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# Chapter 1 Terms and Abbreviations

**AD**, **Active Directory** is an LDAP compliant implementation of Microsoft directory service for Windows NT operating systems. Active Directory is used by the administrators to implement group policies to ensure a consistent user environment, to deploy software on many work stations via group policies or System Center Configuration Manager, and to install updates for the operating system, and application and server software of all network computers via Windows Server Update Service. Active Directory stores environment settings and data in a central database. Active Directory supports networks of different sizes: from dozens to millions of objects.

**Chrome**, Google Chrome browser is a free browser from Google.

**FF**, Mozilla Firefox is a free browser delivered with Mozilla Application Suite developed and distributed by Mozilla Corporation.

**GUID** is a service that generates unique identifiers from a 16 byte binary array.

**ID** is an identifier (unique individual number). For example, task ID.

**IE**, **Internet Explorer browser** is an application used to work in the World Wide Web. The World Wide Web is an informational system accessible via the Internet.

**IIS**, **Internet Information Services** is a proprietary set of servers for a number of Microsoft web services. IIS is delivered with the Windows NT operating systems. IIS supports HTTP, HTTPS, FTP, POP3, SMTP and NNTP protocols. The main component of IIS is a web server, i.e., WWW service (also called W3SVC) which enables customer access to sites via HTTP and via HTTPS, if configured. A single IIS server can service several sites (IIS 6.0 or higher).

**Lookup**, Lookup Field **is** a field used to search for and select an object from the objects of a specific type stored in the database. It is usually in format 
.

**MTF**, **MainTaskForm** is the main task form.

**SID**, Security Identifier is a data structure of variable length that identifies a user, group, domain or computer account (in Windows it is based on NT (NT4, 2000, XP, 2003, Vista)). An SID is assigned to each account when it is created. The system operates with account SIDs instead of account names. In addition, only SIDs are considered for controlling user access to protected objects (files, registry keys, etc.).

**DB**, Database is a dataset formed according to the specified rules and stored in computer memory that defines the actual state of a specific area and helps meet user information requirements.

**Grid** is a table used to view, edit or select objects of a specific category. This table displays object names in the first column, while other custom columns contain values of custom fields of the selected category. *For example, in the figure below, the Value column displays names, while the Rejection Reason column contains values of the corresponding custom field from objects of the Legal Entities category.*

Legal entity

Edit

| Value | Fault cause | |
|---|---|---|
| Test | | ✗ |
| TEST | | ✗ |

**CF**, **Custom Fields** are attributes of a task with a specific data typethat are used to formally register data added to categories during operation. Custom fields are displayed in main category form 3 in a row configured by the administrator. A category can have any number of custom fields. For details on custom fields and their settings, see "Custom Fields".

**A Job** is **a process** executed externally, outside the 1Forma system. Jobs are run periodically according to the specified schedule.

**Captcha** is an image with a number of characters used for anti-bot protection.

**PA**, Personal Account is an alternative 1Forma UI.

**Log** is a **table** with entries for system events.

**PC,** Personal Computer is a computer operated by a single user, i.e., designed for personal use.

**Timeout** is **a parameter** related to events and used to validate event completion for a specific time period. If the system is waiting for an event, an event request is aborted by the system after timeout.

**Checkbox**, or**Flag** is a field that can only have Yes/No or Enabled/Disabled values. It is usually in format ✓ .

# Chapter 2 System Accounts

1Forma provides three system accounts:

1. Admin (administrator mode)

2. SystemRobot (task manager)

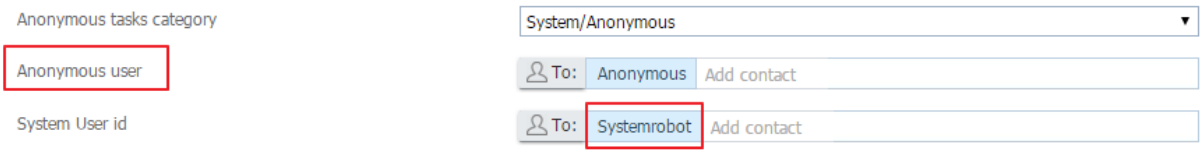
3. Anonymous (anonymous user).

For correct operation of the system go to application settings and configure SystemRobot (task manager) and Anonymous (anonymous user) accounts.

Admin is used for administration of 1Forma employees.

SystemRobot is used for automated system notifications.

Anonymous is used for anonymous user notifications. It works in Category for Anonymous Tasks mode.



# Chapter 3 Task Start

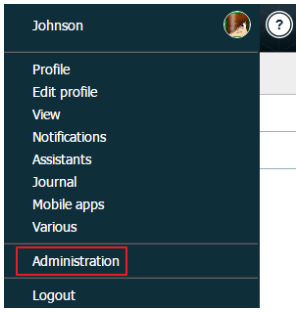


## 3.1 Administration Directory Access

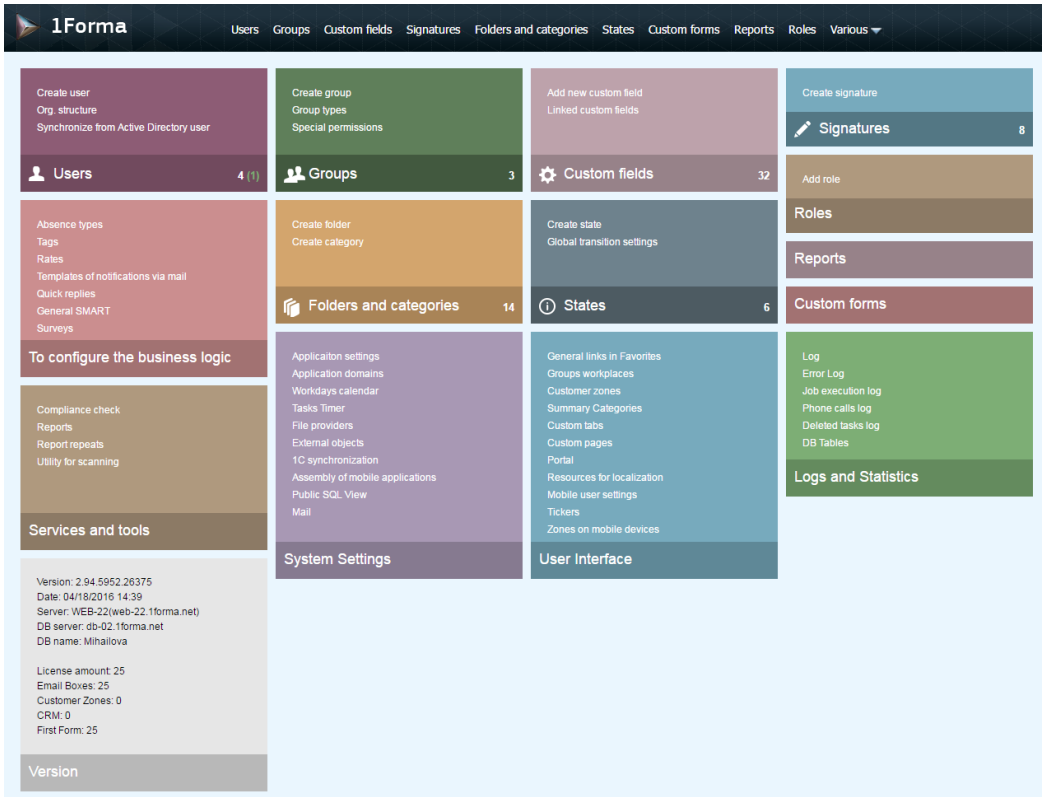
The Administration directory includes a control panel for user and group settings, and settings for custom system fields, digital signatures, custom and personalized object (category) templates and object states (statuses).

The 1Forma system administrator must do the following to access the control panel

1. Login with their user name and password
2. Click user name or avatar (in the top right corner of the screen) to open the submenu and choose Admin (this menu item displays only to users with Administrator rights).




The administrative UI home page opens in a new window with blocks of basic system settings. The same functionality can be called up from the top menu.




For a detailed description of each control panel element, see System Objects and Dependencies.

## 3.2 System Objects and Dependencies

System logic is based on categories.

**Category** is a template that contains settings for appearance and complete business logic applied to objects created from this template. These objects are generic, and depending on the requirements can be configured as:

- Task (order)
- Workflow
- Electronic document
- Directory/log entry.

**User** is a employee's personal account that is used to work in the system.

**Group** is a bundle of system users formed by a specific attribute. It is used to define access permissions, signatures, and roles.

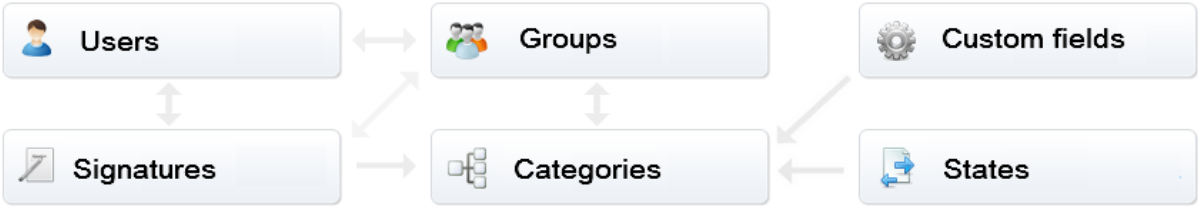
**Custom field** is an input field for the selected data type displayed in the main category object form. These fields are used to formally register data entered into the system.

**Signature** is a group/single user relationship that defines acceptors for signature requests.

**Status** is a continuous object state that this object can have during its route progress.

**Role** is a group/single user relationship that provides users with additional access permissions and functionalities.

Dependencies between these elements are shown with arrows:



# Chapter 4 Users



## 4.1 General

**An information system user** is a person (group, organization) who can use system functionality to retrieve data or complete business tasks.

Information system users primarily include subject matter experts whose information requirements are the basis for developing the system.

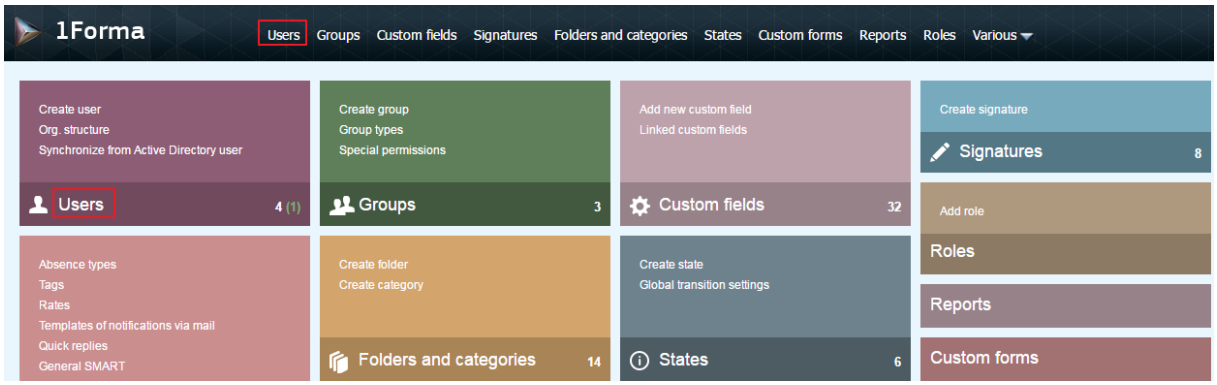
All users must be registered by the administrator to work with the 1Forma system. A personal login and password are used for authorization.

Access permissions for system data, functions and services are managed by groups. Access permissions are configured for each group, which ensures that a user can access only the data, functions and services that correspond to their job duties.

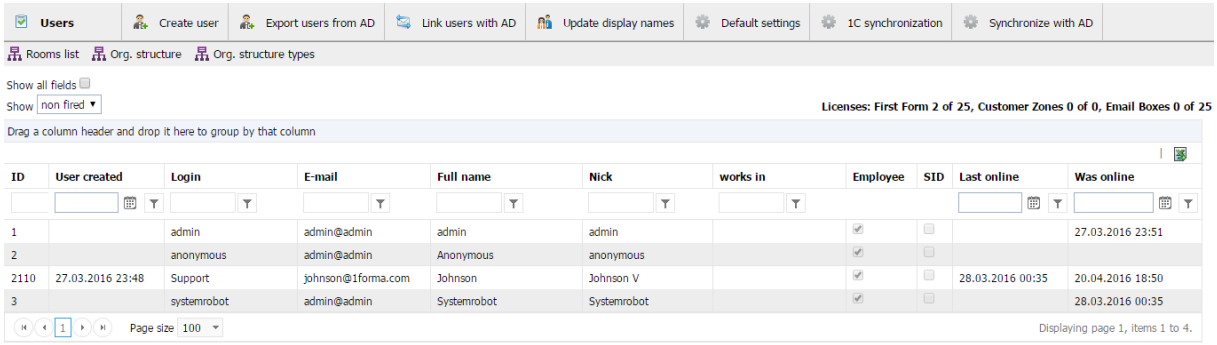
The 1Forma system also supports synchronization to Active Directory for user management.

## 4.2 User Management

To navigate to user management, click the Users link on the home page or choose the corresponding item in the top menu.



The complete list of all user accounts registered in the system appears.




**New User** — opens the form for registering a new user in the system

**Download From AD** — opens the window for maintaining the rules for downloading users from AD to 1Forma

**AD Connection** — opens the window for starting a synchronization job

**Refresh Names** — refreshes displayed user names

**Default Settings** — opens the window for defining default settings applied to a new user

**1C Synchronization** — opens the window for configuring user account synchronization between 1Forma and 1C:Enterprise

**AD Synchronization** — opens the window for configuring user synchronization between 1Forma and Microsoft Active Directory

**Rooms List** — click to navigate to the rooms directory in organization structure management

**Org. Structure** — click to navigate to organization structure management

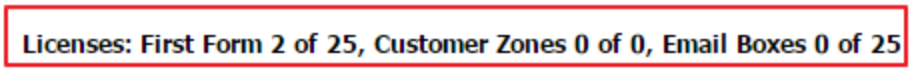
**Org. Structure Types** — click to navigate to organization structure type management.

If **the Show All Fields** flag is set, a summary list of users displays a custom field with detailed user information (such as department, country, city, etc.; phone numbers, fax numbers; social media accounts; date of birth; flags for geolocation, editing own personal information, maternity leave, acceptance request, dismissal, changes in user name view mode, emails, mute mode, etc.).

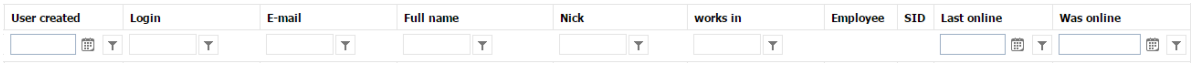
**The Show** field is a filter for the table of accounts with the following values:

- Employed — displays users with disabled Dismissed flag in their settings
- Dismissed — displays users with enabled Dismissed flag in their settings
- Active — displays users who are currently active in the system
- All — displays all users registered in the system.

The total number of acquired 1Forma system licenses and the number of current user licenses are displayed above the table on the right.



To select entries in the list of users, maintain a **filter**. Enter the value in the field below the required column header and click to select operator (contains, does not contain, equal, not equal, more than, less than, empty, not empty). Only entries that meet the specified selection criteria are displayed in the table. This filtering is supported by almost all administrative UI tables.



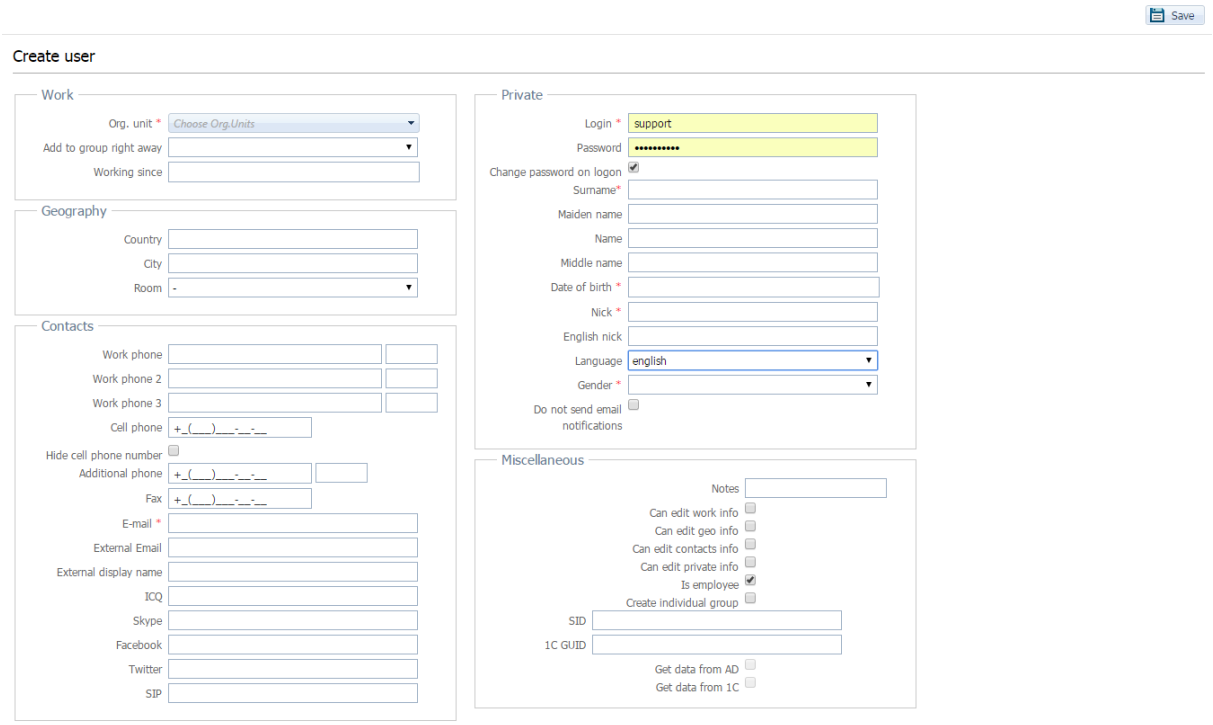

## Downloading a list of users to Excel

Using filters, select the users for downloading and click the icon in the top right corner of the table.

## 4.2.1 Creating a New User

To create a new user, click Create user.

A new user form opens.



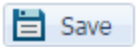

Fields marked with "*" are mandatory. Other fields can be populated by a system administrator or by a user after login.

**It is recommended to enter detailed contact information, since it is frequently used for communicating with employees.**

| Name | Description |
|---|---|
| **Business** | |
| Company* | Name of the user's company |
| Department | Name of the user's department. Select from the list of departments defined in the system. If a department is not marked as active in the department list, it cannot be selected from the drop-down list. |
| Office | User's office |
| Position | User's position |
| External Position | This field is used to generate a signature for emails sent to customers and other external recipients. |
| Add To Group Immediately | A newly created user is automatically added to this user group. Select from the list of groups defined in the system. |
| Employed From | User start date |
| **Geography** | |
| Country | Country of employment |
| City | City or full address of the employee's office |
| Room | Employee's room number |
| **Contacts** | |
| Work | Office phone number |
| Mobile | Mobile phone number. This is entered with a mask. The field is mandatory if the company uses SMS notifications (users click Verify to enter the password received in an SMS to the specified mobile number). |
| Hide Mobile | Only users with View Hidden User Info permission or users from the same non-system user group can see the mobile number. |
| Home | User's home phone number |
| Fax | User's fax number |
| Email* | Employee email address. This is used for system notification emails and authorization. Enter a valid email address! |
| External Email* | This is used to send emails to external users. It must be unique. Enter a valid email address! *At least one of the emails must be specified.* |
| External Name | This name is used to sign emails for external users. |
| ICQ | User ICQ number |
| Skype | User Skype alias |
| Facebook | Facebook page URL |
| Twitter | Twitter page URL |
| SIP | SIP address (internal telephony) |
| **Personal** | |

| Name | Description |
|---|---|
| Login or Email* | Used for system access. Emails are more convenient, since an email address is always unique and easy to remember. |
| Password | Temporary password for system access. The user must change it at first login by setting the Change Password On Login flag in system authorization form. |
| Full Name | User's full name |
| Date of Birth | This is used to remind colleagues of upcoming birthdays. If the Hide Year flag is set in the user profile, the system displays only the day and month of birth. |
| Alias | User name display variant |
| Language | System interface language (Russian or English) |
| Gender | User gender. If Male is selected, voice notifications are issued by the system with a female voice. For Female, a male voice is used. |
| Do Not Email | Disable system notification emails to the user |
| **Miscellaneous** | |
| Memos | Free text notes for the user. These are visible to all employees who can access the profile. |
| Can Edit Work Block | If the flag is set, the user can independently change Work block data. If the flag is not set, only system administrators can edit this block. |
| Can Edit Geography Block | If the flag is set, the user can independently change Geography block data. If the flag is not set, only system administrators can edit this block. |
| Can Edit Contacts Block | If the flag is set, the user can independently change Contacts block data. If the flag is not set, only system administrators can edit this block. |
| Can Edit Personal Block | If the flag is set, the user can independently change Personal block data. If the flag is not set, only system administrators can edit this block. |
| Employee | If the flag is cleared:<br>• Reports and Admin in the More menu are grayed out (if the user has administrator permissions)<br>• Comments are emailed without custom field values for users who have never logged in<br>• A user can subscribe only users with the same Company parameter value in their profile to a task, if subscription is restricted for the category<br>• A user can access user information only for users with the same Company parameter value in their profile<br>• User groups are invisible and cannot be subscribed<br>• By default, business information cannot be edited. |

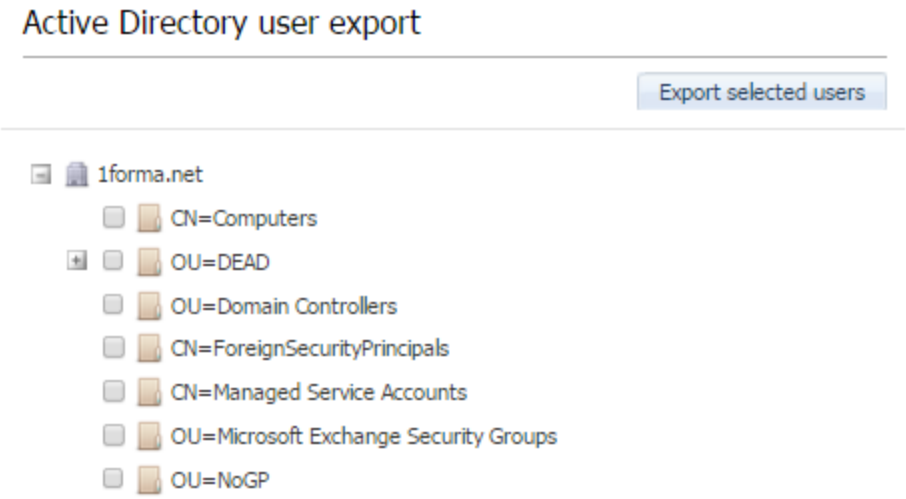
| Name | Description |
|---|---|
| | Users with a disabled Employee setting are treated as external users by the system. |
| Create Custom Group | A custom group with a name identical to the full user name is created automatically (this option is available only when a user is created). |
| SID | User SID from AD. By default, this is populated if the employee's name is found in AD. |

To confirm a new user, click 

. If all field values are valid, the new user is added to the system.

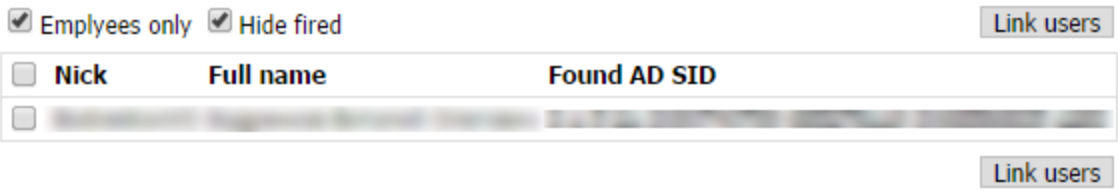
### 4.2.2 Download From AD

You can include or exclude departments or single users when downloading users from AD.




### 4.2.3 AD Connection

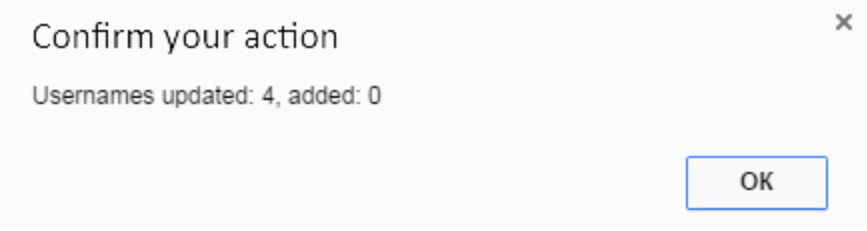
The table displays new users whose user names are found in AD during 1Forma synchronization. To create mappings between 1Forma and AD user accounts, select entries (by setting the flag in the left column) and click Link Users. SIDs from these entries are added to profiles of the corresponding users.



### 4.2.4 Refreshing Names

To refresh values in the table with system user data, click 

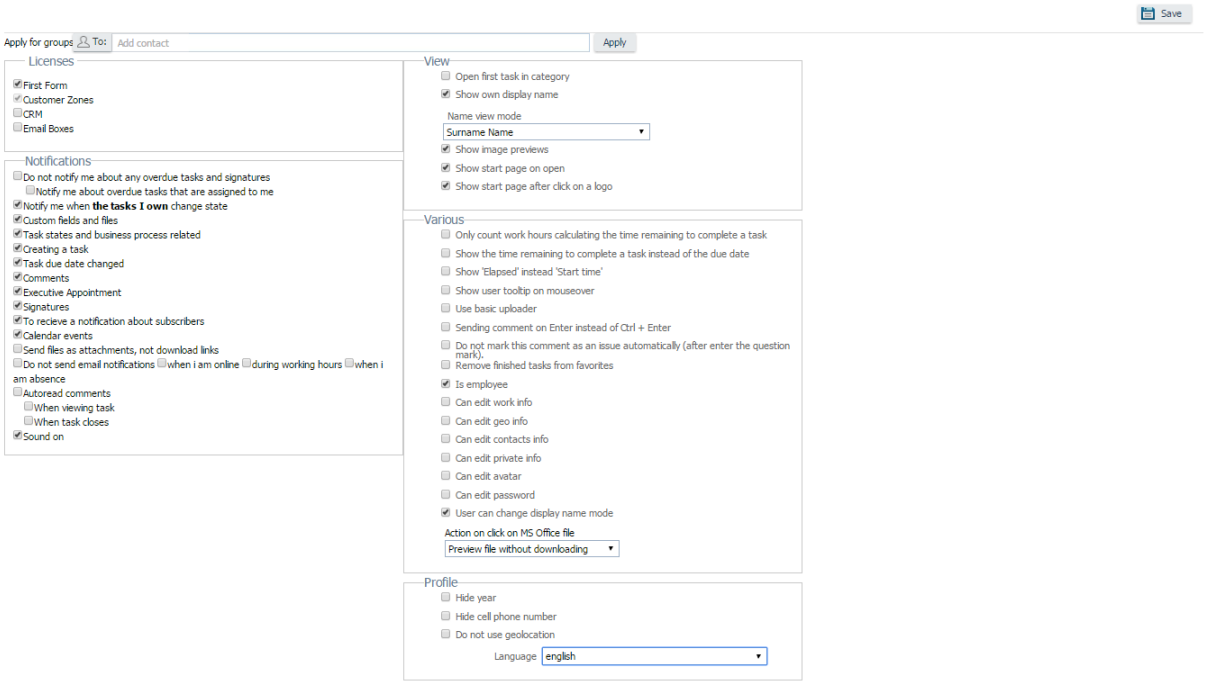
. A message with the number of refreshed and added names is issued.




### 4.2.5 Default Settings

Default settings are applied to newly created users. After the new settings are saved, they apply only to newly created users, without affecting already existing users.

However, default settings can be used **for a mass change of settings** for the existing users. To do this, select a group from the Apply To Groups field, maintain the settings and click Apply. The settings are applied to all users in the selected group; therefore, use this function with caution.

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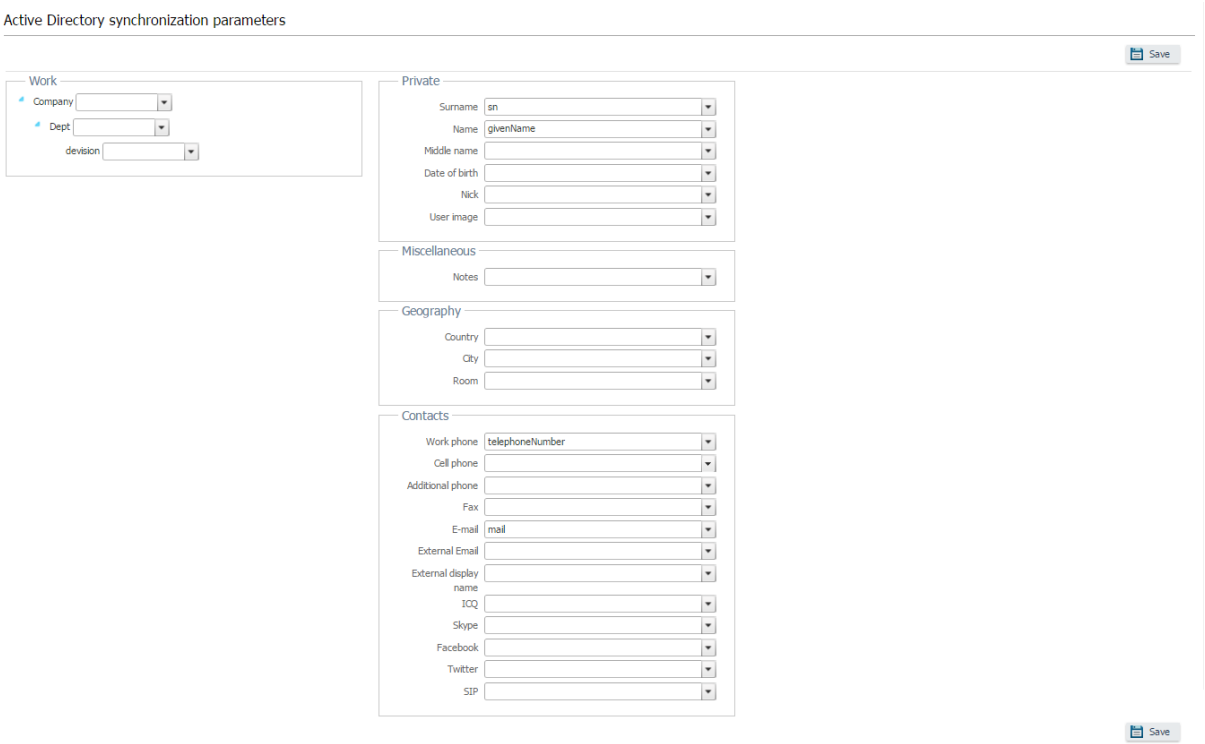
### 4.2.6 AD Synchronization

The 1Forma system supports user data synchronization to AD. Synchronization is executed daily at 8 PM. For one-time (unscheduled) synchronization, start the Active Directory Synchronization job.




User download settings contain values of all downloaded fields. If possible, map each user profile field from the 1Forma system to the AD field it must be synchronized to. *For example, the Company field in 1Forma is synchronized to the "company" field in AD. The country field must be synchronized to the "co" field in AD, "City" to "l" in AD, and Room to "physicalDeliveryOfficeName" in AD.*

For correct parameter values, see the AD guide.

If a user is renamed in AD, they can login with their account even if synchronization has not been executed yet. If AD synchronization is enabled, user data is updated after login.

**IMPORTANT:** AD supports three organization structure levels: Organization, Division, Position. The 1Forma system supports more hierarchy levels; however, these cannot be synchronized to AD.

### 4.2.7 1C Synchronization

See "User Data Synchronization" in the 1Forma Configuration Guide.

## 4.3 Editing a user

To view or configure a user account, left-click the corresponding row of the summary user list.


The following tabs display in the top part of the window that opens:

- Profile — user information and basic settings
- Group Membership — here you can view or edit the user's group membership
- Signatures — a list of signatures with the user in their settings
- Roles — a list of roles with the user in their settings
- Service — tools for transferring permissions and tasks from other users, and statistics of failed login attempts

- Notifications — user notification settings
- View — system UI appearance settings for the user
- Miscellaneous — advanced behavior settings for key UI controls
- Needs Attention — a list of objects displayed in the Analytics menu on UI
- Special Permissions — a summary of special permissions granted to the user
- Domain Access — application domains available to the user
- Log — information on user actions in the system
- Advanced — advanced user properties.

### 4.3.1 Profile

The Profile directory contains main user information. *Please note that different fields are available in the list for creating and editing.*

Profile | Group membership | Signatures | Roles | Service | Notifications | View | Various | Watched objects | Special permissions | Access to domains | Journal

Advanced

Save

Edit user Support - Profile

Licenses
- First Form
- Customer Zones
- CRM
- Email Boxes

Work
Choose Org.Units | Add

| Org. unit | Is primary |
|---|---|
| No records to display. | |

Working since

Geography
Time zone: Russian Standard Time UTC +03:00
Country
City
Room: -
Do not use geolocation

Contacts
Work phone
Work phone 2
Work phone 3
Cell phone: +
Hide cell phone number
Additional phone: +
Fax: +
IP Callback Number: Work
E-mail *: johnson@1forma.com
External Email
External display name
ICQ
Skype
Facebook
Twitter

SIP
Number
Password
Host
Port
Host (reserve)
Port (reserve)
Account

Select a file | Upload

Private
ID: 2110
User created: 27.03.2016 23:48
Login *: Support
New password ?
Input new password again
Change password on logon
Surname *: Johnson
Maiden name
Name
Middle name
Date of birth *: 01.01.1980
Hide year
Nick *: Johnson V
English nick
Name view mode: Surname
Language: english
Gender
Personal information
Has left the company
Is on maternity leave

Miscellaneous
SID
Notes
- Is employee
- Can edit work info
- Can edit geo info
- Can edit contacts info
- Can edit private info
- Can edit avatar
- Can edit password
- Requires approval of all his tasks when they are moved into states in which originator approval is enabled
- User can change display name mode
- Do not send email notifications
  - when i am online
  - during working hours
  - when i am absence
- Autoread comments
  - When viewing task
  - When task closes

| Name | Description |
|---|---|
| **Licenses** | |
| 1Forma | The 1Forma user license includes a Personal Account license. If insufficient licenses are available, a notification is sent to the administrator. The licenses are checked when users access application functionality. If a user has no license, a notification is issued, and the functionality is unavailable. |
| Personal Account | User license for personal account. This overlaps the 1Forma license. |
| CRM | User license for an additional CRM module |
| Email Accounts | User license for email accounts |
| **Business** | |
| Select Org. Units | These are user positions in the company. A user can be assigned several positions (for example, as a stand-in), but only one can be the primary position. |
| Employed From | Employee start date |
| **Geography** | |
| Country | Country of employment |
| City | City or full address of the employee's office |
| Room | Employee's room number |
| Do Not Use Geolocation | This setting for mobile devices disables geolocation. Geolocation is enabled by default. |
| **Contacts** | |
| Work | Office phone number |
| Mobile | Mobile phone number. This is entered with a mask. The field is mandatory if the company uses SMS notifications (users click Verify to enter the password received in an SMS to this number). The mobile number is displayed in red in the user profile until verified. |
| Hide Mobile | Only users with View Hidden User Info permission or users from the same non-system user group can see the mobile number. |
| Additional | Additional phone number (e.g., home). |
| Fax | User's fax number |
| Email | Employee email address. This is used for system notification emails and authorization. |
| External Email | This is used to send emails to external users. |
| External Name | This name is used to sign emails for external users. |
| ICQ | User ICQ number |
| Skype | User Skype alias |
| Facebook | Facebook page URL |
| Twitter | Twitter page URL |

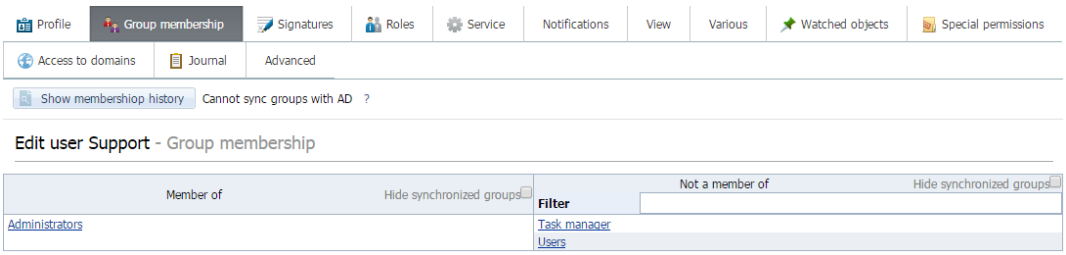
| Name | Description |
|---|---|
| SIP | SIP address (internal telephony) |
| **Personal** | |
| ID | Individual user number in the database. *It cannot be edited!* |
| Login or Email | Used for system access. Emails are more convenient, since an email address is always unique and easy to remember.<br>**IMPORTANT:** Logins cannot contain "<" or ">". |
| Password | Temporary password for system access. The user must change it at first login by setting the Change Password On Login flag in system authorization form.<br>**IMPORTANT:** Passwords cannot contain "<" or ">". |
| New Password | Enter new user password |
| Confirm Password | Repeat new password for validation |
| Full Name | User's full name |
| Date of Birth | This is used to remind colleagues of upcoming birthdays. If the Hide Year flag is set, the system displays only the day and month of birth. |
| Russian Alias | User name display variant for Russian UI |
| English Alias | User name display variant for English UI |
| User Name View Mode | Select the user name display format (for example, first name only, last name + initials, position, etc. ) |
| Language | System interface language (Russian or English) |
| Gender | User gender. If Male is selected, voice notifications are issued by the system with a female voice. For Female, a male voice is used. |
| Dismissed | This user is not considered by the license counter, has no permissions and cannot login. The flag is set automatically when Dismiss is clicked. Any comments sent to a dismissed user are automatically marked as read, and the following comment is sent from the task manager: "Comment marked as read due to recipient's dismissal". |
| On Maternity Leave | This flag is set for users on maternity leave. It is used in reports. |
| **Miscellaneous** | |
| SID | User SID from AD. You can obtain an SID from Login or Email field in the user profile.<br>An SID is populated automatically for manually created users, if their user names are found in AD.<br>If an SID is specified and AD contains a user with this SID, the value cannot be changed or deleted.<br>To reset an SID, click ✕, which is useful for disconnecting users from AD. |
| Memos | Free text notes for the user. These are visible to all employees who can access the profile. |

| Name | Description |
|---|---|
| Employee | If the flag is cleared:<br>• Reports and Admin in the More menu are grayed out (if the user has administrator permissions)<br>• Comments are emailed without custom field values for users who have never logged in<br>• A user can subscribe only users with the same Company parameter value in their profile to a task, if subscription is restricted for the category<br>• A user can access user information only for users with the same Company parameter value in their profile<br>• User groups are invisible and cannot be subscribed<br>• By default, business information cannot be edited.<br>Users with a disabled Employee setting are treated as external users by the system. |
| Can Edit Work Block | If the flag is set, the user can independently change Work block data. If the flag is not set, only system administrators can edit this block. |
| Can Edit Geography Block | If the flag is set, the user can independently change Geography block data. If the flag is not set, only system administrators can edit this block. |
| Can Edit Contacts Block | If the flag is set, the user can independently change Contacts block data. If the flag is not set, only system administrators can edit this block. |
| Can Edit Personal Block | If the flag is set, the user can independently change Personal block data. If the flag is not set, only system administrators can edit this block. |
| Can Edit Avatar | If the flag is set, the user can independently change their profile avatar. If the flag is not set, only system administrators can change the user's avatar. |
| Can Edit Password | If the flag is set, the user can independently change their password. If the flag is not set, only system administrators can change the user's password. |
| Avatar and Password Only | If the flag is set, the user can change their avatar and password only. |
| Requires Acceptance of All Tasks for Transitions to Status with Requestor Acceptance | All status transitions that have the Can Require Requestor Acceptance flag enabled in their settings will request the current user signature if this user is a task requestor. |
| Allow User to Change User Name View Mode | If the flag is set, the user can select display format for their name. |
| Do Not Email | If the flag is set, the user will not receive emails. |
| When Online | If the flag is set, the user will not receive emails when they are online. |
| During Working Hours | If the flag is set, the user will not receive emails during working hours. |
| When Absent | If the flag is set, the user will not receive emails when their absence is |

| Name | Description |
|---|---|
| | marked in the factory calendar. |
| Autoread Comments | If the flag is set, any comments sent to the user are automatically marked as read. |
| On Task Display | If the flag is set, any comments sent to the user for this task are automatically marked as read when the user displays the task. |
| On Task Completion | If the flag is set, any comments sent to the user for this task are automatically marked as read when the task is completed. |

## 4.3.2 Group membership

This tab can be used to edit group membership for system users.




To delete a user from a group, left-click the group name in the Group Member column. The group is automatically transferred to the Not Group Member column.

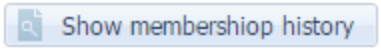
To add a user to a group, left-click the group name in the Not Group Member column. The group is automatically transferred to the Group Member column.

If the list of groups for a user is too long, you can filter by group name. Start entering the group name in the Filter field, and the system automatically proposes a list of groups that contain the entered string.

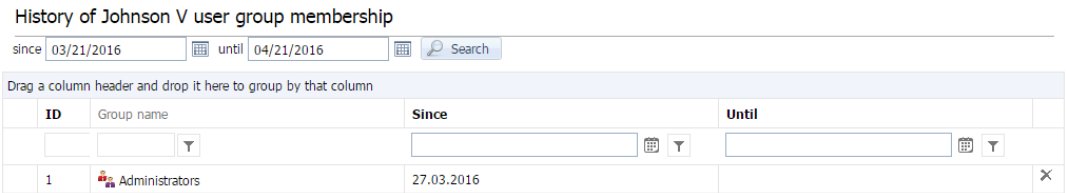

Changes to the list of groups require confirmation.

If **the Hide Synchronized Groups** flag is set, the list does not contain groups with configured Active Directory synchronization.

**The Synchronize Groups From AD** (or **Do Not Synchronize Groups From AD**) setting means that a correct SID. is required to synchronize user groups from AD. To configure (obtain) SID, go to the user profile and click .

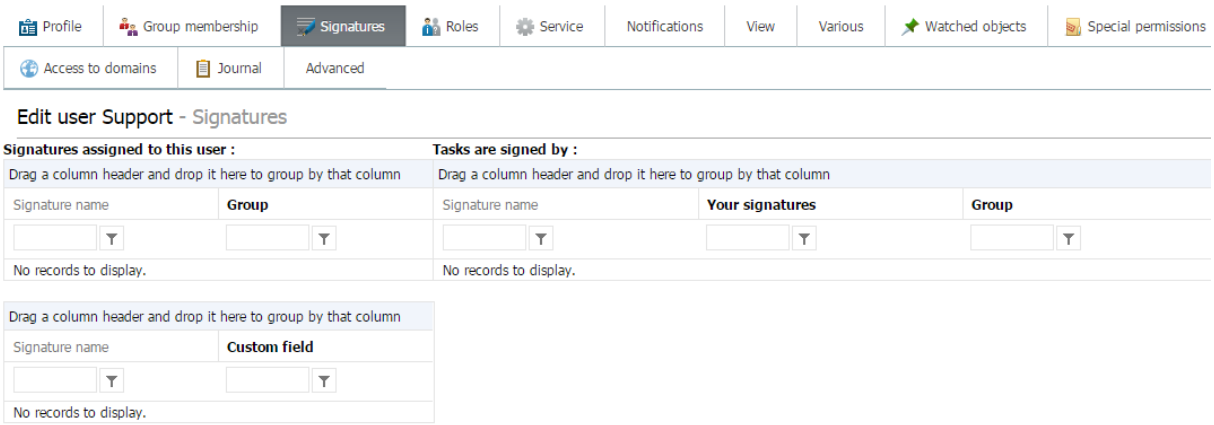
Click the 

button to open the log of events for the user's group membership changes.



### 4.3.3 Signatures

This tab contains a summary list of all signatures that have the current user in their settings. Information is presented in three tables.




**Signs:**

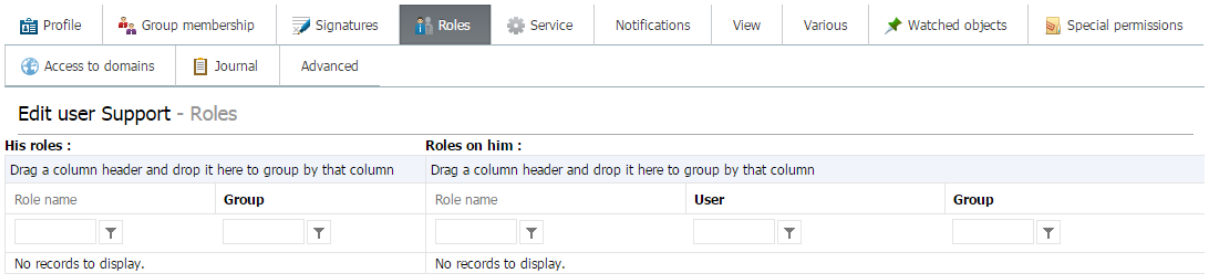
- this table of **groups** contains signatures that have the current user as acceptor for specific groups;
- a table of **custom fields** contains signatures that have the current user as acceptor for specific task custom field values.

**The User Tasks Signed By** table contains signatures used to accept actions of groups one of which includes the current user.

Click a table row to open the edit signature form in a new window.

### 4.3.4 Roles

This tab contains a summary list of all roles that have the current user in their settings. Information is presented in two tables.

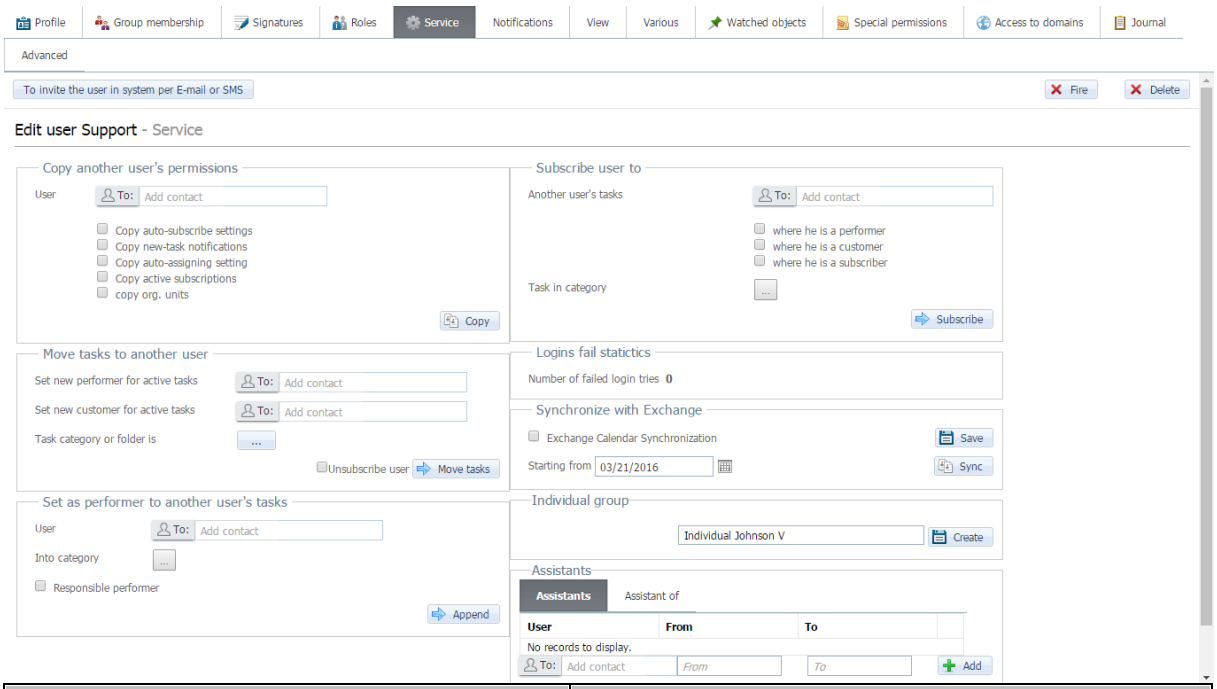



**Assigned Roles** contains a list of roles assigned to the user.

**Affecting Roles** contains a list of roles assigned to other users, but affecting the current user.

### 4.3.5 Service

Tools on this tab are used for faster setup of user access permissions and for transferring tasks when a user is dismissed.

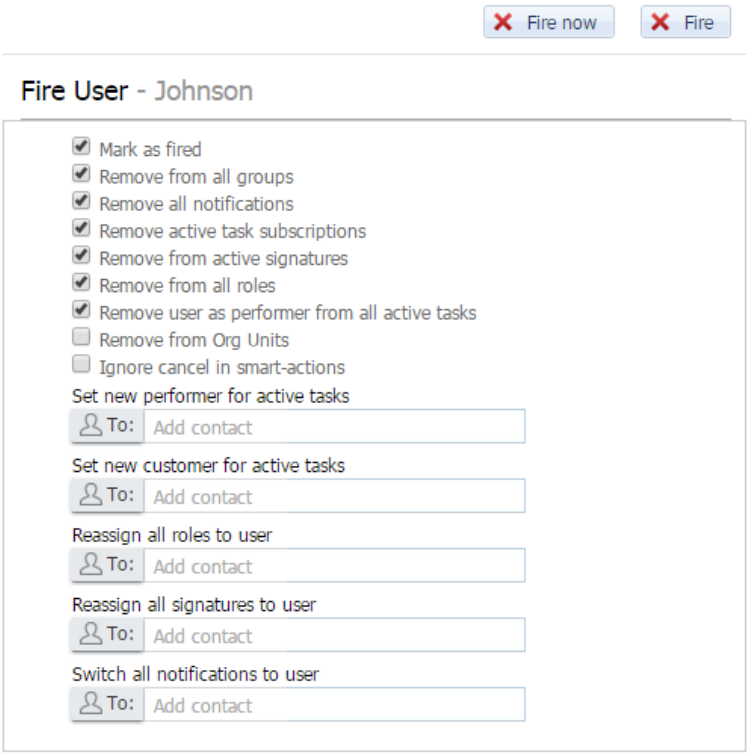



| Name | Description |
|---|---|
| **Buttons** | |
| Impersonation | Another instance of the UI opens in a new window under the current user. During a Run As User session, an indicator Impersonation: [redacted] displays in the upper left corner of the screen on top of the 1Forma logo. To quit a Run As User session, click |
| Delete | User is deleted from the system. |
| Fire | All settings that contain the user (access permissions, signatures, autosubscriptions, etc.) are deleted. This button is available to system administrators only. When a user is dismissed, the required dismissal settings are maintained. The user name of a dismissed user is displayed in gray. |
| **Copying permissions from another user** | |
| User | This is the user whose access permissions will be copied to this user. |
| Copy Autosubscription | Notifications of this type are copied (see "Notifications" in category settings). |
| Copy New Task Notifications | Notifications of this type are copied (see"Notifications" in category settings). |
| Copy Autoassignment | Notifications of this type are copied (see "Notifications" in category settings). |

| Name | Description |
|---|---|
| Copy Active Subscriptions | Only active task subscriptions are copied. |
| Copy Org. Units | A new user is created in the same organization unit as the source user (with adoption of the complete organization structure hierarchy). |
| Copy | Click to start copying access permissions and settings maintained in this block. |
| **Transferring tasks to another user** | |
| Appoint Assignee | In all tasks that contain the selected user as assignee, the assignee is changed to the current user (set the flag and click Transfer). |
| Appoint Requestor | In all tasks that contain the selected user as requestor, the requestor is changed to the current user (set the flag and click Transfer). |
| In Category/Directory | Select a category/directory in which the requestor will be changed to the specified user. |
| Unsubscribe User | The user is unsubscribed from tasks. |
| Move tasks | Click to transfer tasks to the current user (only if at least one of the two flags above is set). |
| **Appoint assignee for other user's tasks** | |
| User | Select the user to be appointed assignee. |
| In Category | Select categories for assignee appointment. |
| Responsible Assignee | If the flag is set, the selected user is responsible only for the tasks that have the co-assignee user as responsible. |
| Append | Click to appoint the user assignee for the tasks of another user. |
| **Subscribe user to** | |
| User's Tasks | The user is subscribed to the tasks of another user or category.<br>Specify the recipient in<br>User Selection<br>To: Johnson Add contact<br>the To field.<br>An edited user can be subscribed to tasks for which he is maintained as:<br>• Assignee<br>• Requestor<br>• Subscriber. |

| Name | Description |
|---|---|
| | Select one or more of these options.<br>To restrict user subscriptions to tasks, select task categories. Use Ctrl or Shift to select several active categories. |
| Category Tasks | The user is subscribed to all tasks of the selected category or directory. |
| Subscribe | Click to execute maintained subscription. |
| **Statistics of failed login attempts** | |
| No. of Failed Login Attempts | Number of attempts to login with this user name where an incorrect password or captcha has been entered |
| **AD synchronization** | |
| Synchronize to AD | Synchronize data to AD |
| **Exchange integration** | |
| Synchronize Calendar to Exchange | Enable calendar synchronization to Exchange mailbox |
| Start From | Synchronization start date |
| Sync | Forced synchronization |
| Save | Save changes |
| **Custom group** | |
| Create | Create a group for the user |
| **Stand-ins** | |
| Assistants<br>Assistants Assistant of<br>User From To<br>No records to display.<br>To: Add contact From To Add | Select a stand-in for transfer of all user's rights: access permissions, notifications, autosubscription, etc. Stand-in is confirmed within 1 minute after saving. Stand-ins are not added to assignees for autoassignments. If you are appointed as stand-in for another employee, the system issues a notification. If you have stand-ins, you can appoint them as assignees for tasks even if you do not have the required permissions for the category (Assignee permissions are sufficient). |

**Dismissal**

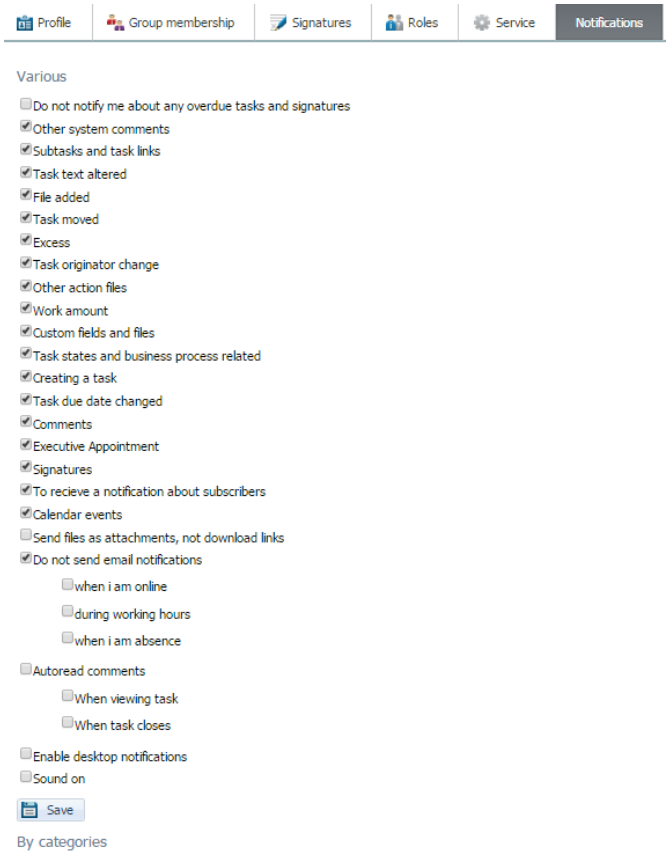



When a user is dismissed, their permissions may be transferred to another user.

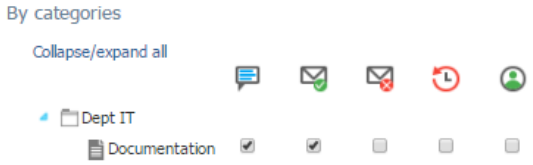
- If the Delete From Org. Units flag is set, organization units that have been occupied by the user become vacant.
- If the Ignore Cancellation for Smart Automation flag is set, the user is dismissed, even if smart automation is executed for an action during dismissal (for example, to change a requestor); the package includes a Cancel action, and the dismissed employee meets the cancellation Smart filter criteria.

## 4.3.6 Notifications

Tools on this tab are designed to configure user notifications for specific task statuses and events.




If personal subscriptions are configured for a user, instead of "You do not have any configured notifications", the category tree with notification settings icons displays:



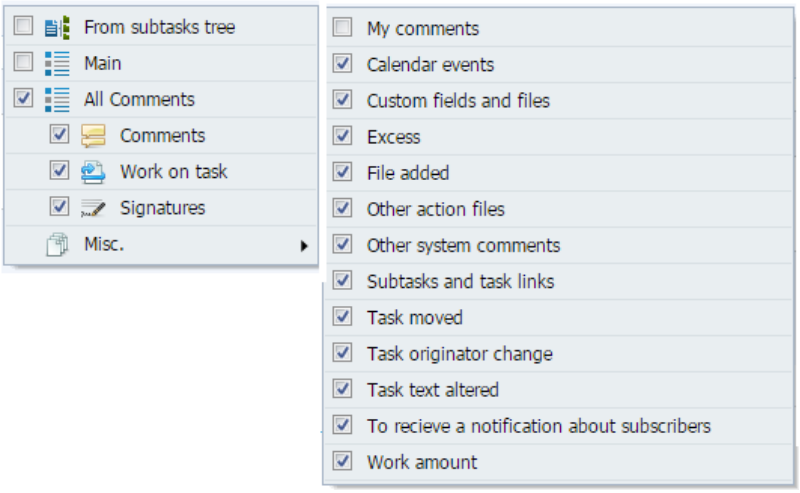

### 4.3.6.1 Notification Types

1Forma supports the following notification types:

| Notification type | Description |
|---|---|
| System | Configuring or executing repeats and reminders |
| Subtasks and associations | Creating or deleting associations between tasks (subordinate, related) |
| Changing a task text | Editing a task text |

| Notification type | Description |
|---|---|
| Attaching a file | Attaching a file to a task |
| Transferring a task | Transferring a task to another category |
| Exceeding | Exceeded efforts |
| Changing a task requestor | Changing a task requestor |
| Other actions on files | Editing, replacing or deleting a file |
| Efforts | Entering or changing efforts |
| Parameters | Changing a custom field value |
| Workflow route progress | Changing a task status, executing a transition |
| New task | Creating a new task, copying a task |
| Due date change | Setting or changing task due date |
| Comments | Sending or editing a comment |
| Appointing an assignee | Appointing or changing an assignee for a task, appointing or changing a responsible assignee |
| Signatures | Requesting a signature, receiving or rejecting acceptance, deleting a requested signature, delegating a signature, recalling a signature, changing the list of acceptors |
| Receive subscriber notifications | Adding or deleting a subscriber |
| Calendar events | Creating a calendar event, changing attendee list, changing event status for an attendee |

Notification types correspond to comment types displayed in the Comments feed on the main task form:




They also follow the user profile settings configured in user mode on the Notifications and Mobile Apps

tabs.

The summary comment type "Task Processing" includes the following types: workflow route progress, task creation, due date change, assignee appointment.

If a notification type is enabled, comments of this type being sent are marked as unread for the user, and when the comments are received, they increase the unread notification counter value (to envelope ), and emails (with disabled Do Not Email flag) and Push notifications to 1Forma mobile applications are sent.

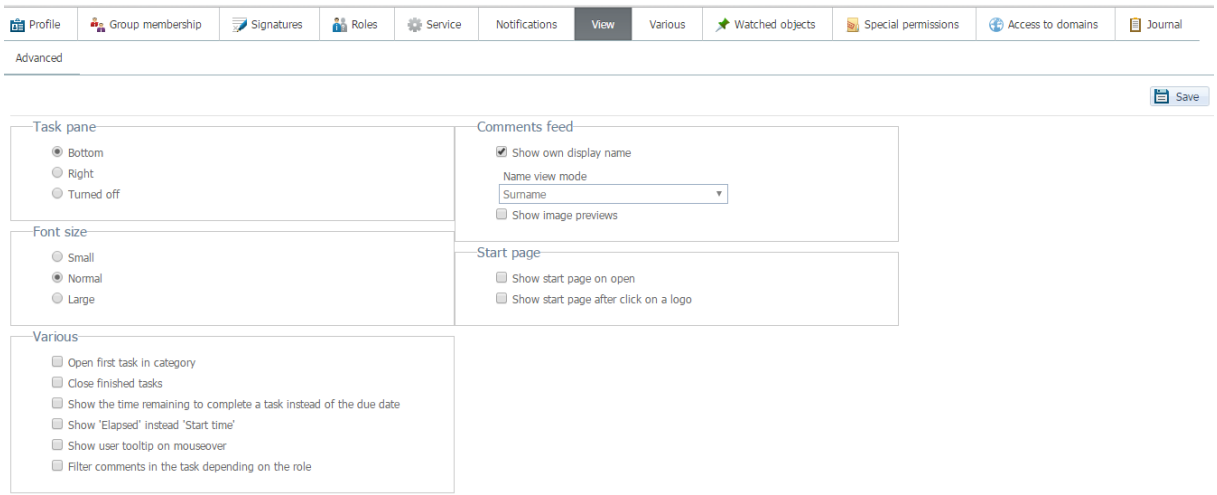
#### 4.3.6.2 Overdue Signature and Task Reports Logic

- A user who is dismissed, does not receive reports, regardless of notification settings.
- If the Do Not Notify of Any Overdue Tasks and Signatures flag is set, reports are not sent.
- If both the Do Not Email and When Absent flags are set, and a user is marked as absent from work, reports are not sent during the specified period.

In all other cases the user receives these reports.

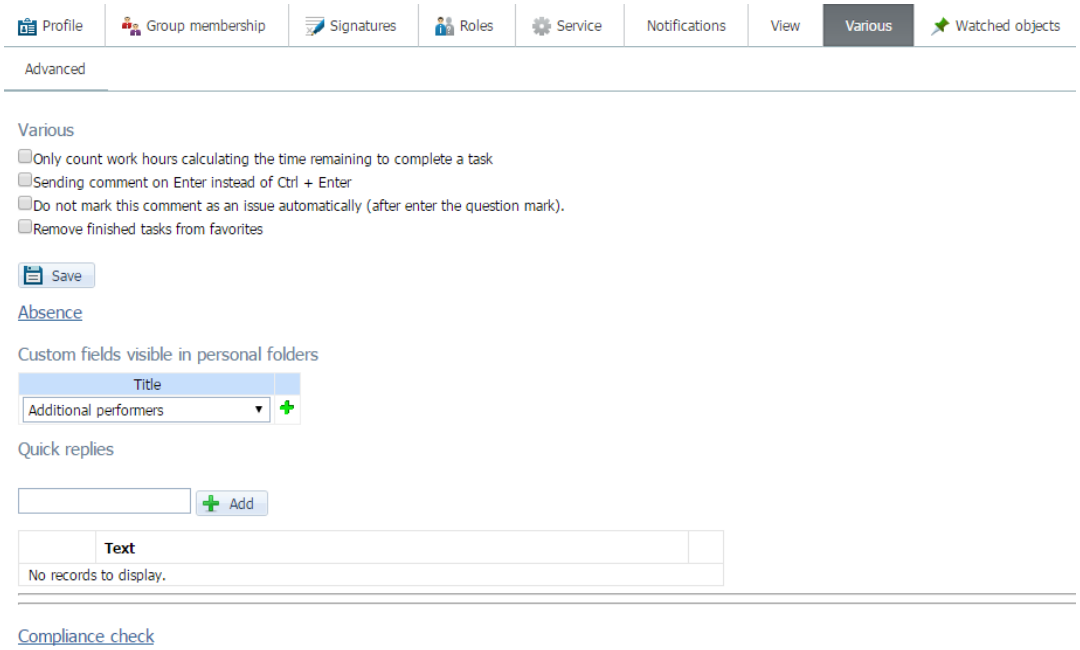
### 4.3.7 View

Tools on this tab are used for basic configuration of main 1Forma user interface controls.



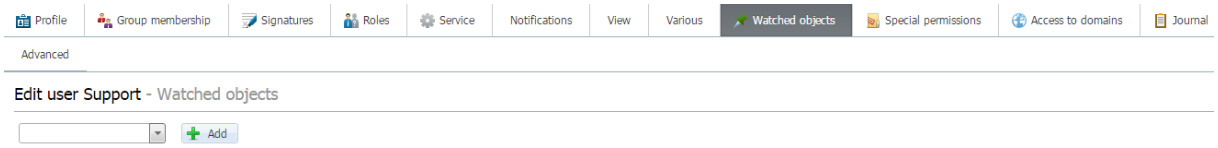
### 4.3.8 Miscellaneous

Tools on this tab are used for advanced configuration of main 1Forma user interface controls.

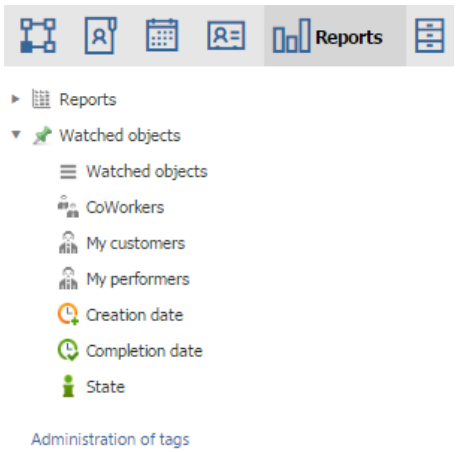



### 4.3.9 Needs attention

Use this tab to edit a list of objects that need user attention. To add a new object that needs attention, select its name from the drop-down list and click Add. To delete an object that needs attention, click ✕ to the right of its name.

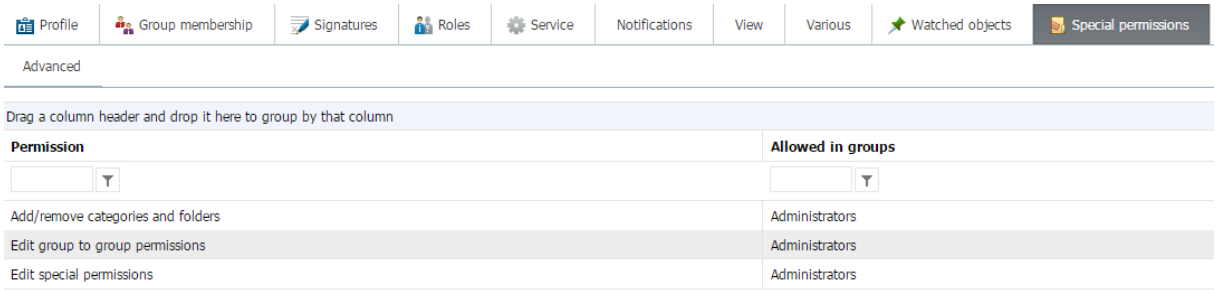



Newly added objects appear in Reports mode of the UI.



### 4.3.10 Special Permissions

This directory contains a summary of special permissions granted to the user.

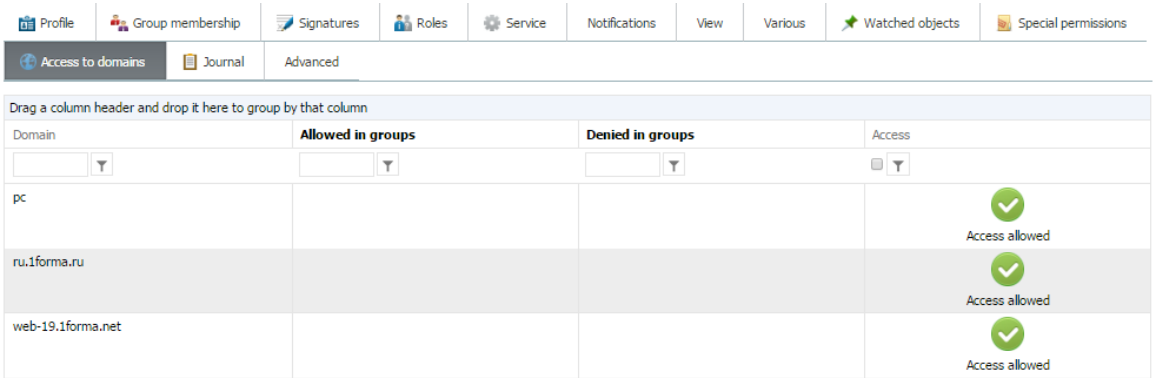



Special permissions are granted by user group settings. To edit special permissions for groups, navigate to special permissions in user groups. To edit special permissions for a user group, click the name of the group in the Allowed in Groups column.

### 4.3.11 Domain Access

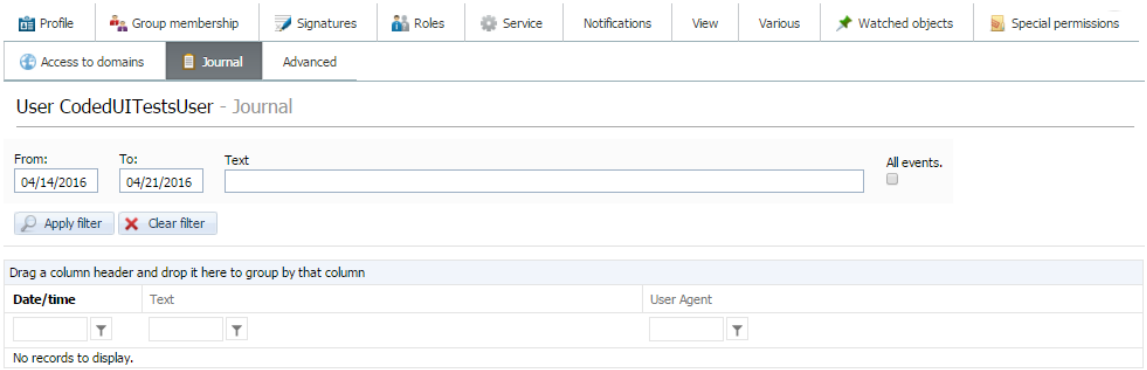
This section contains summary information on application domains available to users.

For details on application domains, see " Application Domains " (Miscellaneous— System Settings).




### 4.3.12 Log

This tab displays system log entries for a specific user in chronological order.




The Text column contains descriptions of actions executed by the user, while the User Agent column

shows the client application (browser) used to access the system.

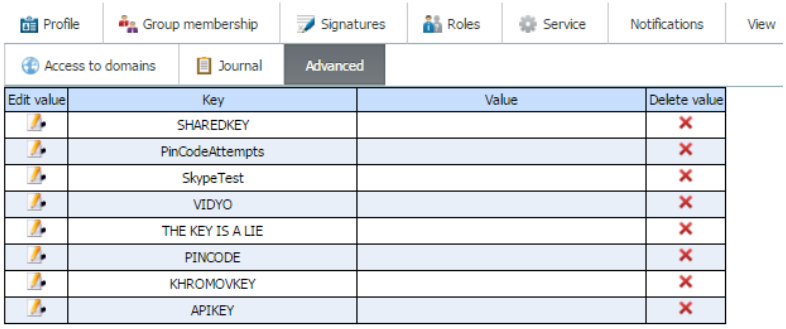
To view log entries for another period, select the start and end dates and click Apply filter.

To search the log, enter the search string and click Apply filter. Search results are highlighted in yellow.

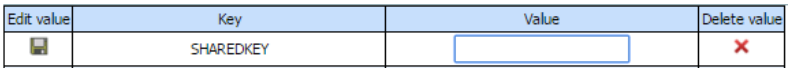
If the All Entries flag is set, entries with a blank User Agent field are also displayed (these entries are created, for example, for logins from smartphones or tablets with proprietary browsers not recognized by the system).

### 4.3.13 Advanced

This tab displays the keys that are used to generate an advanced directory of user entity properties. This set of keys is unique for each system installation. Properties assigned to these keys depend on the requirements of the company only. For instance, they can contain PINs sent to users during registration, or Skype/Telegram user names, etc.



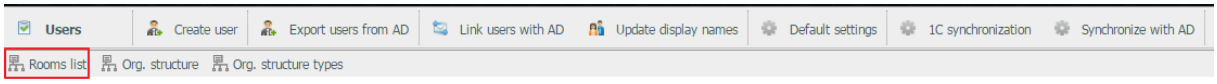

Keys correspond to user settings from the UserInfoExtValues table. A list of keys is defined by the system administrator outside of 1Forma. In administrator mode you can only edit or delete key values for a specific user by clicking and in the corresponding row:



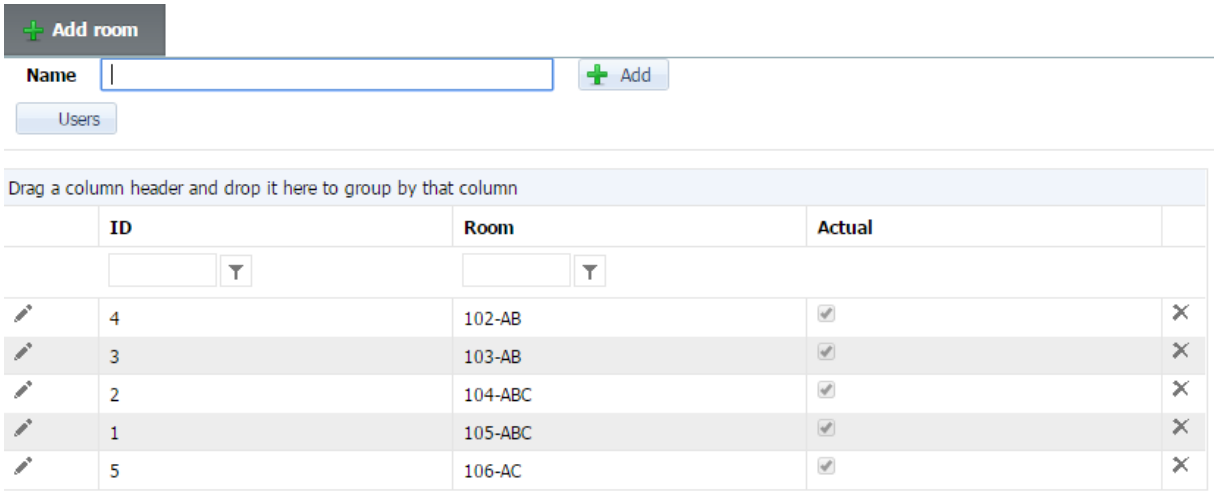

To save input, click .

## 4.4 Rooms List

To navigate to the employee room management directory, click Rooms list in the user management directory.




A list of the rooms created in the system opens.

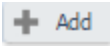



Click  to return to the user management directory.

The Active flag denotes whether an entry is active (disable the flag if the room is no longer used).

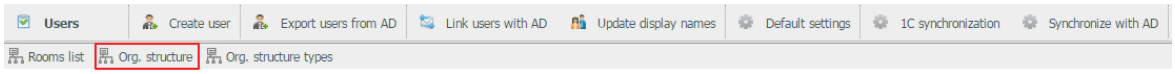
The room number is displayed in the main user form (user profile).

To create a new room, click Add Room. A new room form opens.


Enter room name and click  .

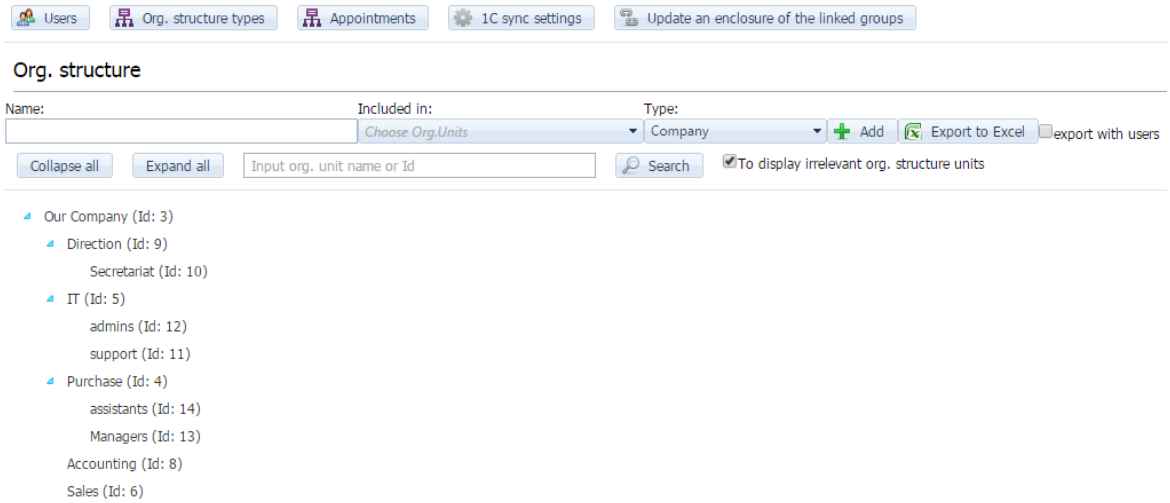
## 4.5 Org. Structure

To manage the company's organizational structure, click the Org. Structure button in the user management category. Organization structure types must be initially configured for the organization structure that will be used to build the structure itself.

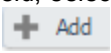



In the organization structure management interface, you can:

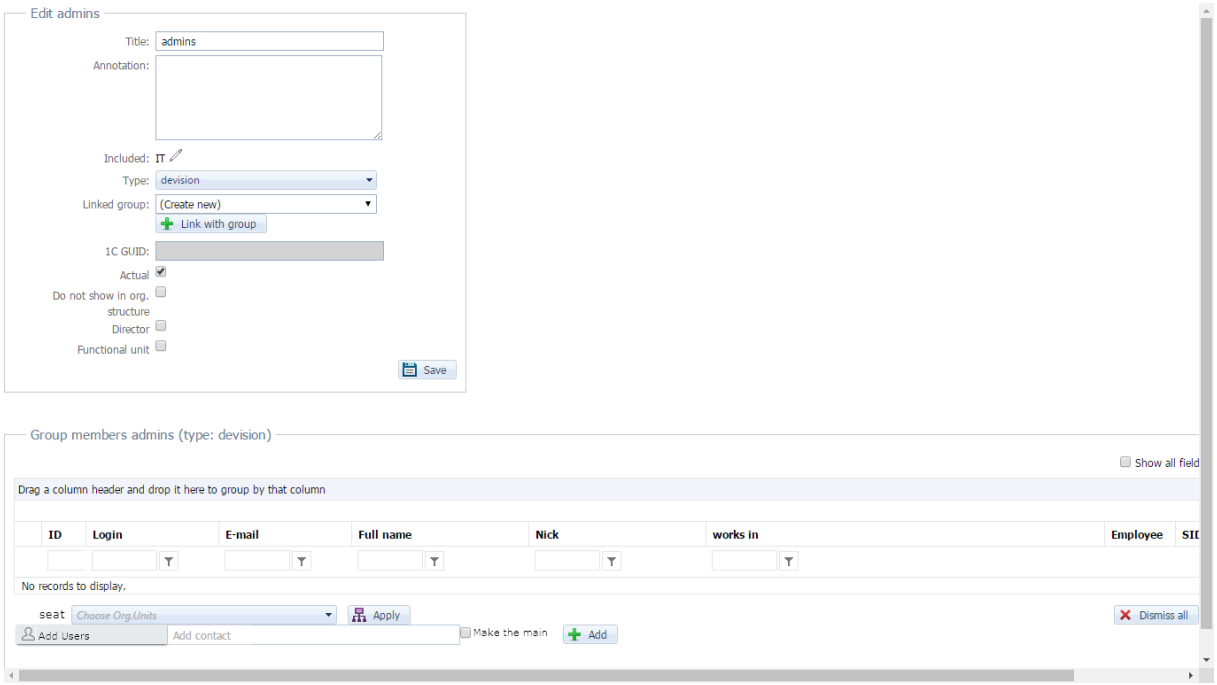
- Add new units
- Edit organization structure units.




If the Display Inactive Org. Units flag is set, the organization structure also displays positions that currently have no assigned employees. These positions are grayed out.

To add a new unit to the organization structure, enter its name in the Name field, select the parent unit from the Is Contained In list, assign an organization structure type, and click  .

To edit any organization structure unit, left-click it. A window for editing the organization structure unit opens.

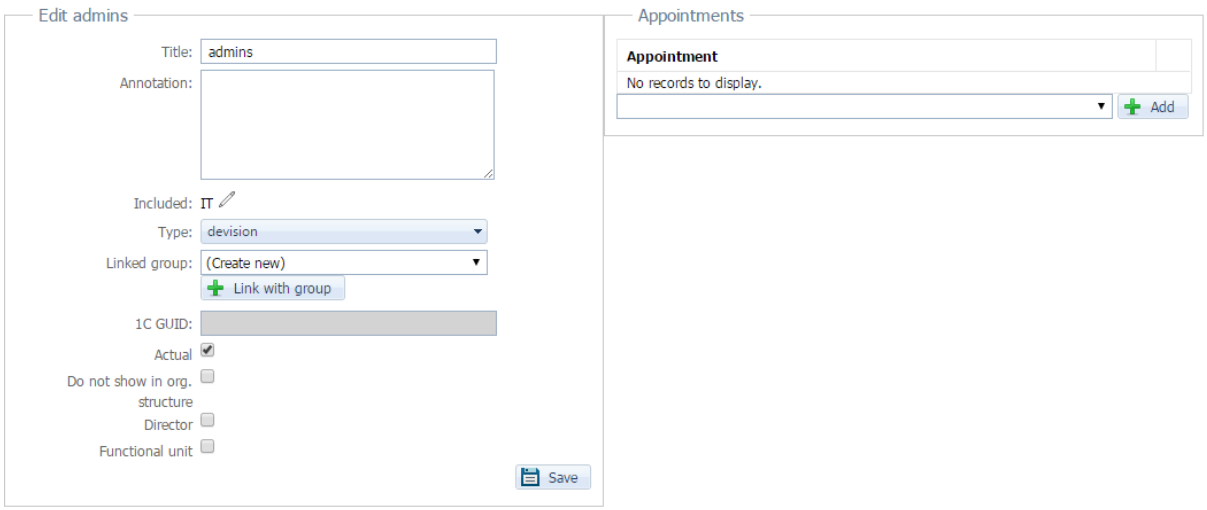



| Name | Organization structure unit name |
|---|---|
| **Is Contained In** | Assignment of the edited organization unit to the organization structure tree (parent organization unit) |

| | |
|---|---|
| **Type** | Organization unit type |
| **Related Group** | Click to create a related group. A group with a name identical to this organization unit name is automatically added to the list of groups.<br>Choose Org.Units Link with org unit<br>During the subsequent download of users, groups created via the organization structure are synchronized to update group members. These groups cannot be edited from the Groups menu.<br>To delete association with the organization structure, click Disassociate. |
| **GUID from 1C** | GUID number from 1C. This is used for 1C user synchronization. |
| **Active** | If this flag is set, the unit is currently active, displays in the user interface and can be selected from the user profile (this setting is enabled by default when the organization structure is created). |
| **Do Not Show in Org. Structure** | Hides the unit from UI of the organization structure |
| **Functional unit** | The system provides two ways of mapping positions to the company's organization structure (two organization unit types):<br>1. Organization unit: A single position can be assigned to several employees who belong to the same organization unit in the organization structure. *For example, two departments contain organization units with the name "Specialist". According to the company's organization structure, a there is list of positions that differentiates specialists of the first and second departments. Thus, we have a list of positions mapped to the organization unit.*<br>2. Functional unit: Several positions can be grouped into a functional unit by a specific attribute. *For example, all specialists from different divisions form a functional unit that contains positions with names that contain the "specialist" keyword. That is, specialists from different departments are grouped into a single "Specialist" functional unit.*<br>To change the organization unit type from organization to functional, set the flag Functional unit. Then map positions to the functional unit in the Positions block on the right. |

Similarly, you can edit an organization unit of position type. Here you can also add a new position in the Positions block to the right of the editing area.

If an organization unit contains the head of a division/department/etc., enable the Director flag.




**Positions block**

Use the Positions block to configure associations between the organizational and functional positions.

Organization units can have only one position assigned in the Positions block. *For example, an accountant in office 1 and an accountant in office 2 must be mapped to the "Accountant" position while chief accountants from offices 1 and 2 must be mapped to the "Chief Accountant" position.*

Functional units can have several positions assigned in the Positions block. *For example, the "Consolidated accounting" functional division must contain "Accountant" and "Chief Accountant" positions. Thus, this functional division groups all accountants and chief accountants from all offices.*

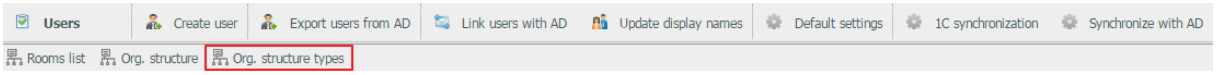
**Members block**

The table in the Members block contains a list of users who belong to this organization unit. To edit an entry, left-click it. The edit user information form opens.

To save changes, click 

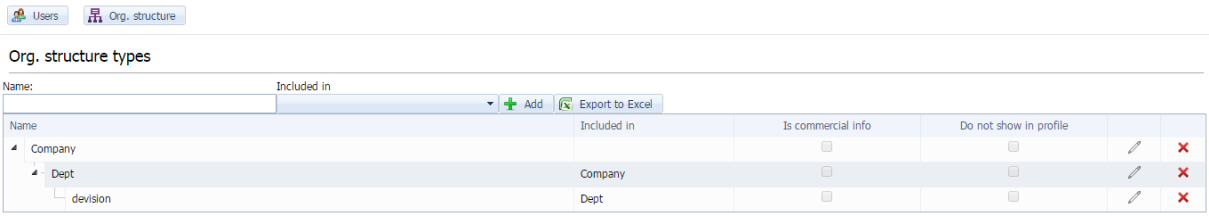
.

## 4.6 Org. Structure Types




**Org. Structure Types** is a hierarchical directory that contains organization units with a parent/child relationship of type many-to-one. *For example, the "Company" unit can include several "Front office" units: Front office A, Front office B, Front office C, etc.*

By default, organization structure units are displayed as Company > Block > Department > Division > Position/External position.




To add a new organization structure unit, enter its name in the Name field and select the corresponding parent organization unit from the drop-down in the Is Contained In field. Then click Add. The new organization structure unit appears in the table below.

**The Name** column displays the name of the organization structure unit, while the **Is Contained In** column shows the parent organization unit.

If **the Is Commercial Info** flag is set, this information is available only to user groups that have permissions to view commercial information.

If **the Do Not Show User Info** flag is set, information on a user who belongs to the corresponding organization structure type is not displayed.

To edit any organization structure unit, click . Click to save changes or to cancel.

# Chapter 5 Groups



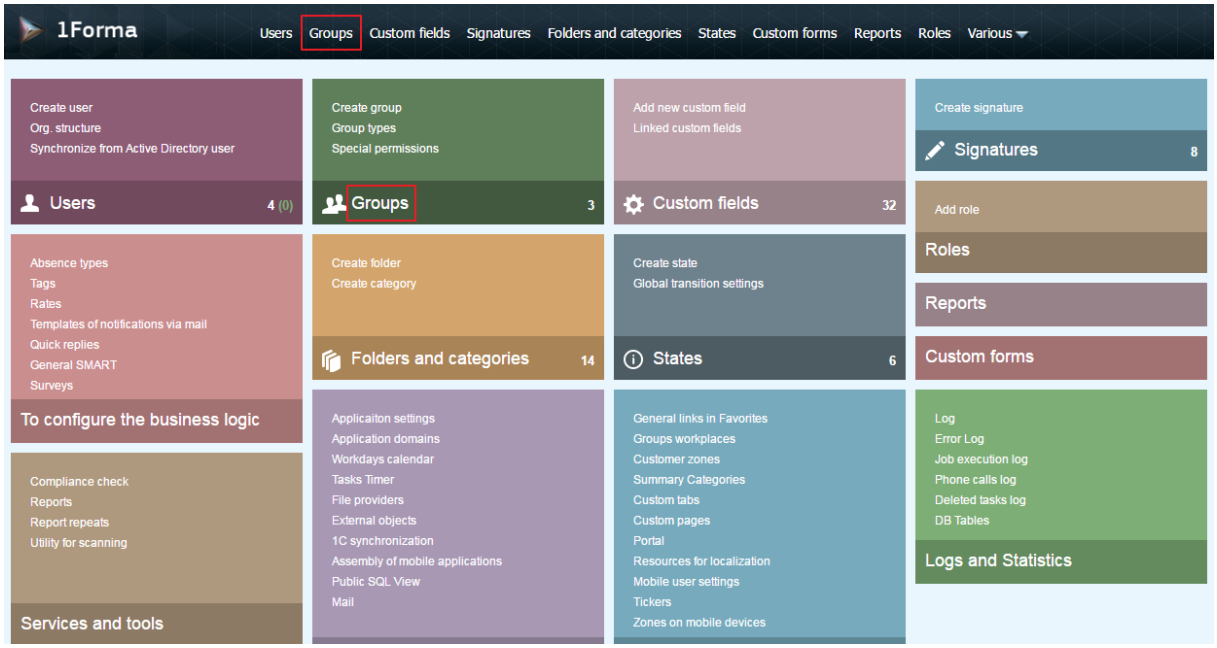
## 5.1 General

Groups are designed to bundle users. The main function and key feature of a group is granting the same access permissions to all group members: if any permissions are assigned to a group, they are granted to all users who belong to this group.

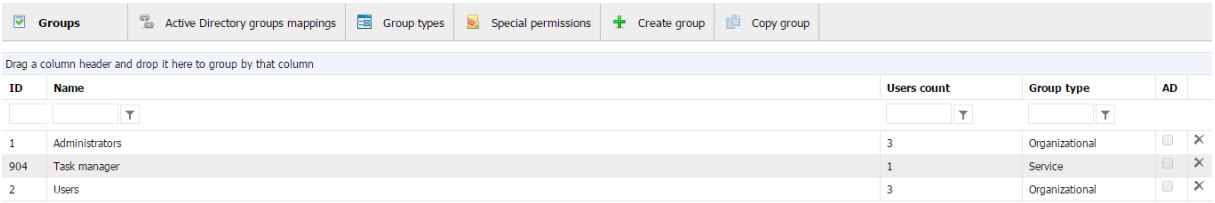
Users can be bundled into groups by any criteria. For instance, you can group users who work in the same business division. You can also group users by positions or job duties. As a rule, groups are needed for configuring categories; therefore, creating groups in advance is not recommended.

## 5.2 Group Management

To navigate to group management, click the Groups link on the home page or choose the corresponding item in the top menu.

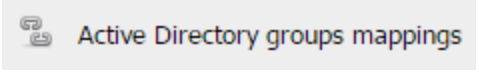


A list of all existing system groups opens.

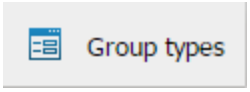



The table contains the following columns:

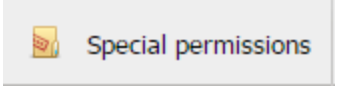
- **ID** is the ID of the group assigned by the system when the group is created
- **Name** is the name of the group displayed in the system
- **Number of Users** is the number of users in the group
- **Group Type** is the group typeselected at creation
- **When the AD** flag is set, this means the group has been imported from Active Directory and cannot be edited



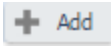
navigates to the directory for maintaining settings for group integration with Active Directory.



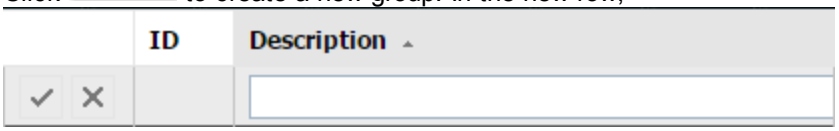
opens a new window for configuring group types.



opens a new window for configuring special group permissions.

Click 

to create a new group. In the new row,



enter the group name and assign group management permissions. To change the name of the created group, hover the mouse over the group and click to open the edit menu. **IMPORTANT:** System groups cannot be renamed.

Set the Can Be Added to Recipients flag to automatically add group members to recipients.

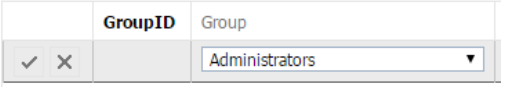
Use the Show in User Profile flag to add different group types to different blocks displayed in a user profile.

Use the Show in Contacts Tree flag to add different group types to the contacts tree in a user profile.

Use the Show in New Task Form flag to add different group types to the new task form.

Set the Allow Absences to Own Group Members flag to allow users mark members of their groups as absent.

**Permissions**

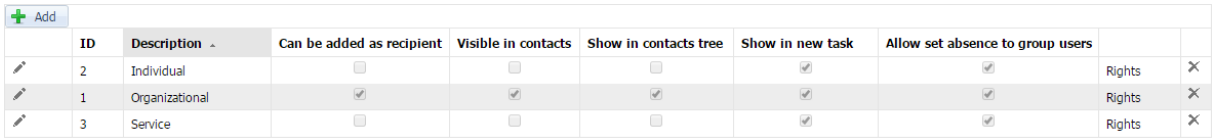


Use the Permissions tab to maintain permissions per group type.

To maintain group type permissions, click Add and in the drop-down list select the group to grant permissions for this group type. Then click ✓ to confirm or ✕ cancel.

### 5.2.1 Group Types

The system supports creation of new group types and granting permissions for managing original groups to other user groups.



Add

| | ID | Description | Can be added as recipient | Visible in contacts | Show in contacts tree | Show in new task | Allow set absence to group users | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2 | Individual | | | | ✓ | ✓ | Rights | ✕ |
| | 1 | Organizational | ✓ | ✓ | ✓ | ✓ | ✓ | Rights | ✕ |
| | 3 | Service | | | | ✓ | ✓ | Rights | ✕ |

Group types:

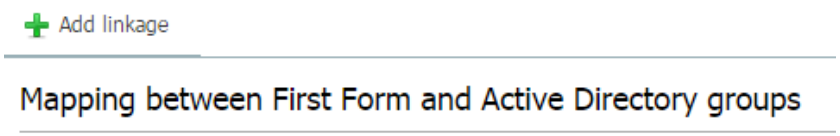
- **Organization** — this type of group is displayed in user profiles and in the Contacts menu if the current user belongs to such a group
- **System** — this type of group and its contents are hidden from users; these groups are used for easy system administration only
- **Individual** groups are similar to system groups, but usually have just one user.

The following system groups are delivered be default:

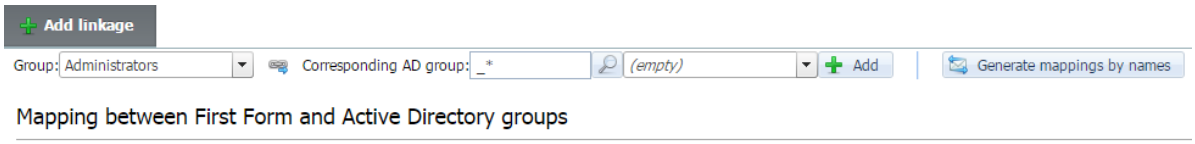
- **Administrators** (or **Administrator Users**) — users in this group can access the administrative UI
- **Users** (or **All Users**) — all system users; it is recommended to add all new users to this group for easy administration
- **External** (or **External users**) — external system users.

### 5.2.2 Mapping Groups to Active Directory

Use this directory to configure mapping of 1Forma system groups to Active Directorygroups, which is used to synchronize user and group information.




To map a system group to AD group, click Add Connection. A window for adding a new connection appears.




Select a 1Forma system group, enter the name of the corresponding group in AD and click  .

**IMPORTANT:** When group members are synchronized, users that are found in the 1Forma system group, but NOT found in Active Directory are deleted from the 1Forma system user group.

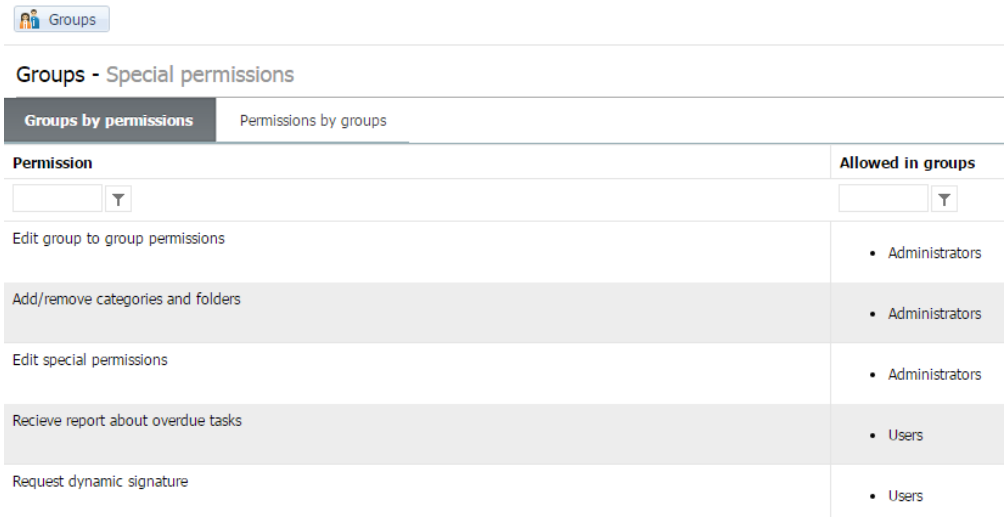
A drop-down list with AD groups found for the specified keyword opens. Select the required group and click Add.

Generate mappings by names button opens a table with automated mappings between the existing 1Forma groups and Active Directory groups. Groups with identical names are mapped. This enables much faster Active Directory synchronization setup.

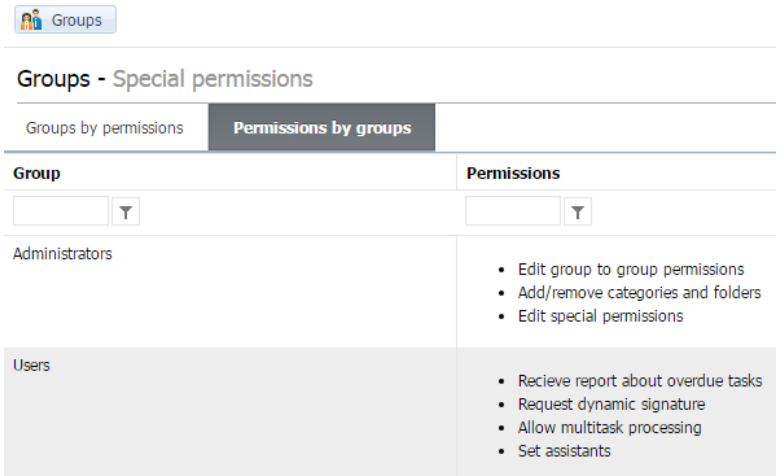
### 5.2.3 Special Permissions

There are two ways of viewing special permissions:

**1**. Permissions to groups mapping. In this view, the left column lists special permissions and the right column contains the groups granted these permissions.

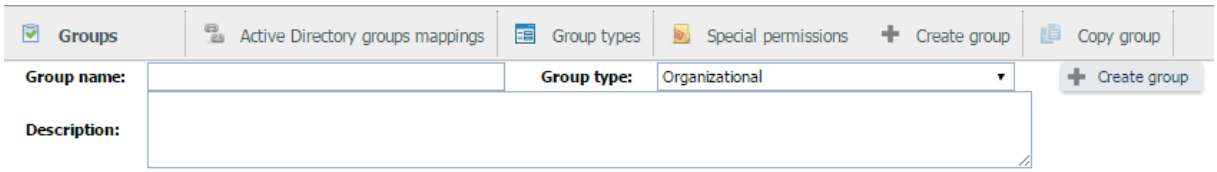



**2**. Groups to permissions mapping. In this view, the left column displays a list of groups created in the system and the right column contains permissions granted to the groups.



## 5.3 Creating a Group

Click **Create** to open the window for creating a new group.



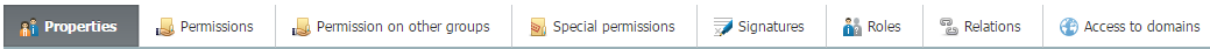

Enter the group name (group names must be unique and cannot contain characters # , + " \ < > ;).

Select the group type, enter its description, and click Create group. The new group appears in the common group list.

You can create custom group types.

## 5.4 Editing a Group

To view or configure a group, click the corresponding table row.

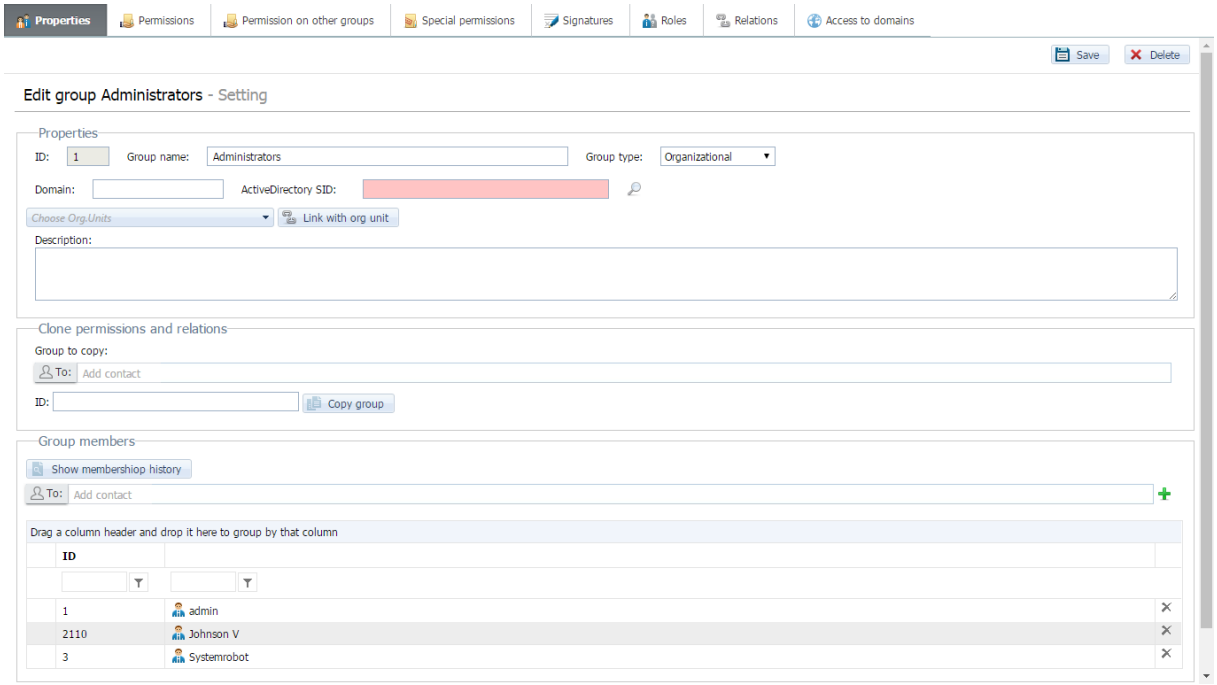



The following tabs display in the top part of the window that opens:

- Properties — used to manage group members and general group parameters and to set up Active Directory integration
- Group Permissions — specific group member permissions for groups
- Category Permissions — used to manage group access permissions for categories
- Special Permissions — used to manage special access permissions
- Signatures — a summary of signatures that have this group in their settings
- Roles — a summary of roles that have this group in their settings
- Associations — used to manage group and group member associations
- Domain Access — used to manage permitted group domains.

### 5.4.1 Properties

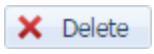
This tab contains basic settings for the group and for Active Directory integration.




| Name | Description |
|---|---|
| ID | Individual group number in the database, unchangeable |
| Group Name | Name of the group displayed in the system |
| Group Type | Available types are Organization, System, Individual, and other types configured by the administrator |
| Group SID in AD | SID of the group in Active Directory (usually pre-populated).<br><br>Click to search for a group SID by its name. |
| Associate with Org. Unit | A group can be associated with the selected org. unit:<br>Choose Org.Units Link with org unit<br>During the subsequent download of users, groups associated with the org. unit are synchronized to update group members. Members of this group cannot be edited in the main group form.<br>To delete association with the org. structure, click Disassociate.<br>Our Company Break the link |

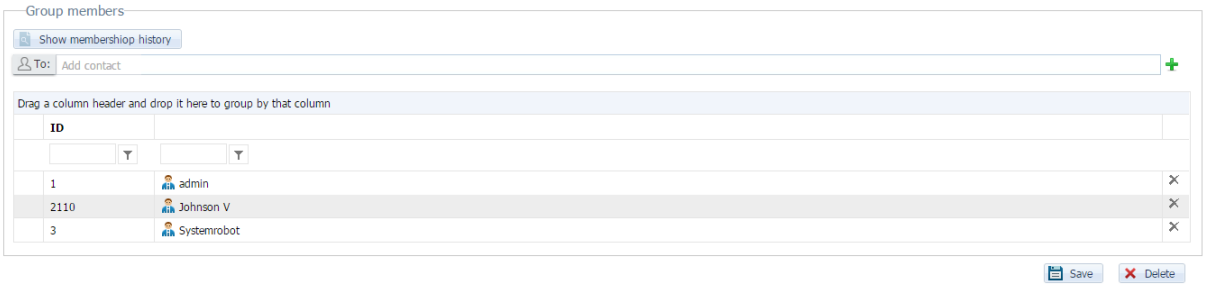
| Description | Group description |
|---|---|

— Click to save changes.



– Click to delete the group.

All users in the group are displayed on this tab as a table.



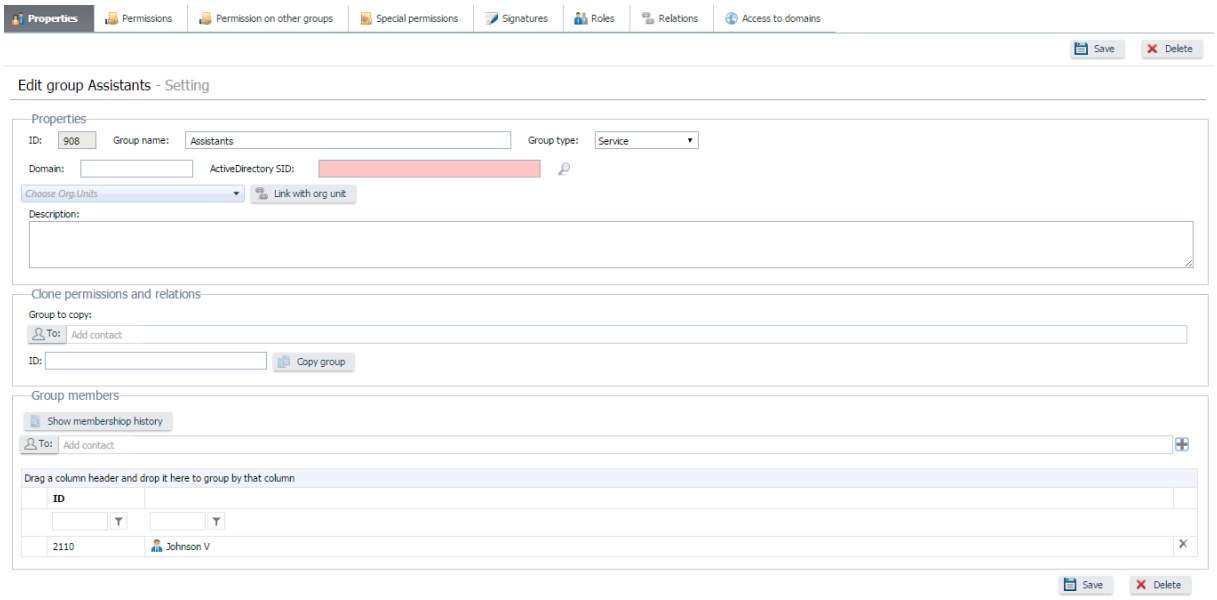

To add a user to the group, start typing their full name in the To field, and the system suggests matching names in the drop-down list. To select a user in the drop-down list, click their name. Repeat to select all users you want to add to the group.

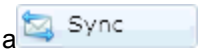
Alternatively, you can add users by clicking the To button and selecting users from the proposed list in the window that opens.

The system supports subordinate groups; i.e., groups can not only contain single users, but also other groups.

To add the selected users to the group, click  .

To open the edit user form, click the corresponding table row.



Groups synchronized from AD have a 

button that can be clicked to upload group updates.

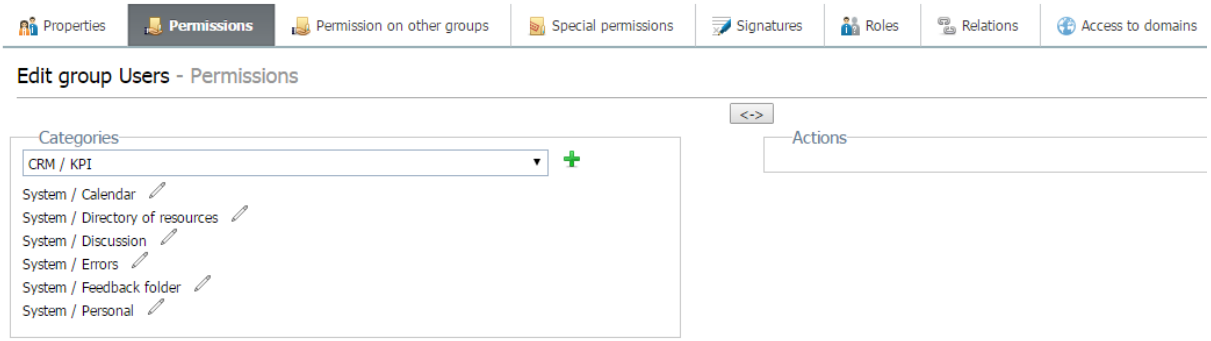
Active Directory synchronization also creates all missing subordinate/parent groups according to the new group input mask, provided that the settings for Active Directory synchronization have enabled the Create New Groups setting.

### 5.4.2 Category Permissions

This tab contains two blocks: Categories and Actions. The Categories block lists system categories that can be assigned access permissions (allowed actions) in the right part of the window. The list displays only the categories for which this group has permissions (for at least one of the supported actions).

Access permissions assigned to a group are applied to all users who belong to this group. If a user belongs to several groups, cumulative access permissions apply.

For easy navigation, a category name in the list is formed as its parent directory followed by a slash and its own name.




To add access permissions for a category to the group, select it in the drop-down list on the left and click  . The category appears in the list. Then grant the required permissions in the Actions block.

To edit group access permissions for a category, left-click its name in the Categories block, and set the flags for granted access permissions in Actions.

To delete all group access permissions for a category, left-click its name in Categories and clear all flags in Actions. Then after reopening the Category Permissions tab, all categories for which permissions have been deleted from the group will no longer display in the Categories block.

A group can have the following access permissions for actions on categories:

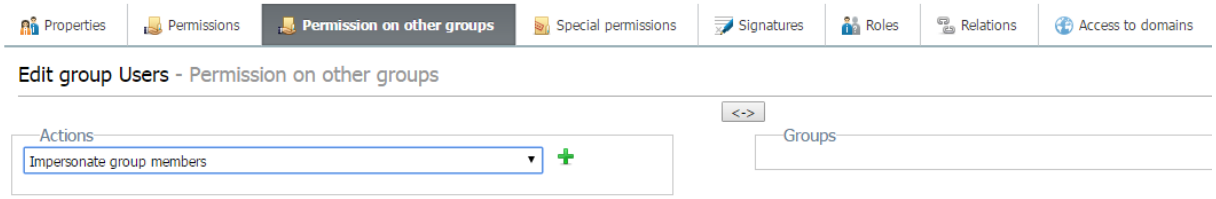
| Access Permission | Description |
|---|---|
| Create Tasks | Permissions for creating objects in the category (user can act as task requestor) |
| Task/Category Administrator | Permissions for changing any category object parameters including requestor, assignee, due dates, task text, adding/deleting signatures, status changes that override the configured route, etc. (it is recommended to grant this permission to the company process owner specified for the |

| Access Permission | Description |
|---|---|
| | category) |
| View Hidden Assignee Scores | Permissions for viewing assignee scores even if the Assignee Assessment Mode parameter in the category settings is Private Assessment |
| Add Acceptors | Permissions for adding acceptors to already requested signatures |
| Custom Requirements Assignee | This functionality is used if the Warehouse module is connected. |
| Execute | Permissions for executing assigned tasks (user can act as task assignee) |
| Custom Requirements Manager | This functionality is used for the Warehouse module. |
| Appoint Assignee | Permissions for editing assignees |
| Change Due Date | Permissions for editing due dates. |
| View Special Parameters | This functionality is used for the Warehouse module. |
| View, Comment | Permissions for viewing all tasks in a category and adding comments to them (including those that do not have requestors, assignees, subscribers, or acceptors as group members) |
| Disable Task Export to Excel | If enabled, the user group cannot download data for this category to Excel. |
| Change Requestor | Permissions for changing task requestor |

### 5.4.3 Group Permissions

This tab contains two blocks: Actions and Groups. The Actions block lists group permissions: Run as Group Member and View Group Member Logs. The Groups block lists system groups that can be assigned group permissions (allowed actions) in the left part of the window.

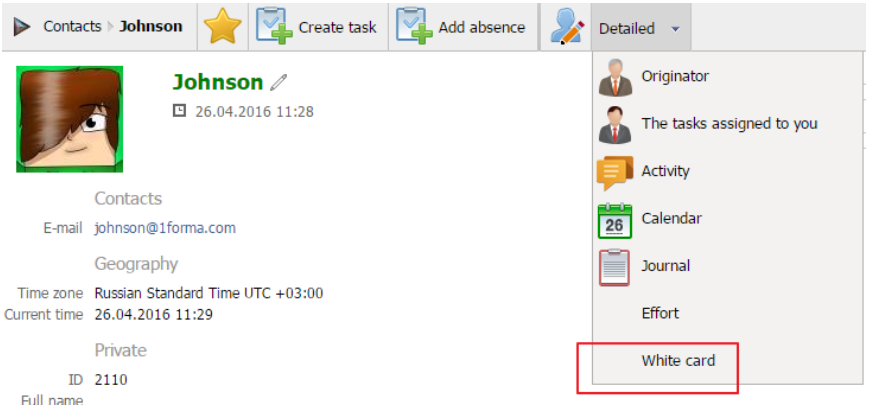
To swap blocks, click <->.




**Run as Group Members** permission enhances the toolbar in the user profile with the Run As User (  ) button, which you can click to log in under another user and view their tasks and account data.

**View Group Member Logs** permission enhances the toolbar in the user profile with the Log button, which opens the log for this user.

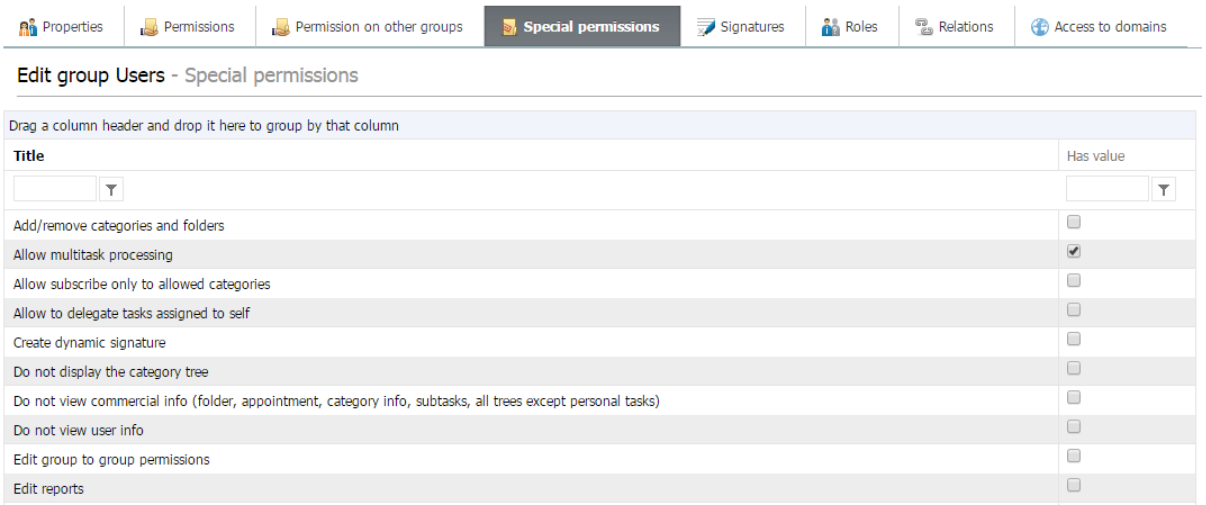
**View White Info** permissions display the White Form item in the More submenu of the user profile.




This form contains a photo, real name and real position of the user. To access this information, the user who is viewing the profile also requires special permissions to View Hidden Info (Full Name), and the real position in the org. structure type must have the Is Commercial Info flag enabled.

## 5.4.4 Special Permissions

Use this tab to configure special access permissions. They are displayed in a list.

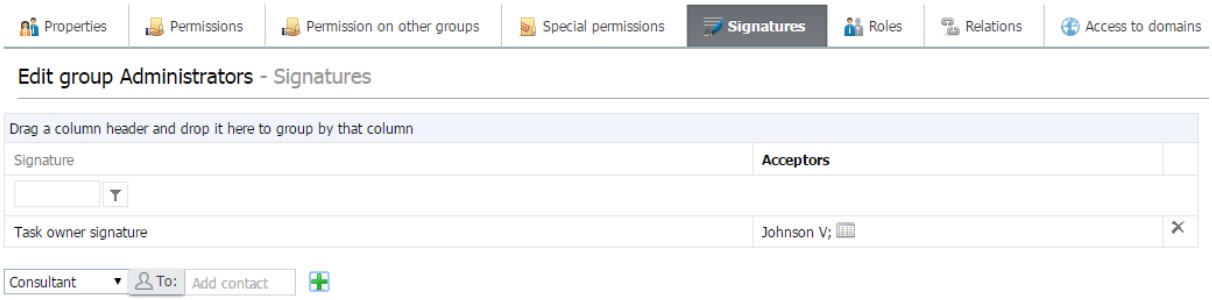



| Special permissions | Description |
|---|---|
| View All Contact Search Results | Group members can view all search results instead of the top 10. |
| View Users and Org. Structure in Contacts Tree | The Contacts tab of the navigation menu displays the Org. Structure subtab. |
| View Hidden User Info in Contacts (Full Name, Room, PC, Search Dismissed) | Group members can view hidden user information in contacts. Hidden information includes, for example, year of birth. If these permissions are not granted, only user names are displayed. |
| View Hidden Employee Info in Contacts (Full | Group members can view hidden employee |

| Special permissions | Description |
|---|---|
| Name, Room, PC, Search Dismissed) | information in contacts. If these permissions are not granted, only employee names are displayed. |
| Request Dynamic Signature | Group members can request dynamic signatures for tasks. |
| Change Special Access Permissions | Group members can edit special access permissions (available to administrators only). |
| Do Not View User Info | User information is not displayed. |
| Do Not View Commercial Info (Department, Position, Categories) | Commercial information is hidden in user profiles. |
| Do Not View Trade Secrets | The trade secret warning is hidden in the bottom right corner of the screen. |
| Do Not View Category Tree | Category tree is hidden. |
| Restrict Subscription | A user cannot be subscribed to a task unless they have permissions for this task. |
| Run As User | Group members can run transactions as other users (available to administrators only). |
| Confirm Password via SMS | When a user logs into 1Forma, an SMS is sent to the mobile number specified in the form, which contains 5 digits that must be typed to log in. |
| Use Search | Group members can use the search service. |
| Invite External Users | Group members can invite external users from the Contacts directory. |
| View Overdue Tasks Statistics | A report on overdue tasks is generated from all system tasks instead of the tasks for which the users have permissions. |
| Enable Delegation of Assigned Tasks | If these permissions are granted, the main task form displays the Delegate button even if a user does not have Edit Assignees permissions for this category. Delegation follows a simplified procedure: a user can exclude themselves from the assignees and appoint a different person without editing other assignees. |
| Edit Groups and Group Permissions | Group members can edit groups and group permissions (available to administrators only). |
| Create Dynamic Signature | |
| Create/Delete Categories and Directories | Group members can create and delete categories or directories (available to administrators only). |
| Mark Any User as Absent | Group members can mark any user as absent. |
| Manage Surveys | Group members can edit any surveys (not just the ones where they are defined as requestors). |

### 5.4.5 Signatures

This tab contains a summary list of all signatures that have this group in their settings.




**Signature** is the name of the signature.

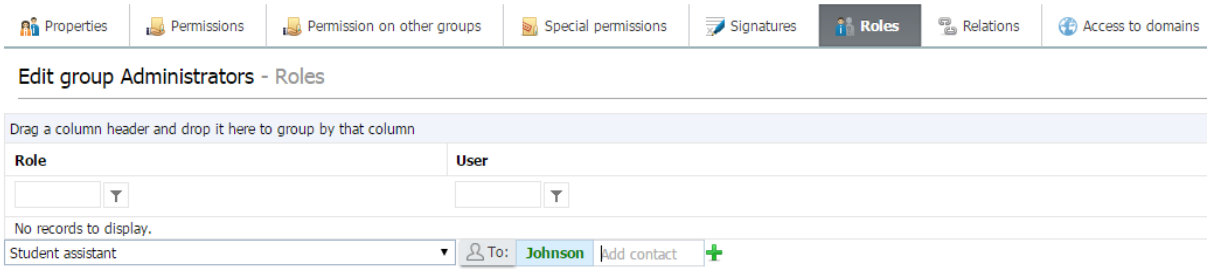
**Acceptor** is the user whose signature is requested by users who belong to this group.

To add a new signature, select its name in the drop-down list, enter the acceptor and click . An association between the current group and the selected acceptor is added to signature settings.

To delete an association, hover the mouse over the required table row and click the icon that appears.

### 5.4.6 Roles

This tab contains a summary list of all roles that have this group in their settings.




**Role** is the name of the role.

**User** is the name of the user associated with this group in the role settings.

To add a new role, select its name in the drop-down list, enter user and click . An association between the current group and the selected user is added to the role settings.

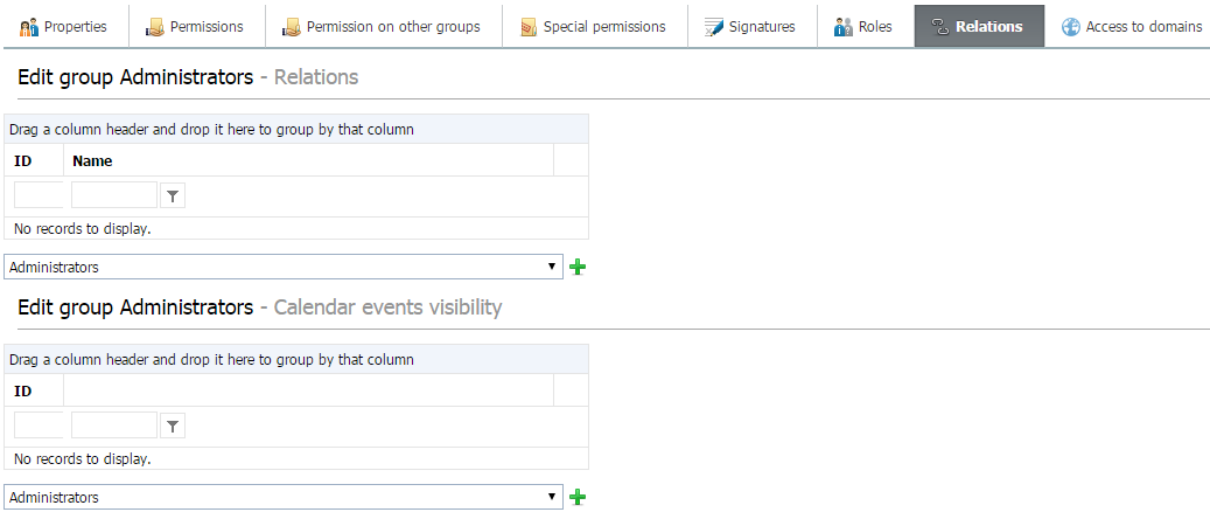
To delete an association, hover the mouse over the required table row and click the icon that appears.

### 5.4.7 Associations

Group associations are used to enhance the search scope when searching for contacts and accessing user calendars (that support absences). For example, when searching for a contact, you can see the users who belong to the same non-system groups as you, and users who belong to associated groups.

**IMPORTANT:** Administrators and users with the HR manager role can see all users and mark them as

absent.

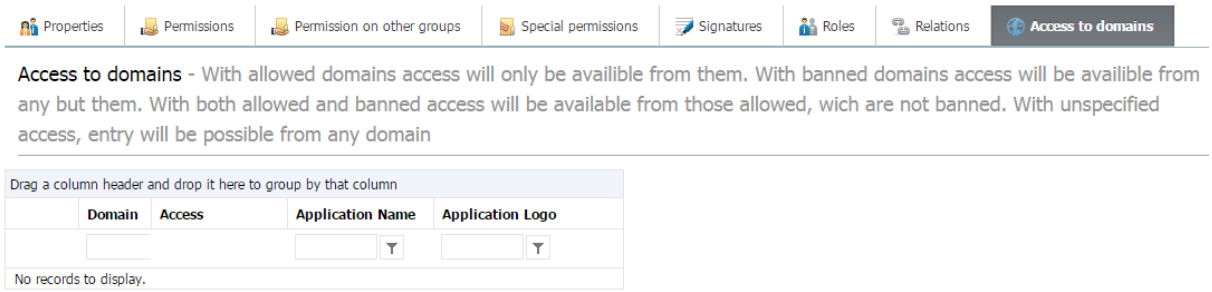



The Associations table defines group associations for a contact search, while the Calendar Event Visibility table defines calendar access.

To add an association, select a group in the drop-down list and click . To delete an association, hover the mouse over the required table row and click the icon that appears.

### 5.4.8 Domain Access

Users can access the system only from the domains assigned to them. If no application domain is assigned to a user or the group they belong to, the system is accessible from any domains defined in the system.




For details on application domains, see "Application Domains" (Miscellaneous— System Settings).

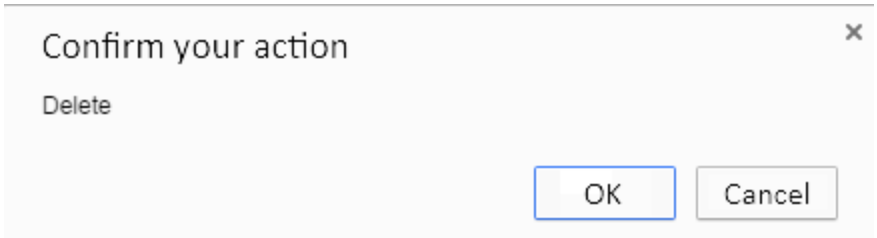
## 5.5 Deleting a Group

To delete a group, hover the mouse over the corresponding table row. The Delete icon appears.

Drag a column header and drop it here to group by that column

| ID | Name | Users count | Group type | AD |
|---|---|---|---|---|
| 1 | Administrators | 3 | Organizational | |
| 908 | Assistants | 0 | Service | |
| 907 | Outside users | 0 | Individual | |
| 904 | Task manager | 1 | Service | |
| 2 | Users | 3 | Organizational | |

Left-click the icon. A confirmation window opens.




Click OK to confirm group deletion. If group deletion has been chosen by mistake, click Cancel.

**IMPORTANT:** The system group "Users" cannot be deleted.

# Chapter 6 Categories



## 6.1 General

**Category** is a template created and configured by the system administrator, and is used to create objects.

In terms of methodology and information contained in category objects, these can include:

- Tasks (orders)
- Workflows
- Documents
- Directory entries
- Log entries
- Discussions (chats, auto- and videoconferences).

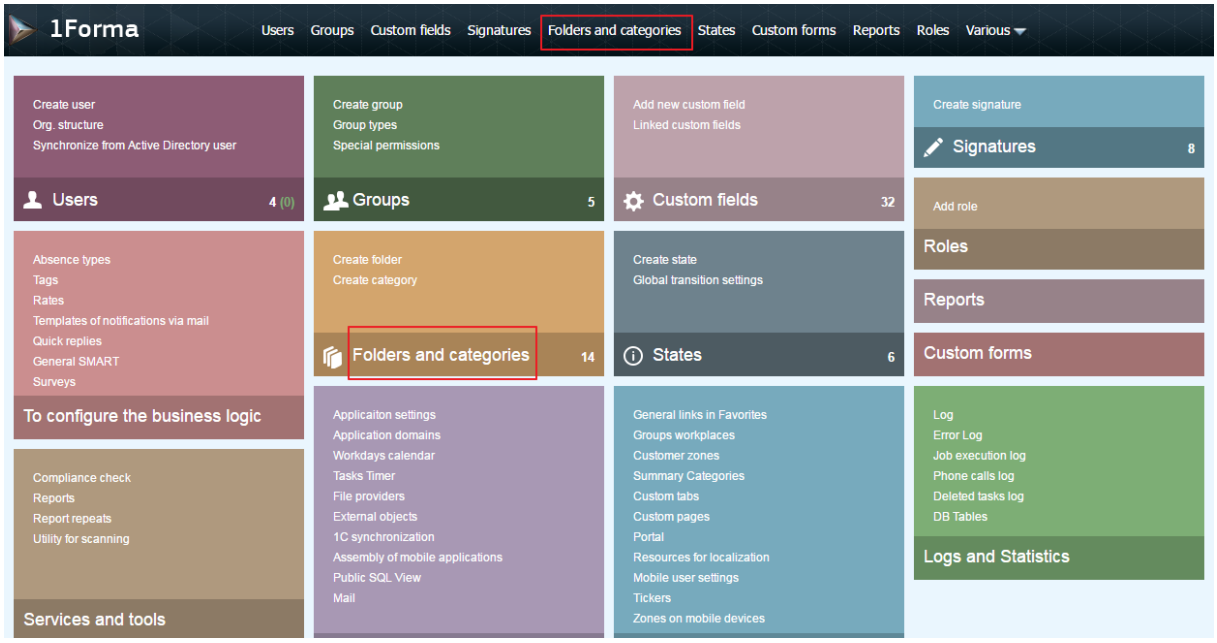
In terms of system categories, they have common processing and administration tools:

- Common set of key parameters (requestor, assignees, subscribers, due dates, etc.)
- Individual set of custom fields
- Individual route (life cycle)

- Access permissions based on groups (users can see only the information allowed for their positions)
- Signatures requested on the basis of specific events and parameter values
- Notifications of specific user actions to certain employees distributed via system interface, emails, SMS and other communication channels
- Unified menu and tools for easy system data processing.

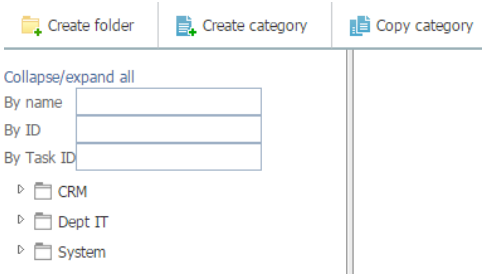
## 6.2 Category Management

To navigate to category management, click the Categories link on the home page or choose the corresponding item in the top menu.




A tree of categories with all the categories defined in the system is displayed on the left. The category tree consists of category names divided into directories.

**Directory** is a kind of folder designed for quick and easy user access to categories.




The Directory menu contains the following items:

- **New Directory** — click to open the form for creating a new directory
- **New Category** — click to open the form for creating a new category
- **Copy Category** — click to open the form for copying a category.

The tree provides the following navigation tools:

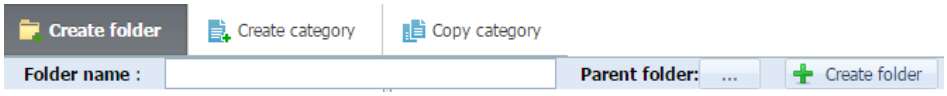
- **Collapse All/Expand All** — click to expand or collapse all category tree levels
- **Filter by Category Name** — click to filter all existing categories by names

- **Filter by Category ID** — click to filter all existing categories by ID
- **Filter by Task ID** — click to filter all existing category tasks by ID.

## 6.3 Creating a Directory

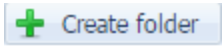
Names of root directories are usually identical to the names of the company's divisions. Directories contain categories, i.e., the processes, functions and tasks this division is responsible for. This structure allows much faster task creation in the system.

To create a directory, click Create Directory in the top submenu.




**Directory Name** is the name of the directory displayed in the category tree. Names of directories can be identical if they belong to different parent directories.

**Parent Directory** is used to create a hierarchical structure. To create a root directory, choose "---No---".

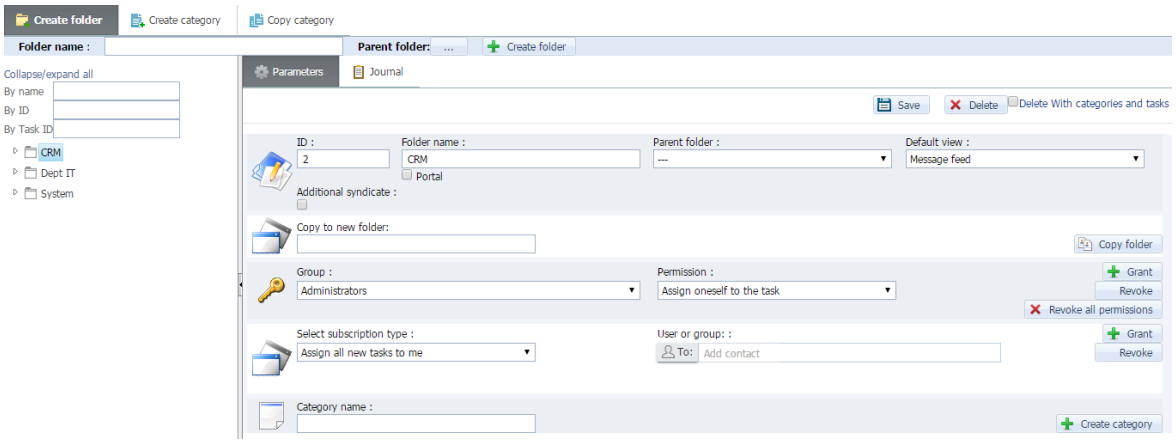


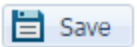
— Click to create a directory with the parameters entered in the form.

After successful creation, the directory automatically appears in the tree.

## 6.4 Editing or Deleting a Directory

To edit a directory, left-click it in the category tree. A settings form opens on the right.




To change name and position in the tree, edit Directory Name and Parent Directory parameters. If required, you can also change the directory view (Standard View parameter). Then click 

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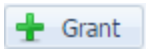
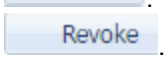
To edit group access rules for all child categories of the directory, select the required values in the Group and Permission fields. To grant permission to the selected group for all child categories at once, click 

. To revoke permission from the selected group for all child categories at once, click 

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To edit notification settings for all categories of the directory, select the required value in the Select

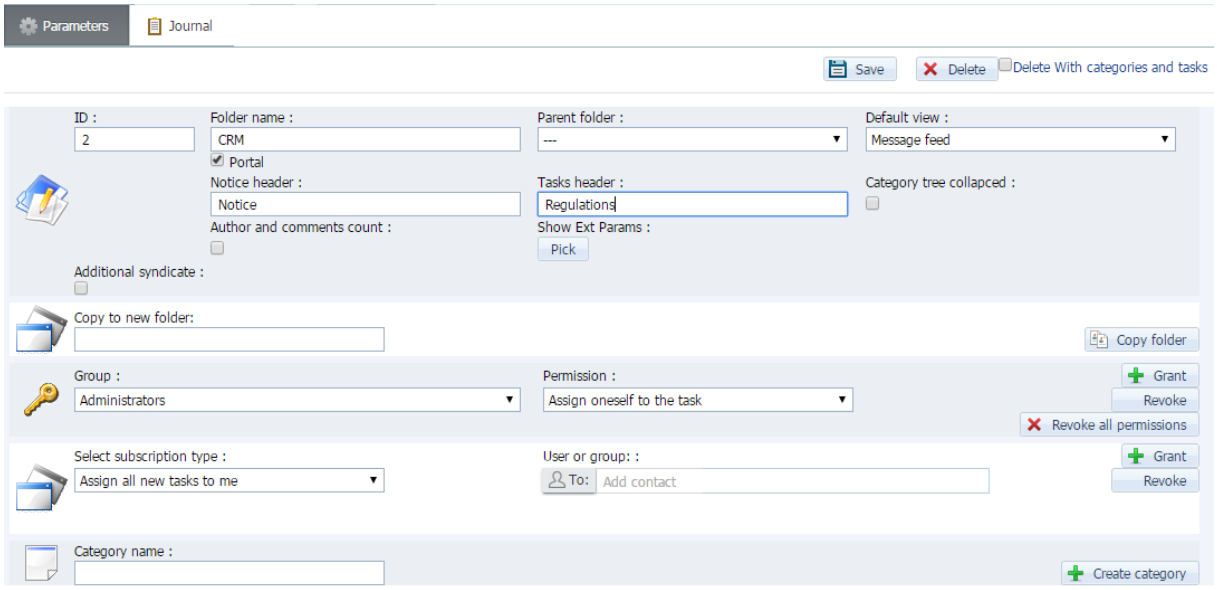
Notification Type: field.

To create a new category in the directory, enter its name in the Category Name field and click Create category.

To delete a directory that has no child directories or categories, click Delete. If a directory has subdirectories and categories, set the Delete Delete with Subcategories and Tasks flag before clicking. Subdirectories and categories including all tasks created by users in these categories will be deleted from the system together with the directory.

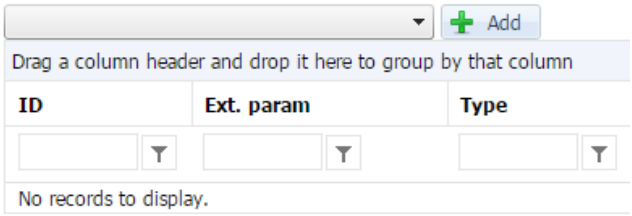
## Portal view

If the Portal flag is set, custom fields are available for entry of displayed announcement and task header texts.




If the Creator and Comments Number flag is set, the portal view of the category will display additional rows with the announcement/regulation creator's name and the number of comments added by each user.

Click Show Custom Fields to open the form for selecting custom fieldsto be displayed in portal view:




The drop-down list contains all custom fields assigned to the categories of this directory. To add a custom field to the list of visible fields, select the required custom field in the drop-down list and click the Add button. To delete a custom field from the list, click the icon with a red cross: .

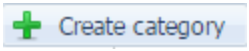
The user interface displays the button 

. Portal view contains requests from the categories of the directory defined as Is Portal and Is Announcement.

## 6.5 Creating a Category

Each category requires a parent directory. If the parent directory exists in the system, click Create Category to create a category.

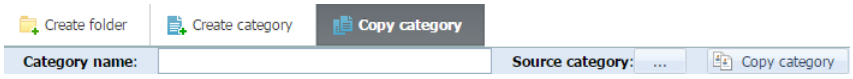

- Category Name is the name displayed in the category tree.
- Parent Directory is the directory in which the category is displayed. The drop-down list contains only the names of the two last directory levels.

Click the 

button, and the new category created from the data entered in the form is automatically added to the tree.

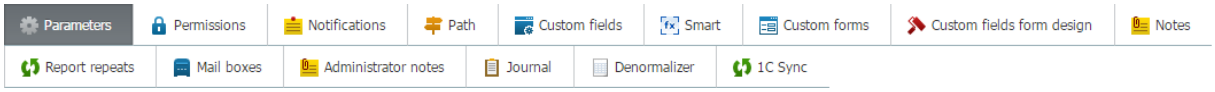
### Copying a Category

A new category can also be created by copying an existing one. All settings of the original category except the name are copied. The name can be entered in the corresponding form.




## 6.6 Editing a Category

To configure a category, left-click its name in the tree. A category settings panel with several tabs appears on the right.

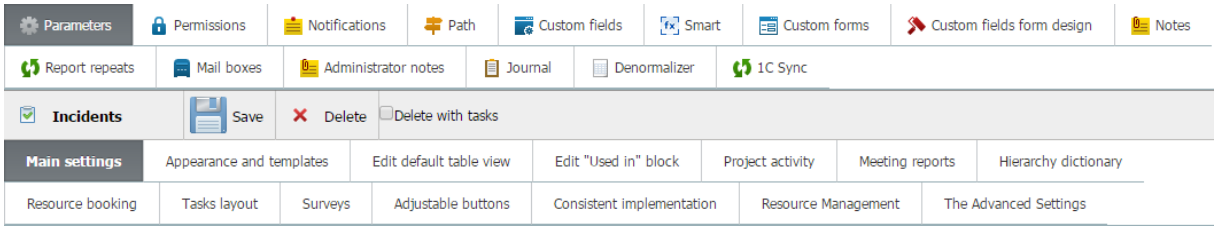



- Settings — define general settings, appearance and key parameters of the category
- Access — configure access rules
- Notifications — configure user notifications about the events for the tasks of this category
- Route — define the life cycle of the objects created in this category, transition rules, required signatures, and subtasks
- Custom fields — edit the custom field list for the main task form
- Smart — configure automated actions on tasks
- Forms — manage custom forms used within a task
- Design — define task form appearance in the system
- Notes — add notes on the category
- Repeat Report — review repeated tasks in the category
- Email Accounts — configure integration with mail sever to process emails
- Memos — add information on the category for the administrator
- Log — review action log for the category
- Denormalizer — set up task denormalization

- 1C Synchronization — configure synchronization
-

### 6.6.1 Settings

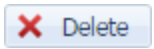
This tab contains basic settings for the category and its appearance.




**Category Name** is the name of the category displayed in the tree.

**Directory Name** is the name of the directory in which the category is displayed.

saves changes to settings made on this tab.



deletes the category from the system (applicable if it does not contain created child objects).

If the flag Delete with Tasks is set, the category is deleted with the created objects.

If the category has a linked Lookup custom field, a warning is issued before deleting this category. If deletion is confirmed, the link to the custom field is deleted first and then the category itself.
If the category for deletion is used for subtasks of another category, in order to delete it, you have to adapt the actions of the route of this category.
Categories specified in application settings in the For Current Requestor block cannot be deleted.

The tab contains the following subdirectories:

- Basic Settings
- Appearance and Templates
- Edit Default Table View
- Used In Block Configuration
- Project Services
- Meeting Minutes
- Hierarchical Directory
- Resource Booking
- Layout Plan
- Surveys
- Custom Buttons
- Sequential Execution
- Resource Planning
- Custom Field Blocks

#### 6.6.1.1 Basic Settings

**The Basic Settings** tab opens by default.

Main settings | Appearance and templates | Edit default table view | Edit "Used in" block | Project activity | Meeting reports | Hierarchy dictionary | Resource booking | Tasks layout
Surveys | Adjustable buttons | Consistent implementation | Resource Management | The Advanced Settings

**Category name:** Incidents **Folder name:** Dept IT ...

Main(ID 11)

Category description

Responsible group
To: Add contact

Main and personal folders visibility mode:
Show all

- Notify responsible group about state change
- Is a dictionary
- Is a portal
- Additional syndicate
- Is a notice
- Do not send email messages
- Subtasks must be finished to finish work
- Can be used for invitations
- Forbid upload files into closed tasks
- Do not allow move tasks from this category
- Give rights only to AD groups
- Auto delete previous versions of files
- Allow performers to recall requested signatures
- Allow acceptors to recall signed signatures
- Allow Owner to recall requested signatures
- Allow requesters to recall requested signatures
- Forbid task move to other category
- Show task text as Html
- For root tasks

Invited users group
application default

Confidential mode:
Disable

Terms

- [x] Due date must be set

Default task ordered time
minutes

Minimum time required to complete the task
minutes

Recommended time to complete the task
minutes

- [x] User can change ordered time
- User can set task start time
- Fill new task start time with current date
- Allow status change and performers appointment for overdue tasks, due date in the past
- To forbid to put term on a problem for the weekend
- Due date only on working days
- Allow change task start time in closed tasks
- Restrict editing due date and task start time to users that have the "change due date" permisison

Deadline change demand the signature.
No

- Do not show task due date changes count at home page
- Originator can lock task due-date

Remind ...days prior to due date

Notify approaching deadline
25% 50% 75% on due date

- Exclude from overdue report
- Subscribe to overdue tasks only responsible group

Work with Word files

- Load attachments files in Sharepoint while signing
- Generate file with changes (Redline)

Show compare button for Word files

Smart - filter to compare against first version

- Diallow to upload protected docx files

Counters

- Likes
- View
- Users comments

Automatization

Stored procedure to execute for every task (SQL)

Stored procedure to execute when "Save" is pressed

Step to perform when the task is posted
---

- Send signature requests on bahalf of System User
- Copy subscribers to subtasks (default)
- Only allow subtasks in this category (no direct tasks)
- Log subtasks status changes
- Due date depends on child\parent tasks
- Clear performers list when moving task to another category
- Reject subtasks when parent rejected

Performers and subscribers

- Select task owner manual
- Restrict removing assignees
- Restricted subscribe
- Allow Group Subcription

Assigning the task on creation
Tasks can be assigned on creation

Delegating tasks requires acceptance signatures
No

- [x] Do not limit manhours visibility
- [x] Notify owner on work amount excess

Group alerted in case the plan is exceeded
To: Add contact

Performance evaluation mode
Disabled

- Performance evaluation required
- [x] Allow last performer to refuse from performing
- Every assignee finishes work separately

On performer multifinish
Do nothing

Action with assistants
Add to performers

- Forward comments to all helpers

Task text and comments

Task text
Task text is required

Default task text

- [x] Display full text
- [x] Allow HTML in task text
- Allow images in task text
- [x] Originator can change the task text
- [x] Administrator can change the task text
- Subscribers can edit text
- Any can correct the task text
- [x] Enable comment in this category
- Allow HTML in comments
- [x] To allow to edit to authors comments
- Posting comments without selected recipients not allowed
- Hide system comments
- Deny post comments in closed tasks
- [x] At entering '?' automatically stamp "The answer is necessary"
- Show all comments from task tree by default

Tasks encryption mode:
No encryption

This tab contains the following settings:

| Name | Description |
|---|---|
| **General** | |
| (ID) | The block name is followed by the unique category system ID in brackets. |
| Category Description | This text displays in a tooltip when a user hovers the mouse over the category name in the tree. |
| Responsible Group | Users in this group are notified of canceled and overdue tasks. |
| View Mode for Home Page and Personal Folders | Here you can define display of category items on the application home page and Personal tab. Possible values are:<br>• **Show All** — displays both tasks on the Personal tab and comments in the feed<br>• **Show Tasks Only** — displays tasks on the Personal tab, but does not display comments in the feed<br>• **Show Comments Only** — displays comments in the feed, but does not display tasks on the Personal tab<br>• **Do Not Show**. |
| Notify Responsible Group of Forced Status Change | If the flag is set, users in the group selected above are also notified of forced status change. |
| Is Directory | This category is displayed with the icon. Categories of this type do not support parameters such as assignee, task start date, due date, etc. Objects of this category are not displayed on the home page, and the category tree does not contain the number of objects created. They are excluded from user task lists of a subordinate group, subordinate org. unit, tasks where the user is the requestor or assignee, tasks canceled or appealed by the user, and recurring tasks and do not support roles. |
| Is Portal | This category is displayed with the icon. Tasks of a category with this attribute are displayed as a tree with task view in the directory with the Portal attribute of the block Dashboard on the directory interface. |
| Custom Syndication | The category is displayed as a portal selected in the drop-down list below the flag (the Standard View parameter value on the Appearance and Templates tab is changed to Custom Syndication). |
| Is Announcement | This category is displayed with the icon. Tasks of a category with this attribute are displayed as announcements in the directory with the Portal |

| Name | Description |
|---|---|
| | attribute of the block  on the directory interface. |
| Do Not Email | Events with category tasks do not generate notification emails. |
| Requires Subtask Completion to Complete | The task cannot be completed until all subtasks are completed. |
| Supports Invitations | The category can be used to invite users from the Employee tab on the navigation bar. |
| Enable SMS | This category allows comments to be sent via SMS by choosing the corresponding option. The setting is available if SMS notifications are enabled in the application settings. |
| Disable File Attachment after Task Completion | After the task has been completed, no files can be attached to it. |
| Disable Task Transfer from Category | A task cannot be transferred to another category. If enabled, the Transfer button is hidden from the main task form. |
| Restrict Permissions Granted to AD Groups | In this case, only the groups synchronized from AD can be added to category permissions. |
| Delete Old File Versions Automatically | If a file with a name identical to any of the existing task files is attached, the previous version is deleted (when required permissions are granted and the file supports deletion). If the file is linked or referenced in the task text or a custom field or delete permissions are missing, the new file is automatically renamed without notification. |
| Allow Assignees to Recall Signature Requests<br>Allow Acceptors to Recall Signature Requests<br>Allow Requestor to Recall Signature Requests<br>Allow Signature Requestors to Recall Signature Requests | If the setting is enabled, the requested signatures menu contains a Recall Signature button, which you can click to move the task back to the step preceding the signature request. This setting is used to abort the approval route. The Recall button is available to users with Task Administrator permissions and assignees/acceptors/requestors of the current task, as well as to the user requesting a signature. |
| Disable Task Transfer to Category | If the flag is set, tasks from other categories cannot be transferred to the current category. |
| Display Task Text as HTML in Table | If the flag is set, the table view of the category will display task texts with HTML tags.<br>Use the formatting toolbar to format task texts. Texts with HTML tags can also be inserted via SMARTs. However, if tags are added manually in the task text editor, they are treated as plain text instead of HTML tags. |

| Name | Description |
|---|---|
| For Root Tasks | If the flag is set, tasks of this category are treated as root tasks when a comments feed is generated.<br>The comments feed for these tasks includes comments from category subtasks without this flag. |
| Group for Invited Users | Invited users are added automatically to this group for invitations based on this category. |
| Confidentiality Mode | Possible values are:<br>• Disable (disabled for all category tasks)<br>• Enable Flag (set selectively for category tasks)<br>• All Tasks Confidential (enabled for all category tasks).<br>For details click here. |
| **Due dates** | |
| Due Date parameter is required. | A task cannot be assigned without a due date. |
| Default Due Date | Due dates for created tasks are automatically populated according to the rule: "current date" + "entered value". Enter an integer and select the unit of measurement (minute, hour, workday, day). |
| Minimum Due Date | The due date of a created task cannot be earlier than "current date" + "entered value". |
| Recommended Due Date | This is used for comparison in the report (Tasks Not Completed until Recommended Due Date report). |
| Enable Due Date Entry on Creation | If enabled, the Due Date parameter displays in the main task form and is available for editing. |
| Enable Start Date Entry at Creation | The Task Start field displays in the new task form. Users can configure the home page to display only active tasks (with task starting before the current date) in their personal settings. This setting is enabled by default. |
| Populate Task Start with Current Time at Creation | Task start for a created request is populated with the current date. |
| Enable Route Progress and Assignees for Overdue Tasks, and change Past Due Dates | Time values of a category object support values earlier than the current date, and tasks with past due dates allow actions. |
| Disallow Non-Working Days for Task Due Dates | The Due Date parameter allows only working days. |
| Allow Only Working Hours for Due Dates | Due Date parameter allows only working hours. |
| Enable Task Start Change for Completed Tasks | Completed tasks support start date change. |
| Restrict Due Date Change by Change Due Date Permissions | The Due Date parameter value can be changed only by users with access permissions for due |

| Name | Description |
|---|---|
| | date change. |
| Due Date Change Requires Signature | If No is selected, no signature is requested for due date changes.<br>If signature is enabled, it is requested for due date changes.<br>If Define with Smart Expression is selected, then the selection field displays. The selected Smart expression must return the ID of the requested signature. If the Smart expression returns -1, the signature is not requested.<br>Deadline change demand the signature.<br>Define in Smart expression |
| Do Not Show Number of Task Due Date Changes in Tasks Feed | If enabled, messages of type **"[Due date changed 9 times!]"** are not displayed in the feed. |
| Can Requestor Block Due Date? | The requestor can block the task due date for editing at any time. If the due date is blocked, a comment from the requestor is sent to the task assignees. |
| Remind ... Days Ahead | When a due date is set, all subscribers are automatically reminded of the task the specified number of days ahead of the due date. |
| Remind of ... Task Due Date | If the flags are set, the task generates reminders after passage of 25%, 50%, and 75% of the period until the due date, respectively. You can only enable reminders on the task due date. |
| Exclude from Overdue Tasks Report | The task is not included in basic reports Overdue Tasks Statistics, Overdue Tasks Information and similar custom reports. |
| Subscribe Only Responsible Group to Overdue Tasks | Only the responsible group is subscribed to overdue tasks. If the flag is not set, managers of the assignee and the responsible group are subscribed. |
| **Working with Word files** | |
| Download Docx Files to Sharepoint on Approval | If the flag is set, files are downloaded to Sharepoint on transition. |
| Generate Cumulative Log File (Redline) | If the flag is set, a cumulative log file is generated (similar to Word track changes mode). |
| Show Compare Button for Word Files | If a Smart filter is selected and returns True on executing the transition (i.e., during document approval), the Compare button displays for Word files. |
| Smart Filter for Comparison to Original Version | If a Smart filter is selected and returns True on executing the transition (i.e., during document |

| Name | Description |
|---|---|
| | approval), the latest document version is compared to the original instead of the previous version. |
| Disable Password Protected File Attachments | If the flag is set, the tasks do not allow attachment of password protected files. |
| **Counters** | |
| Likes | If the flag is set, the key parameters block of the main task form displays a line with task likes as 1 |
| Number of Views | If the flag is set, the number of views is counted for a task (internal counter displayed on the mobile application services test page). |
| User Comments | If the flag is set, number of user comments is counted for a task (internal counter displayed on the mobile application services test page). |
| **Automation** | |
| Procedure on Creation (SQL) | This field must be empty. It can be edited only by professionals certified by the developer. Improper use may lead to system failure and data corruption. |
| Procedure on Saving | This field must be empty. It can be edited only by professionals certified by the developer. Improper use may lead to system failure and data corruption. |
| Step on Saving | This is an automatic transition executed when a task is created (if the Auto Transition on Creation value is Fixed Transition Selected by Admin). |
| Send Signature Requests for Steps from Task Manager | Users receive notifications of requested task signatures from a Task Manager user. |
| Copy Subscribers to Subtasks | When subtasks are created, all subscribers of the parent tasks are copied automatically. |
| Create Subtasks Only | Tasks in this category can be created only as children. |
| Log Subtask Status Changes | Status changes of child tasks are logged as comments to the parent task. |
| Due Date Depends on Children/Parent | Subtask due dates cannot be later than the parent due date. |
| Clear Assignees on Task Transfer to Other Category | When a task is transferred to another category, the Assignees parameter is cleared automatically. |
| Cancel Children when Parent Canceled | When a parent task is canceled, all of its subtasks are also canceled. |
| **Assignees and subscribers** | |

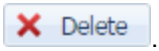
| Name | Description |
|---|---|
| Do Not Propose Requestor | If enabled, the Requestor field remains empty. |
| Restrict Assignee Deletion | A user can delete himself/herself from assignees only with Appoint Assignees or Admin category permissions. |
| Restrict Subscription | Only users with category permissions can be subscribed. |
| Enable Group Subscriptions | If the flag is set, users can send comments to user groups. (Group members are dynamic.) |
| Assignee Appointment | • Enable Assignee Appointment at Creation: assignees can be selected by the task requestor at task creation.<br>• Disable Assignee Appointment at Creation: if selected, the Assignees parameter is hidden.<br>• Require Assignee Appointment at Creation: a task cannot be created unless assignees are selected.<br>If assignee appointment at creation is allowed, the cursor is positioned in the assignee entry field; otherwise it is in the task text field. |
| Do Not Restrict Effort Visibility | Efforts are visible to all users with task permissions for viewing and adding comments. |
| Notify Requestor of Exceeded Efforts | The task requestor is notified if actual efforts exceed planned efforts. |
| Group to Notify of Exceeded Plan | The selected group is notified of exceeded planned efforts. |
| Assignee Assessment Mode | • Disabled: assignees are not assessed.<br>• Private Assessment: assignees cannot access scores given by requestors for task execution.<br>• Public Assessment: assignees can access scores given by requestors for task execution. |
| Require Assignee Scores | If enabled, an assignee cannot complete the task until he/she is assessed.<br>**IMPORTANT:** To avoid situations where a user cannot complete the task and at the same time the requestor cannot add a score, create an additional intermediate status (such as validation) that will be set by the assignee after the task has been executed. Then the requestor will complete the task after it has been validated and assessed. This status must have an enabled Work Completed setting and disabled Execution Completed (Inactive) setting.<br>If assignee assessment is mandatory, but has not been performed, a window opens where the requestor can enter scores for assignees. |

| Name | Description |
|---|---|
| Allow Last Assignee Self Recall | If a task has only one assignee, they can self recall and leave the task without assignees. |
| All Assignees Must Complete Task | To complete a task, all users specified as assignees must click Finish or a similar button. This button (and other buttons for completion) is available only to assignees regardless of access permissions of other task subscribers. |
| Action on Multicompletion | This action is executed when the task is completed by one of the assignees for the user. Possible values are:<br>• None<br>• Delete from Assignees<br>• Delete from Subscribers (also deletes from assignees). |
| Action for Assistants | This action is automatically executed for role Assistant. Possible values are:<br>• Add to Assignees<br>• Add to Subscribers<br>• None. |
| Notify All Assignees of Messages to Assignee | If a comment is sent to an assignee, all task assignees are notified. |
| **Task and comments text** | |
| Text | Possible values are:<br>• Text Required<br>• Text Can Be Empty<br>• Disable Task Text Entry. In this case, task texts are generated from a template with values populated for custom field configuration (seeAppearance and Templates, Templates block, Template for Auto Task Text Generation setting)<br>• Block Task Text for Changes. |
| Default Text | This is the task text displayed by default at task creation. To edit, click |
| Show Full Text | Select whether to show the full task text regardless of its length or only its first part with Show All link. |
| Enable HTML in Task Text | This setting allows text formatting with HTML (formatting toolbar displays). If disabled, task texts are entered similar to Large Text parameter. |
| Enable Images in Task Text | Task text editor supports inserting images from files attached to the task. |
| Requestor Can Change Task Text | The requestor can change the text of the created task. |

| Name | Description |
|---|---|
| Administrator Can Edit Task Text | The administrator can change the text of the created task. |
| Subscribers Can Edit Task Text | Subscribers can change the text of the created task. |
| Anyone Can Edit Task Text | Any user can change the text of the created task. |
| Enable Comments | If the flag is not set, the category does not support comments. |
| Enable HTML in Comments | This setting allows comment text formatting with HTML (formatting toolbar displays).<br>If enabled, you can insert images by dragging and dropping. |
| Allow Creators to Edit Comments | The creator of a comment can edit it after sending. |
| Disable Comments Without Recipients | If the flag is not set, users cannot send comments without recipient selection. |
| Do Not Send System Comments | We strongly recommend leaving this flag disabled! If the flag is set, the category does not generate system comments (e.g., for assignee appointment, due date changes, etc.). |
| Disable Comments on Completed Tasks | Manages comments on completed tasks. |
| Auto Enable Response Required on Entry | If the flag is set, then if a comment text in task comment entry mode contains "?", the comment is automatically marked as a question, and the Response Required setting is enabled. |
| Show Common Feed By Default | If the flag is set, then in comments feed user mode comments from subtasks are displayed. |
| Encryption Mode | Possible values are:<br>• No Encryption<br>• Enable Encryption<br>• Encryption Required.<br>For details click here. |

Edit settings and click 

. Otherwise, any changes to the settings will be lost.

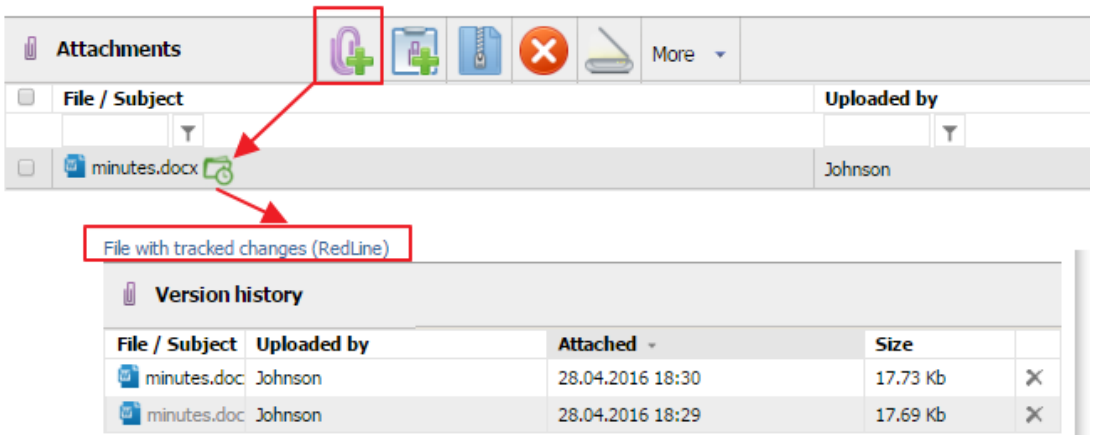
To delete a category, click 

. Categories specified in application settings. in the For Current Requestor block cannot be deleted.

### Redline mode features (tracking changes to text files)

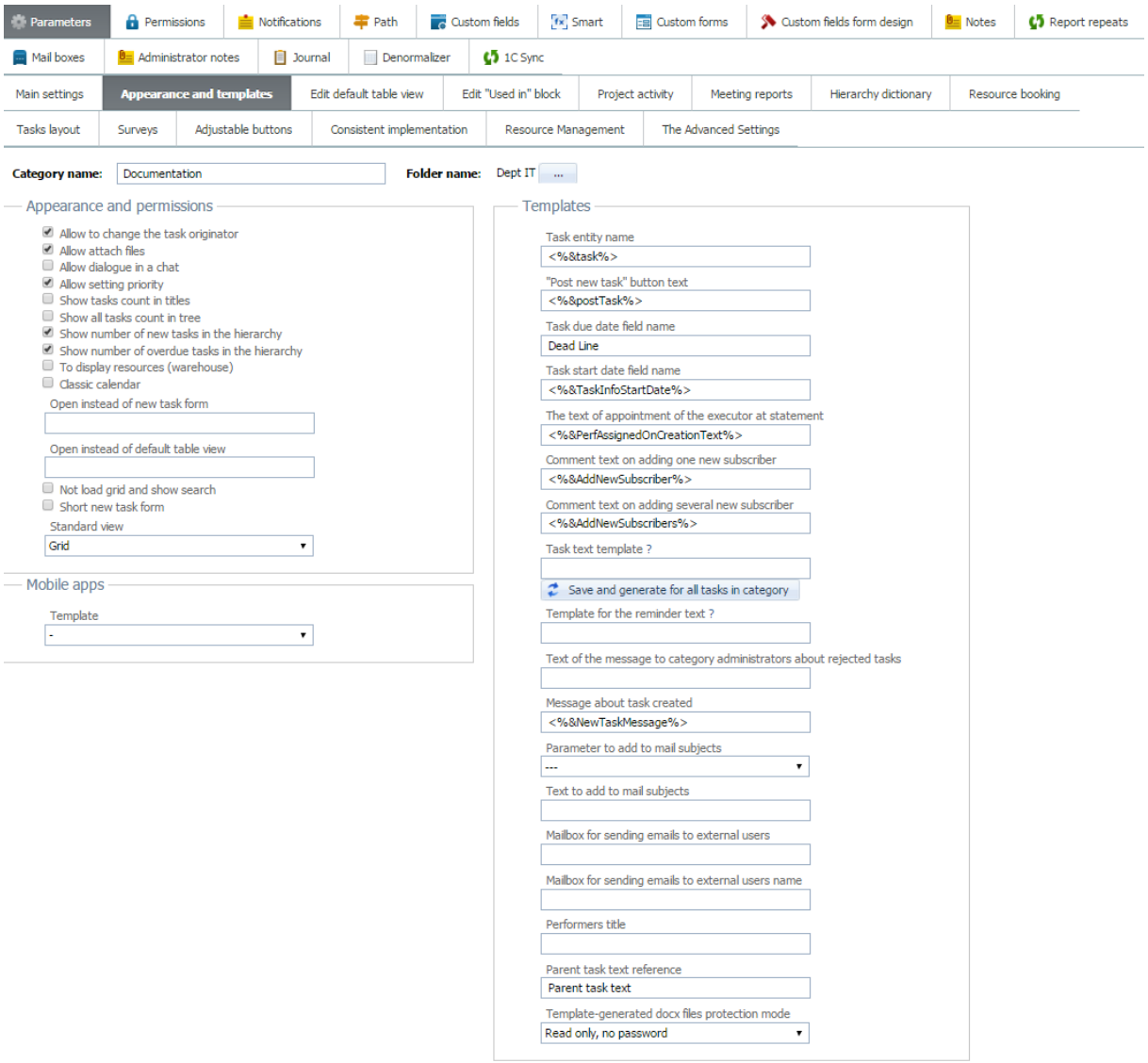
Redline change tracking mode is a part of the text document approval process when approval is performed in several steps. If this mode is enabled for a category, then after the first approval step is completed for each text file attached to the task or to the custom field, a cumulative log file is automatically generated and maintained. If a file is edited in a browser via Web Apps or WebDAV, all changes are logged and displayed as in standard Word track changes mode. If a file is edited locally (i.e., downloaded to a user PC, edited and uploaded back to the task), changes are tracked only when

the uploaded file name is identical to the original file. Tracked changes can be viewed in the revision history window by clicking the Cumulative Log File (Redline) link.




**IMPORTANT**: If a category does not have a multistep approval process or does not require cumulative log file generation, the Generate Cumulative Log File (Redline) flag must be disabled. Otherwise, attached file versioning will not work correctly.

### 6.6.1.2 Appearance and Templates




This tab contains the following settings:

| Name | Description |
|---|---|
| **Appearance and permissions** | |
| Enable Task Requestor Change | This setting enables changes to the task requestor. |
| Enable File Attachments | The task supports file attachments. |
| Enable Chats | The task supports chats. |
| Enable Priority | The task supports changes to priority. |
| Show Task Number in Headers | A category header displays the number of tasks in brackets (except categories with Is Directory setting |

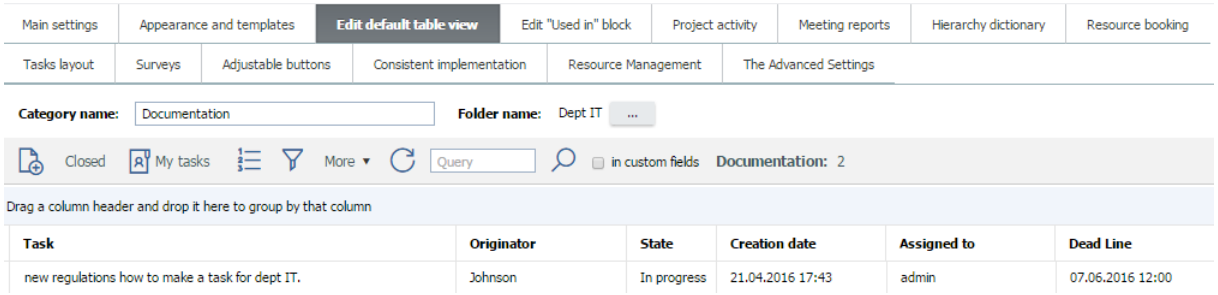
| Name | Description |
|---|---|
| | enabled). |
| Show Total Task Number in Tree | The total number of tasks available to the user is displayed in brackets to the right of the category name (except categories with Is Directory setting enabled). |
| Show New Task Number in Tree | The number of new tasks available to the user is displayed in brackets to the right of the category name (except categories with Is Directory setting enabled). |
| Show Overdue Task Number in Tree | The number of overdue tasks available to the user is displayed in brackets to the right of the category name (except categories with Is Directory setting enabled). |
| Show Resources (Warehouse) | This functionality is used for the Warehouse module. |
| Classic Calendar | Categories are displayed as calendars. |
| Open Instead of New Task Form | This field must be empty. It can be used only by professionals certified by the developer. Improper use may lead to system failure and data corruption! |
| Open Instead of Default Table View | This field must be empty. It can be used only by professionals certified by the developer. Improper use may lead to system failure and data corruption! |
| Do Not Load Table and Show Search | Opens category object search form instead of table view |
| Task Creation Summary View | Option for entering only task subject is supported |
| Standard View | Requests of this category are displayed in the selected view.<br>Possible values are:<br>• Feed<br>• Table (default)<br>• Calendar<br>• Files<br>• Summary<br>• File storage<br>• Portal. |
| **Mobile apps** | |
| Display Template | This template is used for displaying category tasks in iOS mobile app. Possible values are News, Rate, etc. |
| **Templates** | |
| Entity Name | Entity name of the object created in the category (task, document, directory entry, etc.) |
| Assignment Button Text | Text displayed on the task assignment button in the main task form (Assign Task, Add Counterparty, Register Document, etc.) |
| Due Date Name | Due date parameter name displayed in the main task form |

| Name | Description |
|---|---|
| Task Start Date Name | Enter text to be displayed for the date of the first route transition in the main task form |
| Assignee Appointment Text at Creation | Text of the comment created during assignee appointment at task creation |
| Template for Task Text Auto Generation | If the Text setting in Basic Settings has the value Disable Task Text Entry, task texts are generated from this template.<br>Template text supports the following inserts:<br>• $Text — outputs task text<br>• $TaskID — outputs task ID<br>• $ExtID — outputs task custom field value for this ID. *For example, $Ext15 is replaced by a parameter value with ID=15.* For parameter IDs, see the common list of custom fields.<br>Click the Save and generate for all tasks in category button to process and apply new templates. |
| Generate for All Tasks | The text of all category tasks, including those with completion status, is replaced from the auto generation template. |
| Reminder Text Template | The text of the reminder is added as a comment.<br>Text supports the same inserts as the task text auto generation template (see above). |
| Cancellation Email | Email body |
| Task Creation Message | Text of the comment added automatically at task creation |
| Add Parameter to Email Subjects | Inserts value of a custom field defined for the category into email subjects |
| Add Text to Email Subjects | Inserts text into email subjects |
| Address for Outgoing Emails to External Users | Email address populated for external users |
| Sender for Outgoing Emails to External Users | Sender name populated for external users |
| Assignee Appointment Header | Here you can specify assignee selection button text for categories displayed at new task creation. |
| Parent Task Text Reference | Here you can define the header of the parent task text for a subtask. This setting is available if Enable Parent Text is selected for subtasks in the step. |
| Protection Mode for Docx Documents Generated from Template | Here you can restrict access to docx documents generated from a template.<br>The following protection modes are supported:<br>• No protection<br>• Read only, no password<br>• Track changes<br>• Comments<br>• Read only, password. |

Edit settings on this tab and click Save. Otherwise, any changes to the settings will be lost.

Click Delete to delete the current category.

### 6.6.1.3 Edit Default Table View




Use this block to configure display of category table view for all users; applied by default when a category is opened.

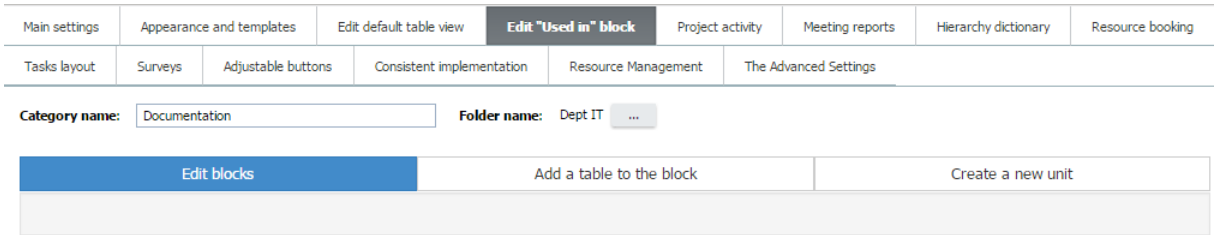
The View menu contains the following configuration tools:

| Field name/icon | Description |
|---|---|
| | Click to create a task in the category.<br>If a user is viewing the directory, it opens the window to select a category for creating a task.<br>If a user is viewing the category, it opens the new task form for the category. |
| Closed | Displays inactive tasks (in status such as Completed or Canceled) in the table |
| My tasks | Click to display only the tasks where the current user is a requestor, assignee, or acceptor |
| | Click to display the table with pagination (10 tasks on a page). A navigation bar appears at the bottom of the table to navigate between pages. |
| | Click to enable column value filtering. Selection criteria fields appear above column headers. |
| | Click to update the changes in the table. |
| More ▾ | Advanced submenu |
| Поля.. | Opens a selection window for fields (columns) that will be displayed in the table when this category or directory is viewed |
| В Excel | Downloads current table contents as an .xls file (viewed in Excel or similar spreadsheet editor) |

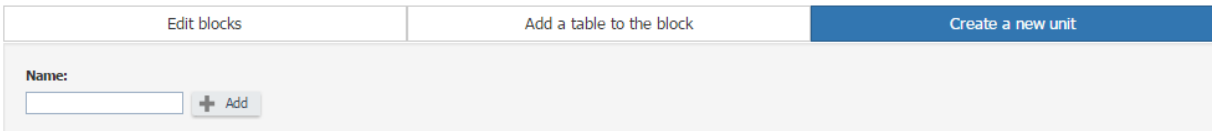
| Field name/icon | Description |
|---|---|
| По умолчанию | Applies default table view settings configured by the administrator |
| Информация о категории | Displays category information (steps, access permissions, summary, selection by period, etc.) |
| Настройка категории | Click to edit category settings.<br>This option is available to system and category administrators only. |
| Свернуть/Развернуть группы | Collapses/expands groups if value grouping is enabled |
| Расширенный поиск | Opens advanced search menu |
| Пакетная обработка задач | Click for batch processing of the tasks in this category. For details on batch task processing, see the User Guide (section 7.3.1 Batch Task Processing). |

### 6.6.1.4 Used In Block Configuration

Used In block can display tasks from other categories related to this task. Each category can have several Used In blocks, each with several tabs and specific data sources per tab.

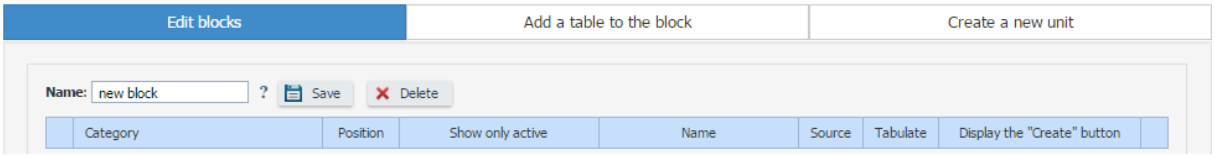



To create a new block, open the Create New Block tab, enter block name and click the Add button:

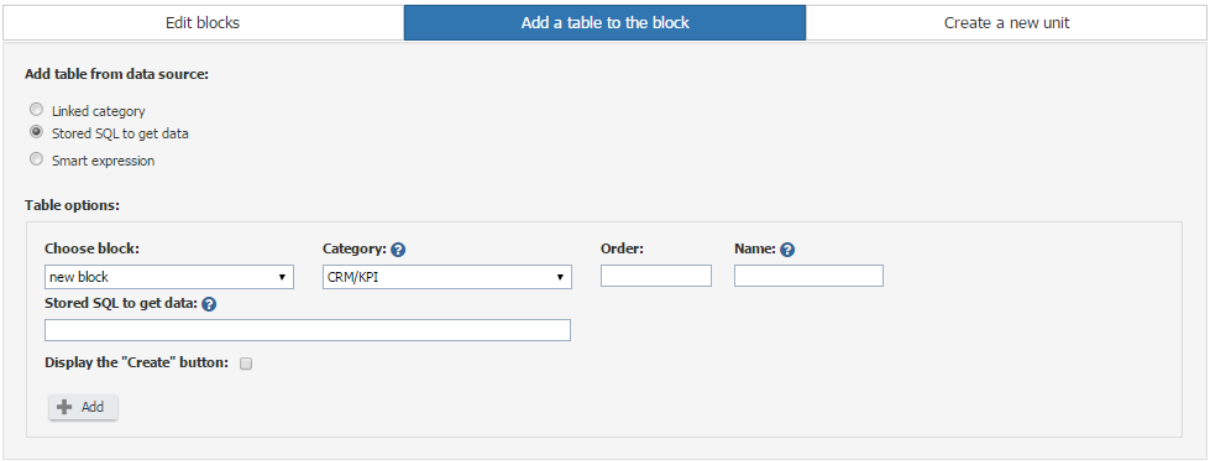



The Edit Blocks tab appears with a table where each row corresponds to a block tab in user mode. The table contains the following columns:

- **Category** — data source; this category will be used for adding tasks by clicking the Add button
- **Sequence** — this number defines tab display order in the block (from left to right)
- **Show Active Only** — if the flag is set, the tab displays only incomplete tasks (available for related categories only)
- **Name** — if specified, displays as tab title; if not specified, the data source name is used as the tab title (available only for SQL and Smart sources)
- **Source** — Smart expression or SQL procedure name
- **Table View** — click the icon to display the window for configuring displayed tab fields (similar to configuration of default category table view).
- **Show Create Button** — if the flag is set, users (in user mode) can create new tasks in the respective categories directly from Used In block.




To configure a new block tab, i.e., a new data source, open the Add Table to Block tab:



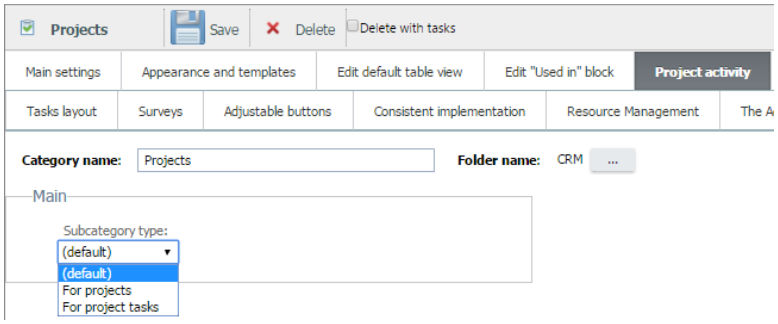

Block tabs support the following data sources:

- Related categories (with lookup custom fields configured for selection from this category)
- SQL stored procedures (for procedure requirements see below)
- Any categories (category selection is restricted by a Smart filter, and associations between tasks based on lookup custom fields are not considered).

For details on configuring tabs with different data source types, see the Administrator's Guide.

### 6.6.1.5 Project Services

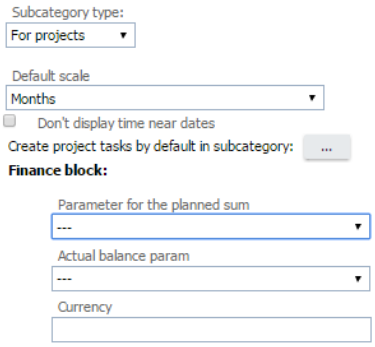
The project services configuration implies creating a set of tasks defined as parent and children. Tasks are created in table view with due dates prepopulated and project task due dates displayed in a Gantt chart.



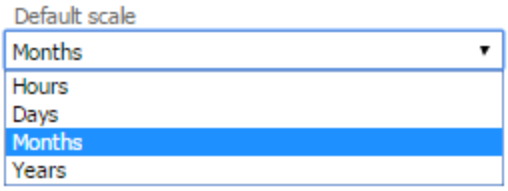

*Category of type **"(Selected by default)"** is not related to project services; this setting is used by default.

To specify a category as project-related, select the corresponding category type:

- **For Projects** — category used to add project tasks (parent category for project services).




Default Zoom defines displayed project duration:



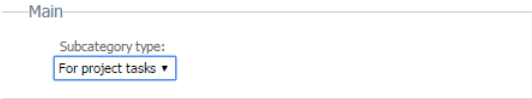

If the Do Not Show Time for Dates flag is set, dates are used without time (recommended for long-term projects).

To select a category for project tasks, click ..., choose a category in the list and click OK. Only one category can be selected.

Select a custom field for storing planned project expenses in the Planned Amount Parameter field and a custom field for actual project expenses in the Actual Amount Parameter field. Specify the currency for accounting in the Currency field.

**IMPORTANT:** In order to define a category as project-related, it cannot have mandatory custom fields.

- **For Project Tasks** — category used for project services accounting (subcategory for project services).

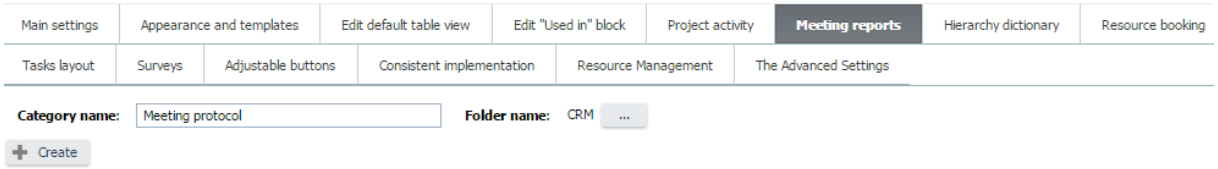



**IMPORTANT**: Project tasks remain in the Project Tasks category of the system directory until project execution starts.

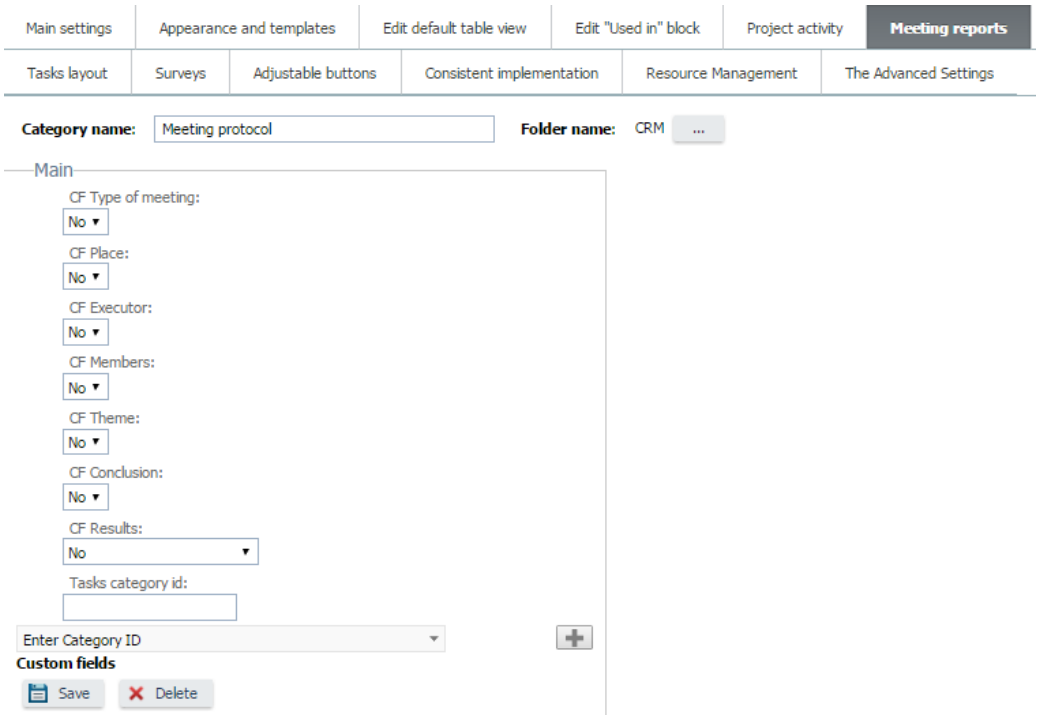
For functionality of the Project Management module, see 1Forma Configuration Guide.

### 6.6.1.6 Meeting Minutes

Meeting minutes are used to configure categories with custom fields.



To display settings, click Create.




Possible values for **Meeting Type custom field**:
- None
- One of the custom fields of drop-down list type configured in the current category.

Possible values for **Location custom field:**
- None
- One of the custom fields of drop-down list type configured in the current category.

Possible values for **Assignee custom field:**
- None
- One of the custom fields of user selection type configured in the current category.

Possible values for **Attendees custom field:**
- None
- One of the custom fields of user selection type configured in the current category.

Possible values for **Subject custom field:**
- None
- One of the custom fields of text type or large formatted text type configured in the current category.

Possible values for **Output custom field:**
- None
- One of the custom fields of text type or large formatted text type configured in the current category.

Possible values for **Results custom field:**
- None
- One of the custom fields of text type or large formatted text type configured in the current category.

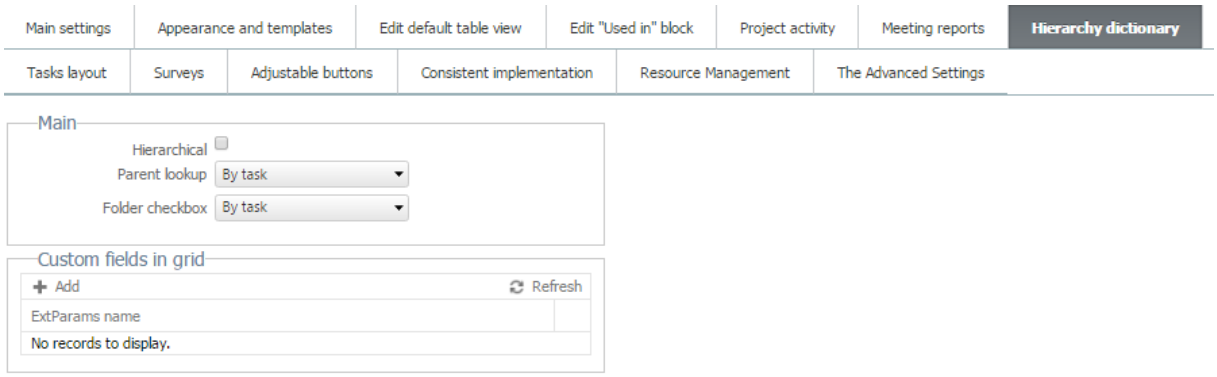
**Order Category ID** is the ID of the category used to generate orders after a meeting. If this category

contains custom fields, they can be selected in the drop-down field one by one and added by clicking . These custom fields are displayed in an orders table and populated directly from the task with the meeting minutes.

For details on the meeting minutes engine, see Configuration Guide.

#### 6.6.1.7 Hierarchical Directory tab

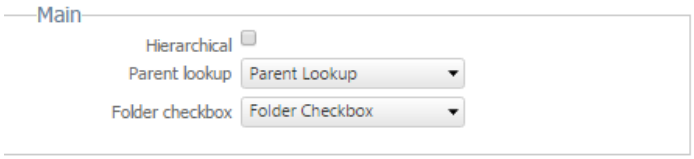
Use this tab to configure category presentation as a hierarchical list (tree). This can be useful to view a company's org. structure and other hierarchical directories. Custom Fields in the Grid table must contain the list of category custom fields to be displayed in the category.



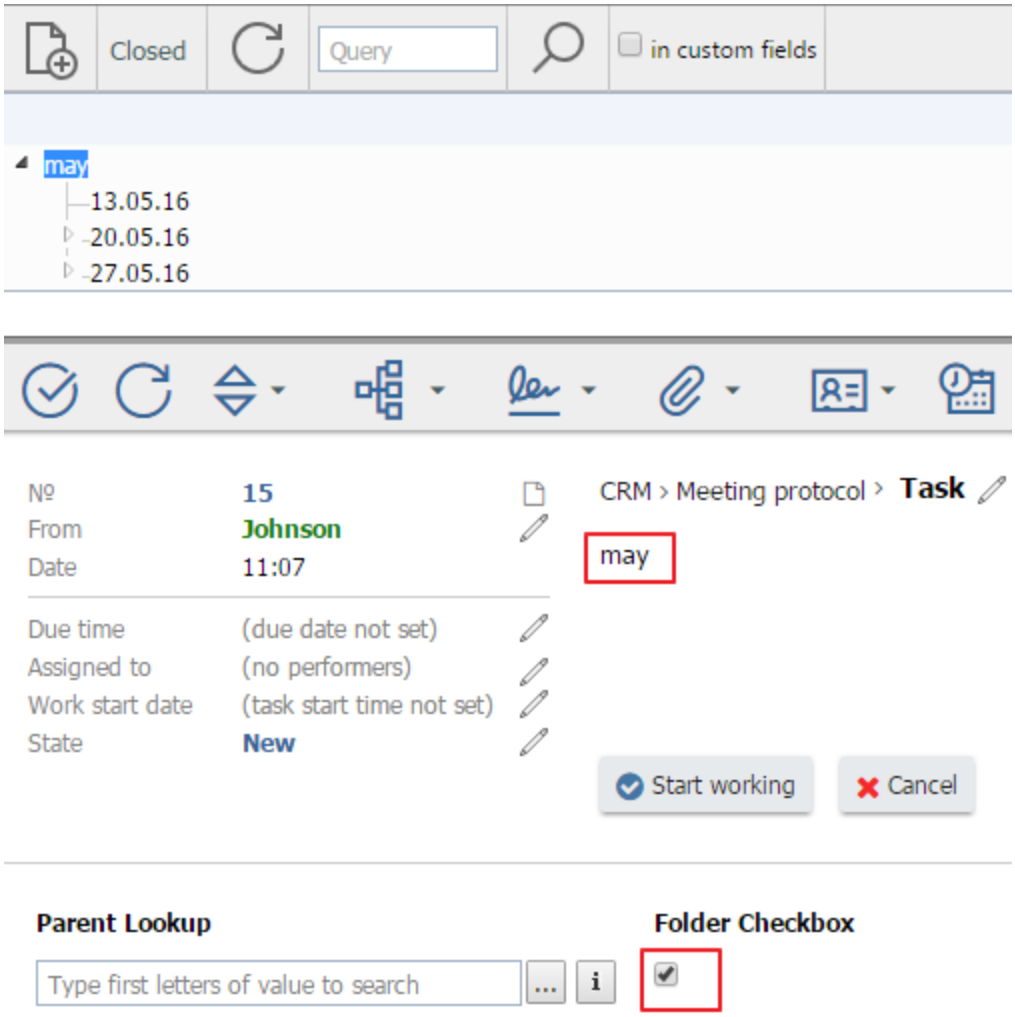

To configure category presentation as a tree, set the Hierarchical flag.

**Hierarchy configuration option 1: Lookup custom field link**

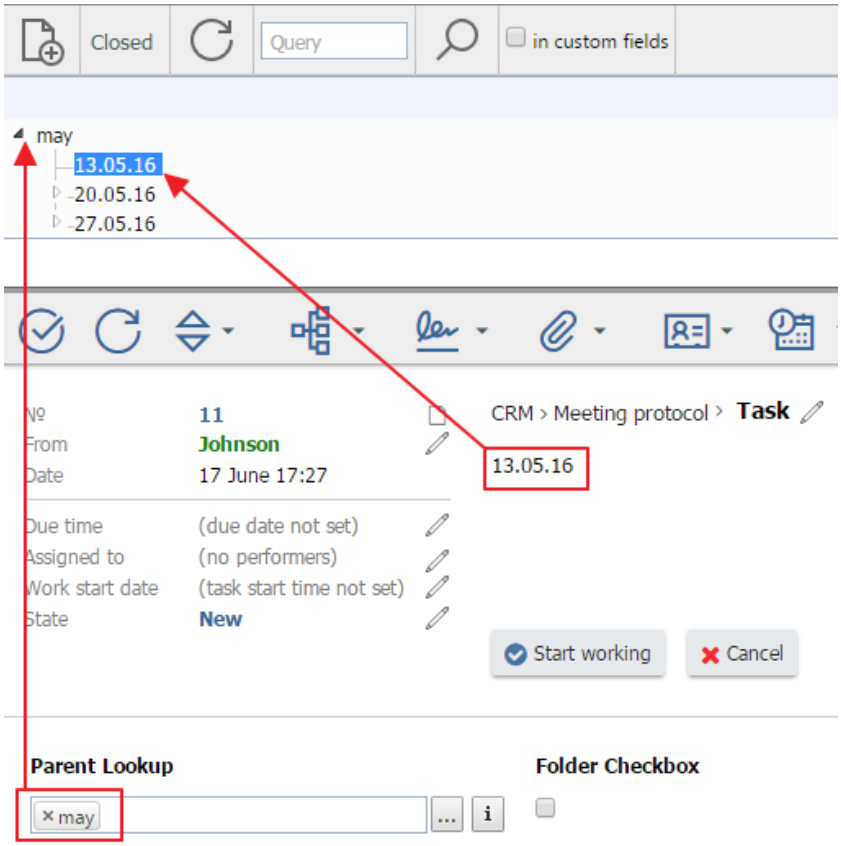
Open the custom fields tab of the category and configure two custom fields: *Lookup Custom Field* and *Checkbox Custom Field* (flag). A *lookup custom field* must have a custom category as a source and an enabled Hierarchical flag:




Open Hierarchical Directory tab in the category settings and select *Lookup Custom Field* in Parent Lookup parameter and *y Custom Field in the Folder Checkbox parameter.*

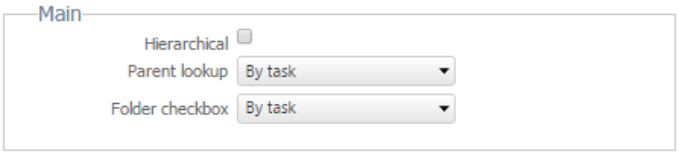



Tasks of this category in user mode must have a Parent Lookup field populated with the link to the parent task and the Folder Checkbox field enabled for parent tasks (which have subtasks) and disabled for end tasks (without subtasks):



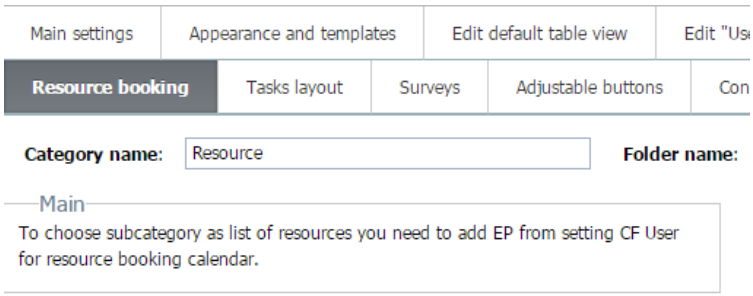

**Hierarchy configuration option 2: subtask tree**

Select By Task in Parent Lookup and Folder Checkbox fields.

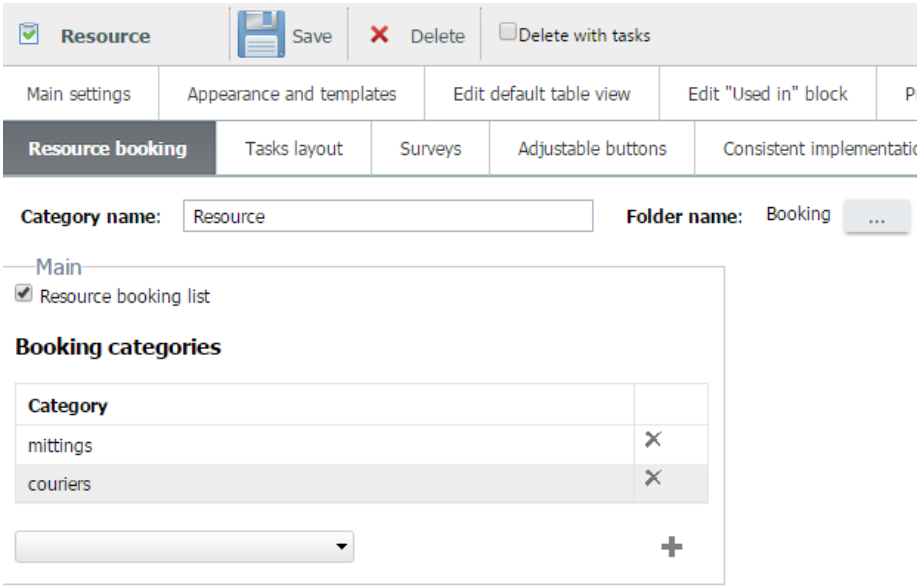



A hierarchy corresponds to a subtask tree on UI.

### 6.6.1.8 Resource Booking



Add the required custom field to display the complete configuration interface:




For functionality of Resource booking, see 1Forma Configuration Guide.

### 6.6.1.9 Layout Plan tab

Categories support configuration of Layout Plan view — it displays objects split into zones, which are further split into cells. This view can be used, for example, for real estate objects, such as apartments, car parking slots, etc. Thus, a house will be treated as an object with blocks as zones and apartments as cells.

Three categories are used to implement this view: objects directory, zones directory, and cell category:

- An **objects directory** does not require additional configuration. The object name is entered into the Text field.
  Each category task describes one object (*e.g., a house*).

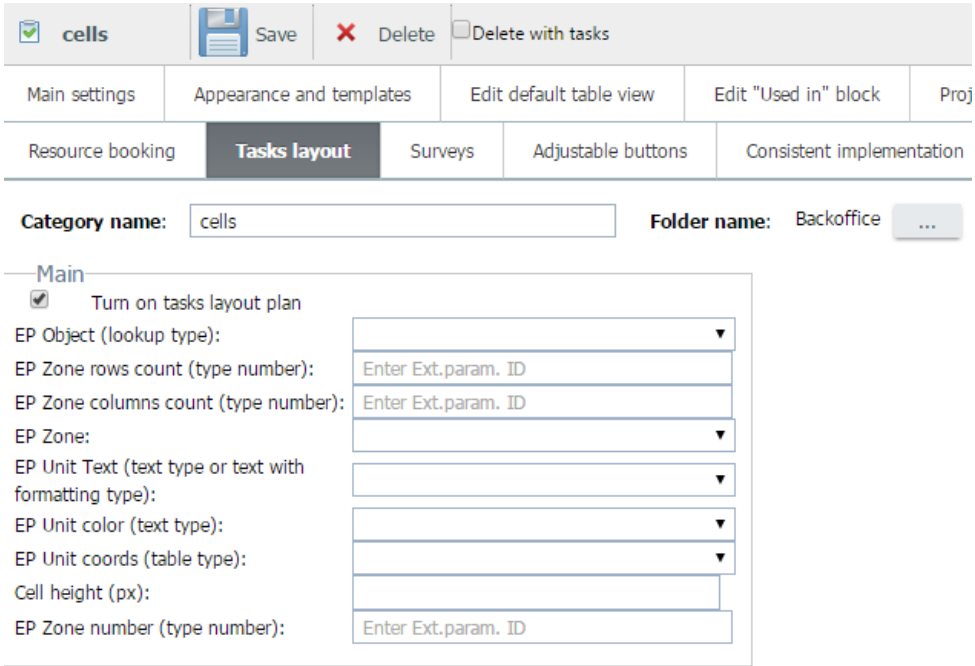
- A **zones directory** requires four custom fields in the category:
  - Lookup custom field — a reference to the objects directory
  - Numerical custom field — zone height in cells (*e.g., number of floors*)
  - Numerical custom field — zone width in cells (*e.g., number of down pipes, i.e., apartments on a floor*)
  - Numerical custom field — sequential zone number (*e.g., block number*).

  The zone name is entered into the Text field.
  Each category task describes attributes of one zone (*e.g., a block*).

- A **cell category** requires five custom fields:
  - Lookup custom field — a reference to the objects directory
  - Lookup custom field — a reference to the zones directory
  - Text or Formatted Text custom field — free text cell description (*e.g., for an apartment, it can contain its number, number of rooms, area, etc.*)
  - Text custom field — cell color with a hexadecimal color number. This color can be used to display a cell's current status (*such as booked, sold, etc.*) and changed with Smart automation
  - Table custom field with two numerical columns, which contain the cell's X and Y coordinates according to the zone settings (*such as floor and down pipe number for an apartment*).

A Text field is generated automatically on saving the entry from the data entered into custom fields. Each category task describes one cell (*e.g., an apartment*).

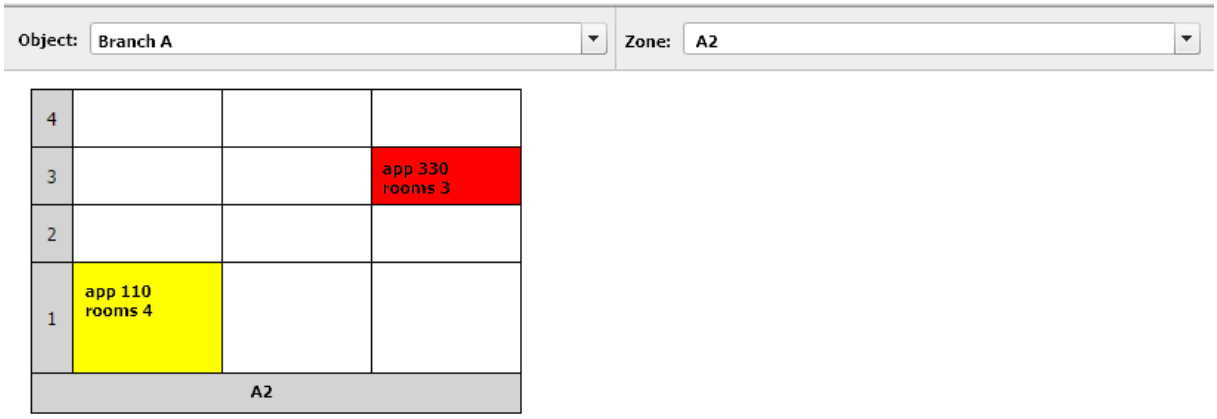
Along with custom fields, use the Layout Plan tab in category settings to configure cell category. This tab is maintained only for the category that describes cells:




| Parameter | Description |
|---|---|
| Object custom field (lookup type) | Reference to objects directory |
| Zone row number custom field (numerical type) | ID of the custom field used in a zones directory that contains zone height in cells |
| Zone column number custom field (numerical type) | ID of the custom field used in a zones directory that contains zone width in cells |
| Zone custom field (lookup type) | Reference to zones directory |
| Unit text custom field (text/formatted text type) | Text field for cell description |
| Unit color custom field (text type) | Text field for hexadecimal color number |
| Unit coordinates custom field (table type) | Table with two numerical columns |
| Cell height in px | Cell height in Layout Plan view |
| Zone sequence number custom field (numerical type) | ID of the custom field used in a zones directory that contains a zone sequence number (within the object). Zones are displayed by sequence numbers in ascending order from left to right. |

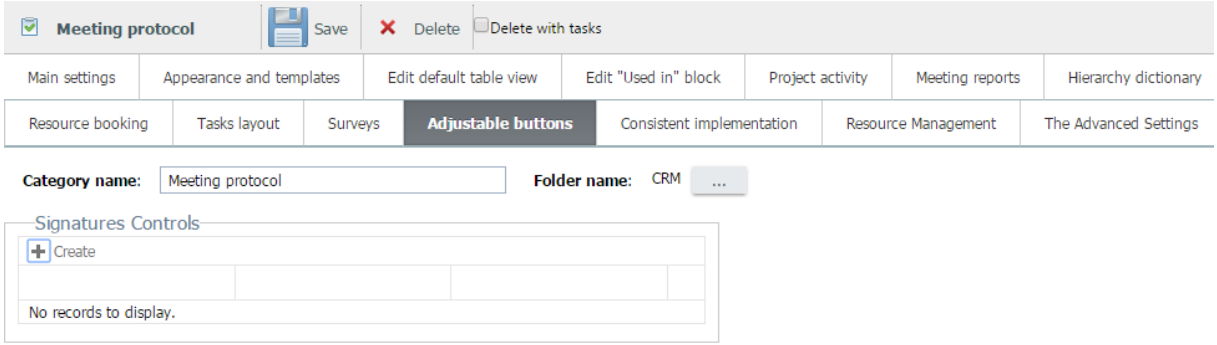
***Example of Layout Plan view***

*(click a cell to open the corresponding task):*

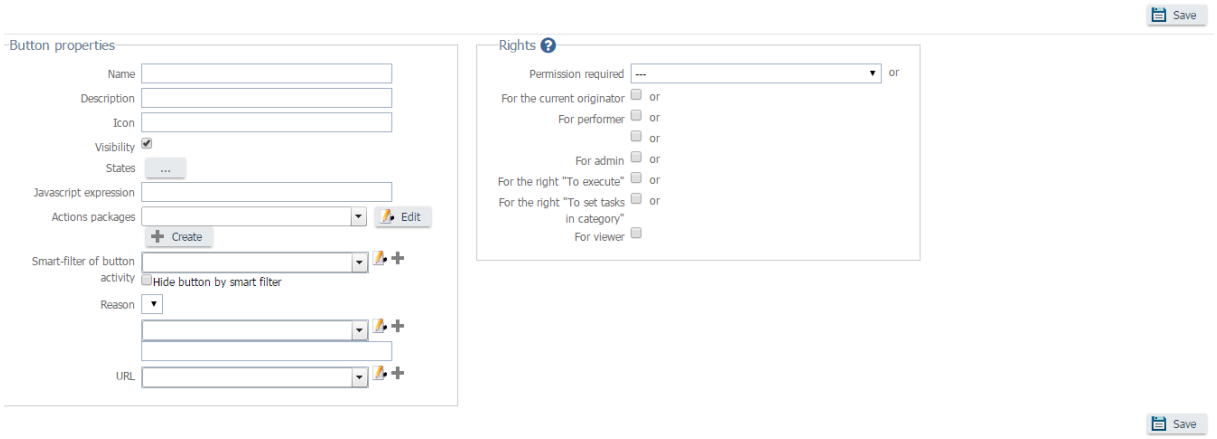



### 6.6.1.10 Custom Buttons

Along with buttons for status transitions that are created automatically as the task progresses along the route, a category supports custom buttons that can be configured to execute predefined actions. Task status is not changed in this case.



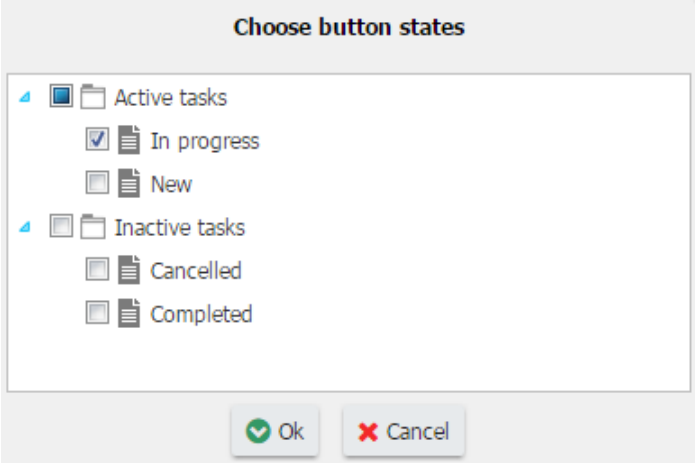

To create a new button, click Add. A configuration window opens:




**Button properties:**

- **Title** is the text that appears on the button.

- **Description** is the text of the tooltip that appears when you hover the mouse over the button (optional).
- **Icon** contains the path to an image that will be displayed to the left of the button title (optional). Enter the path relative to the 1Forma root directory (e.g.,*img\edit.png*).
- **Visibility** flag, if disabled, hides the button regardless of whether other conditions are met.
- **Statuses** contains the task status list. This button is displayed only if the current task has one of these statuses. To edit the status list, click ... . The status selection window opens:



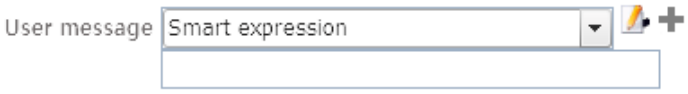

- One of the parameters:
  - **JavaScript Expression** is the script that describes actions executed when the button is clicked.
  - **Action Package** is a package of Smart actions (global or category-specific) that describes actions executed on when the button is clicked.
- **Active Button Smart Filter** is the Smart filter (global or category-specific) that describes conditions under which the button can be clicked.
- **The Hide Button by Smart Filter**

  flag, when enabled, hides an inactive button (when active button Smart filter conditions are not met, see above) from the main task form. The User Message field is also hidden from settings.

  If the flag is disabled, the inactive button displays in the main task form, but can issue a message for a user when clicked.

  The text of this message can be fixed by entering it into the User Message field:


  Alternatively, it can be defined as a custom or predefined Smart expression:




- **URL** is the Smart expression used to calculate hyperlink URL. If a Smart expression is specified, after successful processing of the actions package, this link opens in a new window. If package processing

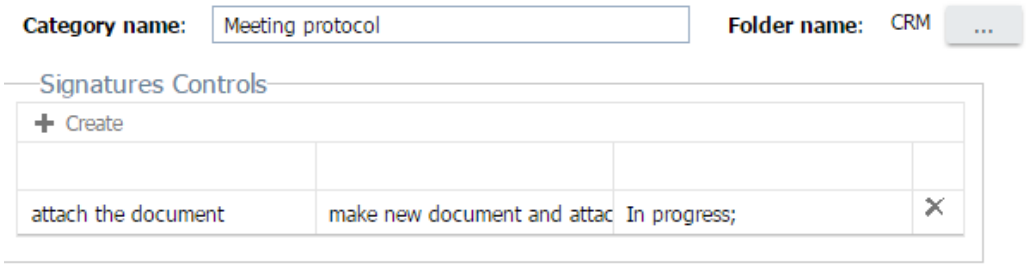
fails (end with errors), the link is not opened.

**Permissions:**

This button is displayed for users that meet at least one of the selected prerequisites.

Maintain the required settings and click 

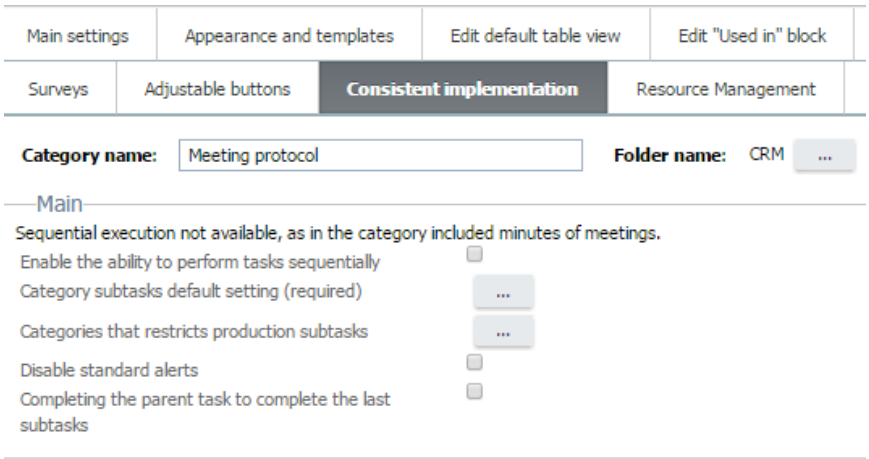
to add the created button to the table:




To edit settings of a previously created button, click the corresponding table row. To delete a button, click the ✕ icon at the end of the corresponding row.

### 6.6.1.11 Sequential Execution

In standard mode, subtasks related to the generic parent task are executed in parallel. In sequential subtask execution mode, the next subtask is not started until the previous one has been completed. Sequential subtask execution mode is disabled by default and can be enabled explicitly for certain categories that will be used to create parent tasks.




| Parameter | Description |
|---|---|
| Enable Sequential Task Execution | If the flag is set, the tasks of this category support sequential subtask execution mode. In this case, the new task form displays the Enable Sequential Subtask Execution for This Task flag; and if the custom field is enabled, the main task form displays custom table field for creating subtasks and managing their execution order. |

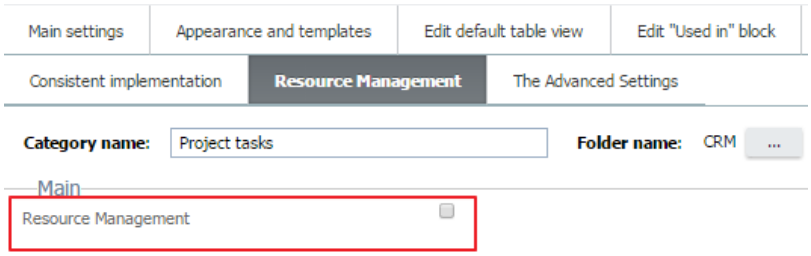
| Parameter | Description |
|---|---|
| Default Subtask Category | This category will be used to create subtasks unless another category is specified. |
| Categories Available for Subtasks | These are the categories that support subtasks. The list of these categories opens when creating a new subtask. |
| Disable Standard Notifications | If the flag is not set, the assignees are notified of created subtasks, and upon completion of the next subtask the assignee of the following task is notified to start execution, while the requestor and the assignee of the parent task are notified of subtask completion. If the flag is set, these notifications are not sent. |
| Close Parent Task when Last Subtask Completed | If the flag is set, the parent task is automatically closed when the last sequential subtask is completed. |

For details on sequential and parallel modes, see the Configuration Guide.

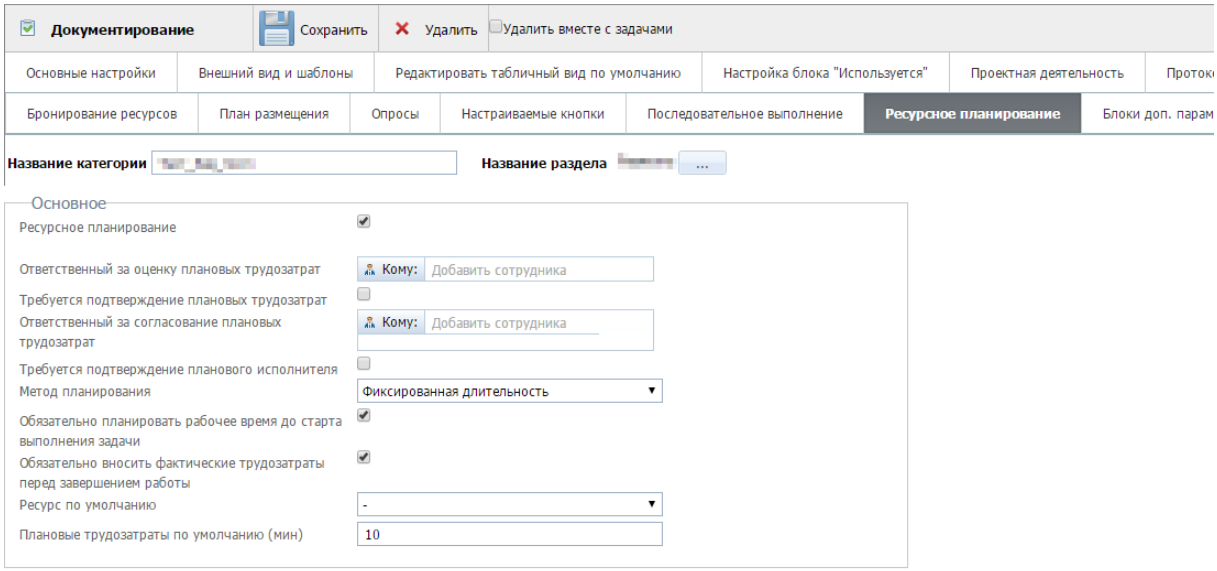
#### 6.6.1.12 Resource Planning

The resource planning engine is used for central accounting of planned and actual efforts for a task. The engine is enabled for a category and applies to all tasks of this category. If the engine is enabled, effort entry is mandatory (Planned Effort Mode and Actual Effort Mode settings on theBasic Settingsautomatically change to Required Entry and cannot be modified manually).

To enable the resource planning engine, set the flag:




Advanced settings appear:



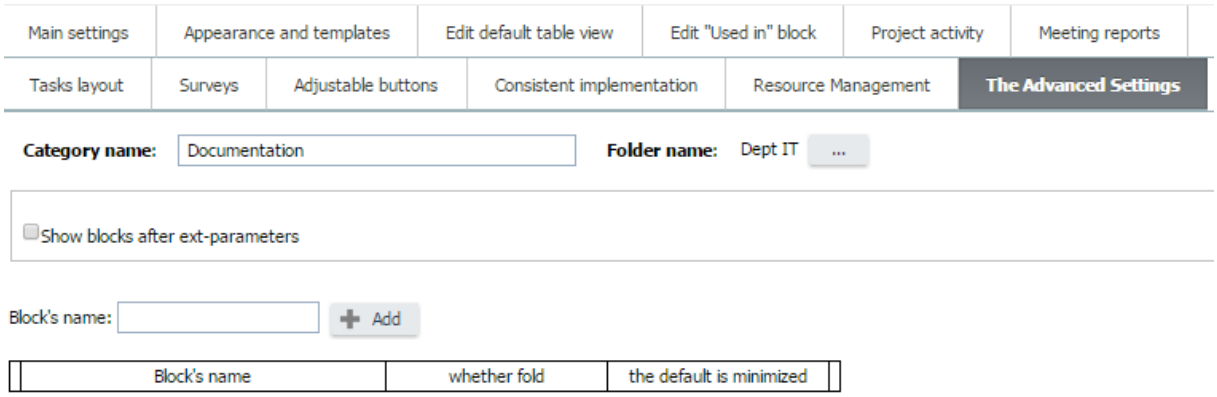

| Parameter | Description |
|---|---|
| Person responsible for Planned Effort Estimation | The user responsible for assigning planned effort to the tasks of this category |
| Planned Efforts Require Confirmation | If this flag is set, a signature is requested for entered efforts from the employee responsible for their approval (see below) |
| Responsible for Planned Effort Approval | The user who signs to confirm planned efforts for a task (a signature is requested if the task has been started) |
| Planned Assignee Requires Confirmation | If this flag is set, a signature to specify the planned assignee is requested from the resource owner (the owner is defined in the Resource Owner custom field of the Resources system category). If no resource owner is defined, a signature is requested from the managers of the users specified as primary assignees; if primary assignees are not defined, a signature is requested from the managers of secondary assignees. |
| Scheduling Method | Possible values are:<br>• Fixed Duration — all efforts are distributed through the time period of the task<br>• Fixed Efforts — task durations change according to efforts. |
| Require Working Time Planning Before Task Start | If the flag is set, task status cannot be changed from New to In Progress (or similar) until assignees and planned efforts are specified. |
| Require Actual efforts Before Task End | If the flag is set, a task cannot be completed until actual efforts are entered for all assignees. |

| Parameter | Description |
|---|---|
| Default Resource | This resource is assigned to a new task if an assignee has not been selected during task creation, and the resource table remains empty. |
| Default Planned Time (in minutes) | Planned efforts are entered for a resource by default (see above) if a value is not specified. |

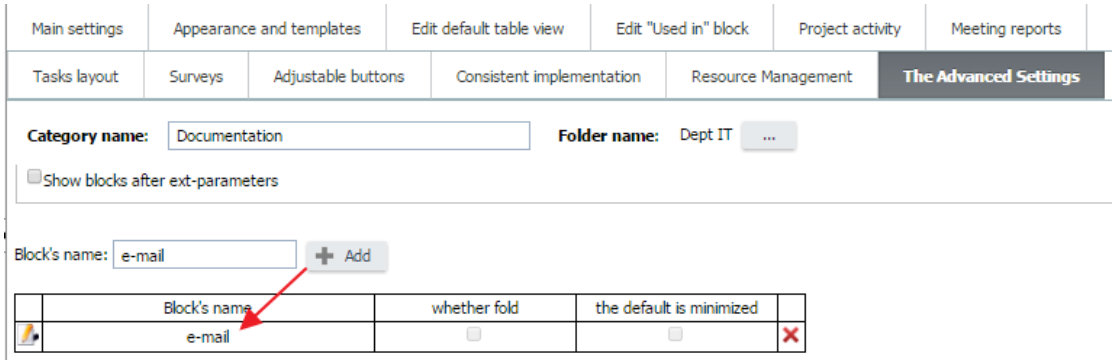
***Note**: SMARTs use the Resource parameter to add assignees. If it is empty, the system attempts to match a resource to the assignee: entries in the system resources directory (System directory, Resources category) are searched for a resource with this assignee (first primary then secondary assignees are checked); if no resource is found, the default resource is used with the Users system group as secondary assignees.*

### 6.6.1.13 Custom Field Blocks

Custom fields configured for a category can be grouped into blocks in the main task form. Use the Custom Field Blocks tab to configure blocks.




To add a new block, enter its name and click the Add button. The block appears in the table below. You can change a block name later by clicking . To delete an unused block, click the icon at the end of the corresponding table row.




**The Show Blocks above Other Custom Fields** flag is applicable if the category uses a default task form design. Set the flag to display custom fields not assigned to blocks below those that are assigned

to blocks in the main task form. Clear the flag to display unassigned custom fields above custom field blocks.

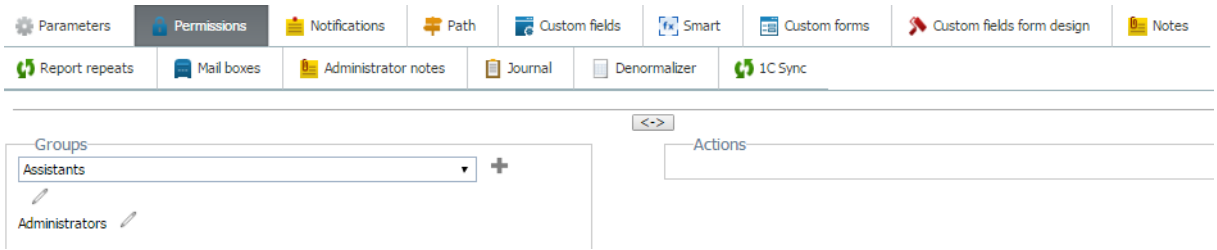
Set the **Can Collapse** flag for a block to display the "+" symbol next to the block name in the main task form, which you can click to collapse the block. Set **Collapsed by Default** to display the block collapsed on opening of the main task form.

Custom fields can be assigned to blocks on theCustom Fieldstab.

For details on displaying custom field blocks in the main task form, see 1Forma Configuration Guide.

### 6.6.2 Access

Use this tab to configure user access permissions for a category.




**Groups** contain a list of groups with access permissions for a category (actions).
**Actions** contain a list of permissions granted to the selected group for this category.

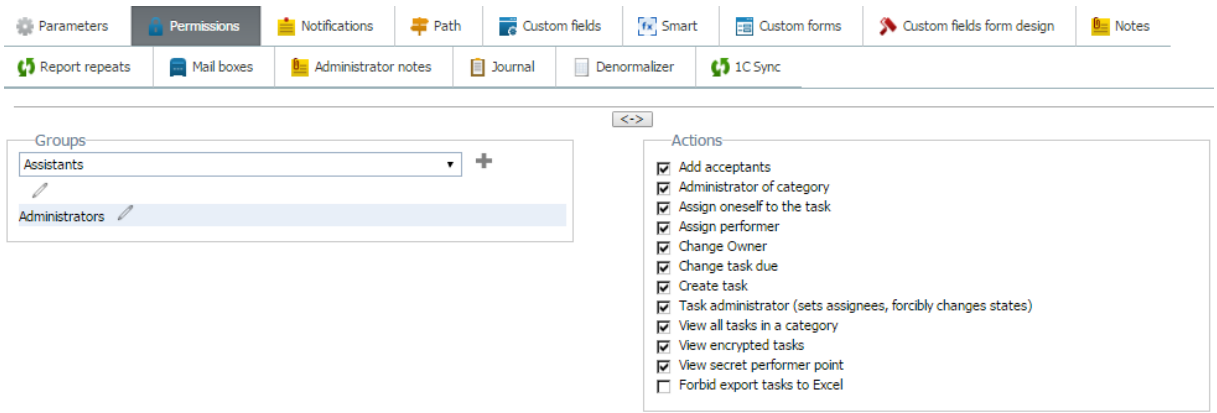
To navigate to editing the selected group, click .

To view and edit user access permissions for a category, left-click its name in the Groups block. Granted permissions appear in the Actions block. Change group permissions by setting and clearing flags.

If a group has no permissions for the category, it is not displayed in the Groups block. To grant access permissions to a group that currently has no access permissions for the category, select its name in the drop-down list of the Groups block, click and assign the group all required permissions in the Actions block.

To delete all group access permissions for a category, click its name and clear all flags in the Actions block. Now all groups that have no permissions are hidden from the Groups block of the Access tab.

Click <-> to change access permissions configuration mode (Groups and Actions blocks swap places). In this mode you can grant a single permission to several groups at once.

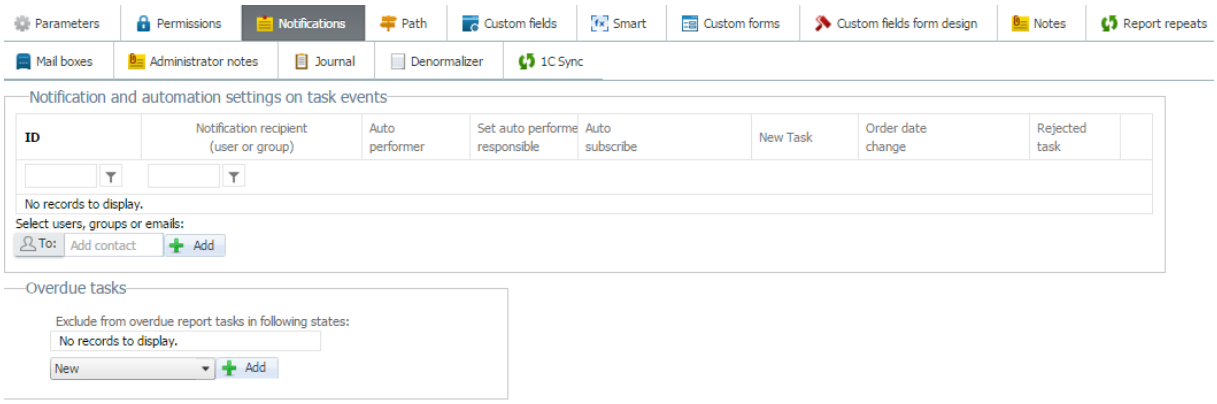



| Access Permission | Description |
|---|---|
| Create Tasks | Permissions for creating objects in the category (user can act as task requestor) |
| Task Administrator | Permissions for changing any category object parameters including requestor, assignee, due dates, task text, adding/deleting signatures, status changes that override the configured route, etc. (it is recommended to grant this permission to the company process owner specified for the category) |
| Category Administrator | Users with this permission can access category settings pages from the task tree and task toolbar. They also can perform any actions on categories except editing custom fields, deleting categories and using workflow designer, |
| View Hidden Assignee Scores | Permissions for viewing assignee scores even if the Assignee Assessment Mode parameter in the category settings is Private Assessment |
| Add Acceptors | Permissions for adding acceptors to requested signatures |
| Custom Requirements Assignee | This functionality is used for the Warehouse module. |
| Execute | Permissions for executing assigned tasks (user can act as task assignee) |
| Custom Requirements Manager | This functionality is used for the Warehouse module. |
| Edit Assignees | Permissions for editing assignees |
| Change Due Date | Permissions for editing due dates. The option is applicable if category settings have enabled Restrict Due Date and Task Start Change by Change Due Date Permissions parameter. |
| View Special Parameters | This functionality is used for the Warehouse |

| Access Permission | Description |
|---|---|
| | module. |
| View All Tasks | Permissions for viewing all tasks in a category and adding comments to them (including those that do not have requestors, assignees, subscribers, or acceptors as group members) |
| Disable Task Export to Excel | If enabled, the user group cannot download data for this category to Excel. |
| Change Requestor | Permissions for changing task requestor |

### 6.6.3 Notifications

Use this tab to configure user/group notifications of actions on tasks in the category. The table contains a list of notification recipients.

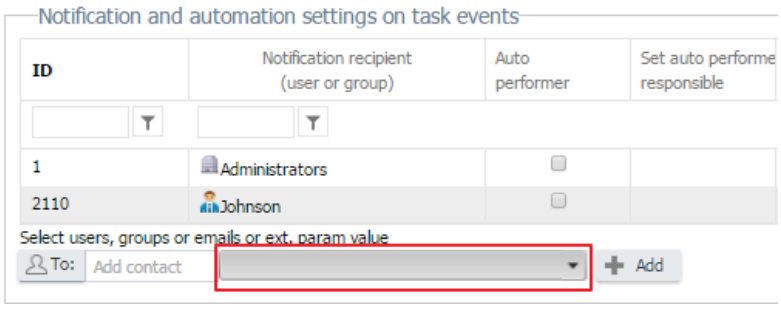



To add recipients, use the To field to select users or user groups that will receive notifications.

Types of notifications (actions on tasks):

- **Add to Assignees** — users are added to assignees when a task is created. Only users with Execute permissions for this category are available for selection.
- **Assign Responsible** — a notification is generated when a user is specified as the responsible assignee for a task.
- **Auto Subscribe to Task** — users are added to subscribers.
- **New Task in This Category** — notification is generated when a new task is created.
- **Due Date Change for Subscription Task** — notification is generated when the due date of a task is changed.
- **Task Cancellation** — notification is generated when a task is canceled.

For a category with a custom field of drop-down list type, you can specify a user from the value of the custom field.




Task with status selected in **Overdue Tasks** block are not included in the report on overdue tasks. To add a status to this list, select it in the drop-down list and click Add.

### 6.6.3.1 Rules for Generating Overdue Task Notifications

The system contains two configured jobs for notifying users of overdue tasks:

- A job that generates comments in overdue tasks
- A job that generated broadcasts for overdue tasks.

Both are timer jobs executed daily at 5 PM.

Generation of notifications (comments and email)s for overdue tasks in a category is determined by two parameters:

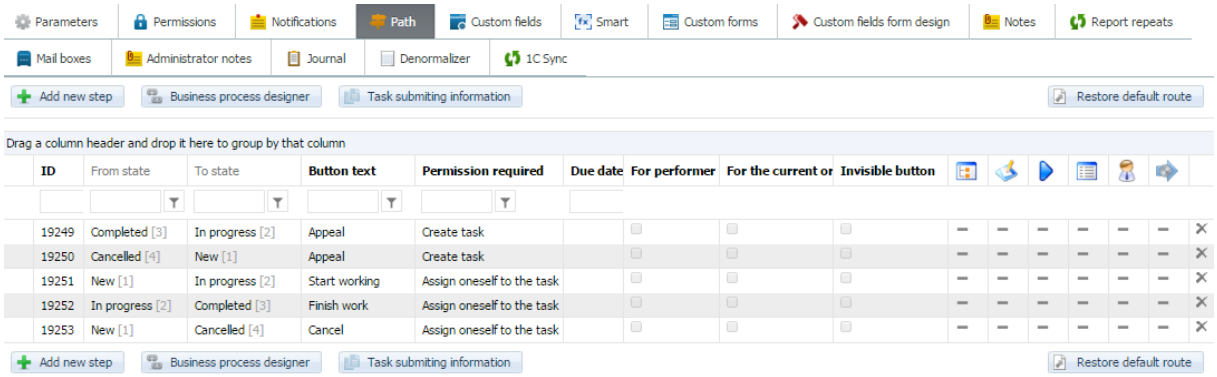
a) Exclude from Overdue Task Report flag onthe Settingstab defines whether the category is excluded from the notification generation procedure

b) In Overdue Task Report Include Tasks with Statuses: parameter on The Notificationstab defines whether the category is included in the notification generation procedure This parameter has higher priority:

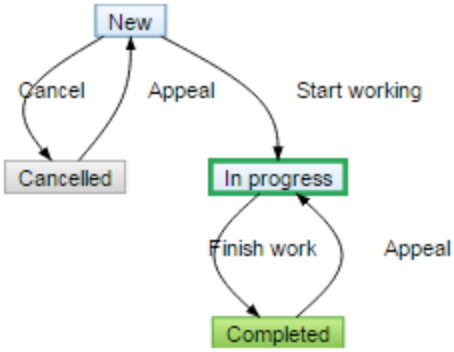
- if tasks with specific statuses must generate notifications, they are generated even if the Exclude from Overdue Tasks Report flag is set.
- If tasks with specific statuses do not have to generate notifications, they are not generated, even if the Exclude from Overdue Tasks Report flag is not set.

## 6.6.4 Route

This tab contains tools for configuring a task (category object) execution route (life cycle).




When a new category is created, it is automatically assigned the default route. This route enables most of the tasks that are automated with the 1Forma system.




**The Transitions table** displays the route in table view, where each row corresponds to a possible object status transition.

✕ deletes a route step. After deletion, the system checks for any other steps that follow the deleted status. If there are no such steps and the category contains requests in the deleted status, an error message is issued. You cannot delete transitions if they are used in basic settings of the category in the Step on Saving directory or in other category settings that use auto transition.

Add new step opens the form for anew transition.

Business process designer switches to route configuration in workflow renderer.

Click the Restore default route button to reset the category route to basic (default) route.

Click Task submiting information to display a window with the categories that are used to create subtasks in this category. This directory also displays information on the tasks created with Smartengine.

List of categories subminig task on steps

Export to Excel Refresh

| ID | Step | From state | To state |
|---|---|---|---|
| No records to display. | | | |

Categories setting tasks through Smart

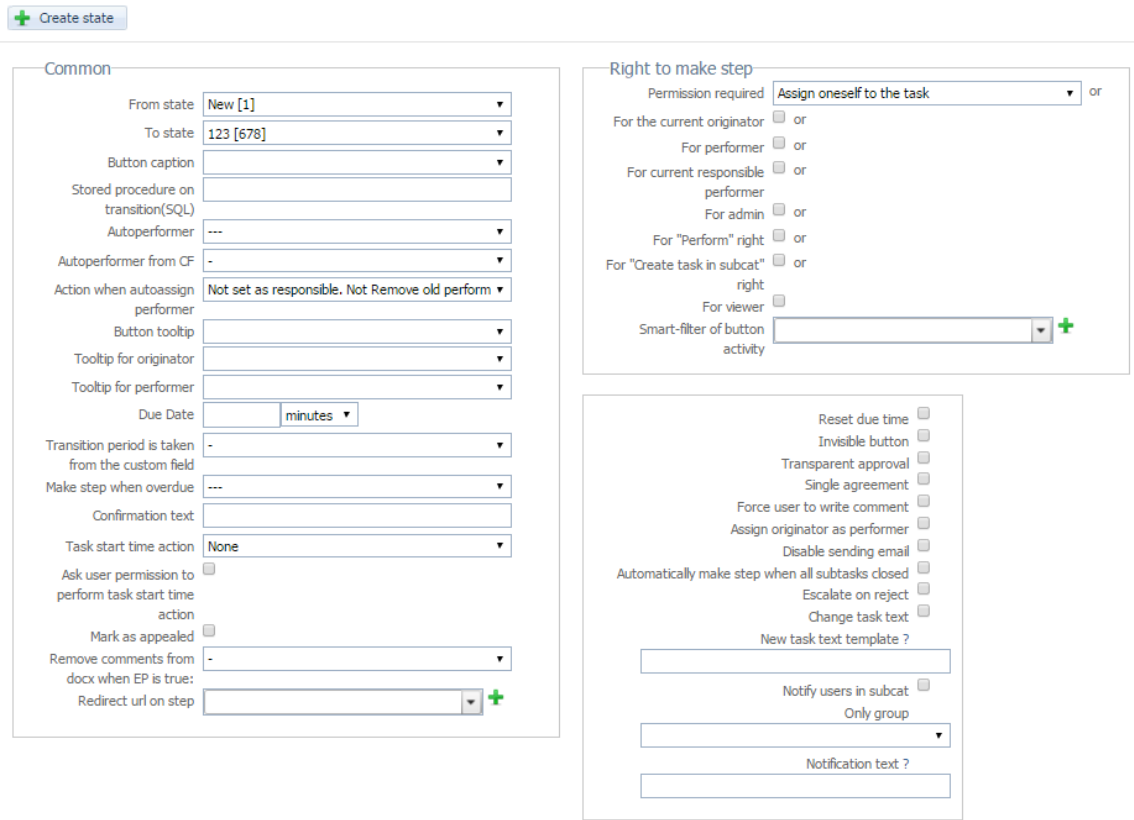
| ID | Category | Event | Action package name |
|---|---|---|---|
| No records to display. | | | |

Refresh updates the category list.

Export to Excel downloads the category list as a table.

### 6.6.4.1 Adding a Transition

Click Add new step to open a new transition window.

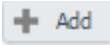



| Name | Description |
|---|---|
| **Left block** | |
| From Status | Source transition status |
| To Status | Target transition status |
| Button Title | Title of the button in the category object form that |

| Name | Description |
|---|---|
| | initiates the transition |
| Procedure on Transition (SQL) | This field must be empty. It can be edited only by professionals certified by the developer. Improper use may lead to system failure and data corruption. |
| Autoassignee | Button Clicked By — the user who clicked the button is automatically appointed as assignee. The list also contains roles of autoassignee type, and the assignee is appointed according to the rules configured for the selected role. |
| Autoassignee from Custom Field | The employee selected in the specified custom field is appointed as task assignee. The custom field must be of drop-down list type and contain a column of user ID values. |
| Actions on Automatic Assignment | • Delete old and assign responsible<br>• Do not delete old, do not assign responsible<br>• Do not delete old, assign responsible<br>• Delete old from assignees and subscribers, assign responsible |
| Button Tooltip | Tooltip that displays on button hover |
| Tooltip for Requestor | Tooltip that displays on button hover by the task requestor |
| Tooltip for Assignee | Tooltip that displays on button hover by the task assignee |
| Due Date | Transition button displays the number of days until transition in brackets;<br>entered in minutes or hours |
| Due Date from Custom Field | The custom field that has the due date as its value |
| Execute Transition when Overdue | Transition that is executed if the transition due date has passed |
| Confirmation Text | Text of the comment added to a task after transition |
| Action on Task Start Date | • Do not change<br>• Clear<br>• Populate with current time<br>• Populate with current time if empty |
| Request User Confirmation for Actions on Task Start Date | If enabled, the user receives confirmations of task start date changes |
| **Right block** | |
| **Transition permissions** | |
| Required Permissions | The drop-down list contains standard category access permissions. Therefore, transition can be |

| Name | Description |
|---|---|
| | executed by all groups that are granted the selected permissions. |
| • For current requestor<br>• For current assignee<br>• For current responsible assignee<br>• For administrator<br>• For Execute permissions<br>• For Create in category permissions<br>• For anyone with view permissions | This form is used to grant access to the transition to different user categories. All users that meet at least one of the selected conditions can access the transition, including the Required Permissions settings. |
| Button Visibility Smart Filter | The transition button is displayed if the conditions of the Smart filter are met |
| | |
| Reset Due Date | Resets due date on transition and requests the reason for delay for overdue tasks |
| Hide Button | The button is not displayed in the category object form. Transition is shown as a dotted line in the workflow designer. |
| Review | If signatures are requested for the transition, it is executed regardless of the acceptors' decision |
| Single Approval | If signatures are requested for the transition, the system waits for a decision from all acceptors. Then a signature request is submitted again to the acceptors who declined. This continues until all transition acceptors approve.<br>This approval defines the settings for ALL transition signatures; i.e., for single approval, ALL transition signatures are not requested again. |
| Require Comment for Transition from Status | Transition cannot be executed unless a comment is added. |
| Appoint Requestor as Assignee | Task requestor is appointed assignee. |
| Disable Emails | Notification emails for the transition are not sent |
| Auto Transition if All Subtasks Completed | Transition is executed automatically if the source transition status has no open subtasks |
| Escalate if Canceled | If a signature is canceled in a task, the manager of the canceling user is requested to sign (if any) |
| Change Task Text | If this checkbox is selected, changes to route steps change the text of the task according to the template entered below. This setting does not apply if automated task text generation from custom fields is configured in theAppearance and Templatesdirectory of basic category settings. |
| Template for Task Text Auto Generation | Template text supports inserts in $ExtID format for task parameter values (entered when creating a task). *For example, $Ext15 is replaced by a* |

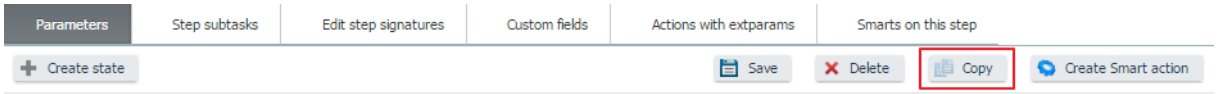
| Name | Description |
|---|---|
| | *parameter value with ID=15*. For parameter IDs, see the custom fields table. $Text macro insert adds task text before transition. |
| Notify Category Users | If the flag is set, notification is sent to task members after transition. |
| Group Only | Only members of the selected group are notified of the executed transition. |
| Notification Text | Template text supports inserts in $ExtID format for task parameter values (entered when creating a task). *For example, $Ext15 is replaced by a parameter value with ID=15*. For parameter IDs, see the custom fields table. |

Fill in the form and click 

to add the transition.

### 6.6.4.2 Copying a Transition

A new transition can be created as a copy of an existing transition. To do this, in edit mode of the selected transition, click Copy Transition in the Category Route button. The selected transition is copied completely with all settings, including signatures and SMARTs.




### 6.6.4.3 Editing a Transition

To edit transition parameters, left-click the corresponding transitions table row.


This opens the edit transition parameters form with the following tabs:

- Settings — key transition parameters
- Transition Subtasks — configuration of automated subtask creation after transition
- Transition Signatures — configuration of signature requests for transition
- Custom Fields — configuration of access permissions for custom fields
- Transition SMARTs — configuration of Smart actions assigned to Before Transition and After Transition events.

On status transition, the following actions are executed in the specified order:

1. Signatures selected on Step Signatures are requested.
2. The procedure from the signature is initiated.
3. On approval:
   a) Request transitions to the next status
   b) Procedure on transition is initiated
   c) Subtasks specified in the Step Subtasks block are created.
4. On cancellation, the request returns to the initial status (unless configured otherwise).

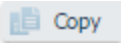
**IMPORTANT:** Route transition buttons cannot be swapped. Transition buttons are positioned as follows: Cancellation and Completion buttons are on the outside with other buttons between them.

6.6.4.3.1 the Settings

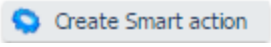
This tab contains settings similar to the ones described in "Adding a Transition".

3

— creates new status.



— copies transition



— creates a Smart action on After Transition event. This button opens the window for editing Smart actions "Action Packages Assignment to Events" with a pre-populated After Transition event.

| Name | Description |
|---|---|
| **Left block** | |
| From Status | Source transition status. The status is identified by its name and ID. |
| To Status | Target transition status. The status is identified by its name and ID. |
| Button Title | Title of the button in the category object form that initiates the transition |
| Procedure on Transition (SQL) | This field must be empty. It can be edited only by professionals certified by the developer. Improper use may lead to system failure and data corruption. |
| Autoassignee | Button Clicked By — the user who clicked the button is automatically appointed as assignee. The list also contains roles of autoassignee type, and the assignee is appointed according to the rules configured for the selected role. |
| Autoassignee from Custom Field | The employee selected in the specified custom field is appointed as task assignee. The custom field must be of drop-down list type and contain a column of user ID values. |
| Actions on Automatic Assignment | • Delete old and assign responsible<br>• Do not delete old, do not assign responsible (selected by default)<br>• Do not delete old, assign responsible<br>• Delete old from assignees and subscribers, assign responsible |
| Button Tooltip | Tooltip that displays on button hover |

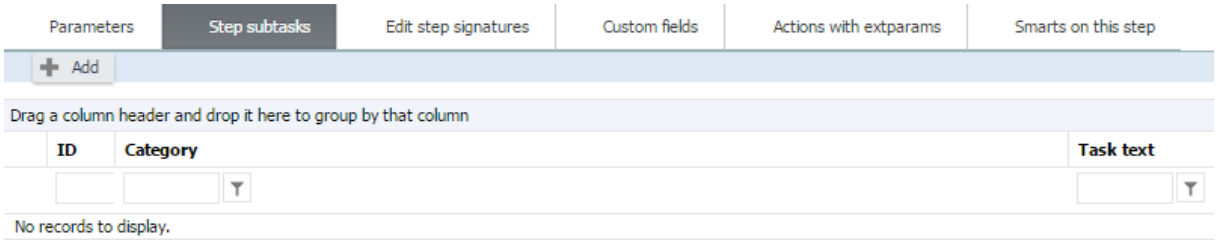
| Name | Description |
|---|---|
| Tooltip for Requestor | Tooltip that displays on button hover by the task requestor |
| Tooltip for Assignee | Tooltip that displays on button hover by the task assignee |
| Due Date | Transition button displays time until transition in brackets (in minutes or hours) |
| Due Date from Custom Field | The custom field that has the due date as its value |
| Execute Transition when Overdue | Transition that is executed if the transition due date has passed |
| Confirmation Text | Text of the comment added to a task after transition |
| Action on Task Start Date | • Do not change<br>• Clear<br>• Populate with current time<br>• Populate with current time if empty |
| Set as Appealed | If the flag is set, after the transition, assignees are not displayed as strikethrough and see the task in My Tasks mode.<br>**IMPORTANT**: Settings of a specific transition are adopted from global transition settings (if any exist for this transition) and apply if AT LEAST ONE of the flags is set. |
| Request User Confirmation for Actions on Task Start Date | If enabled, the user receives confirmations of task start date changes |
| Disable Approval Procedure for Documents with Unaccepted Changes | If the flag is set and the task or custom field has attached doc/docx files with unaccepted changes (that is, changes made in track change mode, but not accepted), the transition is not executed and a warning with the file name is issued. |
| **Right block** | |
| **Transition permissions** | |
| Required Permissions | The drop-down list contains standard category access permissions. Therefore, transition can be executed by all groups that are granted the selected permissions. |
| • For current requestor<br>• For current assignee<br>• For current responsible assignee<br>• For administrator<br>• For Execute permissions<br>• For Create in category permissions<br>• For anyone with view permissions | This form is used to grant access to the transition to different user categories. All users that meet at least one of the selected conditions can access the transition including the Required Permissions settings.<br><br>"For anyone with view permissions" rights are determined as a combination of the following permissions: |

| Name | Description |
|---|---|
| | • The user is member of a group with view permissions for tasks of this category<br>• The user is the requestor, assignee, or subscriber of a specific task<br>• The user is granted task view permissions based on settings maintained for tags. |
| Button Visibility Smart Filter | The transition button is displayed if the conditions of the Smart filter are met |
| | |
| Reset Due Date | Resets due date on transition and requests the reason for delay for overdue tasks |
| Hide Button | The button is not displayed in the category object form. Transition is shown as a dotted line in the workflow designer. |
| Review | If signatures are requested for the transition, it is executed regardless of the acceptors' decision |
| Single Approval | If signatures are requested for the transition, the system waits for a decision from all acceptors. Then a signature request is submitted again to the acceptors who declined. This continues until all transition acceptors approve.<br>This approval defines the settings for ALL transition signatures; i.e., for single approval ALL transition signatures are not requested again. |
| Require Comment for Transition from Status | Transition cannot be executed unless a comment is added. |
| Appoint Requestor as Assignee | Task requestor is appointed assignee. |
| Disable Emails | Notification emails for the transition are not sent |
| Auto Transition if All Subtasks Completed | Transition is executed automatically if the source transition status has no open subtasks |
| Escalate if Canceled | If a signature is canceled in a task, the manager of the canceling user is requested to sign (if any) |
| Change Task Text | If this flag is set, changes to route steps change the text of the task according to the template entered below. This setting does not apply if automated task text generation from custom fields is configured in theAppearance and Templatesdirectory of basic category settings. |
| Template for Task Text Auto Generation | Template text supports inserts in $ExtCFNumber format for parent task parameter values. *For example, $Ext15 is replaced by a parameter value with ID=15.* $Text macro insert adds task text before transition. |
| Notify Category Users | All users with view permissions for this category |

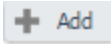
| Name | Description |
|---|---|
| | are notified of task transition to another status |
| Notification Text | Text of the notification sent to users who are not subscribed to the task, but have view permissions for the category when the task transitions to another status |

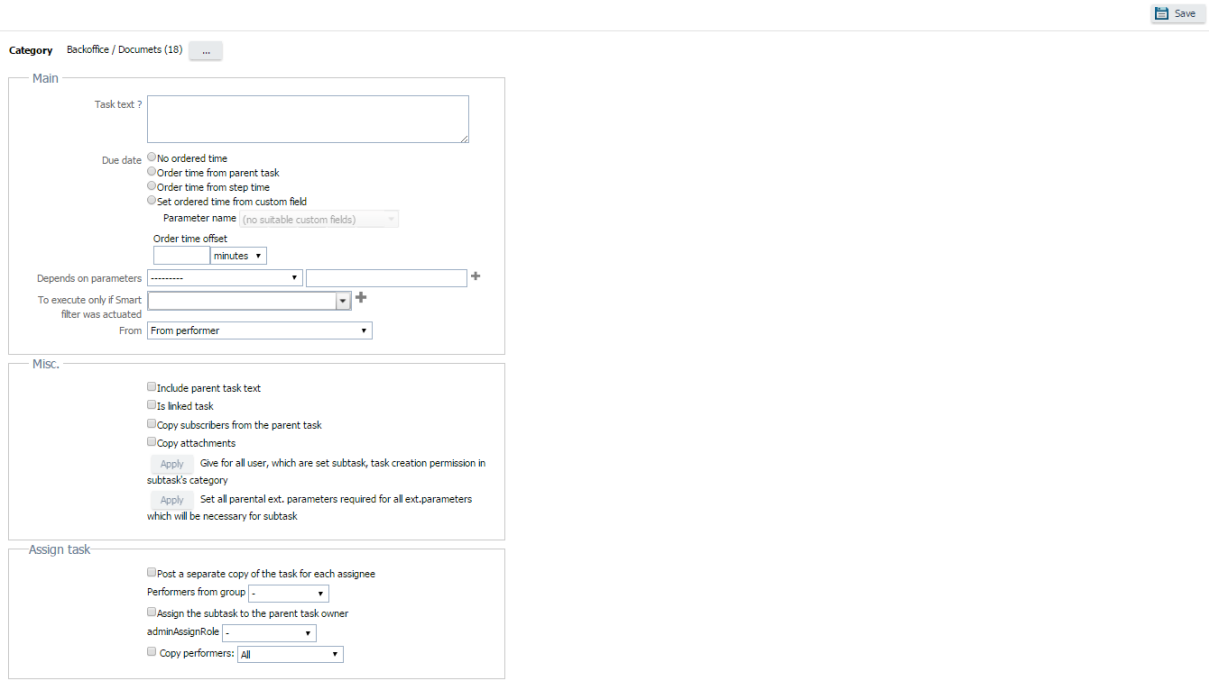
6.6.4.3.2 Transition Subtasks

Use this tab to configure subtasks created automatically after executing a transition.




This table lists subtasks created for the transition.

To add a new subtask for the transition, click  . A new subtask form opens. Select a category in the Category field. This category will be used to create subtasks. The settings form opens.




| Name | Description |
|---|---|
| **General** | |
| Task Text | Text of the subtask. Template text supports |

| Name | Description |
|---|---|
| | inserts in $ExtCFNumber format for parent task parameter values. *For example, $Ext15 is replaced by a parameter value with ID=15.* |
| Due Date | Time alloted for subtask execution. It is calculated according to the settings maintained here. |
| Due Date Offset | Offset for the due date calculated as specified above. Offset can be in minutes, hours, working days or calendar days. |
| Parameter-based | If a custom field of the parent task has the value specified here, the subtask is created. To add a value, select a custom field, enter the value and click |
| Execute if Smart Filter Applied | The drop-down list contains previously created filters. You can select a filter from the list, edit an existing filter or create a new filter. For details on working with filters, see below. |
| From | • From Assignee — assignee of the parent task is proposed as subtask requestor<br>• From Requestor — requestor of the parent task is proposed as subtask requestor<br>• From Button Clicked By User — user who has clicked the transition button is proposed as subtask requestor. |
| **Parameter values** | |
| This section displays only for categories where at least one custom field is used.<br><br>Select value source for transition for each custom field: Automated, Fixed Value or one of the subordinate parameters of the parent task. | |
| **Assignees** | |
| Separate Copy for Each Assignee | Each assignee receives a separate subtask. |
| Assignees by Group | All group members are appointed as assignees. |
| Appoint Parent Requestor as Assignee | Requestor of the parent task is appointed as task assignee. |
| Assign Requestor Role | Select a role that will be used to determine subtask assignee based on the group that contains the requestor of the parent task. |
| Copy Assignees | Assignees are adopted from the parent ask. |
| **Miscellaneous** | |
| Append Parent Text | Text of the parent task is appended to the subtask text. |
| Related task | The task is created as related, not as subtask. If enabled, setting Auto Transition if All Subtasks Completed in the parent task does not apply to the |

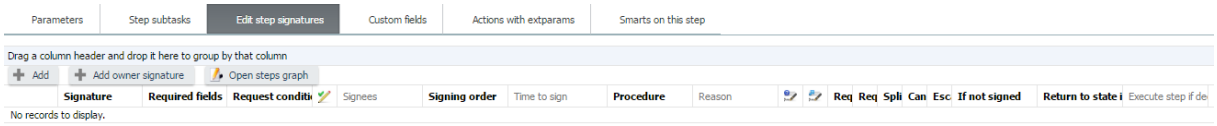
| Name | Description |
|---|---|
| | corresponding transitions. |
| Copy Subscribers from Parent | Parent task subscribers are copied to the subtask. |
| Transfer Attachments | When a subtask is created, all parent task attachments are transferred. |
| Grant Create Permissions for Subtask Category to All Users with Create Subtask Permissions | This one-time transaction is available after subtask settings are saved. |
| Set as Required for Step All Parameters That Deliver Mandatory Values to Maintain Subtask Parameters | This one-time transaction is available after subtask settings are saved. |

To delete a subtask from the transition, hover the mouse over the corresponding table row and click the ✕ icon that appears on the right in the table.

6.6.4.3.3 Transition Signatures

Use this tab to configure signatures requested for executing a transition.

To add a transition signature, click Create. A line for a new signature appears.




| Name | Description |
|---|---|
| Signature | Select one of the predefined system signatures from the drop-down list |
| Mandatory CF | A list of custom fields mandatory for signing (acceptor cannot process the signature unless all these custom fields are populated) |
| Request Conditions | Used to request a signature when the current task has specific custom field values. Custom values must be defined as mandatory in the category settings. If a parameter is selected, but no value is entered, a signature is requested when this custom field is present in the request. |
| Mandatory | If this flag is set, a signature is automatically requested for transition. If the flag is not set, the signature is requested explicitly by the user. If a transition has only optional signatures, the system waits for anyone to request at least one of transition signatures or to click the Signatures Not Required button (the task transitions to the next status without a signature request) |
| Acceptors | Select acceptor determination condition: by |

| Name | Description |
|---|---|
| | assignee, by requestor, or by responsible assignee |
| Approval Step | Number of the approval step for signature request. Number of steps and acceptors |
| To Be Signed | Time allotted for signing. If the deadline expires, the acceptor receives notifications of overdue signature. |
| Primary Acceptor First | If the deadline for signing expires and neither approval nor cancellation is received, signatures from secondary acceptors are requested. |
| Procedure | This field must be empty. It can be used only by professionals certified by the developer. Improper use may lead to system failure and data corruption! |
| Reason | Default comment added to signature request |
| Signature Request Reason Editable | Users can edit a signature request reason. |
| Signature Request Reason Required | A signature request requires a reason. |
| Require Comment for Signing | A comment for signature is requested when signing. |
| Do Not Resubmit Request | If the approval procedure is re-started, signatures are not requested from acceptors who have already approved. This option applies only to the signatures of the current step, not to the whole approval procedure. |
| Can Escalate | If a signature is canceled in a task, the manager of the canceling user is requested to sign, provided this signature is configured. |
| Escalate if Overdue | If the deadline for signing expires, a signature from the manager is requested. |
| To Status for Canceled Signature | The status that is assigned to a task if the acceptor cancels. If no status is specified, cancellation returns the task to the previous status. |
| On Cancellation | Possible values are:<br>• Abort Approval — unprocessed signatures are removed from all step members<br>• Wait for Decision from All Step Members — approval continues until all step signatures are processed<br>• Continue Approval — approval continues until all signatures for all approval steps are processed. |
| To Status for Canceled Signature | Select the status that is assigned to the task if the |

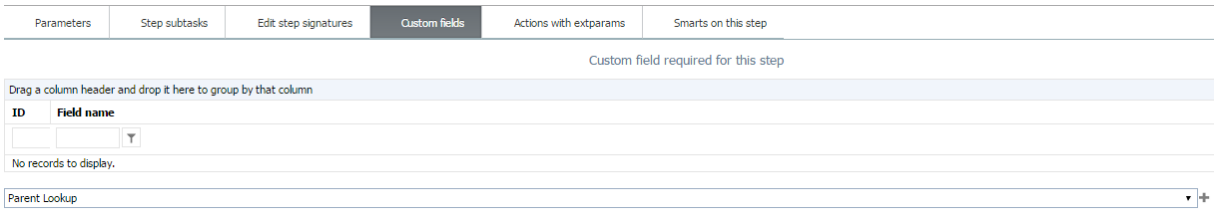
| Name | Description |
|---|---|
| | signature is canceled. |
| Execute Transition on Cancellation | Flag the transition that is executed when a signature is canceled. |
| Active | If the flag is set, a signature is requested. |

**IMPORTANT:** Calculation of the time spent on signing takes only working hours into account.

Click the entered signature to open the edit signature window.

#### 6.6.4.3.4 Custom Fields

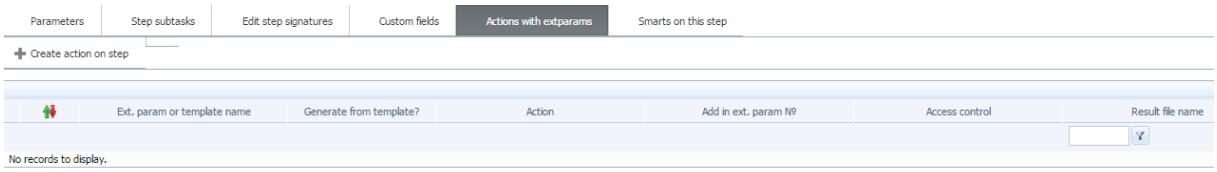
This tab displays custom fields that are mandatory for transition.



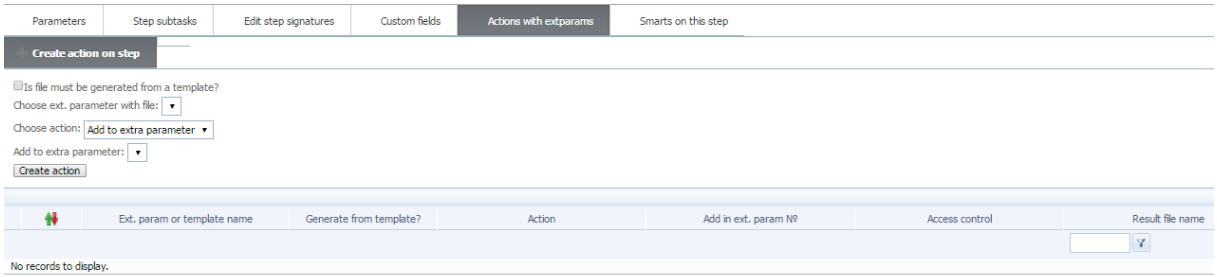

To add a mandatory custom field, select it from the list and click 

#### 6.6.4.3.5 Actions on Custom Fields

Use this tab to configure actions on custom fields of file typethat are executed during transition.




To create an action, click the Create Transition Action. A field with the required parameters appears.




If the **Generate File from Template?** flag is set, advanced settings appear.

- If the Template in Custom field flag is set, you can select the required custom field from the drop-down menu by choosing Select Custom Field with Template.
- If the Template in Custom field flag is not set, you can select an existing template in the Select Template field.

Actions on document templates executed during this transition are defined in the **Select Actions** field.

The following actions on custom fields are currently supported:

- Attach to Custom Field. Here you can specify the custom field for attaching a document template as Attach to Custom Field value.
- Attach to Task
- Generate from Template.

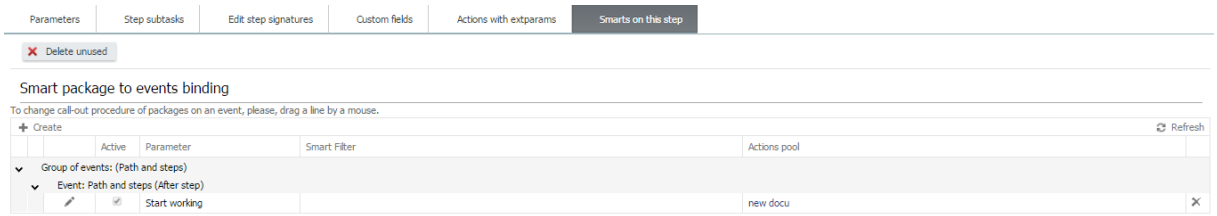
Use the **Restrict File Access** parameter to configure the following restriction types:

- No Protection — file is available to all users
- Read only, no password
- Track changes
- Comments
- Read only, password.

If the Generate File from Template? flag is set, you can also enter the name of the generated file in the Resulting File Name field.

6.6.4.3.6 Transition SMARTs

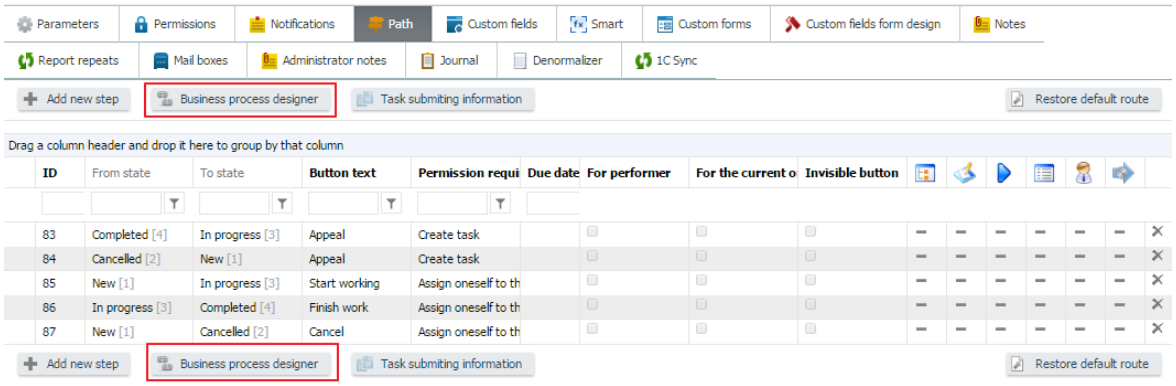
Use this tab to configure Smart packages assigned to Before Transition and After Transition events.




These packages and assignments are also available from the SMART tab of the category together with all other Smart objects. They are grouped on a separate tab for easy access.

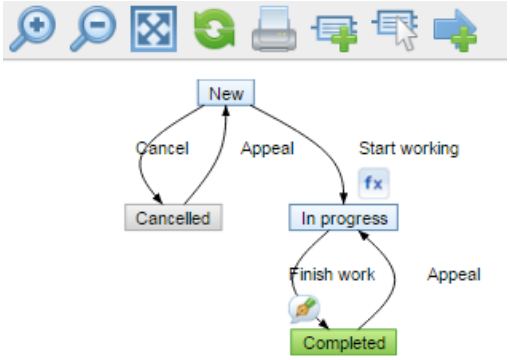
### 6.6.4.4 Workflow Designer

To switch to graphics mode for route configuration, click the Workflow Designer button on the right in the transitions table.

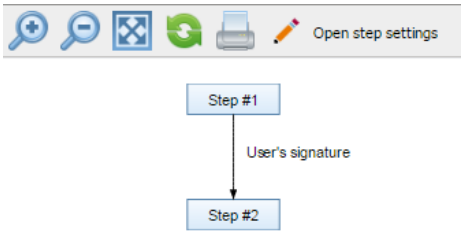



Workflow designer UI opens with a graphical presentation of the current category route. Here you can

click a status rectangle to open the settings window for this statusor transition name/arc to open the settings window for this transition.




If static signatures are maintained for the transition, click the  icon to display an additional window with approval steps. Here you can click the signature name or an arrow next to the name to open the signature settings window.

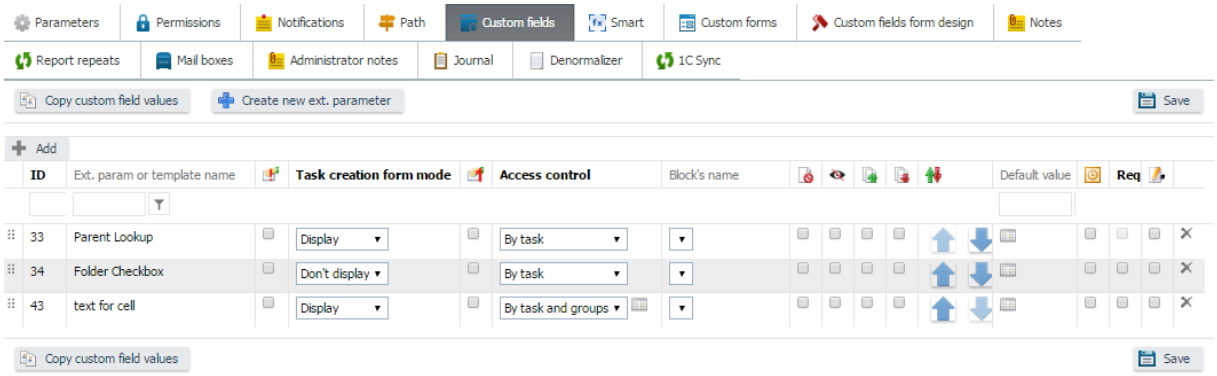



| Button | Action |
|---|---|
| | Zoom in |
| | Zoom out |
| | Fit to screen |
| | Refresh |
| | Print |
| | Create new system status |
| | Add existing status |

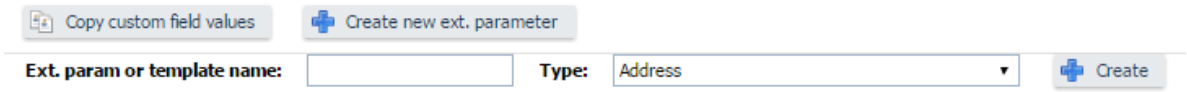
| Button | Action |
|---|---|
| | Add transition |
| Open step settings | Open transition configuration window on tab with signature settings |

### 6.6.5 Custom Fields

Use this tab to configure the list and location of custom fields for this category.




Create new ext. parameter — Click to open the new custom field creation menu. A custom field created in the current category is automatically assigned to it. To edit a custom field in the category, click the required custom field to open the default custom field edit form.

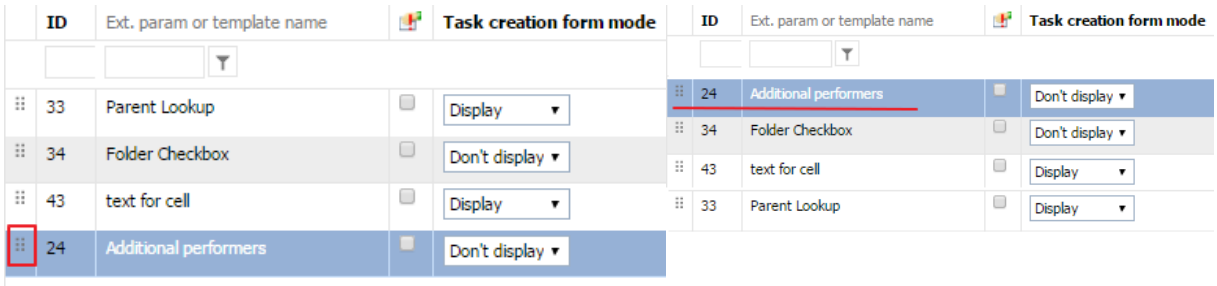



All custom fields in a category are displayed in a table with the form for adding a new custom field below.

| Name | Description |
|---|---|
| Custom Field/Template Name | Custom field name |
| Required for Completion | Custom field is required to complete the task |
| Assignment Mode | Show — the custom field displays in the form when a new task is created; Do Not Show — the custom field does not display in the form when a new task is created; Required — the custom field is required to create a task. Show and Required modes are incompatible with custom fields of numerator type. |
| One-Time Entry | Once a value is entered, the custom field cannot be changed. This option does not affect custom field value editing by users with category administrator permissions. |
| Access Restriction | By Task — access to the custom field depends on |

| Name | Description |
|---|---|
| | current category settings.<br>By Groups Only — access to the custom field depends on the groups the user belongs to. To configure group access rules for the custom field, click .<br>By Task or Groups — access depends on rules bundled by task or group.<br>By Task and Groups — access depends on rules bundled by task and group. |
| Block Name | Title of the custom field block (if the category has any configured blocks) |
| Access by Status | Access to custom fields depends on the status. To configure access permissions, click |
| Hidden | Custom field is hidden in the user interface. |
| Synchronize with Parent | The entered custom field value is automatically synchronized with the parent task (if any). If the subtask has been created manually, the values entered manually are not replaced by values from the parent request.<br><br>Please note that for custom field synchronization, parameters are transferred regardless of access rules for the corresponding categories. |
| Synchronize to Child | The entered custom field value is automatically synchronized with all child tasks (if any).<br><br>Please note that for custom field synchronization, parameters are transferred regardless of access rules for the corresponding categories. |
| Sort Order | This defines the display order of custom fields in the main task form. Click buttons to change the display order of the custom fields in the tasks of this category. |
| Default Value | This value is used to populate the custom field when a new task is created. The default value specified here overrides the default value entered for the parameter. |
| Notify Subscribers of Value Change | If the value changes, all subscribers receive comments. |
| Require Comment on Change | A comment is required if the custom field changes. |
| Editable History | Select the checkbox to enable deletion of rows with this custom field from the change history table. |

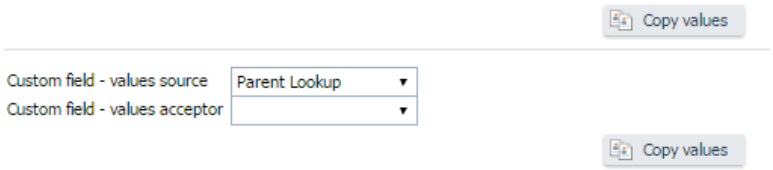
To manage custom field display order, highlight the custom field row by clicking the far left column ( ) and holding down the mouse button drag the row to the desired position.




To add a new custom field to the category, fill out the form for adding a new custom field and click .

### 6.6.5.1 Copying Field Values

Click the Copy Field Values button to open a window for copying custom field values between the tasks of the category.

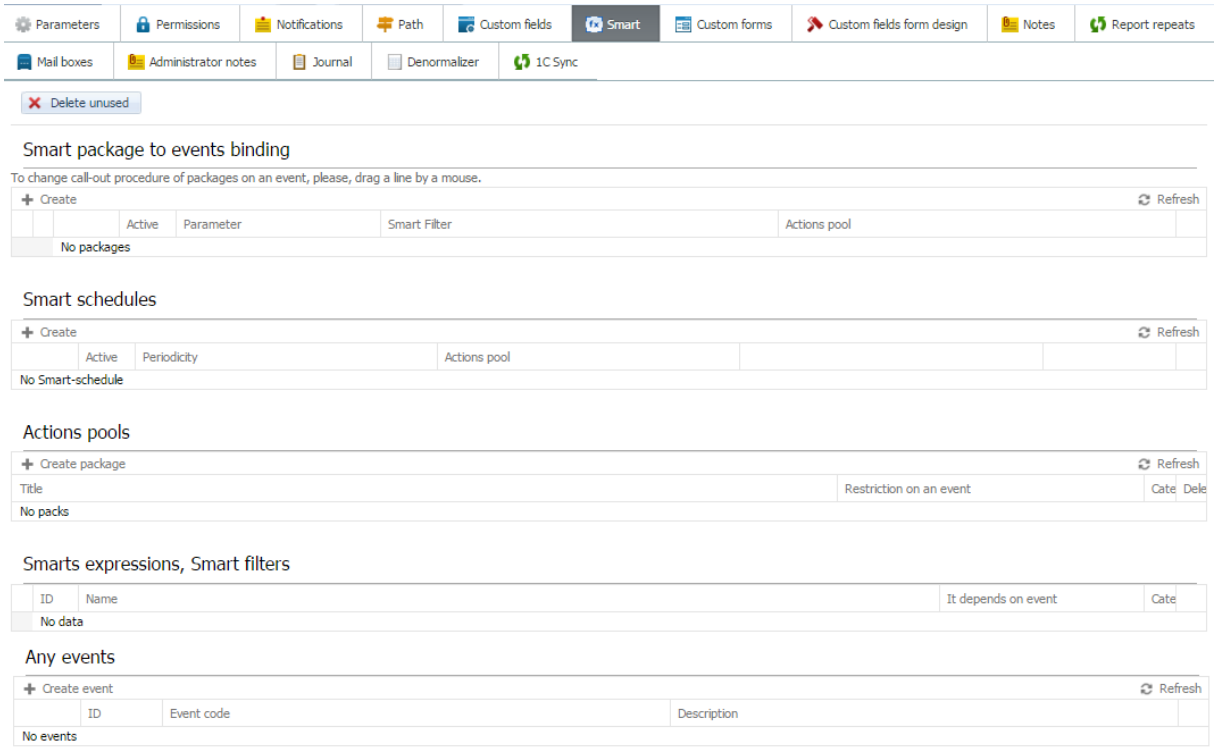



This tool is used to replace one custom field in the category with another and retain entered values.

To initiate copying, select custom field names in Value Source Field and Value Target Field and click Copy values. In each task of the category, the value of the custom field selected as Value Source Field is copied to the custom field selected as Value Target Field. On successful completion, a message with the number of successfully processed tasks is issued.

## 6.6.6 Smart

You can use the Smart tab to configure almost any possible system action. System actions are grouped into actions packages. An actions package is executed when an event is triggered.
Actions are executed within a customizable category, but can influence any task in the system (see **Actions Packages**).
Actions packages and Smart expressions/filters that are currently not used by the system are marked with .



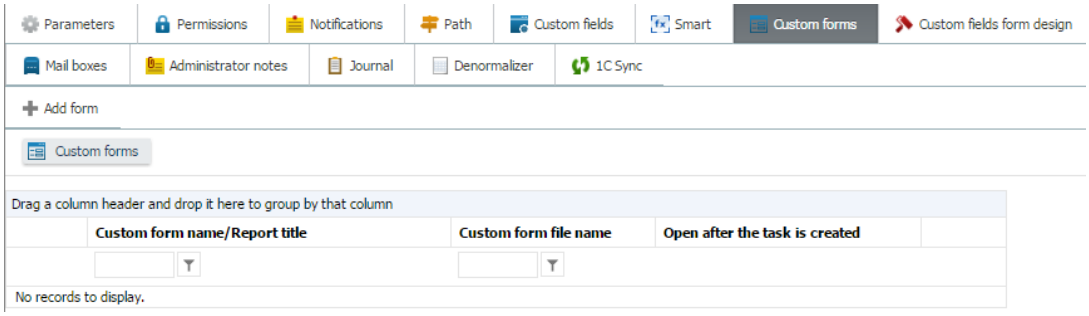

For details on SMART functionality, see the 1Forma Configuration Guide.

## 6.6.7 Forms

**Form** is an advanced interface with personalized appearance and functionality for working in the 1Forma system. It can be used for integration with the corporate website or third-party information system, data entry and preprocessing, etc.

This functionality is available only to professionals certified by the developer. Improper use may lead to system failure and data corruption.

The tab contains a list of forms assigned to the category.

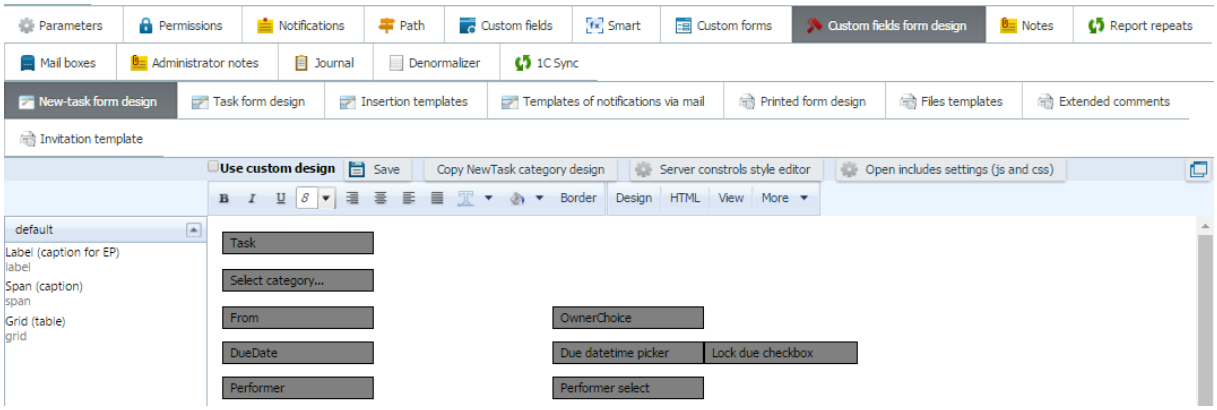



## 6.6.8 Design

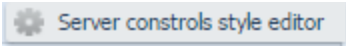
Use this tab to configure a design for the new task form, task form, printed form, document templates (docx), and notification email templates.

### 6.6.8.1 New Task Form Design

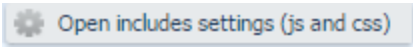
Here you can configure the appearance of a newly created task form.




The following controls are displayed above the Form Designer area:



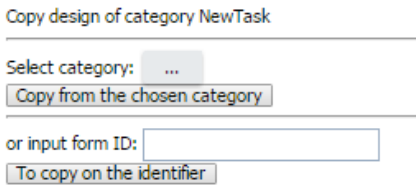
— Click to switch to server component style edit mode. Available only to the developer's employees.



— Click to insert JavaScript add-ons (they can be added either to a new request form or to the main request form).

**Use Template** — Select to use a custom template instead of the default one.

— Click this button to copy the design of another category. This opens the following form:




— Click to save changes.

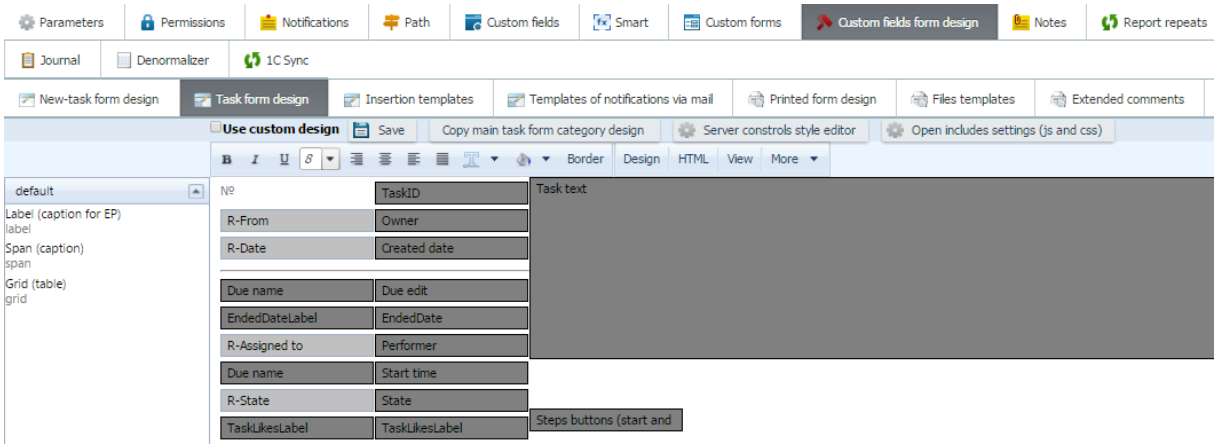
— Click to cancel changes and restore default design.


— Click to edit the template in a new window.

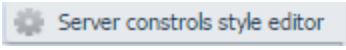
For details on working with Form Designer, see 1Forma Configuration Guide.

### 6.6.8.2 Task Form Design

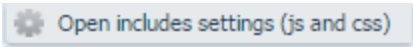
Here you can configure the appearance of the main task form.




The following controls are displayed above the Form Designer area:

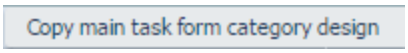



— Click to switch to server component style edit mode. Available only to the developer's employees.

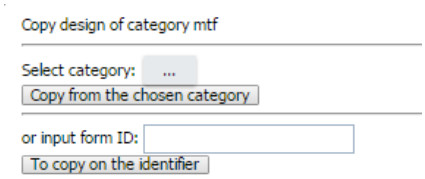



— Click to insert JavaScript add-ons (they can be added either to a new request form or to the main request form).

**Use Template** — Select to use a custom template instead of the default one.

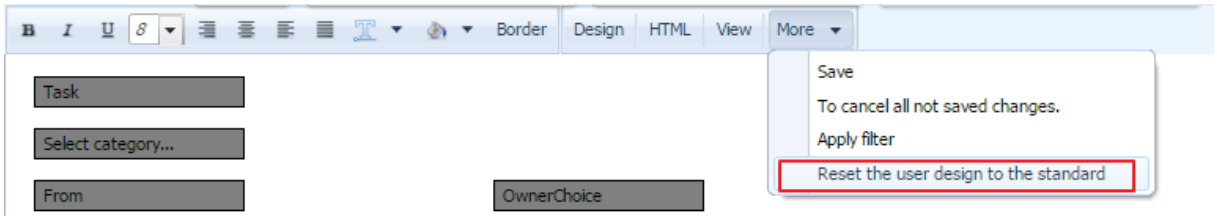



— Click this button to copy the design of another category. This opens the following form:





— Click to save changes.



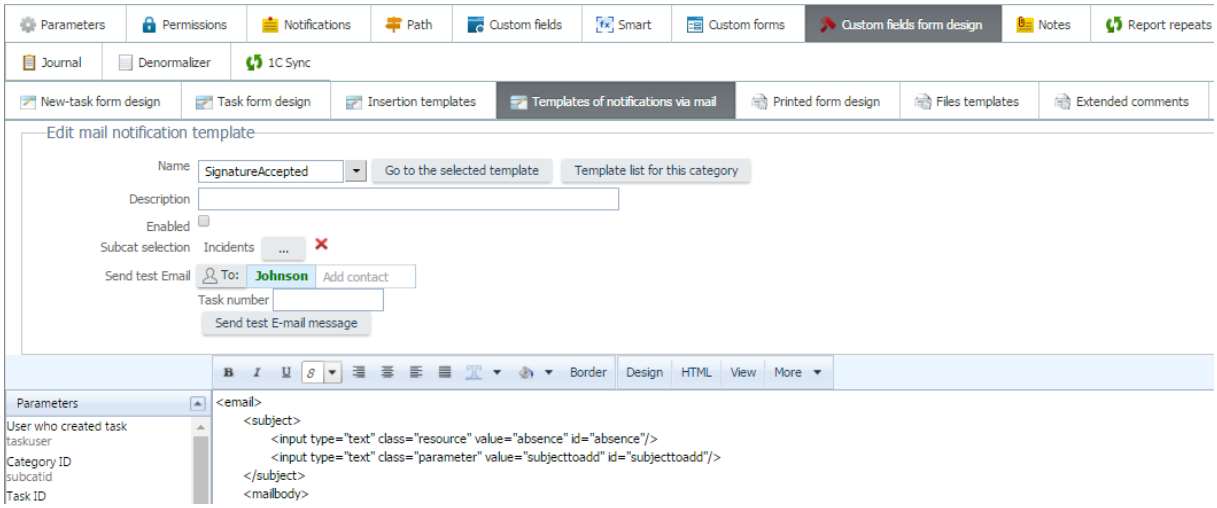

— Click to cancel changes and restore default design.

 — Click to edit the template in a new window.

For details on working with Form Designer, see 1Forma Configuration Guide.

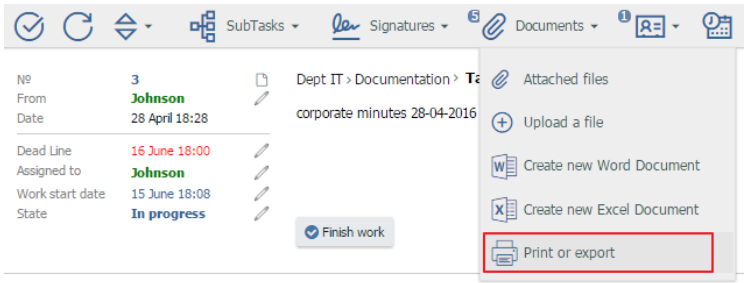
### 6.6.8.3 Notification Email Templates

This directory contains the notification email template editor for notifications within the category. For details on notification email template configuration, see Notification Email Templates.

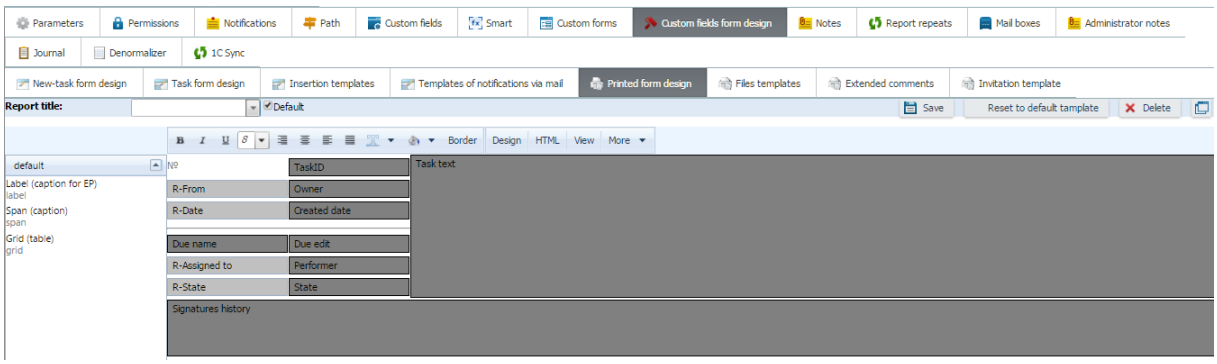



### 6.6.8.4 Printed Form Design

This section is used to configure the task display form that opens in UI from the main task form menu by choosing More -> Print&Export to Word.




Report configuration form:

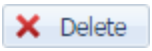


Report Name contains the name of the created template.

If the Default flag is set, this template is used by default.

— Click to save changes.

— Click to cancel changes and restore default design.



— Click to delete the previously configured template.


— Click to edit the template in a new window.

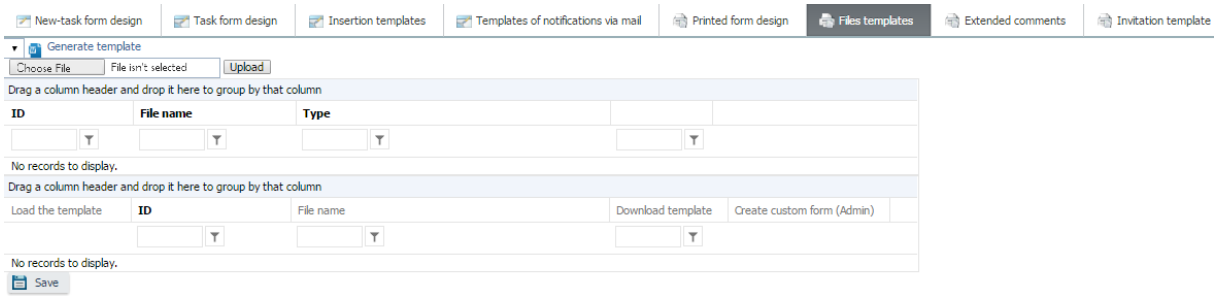
For details on working with Form Designer, see 1Forma Configuration Guide.

### 6.6.8.5 File Templates (docx)

## Template management

Please note that MS Office 2007 or higher must be installed to work with document templates.

On this page you can generate a template that describes the tags for all key parameters and custom fields available in the category. You can also upload edited templates to the category and delete unused templates.




## Editing templates

For the complete list of available parameters, see 1Forma Configuration Guide.

## Creating reports from templates in UI

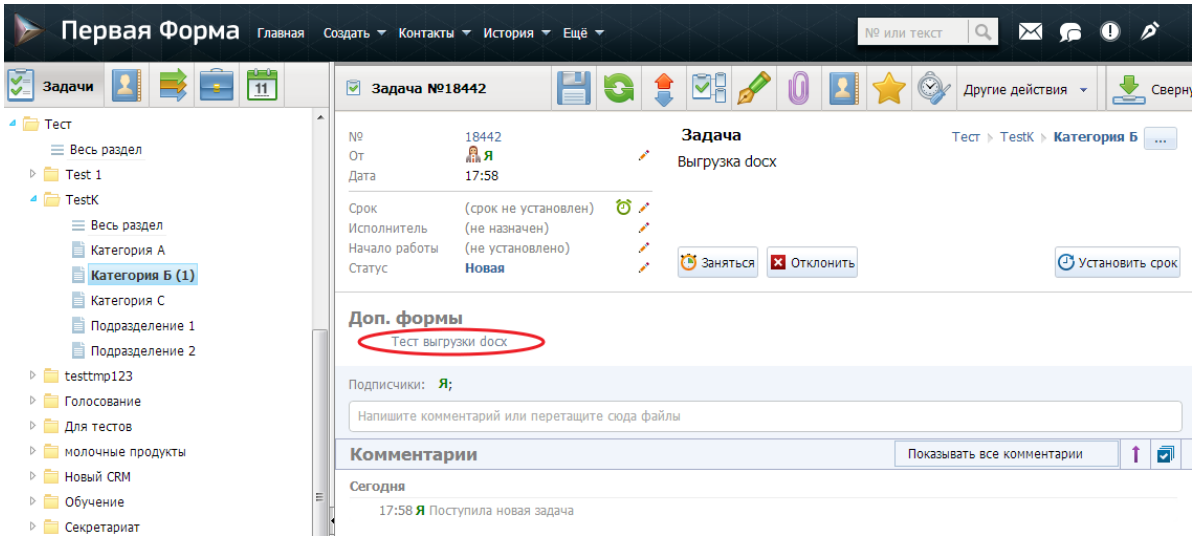
### Standard procedure

To generate a docx report from a task:

1. Open the task, go to Other Actions and choose Print&Export to Word.
2. In the window that opens click Generate from Template.
3. Next, click the name of the required template.

### Creating a custom form for report generation

Report generation from a specific template can be added to the block of custom task forms of the category. The link for report generation will display to users as follows:




To do this:

1. Generate a link to the custom form in the format

../TaskPrintFromTemplate.aspx?print=1&templateid=727988

where 727988 is the ID of the template.

2. Create a form (Admin panel -> Forms -> Add Form) with the following parameters: Custom Form Name (form link text for the category); Custom Form File Name (link from p.1).

3. Open the Forms tab in the category settings and add the created form.

### Using a file type custom field as a template source

To allow users to create/edit templates, specify the value of a file type custom field as the template source.

To do this:

1. Add a file type custom field and configure it to support only files in docx format.

2. Generate a link to the custom form in the format: ../TaskPrintFromTemplate.aspx?print=1&extparam=1&templateid=1234 where 1234 is the ID of the custom field.

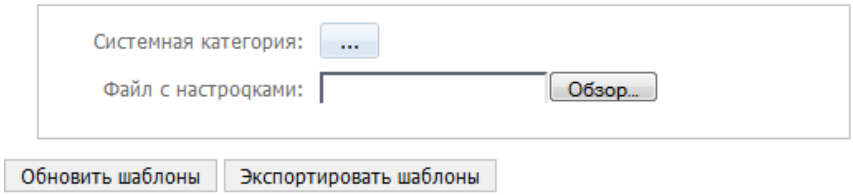
3. Add this form to the category (see "Creating a custom form for report generation" above).

### 6.6.8.6 Transfer of Category Templates Between 1Forma Installations

The category templates transfer functionality is used by customers to create standard categories and transfer 1Forma designs.

To transfer category templates between different 1Forma installations, open the link: https://1forma/admin/subcategories/UpdateSubcatTemplates.aspx .

This opens the following window:




1. Choose a system category for transfer.

2. Upload the configuration file (it can be uploaded only to a database with the same structure).

3. Export.

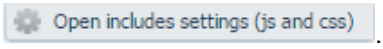
After the templates are imported, a new directory, Category Templates, which contains several categories, appears in the system directory. Customers can add their own templates in this directory.

Open Design — Task Form Design tab and in the drop-down list Use Template choose one of the predefined templates.

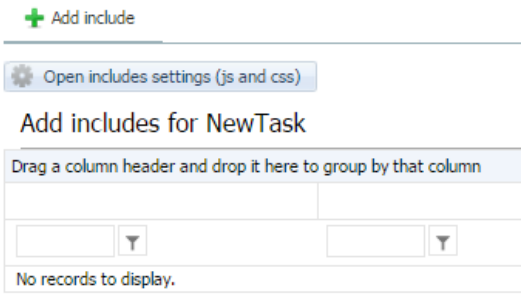
**IMPORTANT:** Categories that use custom fields (such as a calendar) cannot be transferred correctly.

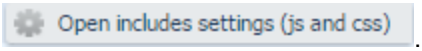
### 6.6.8.7 JS Framework for Custom Fields

**JavaScript (JS)** is a script-based programming language used to access specific application objects. With **JS** a hidden association between several custom fields can be defined in 1Forma to manage custom field visibility and/or values by values of other custom fields.

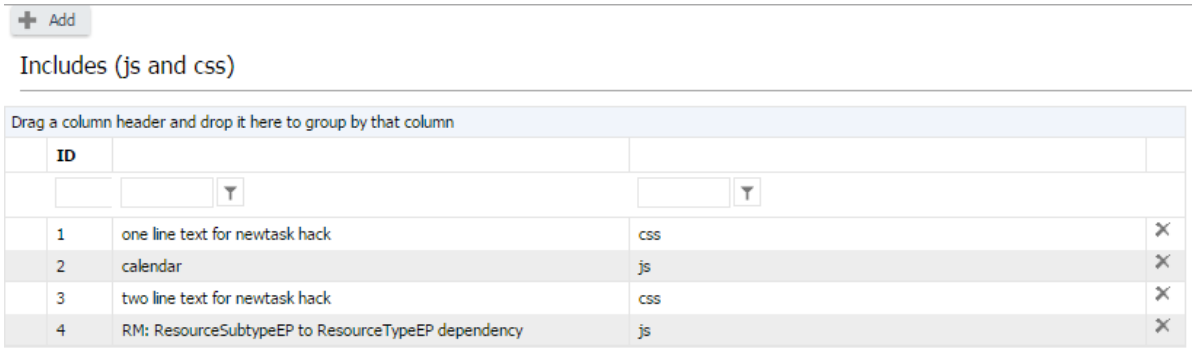
To use a JS insert, click 

. This opens the window for editing JS inserts.

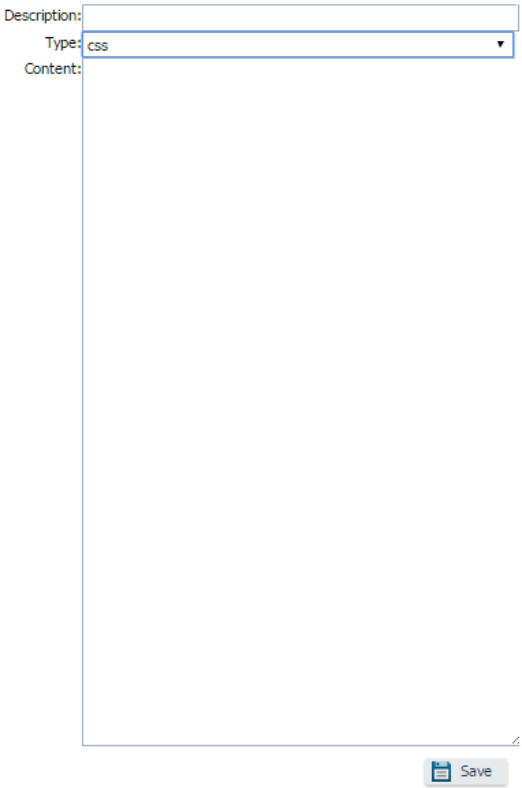



To add a new JS insert to the application, click 

. This opens a table with existing system JS/CSS inserts.




Then click  . JS/CSS insert editor appears.



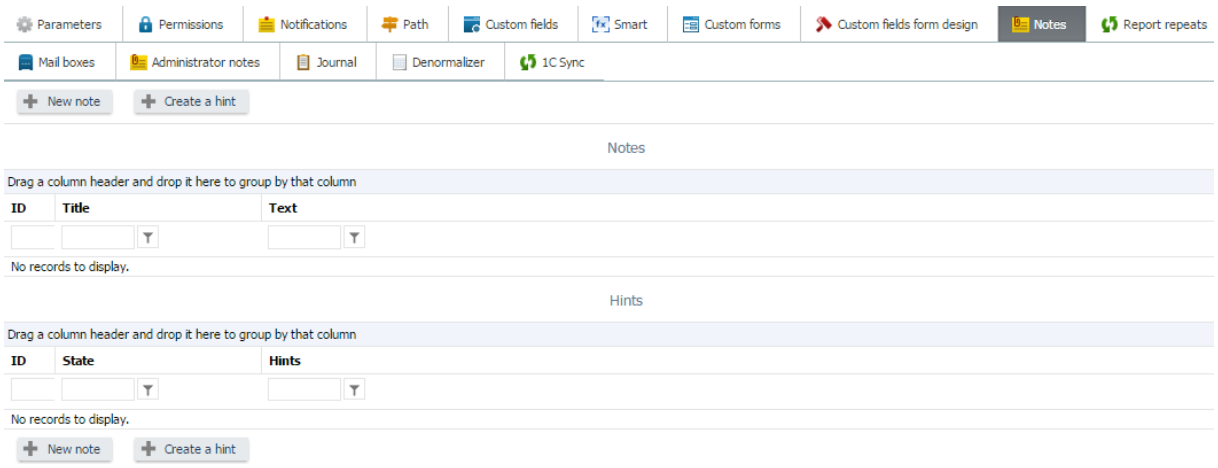

Enter the event processing script, select type (JS or CSS) and add free text description in the Description field.

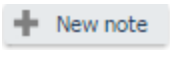
For JavaScript syntax, see the 1Forma Configuration Guide.

### 6.6.9 Notes

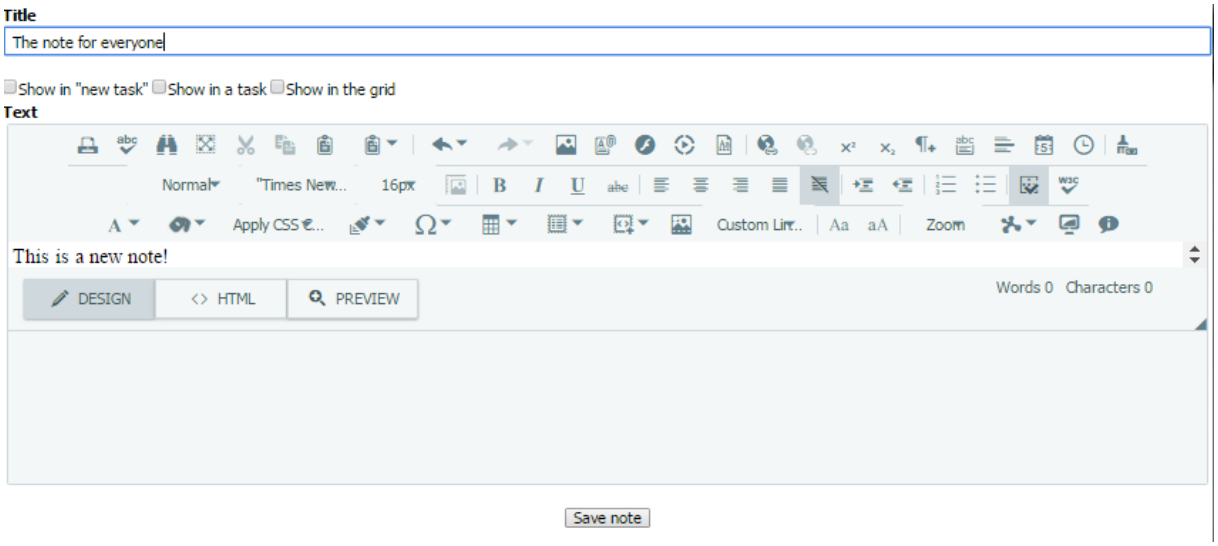
Notes are displayed on the main category object form for any status. They usually contain useful information on a category's functions and on the rules that apply to it.

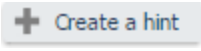
Tooltips are displayed depending on status and contain quick information on available actions.



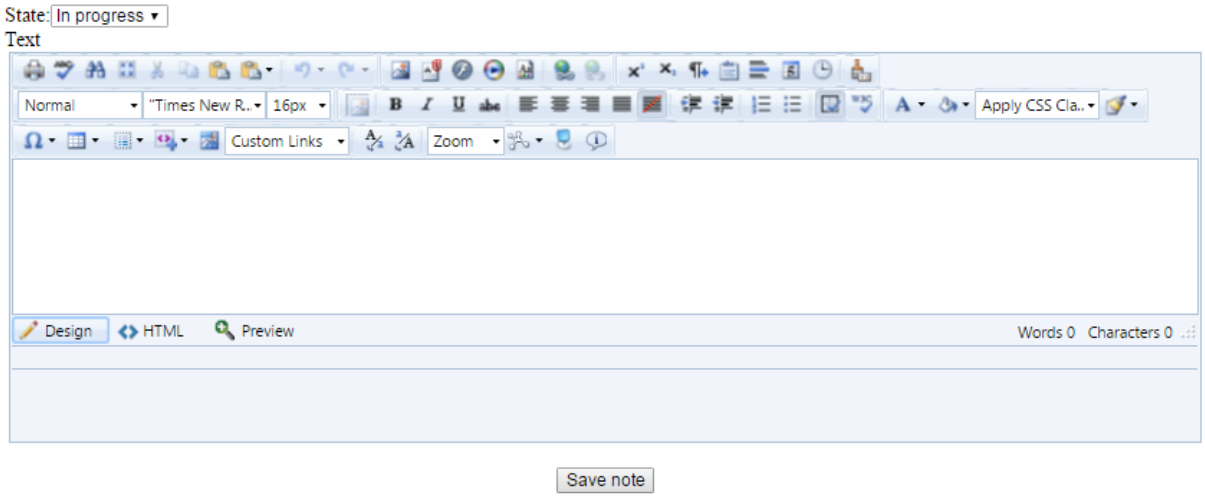

To create a note, click 

. The form for entering a new note opens.




To create a tooltip, click 

. The form for creating a new tooltip opens.

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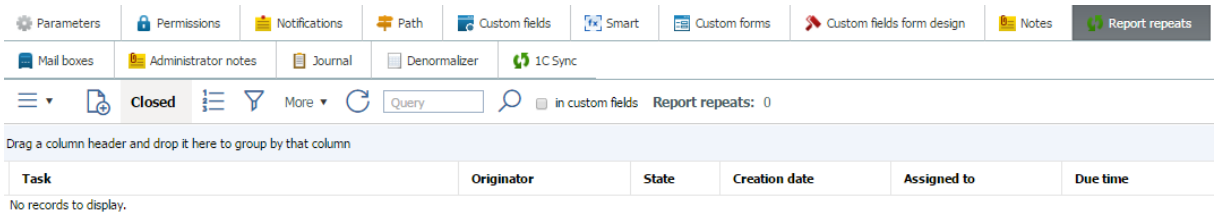
## 6.6.10 Repeats

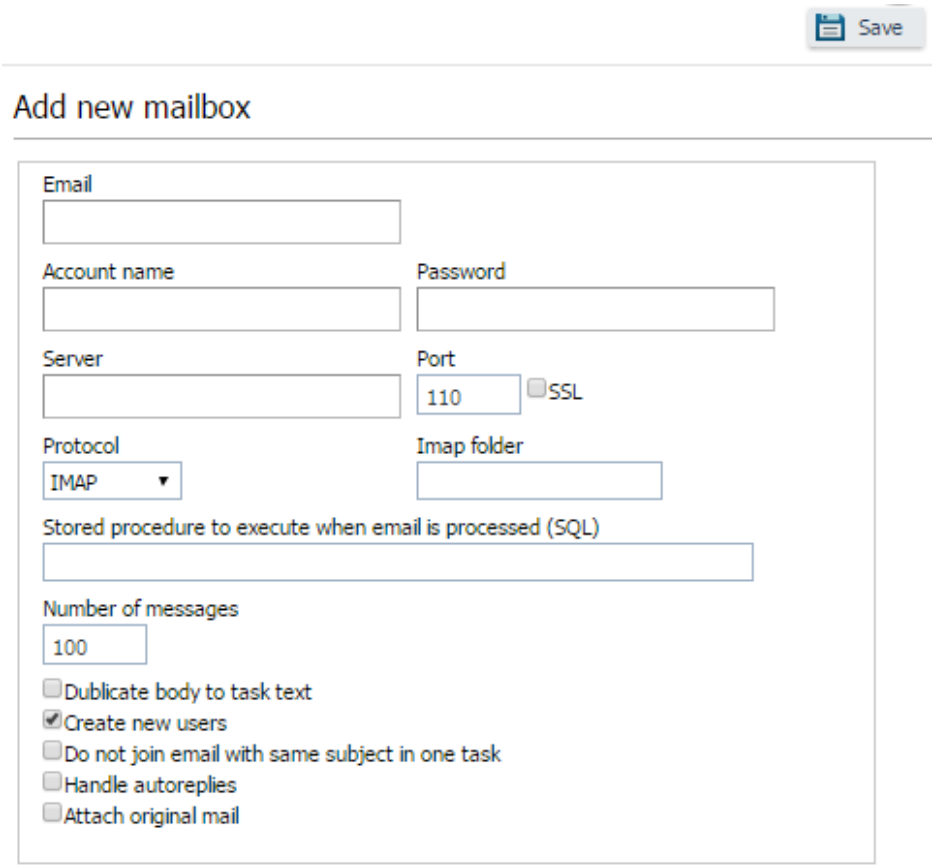
This tab displays a list of category objects with repeats configured in time value settings.




## 6.6.11 Email accounts

You can connect an email account to a category in the directory. Incoming emails from this account are automatically converted into category tasks created on behalf of the email sender. Users in the To field are copied to task assignees, and users in the Copy field are added to subscribers if they exist in the system. Replies and quotes in forwarded emails are not removed from the email body. Any comments added to the task are sent to the sender's email.

To connect a new email account, click Add Email Account.




If the Duplicate Email Body to Task Text flag is set, the email body is copied both to the comment and to the task text.

The Create New Users setting disables creation of new users on the mail server if the requested user has not been found on the server.

The Do Not Group Emails with Same Subject into Task setting separates emails generated by 1Forma from emails received from other mail servers.

If the Process Auto-Replies flag is set, replies to the original email are added as comments to the existing task instead of creating separate new tasks.

This directory also contains categories (System -> Email, Read Notifications) for configuring emails specified in the application settings in the Reply-To Address and Notification Email fields, respectively.

These email accounts are required if the Reply option of the email client is used. The reply email body is recorded in the system as a comment to the task created from the first email of this chain, and read incoming email is treated as a read comment.

Please note that all email accounts specified in any of the categories are processed in 1Forma in the same way; that is, one email account supports several options (for example, both read notifications and replies can be received).

Email subject template

Replace "1f" with the value of the Application Short Name parameter fromApplication Settings:

- To create a task, the subject must be empty
- To write to an existing request, use [1f][taskid]
- To reply to a comment, use [1f]c[commentid].

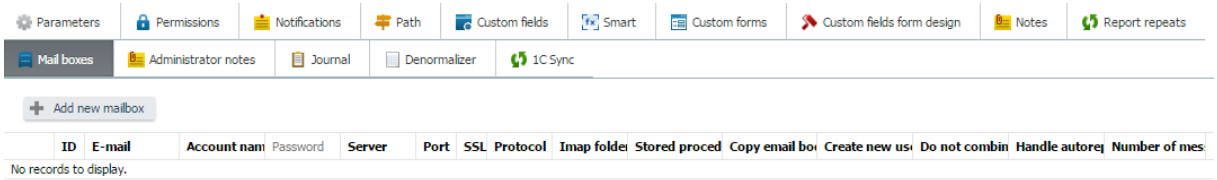
Email accounts can also be used to populate custom field values in the request.

In this case, an email must contain the following tags:
<extparams><extparam id="parameter ID">Value to populate custom field</extparam></extparams>

**IMPORTANT:** When populating an email from custom fields, disable HTML in category settings.

Thus, 1Forma system enables central communication with counterparties without creating separate accounts for them. POP3 and IMAP protocols are supported.

This tab contains a list of email accounts connected to the category.

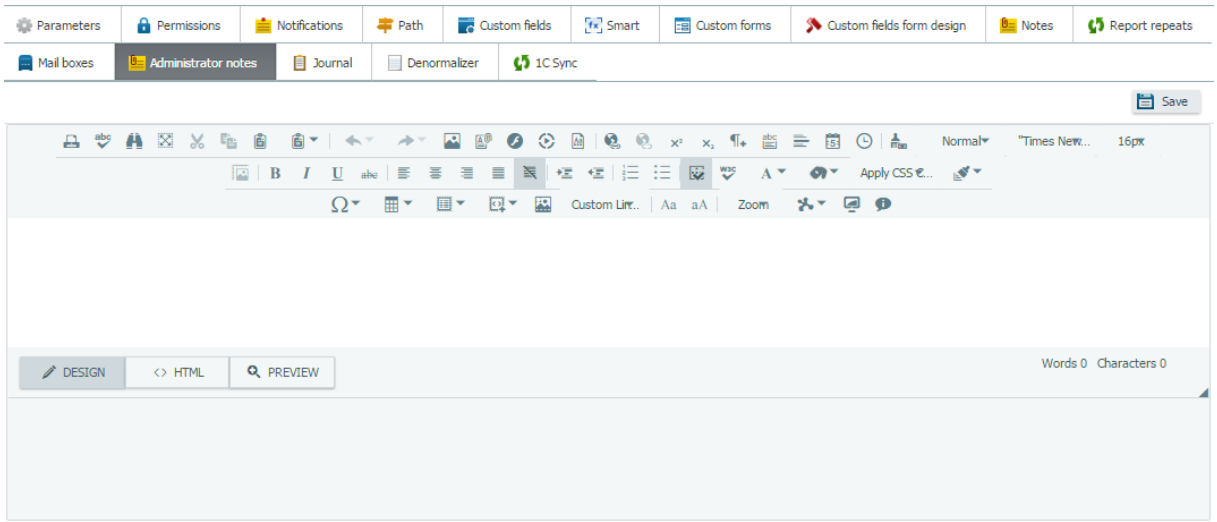



Click  to test connection to all email accounts.

Click a table row for any of the email accounts to open a window for easy editing of email account settings.

## 6.6.12 Memos

This tab can be used only by administrators. Here an administrator can add notes for a category, its function and specific settings.



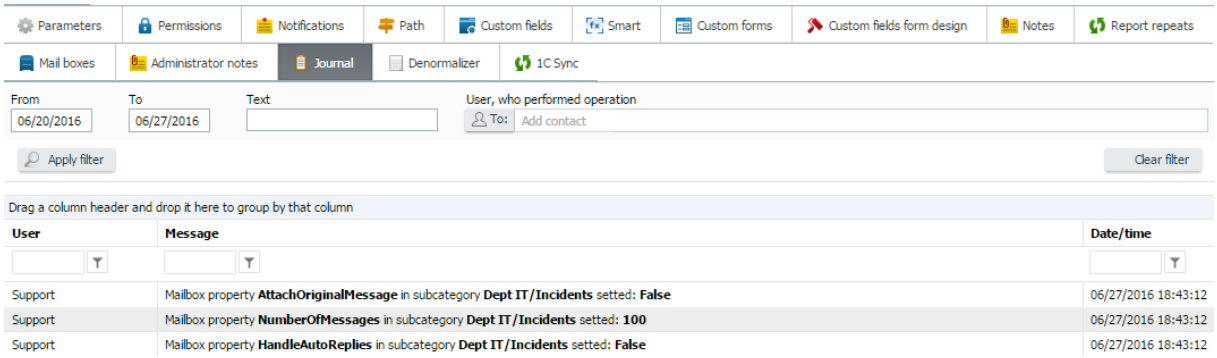

Entry field supports text formatting. Memos can be displayed as HTML code or plain text. Preview is

also supported.

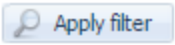
Click Save to save the text and go to further processing of the category.

### 6.6.13 Log

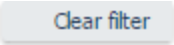
This tab displays a complete list of operations performed on a category.




Selection fields can be used to filter operations by execution date, operation type and user who performed the action.

Click 

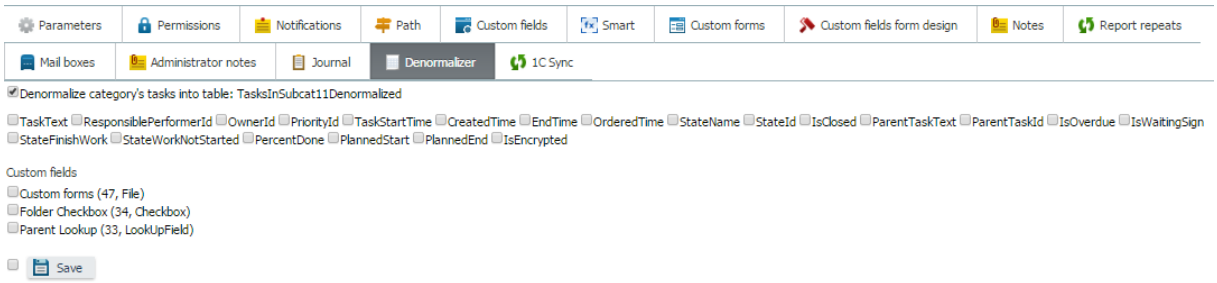
to enable highlighted selection parameters.

Click 

to clear selections.

### 6.6.14 Denormalizer

Denormalizer is used to streamline application automation processes within the selected category. Denormalization of category tasks creates a database table with the selected attributes, which can be used to automate processes.




The attribute list contains several blocks:

- Name of the table created in the database.
- Table column list.
- Task attribute list:
  - TaskText — task text
  - ResponsiblePerformerId — responsible assignee ID

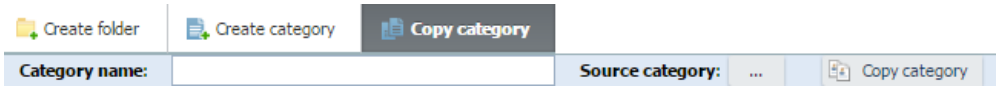
- OwnerId — requestor ID
- PriorityId — task priority ID
- TaskStartTime — task start date
- CreatedTime — task assignment date
- EndTime — task end date
- OrderedTime — due date
- StateName — task status name
- StateId — task status ID
- IsClosed — completed task
- ParentTaskText — parent task text
- ParentTaskId — parent task ID.

- List of custom fields mapped to the selected category. This list varies depending on category settings.

To save changes, click Save.

## 6.7 Copying a Category


Categories are copied with all settings, custom fields and automation options, including SMARTs.



# Chapter 7 Custom Fields



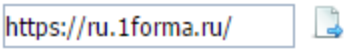
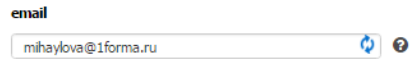
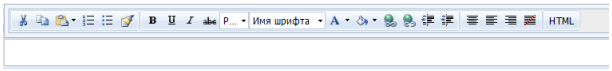
## 7.1 General

**Custom fields (CF)** are task attributes used to formalize information added to the categories during work execution  Custom fields can contain specific types of data.

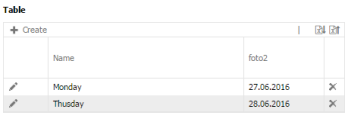
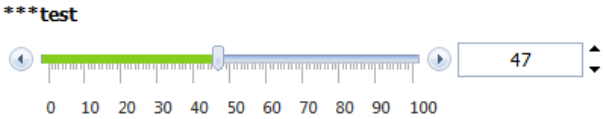
Custom fields are displayed in the main category form three in each row as configured by the administrator. A category can have any number of custom fields.

## 7.2 Data Types

The 1Forma system supports the following data types:

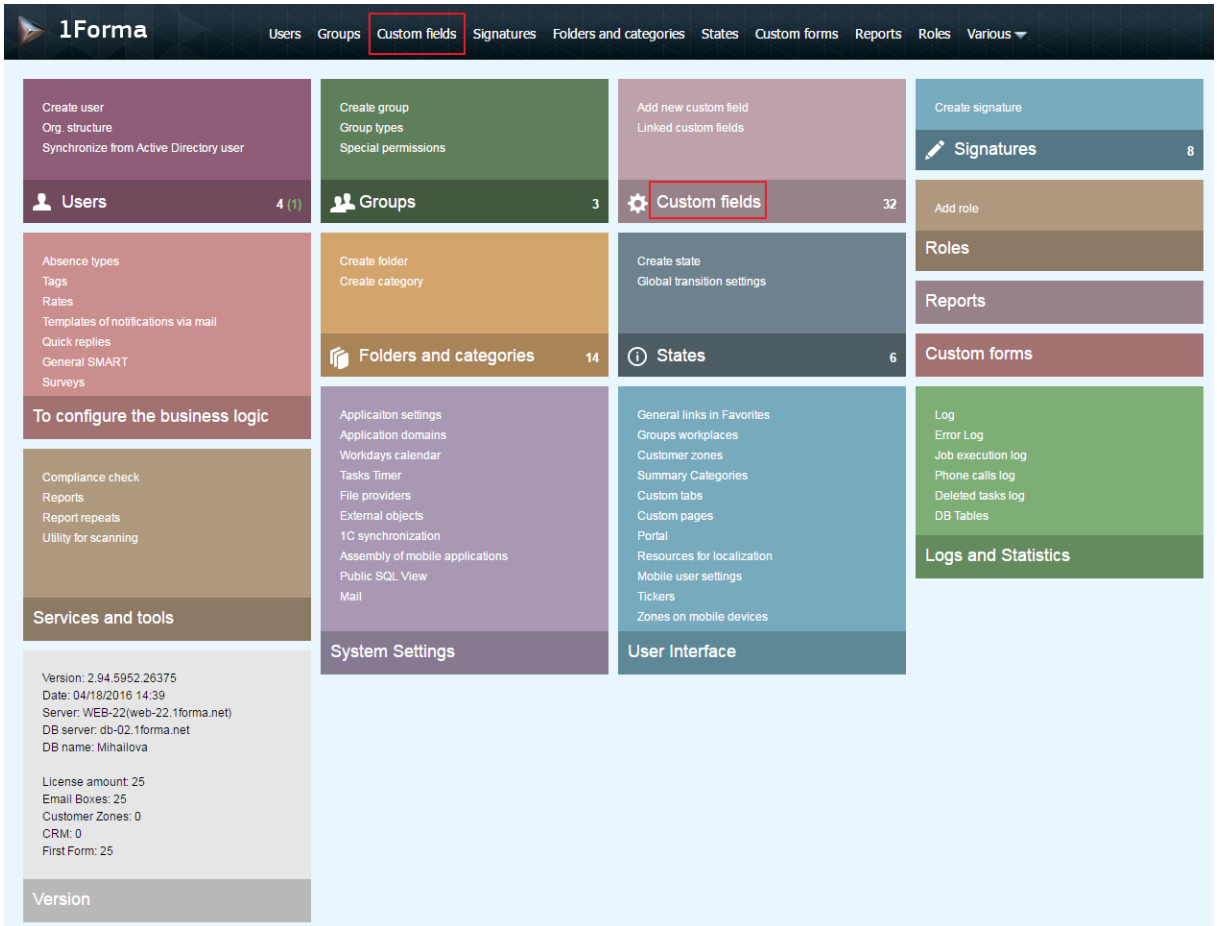
| Data type | Appearance | Description and setup |
|---|---|---|
| Lookup field |  | Category task selection<br>**IMPORTANT**: This custom field type supports only task IDs from the database. |
| URL |  | Resource link |
| Email recipients |  | User email account name, user name or character set |
| Large formatted text |  | Text with over 1,000 characters and options for formatting, disabling Microsoft Word tags and displaying HTML code<br>**IMPORTANT**: In Mozilla Firefox and Google Chrome browsers, images can be pasted into task texts and the clipboard, including drag-and-drop. |
| Large unformatted text |  | Text with over 1,000 characters without formatting options |

| Data type | Appearance | Description and setup |
|---|---|---|
| Multiple category task selection | Multi Tasks<br>Edit<br>Value<br>corporate minutes 28-04-2016<br>register of documents of carriage | Selection of several category objects with optional comments and display of category custom field values for each of the selected objects |
| User selection | User Selection<br>To: Johnson Add contact | Selection of one or several users, user groups, or org. structure units |
| Drop-down list | 1<br>2<br>3 | Selection of a single value from the fixed list |
| Editable drop-down list | 1<br>2<br>3 | A fixed list of values with supported custom values |
| Flag (checkbox) | | Yes/No (True/False) |
| Date | 24.12.2014 | Date selection from the calendar |
| Date and time | 24.12.2014 19:00 | Date and time selection from the calendar |
| Monetary value | 35,00 | Numerical value to 2 decimal places.<br>Use dot (".") or comma (",") as separator. |
| Tree | Tree<br>Backoffice\Buildings\cells ... | Display of tree structure |
| Numerator | 1 | Automated numerator |
| Intermediary | | Automated value calculation based on the maintained dependencies |
| Category task selection list | CategoryTaskList<br>image<br>image<br>foto | Category task selection. Displayed as a drop-down list (useful for directories) |

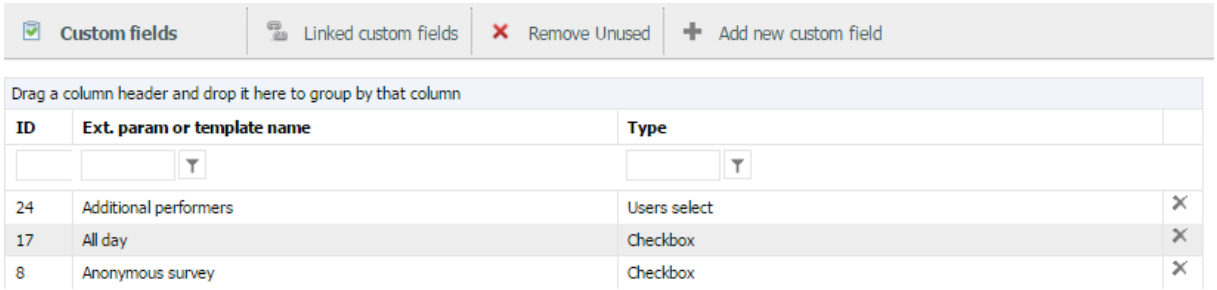
| Data type | Appearance | Description and setup |
|---|---|---|
| Table |  | Data entry in table view. **IMPORTANT**: Actions on table custom fields in the main task form automatically save other custom fields in the form. |
| Text |  | Text value |
| File |  | Electronic file of any type that is allowed by the administrator. **IMPORTANT**: If the Receive Files in Emails as Attachments Not Links setting is enabled in the user profile, file custom fields are also sent as attachments. |
| Number | 1. Text:<br>  <br>2. Slider:<br>  | A number in the specified range (from -100,000,000 to 100,000,000). Can be displayed as plain text or slider (for the latter specify the increment). Numerical custom field display is configured in parameter settings:<br> |

## 7.3 Custom Fields Management

To navigate to custom fields management, click the Custom Fields link on the home page or choose the corresponding item in the top menu.

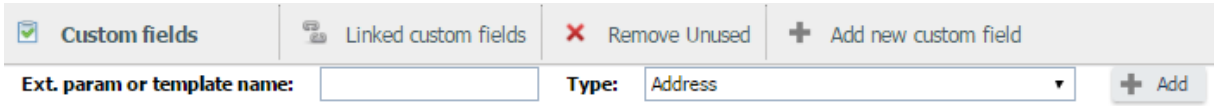


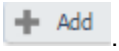

This opens the complete list of custom fields created in the system.




## 7.4 Creating a Custom Field

To create a custom field, click the Add Custom Field button. This opens the window for adding a custom field.




Enter field name, select data type and click 

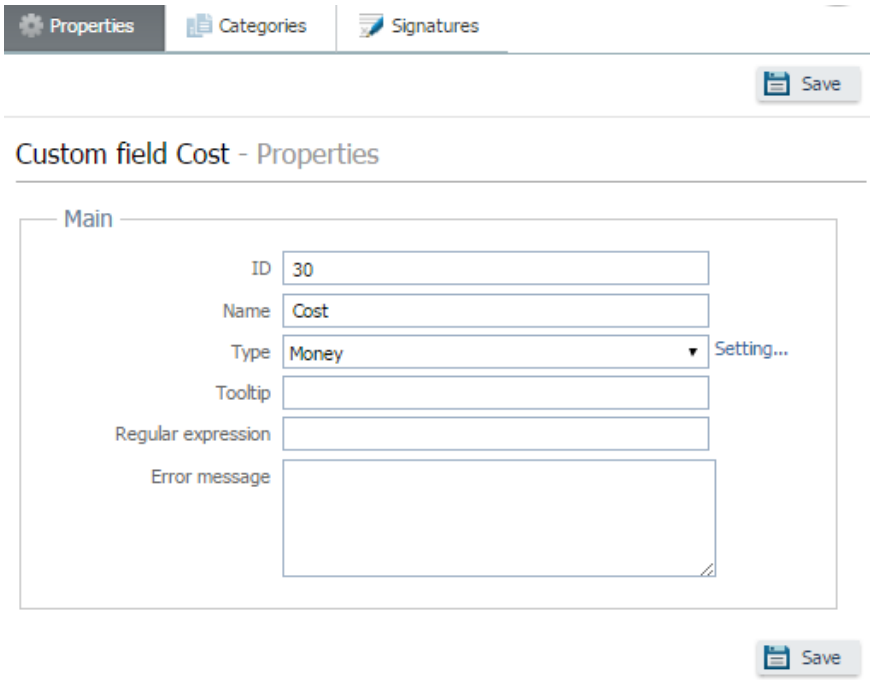
. The new custom field appears in the summary

table.

**IMPORTANT**: Custom fields cannot have names identical to system parameter names (such as End Date).

## 7.5 Editing a Custom Field: Properties Tab

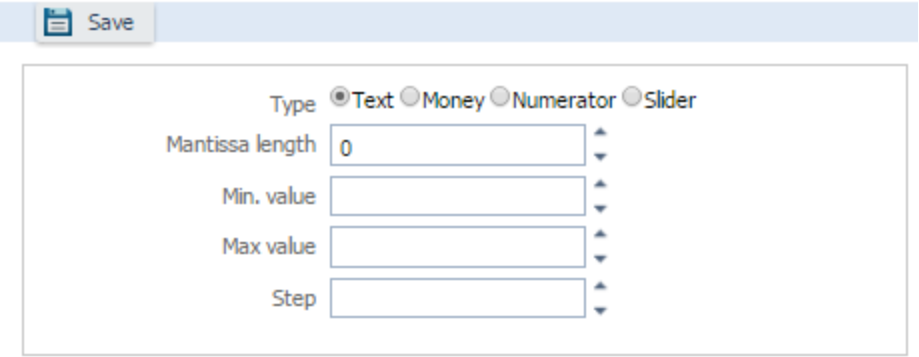
To edit a custom field, left-click the corresponding table row. The custom field edit form opens on the Properties tab.




| Name | Description |
|---|---|
| ID | Unique number of the parameter in the database |
| Name | Name of the parameter displayed in main category object forms |
| Type | Parameter type |
| Setting... | Click to open the page for maintaining advanced custom field properties. This menu is available only for editable custom fields. |
| Tooltip | Text of the tooltip that displays when a user hovers the mouse over the custom field |
| Regular Expression | Template for data entry. See public sources for the list of regular expressions. |
| Report on Discrepancy Between User Input and Regular Expression | Text of the warning issued to a user if input data does not match the regular expression. |

Some custom field types have specific advanced settings.

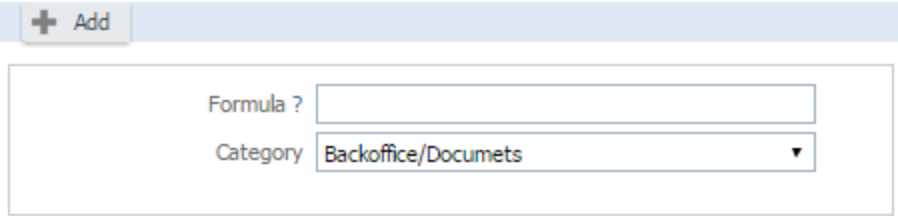
### 7.5.1 Advanced Settings for Numerical Custom Fields




Numerical custom fields can display as text or monetary values, as well as numerators or sliders.

| Type | Display mode |
|---|---|
| Text | 0 |
| Monetary value | 0,00 |
| Numerator | 1 000,00<br>The value range (minimum and maximum values) must be specified for this type. |
| Slider | 1 000,<br>1 101 201 301 401 501 601 701 801 901<br>Values of this type are displayed as a scale with the configured increment.<br>Sliders support three display modes:<br>No color<br>Color opacity<br>Temperature<br>• No Color — the scale is displayed in shades of gray<br>• Color Intensity — color intensity varies from light for values close to minimum to dark for values close to maximum<br>• Temperature (default) — scale color varies from green for values close to minimum to red for values close to maximum. |

### 7.5.2 Advanced Settings for Monetary Value Custom Fields

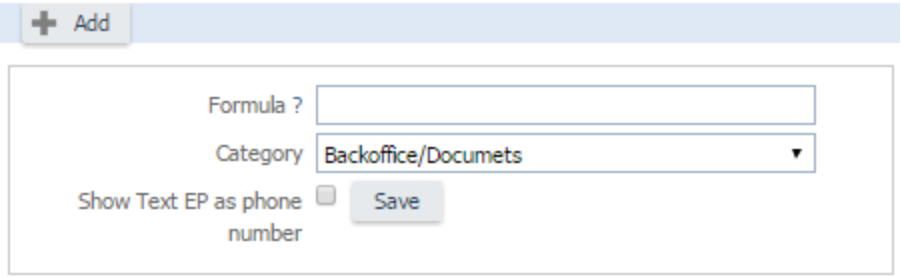



**An expression** can contain mathematical operators, numbers, and other category parameter values in the format Ext[parameter number]. *For example: Ext135+12/(Ext278-Ext18*Ext78)*.

Flag type parameters are used as Ext[parameter number]==1?[expression substituted if the flag is set]:[expression substituted if the flag is not set]. *For example: If parameter 13 flag is set, the custom field value must be 1000; otherwise, it must be 2000. Expression: Ext13==1?1000:2000.*

The entered expression will apply only to the category selected in the **Category** parameter.

### 7.5.3 Advanced Settings for Text Custom Fields



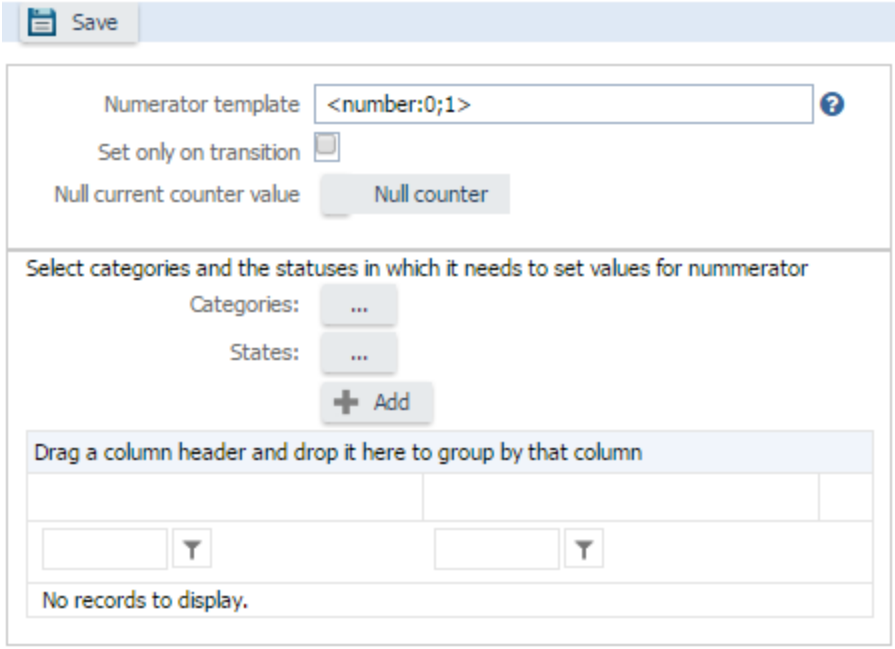

**An expression** can contain mathematical operators, numbers, and other category parameter values in the format: Ext[parameter number]. *For example: Ext135+12/(Ext278-Ext18*Ext78)*.

Flag type parameters are used as Ext[parameter number]==1?[expression substituted if the flag is set]:[expression substituted if the flag is not set]. *For example: If parameter 13 flag is set, the custom field value must be 1000, otherwise, it must be 2000. Expression: Ext13==1?1000:2000.*

The entered expression will apply only to the category selected in the **Category** parameter.

If **Display Text Custom Field as Phone Number** is set, the text is displayed in the task with an applied input mask in the format "+X (XXX) XXX-XXXX".

### 7.5.4 Advanced Settings for Numerator Custom Fields



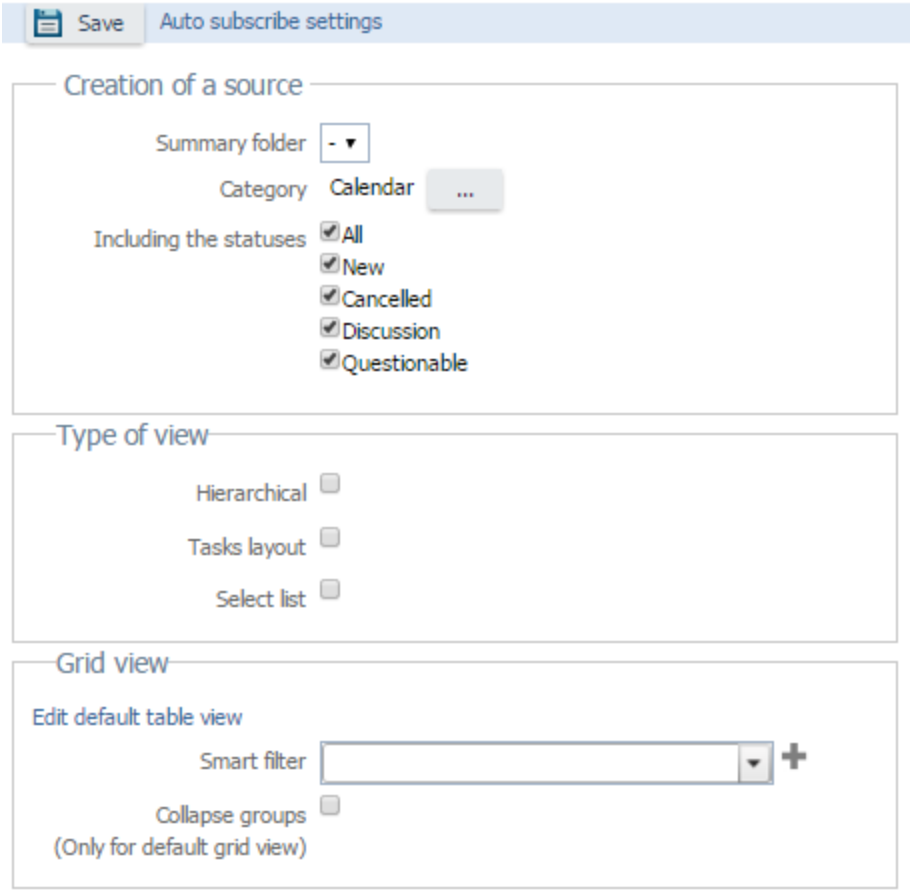

A numerator template can contain static text with inserts in the format <number:X;Y> where X is the initial counter value and Y is the increment and <datetime:dd.MM.yyyy> for date and time. *For example: COUNT<datetime:ddMMyy><number:1;1>.*

Click Null counter to reset the numerator to the initial value.

If the Set at Transition Only flag is set, a task is not assigned a unique number at creation, but at transition to the specified status only (see below).

A numerator can be category-specific or task status-specific. To define these parameters, open the "Select categories and statuses for setting numerator values" block, select required the category and click Add. New values are added to the value table.

### 7.5.5 Advanced Settings for Lookup and Category Task Selection List Custom Fields




**Create Source block**

Select a summary directory or a category for choosing the tasks and marking allowed status values.

**Displayed View block**

If the Hierarchical flag is set, the selected category is displayed as a hierarchical structure (tree). Display and selection parameters are configured in the Categories directory on theHierarchical Directory tab. An enabled Hierarchical flag also displays the Disable Folder Selection custom field. When it is enabled, only leaf elements can be selected.

If the Layout Plan flag is set, the category is displayed in Layout Plan view (for details click here).

**Table View block**

Select the Smart filter that will be used to select entries displayed in the table, or create a new Smart filter by clicking ✚. Define table columns, column width and display order by clicking the Edit Default Table View link:

Save Closed More Query Cancel Custom field value selection: Objects: 4

| Task | Originator | State | Creation date | Assigned to |
|---|---|---|---|---|
| Branch A | Johnson | In progress | 20.06.2016 12:54 | Johnson |
| Branch B | Johnson | In progress | 20.06.2016 12:54 | Johnson |
| Branch C | Johnson | In progress | 20.06.2016 12:54 | Johnson |
| Branch D | Johnson | In progress | 20.06.2016 12:55 | Johnson |

## 7.5.6 Advanced Settings for MultiLookup Custom Fields

Сохранить Настройки автоподписки

Создание источника

Сводный раздел -

Категория Анкеты кандидатов ...

Включая статусы
- Все
- Новая
- Выполняется
- Завершена
- Отклонена

Параметры в гриде

Добавить Обновить

| Имя параметра |
|---|
| Вакансия |

Вид отображения

Иерархический

План размещения

Выпадающий список

Табличный вид

Редактировать табличный вид по умолчанию

Смарт фильтр

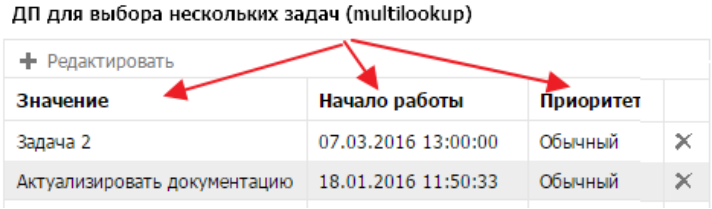
Сворачивать группы

**Create Source block**

Select a summary directory or a category for choosing the tasks and marking allowed status values.

**Custom Fields in Grid block**

Here you can configure custom field display in the main task form in user mode (fields that are displayed in table view of this custom field):




By default, the Value column with task text is always displayed in table view. This column cannot be deleted. You can also enhance table view with columns for key task parameters (Task Start Date, Due Date, Status, etc.) or with custom fields configured for the category.

To add a column with a parameter to the table view, click Add. Select a parameter to display in the table and click ✓ to save or ✕ to cancel. To delete a column from the table view, click ✕ .

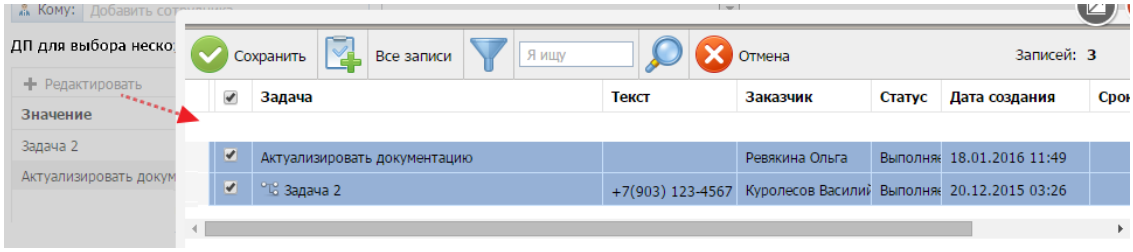
### Displayed View block

If the Hierarchical flag is set, the selected category is displayed as a hierarchical structure (tree). Display and selection parameters are configured in the Categories directory on theHierarchical Directory tab. An enabled Hierarchical flag also displays the Disable Folder Selection custom field. When it is enabled, only leaf elements can be selected.

If the Layout Plan flag is set, the category is displayed in a specific view which can be configured in the Categories directory on theLayout Plan tab.

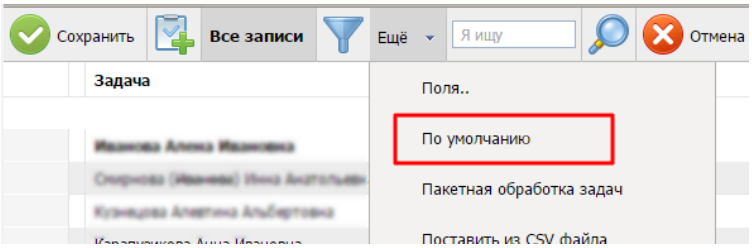
### Table View

Here you can configure custom field display in the value selection window that is opened by clicking the Edit button.



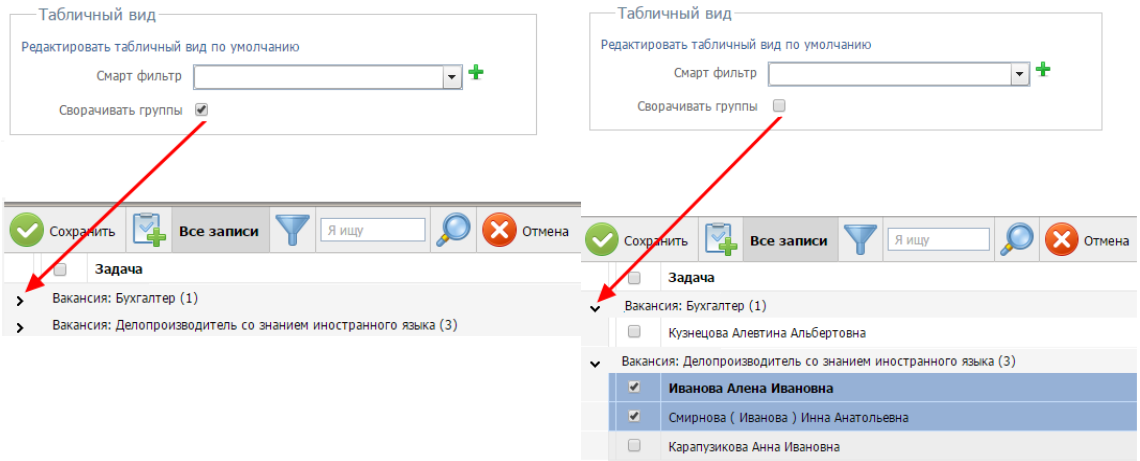

By default, tasks for selection are displayed in table view as configured for the category on the Edit Default Table View tab. To change this view, click the Edit Default Table View link in the custom field settings window.

If you have changed the table view and need to restore the default view, click the Edit Default Table View link and choose the Default in More submenu. All changes will be reset:



If not all category tasks are available for selection and specific conditions apply, define these conditions with a Smart filter. You can use one of the predefined filters or create a new one.

If the table view configured for the category as default enables grouping, you can maintain group display mode in an open window. Set the Collapse Groups flag to display all groups collapsed or clear it to display them expanded:




**IMPORTANT**: The Collapse Groups flag is applicable only for the table view configured for the category as default. If the view has been changed, the changes must be reset,

## 7.5.7 Advanced Settings for Drop-down List and Editable Drop-down List Custom Fields

A drop-down list can use a table or a data element set as a source.

**For a list generated from a table:**

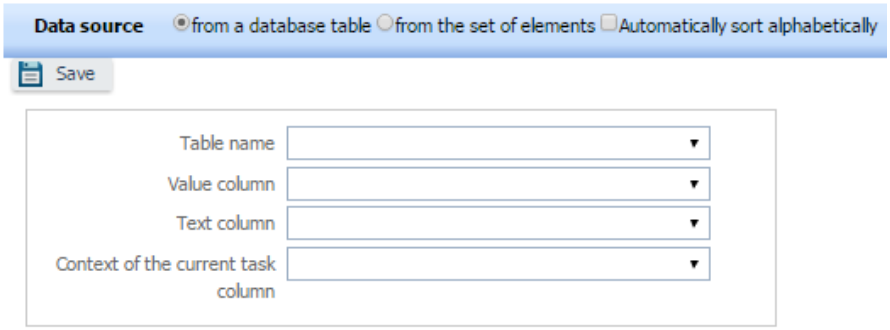
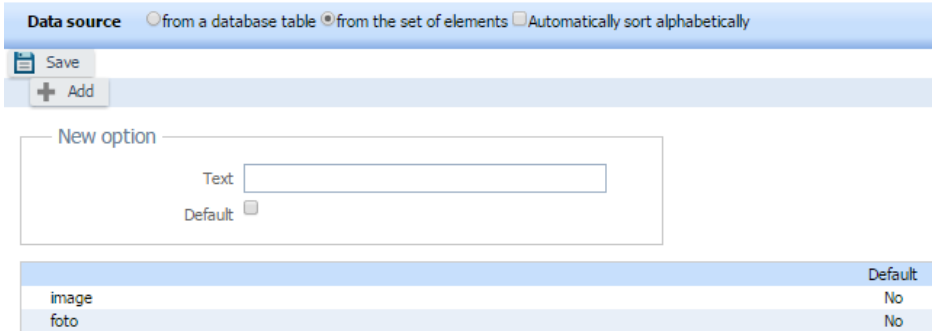



**Table Name** is the name of the source table.
**Value Column** is the name of the table column which contains table entry UIDs (these are written to the corresponding DB field).
**Text Column** is the name of the table column which contains data for list generation (these are displayed to users).
**The Current Task Context Column** field is ether empty or contains task ID. When opened, the

drop-down list is filtered by this column; i.e., it displays only rows that contain current task ID in this column.

*For example, when creating a user list, the Text Column parameter can contain the field with the full name, while Value Column can be the field with user ID.*

**For a list generated from a data element set:**

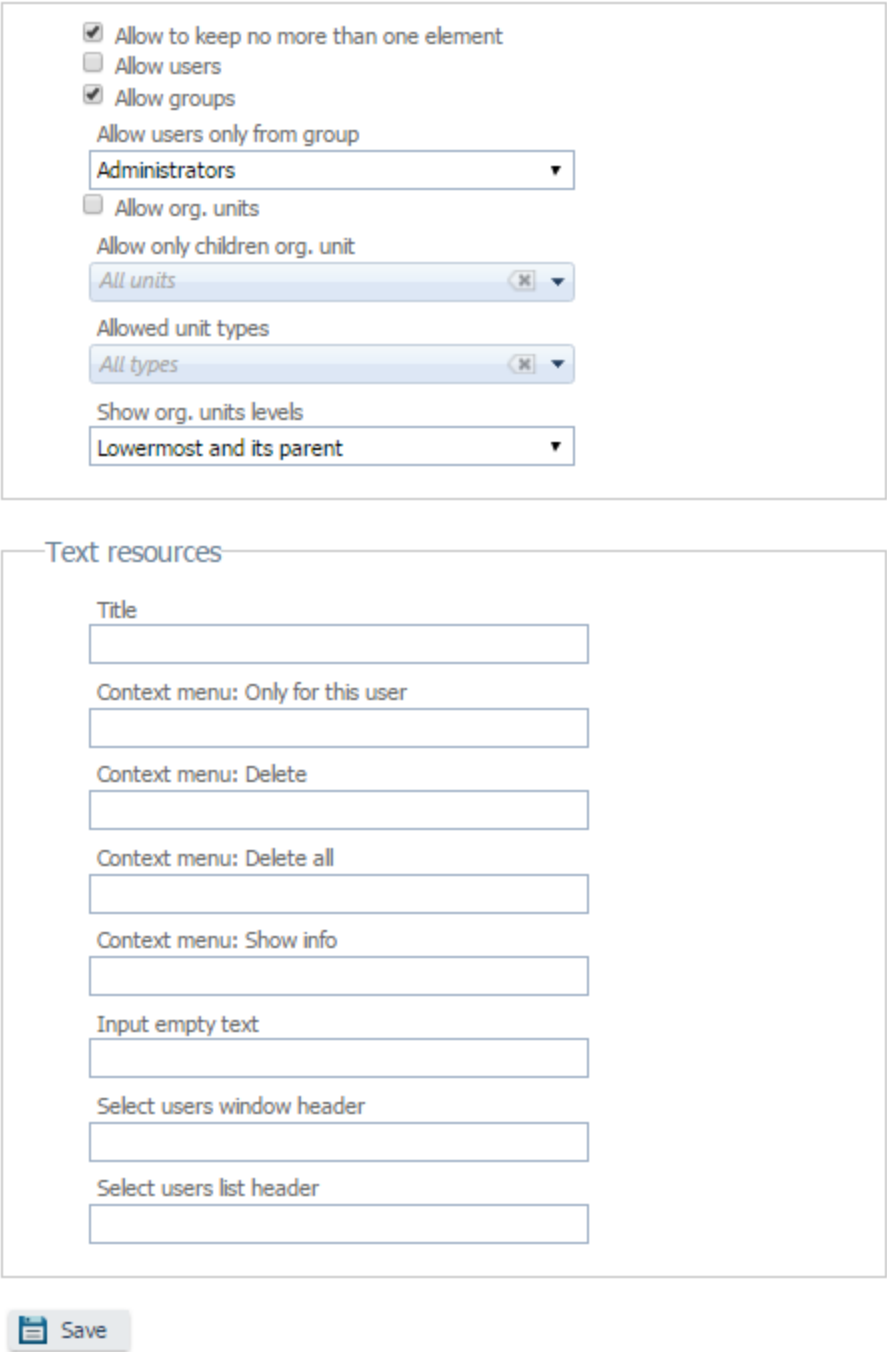



**Text** is a field with a new list element.

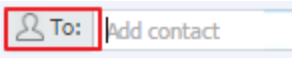
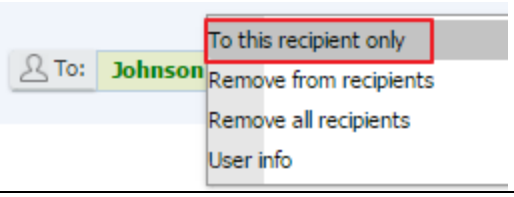
**The Selected by Default** flag can be used to mark list elements.

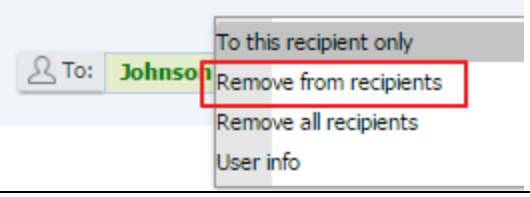
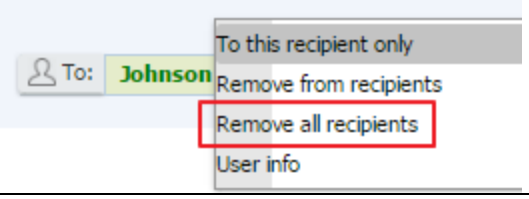
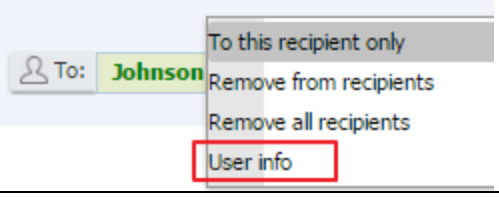
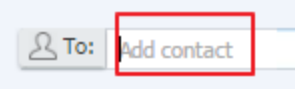
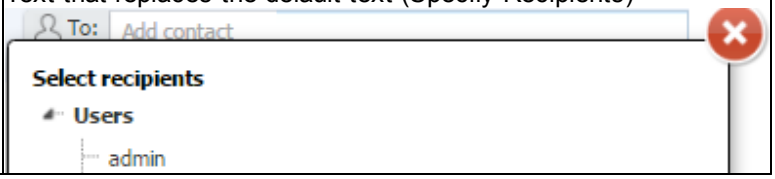
Click Create to add a new element to the list.

### 7.5.8 Advanced Settings for User Selection Custom Fields

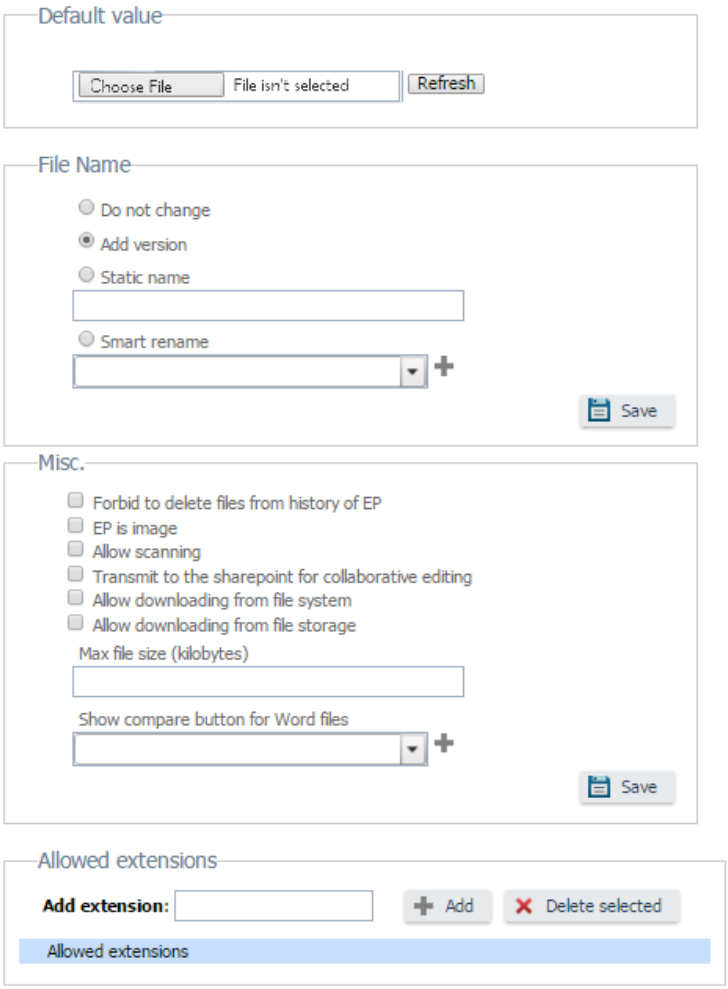



| Field | Description |
|---|---|
| Save Single User | If the flag is set, selection is restricted to a single user. |
| Enable User Selection | If the flag is set, users can be selected; otherwise, only user groups or org. structure units can be selected (depending on the other settings). |

| Field | Description |
|---|---|
| Enable Group Selection | If the flag is set, user groups can be selected. |
| Restrict List to Group Members | Selection is restricted to users who belong to the specified group. |
| Enable Org. Unit Selection | If the flag is set, org. structure units can be selected; i.e., divisions and positions (depending on the other settings). |
| Restrict List by Division | If Enable Org. Unit Selection flag is set, specify the level for starting selection here (users cannot select divisions superior to the specified division in the org. structure). |
| Restrict Selection by Types | If Enable Org. Unit Selection is set, specify the org. structure units (divisions or positions) available for selection here. |
| Show Org. Unit Levels | Specify the number of levels included in the element name for output to a printed docx document.<br><br>Possible values are:<br><br>• Lower and its parent<br>• Lower<br>• All<br>• Except the highest level<br>• Except the two highest levels.<br><br>**IMPORTANT**: Output value for printing is generated when the custom field is saved. Thus, to change output to the printed form for previously created tasks, save the custom field value again for these tasks. |
| **Texts** | |
| Button Title | Text that replaces the default text (To)<br>  |
| To This User Only | Text that replaces the default text (To This Recipient Only)<br>  |
| Delete User | Text that replaces the default text (Delete from Recipients) |

| Field | Description |
|---|---|
| |  |
| Delete All | Text that replaces the default text (Delete All Recipients)<br>  |
| Show User Info | Text that replaces the default text (User Info)<br>  |
| Blank Entry Field Prompt | Text that replaces the default text (Add Contact)<br>  |
| Selection Window Title | Text that replaces the default text (" ") |
| Selection List Title | Text that replaces the default text (Specify Recipients)<br>  |

## 7.5.9 Advanced Settings for File Custom Fields




**File Name block**

- Do Not Change — file name is retained when saving
- Add Version — file version is appended to file name
- Fixed Name — file name is entered into the field below
- Smart Expression — file name is generated depending on the conditions and values of other custom fields described in a Smart expression. You can either create a new Smart expression or use an existing one.

**Miscellaneous block**

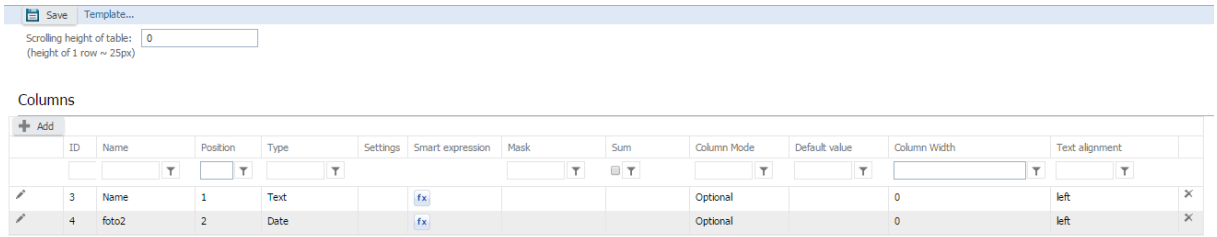
- If the Disable File Deletion from the Custom Fields flag is set, users cannot delete files uploaded to custom fields.
- If the Image flag is set, users can attach only image files.
- If the Enable Scanning flag is set, users can launch the scan utilityby 1Forma.
- If the Transfer to Sharepoint for Shared Editing flag is set, the file is available for Sharepoint integration.

- If the Enable Upload from File System flag is set, the custom field supports upload of external files.
- If the Enable Upload from File Storage flag is set, the custom field supports upload of files from file storage.
- Maximum File Size (KB) specifies the file size limit for attachment to this custom field.

**Supported Extensions List block**

To add a file extension that can be attached to this custom field, enter it into the Add Extension field and click Add. The value is added to the list of supported extensions.

## 7.5.10 Advanced Settings for Table Custom Fields




A table with a large number of rows supports scrolling. To enable scrolling, specify maximum table height (in px) in the main task form on the assumption that one row is approximately 25 px high.

| Name | Description |
|---|---|
| ID | Attribute ID |
| Name | Column header for display in the table |
| Order | Attribute (column) order in the table from left to right |
| Type | Attribute data type. Available data types are: text, drop-down list, masked text, date, telephone number, lookup field, flag, number, file |
| Smart | Available for columns of types String, Number, Date, DateTime.<br>Click fx to open the window for selecting or editing a Smart expression:<br>Columns which calculated with smart expression is possible to have "read-only" or "hidden" mode. This column will be changed to "read-only" mode.<br>Save<br>For columns with an already configured Smart expression, the button is displayed in green fx, otherwise, it is displayed in blue fx.<br>Smart columns can reference one another. The Smart column calculation order is identical to their |

| Name | Description |
|---|---|
| | display order in the Table custom field (Order property if configured, otherwise, order of column creation).<br>If a Smart expression is used, Mandatory mode is not available for the column.<br>Smart expressions are calculated when the user completes row editing in the Table custom field and saves the changes, but after all non-Smart columns are calculated and stored in the database for this table row. |
| Mask | Specify the mask for masked text data type.<br>Masks support the following special characters:<br># — digit or space<br>L — mandatory uppercase letter<br>l — mandatory lowercase letter<br>a — any character<br><n..m> — mandatory numerical value from n to m<br><Character1\|Character2\|Character3> — one of the specified characters<br>\x — insert any character into mask (e.g., "\a" inserts "a"). |
| Total | If the flag is set at least for one field, the total row is displayed below the table with total values for the selected columns. This flag is available for numerical and monetary values. The column is active if the table contains at least one field of these types. |
| Mode | • Optional — the field is active, but optional<br>• Mandatory — the field is mandatory<br>• Read Only — the field is read only<br>• Hidden — the column is not displayed in user mode |
| Default Value | Value proposed by default |
| Column Width | Column width in px. If not specified (equals 0), it is calculated by the system. |
| Text Alignment | Defines column text alignment. Possible values are:<br>• Default<br>• Left<br>• Center<br>• Right<br>• Justify.<br>The default is left-aligned for text fields and right-aligned for numbers. |

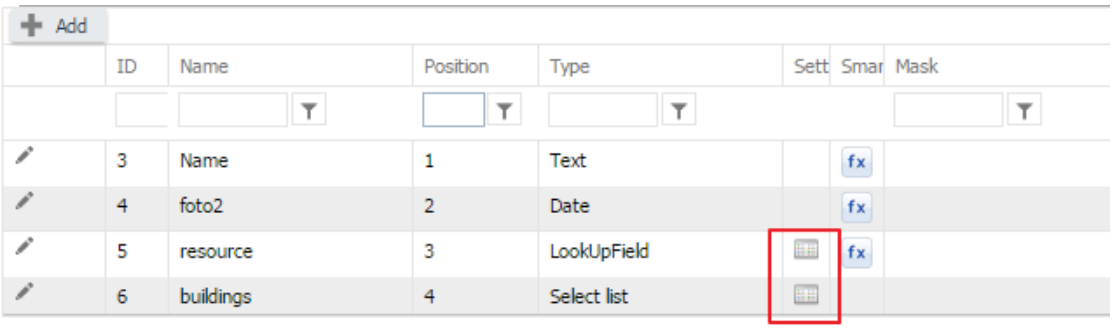
**The Cell Text Alignment** parameter defines alignment:

- NotSet — no alignment

- Left — left-aligned
- Center — centered
- Right — right-aligned
- Justify — both left- and right-aligned.

To add a new attribute (row) to the table, click Add.

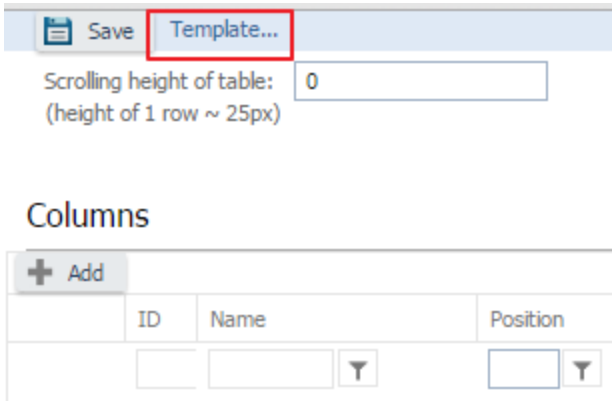
Drop-down and lookup type columns are configured by creating or selecting custom fields of the required types. To configure a column, click the icon in the corresponding row to the right of the Type column.



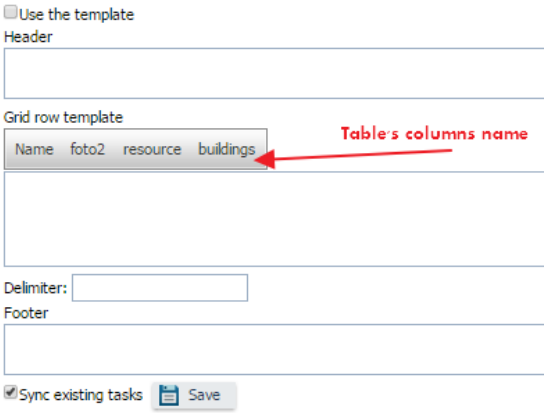

The custom field selection window opens.


### 7.5.10.1 Template for Table Custom Fields

You can use a template to display a table custom field in table view (click the link to open the edit template window):




If a template is used, the whole table is displayed as a single row view. This view starts with the value specified in the Header field and ends with the value from the Footer field. The view lists all table rows separated by the symbol specified in the Separator field. Each table row is displayed according to the template generated in the Table Row Template field by selecting the required column names (a template can contain part of the table columns):

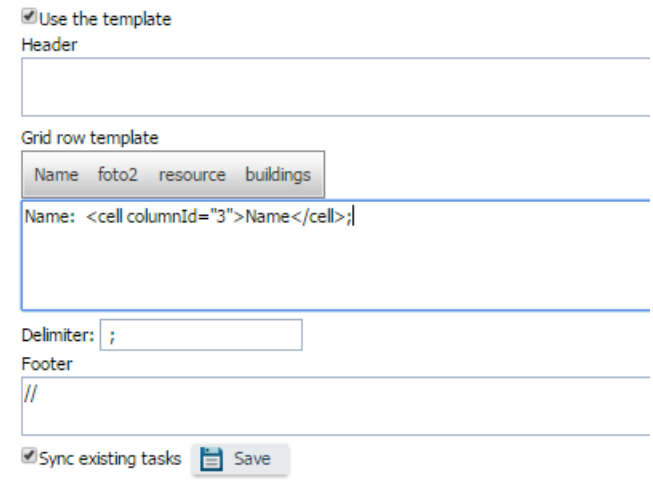



To activate (enable) a template, set the Use Template flag.

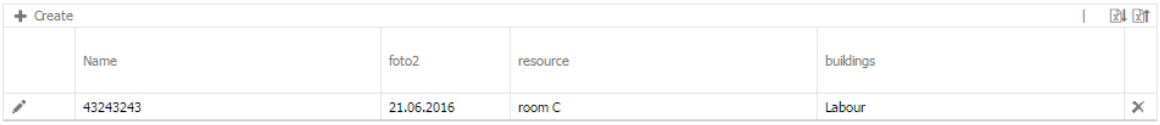
The view created for a table custom field is stored in the Value field of the corresponding database table. Thus, if the template changes, to update the values in the database, set the Synchronize Existing Tasks flag.

### Example of configured template and corresponding view

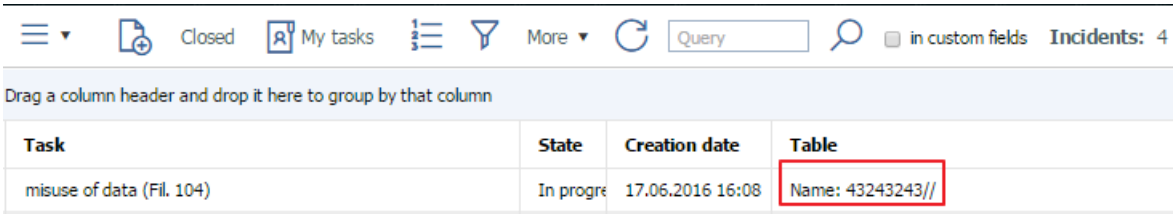
- Template settings:




- Table custom field in the main task form:

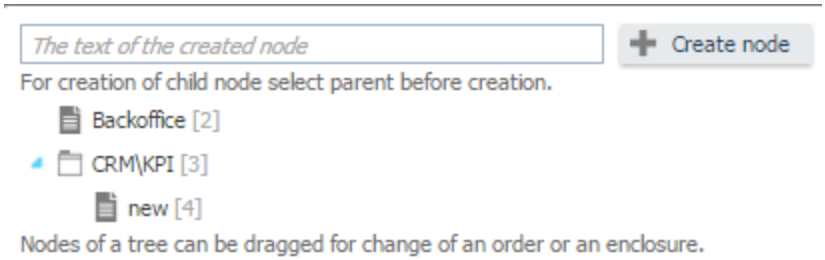



- Table custom field display in the category table view:




**IMPORTANT**: A template defines the row view of this table custom field; i.e., the database stores the value generated from the template by accessing the Value property. This is the value returned when accessing the Value property via stored procedures, views or SMARTs.
In addition, if the template is enabled for the table custom field, but is missing some of the table columns, changes to values in this column do not generate comments.

### 7.5.11 Advanced Settings for Tree Custom Fields




A custom field of type Tree displays a hierarchy of categories. To create a new node, enter its name (New Node Text) and click Create node. To create a child node, highlight the parent node before creation. Drag and drop to change the hierarchical structure.

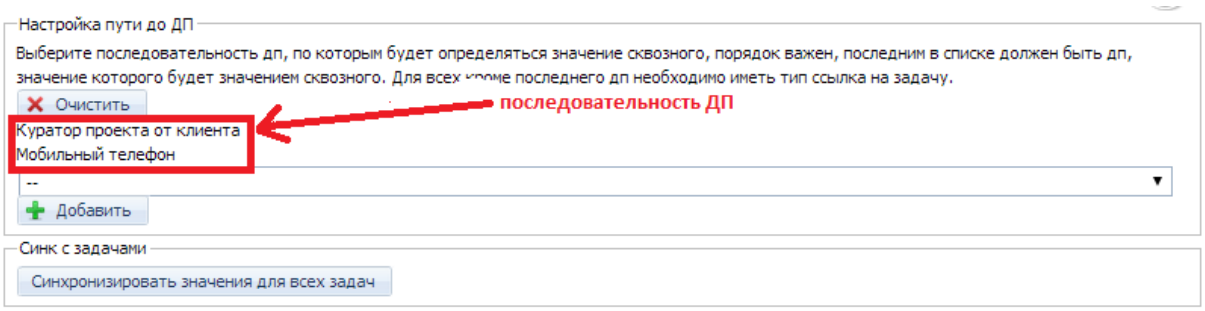
### 7.5.12 Advanced Settings for Intermediary Custom Fields

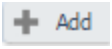
Intermediary custom fields are calculated automatically on the basis of configured dependencies between custom fields.

**Intermediary field calculation algorithm** (for a sequence of N custom fields):

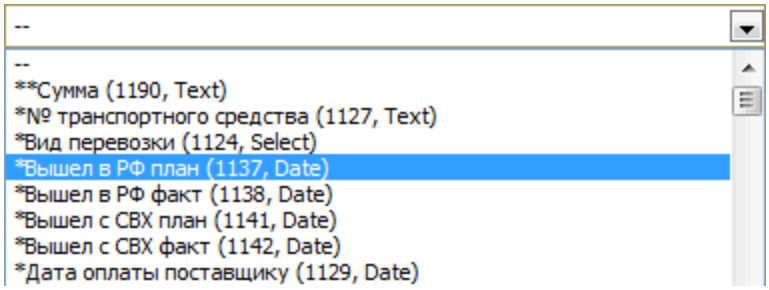
1. The current object is searched for the custom field that comes first in the sequence. The object referenced in this custom field is searched.
2. In the object that is found, the custom field that comes second in the sequence is searched. The object referenced in this custom field is searched.
3. This process continues until the object referenced in custom field (N-1) is found.
4. In the object that is found, the custom field that comes last in the sequence is searched.
5. The value of this field is copied to the intermediary custom field.

Dependencies between fields are configured in the **Path Setting with CF** block.

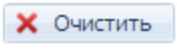



To add a new custom field to the sequence, select it in the drop-down list and click  . The new custom field appears in the list.

The drop-down list contains available custom fields as names followed by a unique number and custom field type in brackets.




> **IMPORTANT**: Custom fields must be added in the required order (see algorithm description below). All custom fields except the last one must belong to one of the following types: Tasks and Categories Selection List, Lookup Field.

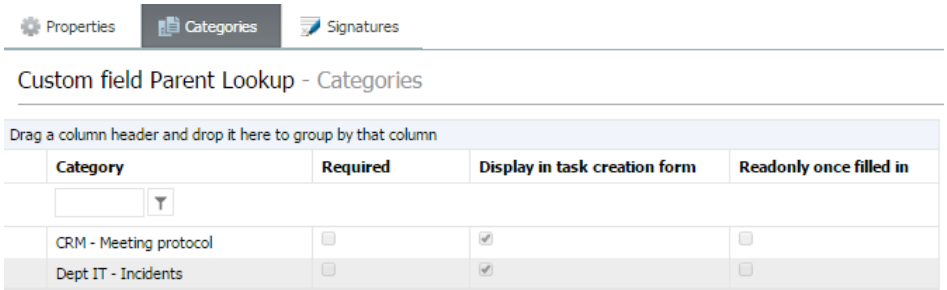
To delete all custom fields, click  .

### 7.5.13 Autosubscription Configuration

For lookup custom fields List of Category Tasks and Category Tasks Selection, autosubscription can be configured to automatically subscribe users to the task when a custom field value is changed. However, this functionality is not recommended (it is outdated). Use SMART features instead. For details on configuring autosubscription with SMARTs, click here.

## 7.6 Editing a Custom Field: Categories Tab

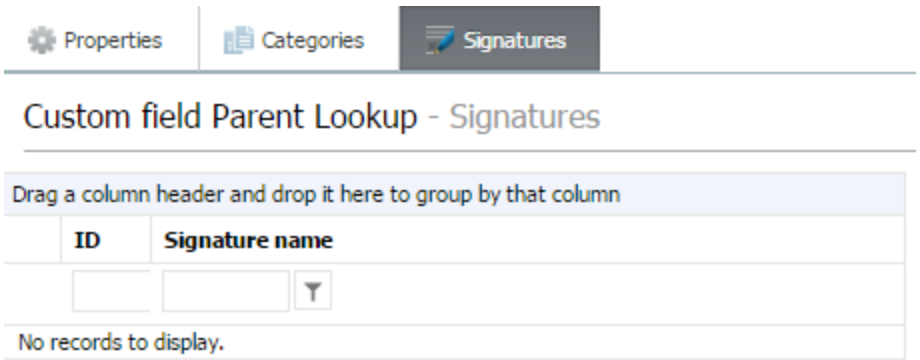
The Categories tab displays a summary table of custom field usage in categories. This table is read only.




| Name | Description |
|---|---|
| Category | Name of the category (with directory) in which the custom field is used |
| Mandatory | Specifies whether the custom field is mandatory for category tasks |
| Show at Creation | Specifies whether the custom field value is displayed after task creation |
| One-Time Entry | Specifies whether the entered custom field value can be changed later |

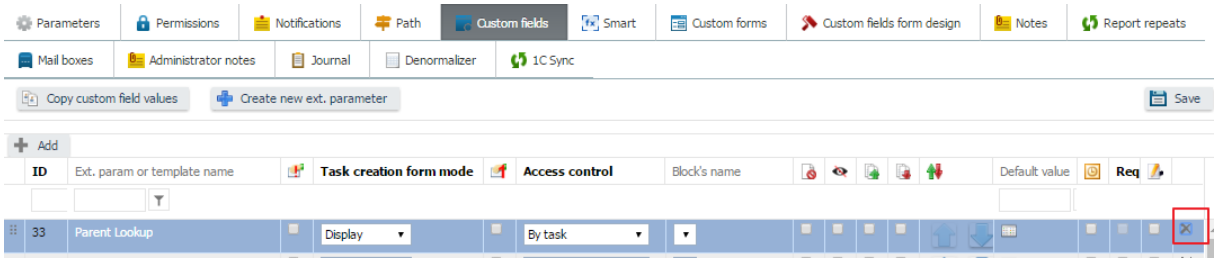
## 7.7 Editing a Custom Field: Signatures Tab

The Signatures tab displays a list of signatures that use this custom field. This table is read only.

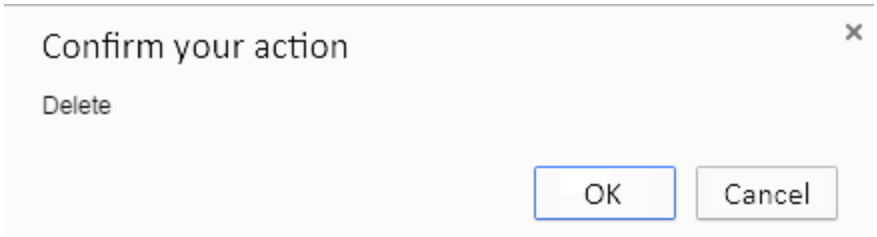



## 7.8 Deleting a Custom Field

To delete a custom field, click the delete icon ✕ in the corresponding table row.




A confirmation window opens.



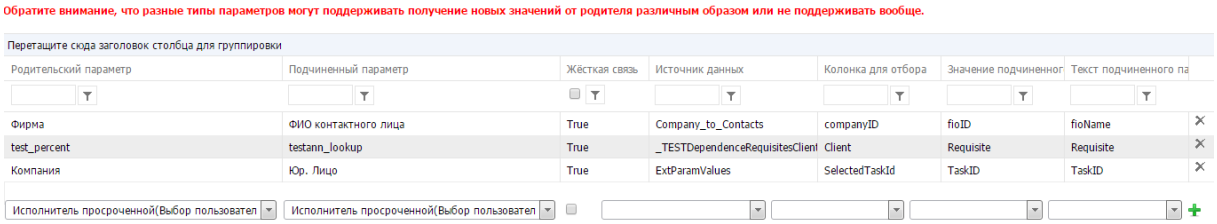

Click OK to confirm custom field deletion. If deletion has been chosen by mistake, click Cancel.

**IMPORTANT:** A custom field cannot be deleted if it is used at least in one category.

## 7.9 Related Parameters

Parameters can be linked (e.g., as parent and child). If the main task form contains the parent custom field, possible values of child fields are determined from this link.

To create and edit links between custom fields, click the Related Parameters button.




| Name | Description |
|---|---|
| Parent Parameter | Name of the parent custom field |
| Child Parameter | Name of the child custom field |
| Hard Link | This flag specifies whether a child custom field value can be selected without selecting a parent field value:<br>• If enabled and at least one of the parent custom fields has no value, a child custom field contains an empty set (i.e., all parent custom fields must be entered before selecting child custom fields)<br>• If disabled, a child custom field contains values filtered by the entered parent field values. |
| Data Source | Name of the resulting 1Forma database table |

| | |
|---|---|
| Selection Column | Column that stores values of the parent custom field |
| Child Parameter Value | Column that stores values of the child custom field |
| Child Parameter Text | Column that stores displayed values of the child custom field |

***Example:*** *There is a list of companies and a list of their addresses where each company can have several addresses. Three tables must be created* ***in the 1Forma*** *database:*

*Table1 contains company names. This table will be* ***the parent parameter for the custom field****.*

| ***FirmName*** |
|---|
| *Firm 1* |
| *Firm 2* |
| *Firm 3* |

*Table2 contains company addresses. This table will be* ***the child (subordinate) parameter for the custom field****.*

| ***FirmAddress*** |
|---|
| *Address 1* |
| *Address 2* |
| *Address 3* |
| *Address 4* |
| *Address 5* |
| *Address 6* |
| *Address 7* |

*Table3 is the resulting table for the first two tables and contains names and addresses. Table3 is the one used as* ***the data source for the custom field****.*

| ***FirmName*** | ***FirmAddress*** |
|---|---|
| *Firm 1* | *Address 1* |
| *Firm 1* | *Address 2* |
| *Firm 1* | *Address 3* |
| *Firm 2* | *Address 4* |
| *Firm 2* | *Address 5* |
| *Firm 2* | *Address 6* |
| *Firm 2* | *Address 7* |

*The following settings must be maintained in Related Parameters:*

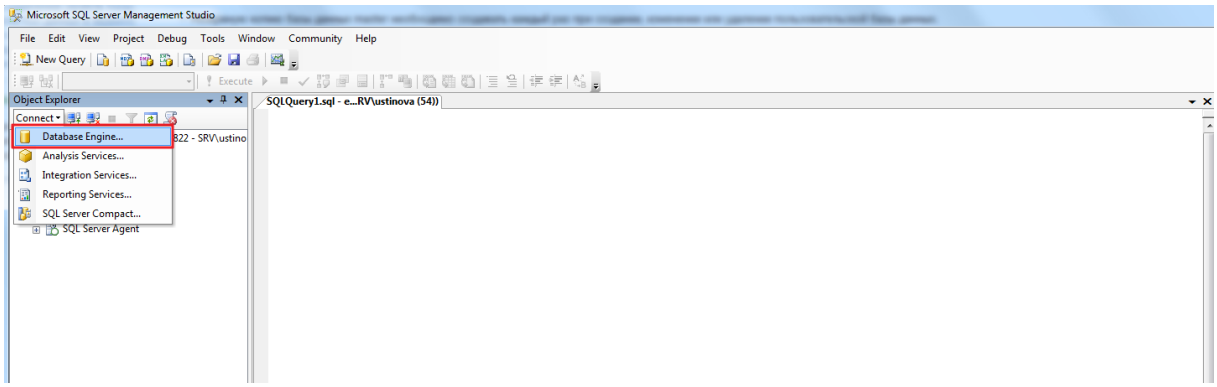
| *Name* | *Value for the example* |
|---|---|
| *Parent Parameter* | *Table1* |
| *Child Parameter* | *Table2* |
| *Hard Link* | *Enabled* |
| *Data Source* | *Table3* |
| *Selection Column* | *FirmName* |
| *Child Parameter Value* | *FirmAddress* |
| *Child Parameter Text* | *FirmAddress* |

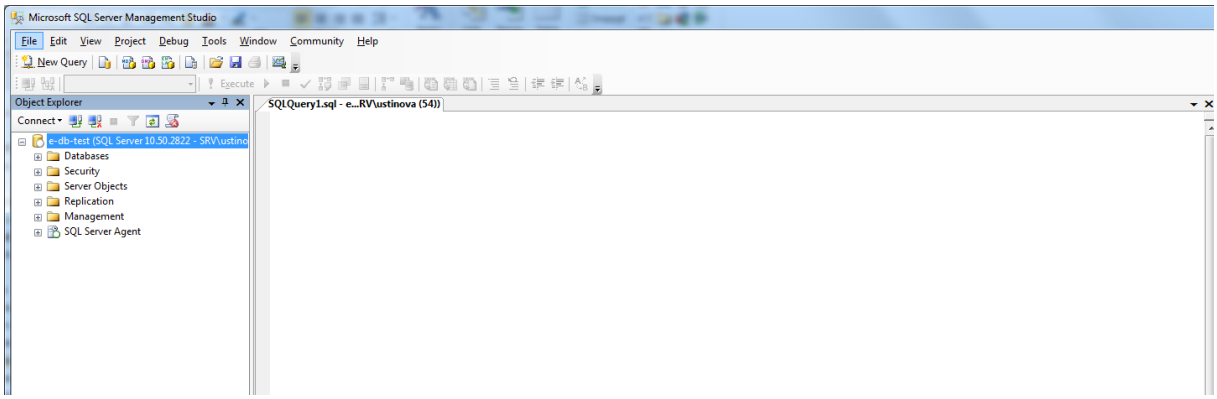
*After selection, the list of columns is automatically uploaded to the drop-down list.*

*Thus, if a task has both custom fields, after selecting a company, you can choose only from the addresses that are mapped to this company.*

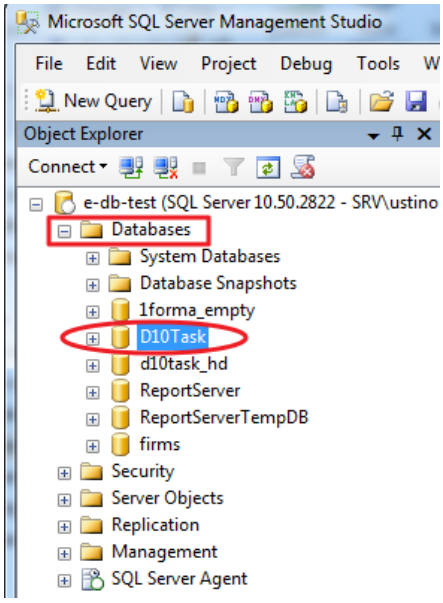
### 7.9.1 Creating a New Database Table in Microsoft SQL Server Management Studio

1. In the object browser establish a connection to an instance of **SQL Server Database Engine** component and expand it.

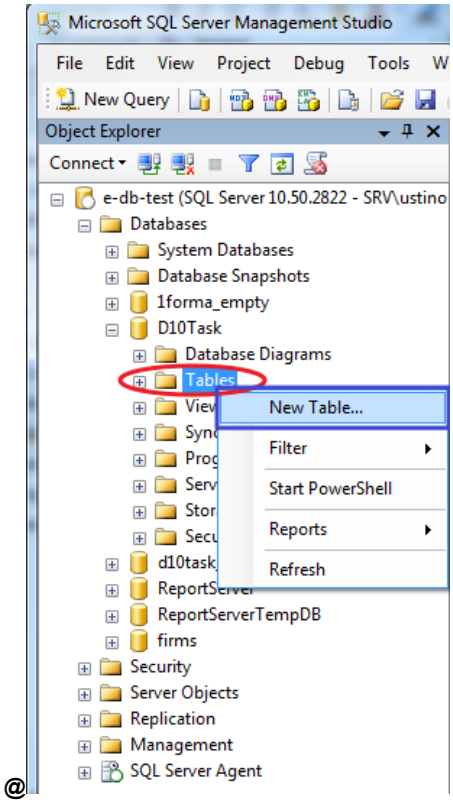



2. Expand folder **Databases**. A list of existing databases opens. Select the database for the 1Forma application. In a standard assembly this is the **D10task** database.




3. Expand **D10Task** database. Select the **Tables** folder in the drop-down list. Right-click the Tables folder to open the context menu and choose New Table... from the menu.



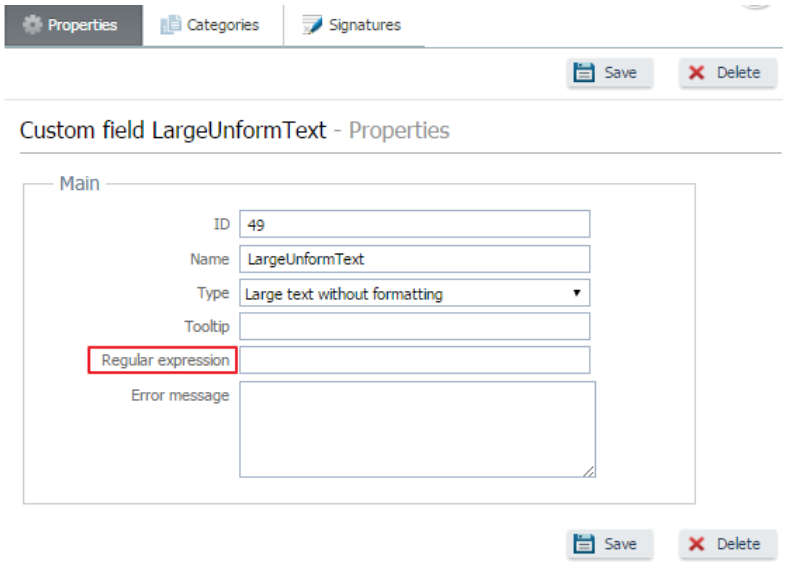

@

4. A new table is created in the database. To save the created table, right-click to open the context menu and choose saving (Save Table...). This displays all standard actions on database tables (population, column dependencies configuration, data retrieval, etc.).

## 7.10 Regular Expressions for Custom Fields

**Regular expressions** ( RegExp, RegEx) are a formal language based on metasymbols used for searching and processing substrings in a text. In effect, they are a pattern also called a template or mask that consists of characters and metasymbols and defines a search rule. Regular expressions streamline search and replace functions.

Custom field settings support regular expressions. To configure, open custom fields in edit mode.




The table below shows some of the most common regular expressions used in custom fields.

Please note that the same regular expression can have different presentations.

| Task | Regular expression | Comments |
|---|---|---|
| Full name | ^[^*-]*$ | |
| Passport number and series | ^[^*-]*$ | |
| Registration address | .*[^-*]+.* | |
| Issue date | ^[^*-]*$ | |
| Date of birth in format DD.MM.YYYY | ^\d\.\d\.\d$ or ^[^*-]*$ | |
| VAT registration number | ^\d+$ or ^[\d+]{10,12}$ | 10 or 12 digits (for legal entities or individuals, respectively) |
| Contract account in format AAA-BB-CCC-D-EEEE-FFFFFFF | ^\d{3}-\d{2}-\d{3}-\d{1}-\d{4}-\d{6}$ | |
| BIC | ^\d$ | |
| Mobile number in format "+7 (xxx) xxx-xx-xx" | \+7 \(\d\d\d\) \d\d\d-\d\d-\d\d | |
| Payment for reregistration step | Per tariff\|\d+/06 | |
| Payment for account closure step | Per tariff\|\d+/06 | |

| Task | Regular expression | Comments |
|---|---|---|
| OKPO | ^[\d ,]+$ | |
| New OKVED codes | ^(\d{1,2}(\.\d+)*\ *;\ *){1,21}$ | Codes are separated with a semicolon (for example, 65.2; 74.87.8), the last code is followed by a semicolon; up to 21 codes in the field. |
| Excluded OKVED codes | ^(\d{1,2}(\.\d+)*\ *;\ *){1,21}$\|(^none$)\|(^-*$)\|(^all$) | If no codes are excluded, use "none"; if all codes are excluded, use "all"; to exclude specific codes, enter them separated with a semicolon with the last code followed by a semicolon; up to 21 codes in the field. |
| Main OKVED code | ^(\d{1,2}(\.\d+)*\ *;\ *){1,21}$\|^same$\|^old$ | If no change is required, use "old"; to change the code, and enter the new value followed by a semicolon. |
| Phone number for bank | ^((8\|\+7)[\- ]?)?(\(?\d{3}\)?[\- ]?)?[\d\- ]{7,10}$ | |
| Key figure year | [1-9][0-9][0-9][0-9]$ | |
| Phone number | \d+ | |
| Full name for visa | ^[a-z, A-Z ]+$ | |
| Turnover from (million) | ^\d{0,1}\s{0,1}\d{0,1}\s{0,1}\d{0,1}\s{0,1}\d{0,1}\s{0,1}\d{0,1}\s{0,1}(,\d{0,2}){0,1}$ | |
| Turnover to (million) | ^\d{0,1}\s{0,1}\d{0,1}\s{0,1}\d{0,1}\s{0,1}\d{0,1}\s{0,1}\d{0,1}\s{0,1}(,\d{0,2}){0,1}$ | |
| Add companies | ^\d*$ | |
| Execution order | ^\d{1,10}$ | |
| Due date (in days) | ^\d{0,3}$ | |
| Start of next project (in days) | ^\d{0,3}$ | |
| Employees from | ^\d*$ | |
| Employees to | ^\d*$ | |
| Annual turnover (million) | ^\d{0,1}\s{0,1}\d{0,1}\s{0,1}\d{0,1}\s{0,1}\d{0,1}\s{0,1}\d{0,1}\s{0,1}\d{0,1}\s{0,1}(,\d{0,2}){0,1}$ | Enter in millions |
| Travel time (in hours) | ^\d*$ | One way travel time. The meeting start time in the calendar will |

| Task | Regular expression | Comments |
|---|---|---|
| | | shifted by travel time specified before the meeting, and the end time is shifted by travel time specified after the meeting. |
| Completed task number | ^\d{1,10}$ | |
| Start time | ^([0-1][0-9]\|[2][0-3]):([0-5][0-9])$ | |
| Phone number for SMS | ^((8\|\+7)[\- ]?)?(\(?\d{3}\)?[\- ]?)?[\d\- ]{7,10}$ | |
| Travel time (in minutes) | ^\d*$ | |
| Maximum number of members | [0-9] | |
| Additional customer no. | \d* | Enter only numbers. |
| Text | ( [^0-9] ) | Enter only letters. |

### 7.10.1 Regular Expression Syntax

Regular expression syntax is complex and varied. This section provides the most common regular expression metasymbols with examples.

Most of the regular expression symbols are used for self representation except special characters [ ] \ / ^ $ . | ? * + ( ) { } that can be preceded by \ (backslash) (escaped, protected) to enable self presentation as text symbols. To escape a character string, enclose it between \Q and \E.

Syntax:

| Presentation | Alternative | Meaning |
|---|---|---|
| \d | [0-9] | Digit |
| \D | [^\d] | Any character except digits |
| \w | [a-zA-Z0-9_] | Characters that form a word (letters, digits and underscore) |
| \W | [^\w] | Characters that do not form a word |
| \s | [ \t\v\r\n\f] | Whitespace character |
| \S | [^\s] | Non-whitespace character |

| Symbol | Description | Examples |
|---|---|---|
| **.** | Any character | **".+"** — any non-zero string in quotes |
| **^** | Line start | **^[a-z]** — paragraph starting with lowercase letter |

| Symbol | Description | Examples |
|---|---|---|
| **$** | Line end | **^$** — empty row |
| **[ ]** | Character set | **0x[0a-c]** — numbers starting with 0×0, 0xa, 0xb, or 0xc |
| **\|** | Alternative (OR) | **employe(e\|es)** — returns "employee" and "employees" |
| **( )** | Highlight substring | **(employe)(e\|es)** — two substrings |
| **n** | Substring | **(0x.., *)1** — two identical adjacent bytes in an array |
| ***** | 0 and more times | **^.*** — highlight rows (empty and non-empty) |
| **+ or** | 1 and more times | **^.+** — highlight non-empty rows (paragraphs) |
| **?** or **{0,1}** | 0 or 1 | **places[^ ]?** — returns "places","place", etc. |
| | Non-greedy mode | **0{2,4}** in a string of zeros returns "0000" while 0{2.4}? returns "00" |
| **{n}** | n times iterator | **0x[0-9a-f]{2}[^0-9a-f]** returns only byte numbers |
| **{n,}** | At least n times iterator | **^.{40,}** — paragraphs with at least 40 characters |
| **{n,m}** | From n to m times iterator | **<[:alpha:]{2,4}>** returns words with 2 to 4 characters |
| **xnn** | Hexadecimal value | **x20** — space |
| **xnnnn** | Hexadecimal (Unicode) | **x0410** — Cyrillic letter "A" |
| **t** | TAB | **^t** — returns rows that start with TAB |
| **n** | NL | |
| **s** or **[ tnrf]** | Separator | **\s** |
| **S** or **[^ tnrf]** | NOT separator | **\S** |
| **d** or **[0-9]** | Digit | **\d** — returns only digits |
| **D** or **[^0-9]** | NOT digit | **\D** — returns NOT digits |
| **w** or **[a-zA-Z0-9_]** | Word character | **\w** |
| **W** or **[^w]** | NOT word character | **\W** |
| **b** | Word break | **\b** |
| **B** | NOT word break | **\B** |
| **<** | Word start | **(<** returns opening round bracket at word start) |

| Symbol | Description | Examples |
|---|---|---|
| **>** | Word end | **[a-z_]+>[]** returns array declaration |
| **A** | Text start | **\A** |
| **Z** | Text end | **\Z** |
| **[:digit:]?** or **d** | Digit | |
| **[:space:]?** or **[ ]** | Space | |
| **[:print:]?** | All printed and spaces | |
| **[:cntrl:]?** or **t** | Not printed (without spaces) | |
| **[:alnum:]?** or **[a-zA-Z0-9]** | Digit or letter | |
| **[:alpha:]?** or **[a-zA-Z]** | Letter | |
| **[:lower:]?** | Lowercase letter | |
| **[:upper:]?** | Uppercase letter | |
| To search for a character identical to a metasymbol, precede it with a backslash — **\ ^ +** … | | |
| To search the list for the symbol **[** or **]** , place it at the start of the list or (preferably) precede it with a slash — **[]a-z] [a-z]]** | | |
| To search the list for a symbol **-**, place it at the start or end of the list or (preferably) precede it with a slash. | | |
| The character **\|** is not supported in the list, e.g., **d[o\|i]g** returns "dog", "dig" and "d\|g". | | |
| **Substitution characters** | | |
| **n** | Found expression | Replace: **/*2*/** — replace strings with blocks |
| **$n** | Found expression | Another syntax for substring substitution |

# Chapter 8 Signatures



## 8.1 General

**A signature** is used to register user acceptance of a specific decision. For example, a signature can confirm that a document has been approved by the manager, or the request has been accepted for execution. The user who signs is called an **acceptor**. An acceptor can be a specific user or a user group (in this case, any group member can sign on behalf of the group).

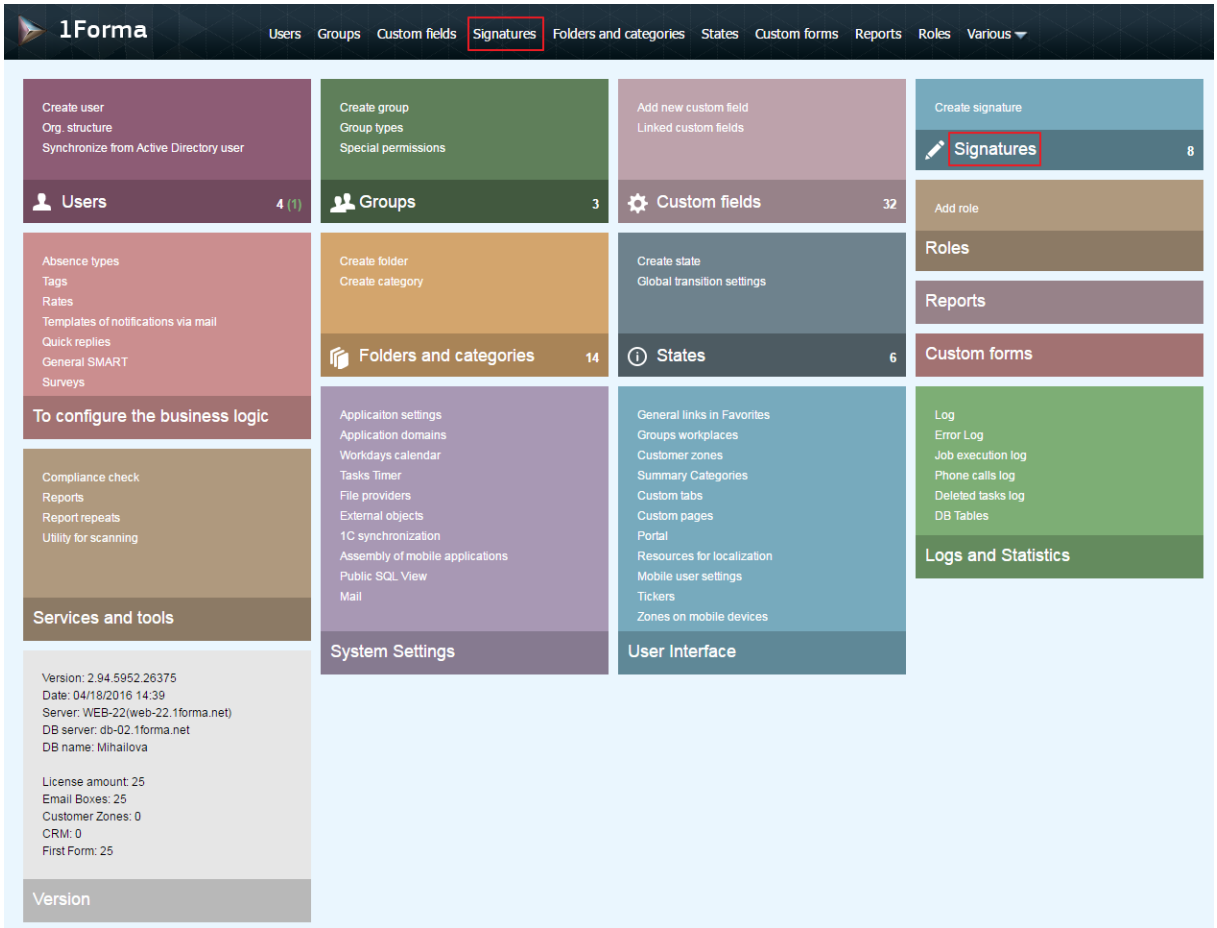
In the 1Forma system, signatures are requested for object status transitions. Each transition is assigned a separate fixed signature list with one or more acceptors for each signature. An object is assigned a new status if all signatures are received. Any of the appointed acceptors can sign.

If employee approval is required during object processing, a one-time **dynamic signature is requested**. A dynamic signature can be requested at any route step. A dynamic signature request suspends further task execution, but does not change its status.

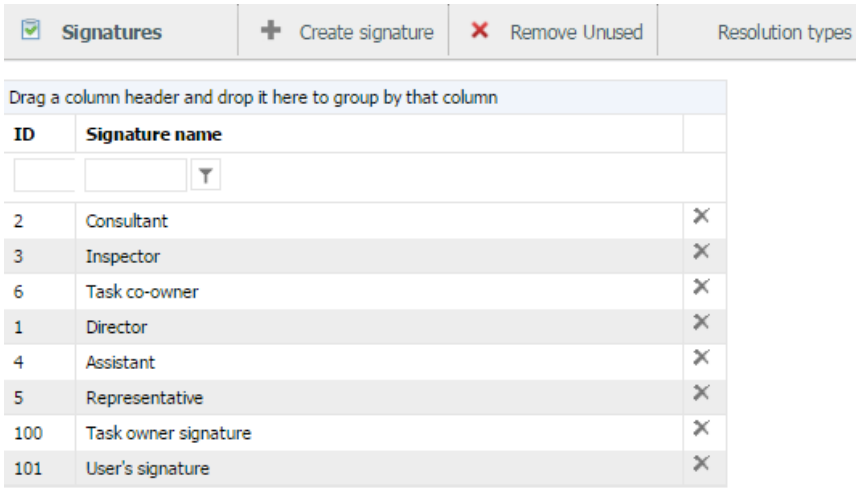
The standard 1Forma delivery provides an uncertified digital signature. Upon signing, the system automatically saves a snapshot of the object with all its data (custom field values, attached files, etc.). This ensures that the object is not changed after signing (including unauthorized database access).

## 8.2 Signature Management

To navigate to signature management, click the Signatures link on the home page or choose the corresponding item in the top menu.

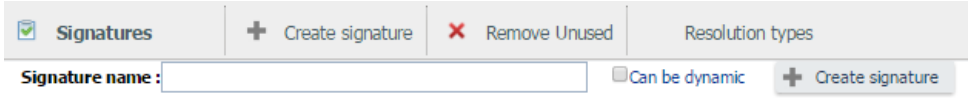



The Signature management page displays a table with the complete list of signatures configured in the system.



## 8.3 Creating a Signature

To create a new signature in the system, click "+ New Signature". This opens the window for creating a new signature.




Enter the signature name and if required set the Can Be Dynamic flag (this flag can be cleared by editing). Then click Create Signature. The new signature appears in the table below.

## 8.4 Editing a Signature: Parameters Tab

To edit a signature, left-click the corresponding summary signature table row. The edit signature form opens on the Parameters tab.

Parameters | Categories

Save

Editing signature <%&signatureConsult%> - Parameters

Main

ID
2

Signature name
<%&signatureConsult%>

- [ ] Request once
- [x] Add acceptor to the subscribers list
- [ ] Request reason on accept
- [ ] Can be escalated
- [ ] Do not send error if acceptor have not been choosen
- [ ] Forbid to accept if documents have tracked changes from current user

Director signature

-

- [x] Add director to acceptants

Due date

Min time for signature
min

Time for signing by default
min

- [ ] Deadline must-have
- [ ] Deadline can be changed

Dynamic signature

- [ ] Can be dynamic

Resolutions

Add

| | Name | Description | Action | |
|---|---|---|---|---|
| | Sign | | Sign | |
| | Reject | | Reject | |
| | Delete | | Delete | |
| | Delegate | | Delegate | |

Acceptors

(•) by groups ( ) By extparamenter ( ) By leader ( ) By Smart-expression

Drag a column header and drop it here to group by that column

No records to display.

Group Add contact

Acceptor Add contact

Add

| Name | Description |
|---|---|
| **General** | |
| ID | Unique number automatically assigned to a new signature by the system |
| Signature Name | Name displayed in main category object forms |
| Do Not Resubmit Request | If the flag is set, the signature is requested only once; after it is received, a signature request is not resubmitted even if the approval procedure is restarted. |
| Add Acceptor to Subscribers | If the flag is set, a signature request automatically adds the acceptor and all stand-ins to task subscribers. |
| Require Comment for Signing | If the flag is set, the acceptor must add a comment (explanation) to a signature request. |
| Can Escalate | If the flag is set, the Escalate button is displayed on UI for acceptors. Click this button to delete an old signature and request a new signature from the manager with the specified acceptors list. |
| No Error If Acceptors Missing | If the flag is not set, signature requests without a determined acceptors list (empty list) generate an email to a dedicated email address (this address is configured in application settings as a system email). If the flag is set, no email is sent. |
| **Manager's signature** | |
| Manager's Signature | Select the signature that will be requested as the manager's signature (e.g., for signature escalation). |
| Add Manager's Signature Acceptors | If the flag is set, the acceptors specified in the selected Manager's Signature settings are added to object acceptors when a signature is requested. |
| **Due date** | |
| Minimum Signature Due Date | This is the minimum time provided for making a decision. *For example, if 2 hours is specified, you cannot request acceptance within an hour.* |
| Default Signature Due Date | Default time provided for making a decision (signing or rejecting) |
| Due Date Required | If the flag is set, a due date is mandatory for a signature request. |
| Due Date Editable | If the flag is set, you can change the due date for an already requested acceptance. |
| **Dynamic signature** | |
| Can Be Dynamic | If the flag is set, the signature can be requested dynamically. |
| Determine Acceptor By | Select acceptor determination algorithm: by requestor, by assignee, by responsible assignee |
| Abort Transition Approval if Signature | If the flag is set, approval is terminated when the signature is |

| Name | Description |
|---|---|
| Rejected | rejected. If the flag is not set, the approval procedure continues even after the signature is rejected. |
| Dynamic Signature Request Reason Required | If the flag is set, users must add an explanation to dynamic signature requests. |

In the **Resolutions** block specify all resolution typessupported for this signature (by default, Sign, Reject, Delete, and Delegate resolution types are supported for a signature). Resolution buttons are displayed in a signature request in the same order as in the Resolutions block. To change the order of resolutions, drag and drop table rows (by dragging the icon at the beginning of the row).

**IMPORTANT**: The Escalate resolution type is available for signature requests only if the Can Escalate flag is enabled in the settings of this signature.

**Acceptors** block appearance depends on the selected acceptor determination algorithm:

- By Group
- By Parameter
- By Manager
- By Smart Expression.

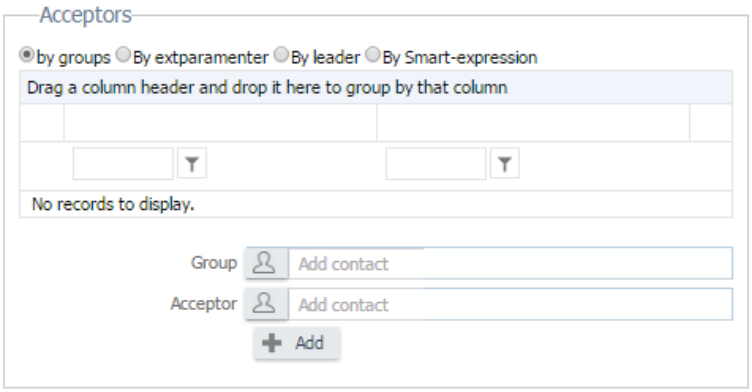
### 8.4.1 Requesting a Signature by Group

If the acceptor determination algorithm **By Group** is selected, a list is generated for mappings between groups and acceptors whose signatures are requested if the requestor belongs to this group.

The acceptor is determined as follows:

1. The system checks category settings and determines whether the acceptor is defined by the requestor or by the assignee. By default, the acceptor is defined by the requestor.
2. The system checks the groups specified in the group settings and determines the ones that this user belongs to.
3. If these groups are found, signatures from the corresponding acceptors are requested. If a group is assigned several acceptors, at least one of them must accept for signing. If a user does not belong to any of the groups specified in the settings, a signature is not requested.

Mapping rules are displayed in a table where the first column contains groups and the second column contains acceptors. To add a new rule, select a group from the drop-down list and in the To field enter one or more users who will be acceptors for this group. Then click Add.




## 8.4.2 Requesting a Signature by Parameter

If the acceptor determination algorithm **By Parameter** is selected, a custom field for determining the acceptor is defined.

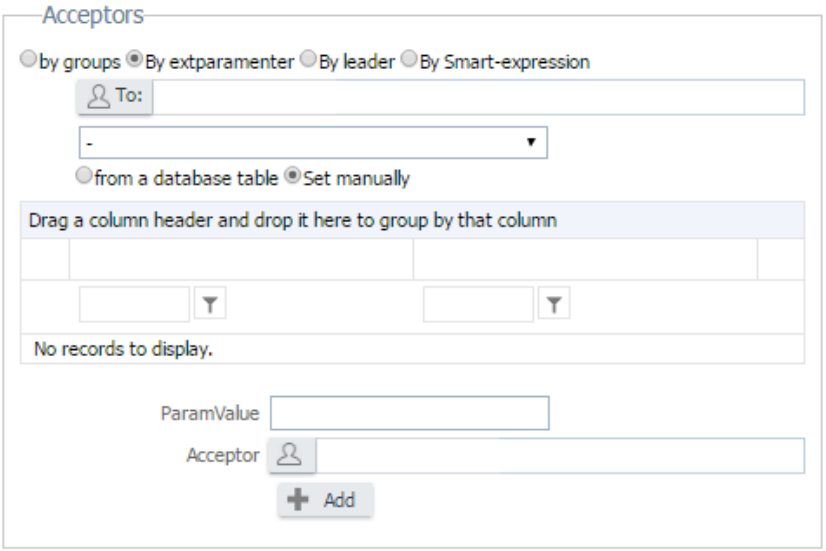
The acceptor is determined as follows:

1. The system determines the custom field value in the main object form and compares it to the intervals or constants specified in the signature settings.
2. If a matching value is found, a signature is requested from the corresponding acceptor. If no matching value is found, a signature is requested from the default acceptor (To field).
3. If no default acceptor is specified, a signature with an empty acceptor list is requested.

Mapping rules can be selected from a pre-configured table or entered manually. The parameter type must be selected in both cases (from the drop-down list below the To field).

If rules are selected **from the table**, then:

- Specify a parameter for value comparison
- Select a pre-configured table with mappings between the values of the compared parameter and users appointed as acceptors for this custom field value
- Specify thetable column with user (acceptor) IDs.



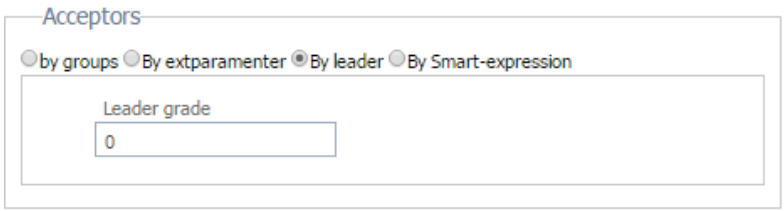

If the rules **are entered manually**, populate the table with mappings between parameter values (first column) and acceptors (second column). To add a new rule, enter the custom field value and in the Acceptor field specify one or more users who will be acceptors for this custom field value. Then click Add.

At least one of the specified users must accept for signing.

### 8.4.3 Requesting a Signature by Manager

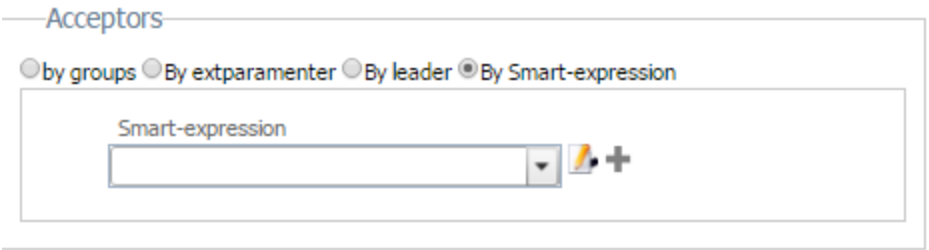
If the acceptor determination algorithm **By Managers** is selected, the manager of the user who determines the acceptor in signature settings (signature requestor, task requestor, assignee, or responsible assignee) is appointed acceptor.

Manager Level determines the level of the manager: if 0 is set (by default), a signature is requested from a line manager; if 1 is set, the signature is escalated to the manager of the next highest organization unit, etc.

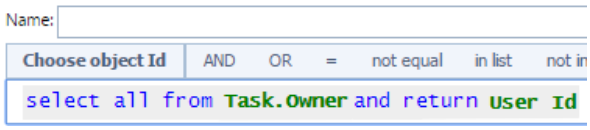
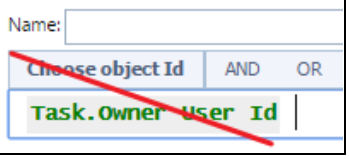



### 8.4.4 Requesting a Signature by Smart Expression

If the acceptor determination algorithm **By Smart Expression** is selected, acceptors are defined by calculating the selected or created Smart expression.



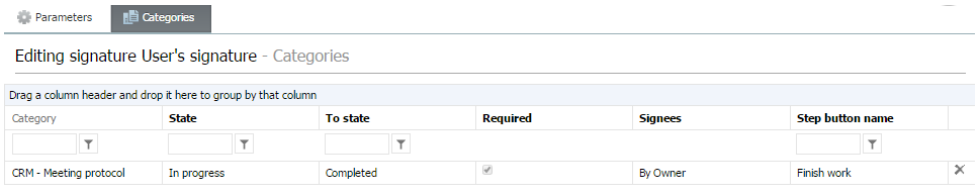

**IMPORTANT**: The Smart expression must return a list instead of a number (such as user ID):

| Right | Wrong |
|---|---|
|   |   |

## 8.5 Editing a Signature: Categories Tab

Signatures can be configured for each category for which they are requested.

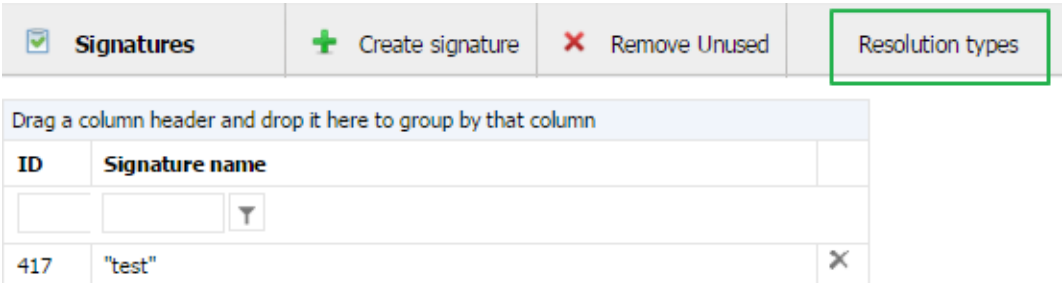
The table displays all categories that use this signature. To edit signature settings for a specific category, click in the Category column below the required table row. To delete a category from the list, click the ✕ button at the end of the row.



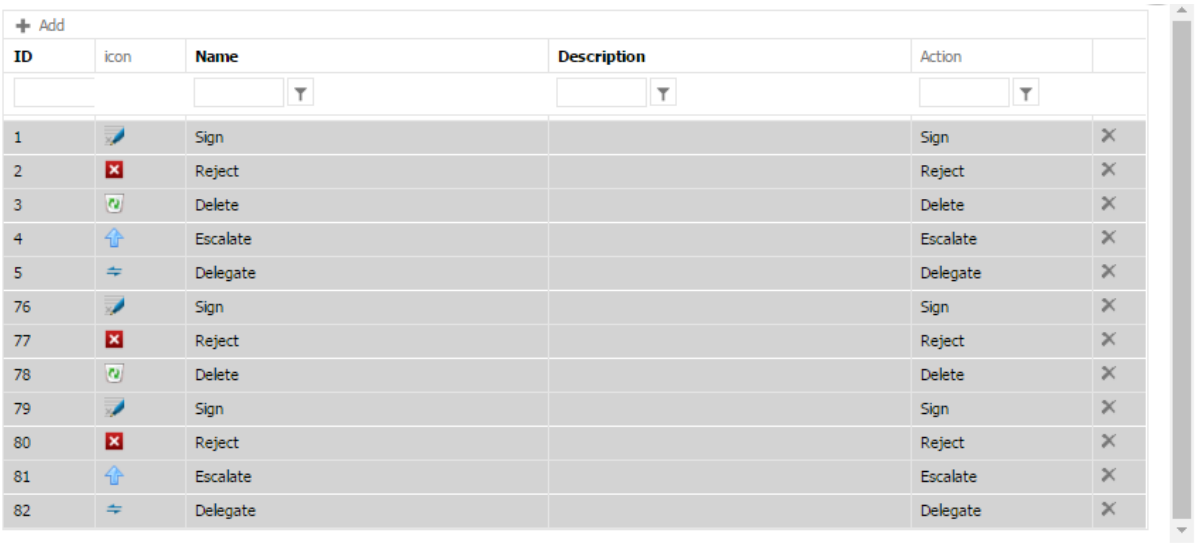

| Name | Description |
|---|---|
| Category | Name of the task category |
| Status | Source task status |
| To Status | Status assigned to the task after it is signed |
| Mandatory | If the flag is set, a signature is required for transition of the task from source to target status |
| Acceptors | Select acceptor determination algorithm: by requestor, by assignee, by responsible assignee |
| Transition Button Title | Button for status transition |

## 8.6 Resolution Types

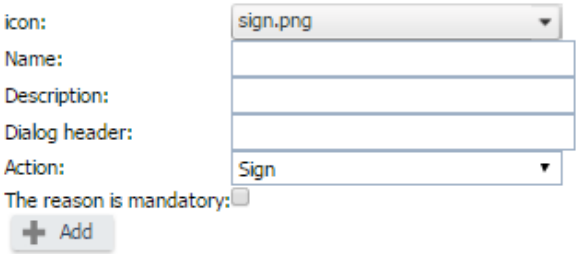
To process resolutions, click the Resolution Types button:




A window with the list of already configured resolutions appears (mandatory pre-configured resolutions displayed in dark gray cannot be deleted or edited):

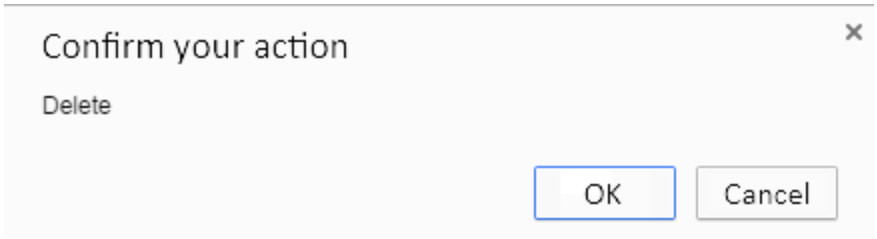



To **add a new** resolution, click the Add button. To **edit** a resolution, click the corresponding row. The window for resolution editing opens.




Select an icon (from the pre-configured list of icons), enter the resolution name and description, and assign the resolution to an available action (Sign, Reject, Delete, Escalate, Delegate). If resolutions of this type always require the acceptor's explanation, enable the Reason Required flag (this flag is enabled by default for resolutions assigned to the Reject action). Then click Add. The new resolution appears in the summary list.

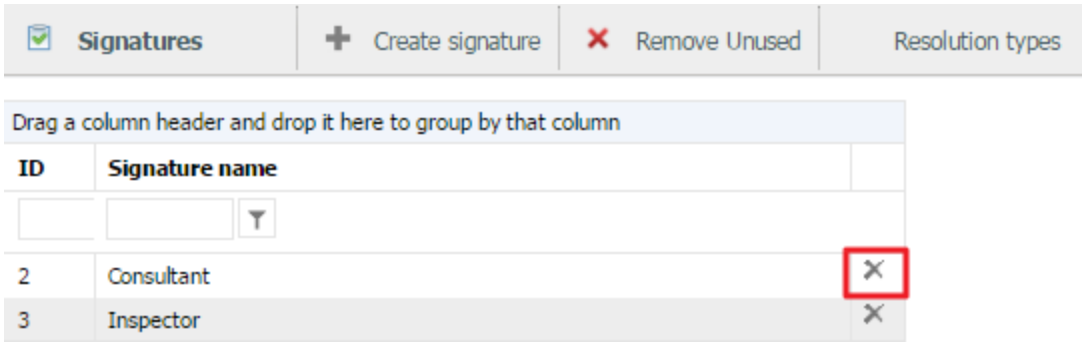
To **delete** a resolution, click the button in the corresponding resolution table row. A confirmation window opens:



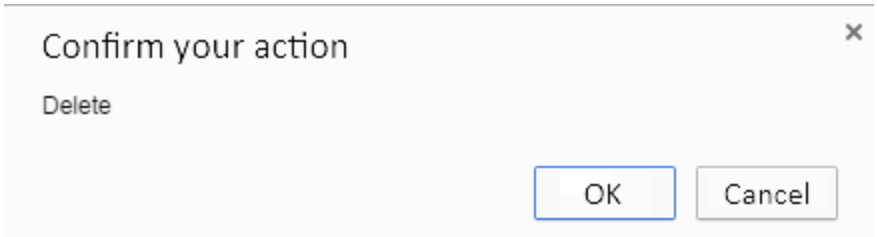

Click OK to confirm signature deletion. If an action has been chosen by mistake, click Cancel.

## 8.7 Deleting a Signature

To delete a signature, click the button in the corresponding signature table row. **IMPORTANT:** A signature cannot be deleted if it is used in at least one category.



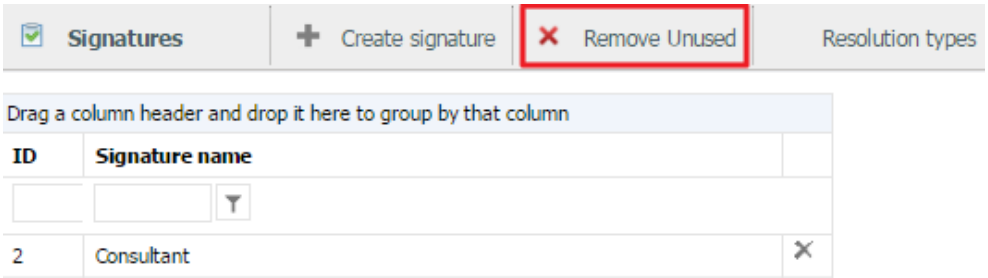

A confirmation window opens:




Click OK to confirm signature deletion. If an action has been chosen by mistake, click Cancel.

## 8.8 Deleting Unused Signatures

For mass deletion of unused signatures, click the Delete Unused button. Signatures that are not used by any category are deleted from the summary signature list.




After deletion, a message with the number of deleted unused signatures is issued.

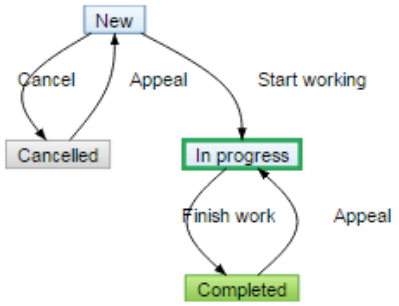
# Chapter 9 Statuses



## 9.1 General

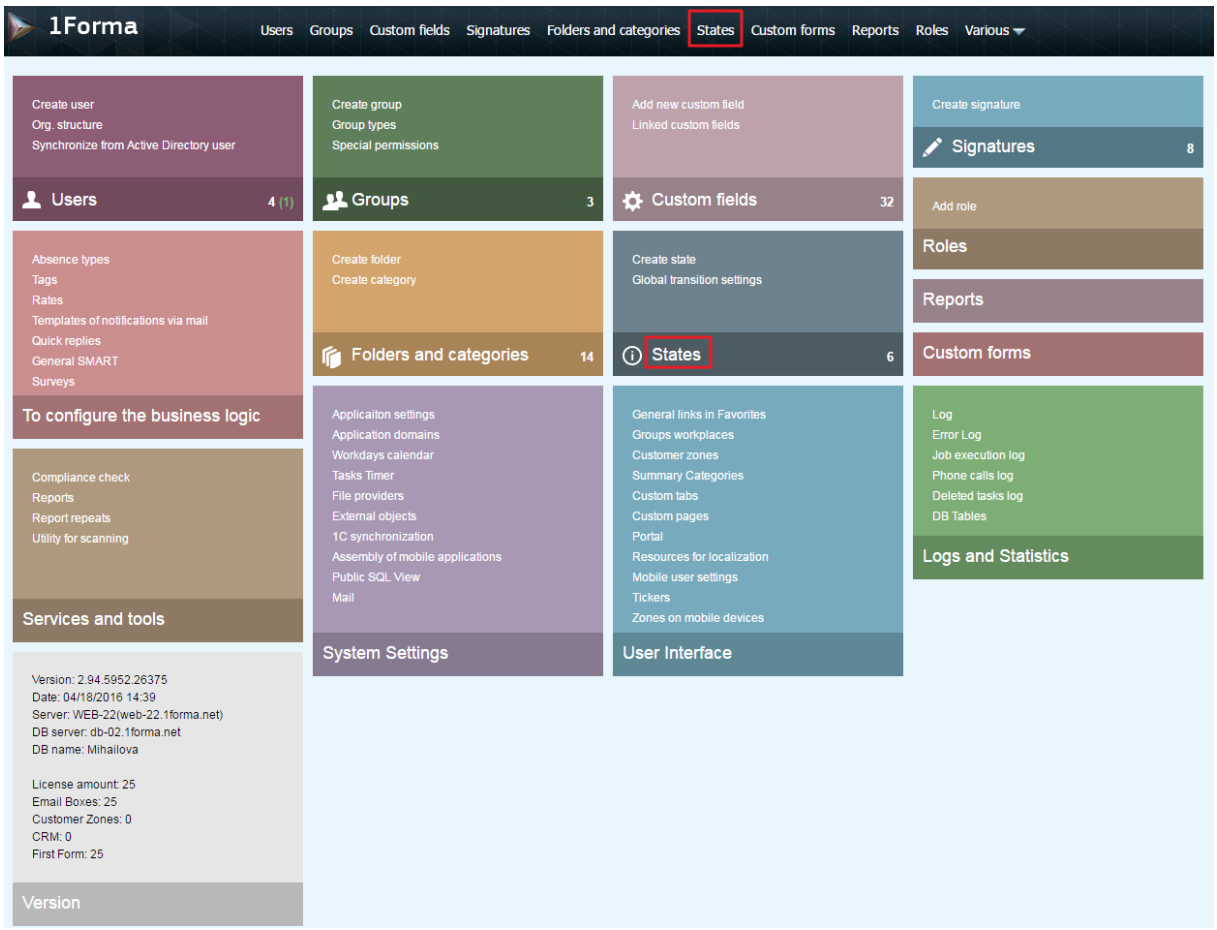
**A status** defines the current system object state. Statuses are used for configuring routes of category objects: status is changed at the end of each route step.

The figure below shows a default route where New, In Progress, Completed and Canceled are task statuses.

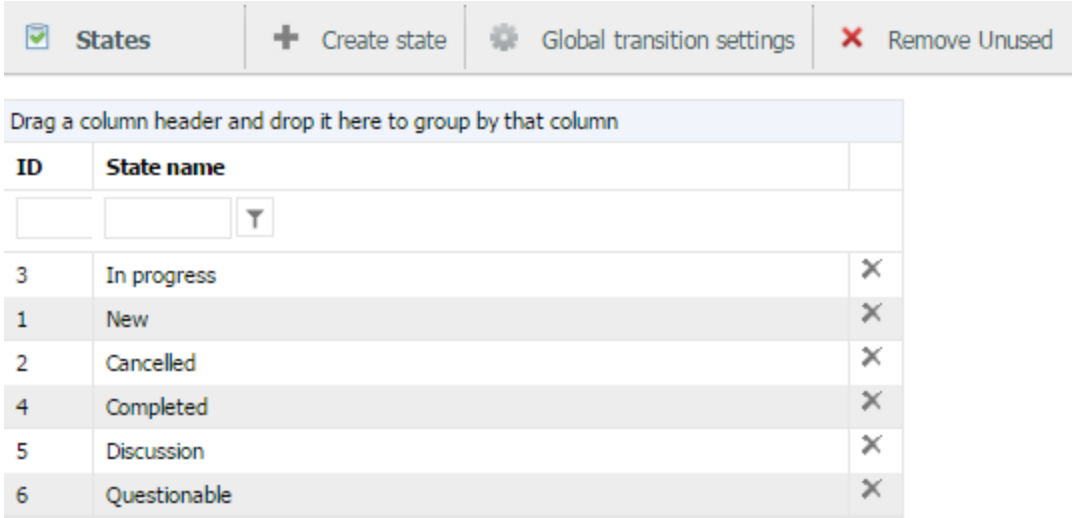



## 9.2 Status Management

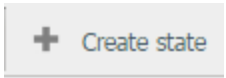
To navigate to status management, click the Statuses link on the home page or choose the corresponding item in the top menu.



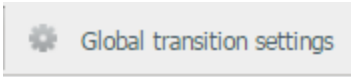

The table that opens contains the complete list of statuses created in the system.



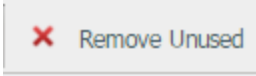

The following buttons are available above or below the table:




opens a new status form.

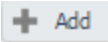


opens the form for editing default settings that are displayed when new transitions are created for categories.

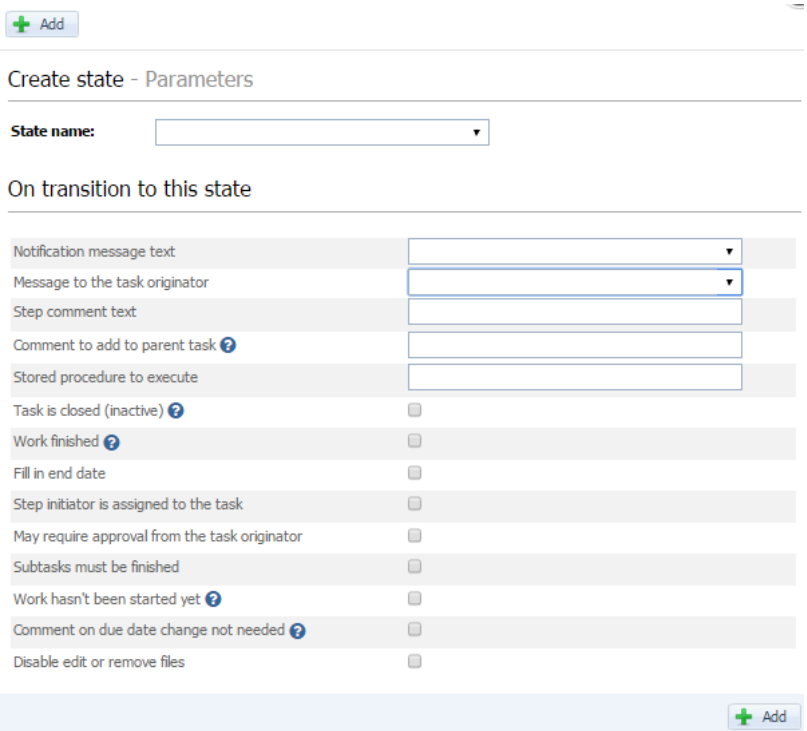


deletes all statuses not used by existing category routes.

## 9.3 Creating a Status

To create a new status, click 

. A new status form opens.




| Name | Description |
|---|---|
| ID | Status ID |
| Status Name | Status name to display in the main object form |
| **Transition to status** | |
| Subscriber Email | Email text automatically sent to task subscribers when a task transitions to this status |
| Requestor Email | Email text automatically sent to the task requestor when a task transitions to this status |
| Task Comment | Comment text automatically added to a task when the task transitions to this status |
| Parent Comment | Comment text automatically added to the parent task (if any) when |

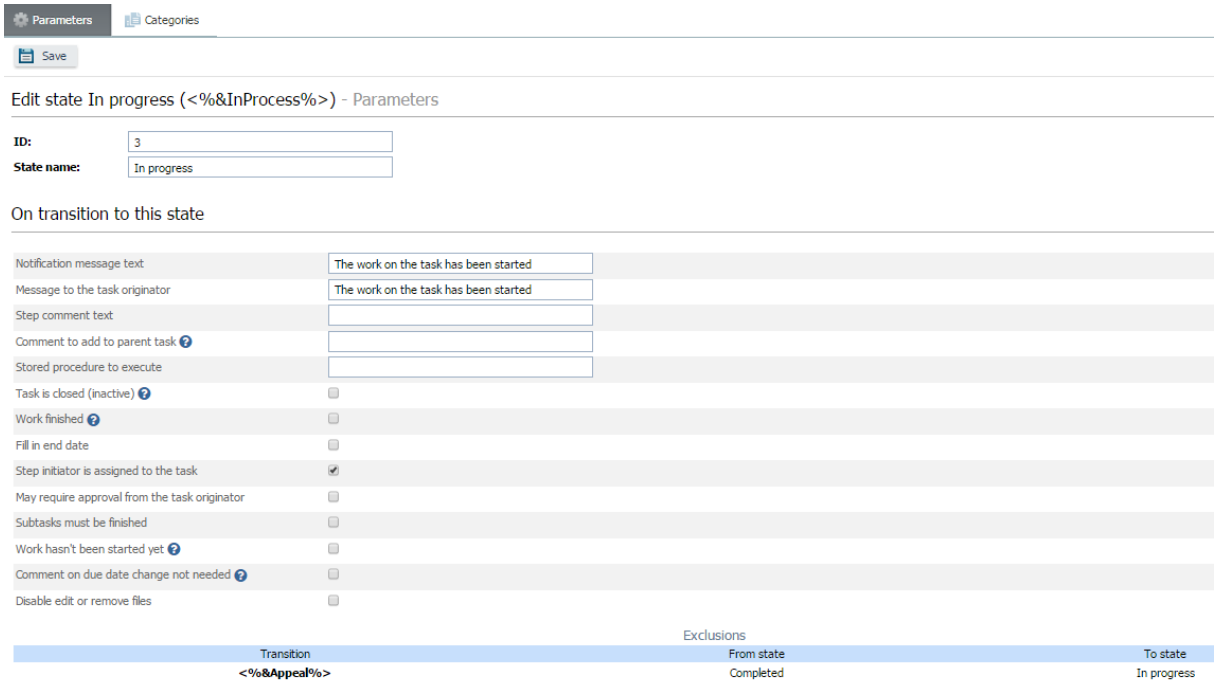
| Name | Description |
|---|---|
| | the current task transitions to this status.<br><br>*Message texts support the following expressions:*<br>*$Cat for subtask category name*<br>*$TaskLink for a subtask keyword which is a link to the subtask itself.* |
| Execute Built-in Procedure | This field can be used only by professionals certified by the developer. Improper use may lead to system failure and data corruption! |
| Execution Complete | If the flag is set, a task that transitions to this status is marked as completed and does not display on the list of active tasks<br><br>(*the flag determines the IsClosed parameter value*). |
| Work Complete | If the flag is set, a task that transitions to this status is displayed as inactive (hidden from the home page and shown in the task list of the corresponding category only on clicking the All Entries button)<br><br>*(the flag records assignee working times: if States.CloseTask = 1 and States.FinishWork = 0, the status is Canceled).* |
| Populate End Date | If the flag is set, for a task that transitions to this status, End Date is automatically populated with the current date and time. |
| Appoint Assignee | If the flag is set, the user who has clicked the transition button and initiated task transition to this status is automatically appointed assignee for the task. |
| Can Require Requestor Acceptance | If the flag is set and the task requestor has enabled the "Requires Acceptance of All Tasks for Transitions to Status with Requestor Acceptance" flag in their profile, their signature is requested on transition to this status. |
| Require Completion of Subtasks | If the flag is set, all subtasks must be completed for transition to this status. |
| Not Started | If the flag is set, the tasks in this status are displayed on the task start tab of the home page. |
| Does Not Require Comment for Due Date Change | If the flag is set, no comments with the reason for due date change are required for changing due dates of tasks in this status. |

Maintain the required parameter values and click 

to add a new status to the system.

## 9.4 Editing a Status: Parameters Tab

To edit a status, left-click the corresponding table row. The status settings form opens on the Parameters tab.

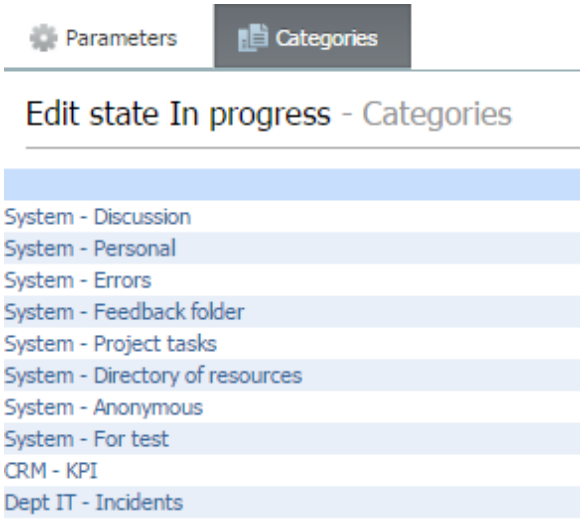



Maintain the required parameters. To save changes, click 

.

## 9.5 Editing a status: Categories tab

To maintain statuses, use category routes. When a status is edited, the Categories tab displays a list of all categories with routes that use this status.

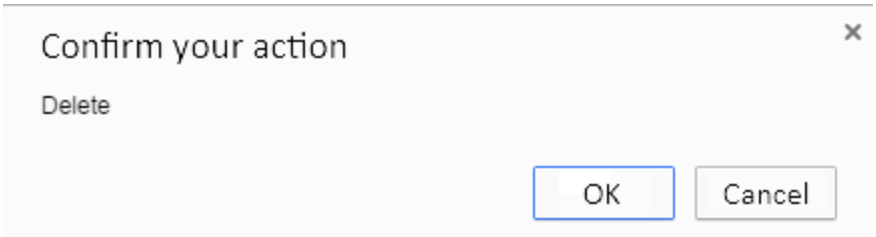



To navigate to category editing and setup, left-click the corresponding table row.

## 9.6 Deleting a Status

To delete a status, click the button in the corresponding table row. **IMPORTANT:** A status cannot be deleted if it is used by at least one route.

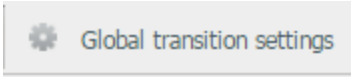

A confirmation window opens:



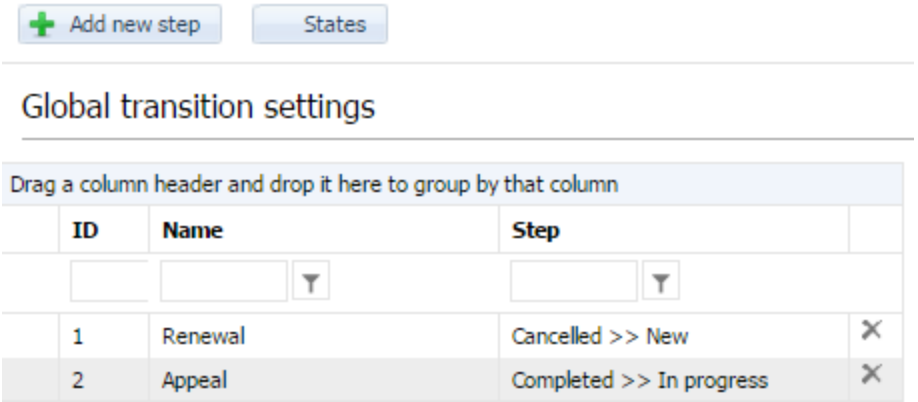

Click OK to confirm status deletion. If an action has been chosen by mistake, click Cancel.

## 9.7 Global Transition Settings

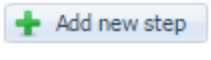
Configuring a route for a specific task can involve creating unique transitionsor using default transitions common to different system tasks.

To navigate to global transition settings, click 

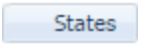

The table that appears contains the complete list of global transition settings:




The following buttons are available above or below the table:



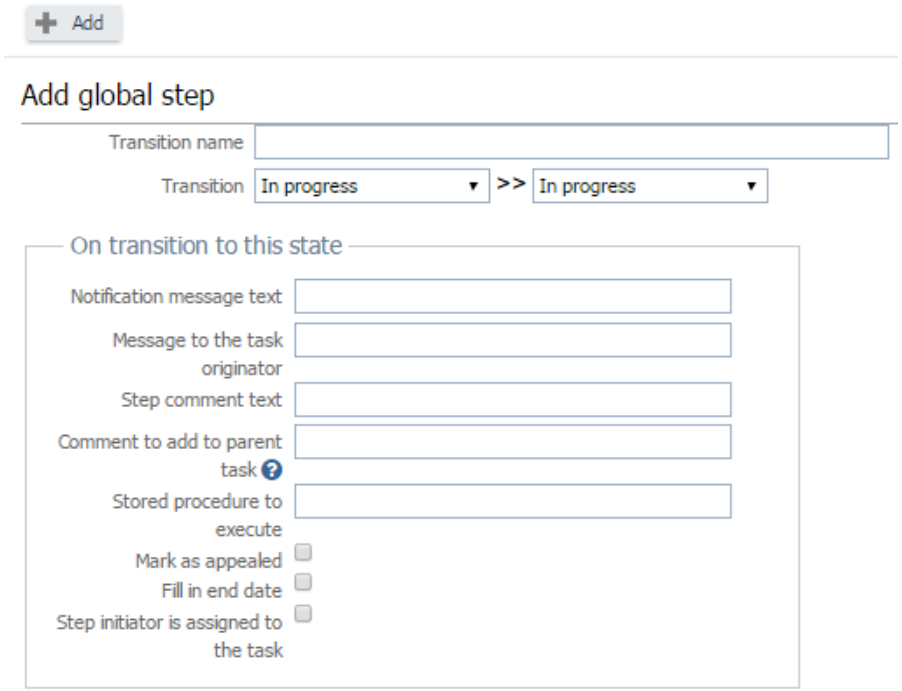
adds a new transition.



navigates to the status management page.

### 9.7.1 Creating new global transition settings

When new global transition settings are being created, the following window opens:



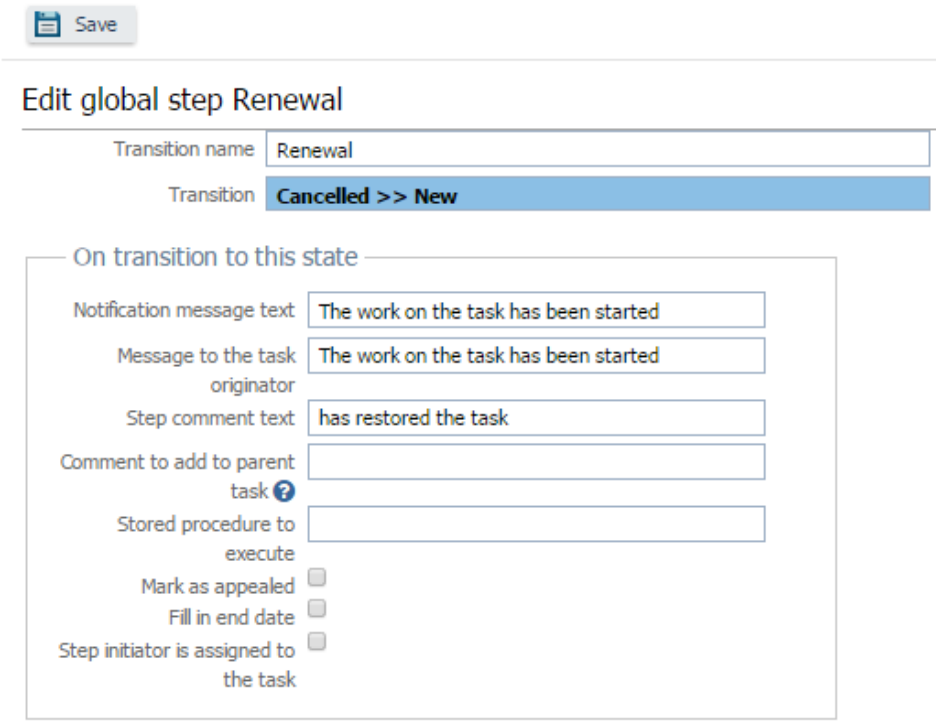

| Name | Description |
|---|---|
| Subscriber Email | Email template used to notify task subscribers of this transition. *For example, <%&AppealedTask%>.* |
| Requestor Email | Email template used to notify task requestor of this transition. |
| Task Comment | Comment template used to add task comments for this transition. |
| Parent Comment | Comment template used to add parent task comments for this transition. Special expressions are supported: \n$Cat — subtask category name, \n$TaskLink — subtask keyword referencing the subtask. |
| Execute Built-in Procedure | Name of the procedure executed on transition |
| Set as Appealed | If the flag is set, after the transition, assignees are not displayed as strikethrough and see the task in My Tasks mode.<br>**IMPORTANT**: This setting is duplicated in the settings of a specific transition. |
| Populate End Date | If the flag is set, the task end date is populated on transition. |
| Appoint Assignee | If the flag is set, |

after maintaining the parameters, click 

.

### 9.7.2 Editing global transition settings

To edit global transition settings, left-click the corresponding table row. This opens the following window:

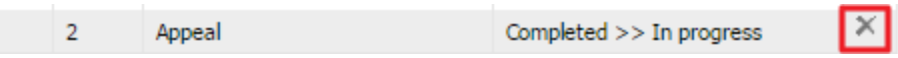



Make the required changes to the parameters and click 

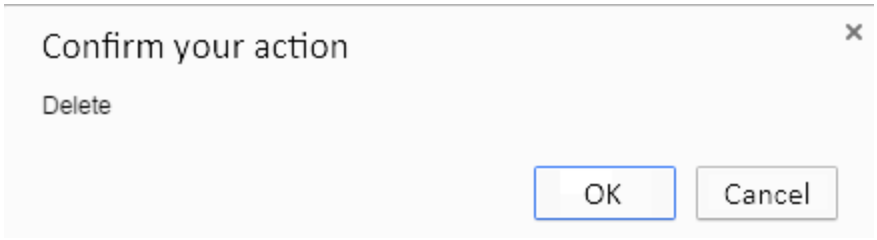
.

### 9.7.3 Deleting global transition settings

To delete global transition settings, click the ✕ button in the corresponding table row. **IMPORTANT:** Global transition settings cannot be deleted if they are used by at least one route.

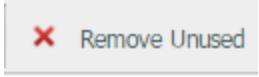



A confirmation window opens:




Click OK to confirm deletion. If an action has been chosen by mistake, click Cancel.

## 9.8 Deleting Unused Statuses

For mass deletion of unused statuses, click 

. Statuses that are not used by any route of any category are deleted from the summary list.

After deletion, a message with the number of deleted unused statuses is issued.

# Chapter 10 Roles



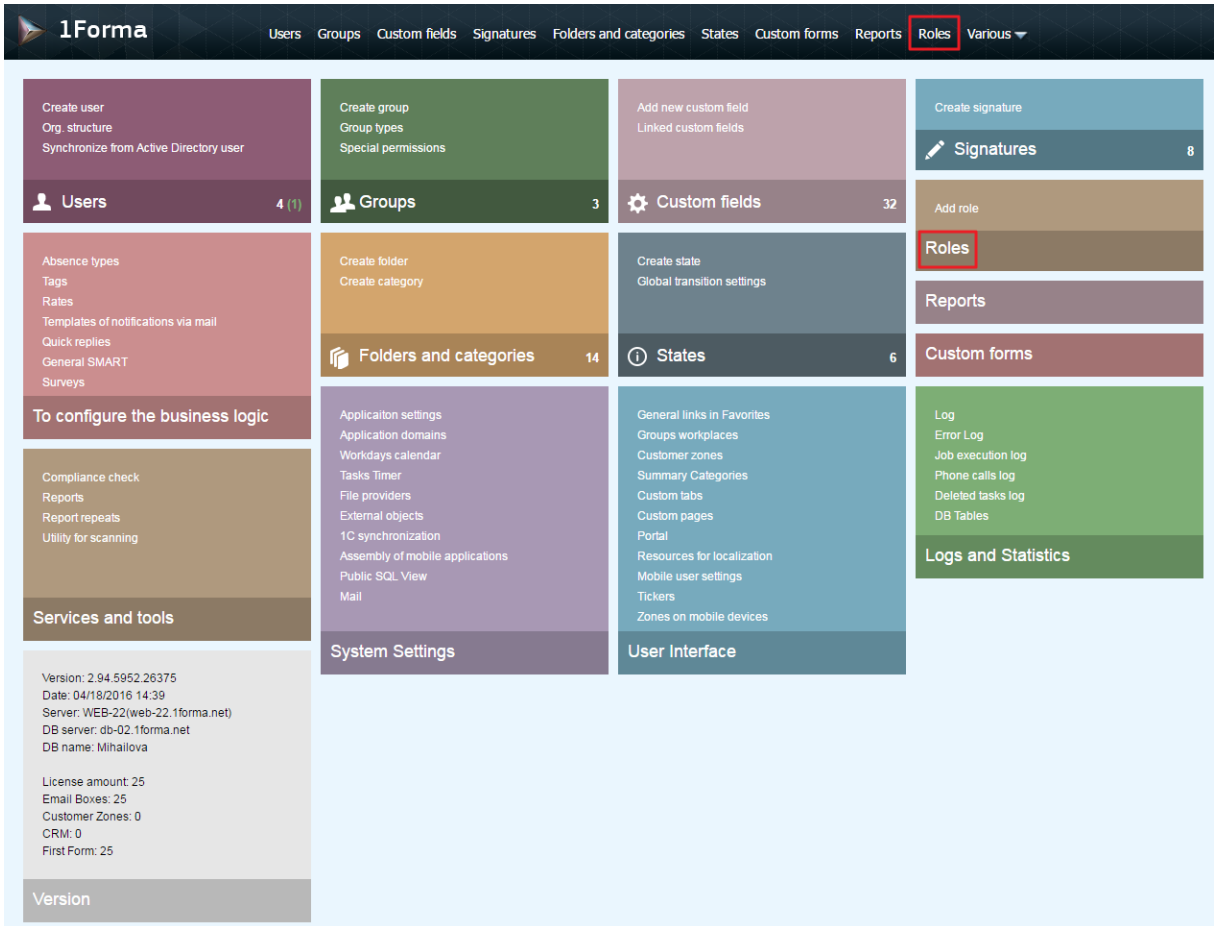
## 10.1 General

**A role** represents user assignment to a group which determines an individual set of permissions and additional features for specific categories. The system supports basic roles that can be combined. In fact, a role is a combination of permissions and capabilities defined by basic roles.

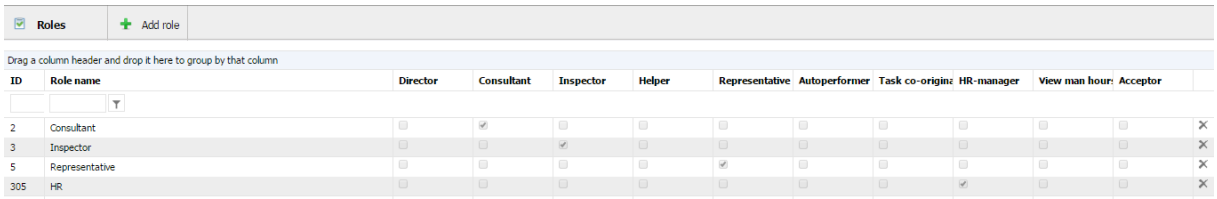
| Role name | Permissions and capabilities |
|---|---|
| Manager | Can view tasks assigned to or executed by members of the specified group. Can change efforts for tasks assigned to users who belong to the group |
| Consultant | Is automatically subscribed to the tasks that have group members as assignees |
| Supervisor | Is automatically notified of the tasks that have group members as assignees |
| Assistant | Can be appointed as assignee for tasks that already have group members as assignees. Can create requests on behalf of users who belong to the specified group if the group is granted Change Requestor permissions |
| Representative | Can create tasks on behalf of users who belong to the specified group |
| Autoassignee | Is specified in transition settings for the route. This person is automatically appointed as assignee for the tasks that have group members as assignees |
| Co-requestor | Is automatically subscribed to the tasks that have group members as requestors |
| HR Manager | Can edit the specified groups and users who belong to these groups |
| View Efforts Report | Can view efforts for requests assigned to users who belong to the group |
| Acceptor | Is automatically appointed as acceptor for the tasks that have group members as assignees |

## 10.2 Role Management

To navigate to role management, click the Roles link on the home page or choose the corresponding item in the top menu.



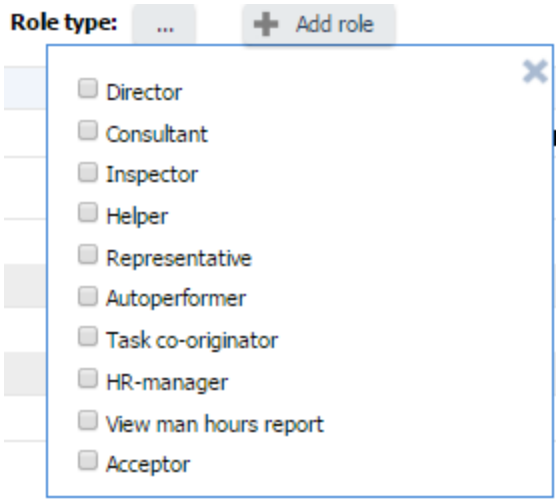

The table contains a list of roles configured in the system.




## 10.3 Adding a role

To create a new role which is a combination of basic roles, click Add Role. A new role form opens.

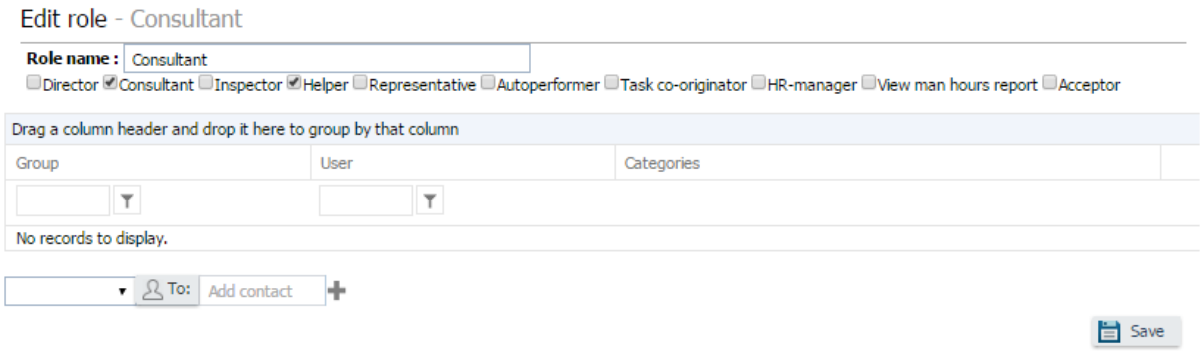

Enter role name, click "..." button, and in the window that appears select basic roles.




To confirm entered values, click Add Role.

## 10.4 Editing a role

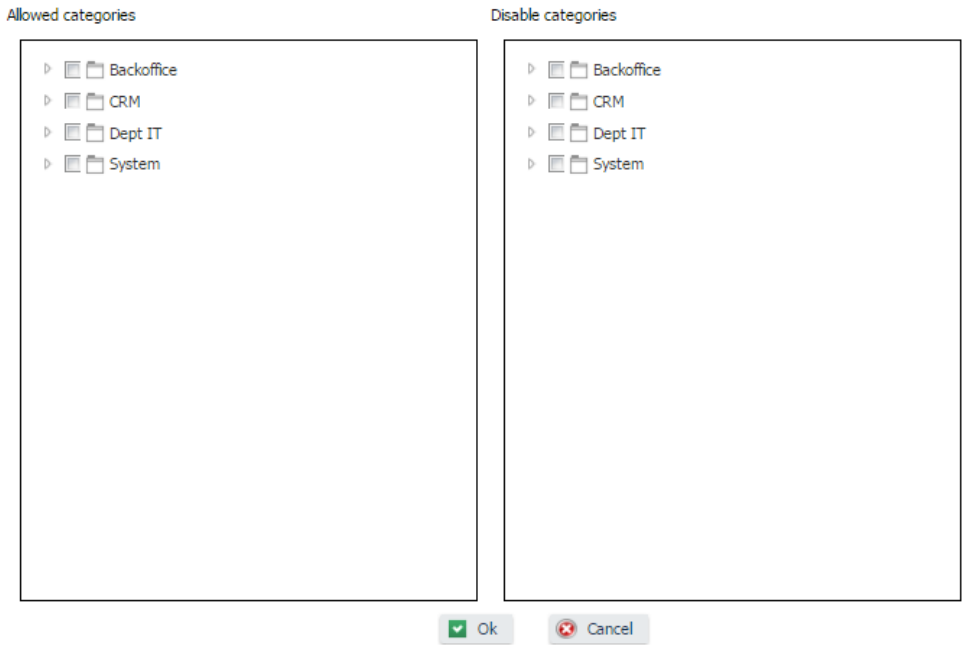
To edit a role, left-click the corresponding table row. The form for editing role parameters opens.




The edit role window contains the role name, a list of active basic role flags, and **a table of relations** that define role validity for users, groups and categories.

To add a new relation, select the group the role is valid for, and one or more users who will be granted additional permissions and rights (To field), and click .

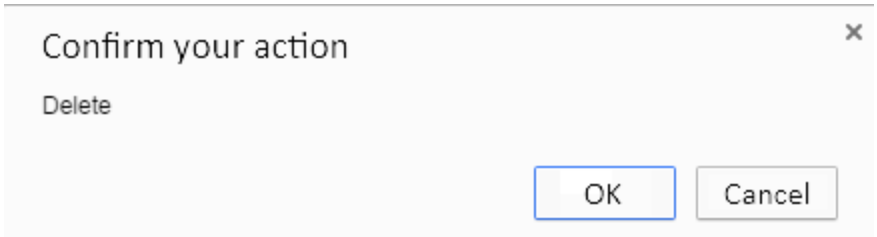
If the role is valid for specific categories only, click in the Categories column for the corresponding relations table row. The window to define role validity for categories opens: the left column contains categories the role is valid for, while the right column contains categories it is not valid for. If nothing is selected in the left column, the role is global (valid for all categories).




Click OK to confirm changes or Cancel to cancel.

## 10.5 Deleting a role

To delete a role, click the Delete button in the corresponding table row. A confirmation window opens:




Click OK to confirm role deletion. If an action has been chosen by mistake, click Cancel.

# Chapter 11 Forms



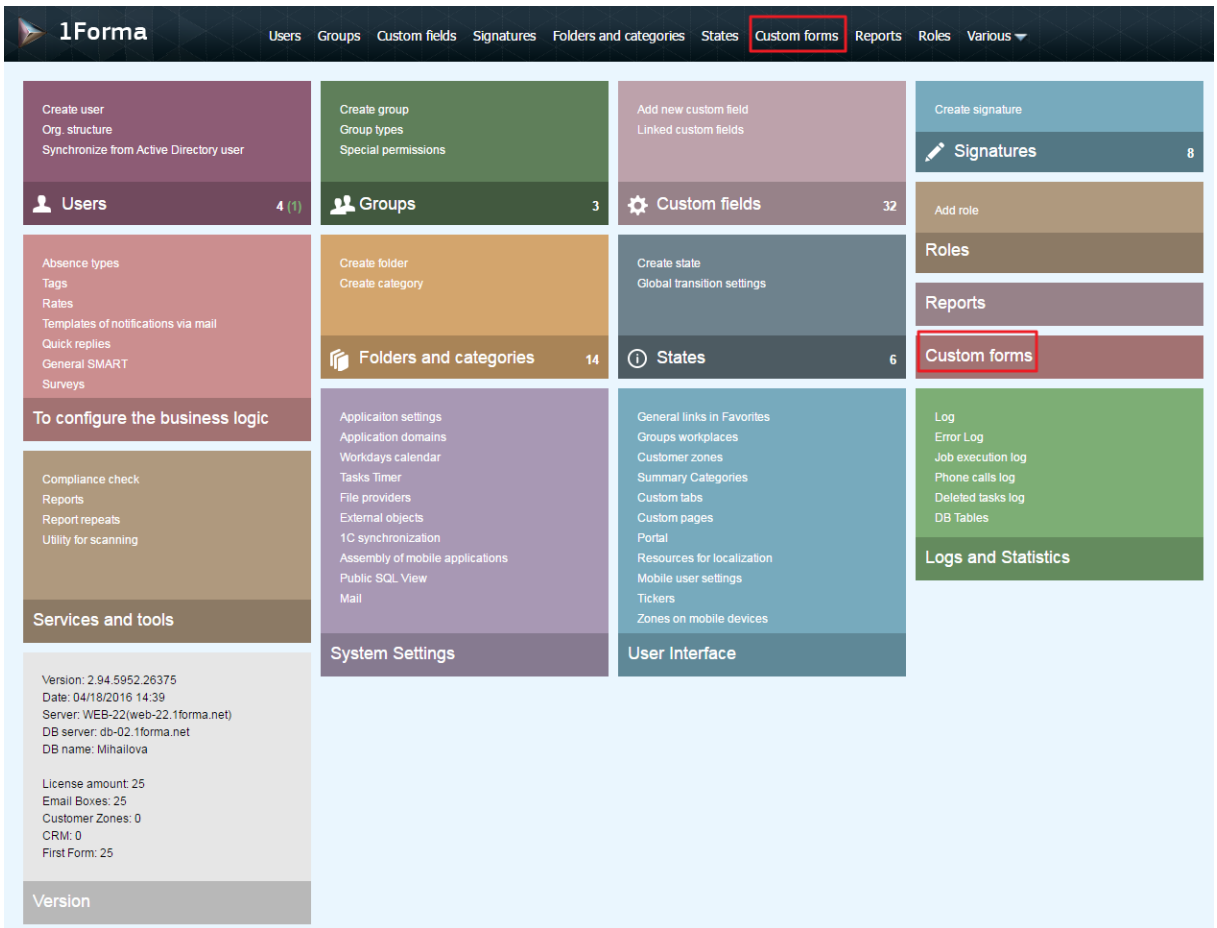
## 11.1 General

**Form** is an advanced interface with personalized appearance and functionality for working in the 1Forma system. It can be used for integration with the corporate website or third-party information system, data entry and preprocessing, etc.

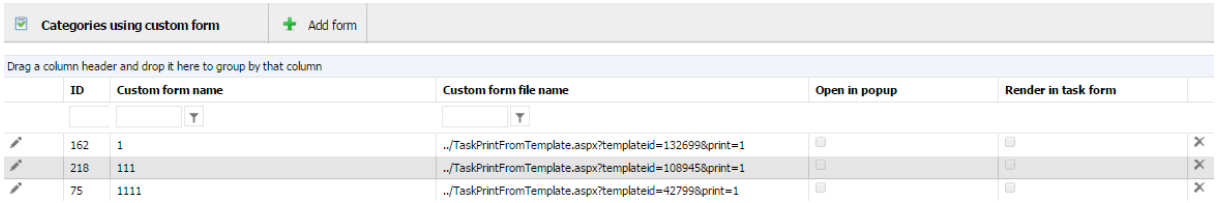
This functionality is available only to professionals certified by the developer. Improper use may lead to system failure and data corruption.

## 11.2 Form Management

To navigate to form management, click the Forms link on the home page or choose the corresponding item in the top menu.



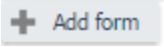
The table contains a list of forms configured in the system:




## 11.3 Creating a Form

To create a new system form, click the Add Form button. This opens the window for creating a new form.

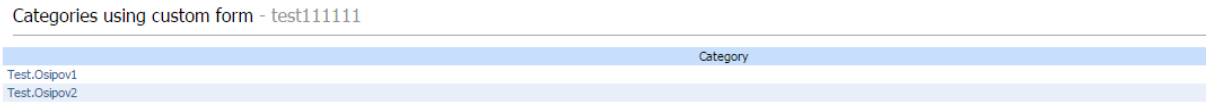

If the Compile in Task Design flag is set, the custom form is appended as part of the category layout instead of a link.

Maintain the parameters and click the  button. A new custom form appears in the table.

## 11.4 Editing a Form

To edit form data, hover the mouse over the required table row and click .

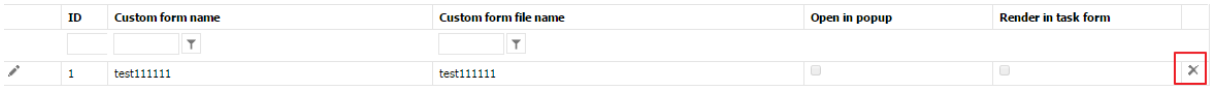
To edit the list of categories that use the form, left-click the corresponding table row. A window with the list of categories opens.



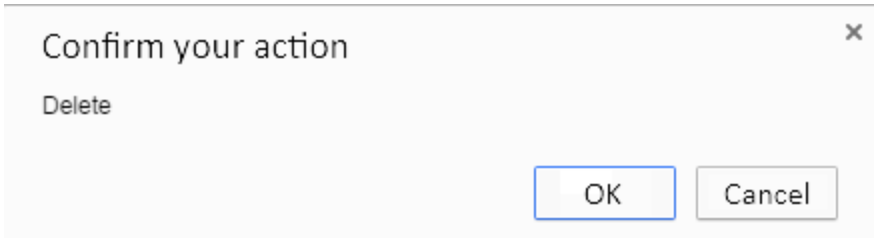

Each line of this list is an active link that you can click to open the window for editing this category.

## 11.5 Deleting a Form

To delete a form, click the delete icon in the corresponding table row.




A confirmation window opens.



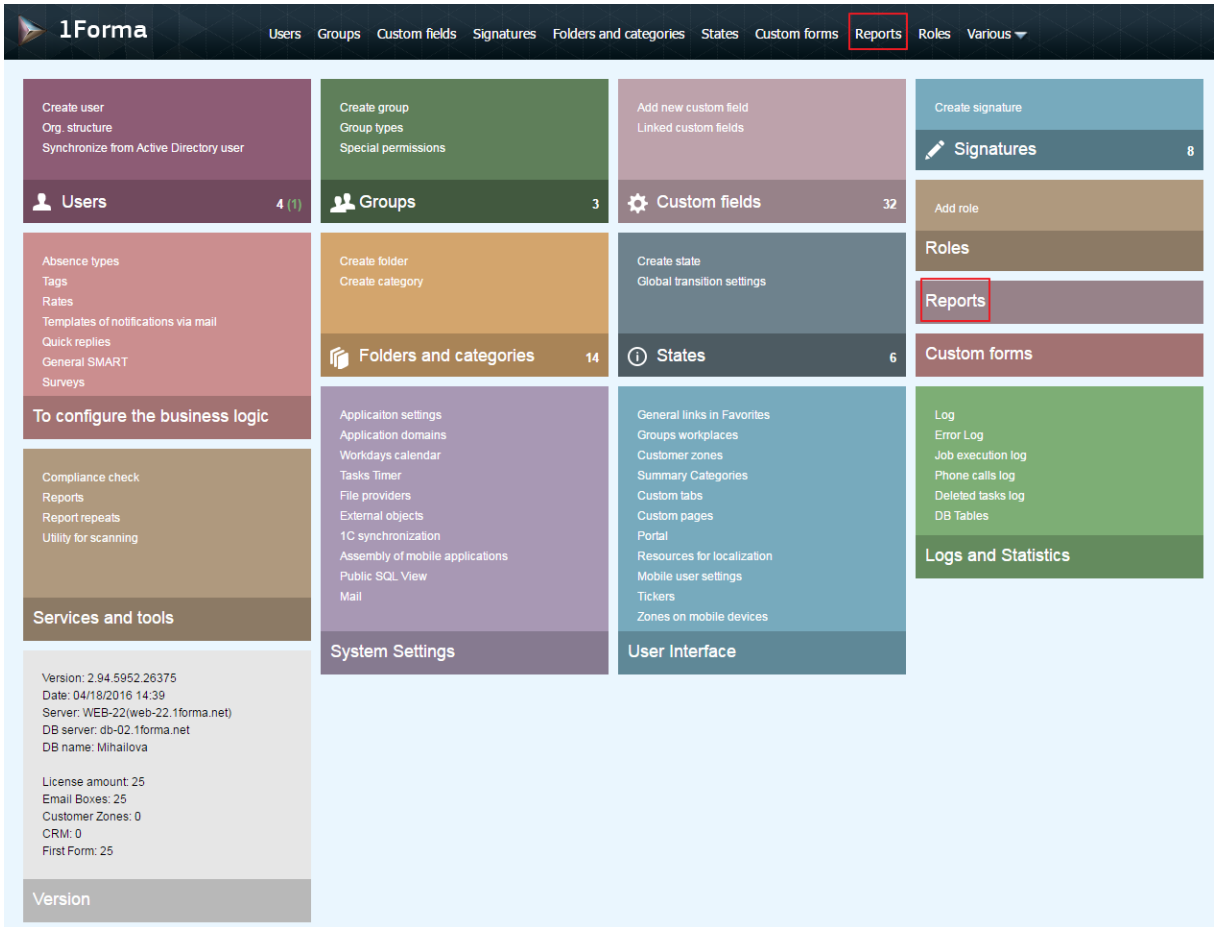

Click OK to confirm signature deletion. If deletion has been chosen by mistake, click Cancel.

# Chapter 12 Reports

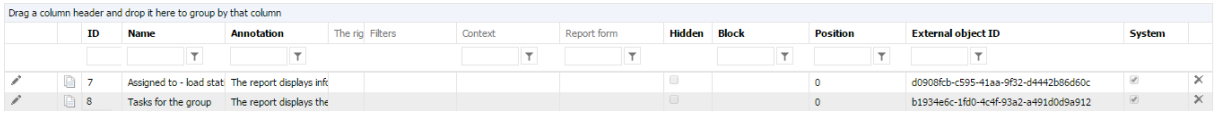


## 12.1 Report Management

To navigate to report management, click the Reports link on the home page or choose the corresponding item in the top menu.




The table contains a list of reports configured in the system.



Drag a column header and drop it here to group by that column

| | ID | Name | Annotation | The rig | Filters | Context | Report form | Hidden | Block | Position | External object ID | System | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | |
| | 7 | Assigned to - load stat | The report displays inf | | | | | | | 0 | d0908fcb-c595-41aa-9f32-d4442b86d60c | | |
| | 8 | Tasks for the group | The report displays the | | | | | | | 0 | b1934e6c-1fd0-4c4f-93a2-a491d0d9a912 | | |

Standard 1Forma delivery includes 16 reports frequently used by companies. In addition, 1Forma

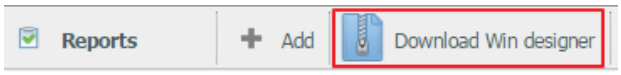
supports **two options for report enhancement**:

**Option 1:** develop an external report in C# and upload it to the system This option is recommended only for professionals certified by the developer, since improper usage may lead to system failure and data corruption.

To add a new external report:

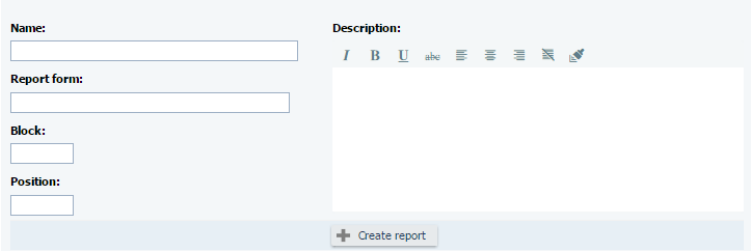
- Add the report to external objects. You can enter a free text report name into the Description field. For an ID, contact technical support.
- Register the report in the system by adding it to the list of existing reports in the Reports directory (click Add and then New Report).
- Edit the newly added line of the reports list by clicking at the beginning of the row and enter the external object ID (see above) in the corresponding column.

**Option 2**: develop a report in FastReport designer This option is available to advanced users. The designer can be uploaded from the Reports directory of the administrative UI:

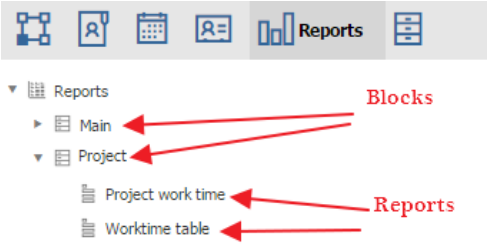



To use the designer, install .Net Framework 4.6.1.

To create a new report in FastReport designer, click Add, then enter the report name, description, block (subdirectory), and the report order in the block, if required. Do not populate the Report Form field. It displays the link to edit the report form, which is generated automatically.



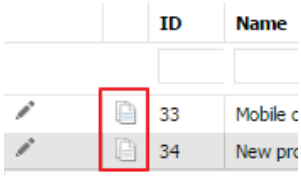

In user interface reports split by blocks are displayed as follows:



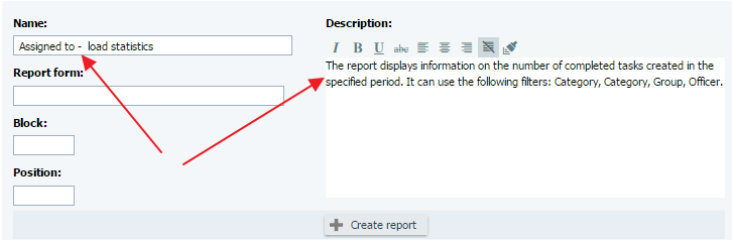

To open a report in FastReport designer, click the link:


**For recommendations on building reports on FastReport designer, see the Administrator's Guide and the documentation on FastReport provided by the developer.**

FastReport designer supports copying an existing report and saving it in the system with a different name as a basis for creating a similar report. To copy a report, click the icon at the beginning of the corresponding reports table row:




Clicking this icon opens the window in the top part of the screen above the reports table, which is similar to new report window, however, the fields here are pre-populated. Change values in Name (and Description) field. To save changes, click Create Report.

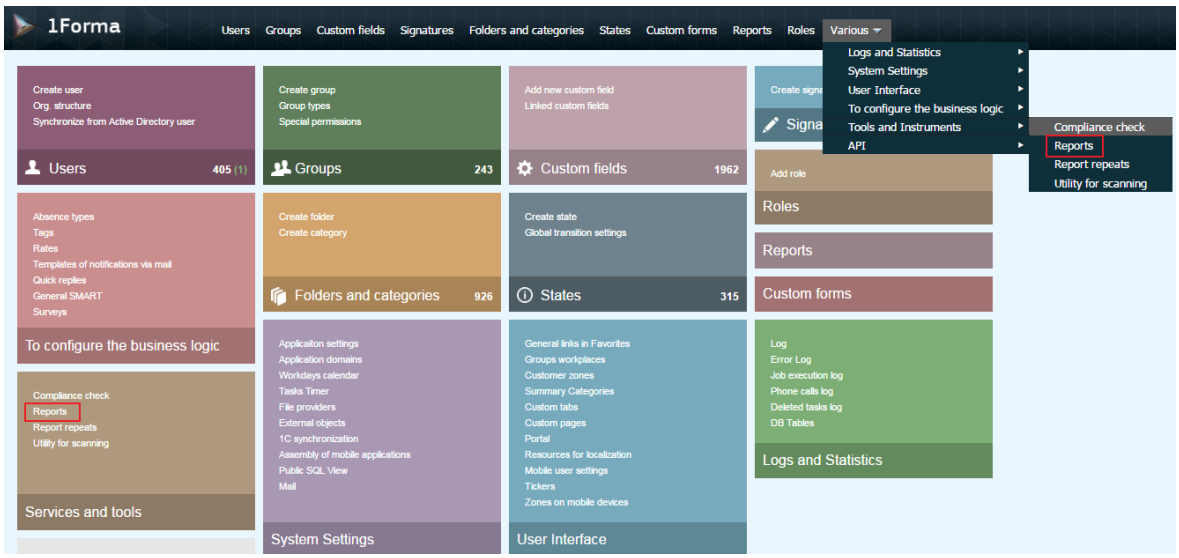



## 12.2 Editing a report description and configuring permissions

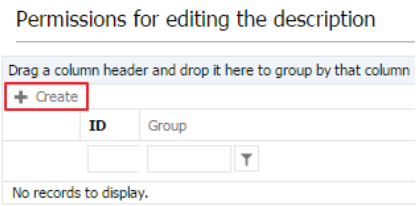
1. To edit a report description, hover the mouse over the required table row and click . You can change the report name, description, file name and maintain block assignment, order in the block and Hidden setting. For details on assigning reports to context, click here.

   Click to save changes or at the beginning of the row to cancel.

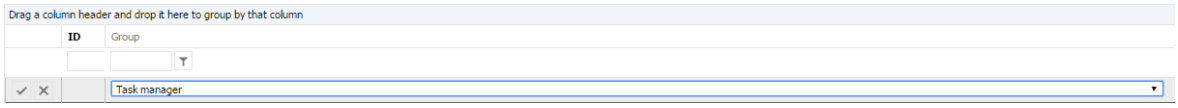
2. To navigate to **configuring permissions for editing a report description**, click the icon to the right of the Description column for the corresponding row.



The window for editing permissions opens. Permissions are granted at group level. To add a group whose members will be able to edit a report description, click Create.

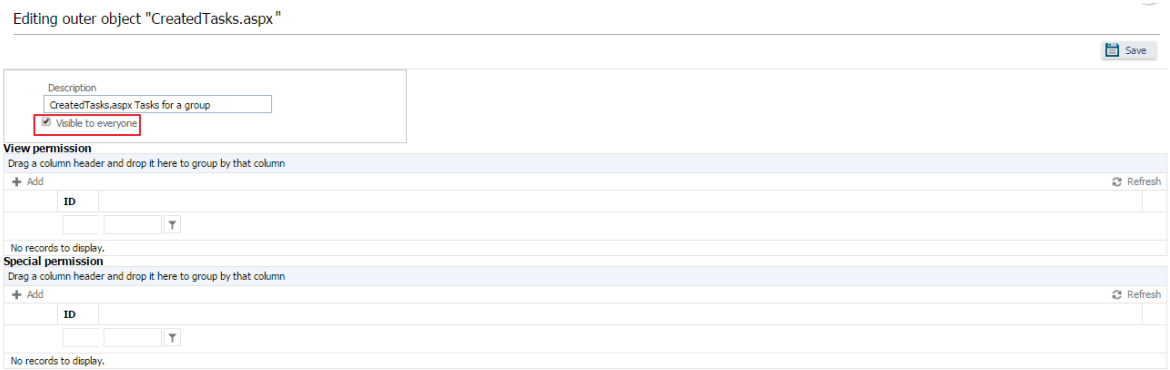



Select a group from the drop-down list. Click ✓ to save changes or ✕ at the beginning of the row to cancel.




3. To navigate to **configuring report view permissions**, click the icon in the External Object ID column for the corresponding row.

The window for editing permissions opens. Access is also granted at group level. An additional Visible To All button is displayed.

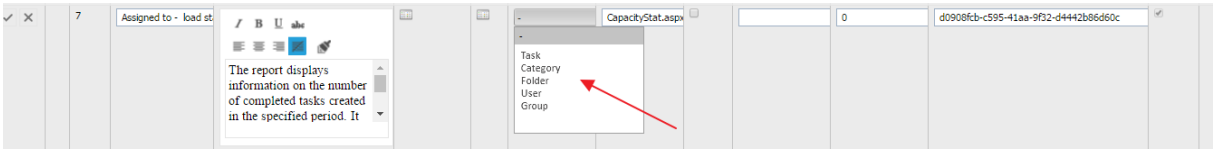



To add a group whose members will be able to view the report, click Add in the View Permissions block. Select a group from the drop-down list. Click ✓ to save changes or ✕ at the beginning of the row to cancel.

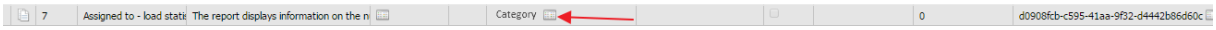
To add a group whose members will be granted special permissions, click the Add button in the Special Permissions block. Select a group from the drop-down list. Click ✓ to save changes or ✕ at the beginning of the row to cancel.

## 12.3 Assigning Reports to Context

A report can be context-based. To assign a report to context, select the required context type in report description edit mode:




After selecting the context type, specify one or more values for assigning the report. To open the list of available values, click :




Depending on the context, a Reports item is added to the corresponding menu or toolbar in user mode, and the context is transferred to reports as parameters:

| Context | Parameters transferred to the report | Report can be executed from | What is configured in the available values list for the context |
|---|---|---|---|
| Task | TaskID<br>SubcatID | More menu on toolbar of the main task form | If the list of available values contains categories or directories, the report is available only for the tasks of these categories and directories |
| Category | SubcatID | Category context menu in the category tree | If the list of available values contains categories or directories, the report is available only for these categories or categories that belong to these directories |
| User | UserID | Details menu on the toolbar of a user profile | No list of available values is configured, and the report can be executed from any user profile |
| Group | UserID + GroupID collection | Details menu on the toolbar in group member view mode | |

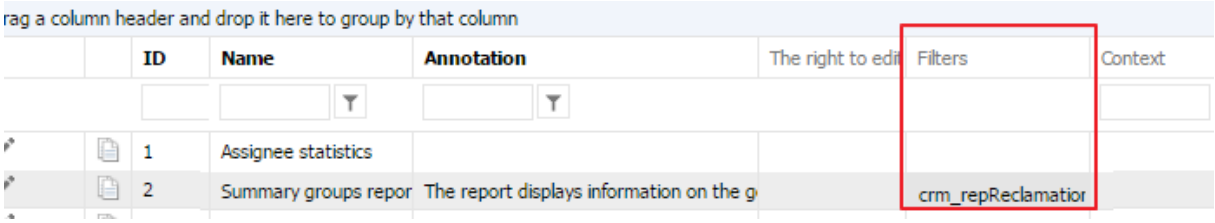
In addition, the ID of the user who displays the report (*CurrentUserID*) is transferred to all reports as a parameter. This is required to check user permissions, since only authorized data must be displayed.

**IMPORTANT**: Report developers are responsible for checking user permissions for viewing report data!

**For details on using context, see the Administrator's Guide.**

## 12.4 Filters

Configure a filter to allow users to manage report contents.



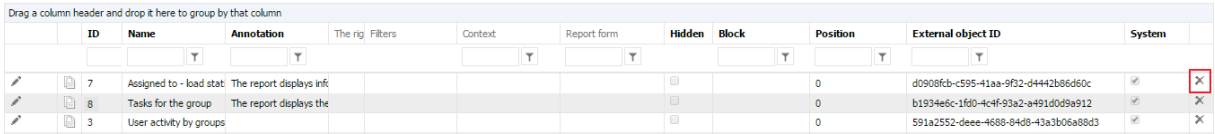

A filter contains conditions that can be used to select the required data.

Filters are selected, created and edited similarly to portal filters.

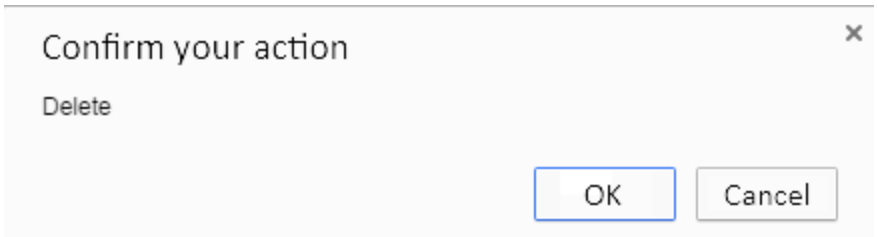
**For details on using filters, see the Administrator's Guide.**

## 12.5 Deleting a Report

To delete a report, click the delete icon ✕ in the corresponding table row.




A confirmation window opens.




Click OK to confirm report deletion. If deletion has been chosen by mistake, click Cancel.

# Chapter 13 Miscellaneous



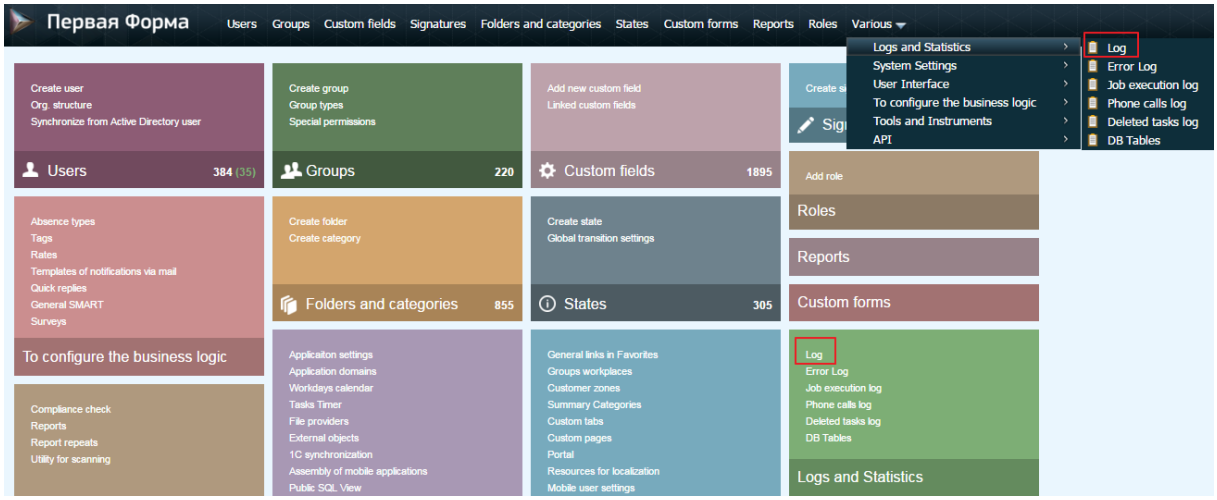
## 13.1 Logs and statistics



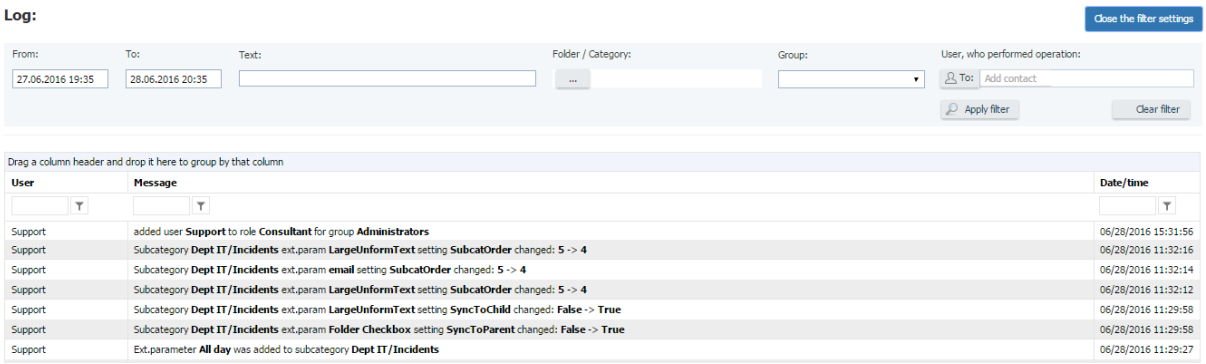
### 13.1.1 System Log

The system log displays information on changed category settings, users, roles, UI language, and other relevant administration data.

To navigate to the system log view page, click the Log link on the home page or choose the corresponding item in Miscellaneous — Logs and Statistics.

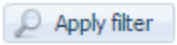



The page that opens displays the system log and provides options for filtering (selection) by parameters.

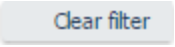



**Selection parameters:**

| Name | Description |
|---|---|
| From | Display entries created on this date and time or later |
| To | Display entries created on this date and time or earlier |
| Text | Display entries that contain the specified text |
| Executed By | Display entries for actions of the specified user |
| Group | Display entries for users who belong to the specified group |
| Directory/Category | Display entries for this category or any category that belongs to the specified directory |



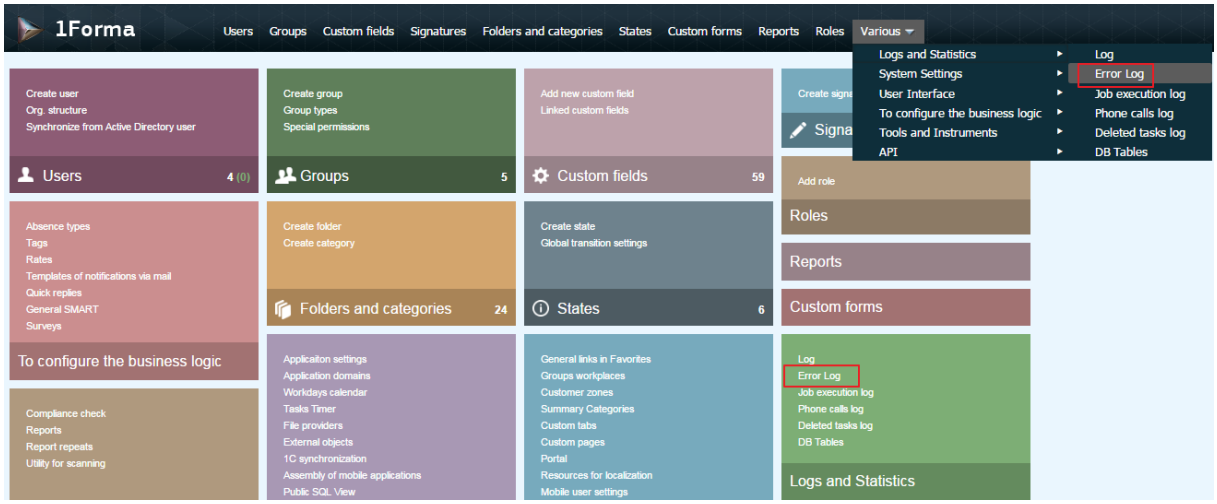
filters the log by selected parameters.



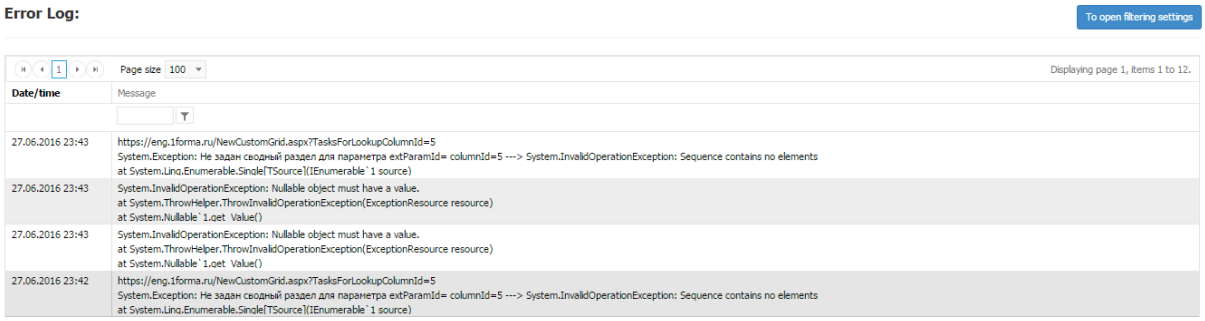
displays all log entries.

## 13.1.2 Error Log

To navigate to the error log view page, click the Error Log link on the home page or choose the corresponding item in Miscellaneous — Logs and Statistics.

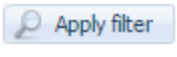



The page that opens displays the error log and provides options for filtering (selection) by parameters. Initially the table contains short error descriptions. Click a row to open the detailed error description.

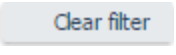



**Selection parameters:**

| Name | Description |
|---|---|
| From | Display entries created on this date and time or later |
| To | Display entries created on this date and time or earlier |
| Text | Display entries that contain the specified line |
| Sources | Display errors that occurred in the specified services. By default, errors from all sources are displayed. |



filters the log by selected parameters.

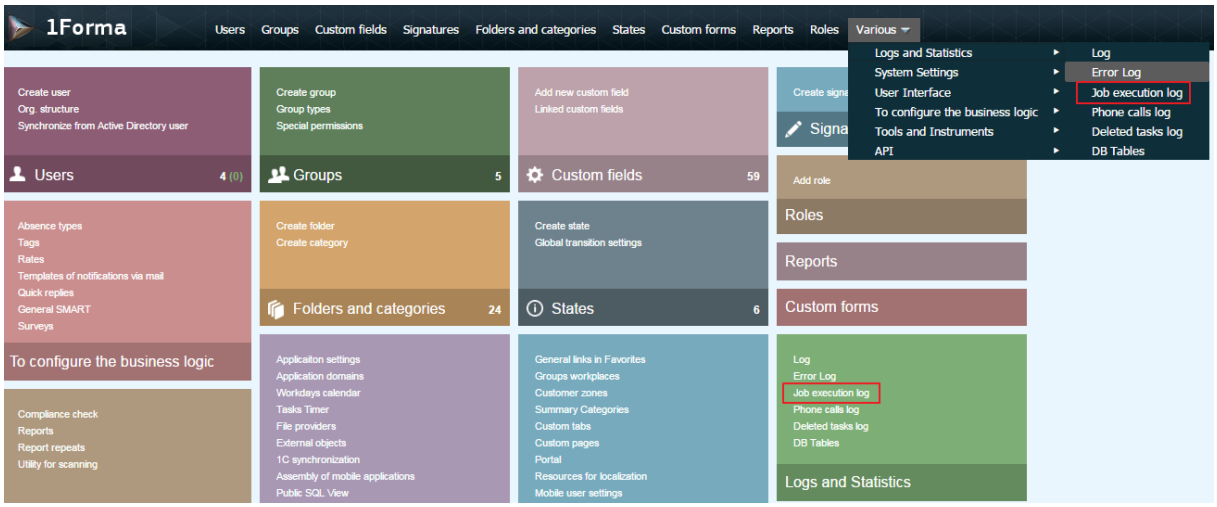


displays all entries.

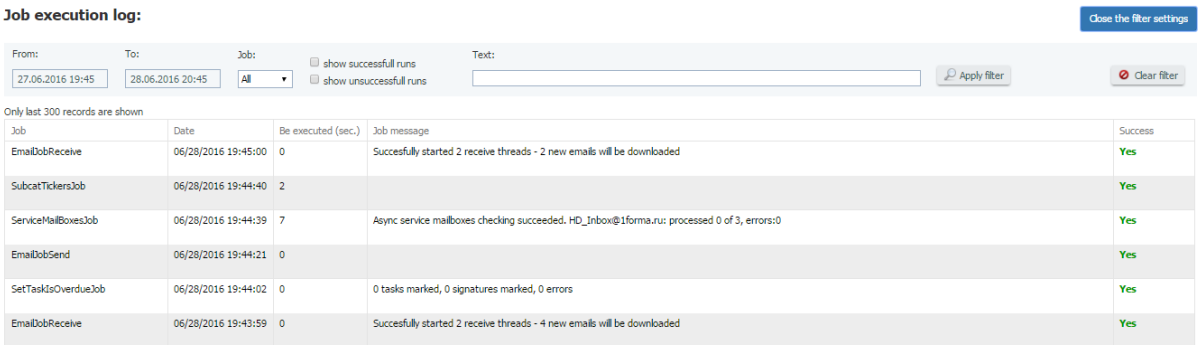
### 13.1.3 Job Log

This log contains information on executed scheduled system jobs.

To navigate to the job log view page, click the Job Log link on the home page or choose the corresponding item in Miscellaneous — Logs and Statistics.




The page that opens displays scheduled system jobs and provides options for selection by parameters.




**Selection parameters:**

| Name | Description |
|---|---|
| From | Display entries created on this date and time or later |
| To | Display entries created on this date and time or earlier |
| Job | Display entries related to the specified job only |
| Show Successful | Display entries for successfully executed jobs only |
| Show Failed | Display entries for failed jobs only |
| Text | Display entries that contain the specified text |

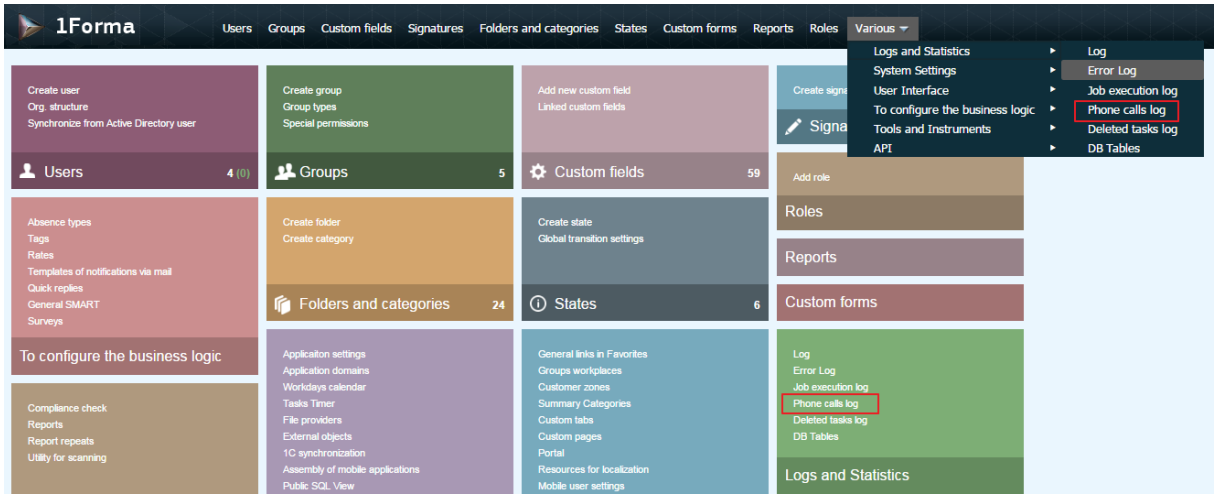
filters the log by selected parameters.

Clear filter displays all log entries.

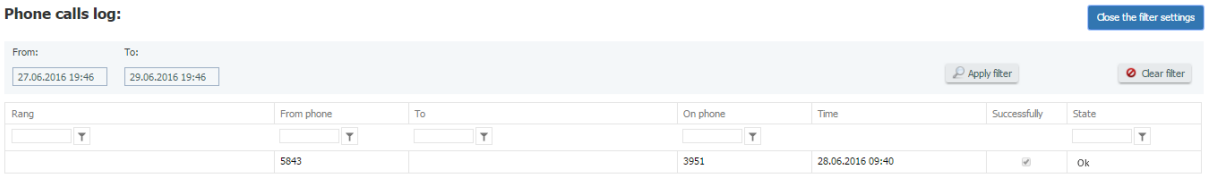
## 13.1.4 Phone Call Log

This log contains information on missed phone calls (applicable for mobile apps).

To navigate to the job log view page, click the Phone Call Log link on the home page or choose the corresponding item in Miscellaneous — Logs and Statistics.



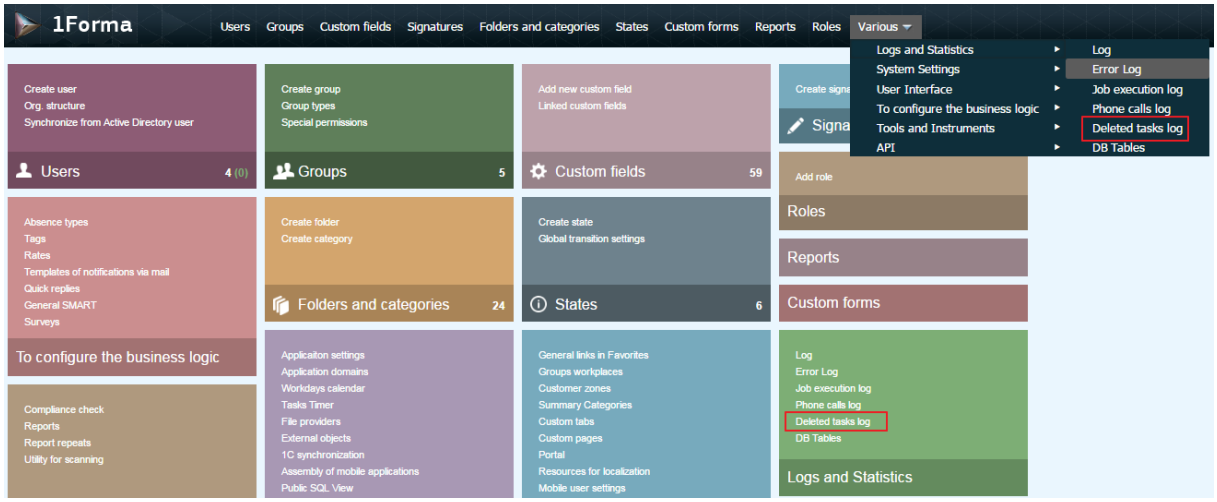

The page that opens displays missed calls and supports selection by period.



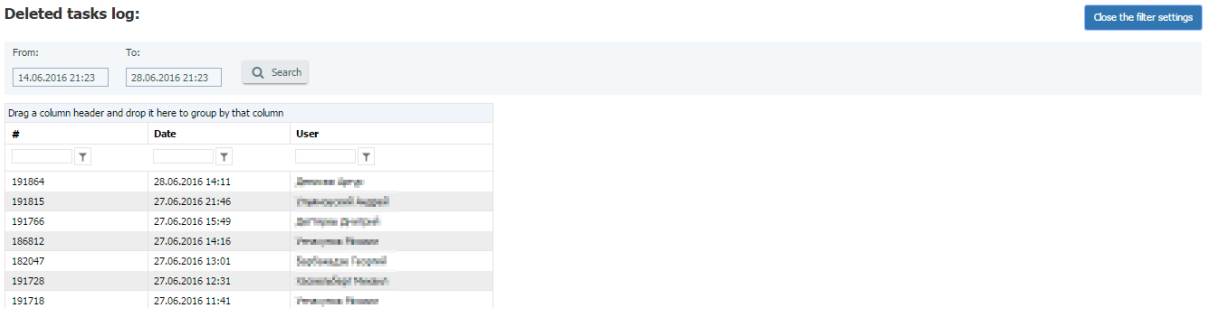

## 13.1.5 Deleted Tasks Log

This log contains information on deleted tasks.

To navigate to job log view page, click the Deleted Tasks Log link on the home page or choose the corresponding item in Miscellaneous — Logs and Statistics.

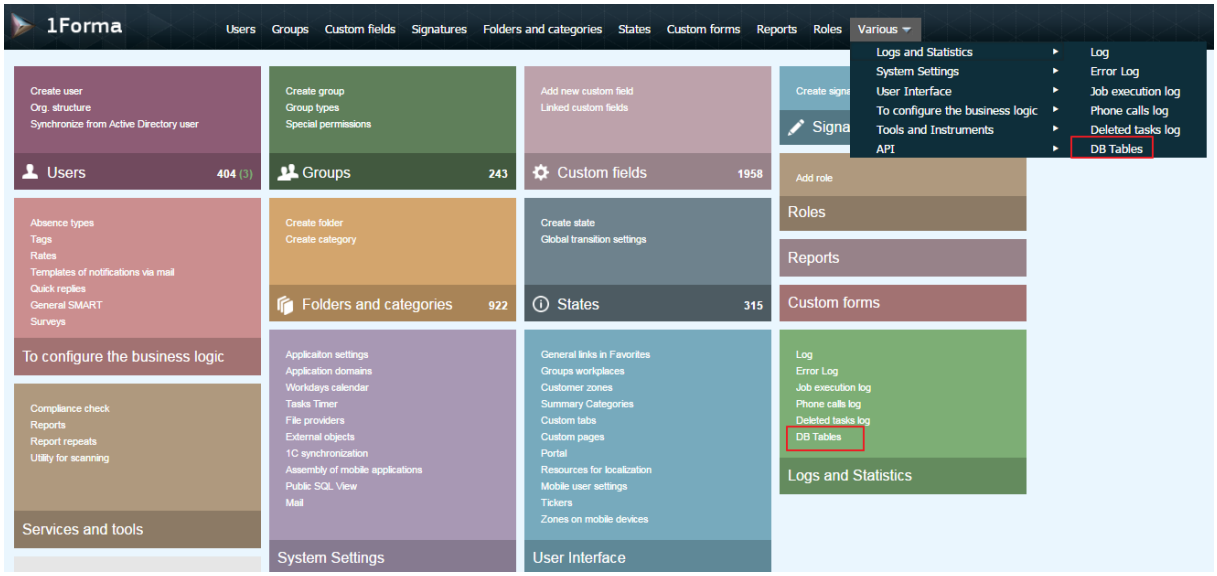



The page that opens displays deleted tasks with options for selection by period and sorting by task ID, date deleted, or deleted by user.




## 13.1.6 Database Tables

To navigate to the database table list view page, click the DB Tables link on the home page or choose the corresponding item in Miscellaneous — Logs and Statistics.




A list of all database tables opens.

Таблицы БД

| Name | Rows | Reserved Size | Data Size | Index Size | Unused Size |
|---|---|---|---|---|---|
| __CommentTemplate | 2 | 32 KB | 24 KB | 8 KB | 0 KB |
| __CommentTypes | 12 | 16 KB | 8 KB | 8 KB | 0 KB |
| __ExtParamNumeratorGlobal | 0 | 0 KB | 0 KB | 0 KB | 0 KB |
| __ExtParamProvider | 0 | 0 KB | 0 KB | 0 KB | 0 KB |
| __ManHours | 1 220 | 200 KB | 128 KB | 16 KB | 56 KB |
| __Powers | 11 | 16 KB | 8 KB | 8 KB | 0 KB |
| __SPConnector_ExtParamChanged | 0 | 0 KB | 0 KB | 0 KB | 0 KB |
| __SQLInbox | 0 | 0 KB | 0 KB | 0 KB | 0 KB |
| __TaskReport | 0 | 0 KB | 0 KB | 0 KB | 0 KB |
| __TaskReportInSubcat | 0 | 0 KB | 0 KB | 0 KB | 0 KB |
| __TimePeriodUserProfile | 11 | 16 KB | 8 KB | 8 KB | 0 KB |
| __Tmp_Subcategories | 72 | 32 KB | 24 KB | 8 KB | 0 KB |
| __UsersLastOnline | 11 | 24 KB | 16 KB | 8 KB | 0 KB |
| AbsenceTypes | 4 | 16 KB | 8 KB | 8 KB | 0 KB |
| ActionLog | 27 382 | 4 360 KB | 4 200 KB | 16 KB | 144 KB |
| Actions | 14 | 32 KB | 8 KB | 24 KB | 0 KB |
| ActionsPacks | 0 | 0 KB | 0 KB | 0 KB | 0 KB |
| ADGroupSyncMasks | 0 | 0 KB | 0 KB | 0 KB | 0 KB |
| ADPropertyMapping | 5 | 16 KB | 8 KB | 8 KB | 0 KB |
| Categories | 45 | 16 KB | 8 KB | 8 KB | 0 KB |
| CommentColor | 47 | 16 KB | 8 KB | 8 KB | 0 KB |
| CommentRecipients | 10 392 | 7 064 KB | 1 960 KB | 3 728 KB | 1 376 KB |
| CommentRecipientsArchive | 251 681 | 16 592 KB | 12 712 KB | 3 712 KB | 168 KB |
| Comments | 116 176 | 41 648 KB | 32 280 KB | 9 056 KB | 312 KB |
| CommentVideos | 320 | 9 456 KB | 9 264 KB | 16 KB | 176 KB |
| Customers | 13 | 16 KB | 8 KB | 8 KB | 0 KB |
| CustomTaskUsedAsEpBlocks | 11 | 16 KB | 8 KB | 8 KB | 0 KB |

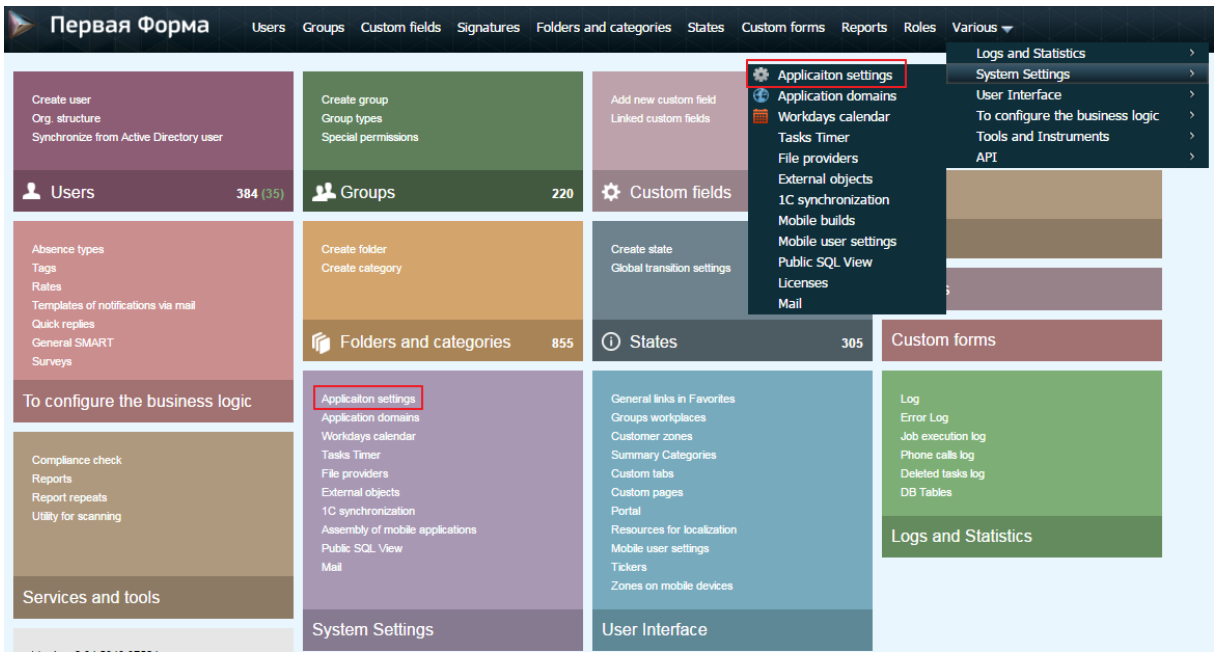
| Name | Description |
|---|---|
| Name | Table name |
| Rows | Number of table rows |
| Reserved Size | Disk space reserved for the table on the server |
| Data Size | Used disk space |
| Index Size | Disk space used for indexes |
| Unused Size | Unused disk space |

## 13.2 System Settings

Uploaded file providers
External objects
1C synchronization
Mobile application builds
Mobile user settings
Released SQL Views
Licenses
Email

### 13.2.1 General application settings

To navigate to the global application settings page, click the General Application Settings link on the home page or choose the corresponding item in Miscellaneous — System Settings.




System settings open.

**IMPORTANT:** To apply changes, an application pool restart may be required..

Applicaiton settings | Save

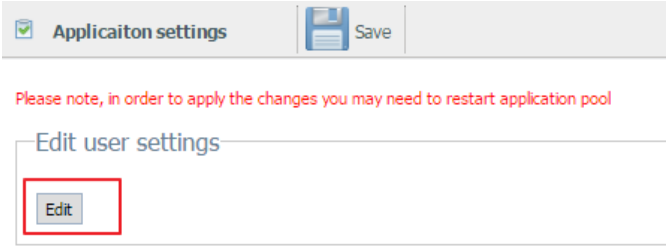
Please note, in order to apply the changes you may need to restart application pool

Edit user settings

Edit

| | |
|---|---|
| Phone | |
| Address | |
| Email | |
| Blog | |
| Outlook Web Access Url | |
| Download OWA Integration Package | |
| Application URL | http://1F-WEB/ |
| System path to application | http://1F-WEB/ |
| Application External URL | http://1F-WEB/ |
| Application path for invitations | |
| Default mail sender | admin@admin |
| Default mail sender name | TaskCenter |
| Web service settings | http://SQL2016/tcwebservice.asmx;;; |
| SharePoint settings | |
| Use Office Web aps for editing document via brwser | ☐ |
| Use Office Web Apps for editing documents in browser | |
| Server for files info in Office Web Apps | |
| Type zone | External |
| Path to discovery xml | |
| Lifetime token (sec.) | |
| Enable WebDAV | ☐ |
| Action on click on MS Office file | download file |
| Enable invitations | ☐ |
| letter sender | ○ To send letters on behalf of a system box<br>◉ To send letters on behalf of users |
| Default zone | default |
| Domain | ... |
| Given domain is a forest root domain | ☐ |
| AD login | |
| AD password | ••••• |
| AD synchronization | ☐ |
| User data | |
| Group names | |
| New groups | |
| User membership | |
| Group nesting | |
| Create users from AD | ☐ |
| Save AD logins as Domain\Nick | ☐ |
| Masks to filter AD groups to be created | |

Click Edit to navigate to editing user settings:




The following parameters are maintained in the general application settings:

| Name | Description |
|---|---|
| Phone Number | Company phone number |
| Address | Company mailing address |
| Email | Company email address |
| Blog | Link to company blog |
| Application Path | Fully qualified URL |
| System Application Path | Internal server URL used by the application |
| Download OWA Integration Package | Link for downloading archived package required for integration with Outlook Web Access web service |
| External Application Path | Fully qualified external URL (used to generate links in emails) |
| Application Path for Invitations | Application URL for invitations |
| Default Email Sender | Email address that is used by default for sending emails |
| Default Email Sender Name | Sender name for emails from default email address |
| Web Service Settings | System web service settings. **These can be maintained by the developer's staff only!** |
| SharePoint Settings | This line contains the following values separated with a semicolon (;):<br><br><Sharepoint server URL>;<owner user name used for system actions, such as creating folders, granting permissions, etc.)>;<owner user password>;<server domain name>;<Sharepoint version>;<document library name for uploading documents> |
| Use Office Web Apps for Viewing Documents in Browser | If the flag is set, Office Web Apps are used to view documents in the browser |
| Use Office Web Apps for Editing Documents in Browser | If the flag is set, Office Web Apps are used to edit documents in the browser |

| Name | Description |
|---|---|
| Server for Receiving Files from Office Web Apps | Server URL in format "http://web_apps" |
| Zone Type | Zone for 1Forma server connection to Web Apps. Both external and internal zones are supported. For available zones, see Discovery.xml. An external zone is commonly used for Web publishing, while an internal zone is used for Intranet. |
| Discovery.xml Path | Path to Discovery.xml file (used for Web Apps settings). The path is specified relative to the application folder. |
| Token Lifetime (seconds) | Web Apps time-out for requesting a file with the security token generated on opening |
| Use WebDAV | If the flag is set, WebDAV is used to view and edit documents. |
| File Action on Click | Select one of the actions:<br>• download,<br>• view in web UI (Web Apps)<br>• edit in desktop application (WebDAV). |
| Enable Invitations | (Not used) |
| Do Not Override Email Sender | If the flag is set, in emails generated by 1Forma, senders are specified according to the Default Email Sender parameter value. |
| Send System Emails from Mailbox | Send system emails from the built-in 1Forma email client |
| System Email Account | Select an email account configured in the built-in 1Forma email client that will be used for sending system emails. |
| **Settings from web.config** | |
| Default Requestor | Requestor whose settings are displayed in the administrative UI by default |
| Domain | Domain name used in the company |
| Domain Is Forest Root | The system addresses Active Directory forest root |
| AD Login | Login for Active Directory access. It can be blank if the user who logs in can access all Active Directory fields |
| AD Password | Password for Active Directory access (see above) |
| AD Synchronization | If the flag is set, 1Forma user information is synchronized daily to Active Directory data. AD data is treated as a template. For configuration, open the Users directory and click Parameters for Synchronizing Users to Active Directory. |
| User Data | If the flag is set, the system synchronizes user |

| Name | Description |
|---|---|
| | data configured in Users -> Parameters for Synchronizing Users to Active Directory |
| Group Names | If the flag is set, the system synchronizes group names from the 1Forma system to Active Directory data |
| Create New Groups | If the flag is set, new groups from AD are automatically created in the 1Forma system |
| User Membership | If the flag is set, the 1Forma system synchronizes group members from 1Forma system to Active Directory data |
| Group Hierarchy | If the flag is set, the 1Forma system synchronizes group dependencies from the 1Forma system to Active Directory data |
| Create Users from AD | If the flag is set, the 1Forma system automatically creates new users when their data are added to AD<br><br>**IMPORTANT:** Automated AD authentication in Mozilla Firefox<br>Unlike Internet Explorer and Chrome, Firefox does not automatically authenticate AD, but this process can be configured for specific sites. To do this:<br>• In address bar, type "about:config" and press Enter<br>• Locate the "network.automatic-ntlm-auth.trusted-uris" key and populate its value with sites that require domain authentication separated by commas. |
| Save Logins as Domain\Nick for AD Synchronization | If the flag is set, user names include domain values.<br>This function is useful for users with identical names from different domains. |
| Mask for Groups from AD | All Active Directory groups that correspond to the entered masks are automatically created in the system. |
| Maximum Updates for AD Synchronization | If an Active Directory data synchronization job contains more updated lines than specified, the update is not executed. You can trigger this job manually to execute the update. |
| AD Password Complexity Message | Message text for low password complexity. If the parameter is specified, this message is issued to users for the corresponding error (from AD). |
| DB Logical and Physical Integrity Check | |
| | |

| Name | Description |
|---|---|
| Email Enabled | If the flag is set, the 1Forma system supports emails. |
| SMTP Server | IP name and address of SMTP server |
| Use SSL in SMTP | If the flag is set, SSL encryption is used for emails. |
| SMTP Timeout | SMTP server timeout |
| Email Errors | If the flag is set, error messages are emailed to the address specified in Email Address for Errors. |
| Write Errors to DB | If the flag is set, error messages are saved to DB table ExceptionsLog. |
| Write Errors to Server Event Log | If the flag is set, errors can be viewed in the application server Event Viewer |
| Email Address for Errors | Email address used to automatically send reports on errors that occur in the system. To enter several emails, separate them with a semicolon (;). |
| Email For Signatures Without Acceptor | Email address used to automatically send signature requests without acceptors. To enter several emails, separate them with a semicolon (;). |
| Direct Links to Tasks in Emails | If the flag is set, email links open the main task form only without system UI. |
| Add Task Number to Email Subject | If the flag is set, the task number is specified in the email subject for service email accounts. Email reply is added as a comment to the specified task. |
| Add Comment Number to Email Subject | If the flag is set, the task number and comment number are specified in the email subject for service email accounts. Email reply is added as a comment to the specified task and as a response to the original comment. |
| Populate Email Subject | If the flag is not set, emails have a "New email" subject. |
| Maximum Total Attachment Size (in KB) | Maximum allowed total attachment size for an email. If attachments exceed this size, they are not sent. Attachments are allowed if the Receive Files in Emails as Attachments Not Links setting is enabled in the user settings. |
| Adopt AD Password | If the flag is set, the Active Directory password is used for login.<br>The setting applies only if Forms authentication is enabled (*the web.config file section <system.web> contains <authentication mode="Forms"> </ authentication>*). |

| Name | Description |
|---|---|
| | If the flag is set, the system first checks the corresponding value in the web.config file. If none is found, the value is taken from this setting. |
| Use Wowza | Wowza media server settings |
| Apple Push Notification Settings | Apple Push notification settings |
| Remember Password Enabled in Mobile Apps | If the flag is set, mobile applications can remember a password. |
| Application Name | Application name displayed as page name in the browser |
| Application Short Name | Application short name |
| Logo Path | Link to corporate logo displayed in the top left corner of UI |
| Logo Path for Authorization Page | If this parameter has a value and the file exists on the server, this path is used for the authorization page logo. If the path is incorrect, the default logo is displayed. |
| Authorization Type | Authorization type for mobile application users. Possible values are:<br>• One-Step Authorization — user password is requested log into the mobile application<br>• Two-Step Authorization — during authorization, an SMS or Push notification is sent with a code that is entered and validated by the 1Forma server to log into the mobile application. **IMPORTANT**: Configure SMS service(see below). |
| | |
| Show Trade Secret Image | The Trade Secret information block is displayed in the bottom right corner. |
| Trade Secret Image Can Be Hidden | Users can hide the Trade Secret block. |
| Trade Secret Text | Block text contains a trade secret notification. |
| Enable Mobile Phone Verification | If the flag is set, SMS messages can be sent to verified mobile phones only. |
| SMS Service | SMS messaging settings. |
| Enable Push Notification Logging | If the flag is set, the system log is used to register Push notifications. |
| Manager Determination Mode | In By Roles mode, a user with manager role for the group the assignee belongs to is determined. In By Org. Structure mode, the manager is determined from the org. structure hierarchy. |
| Administrator Group | Users in this group can access the administrative |

| Name | Description |
|---|---|
| | UI. |
| Non-Existent User Redirect Page | This parameter applies to Windows authentication only. |
| Prohibited Extensions | A list of file extensions (separated with a comma, semicolon or space). Files with these extensions cannot be uploaded to the system. |
| View Detailed Errors | Names of users who can view detailed error descriptions. To enter several user names, separate them with a semicolon (;). |
| Error Log History Retention Period (in days) | Retention period for error log entries. By default, it is 14 days. |
| No. of Entries Uploaded in Table View | Maximum number of entries uploaded in table view |
| Login Attempts Before Blocking | After the specified number of unsuccessful login attempts, the user account is blocked. To unblock, contact the administrator. |
| Login Attempts Before Captcha | After the specified number of unsuccessful login attempts, the user account is blocked. To unblock, type the displayed characters (captcha). |
| Login Attempts from IP Before Captcha | After the specified number of failed login attempts from a single IP address, this address is blocked. To unblock, type the displayed characters (captcha). |
| Invitation Validity (in days) | Validity of invitations to external users |
| Inactive Time (in minutes) | A user who has been inactive for the specified time period is considered absent (offline) and displayed as inactive on UI (not highlighted in green). |
| Refresh Interval in Offline (in minutes) | Refresh interval for the number of unread messages when a user is offline, but has an open browser page with the 1Forma system |
| Minimum No. of Comment Receivers Without Send Confirmation | If the number of comment receivers exceed the specified number, the system requests send confirmation from the user. In addition, if the number of subscribers is equal to or less than the specified value, all subscribers are entered in the To field. |
| Enable Simplified Chat Control | If the flag is set, users can access chats. If the flag is not set, the Communication (Chat) link is not displayed on the system home page. |
| Voice Notification for Unread Comments | If the flag is set, users receive voice notifications of unread comments. |
| Save Signature Hash to File | If the flag is set, the system creates a complete electronic copy of a category object when a user |

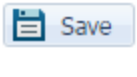
| Name | Description |
|---|---|
| | signs this object. Next, this copy is compared to the current object status to notify of data changes. |
| Subscribe Managers to Overdue Tasks | If the flag is set, users who are assigned manager roles for the assignee's group are subscribed to overdue tasks. |
| Notify Category Responsible of Permission Changes | If the flag is set, category responsible persons are notified of any changes to category permissions. |
| Allow Users to Edit Own Positions in Profile | If the flag is set, users can edit their own positions in profiles. |
| Use Captcha | If the flag is set, the system uses captcha during authorization. |
| Cut Off Middle Name from Full Name for Display | If the flag is set, the system displays only the user's last and first names without any middle name. |
| Resources Instead Of Text | If the flag is set, on specific pages of the administrative UI, instead of text entry fields, a selection from existing localized resources is displayed for multi-language support. |
| Disable Reminder Text Entry | If the flag is set, reminder text cannot be edited in task time settings. |
| Require Due Date Change On Task Completion | This is useful for categories that do not allow route progress for overdue tasks. In these categories, the reasons for the overdue task are requested from a user when the overdue task is completed. If the flag is not set, the Due Date field value is not changed. If the flag is set, a new value is entered into the Due Date field by the user. |
| Use CRM | If the flag is set, the CRM module is used by the system (requires setup). |
| Request Geolocation After Failed Login Only | If the flag is set, geolocation is requested only after a failed login instead of after each first application login. |
| License Key | An electronic license key that is used to calculate available user licenses |
| | |
| Employee Rate Category | Select a category used for employee time accounting. |
| Hourly Rate CF | This custom field stores the hourly rate for employee efforts. |
| Personal Tasks Category | Select a category that will be used to create personal tasks for users. |
| Error Category | Select a category that will be used to log system errors. |

| Name | Description |
|---|---|
| Feedback Category | Select a category that will be used to store user feedback. |
| Anonymous Tasks Category | Select a category that will be used to create tasks on behalf of an anonymous user. This is used to automate processes. |
| Anonymous User | User on whose behalf anonymous tasks are created |
| Task Manager | User for creating objects with the Create from Task Manager setting |
| Notification Robot | User on whose behalf missed call notification emails are sent (*"You had a call from 0000 to 9999 (line busy) "*) |
| User Signature | Select signature requested if the Requires Acceptance of All Tasks for Transitions to Status with Requestor Acceptance setting is enabled. **IMPORTANT**: This value is populated automatically when the system is installed. Changes are not recommended. |
| Default Group for New Users | Select a group that will be assigned by default to new users with the Employee setting enabled. |
| Group for External Users | Select a group that will be assigned by default to external system users (with the Employee setting disabled). |
| Reply-To Address | Internal email address used by default to send user replies (these emails are displayed as task comments) |
| Reply-To Address Name | Displayed name of internal reply-to address |
| External Reply-To Address | External email address used by default to send user replies (these emails are displayed as task comments) |
| External Reply-To Address Name | Displayed name of internal reply-to address |
| Notification Email Address | Internal email address used by default to send read notifications for emailed comments (these comments are displayed as read in a task) |
| Notification Email Address Name | Displayed name of internal read notification address |
| External Notification Email Address | External email address that is used by default to send read notifications for emailed comments (these comments are displayed as read in a task) |
| External Notification Email Address Name | Displayed name of external read notification address |
| Start Page | Start screen loaded at first user login/ *For example, PortalGrid.aspx?PortalID=1, where* |

| Name | Description |
|---|---|
| | *PortalID is the ID of the required portal* |
| Working Hours (From ... To) | Working hours that are considered in Calendar view.<br>If From is bigger than To, an error message is issued, and the form is not saved until correct values are entered. |
| Daily Working Hours | Number of working hours in a day.<br>This is used to calculate efforts. |
| Reset Password Code Validity (in days) | Validity of the code sent for password reset in days |
| Show Refresh Request for Application Update | If the flag is set, the following notification is displayed: "Application has been updated. Please refresh the page" |
| Show Email in Personal Folders | If the flag is set, you can enable Outlook integration in the Personal directory and view emails directly from the 1Forma system. |
| Show Stock Requests in Personal Folders | If the flag is set, the Stock Requests folder is displayed in the Personal directory. |
| Check Equivalent Characters | Configure characters that are considered equal for searching. |
| Notify of New Application Version | If the flag is set, users are notified of a new 1Forma application version. |
| Mandatory User Profile Fields (Date of Birth, Russian Alias, Email, External Email) | If the flags are set, Date of Birth, Russian Alias, Email and External Email are mandatory for user profiles. |
| Show Extensions as Links | If the flag is set, extension numbers are displayed as links. If telephony integration (SIP) is configured, these links are used to make internal calls directly from the 1Forma system. |
| Show Skype Address as Link | If the flag is set, Skype addresses are displayed as links. If Skype is installed, you can click the link to make a call or start chatting (according to Skype settings). |
| **Social functions** | |
| Close Voting for Completed Tasks | If the flag is set, completed tasks do not support assessments. |
| Close Voting In (days) | After the specified number of days after creating a task, the voting log is deleted, and task assessment becomes unavailable (this setting is useful for categories where the status does not change for a long time, such as announcement categories). A value of 0 means the setting is disabled. |

| Name | Description |
|---|---|
| | |
| To Control Search | Select a search mode (by last name, first name, alias, position, etc.) |
| **Exchange integration** | |
| EWS Address | Exchange Web Service address |
| Unsynchronized Event Categories | A list of Exchange categories excluded from synchronization. Separate values with a semicolon (;).<br>For details click here |
| Synchronize Calendar to Exchange | If the flag is set, the 1Forma calendar is synchronized to the Exchange Server calendar.<br>For new users this setting is enabled automatically. |
| Start From | Start date for 1Forma application synchronization to the Exchange Server calendar |
| Required No. of Characters for Contact Search | An automated search is executed only if the number of entered characters is equal to or greater than the specified value |
| Log Smart Expression/Filter Runtime | If the flag is set, Smart expression/filter runtime is logged (useful for debugging SMARTs, comparing different task variants, and estimating sever load). |
| Start Smart Queries and Filters with ReadUncommitted Transactions | If the flag is set, the final string is determined by the last successful transaction when several parallel transactions are attempting to change the same table row. Thus, commands for changing the same rows started in parallel are actually executed sequentially. Transactions for reading only are not blocked. |
| Maximum Size for Image Compression Request (in MB) | If a value is specified and an image that exceeds the specified size is uploaded to the system, the user is requested to compress the image. |
| Default Dynamic Signature Type | The tab that is opened by default for a dynamic signature request.<br>Possible values are: official signatures, personal signatures, not selected (dash). |
| **Overdue tasks that generate notifications** | |
| Acceptor | |
| Tasks with Your Signature Overdue | If the flag is set, notifications are generated for tasks with an overdue user signature. |
| Overdue Tasks with Your Signature Requested | If the flag is set, notifications are generated for overdue tasks with user signature requested. |
| Manager | |

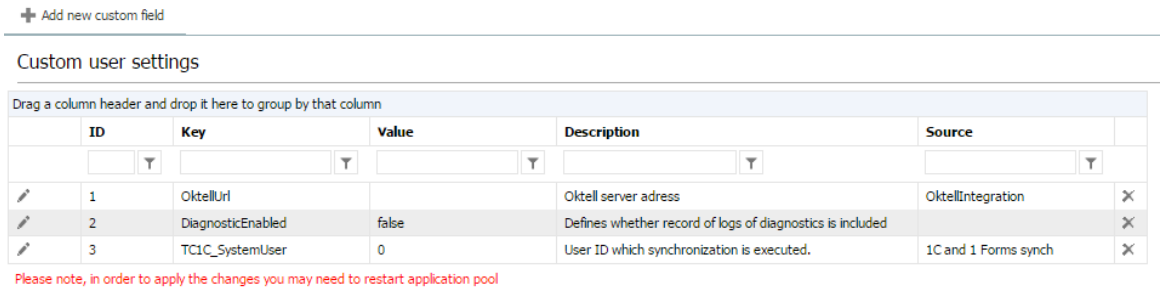
| Name | Description |
|---|---|
| Overdue Tasks of Subordinates | If the flag is set, notifications are generated for overdue tasks of subordinate of this employee. |
| Overdue Tasks for Categories in Your Group Responsibility Area | If the flag is set, notifications are generated for overdue tasks with a user in the responsible group. |
| Overdue Step Tasks for Categories in Your Group Responsibility Area | If the flag is set, notifications are generated for overdue step tasks with a user in the responsible group. |
| Inactive Tasks for Categories in Your Group Responsibility Area | If the flag is set, notifications are generated for inactive tasks with a user in the responsible group. |
| Assignee | |
| Overdue Tasks | If the flag is set, notifications are generated for overdue tasks with the user as assignee. |
| Tasks with Overdue Task Start | If the flag is set, notifications are generated for tasks with overdue task start and the user as assignee. |
| Overdue Step Tasks | If the flag is set, notifications are generated for overdue step tasks with the user as assignee. |
| Requestor | |
| Overdue Tasks Requested By You | If the flag is set, notifications are generated for overdue tasks with the user as requestor. |
| Tasks with Overdue Task Start Requested By You | If the flag is set, notifications are generated for overdue step tasks with the user as requestor. |
| Questions | |
| Questions Waiting for Your Reply | If the flag is set, notifications are generated for tasks with unanswered questions. |
| Editing user settings | Click Edit to open the window for editing user settings. |

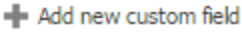
**IMPORTANT**: To save changes, click 

! **To apply changes, application pool restart is required**.

#### 13.2.1.1 Editing User Settings

Navigate to user settings to open the list of keys with their values, descriptions and sources (an incomplete list is shown in the screenshot below):

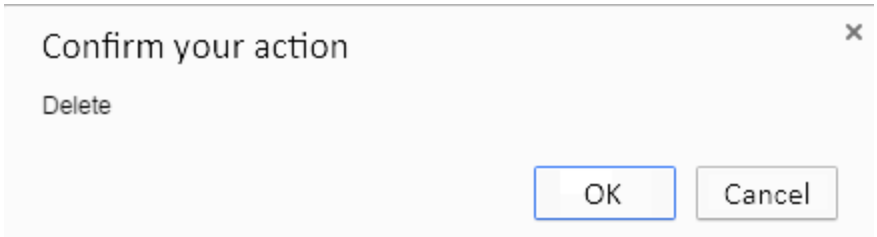



To add a new key, click the Add Custom Field button 

.

To change an entry, click the icon at the beginning of the corresponding row. Make the required changes and click at the beginning of the line to save changes or to cancel.

To delete a key, click the icon at the end of the corresponding row. A confirmation window opens.




Click OK to confirm signature deletion. If deletion has been chosen by mistake, click Cancel.

**IMPORTANT**: IIS service restart may be required to apply changes.

#### 13.2.1.2 Configuring SMS Notifications

1Forma supports the following SMS services:

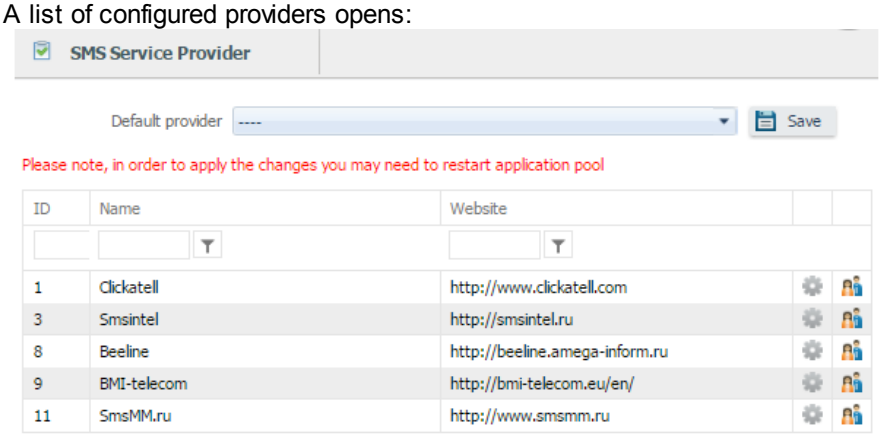
- Beeline (recommended for companies working in Russia; active service site: http://beeline.amega-inform.ru).
- Clickatell (recommended for companies working either abroad or globally; active service site: http://www.clickatell.com).
- SmsMM.ru (recommended for companies working in Russia; active service site: http://www.smsmm.ru). **IMPORTANT:** Before using SmsMM.ru service, go to the provider's site to verify your account.
- SMSintel (recommended for companies working in Russia; active service site: http://www.smsintel.ru).

Future enhancement of SMS broadcast services is planned.

To configure SMS notifications, select a service provider for concluding a service agreement (SMS Service parameter in general application settings). After selecting SMS service, you can maintain some

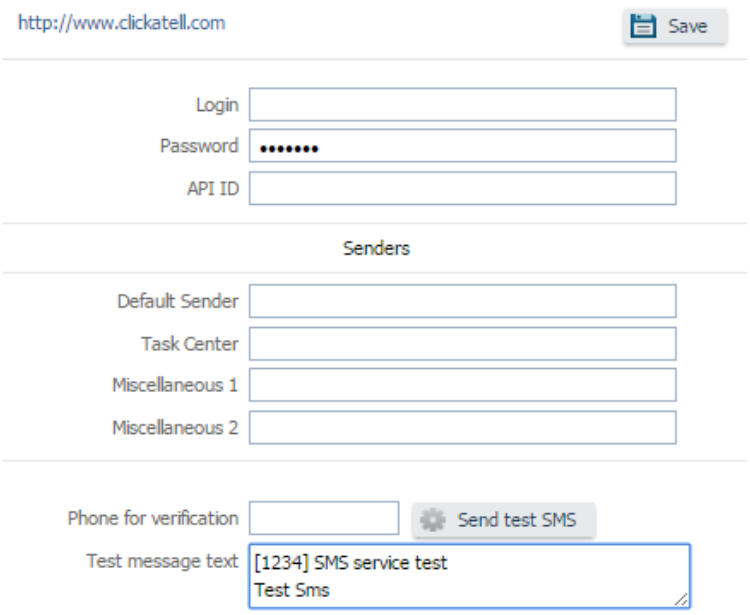
SMS broadcasting settings. To do this, click the Settings SMS Service parameter button.

A list of configured providers opens:




To define user groups that will use this provider, click the icon in the corresponding row and select the required groups.

To edit provider settings, click . This opens the window for editing custom fields:




Login, password and sometimes service address are assigned by the SMS provider.

In the **Senders** block enter SMS sender address that will be displayed to a recipient. SMS providers support sender configuration to send SMS with sender names instead of numbers. SMS from the 1Forma system are signed as *"1Forma"*. If the SMS system is called from external modules or from DB, SMS notifications are signed as *"By Default"*. Each sender name ("By Default" and "1Forma") is explicitly registered on the SMS provider's website. **IMPORTANT**: Most providers are legally required to register each sender name on their sites.

*"Custom 1" and "Custom 2" senders are currently not used.*

The system supports test SMS messages for checking the configuration. Enter recipient phone number,

test text message, and click Send test SMS.

To save settings, click Save.

**Custom fields**

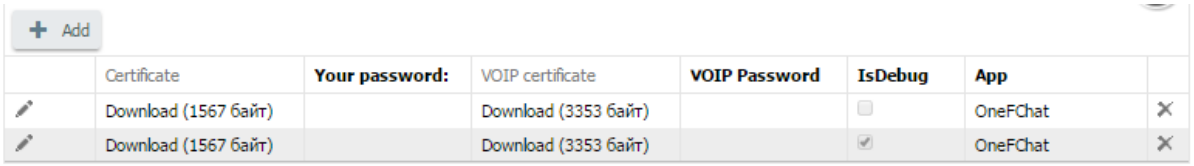
When configuring SmsMM.ru in the web.config file, enhance the <system.net> tag as follows:

```
<settings>
        <httpWebRequest useUnsafeHeaderParsing="true"/>
</settings>
```

### 13.2.1.3 Apple Push Notification Settings

Push technology is a way of distributing Web content that transfers data from server to client based on a number of parameters maintained by the customer. This technology is mainly used for subscriptions. To configure Push notifications for Apple devices, click the Settings button in Apple Push Notification Settings of general application settings.

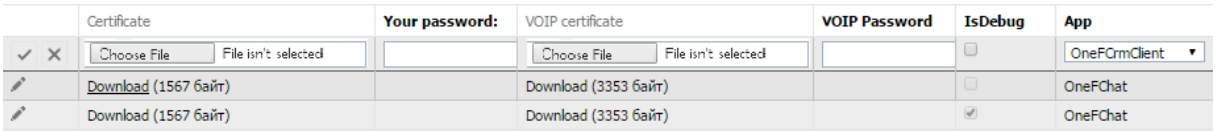
In the window that opens you can add, delete or edit entries with the following fields: certificate, password, debug mode, application.



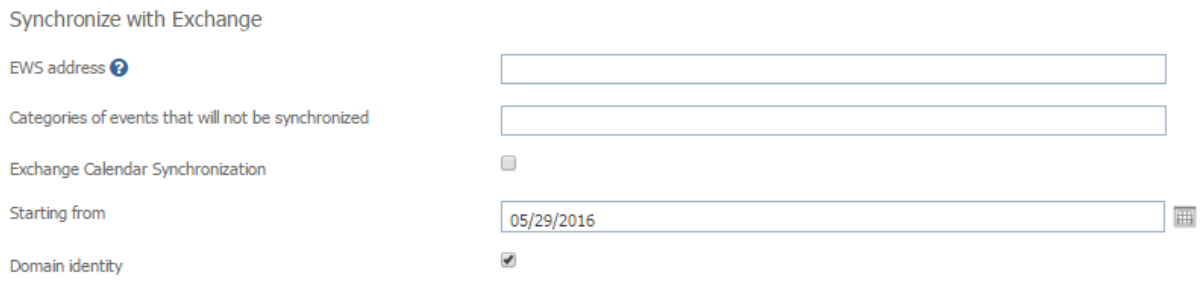

To edit values, click at the beginning of the required row. Make the required changes and click at the beginning of the line to save changes or to cancel.

To delete an entry, click the icon at the end of the corresponding row.

To add a new entry, click the Add button. In the window that appears select the application, click Choose File and select a certificate file for this application, enter password, and if required set the Debug Mode flag. To save input, click at the beginning of the row. The new entry appears in the summary list. To cancel, click .



#### 13.2.1.4 Exchange Server Integration Setup




After maintaining the setting, ensure that the system user that will be used to synchronize calendars between the application and Exchange Server has system administrator permissions (i.e., is added to the group of Administrators).

Please note that this domain user must have Editor permissions for calendars of all users and for the Deleted folder.

To grant Editor permissions, execute the following command in the Exchange Server console:

*For all*

*$allsrv=get-mailbox -ResultSize unlimited | where { $_.PrimarySMTPAddress.Domain -eq 'domain.local' }*

*$allsrv | ForEach {add-MailboxFolderPermission $_":\drafts" -User user@domain.local -AccessRights Owner -Confirm:$False }*

*$allsrv | ForEach {add-MailboxFolderPermission $_":\Deleted Items" -User user@domain.local -AccessRights Owner -Confirm:$False }*

*$allsrv | ForEach {add-MailboxFolderPermission $_":\calendar" -User user@domain.local -AccessRights Owner -Confirm:$False }*

*For a single user*

*add-MailboxFolderPermission -identity USERNAME@domain.local":\Deleted Items" -user user@domain.local -AccessRights Owner -Confirm:$False*

For details on the Exchange Server console, go to the official Microsoft website by clicking this link.

Please familiarize yourself with the application configuration file web.config (it is usually located in C:\inetpub\wwwroot\1Forma).

Find the <system.web> block, and after <controls> tags locate the line *<identity impersonate="true" userName="DOMAIN\USER_NAME" password="PASSWORD" />*

The file looks approximately as follows:

```
<system.web>
  <pages validateRequest="false" enableViewState="true" enableSessionState="true"
enableEventValidation="false" clientIDMode="AutoID">
    <controls>
        ...
    </controls>
  </pages>
  <identity impersonate="true" userName="DOMAIN\USER_NAME" password="PASSWORD" />
```

After making changes to the configuration file, all application transactions are executed under this user. To avoid errors, ensure that the user has all administrator permissions for the 1Forma server.

Changes to user calendars are made under the account of the 1Forma web application pool. Exchange notifies an organizer of any changes to their meeting made from other accounts. To bypass these notifications, you can:

1. Allow the 1Forma web application pool account to send emails under any Exchange user. This is done via powershell with the command:

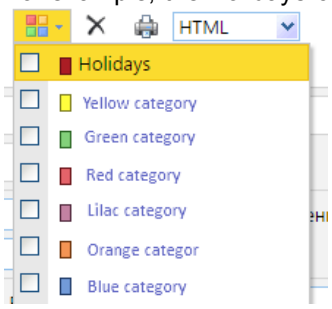
   *Get-MailboxDatabase | Add-ADPermission -user "<1Forma pool account>" -ExtendedRights Send-As -InheritanceType All*

2. Configure transport rules to filter these emails.

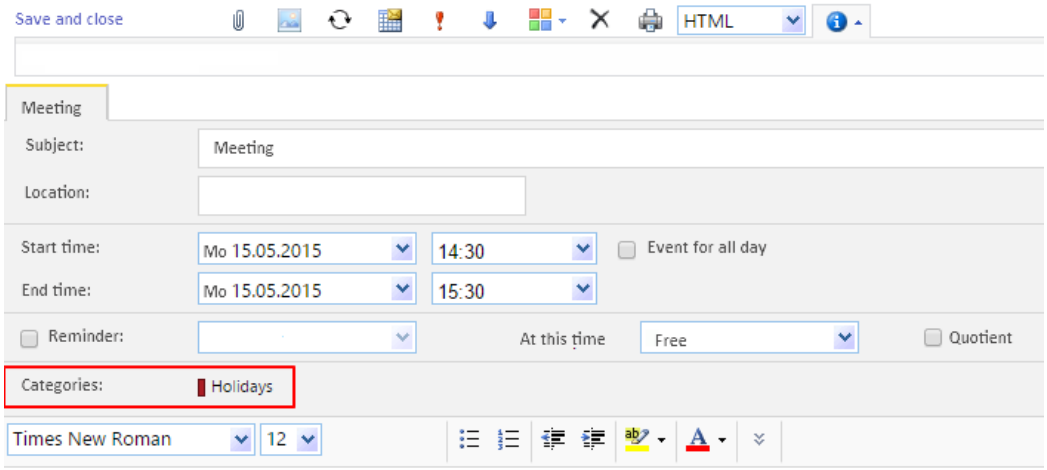
### 13.2.1.5 Outlook Calendar Synchronization Options

Single Outlook event categories can be excluded from 1Forma calendar synchronization.

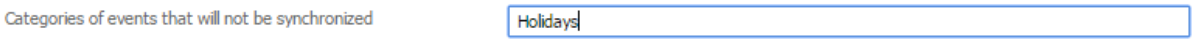
For example, the Holidays category is defined in Outlook:




This category contains some events:




To prevent synchronization of these events with the 1Forma calendar, enter this category name in 1Forma general settings, Non-Synchronized Event Categories parameter:

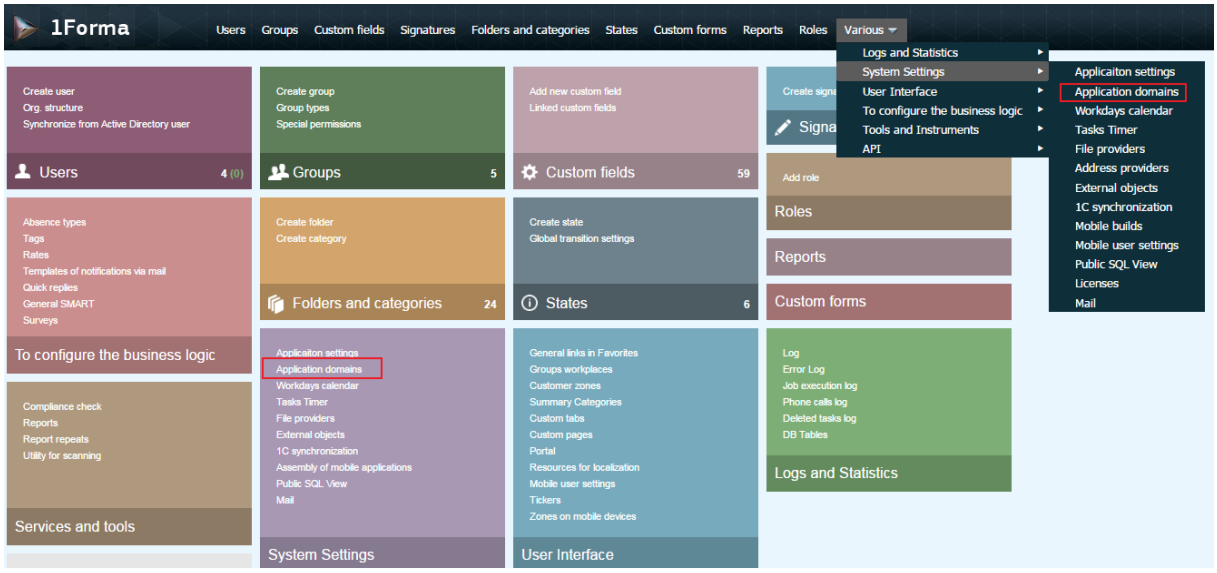



To enter several categories, separate them with a semicolon (;).

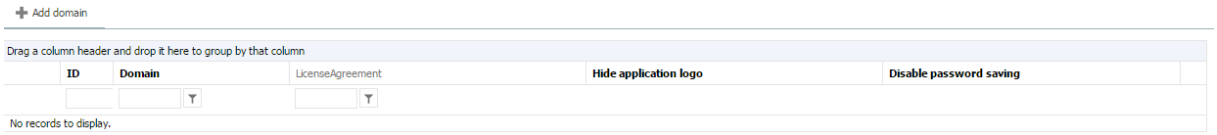
## 13.2.2 Application Domains

Some companies require system access restrictions by specific application domains in order to ensure information security. Application domain is defined for user groups, and group members can access the 1Forma system from the assigned domain only.

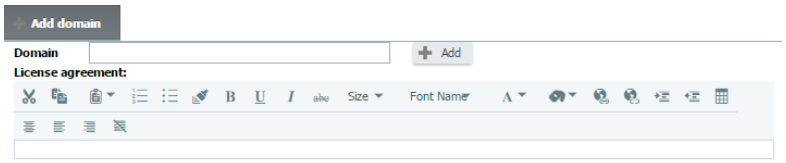
To navigate to the application domain view page, click the Application Domains link on the home page or choose Miscellaneous -> System Settings -> Application Domains.

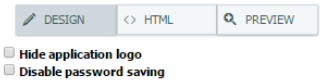



The table that opens contains all domains that are available to users.




To **add a new domain**, click the Add Domain button. In the window that appears enter the new domain name, license agreement description, and if required, enable the Hide Application Logo and Do Not Remember Password flags. Then click Add. The new domain appears in the summary list. A new domain ID is assigned automatically.

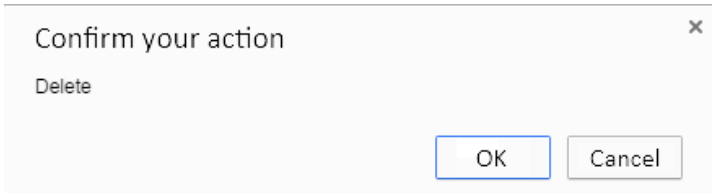



If **Do Not Remember Password** is enabled for a domain, users cannot save their user name and password on login to 1Forma and must re-enter them each time they access the system. Passwords are not remembered in any browsers supported by 1Forma regardless of browser settings for remembering passwords. The Do Not Remember Password setting is not retroactive: if this setting has not been active for a domain and users have saved their passwords in browsers, the setting applies to new users only or after browser data is cleaned up.

To **change domain URL**, click the icon at the beginning of the corresponding row. Make the required changes and click at the beginning of the line to save changes or to cancel.

To **delete a domain**, click the icon at the end of the corresponding row. A confirmation window opens.

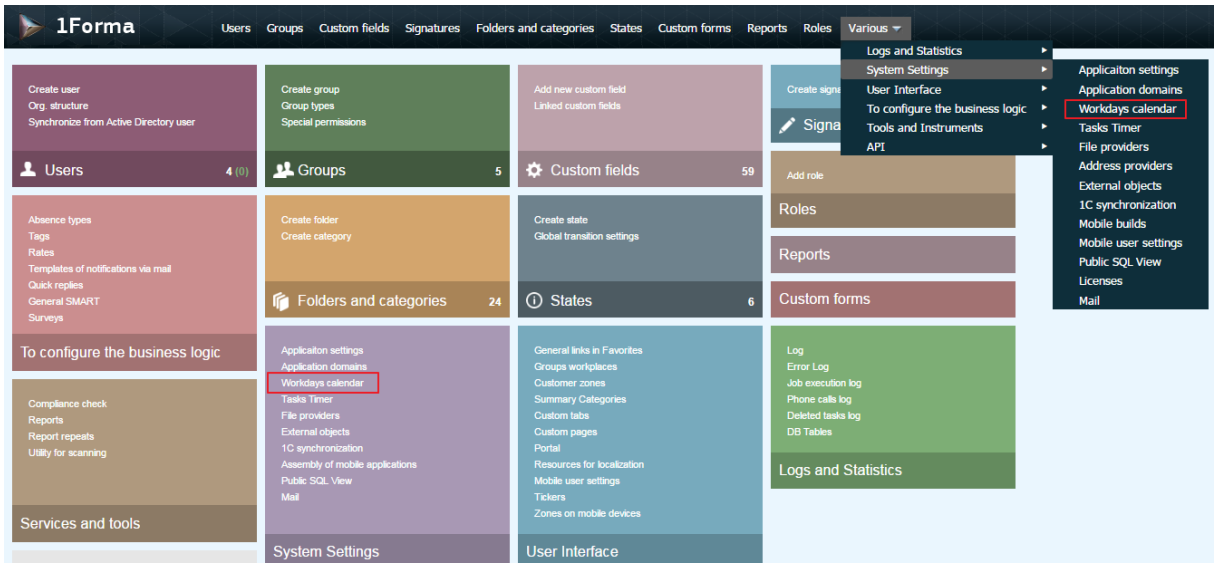



Click OK to confirm signature deletion. If deletion has been chosen by mistake, click Cancel.

### 13.2.3 Factory calendar

A factory calendar is used to define working and non-working times in a year. It is required for correct processing of time values for category objects, including automated effort calculation, blocking due dates that fall on non-working days and holidays, etc.

To navigate to the factory calendar management page, click the Factory Calendar link on the home page or choose the corresponding menu item in Miscellaneous — System Settings.




The factory calendar for the current year opens.

Workdays calendar

2016

2016 January - 2016 December

| January | | | | | | | |
|---|---|---|---|---|---|---|---|
| | S | M | T | W | T | F | S |
| 1 | 27 | 28 | 29 | 30 | 31 | 1 | 2 |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 3 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 4 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 5 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 6 | 31 | 1 | 2 | 3 | 4 | 5 | 6 |

| February | | | | | | | |
|---|---|---|---|---|---|---|---|
| | S | M | T | W | T | F | S |
| 6 | 31 | 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 8 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 9 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 10 | 28 | 29 | 1 | 2 | 3 | 4 | 5 |
| 11 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |

| March | | | | | | | |
|---|---|---|---|---|---|---|---|
| | S | M | T | W | T | F | S |
| 10 | 28 | 29 | 1 | 2 | 3 | 4 | 5 |
| 11 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 13 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 14 | 27 | 28 | 29 | 30 | 31 | 1 | 2 |
| 15 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

| April | | | | | | | |
|---|---|---|---|---|---|---|---|
| | S | M | T | W | T | F | S |
| 14 | 27 | 28 | 29 | 30 | 31 | 1 | 2 |
| 15 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 16 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 18 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 19 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| May | | | | | | | |
|---|---|---|---|---|---|---|---|
| | S | M | T | W | T | F | S |
| 18 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 19 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 20 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 21 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 23 | 29 | 30 | 31 | 1 | 2 | 3 | 4 |

| June | | | | | | | |
|---|---|---|---|---|---|---|---|
| | S | M | T | W | T | F | S |
| 23 | 29 | 30 | 31 | 1 | 2 | 3 | 4 |
| 24 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 25 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 26 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 27 | 26 | 27 | 28 | 29 | 30 | 1 | 2 |
| 28 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

| July | | | | | | | |
|---|---|---|---|---|---|---|---|
| | S | M | T | W | T | F | S |
| 27 | 26 | 27 | 28 | 29 | 30 | 1 | 2 |
| 28 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 29 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 30 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 31 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 32 | 31 | 1 | 2 | 3 | 4 | 5 | 6 |

| August | | | | | | | |
|---|---|---|---|---|---|---|---|
| | S | M | T | W | T | F | S |
| 32 | 31 | 1 | 2 | 3 | 4 | 5 | 6 |
| 33 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 34 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 35 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 36 | 28 | 29 | 30 | 31 | 1 | 2 | 3 |
| 37 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

| September | | | | | | | |
|---|---|---|---|---|---|---|---|
| | S | M | T | W | T | F | S |
| 36 | 28 | 29 | 30 | 31 | 1 | 2 | 3 |
| 37 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 38 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 39 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 40 | 25 | 26 | 27 | 28 | 29 | 30 | 1 |
| 41 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

| October | | | | | | | |
|---|---|---|---|---|---|---|---|
| | S | M | T | W | T | F | S |
| 40 | 25 | 26 | 27 | 28 | 29 | 30 | 1 |
| 41 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 42 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 43 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 44 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 45 | 30 | 31 | 1 | 2 | 3 | 4 | 5 |

| November | | | | | | | |
|---|---|---|---|---|---|---|---|
| | S | M | T | W | T | F | S |
| 45 | 30 | 31 | 1 | 2 | 3 | 4 | 5 |
| 46 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 47 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 48 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 49 | 27 | 28 | 29 | 30 | 1 | 2 | 3 |
| 50 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

| December | | | | | | | |
|---|---|---|---|---|---|---|---|
| | S | M | T | W | T | F | S |
| 49 | 27 | 28 | 29 | 30 | 1 | 2 | 3 |
| 50 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 51 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 52 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 53 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

**Dates in blue** are non-working days or holidays.

**Dates that are not highlighted** are working days.

**The year** is selected in the drop-down list above the calendar.

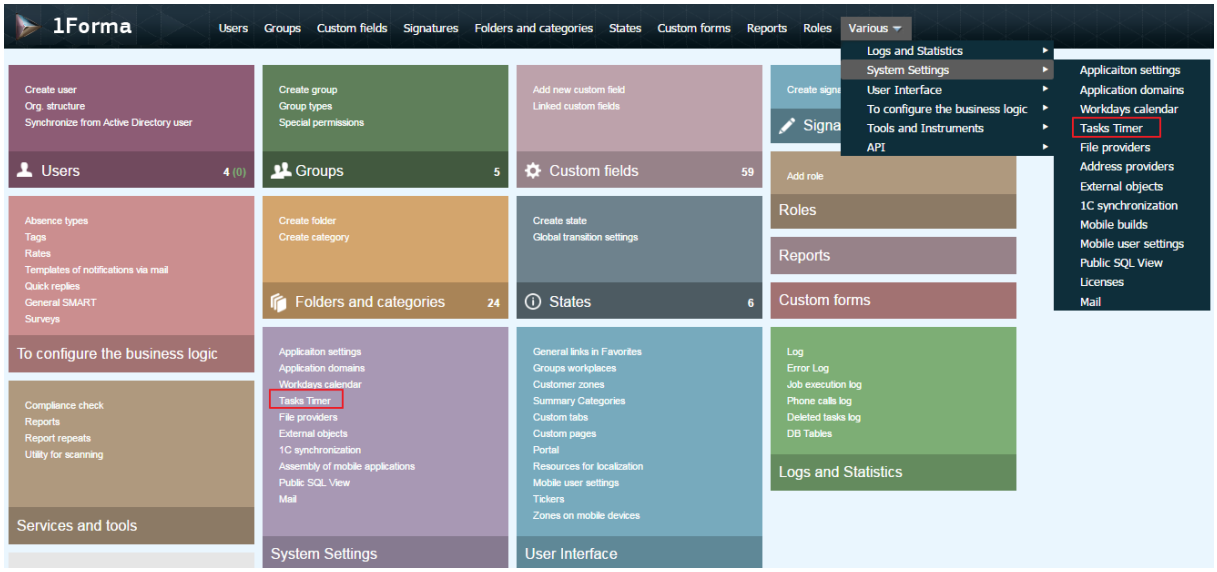
Left-click a day to mark it as working/non-working. The date will be selected/deselected. To save changes, click 

.

## 13.2.4 Job timer

The system is delivered with regulated transactions that are executed not as responses to user actions, but according to the specific schedule. These actions are called "Jobs" and are managed in the Task Timer directory.

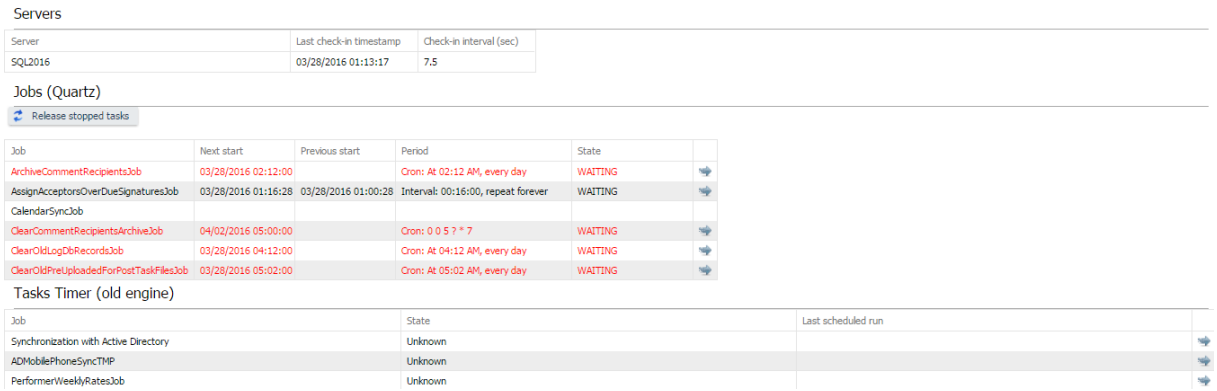
To navigate to the job list view page, click the Task Timer link on the home page or choose the corresponding item in Miscellaneous — System Settings.




A window with the complete list of jobs opens. The first table displays the 1Forma server used to launch jobs.

The second table lists the jobs executed on the Quartz open platform and specifies next execution time, last execution time and current job status.

The third table lists the jobs developed on the legacy platform and specified last scheduled execution time and status.



Servers

| Server | Last check-in timestamp | Check-in interval (sec) |
|---|---|---|
| SQL2016 | 03/28/2016 01:13:17 | 7.5 |

Jobs (Quartz)

Release stopped tasks

| Job | Next start | Previous start | Period | State |
|---|---|---|---|---|
| ArchiveCommentRecipientsJob | 03/28/2016 02:12:00 | | Cron: At 02:12 AM, every day | WAITING |
| AssignAcceptorsOverDueSignaturesJob | 03/28/2016 01:16:28 | 03/28/2016 01:00:28 | Interval: 00:16:00, repeat forever | WAITING |
| CalendarSyncJob | | | | |
| ClearCommentRecipientsArchiveJob | 04/02/2016 05:00:00 | | Cron: 0 0 5 ? * 7 | WAITING |
| ClearOldLogDbRecordsJob | 03/28/2016 04:12:00 | | Cron: At 04:12 AM, every day | WAITING |
| ClearOldPreUploadedForPostTaskFilesJob | 03/28/2016 05:02:00 | | Cron: At 05:02 AM, every day | WAITING |

Tasks Timer (old engine)

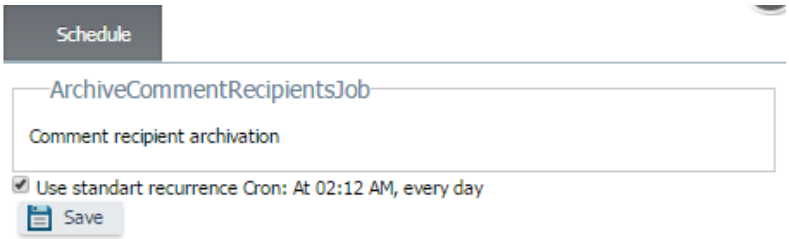
| Job | State | Last scheduled run |
|---|---|---|
| Synchronization with Active Directory | Unknown | |
| ADMobilePhoneSyncTMP | Unknown | |
| PerformerWeeklyRatesJob | Unknown | |

**Job status values:**

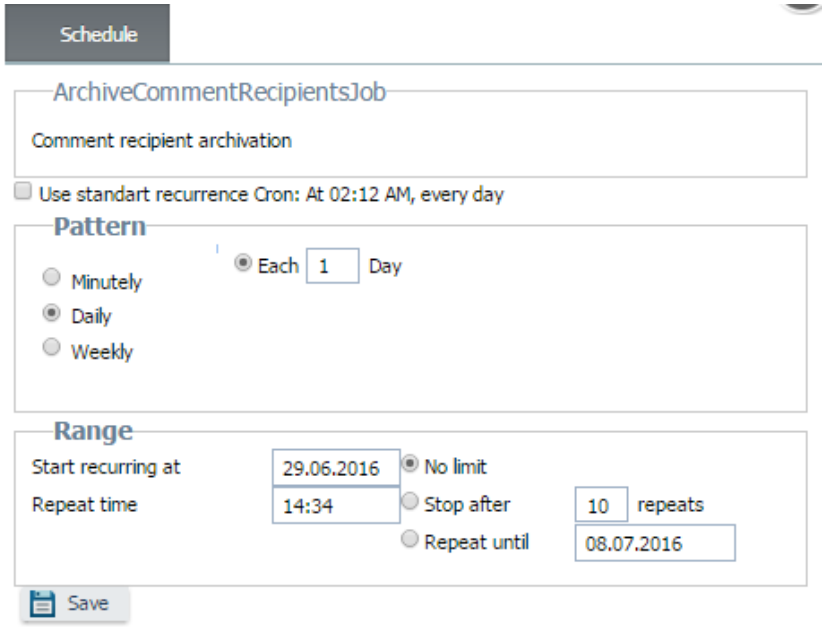
- WAITING — waiting for the next execution (standard job status)
- ACQUIRED — preparation for execution (the next executed job)
- BLOCKED — the job is being launched
- EXECUTING — the job is being executed. After execution, the job is returned to WAITING status or deleted if no more executions are scheduled
- PAUSED — the job is paused until the schedule runs Resume.

To **edit the job schedule**, click the corresponding link and in the window that opens clear the Use Built-

in Schedule flag.




A window for schedule configuration opens:




To save new settings, click  .

Jobs can be **launched manually** as non-scheduled (for example, see "Active Directory Synchronization"). To launch a job, click the  icon at the end of the corresponding row.

#### 13.2.4.1 Job Descriptions

| Job | Description |
|---|---|
| **Jobs (Quartz)** | |
| ArchiveCommentRecipientsJob | Archives comment recipients (for optimizing database table size and faster comments feed generation) |
| AssignAcceptorsOverDueSignaturesJob | *<not currently used>* Assign additional signature acceptors |
| CleanMailBoxesJob | Marks emails older than n days for deletion (email account setting Store Emails) |
| ClearCommentRecipientsArchiveJob | Clears archived comment recipients more than one year old |

| Job | Description |
|---|---|
| ClearOldLogDbRecordsJob | Clears error log and calls log |
| ClearOldPreUploadedForPostTaskFiles Job | Clears temporary files when a task is created |
| CreatePeriodicTasksJob | Creates recurring tasks |
| ClosingUserSession | Closes open user sessions once a day at night (in user activity log UsersActivityInSystem) |
| Delete1CLogExceptWeekJob | Clears 1C synchronization log |
| DeleteOldJobLogJob | Clears Quartz job log |
| DeleteOldLockTokensJob | Clears WebDav file blocks |
| DeleteOldPushTokensJob | Clears outdated push tokens for iOS |
| EmailJobPurgeDeleted | Physically deletes emails marked for deletion with completed synchronization (they are stored in the database until deleted from the server to retain information on emails deleted by the user in the synchronization job) |
| EmailJobReceiveSecondary | Receives emails according to the incoming queue generated by EmailJobSyncFolders job. This job attempts to receive emails that generated over 5 errors on receipt (after 5 attempts, the email has still not been received). These emails are no longer processed by EmailJobReceive job to avoid delays in receiving new emails. Instead, they are processed by EmailJobReceiveSecondary job. |
| EmailJobReceive | Receives emails according to the incoming queue generated by EmailJobSyncFolders job. |
| EmailJobSendSecondary | Sends emails by processing the outgoing queue. This job attempts to send emails that generated over 5 errors on sending (after 5 attempts, the email has still not been received). These emails are no longer processed by EmailJobSend job to avoid delays in receiving new emails. Instead, they are processed by EmailJobSendSecondary job. |
| EmailJobSend | Sends emails by processing the outgoing queue. |
| EmailJobSyncDelete | Synchronizes email deletion. Each folder in each email account is synchronized with local data to find emails deleted from the server and emails deleted from the 1Forma email client. Then, these emails are deleted on the other side as well. |
| EmailJobSyncFolders | Synchronizes email account folders by checking for new emails and updating read/unread flags.<br><br>**IMPORTANT**: This job does not receive new emails, but only generates an incoming queue. Emails are downloaded and received by EmailJobReceive job. |

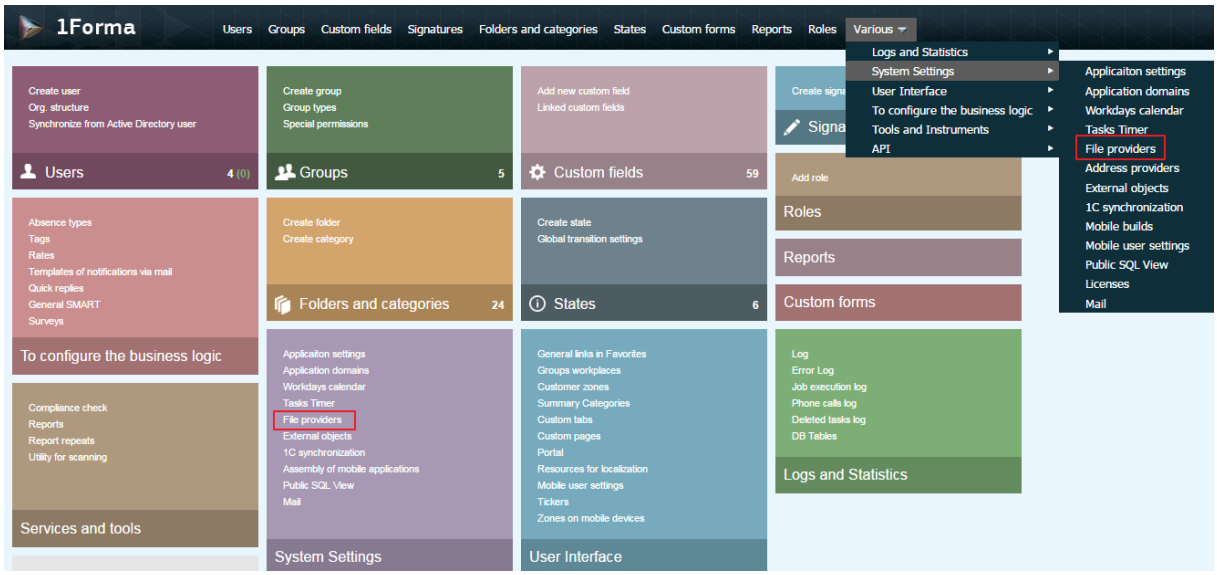
| Job | Description |
|---|---|
| EscalateOverdueSignatures | Escalates overdue signatures |
| EventQueue1CJob | Processes events queue for 1C |
| FireUsersJob | Dismissed users in dismissal queue |
| MarkOldUnredCommentsAsReadJob | Marks old comments as read |
| OverdueCommentsNotificationJob | Adds comments to overdue tasks |
| OverdueNotificationJob | Emails overdue tasks report |
| OverdueStepActionJob | Executes overdue transitions with enabledExecute Transition when Overduesetting |
| PurgeAttachmentsJob | Clears deleted files more than three months old |
| RebuildIndexesJob | Rebuilds fragmented indexes and clears planned request execution cache. By default, this job is deactivated. To activate, specify the database and users for report distributions (if no reports are required, enter systemrobot in user field). |
| SendCommentReadPushJob | Pushes the number of unread comments to mobile devices (for indicator) |
| SendRemindersJob | Email reminders |
| SendTasksSummaryPushJob | Sends push notifications |
| ServiceMailBoxesJob | Checks service email accounts, processes read notification emails and new comment emails *(if a user replies to an email with comment notification, a new comment is created on response and populated with the text of the email sent)* |
| SetTaskIsOverdueJob | Marks tasks past due date as overdue |
| SmartRecurrenceJob | Executes Smart schedules |
| SubcatTickersJob | Updates key figures for the category tree |
| Sync1CUsersJob | Synchronizes users from 1C |
| SyncAbsencesToCalendarSubcatJob | Synchronizes absences |
| SyncOrgStructure1CJob | Synchronizes organization structure from 1C |
| UpdateCoworkersCacheJob | Updates the list of colleagues |
| **Job timer (legacy engine)** | |
| Active Directory Synchronization | Synchronizes 1Forma users to Active Directory catalog |
| ADMobilePhoneSyncTMP | <*This job applies to KSK group only*> Synchronizes phone numbers between 1Forma and Active Directory; executed weekly |
| PerformerWeeklyRatesJob | <*This job applies to KSK group only*> Emails to users requests |

| Job | Description |
|---|---|
| | to assess assignees of the tasks where these users act as requestors; executed weekly |
| ClearOldJobLogRows | Deletes old job logs |
| CalendarSyncJob | Synchronizes the 1Forma calendar to Outlook. Frequencies up to 1 minute can be scheduled |

## 13.2.5 Uploaded file providers

Files uploaded to the 1Forma system and attached to different tasks can be stored in various tables and databases. Configuration variants of such stores are called uploaded file providers.

To navigate to the provider list view page, click the Uploaded File Providers link on the home page or choose the corresponding item in Miscellaneous — System Settings.



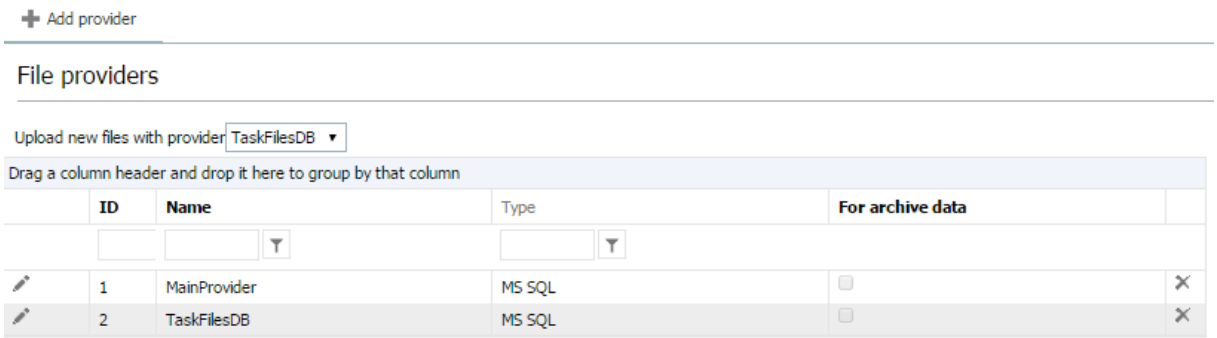

A window with the table of all providers opens.

A provider can be of one of the following types:

- MS SQL
- MS SQL without full text search.

If the For Archived Data flag is set, this provider is not included in the attachment search.

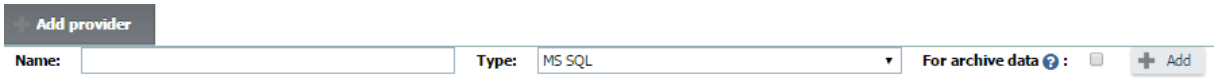
New files are stored via the provider selected in the Attach New Files Via Provider field.




For an MS SQL provider, create a table with an ID field (of type *int*, *identity*), file content (of type *varbinary(max)*), and an optional (non-mandatory) extension field *varchar*).

### 13.2.5.1 Adding a New Provider

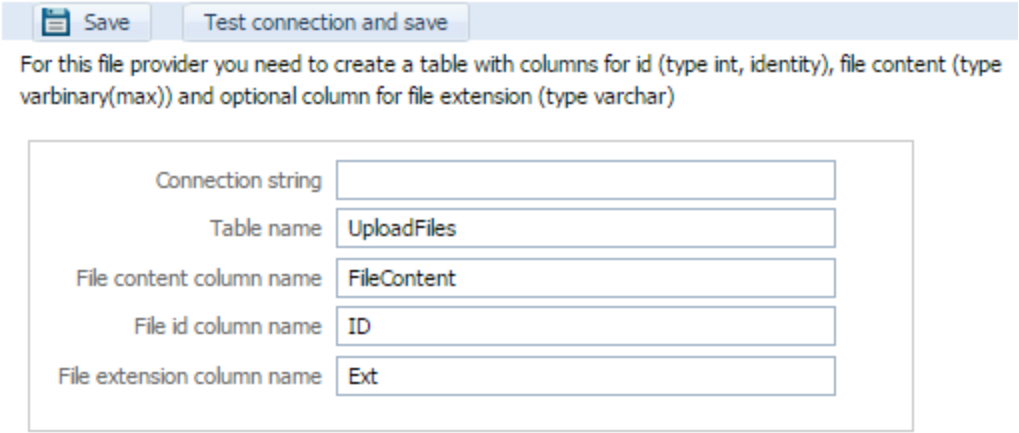
To add a new provider, click Add Provider. In the window that opens, enter the new provider name, select the type, enable For Archived Data setting, and click Add. The new provider appears in the summary list.




### 13.2.5.2 Editing and Deleting a Provider

To edit provider data, click the Make the required changes and click at the beginning of the line to save changes or to cancel.

To maintain provider parameters, double-click the selected line. This opens the window for maintaining custom fields.




| Name | Description |
|---|---|
| Connection String | If the connection string is blank, TCConnectionString from the web.config file is used. |

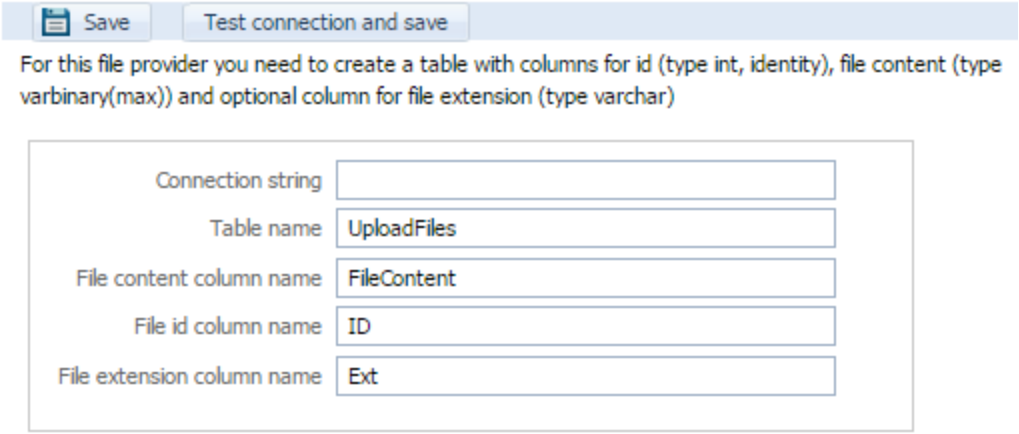
| Name | Description |
|---|---|
| Table Name | Name of the table that stores files. |
| File Content Column Name | Name of the column that stores file contents |
| File ID Column Name | Name of the column that stores file IDs |
| File Extension Column Name | Name of the column that stores file extensions |

To save changes, click Save .

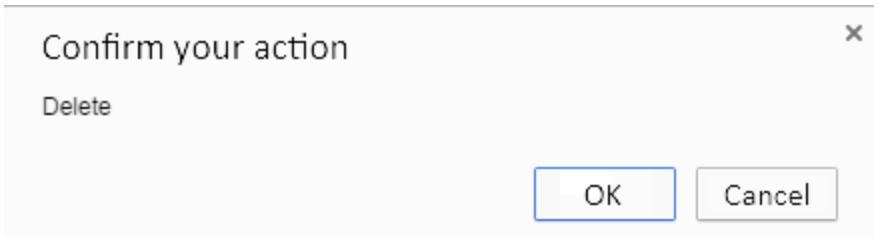
Click the Test connection and save button to test the configured DB connection parameters (Select query is executed).

#### 13.2.5.3 Deleting a Provider

To delete a provider, click the ✕ icon at the end of the corresponding row.




A confirmation window opens.



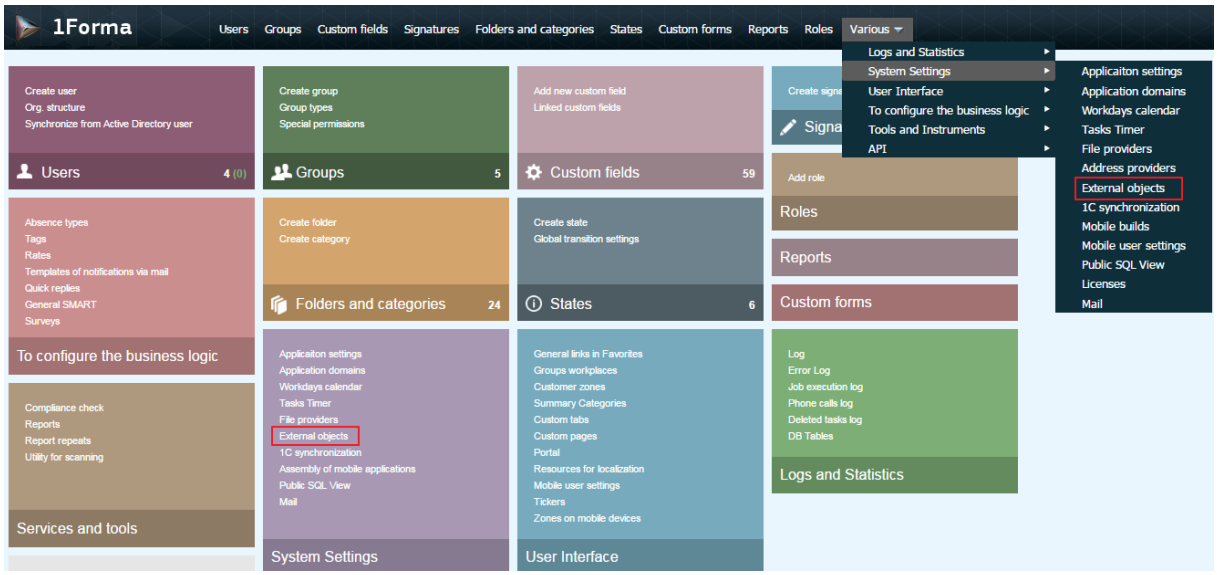

Click OK to confirm deletion. If deletion has been chosen by mistake, click Cancel.

### 13.2.6 External objects

External objects are reports designed outside the 1Forma application environment. These reports are uploaded by users and have configurable restrictions for display permissions and special permissions.

To navigate to the external object list view page, click the External Objects link on the home page or

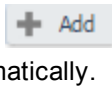
choose the corresponding item in Miscellaneous — System Settings.




A window with the table of all external objects opens.


| Name | Description |
|---|---|
| ID | ID number assigned by GUID service |
| Description | General description of the external object |
| Visible to All | If the flag is set, the external object can be viewed and processed by all users |

### 13.2.6.1 Adding an External Object

To add a new external object, click the Add button. In the window that opens enter the report description, maintain the Visible to All flag, and click  . The new external report appears in the common list. A unique identifier (ID) is assigned automatically.

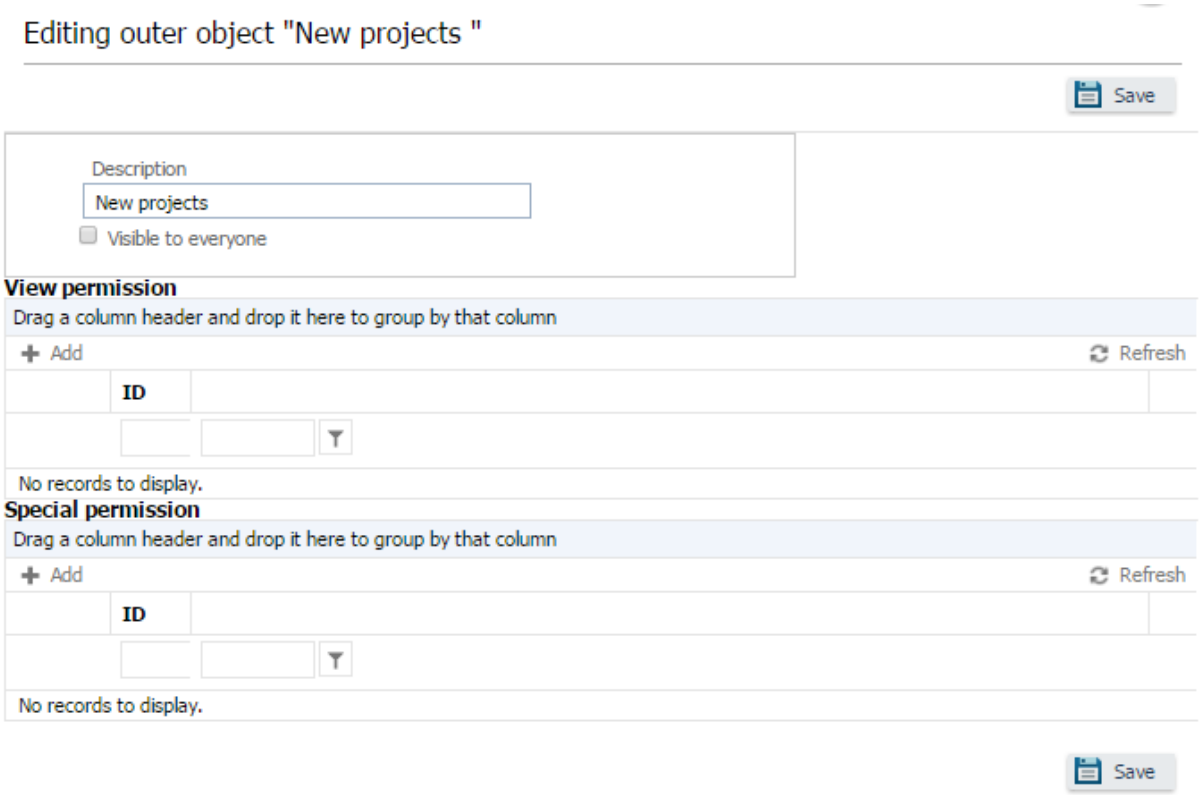
### 13.2.6.2 Editing an External Object

To maintain external object usage parameters, double-click the selected line. A window for maintaining report display and usage permissions opens.

**The Display Permissions** table is used to maintain restrictions for report display permissions.

**The Special Permissions** table is used to maintain special permissions for an external object.

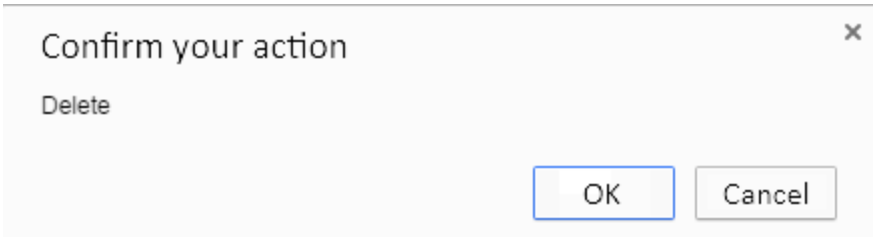
You can add and delete groups in these tables by clicking the corresponding buttons.




### 13.2.6.3 Deleting an External Object

To delete an external object from the list, click the ✕ icon at the end of the corresponding row.


A confirmation window opens.

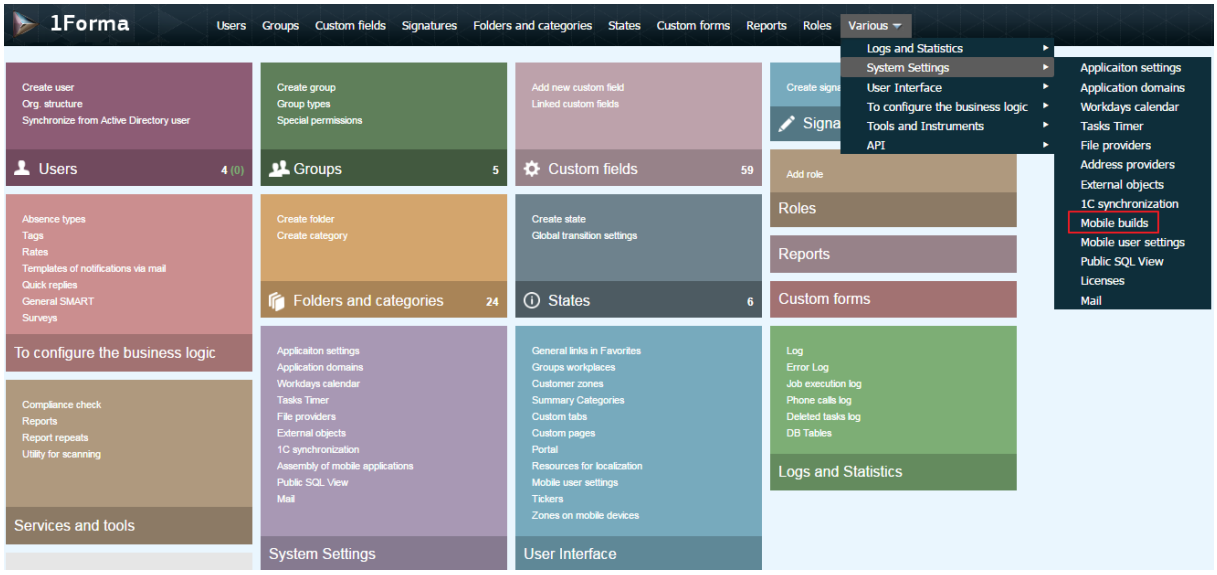



Click OK to confirm signature deletion. If deletion has been chosen by mistake, click Cancel.

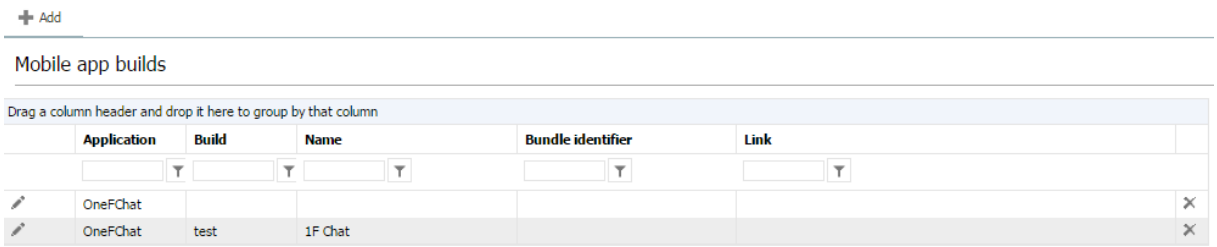
## 13.2.7 Mobile application builds

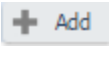
This directory lists various modifications of main mobile applications delivered with 1Forma installation and provides additional download links for these modifications.

To navigate to the directory, click the Mobile Application Builds link on the home page or choose the corresponding item in Miscellaneous — System Settings.




A window with the table of all builds opens.



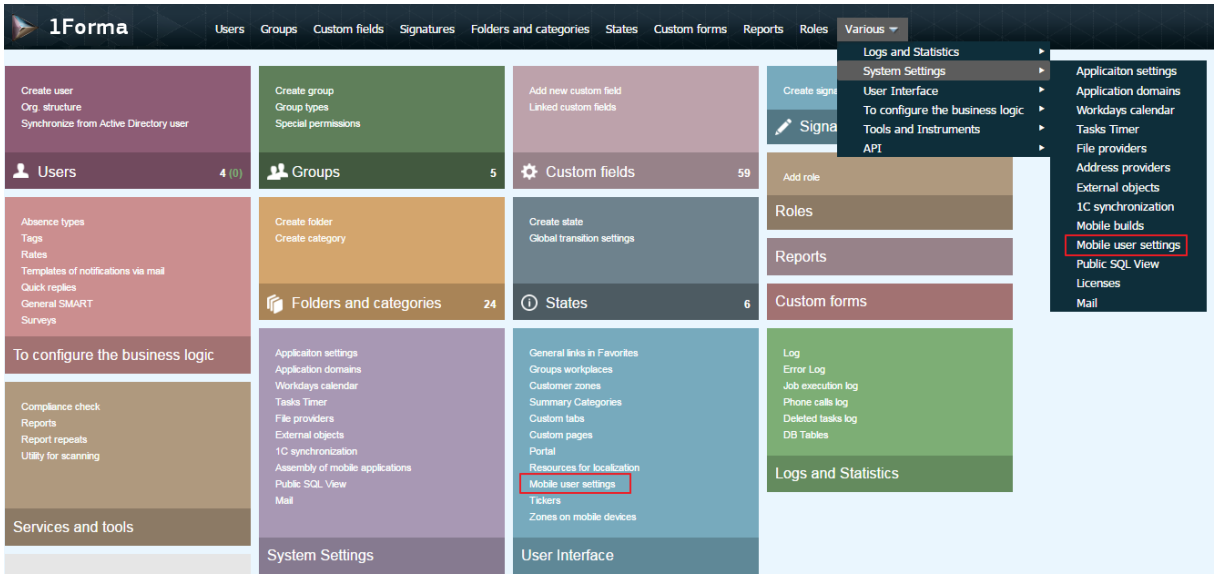

To add a new build, click the Add button. In the window that appears, select or enter the required values and click the 

button on the right:

| Name | Description |
|---|---|
| Application | Application type. Possible values are:<br>• OneFChat is 1Forma thin client.<br>• Android1FChat is used for 1Forma messaging on Android OS.<br>• OneFMail is 1Forma email client.<br>• KSDApp is an application used for Management Round Table. |
| Build | A postfix that contains alphanumerical characters and is used to up- and download different modifications of the same application |
| Name | Free text name assigned to a build |
| Link | Link for downloading the application |

### 13.2.8 Mobile User Settings

To navigate to the directory, click the Mobile User Settings link on the home page or choose the corresponding item in Miscellaneous — System Settings.



Global mobile settings for users of the application.

- [x] To show avatars of users
- [x] To show in an application tape only the comments relating to me
- [ ] To remind of the new message to the following input in the application
- [ ] To hide the text a chat message in the push
- [ ] To hide the text of the comment to the task in the push (except chats)

Notification settings:

| Notifications | To receive a push |
|---|---|
| In chats | always |
| Questions | always |
| By tasks | keep out of the loop |

Tunes of notification: popcorn

Tunes of SIP: Duck

Save

Notification settings have three possible values: Do Not Push, Always, When PC Is Offline.

Enable Push Notifications for Task Comments to configure specific notification types:

Send push messages of the comments of the types (except chats)

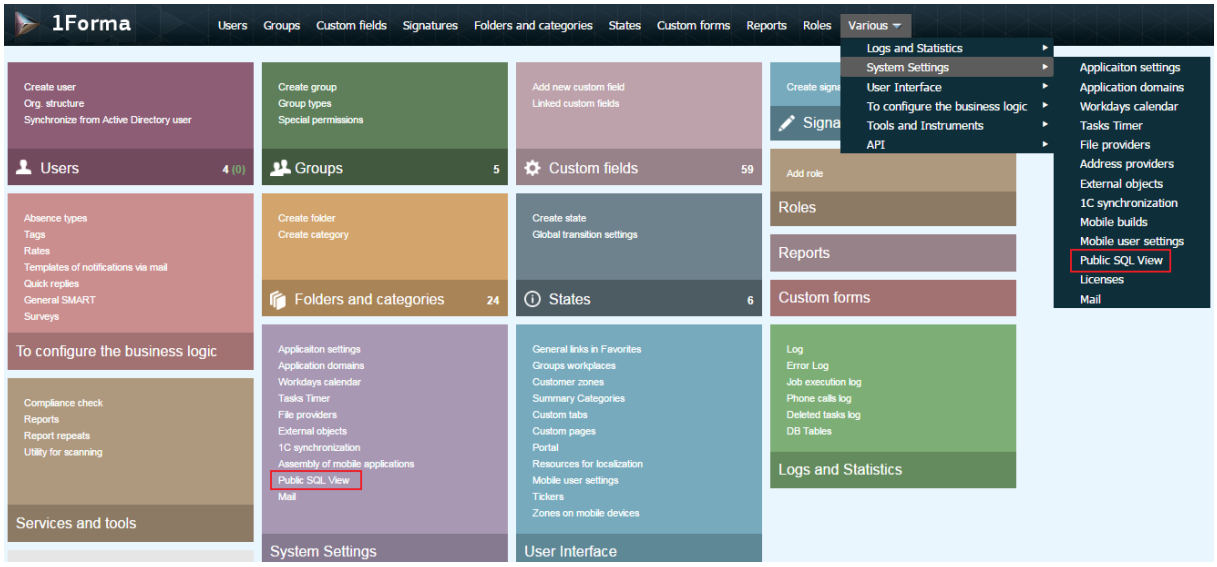
- [ ] Calendar events
- [ ] Comments
- [ ] Creating a task
- [ ] Custom fields and files
- [ ] Excess
- [ ] Executive Appointment
- [ ] File added
- [ ] Other action files
- [ ] Other system comments
- [ ] Signatures
- [ ] Subtasks and task links
- [ ] Task due date changed
- [ ] Task moved
- [ ] Task originator change
- [ ] Task states and business process related
- [ ] Task text altered
- [ ] To recieve a notification about subscribers
- [ ] Work amount

## 13.2.9 Released SQL Views

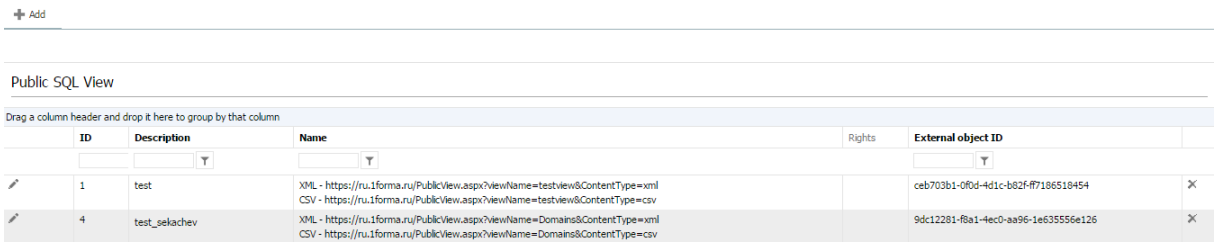
Data stored in the 1Forma system can be processed directly on SQL Server. This processing uses a dedicated SQL Server table type called views (SQL View). These tables do not store data permanently. Data is created dynamically according to the pre-defined SQL request when it is executed Calculation results can be saved to an XML file and downloaded to Excel for further processing. SQL Views enable faster download of large data volumes to Excel compared to built-in engines for data export from the 1Forma system to Excel.

The Released SQL Views directory is used for storing pre-defined views in the 1Forma system.

To navigate to the directory, click the Released SQL Views link on the home page or choose the corresponding item in Miscellaneous — System Settings.




The window that opens contains a table of all released SQL Views.

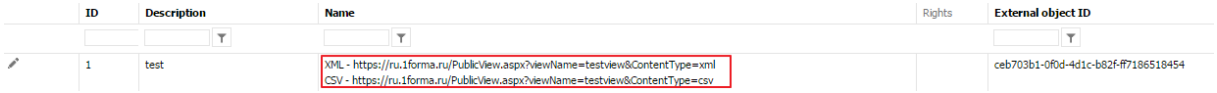



### 13.2.9.1 Adding an SQL View

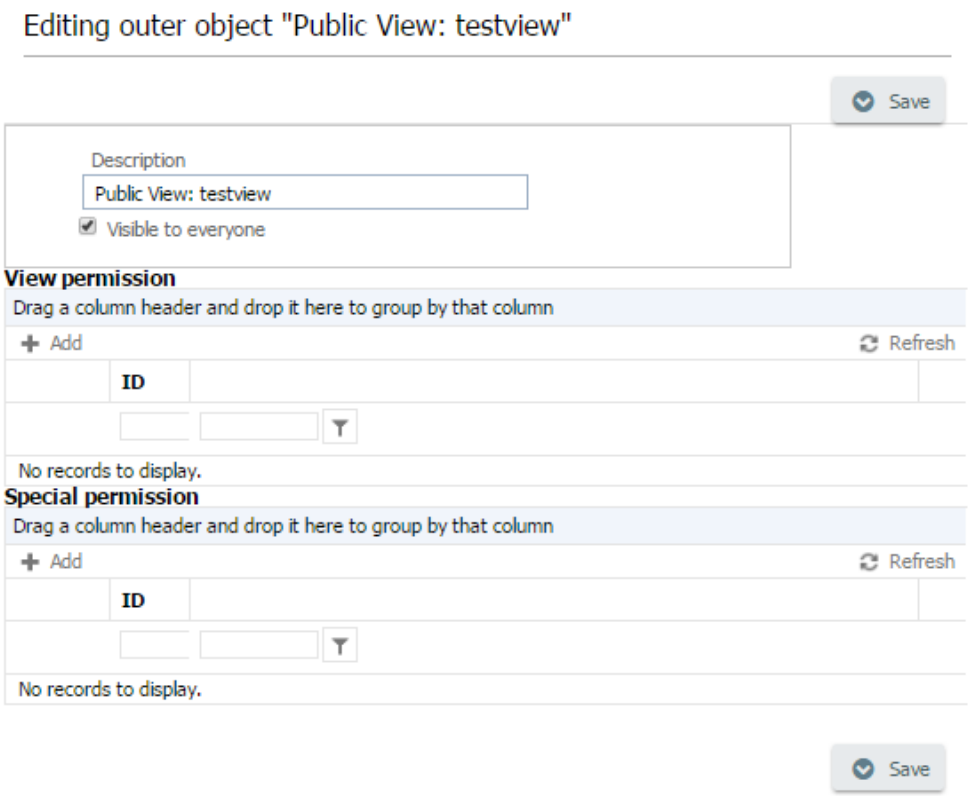
New SQL Views are created by developers in the SQL Server environment and saved under unique names that correspond to the view path on SQL Server.

To add a view to the 1Forma system, click Add. New view window opens.


Enter the view name on SQL Server and its description (name) in the 1Forma system. If the Visible To All flag is set, all system users can work with the new view. If the flag is not set, you can configure restricted access to the view for specific users/user groups during editing. To confirm input, click Create Form. The corresponding entry appears in the view table. An SQL Server view name field contains a hyperlink which corresponds to the stored view path on SQL server.



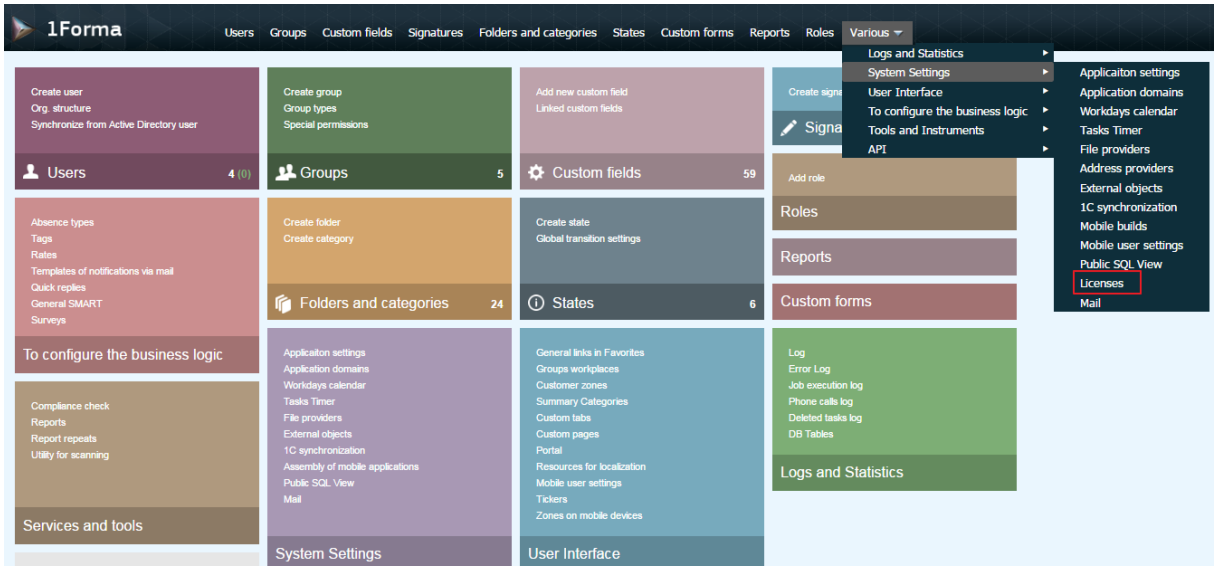

To edit the name and description, click the icon at the beginning of the corresponding row. To configure view access permissions, click the icon in the corresponding row. In the window that opens you can define a list of groups with view permissions and other special permissions. After defining access permissions, click Save.

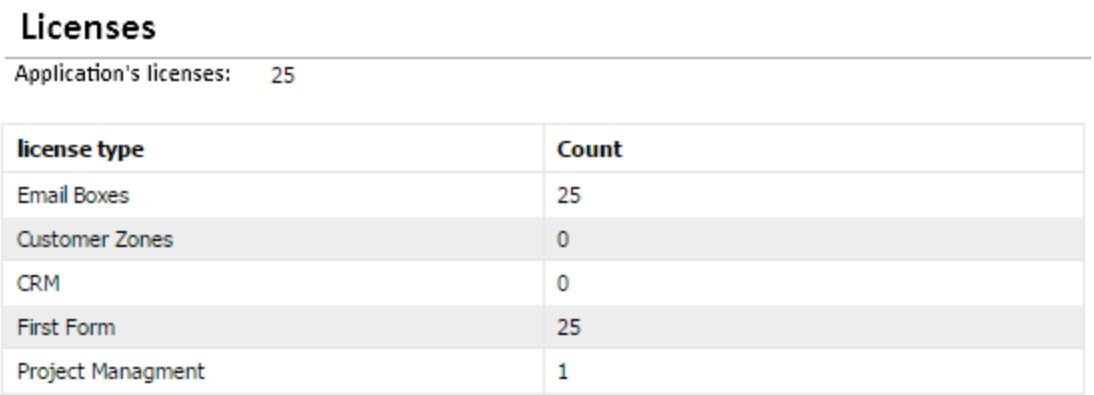



## 13.2.10 Licenses

Licenses are required to work in the 1Forma system and integrated applications and services. The number of purchased licenses is displayed on the Licenses page. This data is read only.

To navigate to the purchased license number view page, click the Licenses link on the home page or choose the corresponding item in Miscellaneous — System Settings.



Licenses

Application's licenses: 25

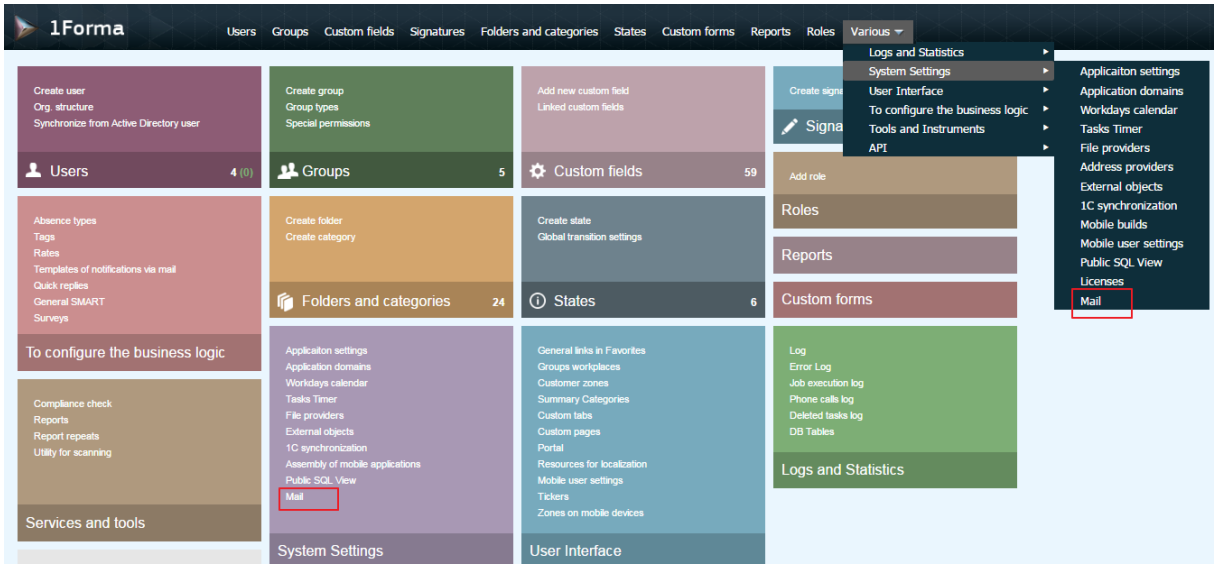
| license type | Count |
|---|---|
| Email Boxes | 25 |
| Customer Zones | 0 |
| CRM | 0 |
| First Form | 25 |
| Project Managment | 1 |

| License type | Description |
|---|---|
| OneCSync | Synchronization to 1C:Enterprise applications |
| EmailClient | Integration with the email client |
| ProjectManagement | Projects module |
| SharepointSync | Integration with Microsoft Sharepoint Server |

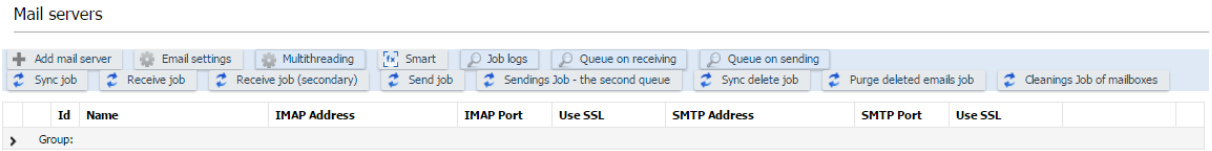
## 13.2.11 Email

The 1Forma system supports integration in different mail servers that can be used to configure automated broadcasts and user notifications.

To navigate to the mail server setup page, click the Email link on the home page or choose the corresponding item in Miscellaneous — System Settings.




The window that opens contains a table with the complete list of mail servers connected to the system.



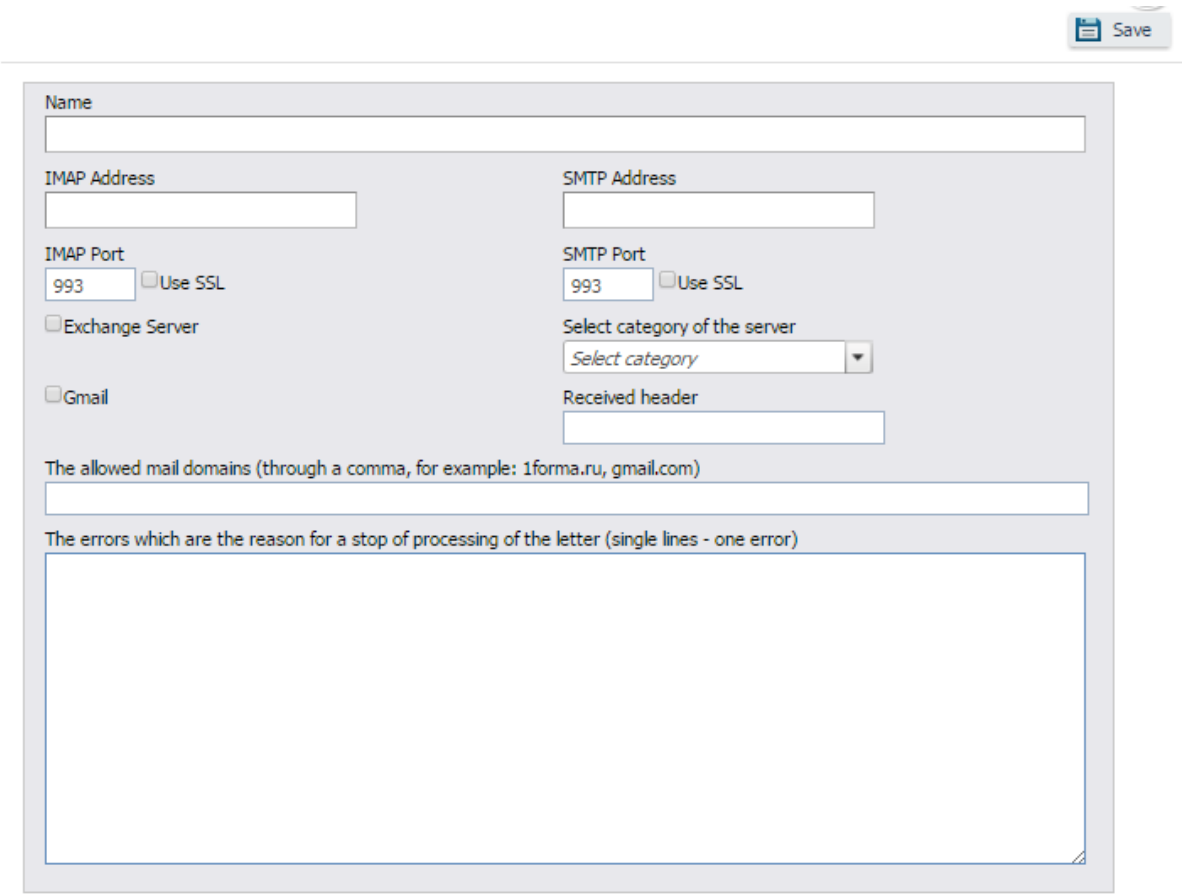

If servers are grouped, expand the group to view the list (a group is displayed in the Category field of the edit server window).

To exclude a mail server from the list of supported servers, click the ✕ icon at the end of the corresponding row.

### 13.2.11.1 Adding/Editing a Mail Server

To add a mail server, click Add mail server. To edit mail server settings, click the corresponding table row or icon at the beginning of the row.

The add/edit mail server form opens.




| Parameter | Description |
|---|---|
| Name | Name of the mail server to be displayed in the drop-down list when users configure email accounts |
| IMAP Address | IMAP server address |
| SMTP Address | SMTP server address |
| IMAP Port | IMAP server port |
| SMTP Port | SMTP server port |
| Use SSL | If the flags are set, IMAP and SMTP servers use SSL encryption. |
| Exchange Server | If the flag is set, the mail server is hosted by Microsoft Exchange Server. |
| Gmail | If the flag is set, the mail server is hosted by Google Mail. |
| Select category | This is the group that contains mail server entries. You can create a new group for a new mail server. |

| Parameter | Description |
|---|---|
| Allowed Email Domains | These email domains can be used to replace users' email accounts:<br><br>by default, the application uses the email account from general application settings for sending system mails. However, you can configure different accounts for sending emails, provided that these accounts are in allowed email domains.<br><br>List email domains separated by commas. *For example, 1forma.ru, gmail.com.* |
| Errors Terminating Email Processing | If one of the errors selected in this field occurs during incoming email delivery, processing of this email is terminated, and the job continues with the next email.<br>Each error is written to a new line. |

Enter the required values and click Save .

### 13.2.11.2 Connecting and Configuring Email Clients

To connect and configure email clients for users, click Email settings. A window for email client setup opens.

Save

Enable Email
Enable Email Jobs
Enable message chain

Enable-disable private Jobs
Sync Folders
Receive
Receive secondary
Send
Sync delete
Purge deleted
Clean mailboxes

Multithreading
Multithreaded start of a Job Sync Folders
start in 1 stream (-s)

Multithreaded start of a Job Receive
start in 1 stream (-s)

Multithreaded start of a Job Send
start in 1 stream (-s)

Multithreaded start of a Job Receive Secondary
start in 1 stream (-s)

Multithreaded start of a Job Send Secondary
start in 1 stream (-s)

Multithreaded start of a Job Sync Delete
start in 1 stream (-s)

The users having access to mail
To: Add contact

To connect an email client for a user, add this user to Users with the Email Access field and click Save.

### 13.2.11.3 Multithreading

Jobs can executed in several parallel threads for faster processing. Information on job execution is displayed in the summary table (read only).

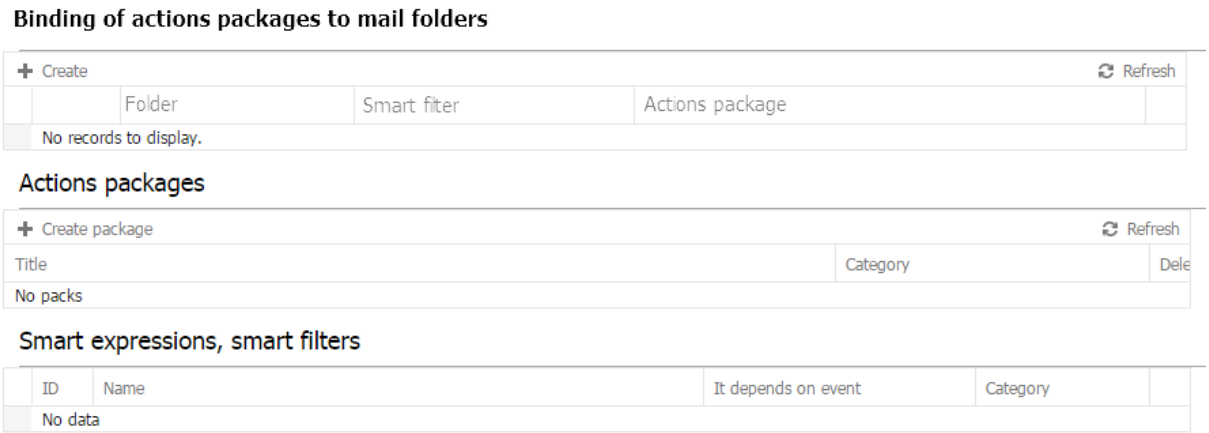
Refresh on | Refresh off

| SyncFolders | | | | | Receive | | | | | Send | | | | | ReceiveSecondary | | | | | SendSecondary | | | | | SyncDelete | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thread № | Active | Items | Started | Last Activity | Thread № | Active | Items | Started | Last Activity | Thread № | Active | Items | Started | Last Activity | Thread № | Active | Items | Started | Last Activity | Thread № | Active | Items | Started | Last Activity | Thread № | Active | Items | Started | Last Activity |
| 1 | | | | | 1 | | | | | 1 | | | | | 1 | | | | | 1 | | | | | 1 | | | | |

### 13.2.11.4 Smart Email Processing

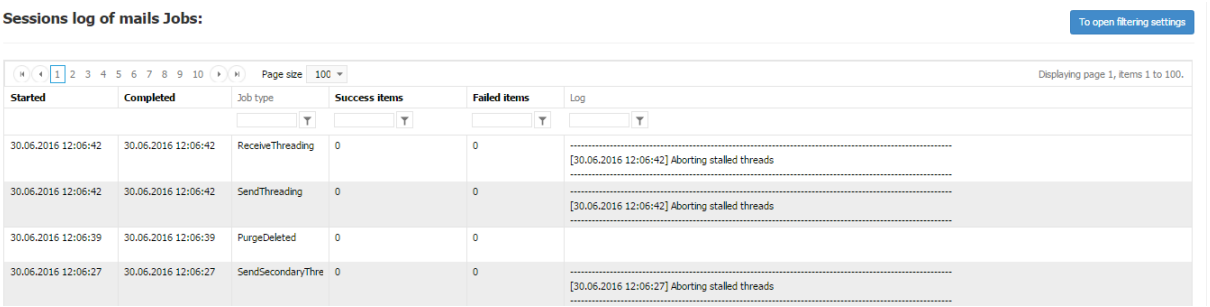
The system supports actions executed with Smart functionality for incoming mails in inbox folders.

To navigate to Smart setup mode for existing email accounts, click Smart. This opens the window for creating/editing email processing with Smart functionality. Expressions are built similarly to SMARTs defined in category settings.

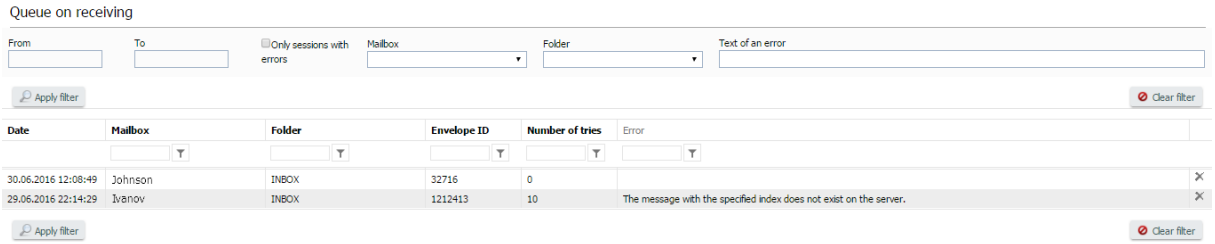



### 13.2.11.5 Mail Logs

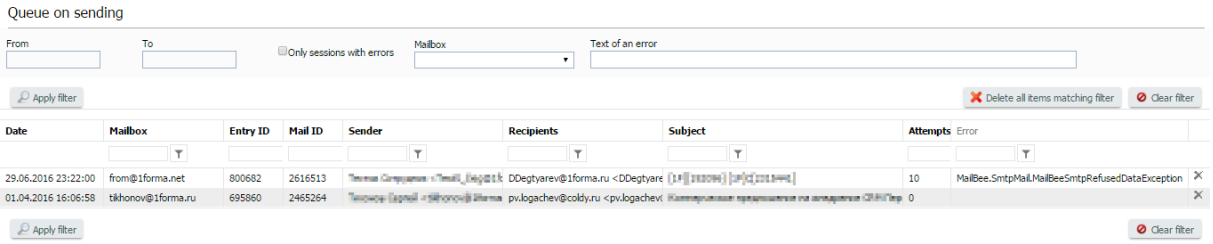
**Mail log** is used to display results of an executed mail job. Entries can be selected by execution period, job type,errors or original email text. The table also supports selection by number of successfully processed emails or by number of errors.




**The incoming queue** contains a list of jobs for receiving emails from mail servers. Entries can be selected by job execution period, errors, email account and its folders (Inbox, Outbox, Drafts, etc.), or by the resulting email text. The table also supports selection by email ID, number of delivery attempts or text of the returned error. To delete an email from the queue, click the ✕ icon at the end of the corresponding row.



**The outgoing queue** contains a list of jobs for sending emails from the system. Entries can be selected by job execution period, errors, email account, or by the resulting email text. The table also supports selection by entry ID, email ID, email sender and recipient, email subject, number of delivery attempts, or text of the returned error. To delete an email from the queue, click the icon at the end of the corresponding row.




### 13.2.11.6 Jobs Processing Emails

Job types:

| Button | Job | Description |
|---|---|---|
| Sync job | Sync (EmailJobSyncFolders) | Synchronizes inbox folders by checking for new emails and updating read/unread flags.<br>**IMPORTANT**: This job does not receive new emails, but only generates an incoming queue. Emails are downloaded and received by EmailJobReceive job. |
| Receive job | Receive (EmailJobReceive) | Receives emails according to the incoming queue generated by EmailJobSyncFolders job |
| Receive job (secondary) | Receive Secondary (EmailJobReceiveSecondary) | Receives emails according to the incoming queue generated by EmailJobSyncFolders job. This job attempts to receive emails that generated over 5 errors at receipt (after 5 attempts the email has still not been received). These emails are no longer processed by EmailJobReceive job to avoid delays in receiving new emails. |
| Send job | Send (EmailJobSend) | Sends emails by processing the outgoing queue |
| Sendings Job - the second queue | Send Secondary (EmailJobSendSecondary) | Sends emails by processing the outgoing queue. This job attempts to send emails that generated over 5 errors at sending (after 5 attempts the email has still not been sent). These emails are no longer processed by EmailJobSend job to avoid delays in sending new emails. |
| Sync delete job | Sync Delete (EmailJobSyncDelete) | Synchronizes email deletion. Each folder in each email account is synchronized with local data to find emails deleted from the server and |

| Button | Job | Description |
|---|---|---|
| | | emails deleted from the 1Forma email client. Then, these emails are deleted on the other side as well. |
| Purge deleted emails job | Purge Delete (EmailJobPurgeDeleted) | Physically deletes emails marked for deletion with completed synchronization (they are stored in the database until deleted from the server to retain information on emails deleted by the user in the synchronization job) |
| Cleanings Job of mailboxes | Clean Mailboxes (EmailJobCleanMailBoxes) | Clears mailboxes with enabled Store Emails for N Days setting |

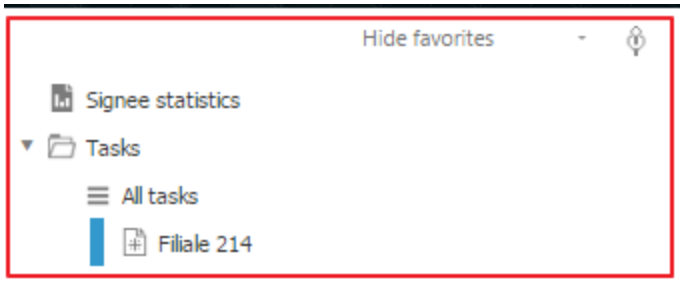
If errors occur, see job logs.

## 13.3 User Interface

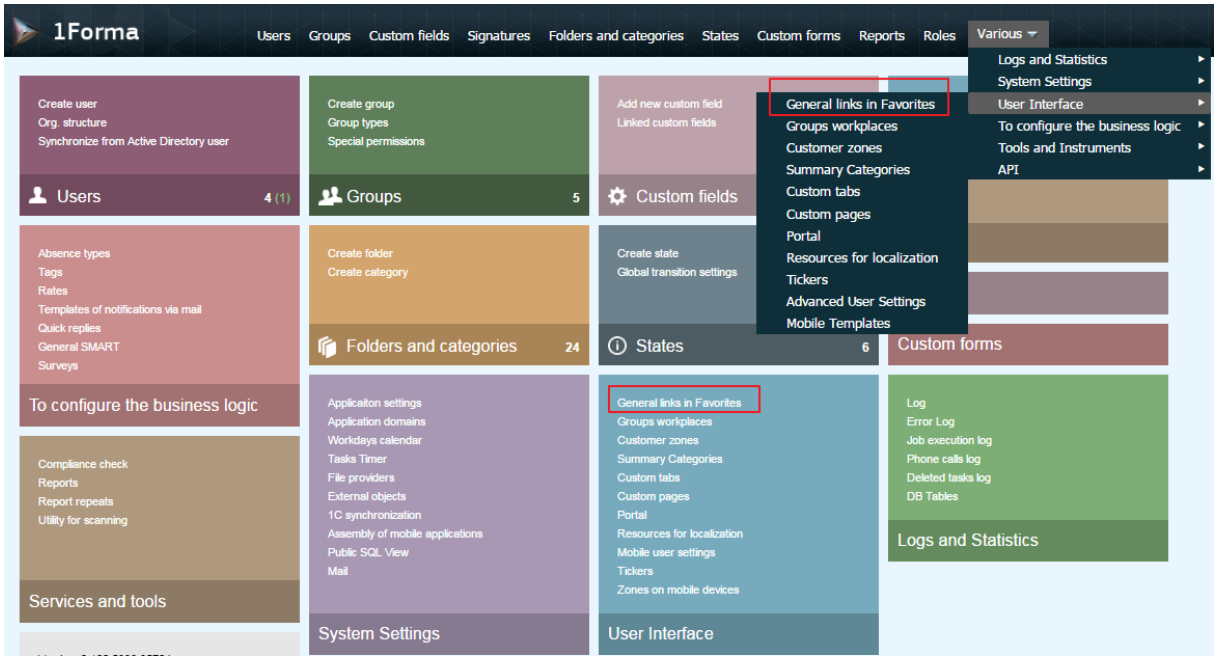
Shared Favorites
Group workplaces
Summary directories
Custom tabs
Portal
Localized resources
Indicators

### 13.3.1 Shared Favorites

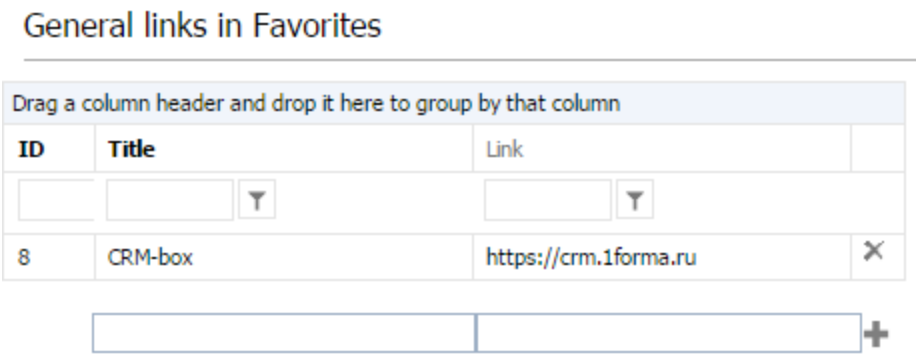
Bookmarks are used for quick access to frequently used resources (a site, internal portal, network drive, etc.). Bookmarks are displayed in UI in the Favorites menu on the Personal panel (to display Favorites on the panel, configure at least one tab in the administrative UI).




The administrative UI contains a table with the complete list of bookmarks added to the system. To navigate to the shared links configuration page, click the Shared Favorites link on the home page or choose the corresponding item in the Miscellaneous — User Interface.

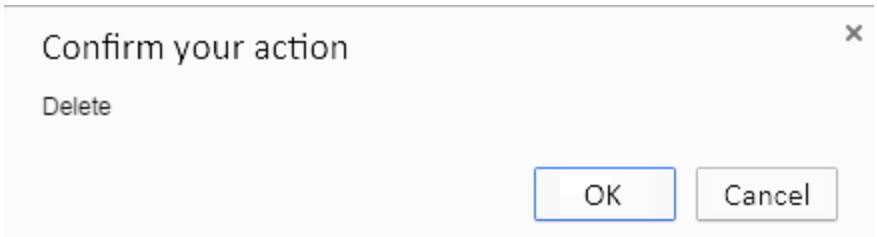



A list of shared links opens.




To add a new bookmark, enter it into the input field below the table: use the first field for the name to be displayed in the menu and the second field for the redirect URL. To confirm entered values, click . The new bookmark appears in the table.

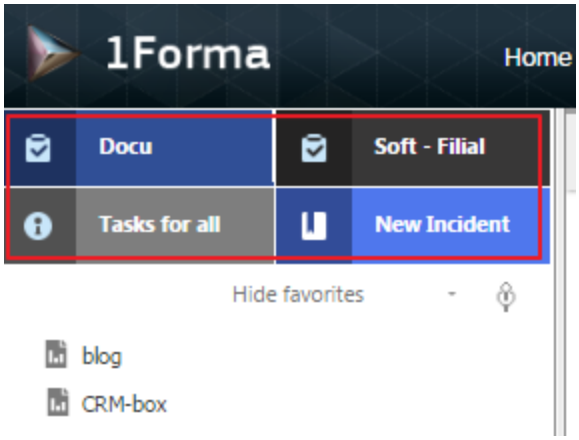
To delete a bookmark, click the button in the corresponding table row. A confirmation window opens:




Click OK to confirm status deletion. If an action has been chosen by mistake, click Cancel.

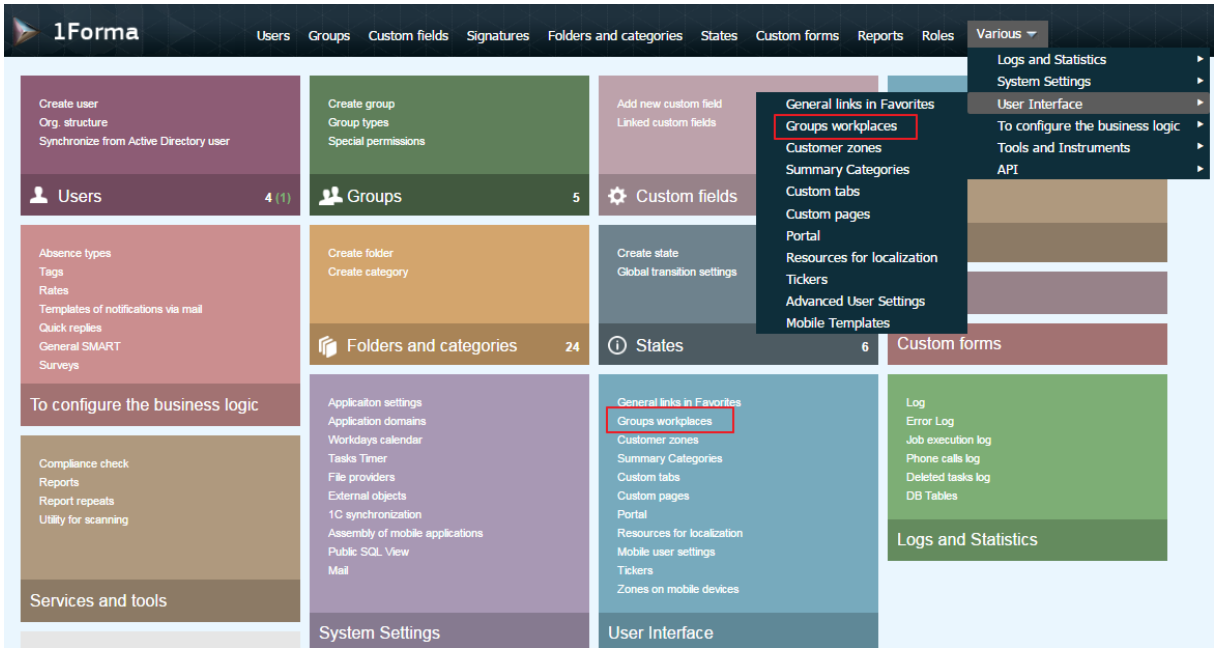
## 13.3.2 Group Workplaces

The user interface provides an element of the navigation menu called Group Workplace, consisting of a box with four buttons, to enable faster access to main functionality.

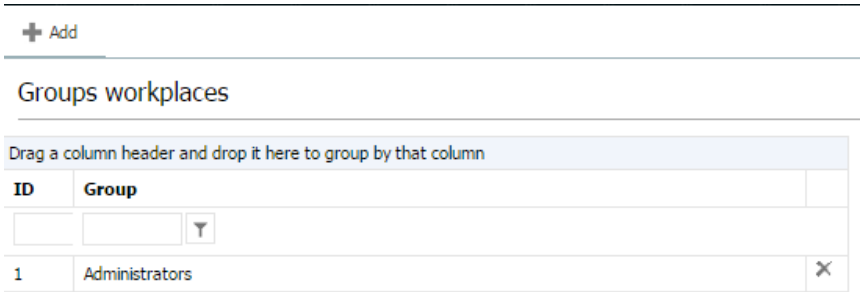



The system supports an unlimited number of group workplaces. The group workplace name is identical to the name of the group that uses it. If a user belongs to several groups, more than one button box (up to three) is displayed one below the other.

In administrative UI,the complete list of workplaces is displayed in a table. To navigate to the group workplace configuration page, click the link on the home page or choose the corresponding item in Miscellaneous — User Interface.

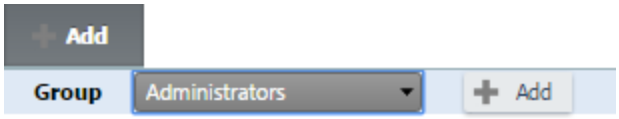



A list of configured group workplaces opens.



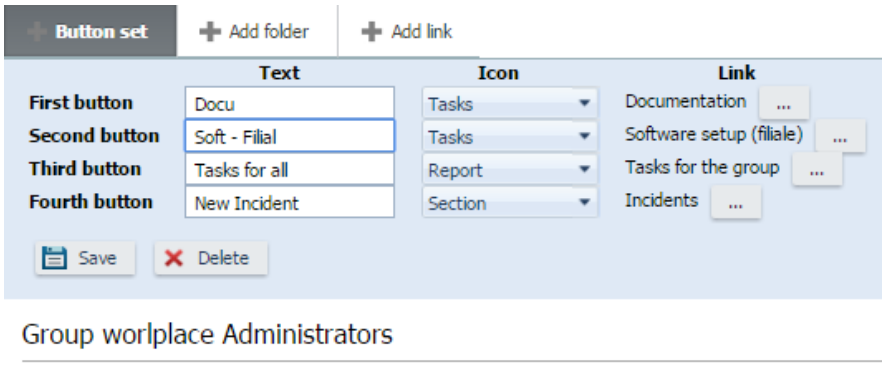

### 13.3.2.1 Creating a Group Workplace

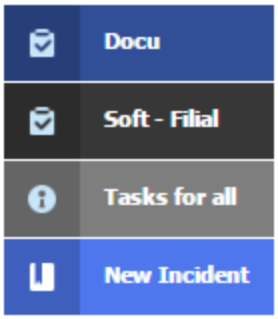
To create a new group workplace, click Add. A window for adding a group workplace opens.



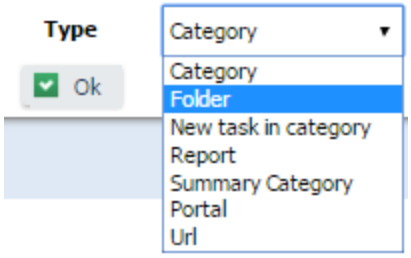

Select the group you are creating a workplace for and click Add. In the workplace configuration window that appears, the top menu contains an icon for creating a Button Box, Folder and Link.

In a button box, assign each button a text, icon and action by clicking the button.

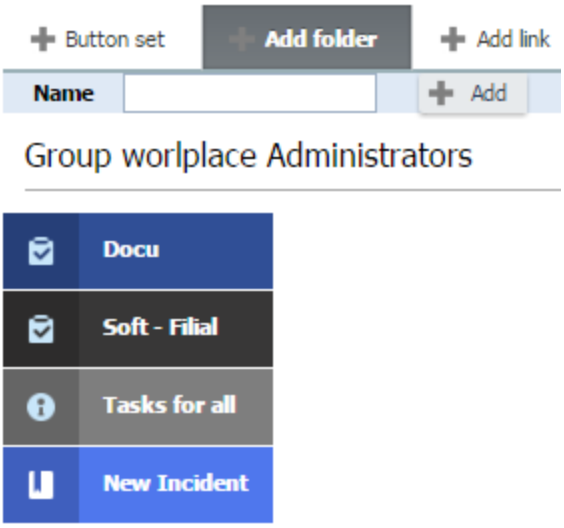


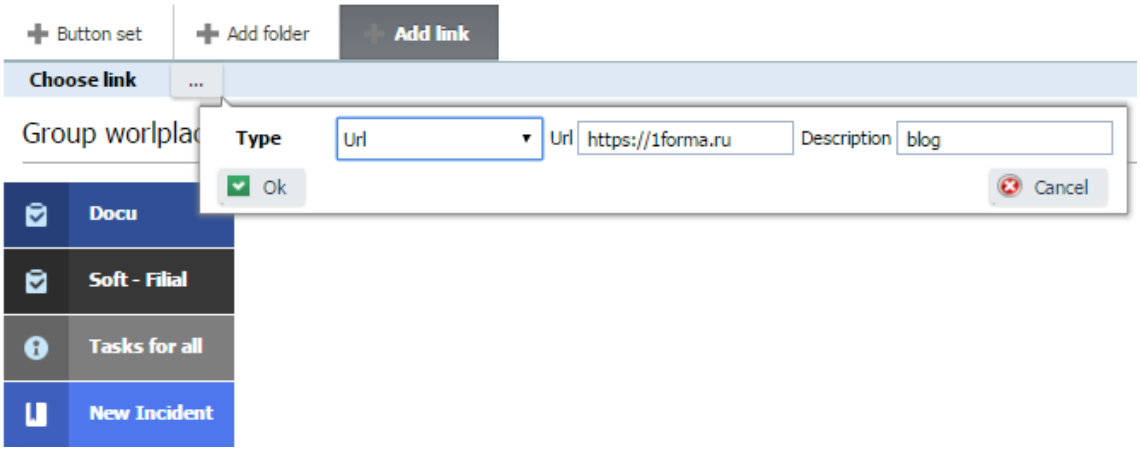

Enter text for each button, select one of the proposed icons, and define the action by clicking the button (link). Supported actions include opening a category, report, or summary report, as well as creating a new task in the selected category.



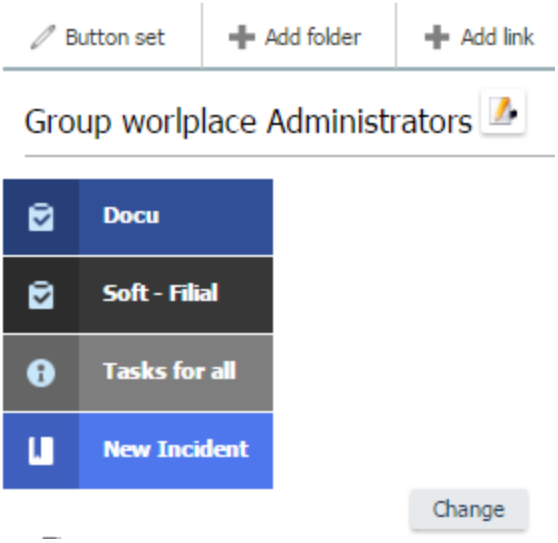

To configure the list of folders displayed in the Favorites directory for each group member, click the Add Folder button.




To configure the list of links displayed in the Favorites directory for each group member, click the Add Link button.

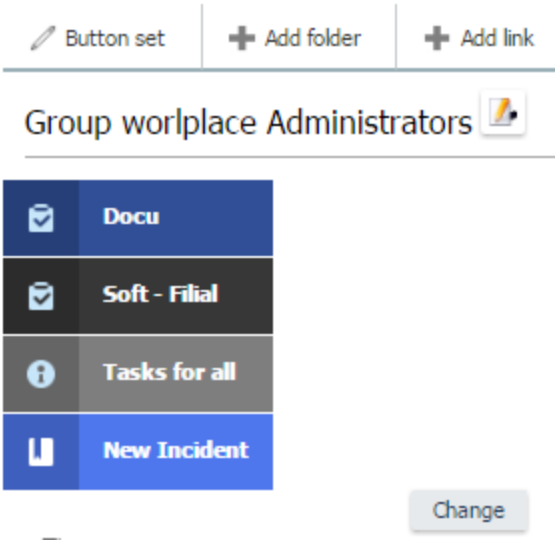



Configured links and folders appear below the button box.




### 13.3.2.2 Editing a Group Workplace

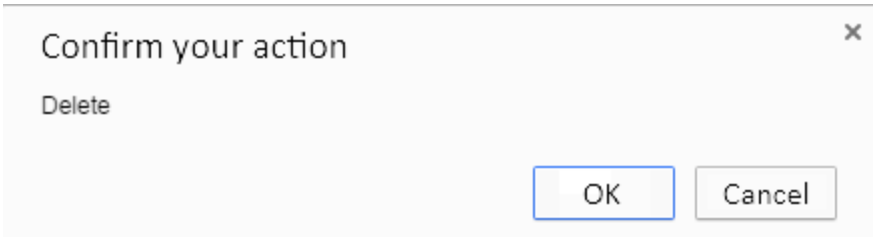
To change group workplace settings, click the required row. In the window that opens select the directory to be changed: a button box, folders or links. To edit button box settings, you can also click the Change button; and to edit links and folders you can open their context menu and choose Rename or Delete from Favorites.




To rename a group workplace, click the button next to its name, enter the new name and click Save (renaming a group workplace also renames the blocks on the portal).

### 13.3.2.3 Deleting a Group Workplace

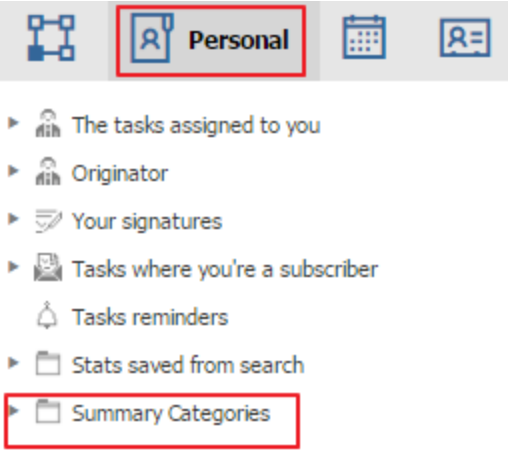
To delete a group workplace, click the button in the corresponding table row. A confirmation window opens:



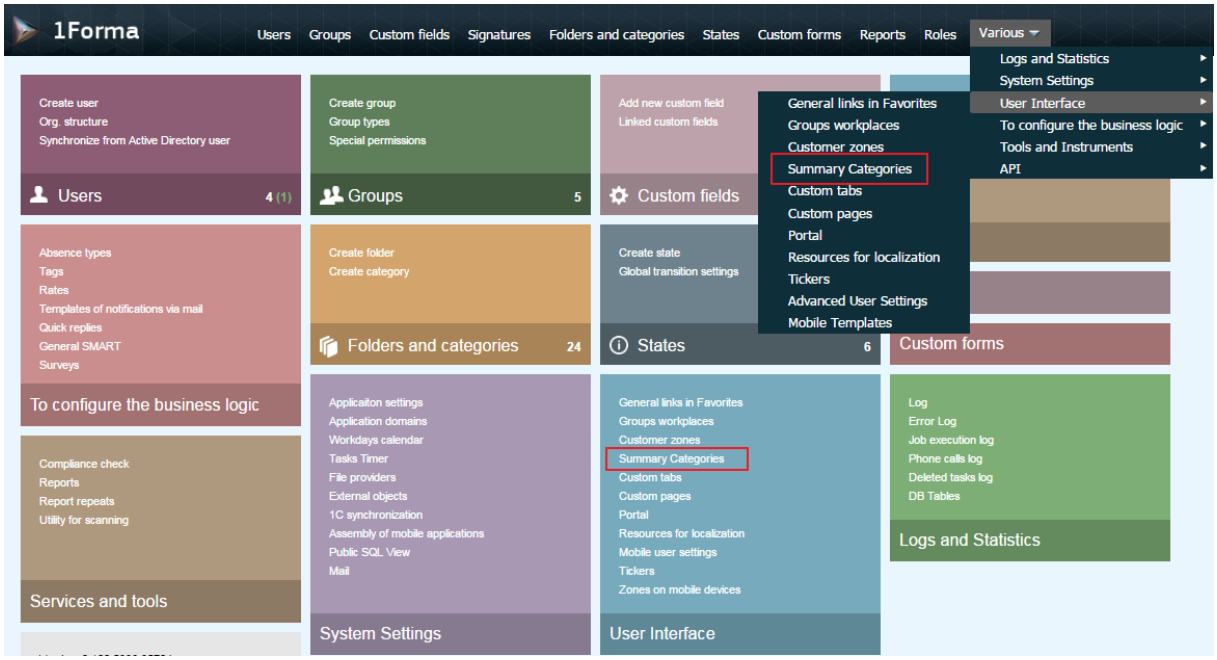

Click OK to confirm group workplace deletion. If an action has been chosen by mistake, click Cancel.

### 13.3.3 Summary directories

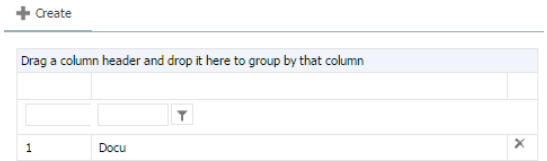
Summary directories facilitate task search and access for users. In a summary directory, users can view tasks selected from different categories by specific criteria (categories, statuses) in their work area. The summary directory details displayed in the Personal Directory, Summary Directories folder in the navigation menu.




To navigate to the summary directory management page, click the Summary Directories link on the home page or choose the corresponding item in Miscellaneous — User Interface.

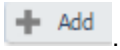



The window that opens contains a table with the complete list of summary directories configured in the system.




### 13.3.3.1 Creating a Summary Directory

To add a new summary directory, click New.

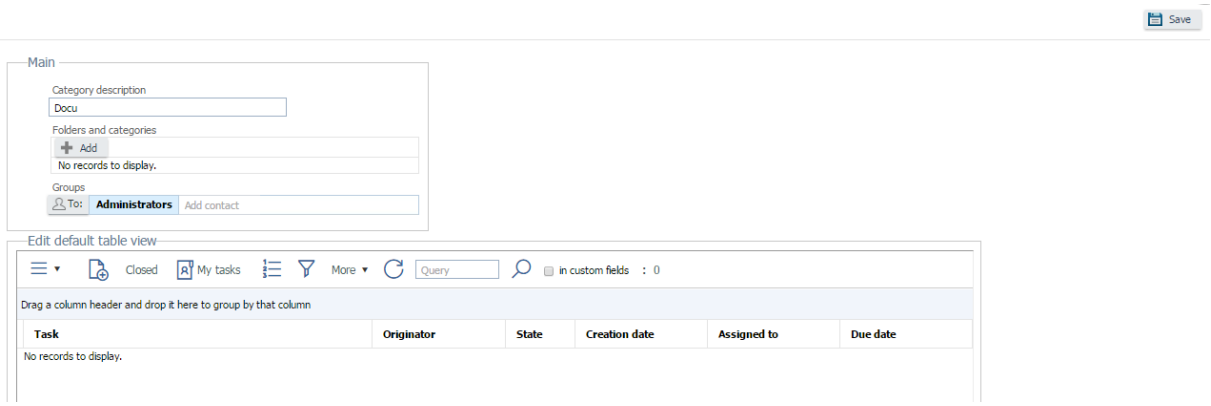

Enter the directory description and select user groups to grant access to this directory. Then click 

.

The new summary directory is added to the summary table.

### 13.3.3.2 Configuring a Summary Directory

To edit data and select categories, left-click the required row. The window for editing opens.




**General**

The Category Description field contains the summary directory name.

To select task categories displayed for the specified user group, click Add in the Category field. The window with the category tree appears. Select a category and click Save. This category appears in the left table column. From the right table column select displayed task statuses. Left-click a field to open the status selection window. Mark the required status values and click Save. The data appears in the corresponding row of the right column. To delete a category, click the ✕ button at the end of the corresponding row.

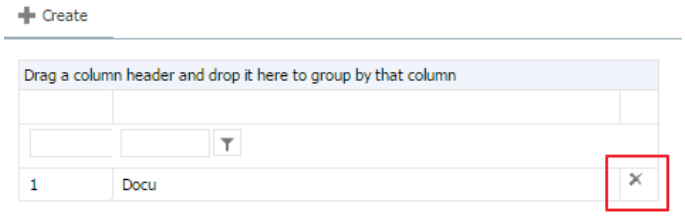
To select groups with access to a summary directory, click the To button and select one or more users or user groups.

**Edit Default Table View**

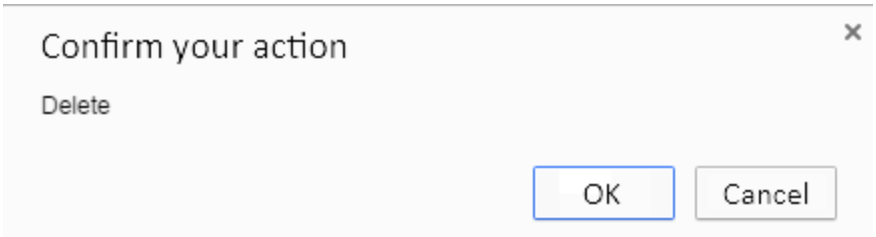
This setting is maintained similarly to the category Edit Default Table View setting.

### 13.3.3.3 Deleting a Summary Directory

To delete a summary directory from the list, click the ✕ icon at the end of the corresponding row.




A confirmation window opens.

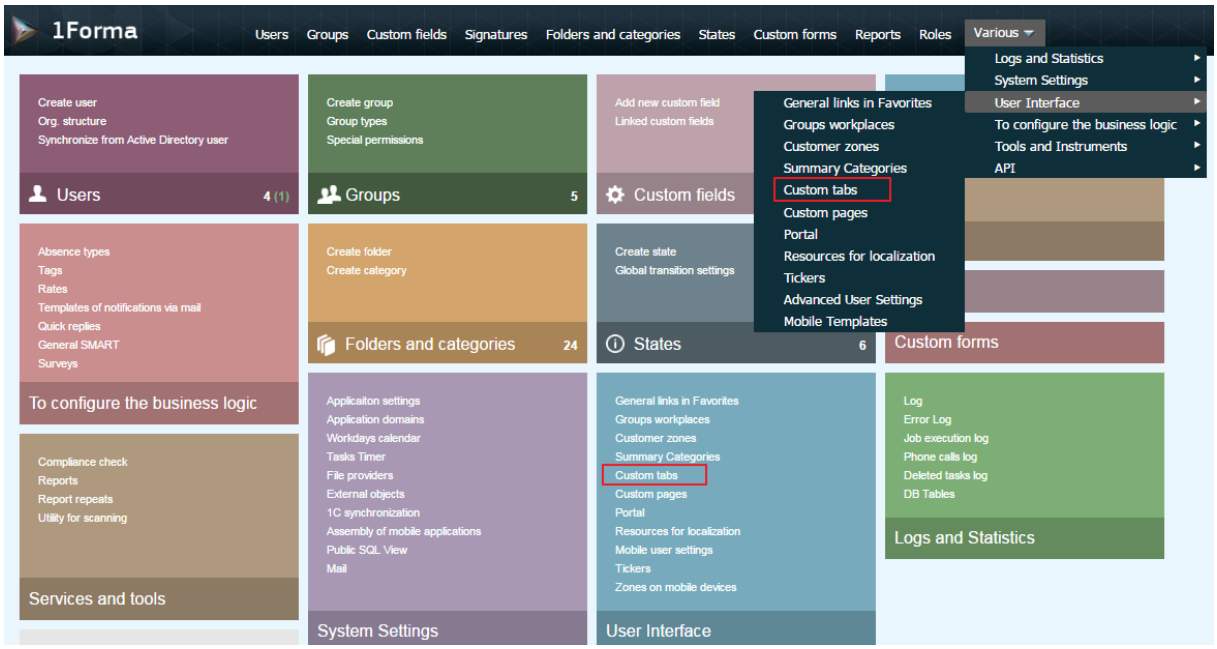



Click OK to confirm summary directory deletion. If deletion has been chosen by mistake, click Cancel.

## 13.3.4 Custom tabs

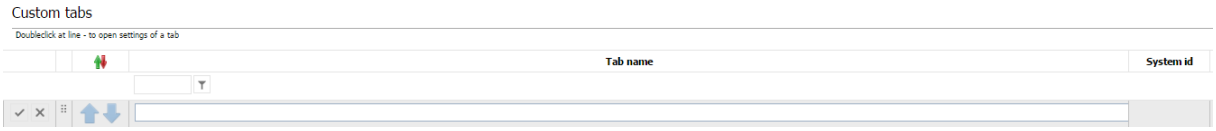
The system supports customs tabs that can display tasks from a user-defined set of categories/ directories. Standard delivery includes a Discussions tab that shows the user's personal tasks (when displaying Comments as a feed).


To navigate to the tab configuration page, click the Custom Tabs link on the home page or choose the corresponding item in Miscellaneous — User Interface.



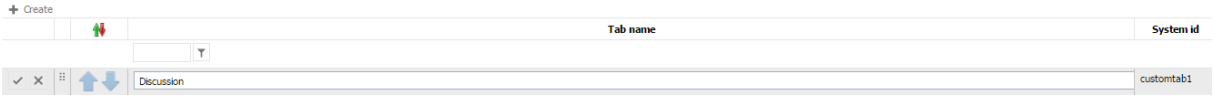

### 13.3.4.1 Creating a Custom Tab

To create a new custom tab, click Add. A new tab window opens.



Enter new tab name and click ✓ at the beginning of the row to confirm data. The new tab appears in the table. To cancel a new tab, click ✕.

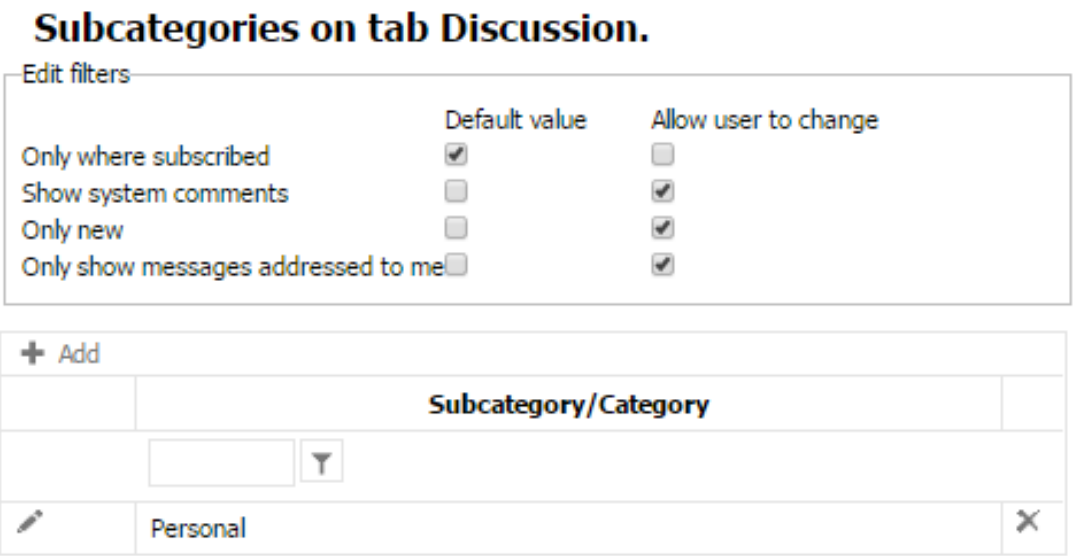
To change the tab name, click ✎ at the beginning of the corresponding row. The window for name editing opens.




Enter new name and click ✓ at the beginning of the row to confirm changes. To cancel changes, click ✕.

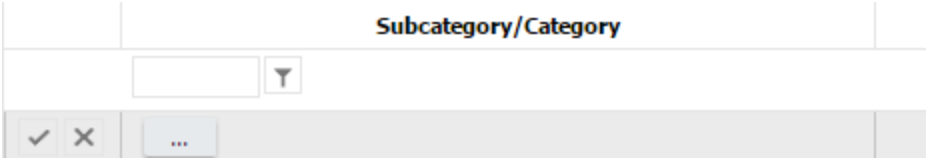
### 13.3.4.2 Tab Settings

To configure categories/directories displayed on a tab, double-click the corresponding table row. The window for category editing opens.

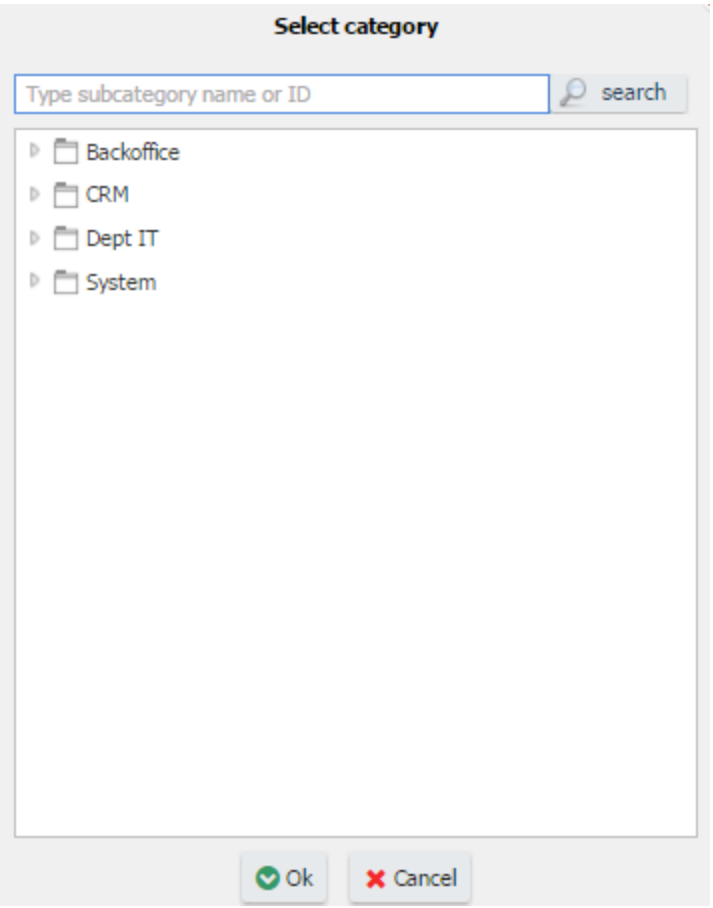



Maintain data selection filters in the top part of the window. Then maintain the list of displayed categories/filters in the bottom part.

To add a new displayed category/directory, click Add. A window with the list of categories/directories opens.



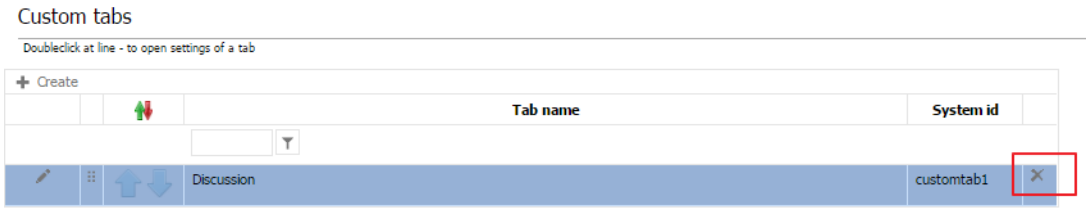

To add a new displayed category/directory to the list, click the "..." button. A window with the list of available categories and directories opens.




Double-click the required category/directory to add it to the list of objects displayed on this tab. To change a category/directory added incorrectly, click the button at the beginning of the corresponding row. To delete a category/directory added incorrectly, click the button at the end of the row.

#### 13.3.4.3 Deleting a Custom Tab

To delete a custom tab, click the button at the end of the corresponding row.

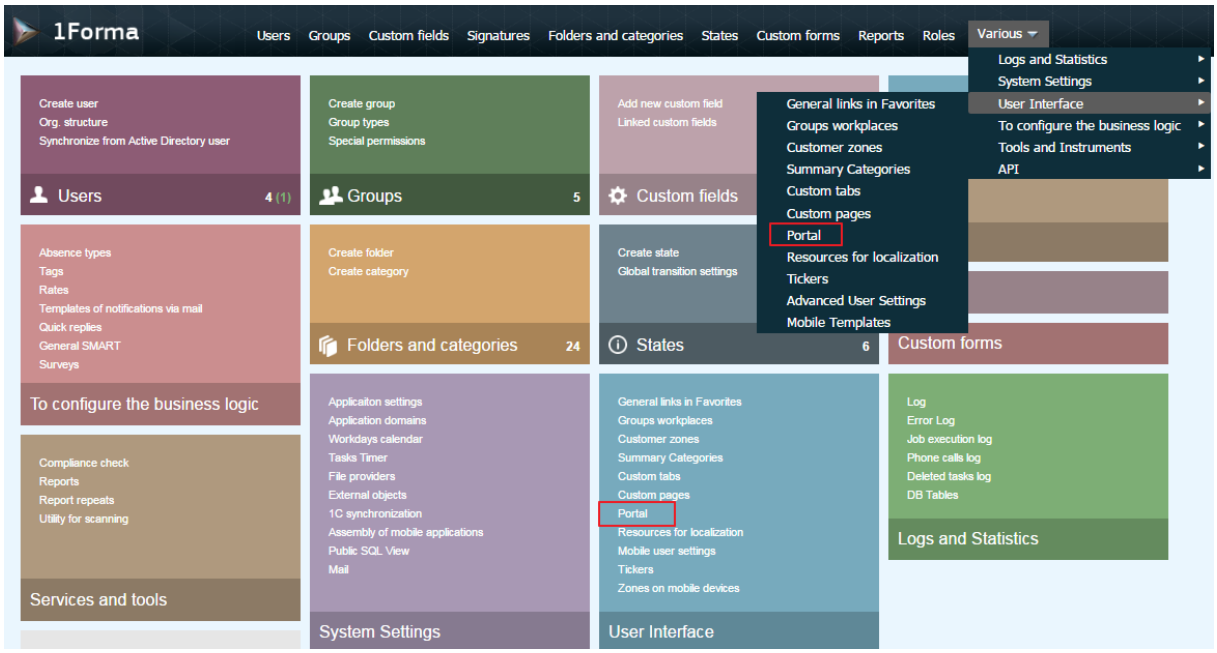



### 13.3.5 Portal

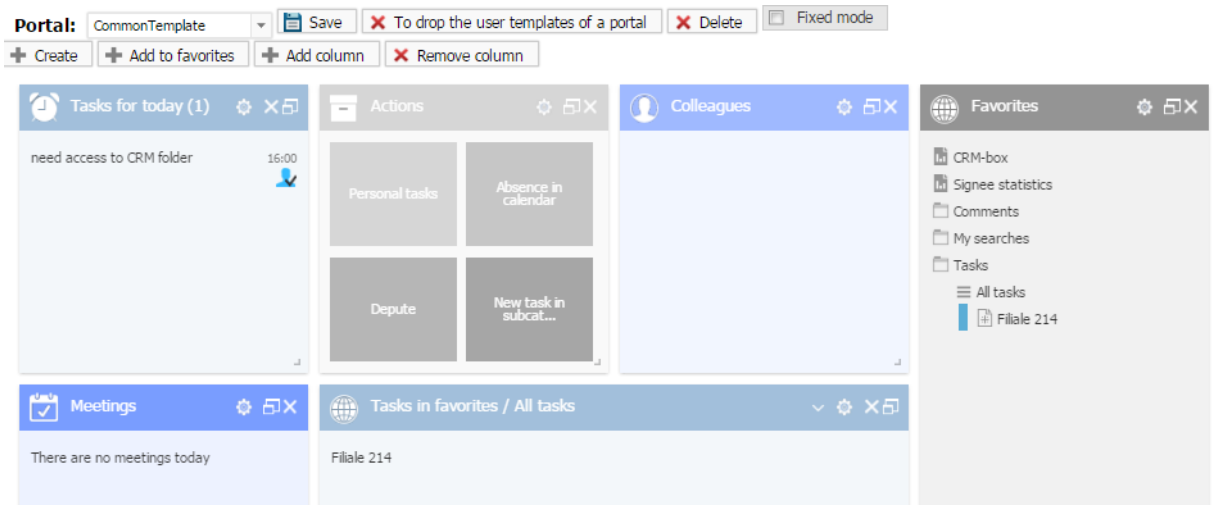
Portal is a page that contains standardized blocks with tasks selected by specific criteria, events, comments or other system data. Displayed portal blocks are aligned by rows and columns (by default, they are arranged in four columns).

To navigate to the portal configuration page, click the Portal link on the home page or choose the

corresponding item in Miscellaneous — User Interface.




The portal editing UI opens.




Portal setup menu:

| Button | Description |
|---|---|
| **Portal:** CommonTemplate | Select portal for maintaining |
| Save | Save changes made to portal settings |
| Reset Portal User Templates | Reset user-defined template to the currently opened portal template |
| Delete | Delete a portal |

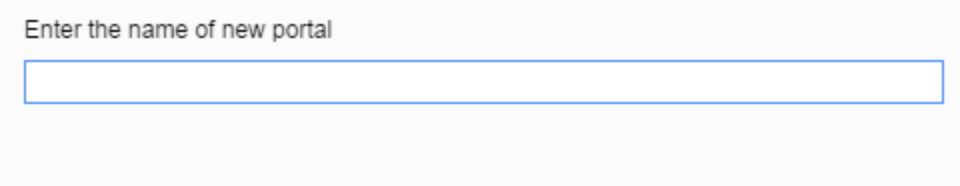
| Button | Description |
|---|---|
| Fixed Mode | If the flag is set, users cannot add, delete or move portal blocks. Block width is also fixed (as configured in administrator mode), while block height is adjusted to its contents. The portal itself automatically fits the screen. |
| Create | Create a new portal |
| Add to Favorites | In user mode, the portal is displayed in Favorites. Click this button to display the To field. Here you can maintain users who will see this portal in their Favorites list. |
| Add Column | Increase the number of columns for blocks |
| Delete Column | Decrease the number of columns for blocks |

In order to open the portal on logging in to user mode and after clicking the system logo (1Forma), go to general application settingsand specify the portal link as the start page:

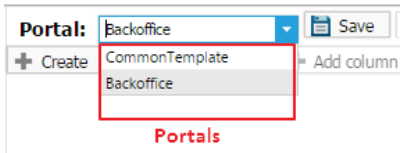

where PortalID is the ID of the required portal


### 13.3.5.1 Creating a Portal

To create a new portal, click Add. In the window that opens, enter a new portal name:

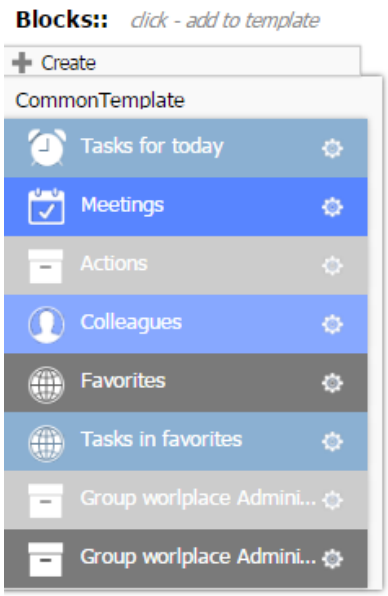



The new portal opens in edit mode.

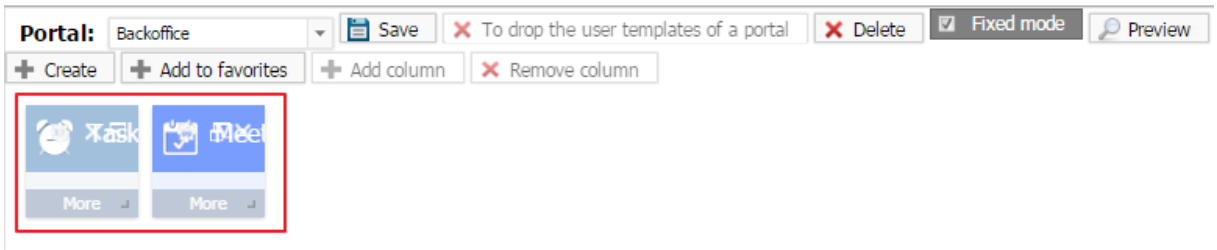



From the top menu you can specify basic portal settings (add or remove columns, enable or disable fixed display mode).

To populate the portal, add the required blocks. You can create new blocks or use the existing pre-configured blocks. To access the existing blocks, expand the block list for each portal (by left-clicking a portal name in the left part of the screen).

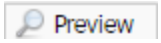



Click the selected block to add it to the portal. The displayed portal block size can be adjusted by stretching. (If the fixed mode flag is set, blocks are added with the minimum supported size).



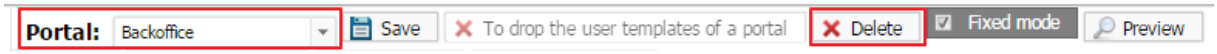

To save portal settings and blocks, click 

.

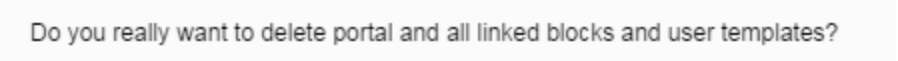
To test portal display in user mode, click 


### 13.3.5.2 Deleting a Portal

To delete a portal, select it from the menu in the bottom part of the screen and click the Delete button.

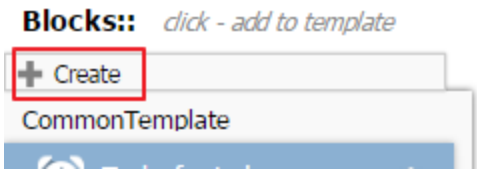



To confirm portal deletion, click OK in the window that opens:



### 13.3.5.3 Creating a Block

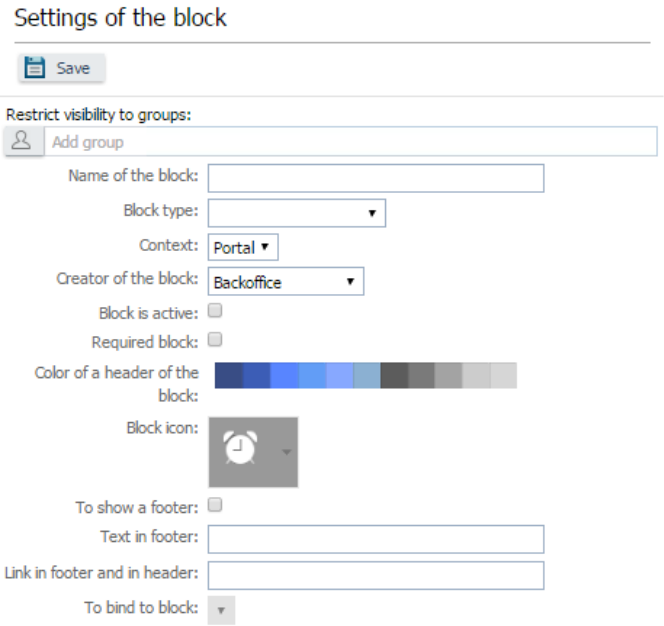
To create a new block, click Create.



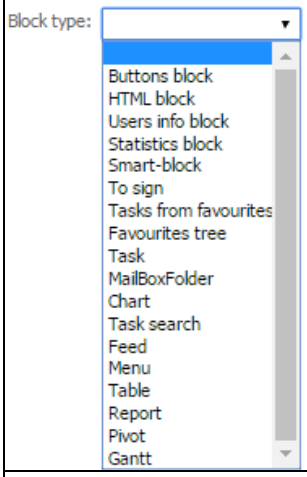

This opens the window with block settings.

### 13.3.5.4 Configuring a Block

To open the block settings window, click the icon in the top right corner of the block. A window with block settings opens.




| Name | Description |
|---|---|
| Ограничить видимость блока группами: Добавить группу | To restrict block visibility, select one or several groups: the block will be visible to members of the specified groups only |
| Block Name | Free text name of the block |

| Name | Description |
|---|---|
|  | Information type displayed in the block |
| Context | • Portal: the block will display on the portal<br>• Task: the block will display in the main task form<br>If a block has Task context and uses Smart filters for data selection, Smart filter editing contains the task context (*At Task Opening event parameters*) |
| Block Owner | By default, the block is displayed on the main portal.<br>The Block Owner parameter defines only block list visibility in administrator mode and the block mandatory flag (which applies only to the block owner portal). |
| Block Enabled | If the flag is set and the block displays on the portal in administrative mode, a user cannot disable it on their portal in user mode.<br>This flag can be cleared during setup, testing or troubleshooting. |
| Block Mandatory | If the flag is set, a user cannot hide the block from UI. The Block Mandatory flag applies to the block owner portal only. |
|  | Select block header color. |
|  | Select one of the proposed icons. The icon will display in the block header next to its name (the gray icon background will be replaced with the block header color selected above). |
| Show Footer | If the flag is set, the bottom part of the block is displayed. |
| Footer Text | Text in the bottom part of the block (*e.g., "More"*) |
| Footer/Header Link | This link is displayed in the block footer or header. A user can click this link to navigate to the |

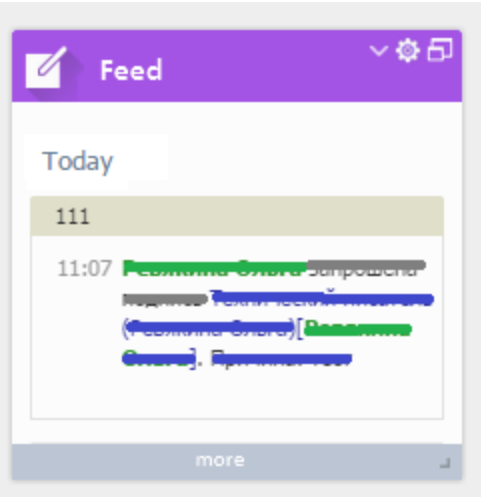
| Name | Description |
|---|---|
| | corresponding application page (*e.g., "/NewCustomGrid.aspx?type=YouPerformerTasks&TodayOnly=true"*) |
| Assign to Block | This drop-down list can be used to select an already configured user page block as a basis for the current block (this parameter is available for some block types after the block type is selected). |
| New Block | Click this link to navigate to settings (displayed only after the block type is selected with an empty Assign to Block field). |
| Open Settings | Click this link to navigate to settings (displayed only after a value is selected in the Assign to Block field). |

Enter the required values and click 

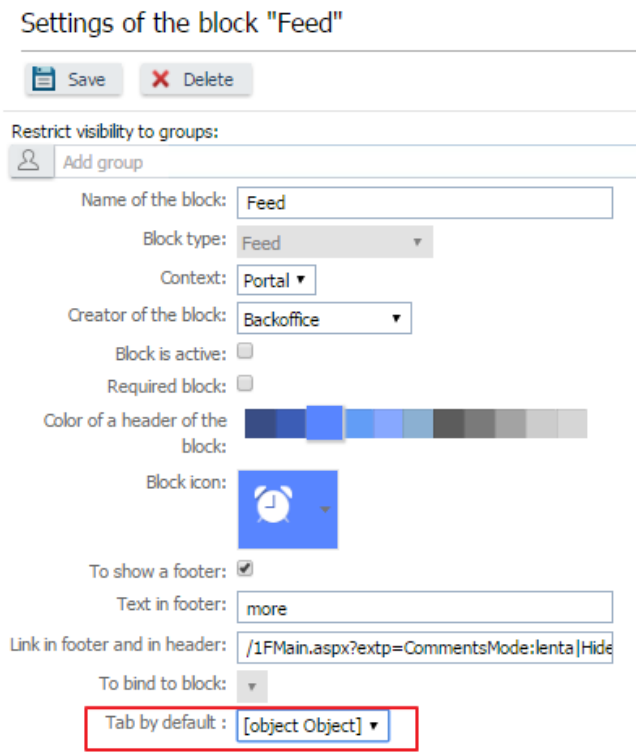
.

Some types of blocks support only the above-mentioned settings (Task, Favorite Task, Favorites Tree, Email Folder block types). Other blocks support advanced settings described in the corresponding sections of this guide.

#### 13.3.5.4.1 Configuring a Feed Block

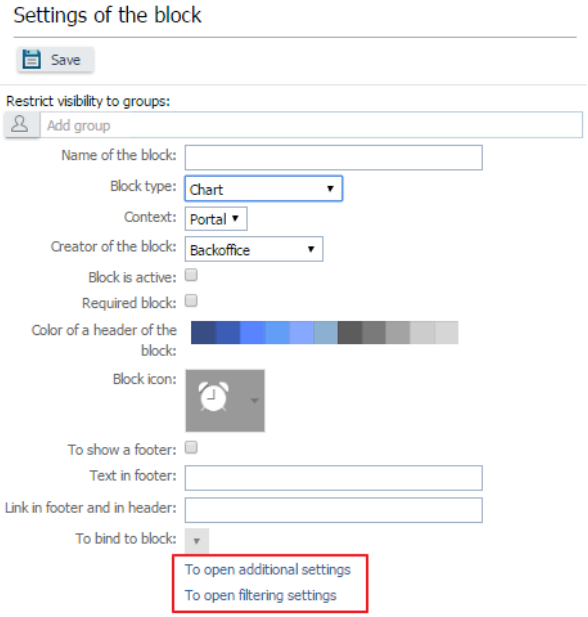



Along with basic settings, a Feed block has an additional Default Tab parameter that defines the tab which opens when the block is accessed:



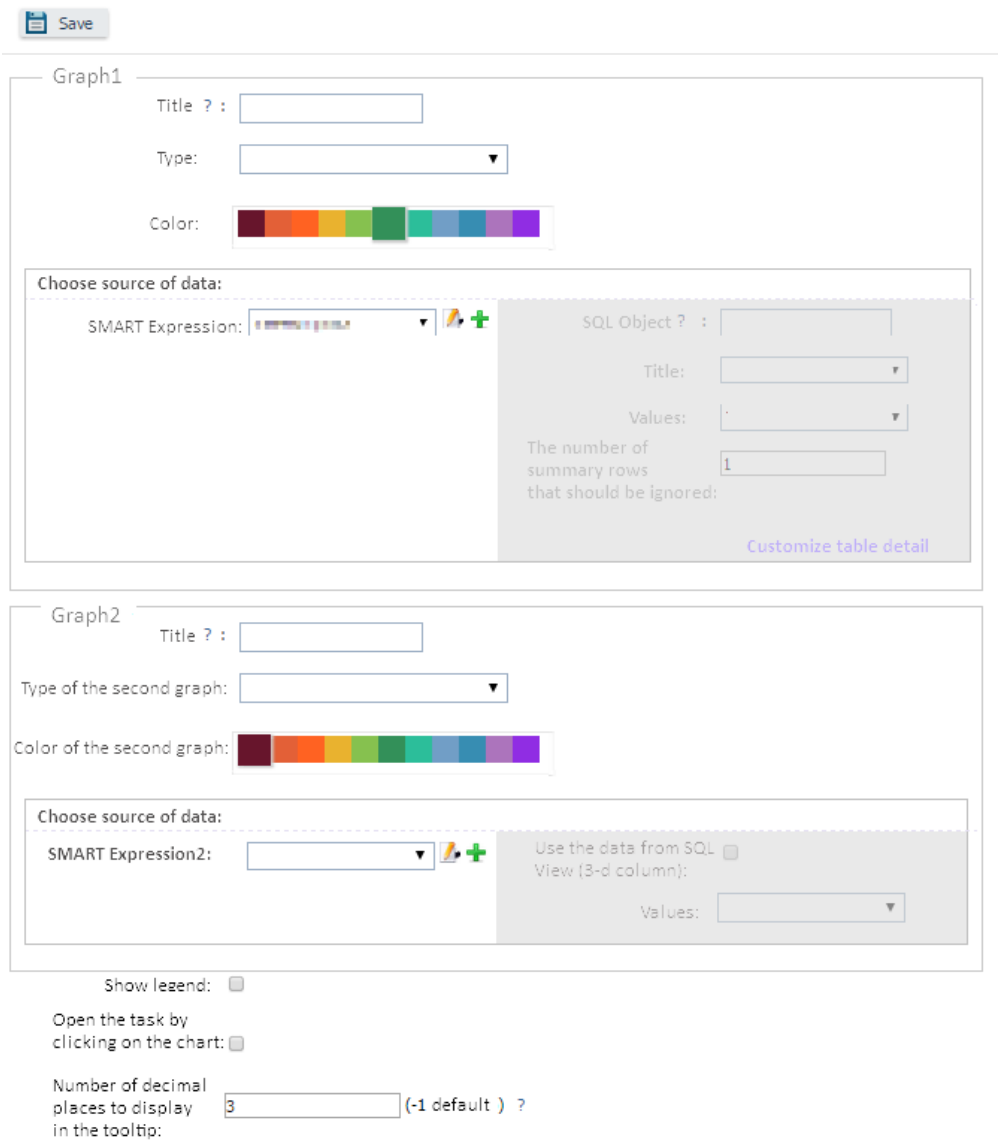

13.3.5.4.2 Configuring a Chart Block

A Chart block displays summary information on the tasks in a table or graphical view.

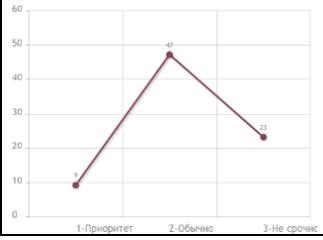


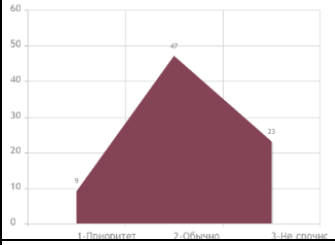
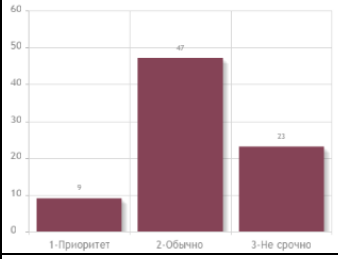
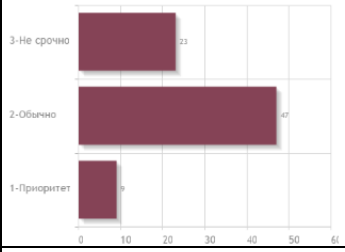
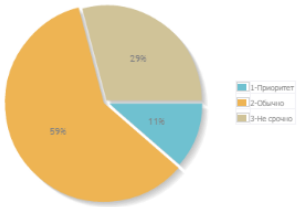
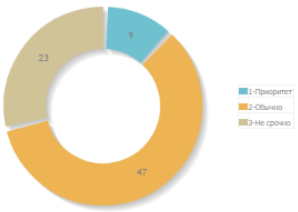

Click Open Filter Settings to open the window with filter settings.

Click Open Advanced Settings to open the window with advanced settings:

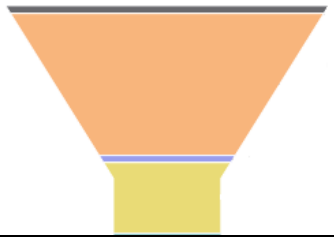
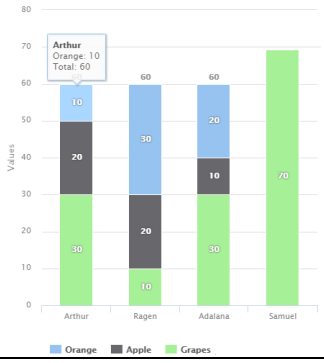
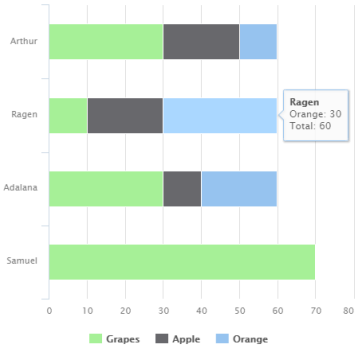



A Chart block can display the following types of charts:

| | |
|---|---|
| Line chart |  |

| | |
|---|---|
| Line chart (area) |  |
| Bar chart |  |
| Horizontal bar chart |  |
| Pie chart<br>(for a single chart) |  |
| Donut chart<br>(for a single chart) |  |
| Table*<br>(for a single chart) |  |

| Приоритет ошибки | задача |
|---|---|
| 1-Приоритет | 9 |
| 2-Обычно | 47 |
| 3-Не срочно | 23 |

| | |
|---|---|
| Sales funnel<br>(for a single chart) |  |
| Speedometer<br>(for a single chart) |  |
| Stacked line chart<br>(for a single chart and SQL object as the data source) |  |
| Stacked line chart (horizontal)<br>(for a single chart and SQL object as the data source) |  |

- **You can use** a Smart query or an SQL object (table, view, or stored procedure) as the data source for building a chart. To select the mode, click the corresponding part of the field; the inactive field is grayed out.

  To use a pre-delivered **Smart query**, select it from the drop-down list. To edit the selected query, click to the right of the selection field. To create a new Smart query, click . This opens the Smart query builder window.

  One chart can display results of one or two Smart queries (each in a different color). Chart types must be compatible (for example, both charts must be either horizontal or vertical). Table, pie chart and speedometer chart types do not support the second chart.

To use an **SQL object** as the data source, enter its name. For SQL object requirements, click here. Data from the Header column are shown on the X axis, while data from the Values field appear on the Y axis. If the Use SQL View Data (3rd Column) flag is set, data from the second Values field are displayed on the Y axis of the same chart in a different color.

- If the **Show Legend** flag is set, a legend is displayed for pie charts, speedometers and sales funnels, while the chart name is displayed for line and bar charts (if the **chart name** is not specified, the data source name is displayed instead).

  Click a legend item, to show/hide this item on the chart.

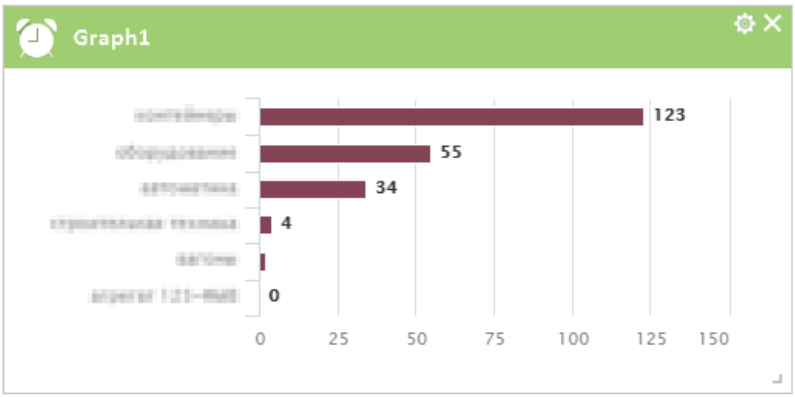
- If the **Open Tasks on Chart Click** flag is set, you can view the list of objects used to calculate totals for each chart area. If an SQL view is used as the data source, this option is not supported.
- If the **Number of Decimal Places for Tooltip** field contains "-1", the number of decimal places is determined automatically from the values in the data source for a specific chart.

*For output of complex tables, use Table block.

13.3.5.4.2.1 Bar Chart Configuration

If a bar chart or horizontal bar chart is selected, an additional block of parameters to maintain appears:


If the Enable Column Labels flag is set, numerical values display next to column headers on the chart.

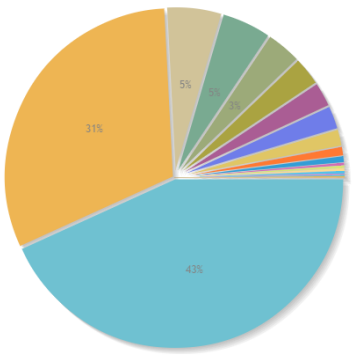


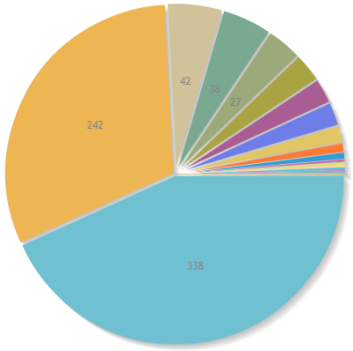

13.3.5.4.2.2 Configuring Pie Charts

If a Pie Chart or Donut Chart is selected, an additional block of parameters to maintain appears:


the Output Values Instead of % flag defines whether labels are output as a % of the total or as a

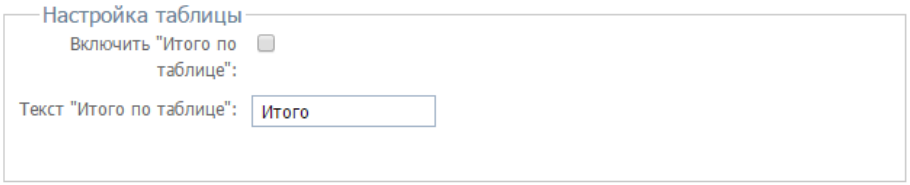
numerical value:




13.3.5.4.2.3 Configuring a Table

If a Table chart is selected, an additional block of parameters to maintain appears:

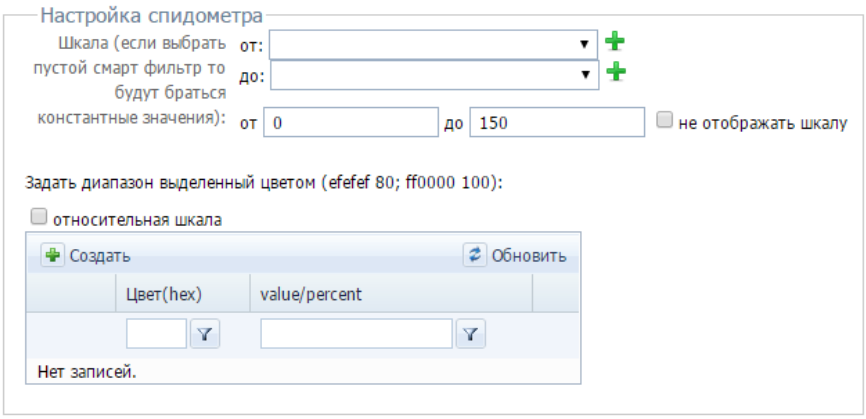



To display the totals row for a table chart, set the Include Table Totals flag.

Use Table Totals Text to specify the label to be displayed in the totals row.

13.3.5.4.2.4 Configuring a Speedometer

If a Speedometer chart is selected, an additional block of parameters to maintain appears:



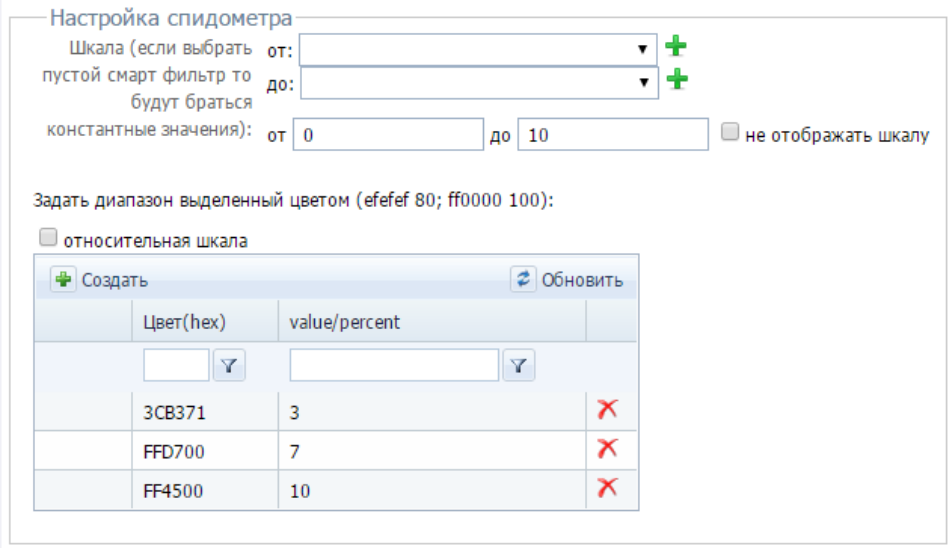

For correct speedometer display, specify maximum and minimum scale values (as Smart expressions or fixed numerical values).

If the Do Not Show Scale flag is set, the speedometer is displayed without numerical figures.

Use a "Specify highlighted range" table to define color range orders and their values. Create the required number of table entries consisting of two parameters:

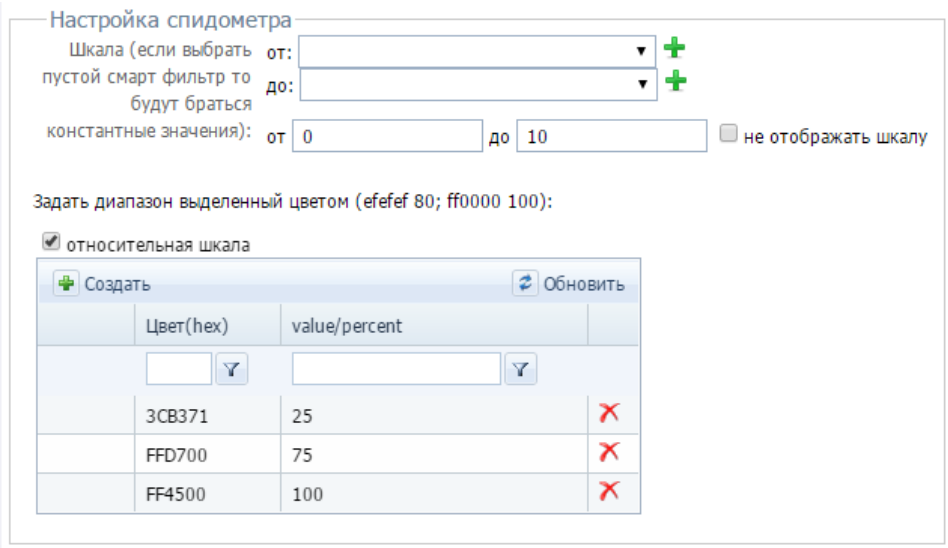
- Color in HTML hexadecimal format (RRGGBB). *For example, ff0000 stands for red*
- Maximum value for this color range.

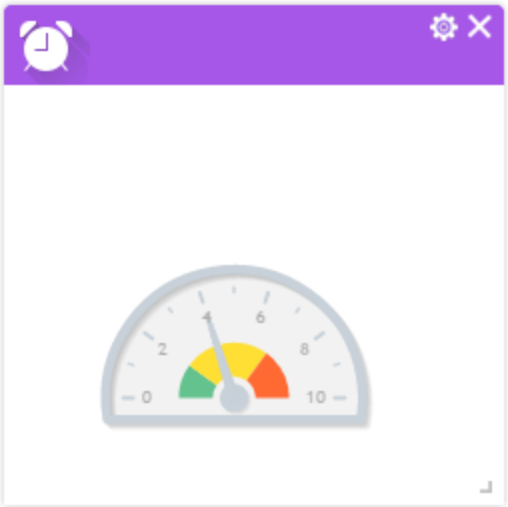
*For example, an entry with "ff0000" and "300" means that values ranging from the maximum value of the previous range to 300 are displayed in red*. Thus, maximum scale value is defined by the value specified for the last range.





If the **Relative Scale** flag is set, table values are specified as relative (in % of full scale), rather than absolute.



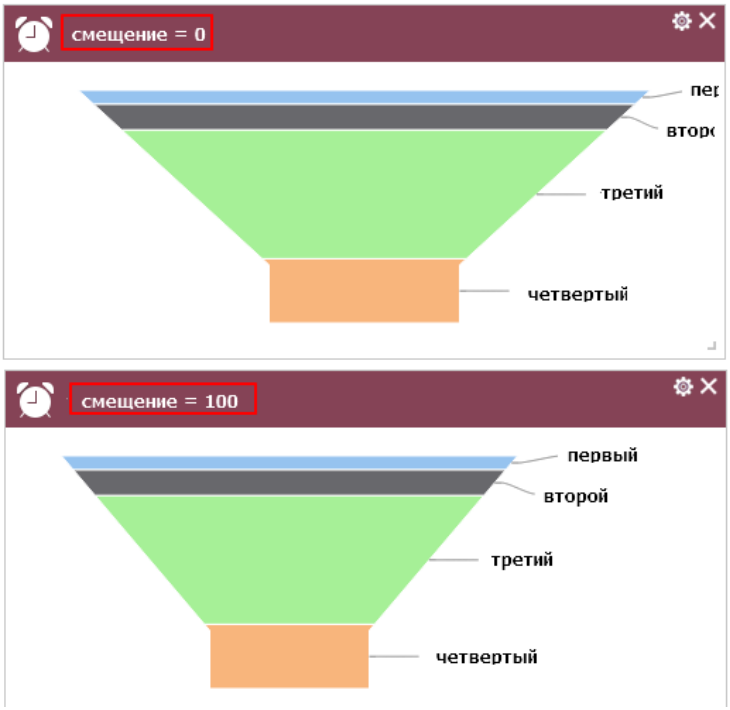

13.3.5.4.2.5 Configuring a Sales Funnel

> **IMPORTANT**: A Sales Funnel chart does not support data aggregation for data sources.

If a Sales Funnel chart is selected, an additional block of parameters to maintain appears:


If the **Enable Funnel Labels** flag is set, chart element labels are displayed on the chart to the right of the funnel.

Use the **Right Padding** parameter to specify offset (in pixels) from the right border of the chart to the right border of the block (this defines the label block width):




If **Right Padding** is blank, chart display is optimized by the system.

13.3.5.4.2.6 Configuring Stacked Charts

For correct display of stacked line charts or horizontal stacked line charts, populate the Group BY field in SQL object settings. In this field, specify the column used for grouping data. Totals are calculated from the column specified in the Header field which defines X axis values.

Segment colors are determined automatically.

*Example:*

*Data source:*

| | id | UserName | FruitName | Amount |
|---|---|---|---|---|
| 1 | 1 | Arthur | Orange | 10 |
| 2 | 2 | Arthur | Apple | 20 |
| 3 | 3 | Arthur | Grapes | 30 |
| 4 | 4 | Ragen | Orange | 30 |
| 5 | 5 | Ragen | Apple | 20 |
| 6 | 6 | Ragen | Grapes | 10 |
| 7 | 7 | Adalana | Orange | 20 |
| 8 | 8 | Adalana | Apple | 10 |
| 9 | 9 | Adalana | Grapes | 30 |
| 10 | 10 | Samuel | Grapes | 70 |

*SQL object settings:*

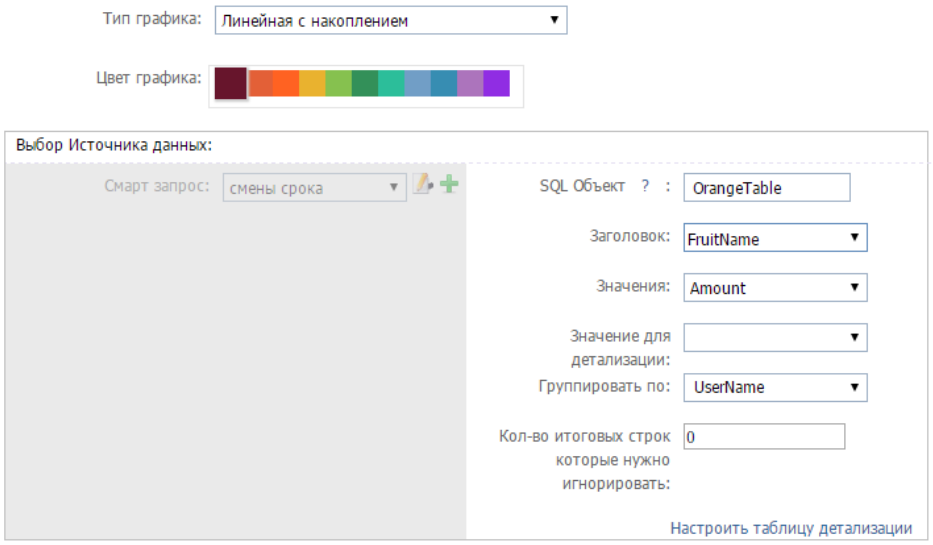
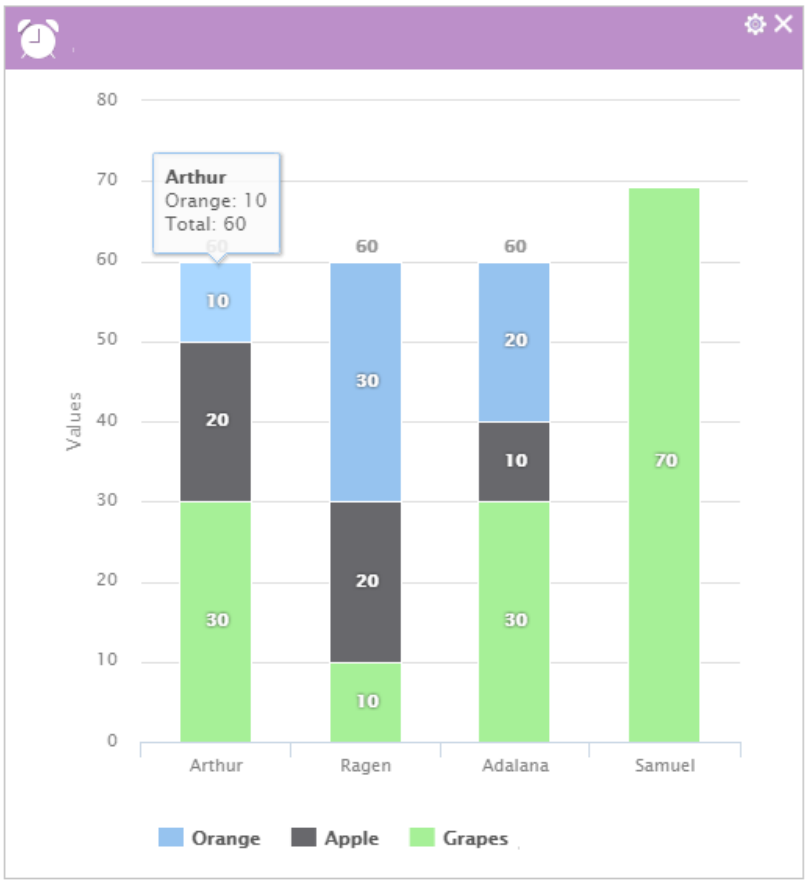
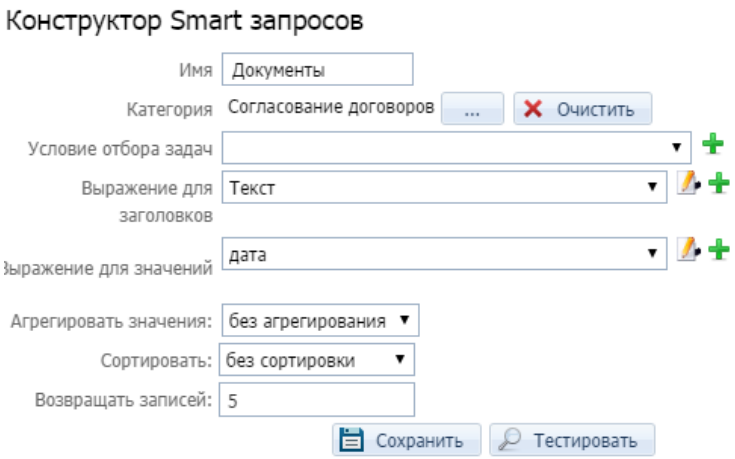



*Chart:*




13.3.5.4.2.7 Smart Query Builder

Click the icon or to the right of the Smart query selection field to navigate to the Smart query builder:

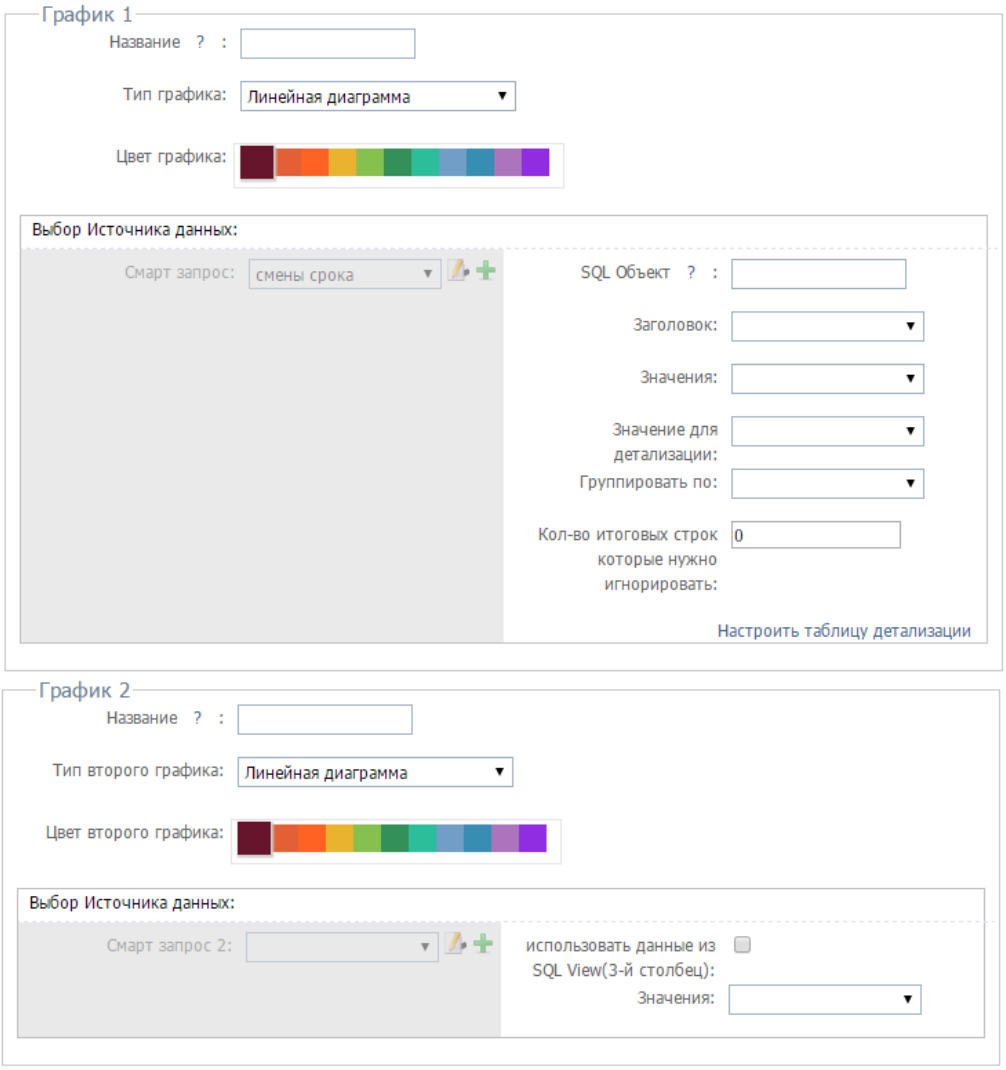



| Parameter | Explanation |
|---|---|
| Name | Query name |
| Category | Category used to build a query |
| Task Selection Condition | This Smart expression defines task selection conditions.<br><br>Select an existing Smart expression from the drop-down list or create a new one. |
| Expression for Headers | This Smart expression defines X axis values (or for aggregated queries, grouping fields similarly to GROUP BY in SQL).<br><br>Select an existing Smart expression from the drop-down list or create a new one. |
| Expression for Value | This Smart expression defines Y axis values, i.e., output results.<br><br>Select an existing Smart expression from the drop-down list or create a new one.<br><br>If Count aggregation type is selected (see below), this parameter is not displayed. |
| Aggregate Values | Select value aggregation type. Possible values are:<br>• No Aggregation<br>• Avg (average)<br>• Count (number)<br>• Min (minimum value)<br>• Max (maximum value)<br>• Sum |
| Sort | Possible values are:<br>• No Sorting<br>• By Headers<br>• By Values |
| No. of Returned Entries | Number of entries returned by the Smart query. If the field is blank, the number of returned entries is unlimited; otherwise, the specified |

| Parameter | Explanation |
|---|---|
| | number of entries is returned (top entries by sorting criteria). |

13.3.5.4.2.8 Using SQL Objects

Data sources for charts can be represented by an SQL object: a stored procedure, a view or a table.




An SQL object must contain:

- A text field with names displayed on the X axis. This field is selected in the Header field
- A numerical field with values displayed on the Y axis of the first chart. This field is selected in the Value field for the first chart
- A numerical field with values displayed on the Y axis for the second chart (optional, required if the Use SQL View Data (3rd Column) flag is set). This field is selected in the Value field for the second chart.

For detailed SQL procedure requirements, click here.

If data must be grouped by a specific column to calculate subtotals, this column is entered into the

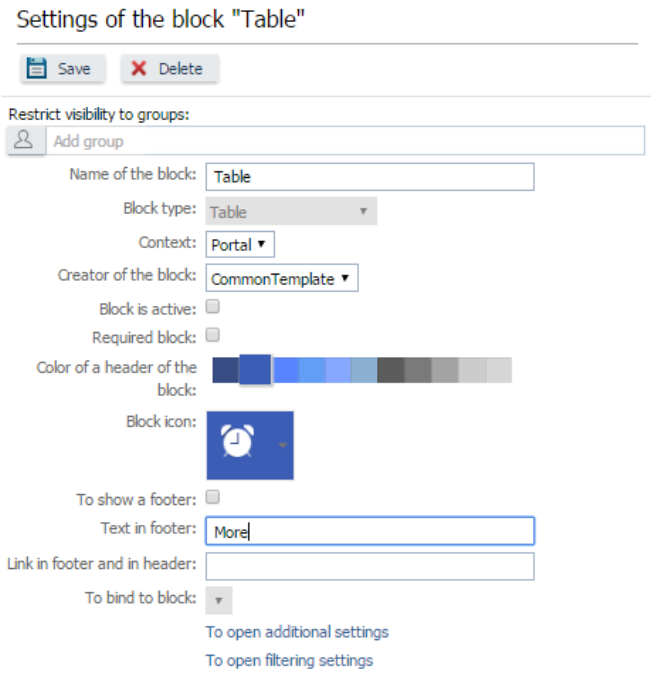
Group By field.

If an SQL object contains totals rows that must be hidden from the chart, specify the number of these rows in the Number of Totals Rows to Ignore field.

If a chart has an enabled data drill down option (Open Tasks on Chart Click flag), drill down parameters must be maintained. To do this, open the Setup Drill Down Table link. This table is maintained similarly to a Table block.

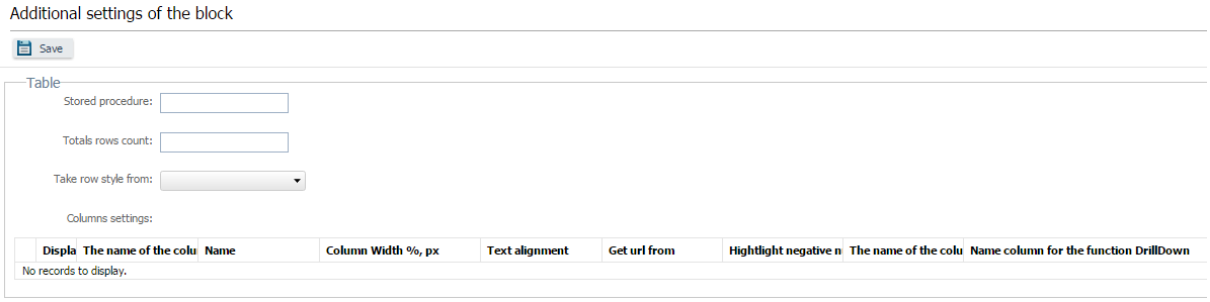
#### 13.3.5.4.3 Configuring a Table Block

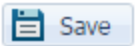
A Table block can display data retrieved from stored SQL procedures.



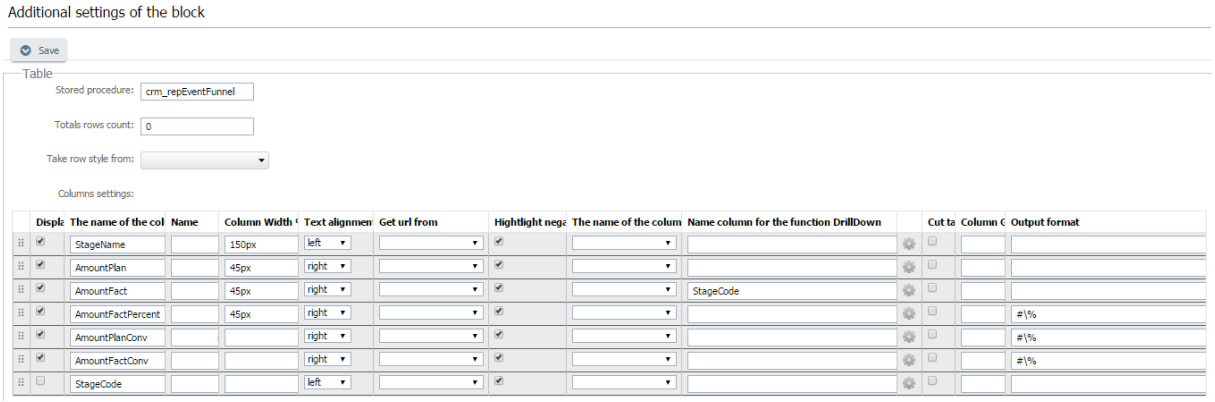

Click Open Filter Settings to open the window with filter settings.

Click Open Advanced Settings to open the window with advanced settings:




Enter procedure name in the Stored Procedure field and click 

. A settings table appears with the columns of the displayed table.



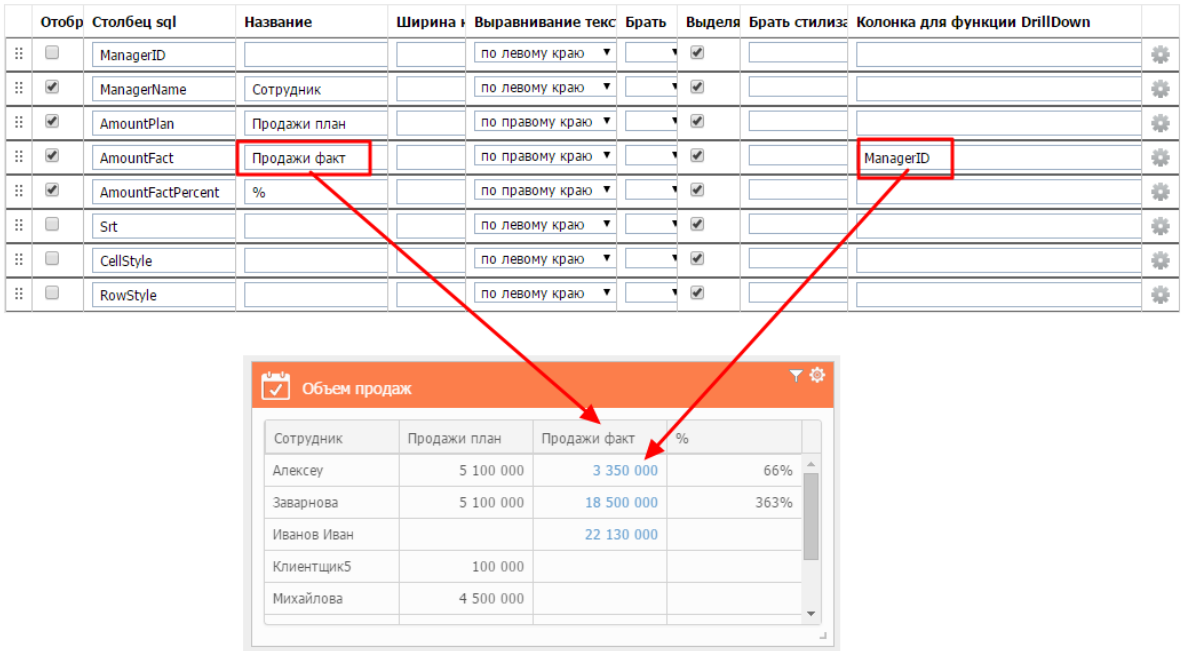

You can change the column order in the displayed table by dragging and dropping setting table rows (clicking the icon).

| Name | Description |
|---|---|
| Stored Procedure | Name of the stored procedure |
| Number of totals rows | Number of bottom rows that are treated as totals |
| Adopt Row Style From | Name of the column that stores the style description (formatting attributes)used for table row display |
| **Table columns** | |
| Show | If the flag is not set, the column is not displayed (by default, all columns are displayed) |
| SQL column | Name of the column in the SQL procedure |
| Name | Displayed name of the table column |
| Column Width | Column width as % of total table width |
| Text Alignment | Select one of the proposed text alignment options for the column (left, centered, right) |
| Adopt Link From | If a column of the table returned by the stored procedure contains a link (such as a task link), you can specify it here to display the corresponding column as a link.<br>IMPORTANT: A row can contain one of these two settings: Adopt Link From or Column for DrillDown. If both settings are enabled, an error message is issued on saving. |
| Highlight Negative Numbers in Red | If the flag is set, negative values are displayed in red. |
| Adopt Style From Column | If this setting is populated, the text in the column is displayed with the specified formatting attributes (instead of default formatting) |
| Column for DrillDown | Name of the column that supports drill down by mouse click.<br>Click the icon to open drill down table settings. |

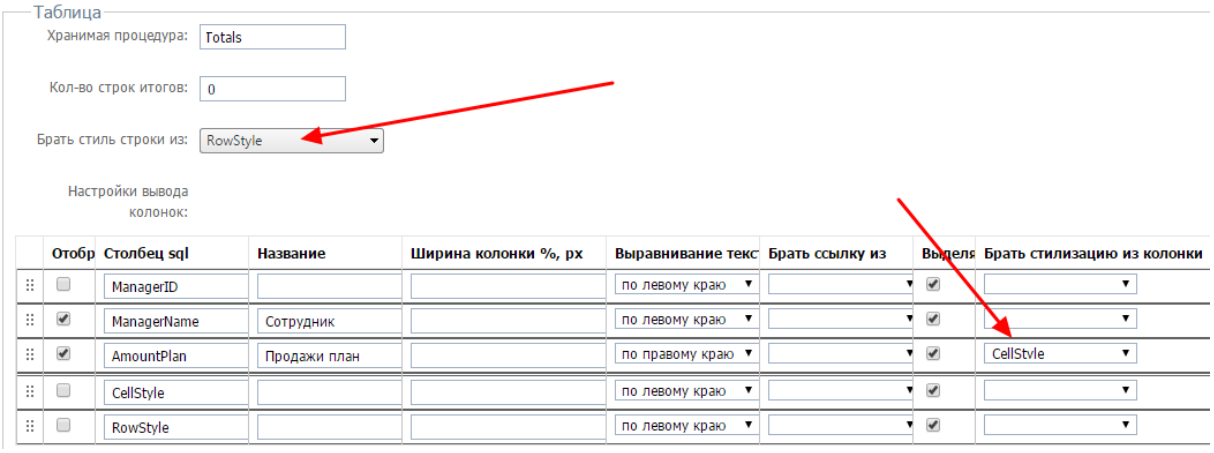
| Name | Description |
|---|---|
| | IMPORTANT: A row can contain one of these two settings: Adopt Link From or Column for DrillDown. If both settings are enabled, an error message is issued on saving. |
| Cut Tags | If the flag is set, the column text is displayed without accounting for HTML tags. |
| Column Group Name | A Table header can have a top level of adjacent columns with an additional common name. This name is specified for all columns grouped here. |
| Data Output Format | For dates<br><br>For numbers |

For stored procedure requirements and their usage, click here.

If data drilldown processing by a specific field is configured for a stored procedure, this field can be entered into the required row of the Column for DrillDown column. In this case, the values in the specified row are displayed as hyperlinks.




If output data formatting is used, the returned data can contain a field with the row style description (from Adopt Row Style From) and a field with the column style description (from Adopt Style From).




For stored procedure requirements, see the Administrator's Guide.

#### 13.3.5.4.3.1 Defining Table Style

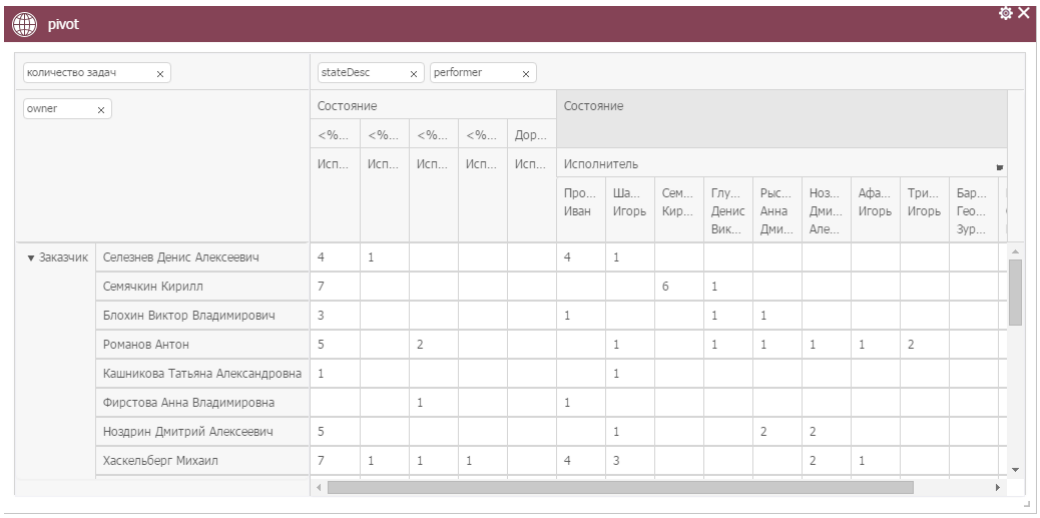
The following attributes can be used to define row and column style for a Table portal block:

| Value | CSS style |
|---|---|
| Default | No style |
| Success | background-color:#dff0d8 |
| Info | background-color:#d9edf7 |
| Warning | background-color:#fcf8e3 |
| Danger | background-color:#f2dede |
| TotalsRow | font-weight: bold |
| BackRed | background-color: pink |
| BackGreen | background-color: lightgreen |
| BackBlue | background-color: lightblue |
| BackYellow | background-color: gold |
| TextRed | color: red |
| TextGreen | color: green |

If a single row/column requires several attributes, separate them with a space.

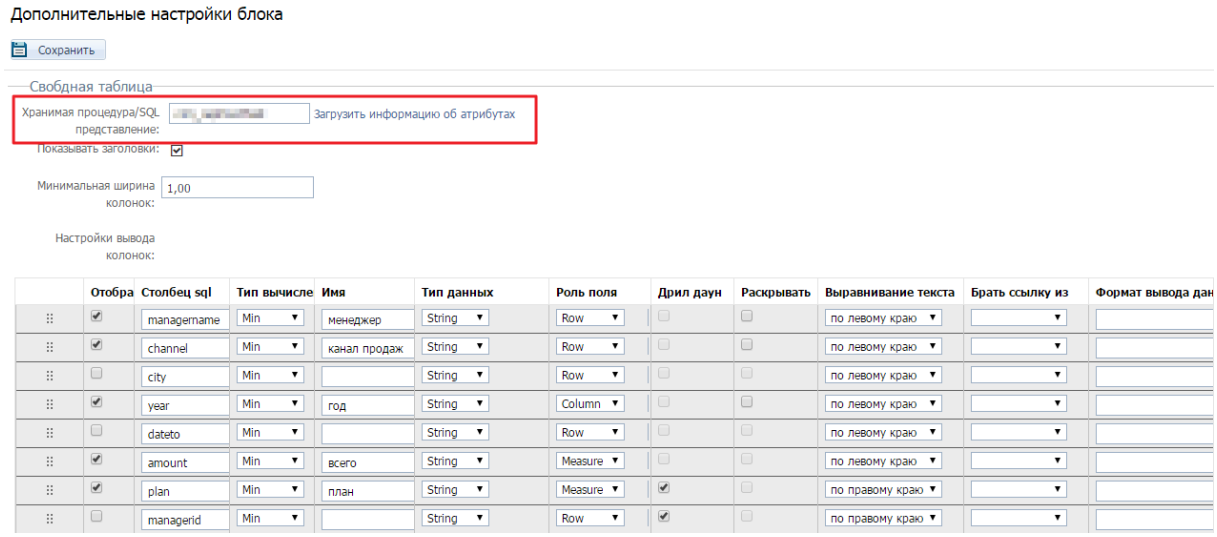
#### 13.3.5.4.4 Configuring a Summary Table Block

Summary Table block configuration is similar to Table block configuration. However, data in this block are arranged in tables with supported grouping and subtotal output.



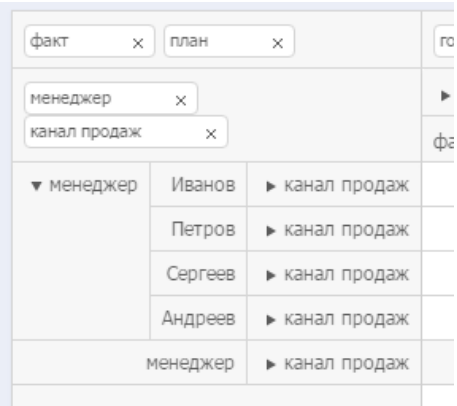

To define the table structure, enter the name of the stored procedure that will be used as the data source in the block settings and click the Upload Attributes Info link. A table with the data returned by the procedure appears below.

The SQL Column displays the names of table columns returned by the procedure.




- **The SQL Column** displays the names of table columns returned by the procedure.
- In **Show** column, set the flags for the data that must be displayed in the block.
- In **Name** column, you can enter field names that will be displayed in the block (if the name returned by the procedure is not meaningful).
- In the **Data Type** column, specify the type of the corresponding column in the returned table (String, Date, Number).
- In the **Field Role** column, specify whether the data must be displayed as a Column, Row or a data cell defined by column and row (Measure). Select DrillDown for data to hide them from the main table view and display them in detailed view (which is opened by clicking a Measure field). Select Hidden to hide data from both the main and detailed view.

- For data marked as a Measure, select an aggregation function **(Min, Max, Sum, Avg)** in the Calculation Type column.
- In the **Text Alignment** column, select one of the values (left, right, centered, justify)
- In the **Drill Down** column, mark Measure type cells that support drill down (they are displayed as hyperlinks you can click to navigate to detailed view).
- In the **Expand** column mark the columns or rows that must be displayed in detailed (expanded) view. Other columns and rows will be displayed collapsed by default, i.e., in a single line, but can be expanded by users at any time. *For example, in the screenshot below, Manager is displayed expanded while Sales Channel is displayed collapsed.*



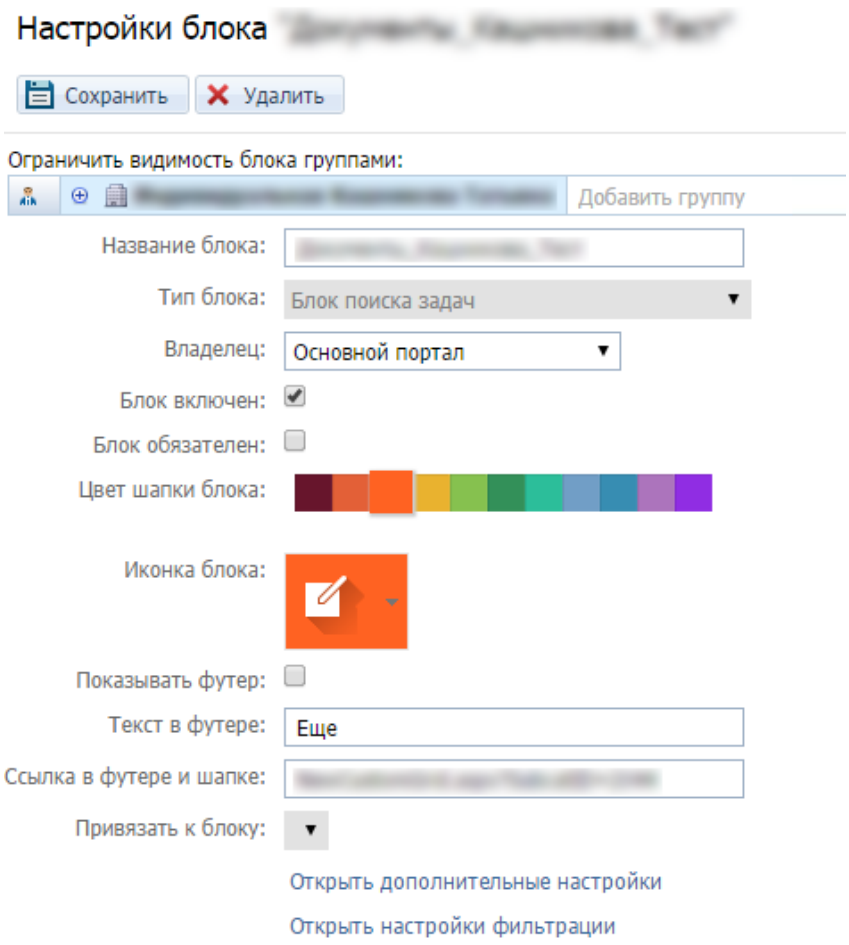

Maintain the settings and click Save.

For stored procedure requirements, see the Administrator's Guide.

13.3.5.4.5 Configuring a Task Search Block

A Task Search block displays the tasks that meet the specified Smart filter conditions.

**Settings window:**




Click Open Filter Settings to open the window with filter settings.

Click Open Advanced Settings to open the window with advanced settings:

Показывать счетчик:

Не подставлять ссылки автоматически:

Фильтр задач

Фильтр поиском: **Фильтр поиска блока 314** указан набор категорий и/или разделов для включения; задачи с датой постановки от -92 д;
Открыть настройки поиска

Смарт-фильтр:

Сортировка

Поле: Срок

Смарт-выражение:

Сортировать: По возрастанию Выводить: пустые значения первы

Группировка

Поле: Нет группировки Выводить: количество записей

Шаблон вывода для задач

Текст задачи:

Смарт-выражение вместо текста:

ID задачи:

Дата создания:

Срок:

Приоритет:

Заказчик:

Исполнитель:

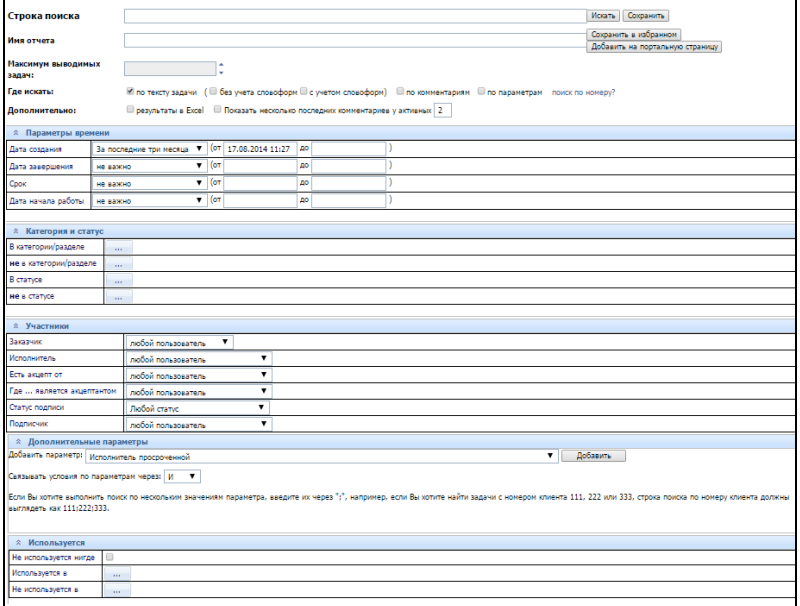
Индикатор "Я ответственный":

Картинки:

Показывать только мои задачи:

Показывать все задачи:

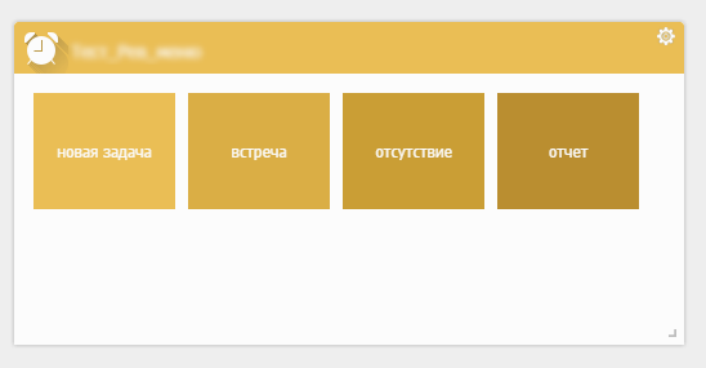
| Name | Description |
|---|---|
| Show Counter | If the flag is set, the task counter is displayed. |
| Do Not Propose Links | If the flag is set, tasks are displayed as texts instead of links. |
| Task filter | |
| Search Filter | Maintain task selection parameters. Click Open Search Settings to open the edit search parameters window: |

| Name | Description |
|---|---|
| |  <br>*Parameters are not saved and are reset (appear as blank) the next time this window is accessed!*<br>If tasks are selected by parameters, search results are displayed on the task search page (click the link in the block header). |
| Smart filter | Select an existing Smart filter or create a new one. A default edit SMARTs window opens.<br>If tasks are selected by a Smart filter, search results are displayed in a table (the table link is generated automatically and displayed in the block header). |
| Sorting | |
| Field | Name of the field used to sort the tasks |
| Smart Expression | Smart expression that defines task sorting |
| Sort | Sort order (ascending/descending) |
| Output | Empty entries (without values) can be output at the beginning or end of the sorted list |
| Grouping | |
| Field | Name of the field used to group the tasks |
| Show | Number of displayed entries for a group |
| Task output template | |
| Task Text | |
| Smart expression instead of the text | |

| Name | Description |
|---|---|
| Task ID | If the flag is set, the task number is output |
| Creation date | If the flag is set, the task creation date is output |
| Due Date | If the flag is set, the task due date is output |
| Priority | If the flag is set, the priority level is output |
| Requestor | If the flag is set, the task requestor is output |
| Assignee | If the flag is set, the task assignee is output |
| "I Am Responsible" Indicator | If the flag is set, the tasks with the user as the responsible assignee are marked with an icon |
| Images | If the flag is set, an image preview is displayed for images attached to a task |
| Show My Tasks Only | If the flag is set, only the tasks with the user as requestor, assignee or subscriber are displayed. |
| Show All Tasks | If the flag is set, both active and completed tasks are displayed. |

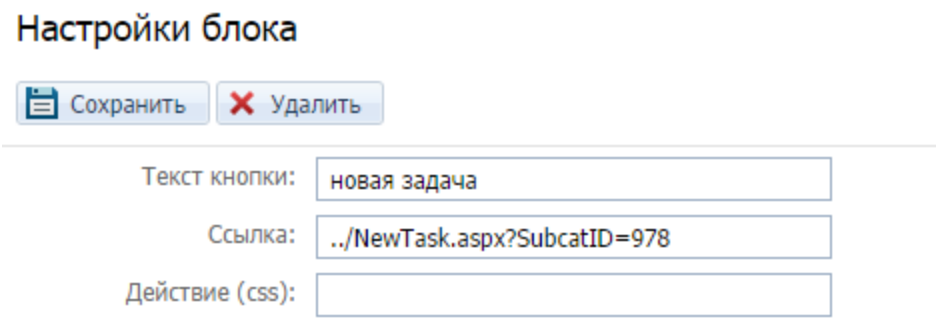
13.3.5.4.6 Configuring a Menu Block

A menu block can contain any number of buttons that are clicked to execute a specific action (navigate to a specific page). For example:




A new block contains a single system button, Add. This button is not displayed in user mode and is used for creating new buttons only.


Click Add to add a new button to the block. The button settings window opens:

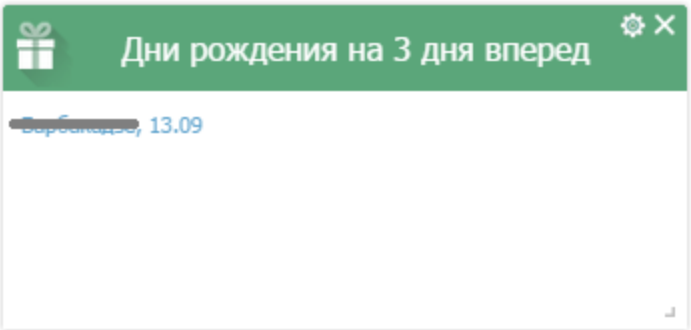



Enter the button text and the link that will open on button click. It can be a link to the list of tasks, to new task form, etc. A link must start with two dots ("..").

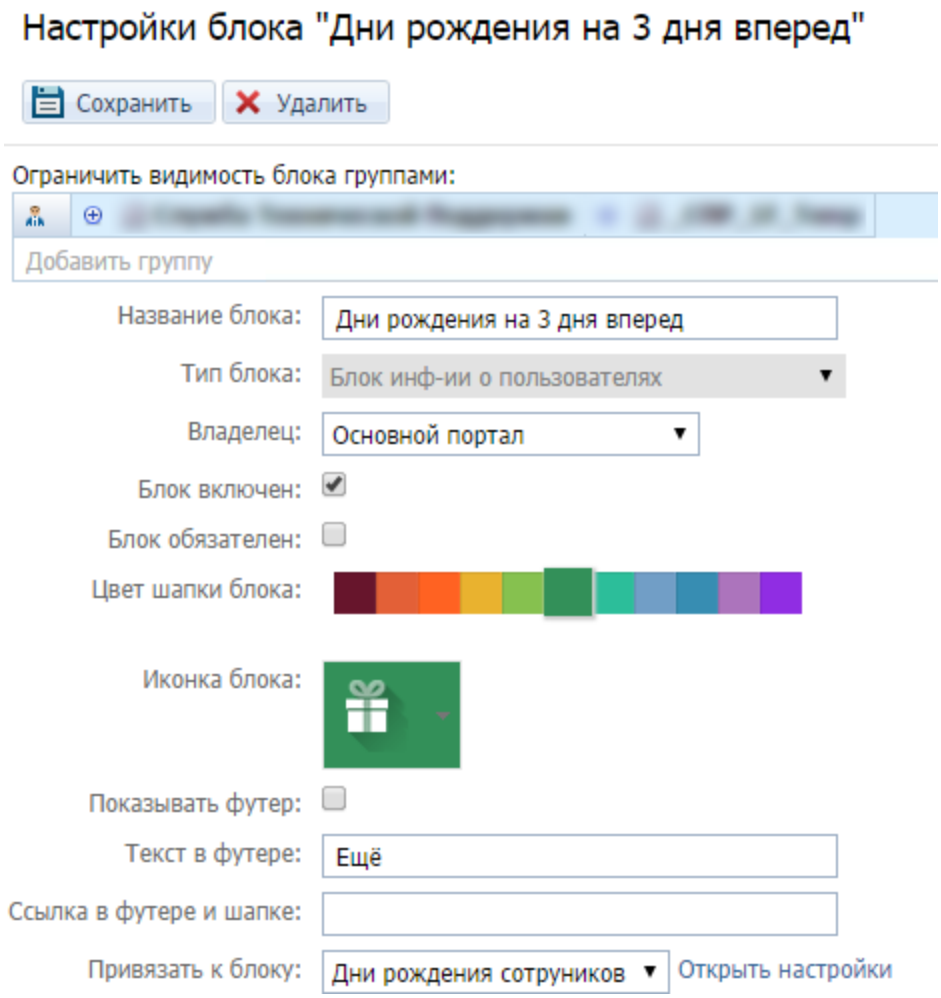
Other block buttons are configured similarly. You can change the button order by dragging and dropping.

#### 13.3.5.4.7 Configuring a User Info Block

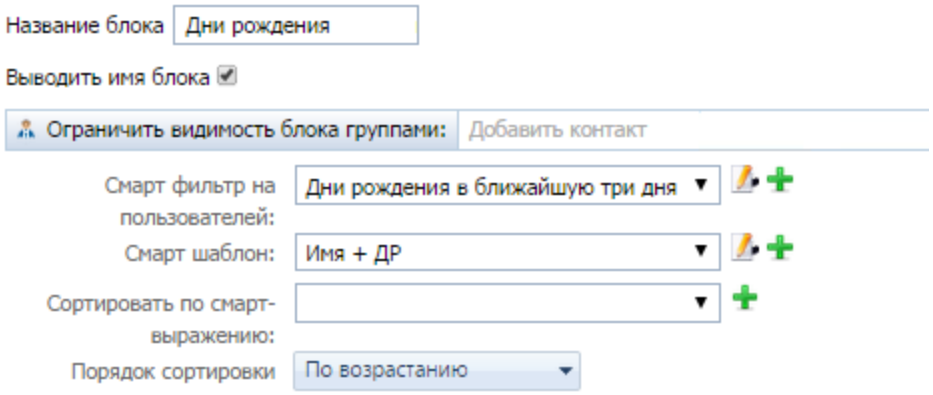
A User Info block displays information on users that meet the selected Smart filter conditions.



**Settings window:**




Click Open Settings to open the window with advanced settings:

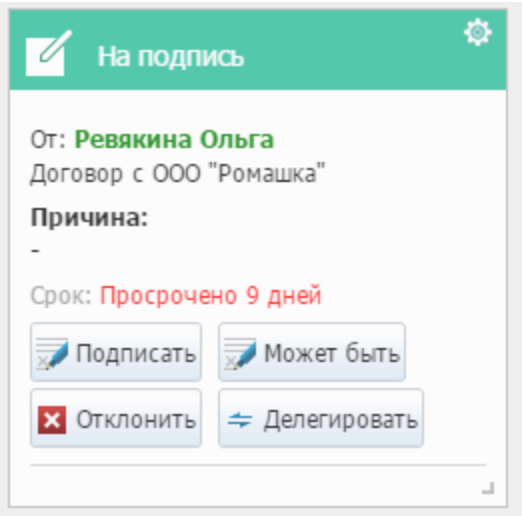



| Name | Description |
|---|---|
| Block Name | The name displayed in the top part of the |

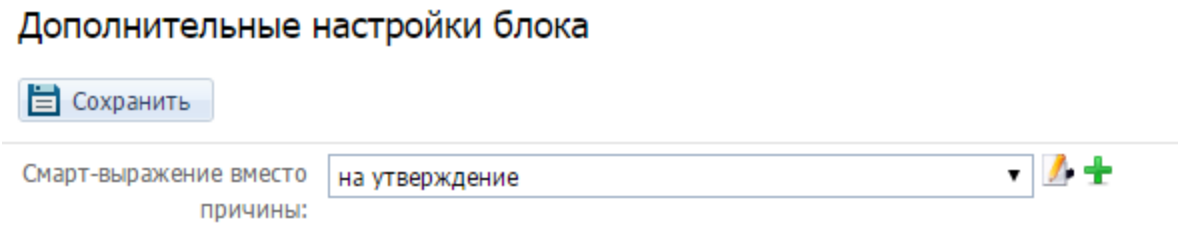
| Name | Description |
|---|---|
| | block |
| Show Block Name | Not used |
| Restrict Block Visibility by Groups | Select user groups that can access the block. |
| User Smart Filter | This Smart filter selects the users whose data is displayed in the block. Select an existing user Smart filter from the drop-down list, edit it by clicking , or click  to create a new Smart filter. |
| Smart Template | A Smart template defines the display of user information in the block. Select an existing Smart template from the drop-down list, edit it by clicking , or click  to create a new Smart template. |
| Sort by Smart Expression | This Smart Expression defines user information sorting. Select an existing Smart expression from the drop-down list or click the  icon to create a new Smart expression. |
| Sort Order | Select sort order (ascending or descending). |

13.3.5.4.8 Configuring a For Signature Block

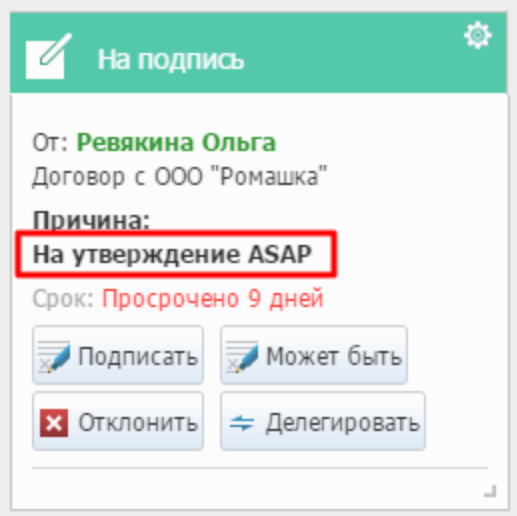
A For Signature block displays a list of tasks with requested signatures:




Use the settings window to select or create a Smart expression which returns a text line:



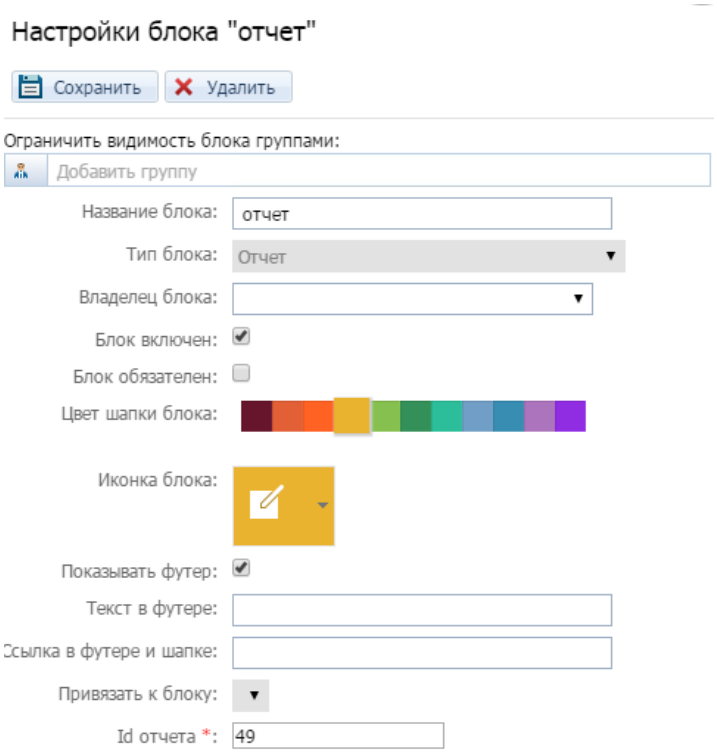

This text is displayed in the block instead of the reason for signature:




13.3.5.4.9 Configuring a Report Block

A Report block displays data obtained directly from one of the reports configured in the system.

**Settings window:**

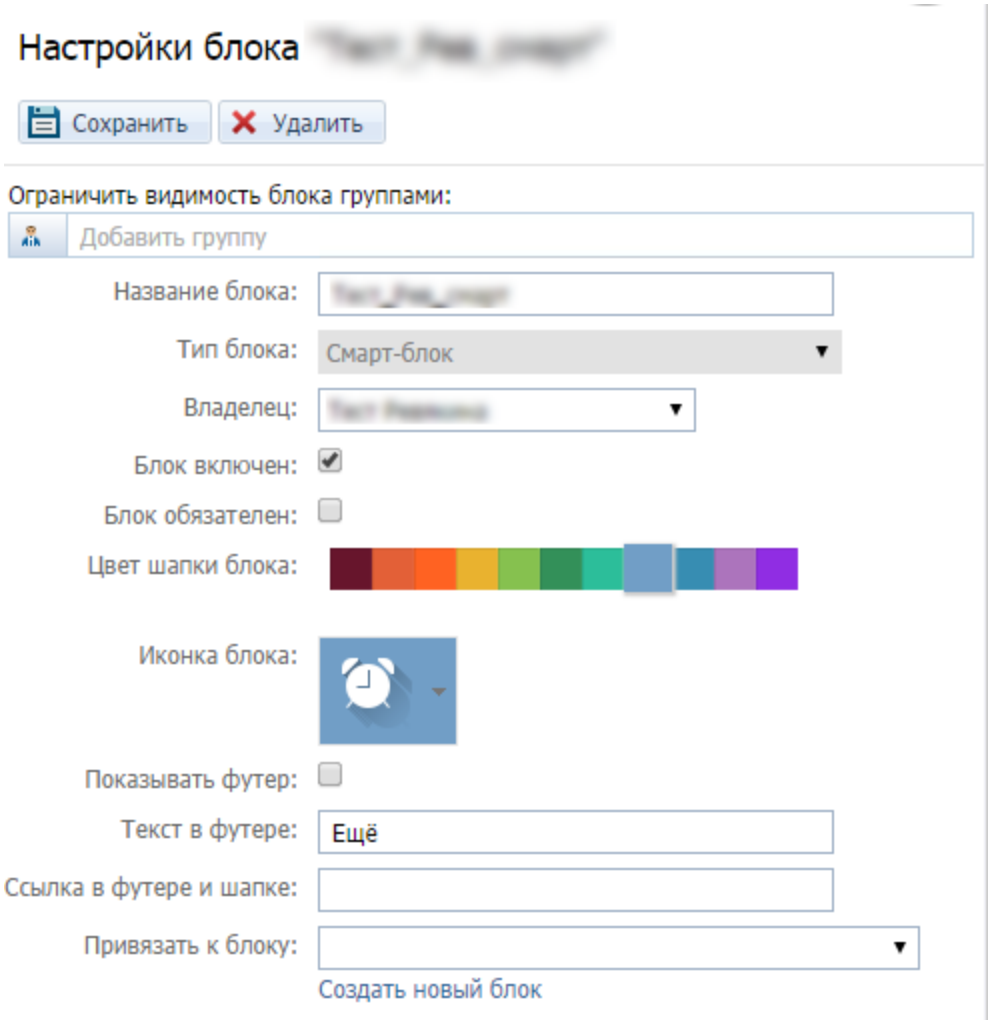



the report ID is sufficient for configuration. Footer Text and Footer/Header Link fields are populated by the system.

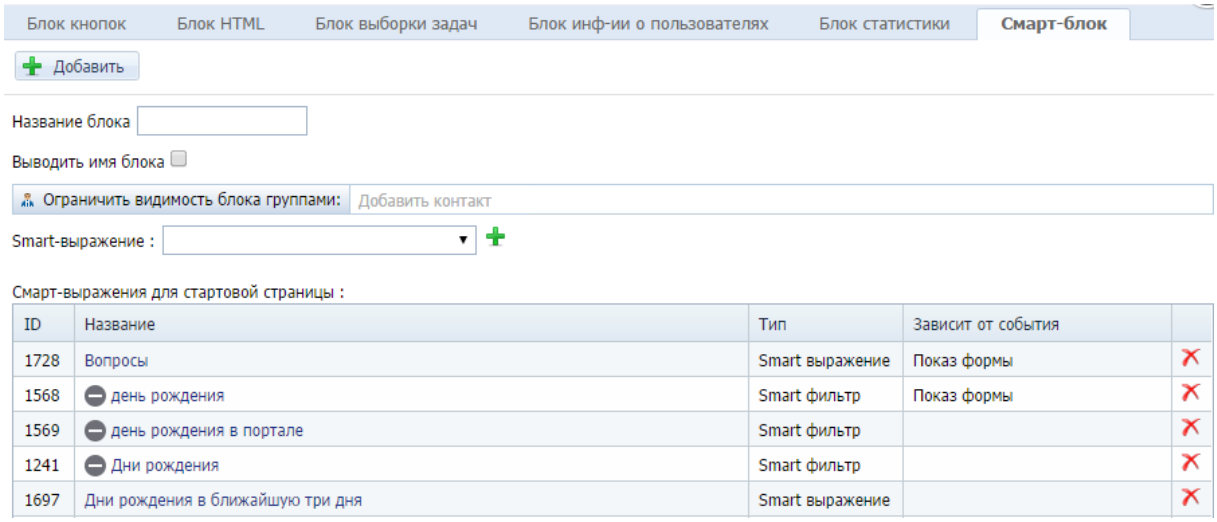
13.3.5.4.10 Configuring a Smart Block

A Smart block displays data derived from a Smart expression.

**Settings window:**




Click the New Block link to open the advanced settings window with a list of all Smart expressions configured in the system:

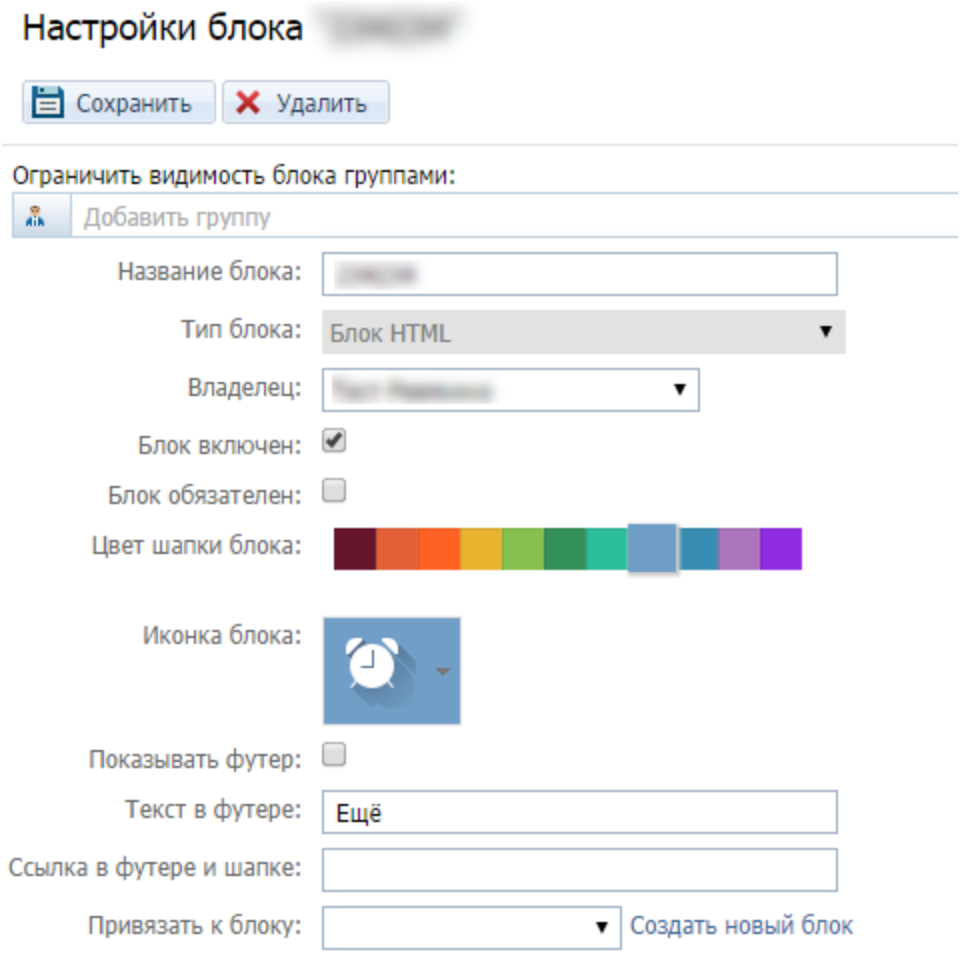


In the Smart Expression field, select an existing expression from the drop-down list or click the icon to create a new expression.

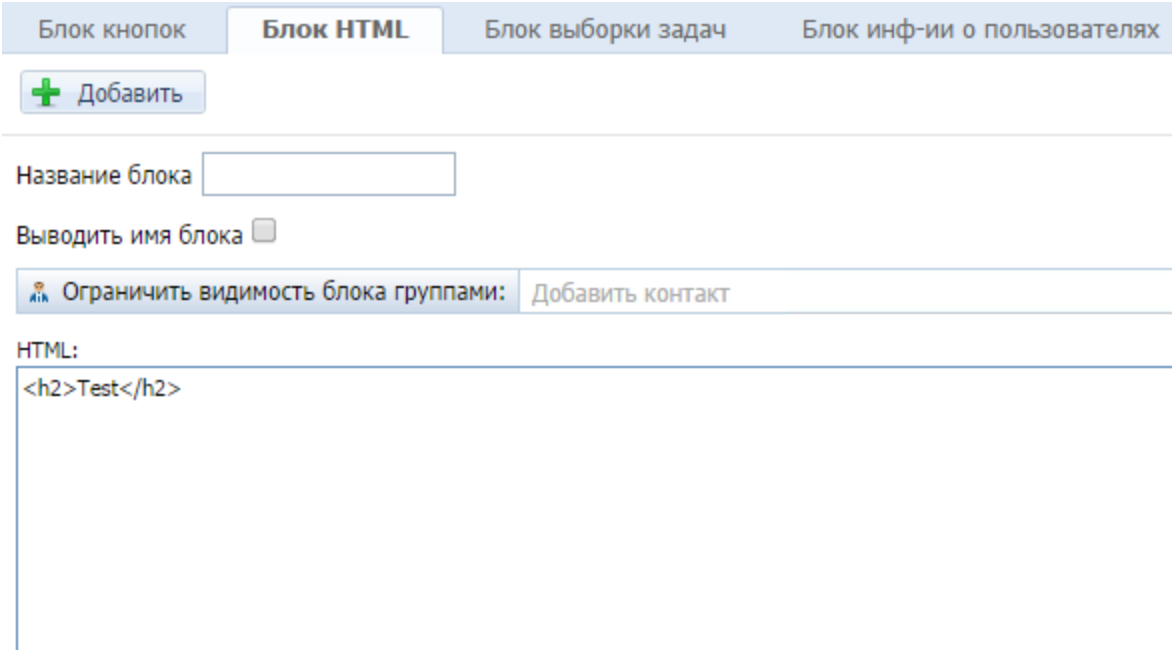
13.3.5.4.11 Configuring an HTML Block

An HTML block displays a page declared in HTML.

**Settings window:**




Click the New Block link to open the advanced settings window for editing HTML:




Copy a text in HTML format to the HTML field.

**Example**

A category must open in a new window from a portal block. The link must have the following format:

<a href="javascript:void(openSyndButtton('?PID=category_ID&force=grid',true))" >category_link_text</a>

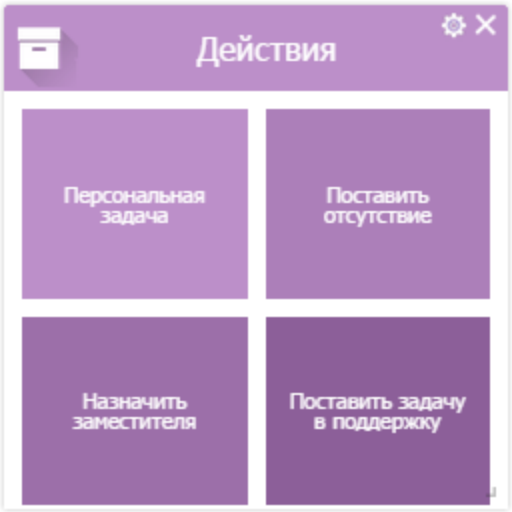
If the first parameter value is force=grid, the category is displayed as a table; force=cal displays it as a feed, force=stats as a summary, force=diagram as a Gantt chart, and force=gant as a calendar.

If the second parameter value is true, the category opens in a new window, and if false, the category opens in the same window.

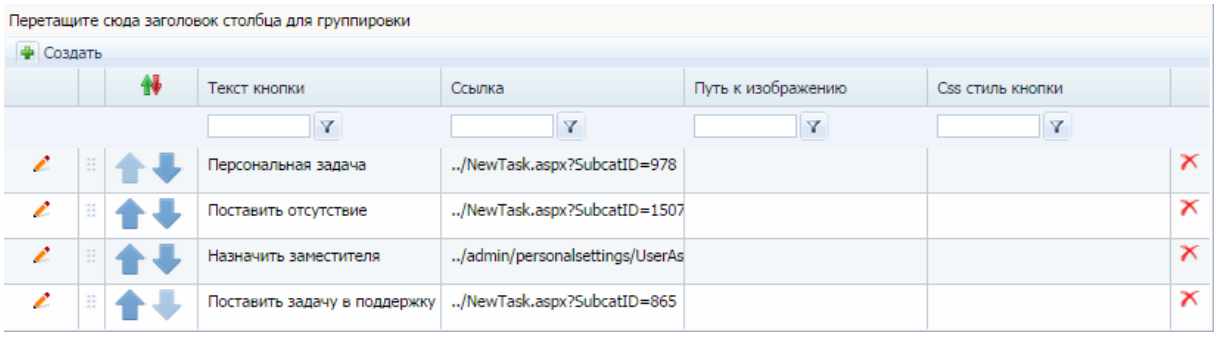
#### 13.3.5.4.12 Button Box Configuration

**IMPORTANT**: It is recommended to use a menu blockinstead of a button box for newly created blocks.

A button box can contain any number of buttons that are clicked to execute a specific action (navigate to a specific page).




Button settings window:

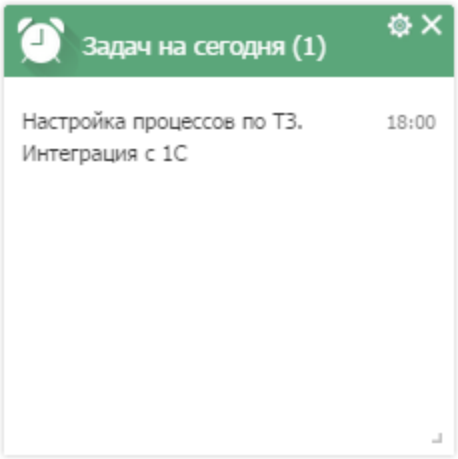



To add a new button, click Create. In the new line, enter the button text (as it will be displayed in the box), link to the window that opens on button click, button icon path (optional), and CSS style file path (optional). Then click ✓ at the beginning of the line to save changes or ✕ to cancel.

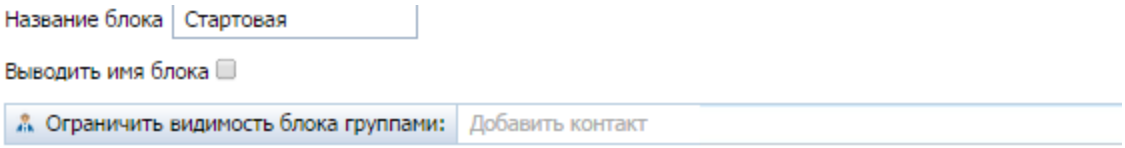
To edit settings, click the ✎ icon at the beginning of the corresponding row. To delete a button from the box, click the ✕ icon at the end of the corresponding row. Use arrows to define button display order in the button box.

13.3.5.4.13 Configuring a Statistics Block

**IMPORTANT:** A Statistics block is not recommended for newly created blocks.




**Settings window:**

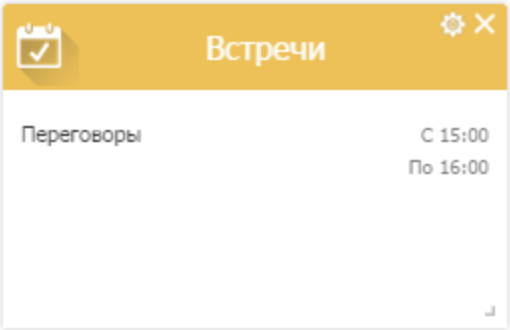



| Name | Description |
|---|---|
| Block Name | The name displayed in the top part of the block |
| Show Block Name | If the flag is set, the name is displayed; otherwise, the block is displayed without the name. |
| Restrict Block Visibility by Groups | Select user groups that can access the block. |

13.3.5.4.14 Configuring a Task Selection Block

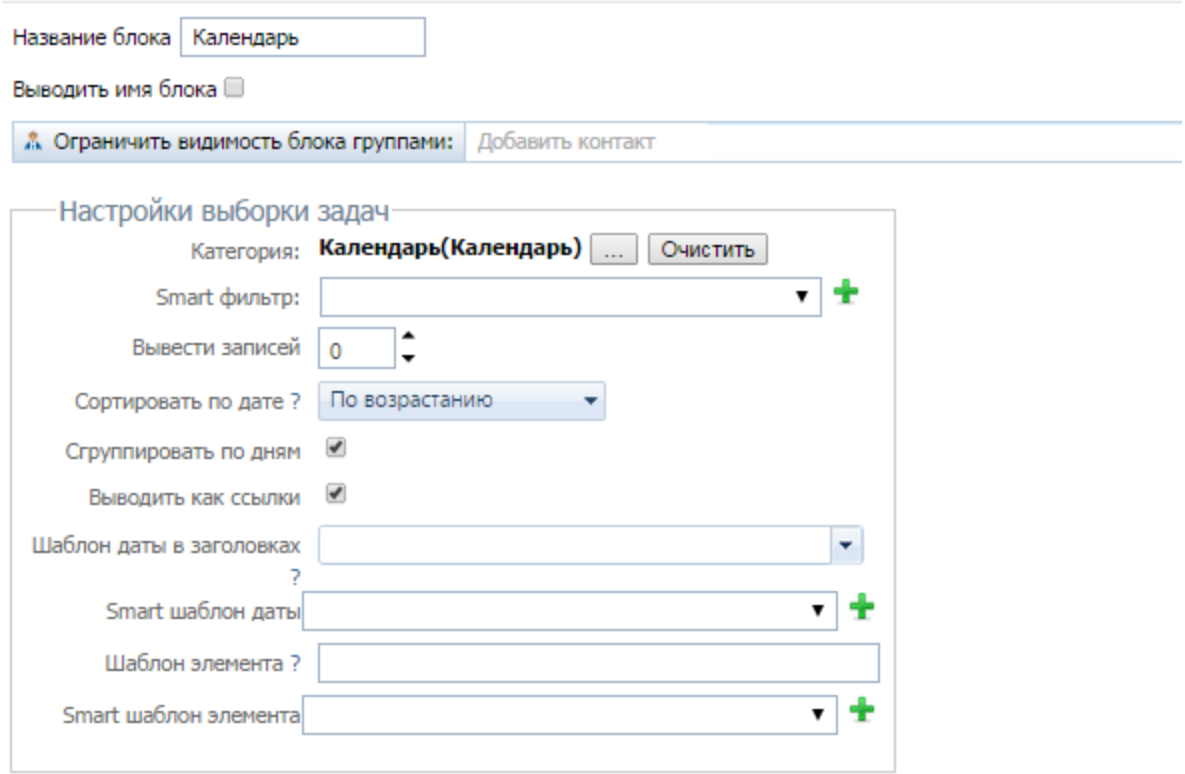
**IMPORTANT:** A Task Selection block is not recommended for newly created blocks. Use a Task Search block instead.

A Task Selection block displays the tasks that meet the selected Smart filter conditions.




**Settings window:**

Enter block name in the settings, set the Show Block Name flag to maintain block name display, and define user groups that will be able to access the block.

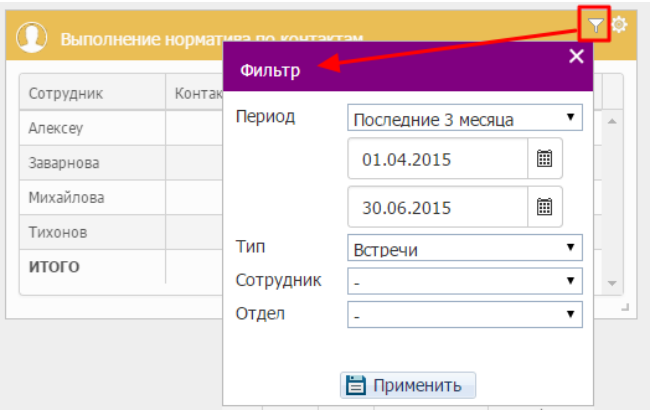



| Name | Description |
|---|---|
| Block Name | The name displayed in the top part of the block |
| Show Block Name | If the flag is set, the name is displayed; otherwise, the block is displayed without the name. |
| Restrict Block Visibility by Groups | Select user groups that can access the block. |
| Category | The category from which the tasks are selected |

| Name | Description |
|---|---|
| Smart Filter | Select an existing Smart filter from the drop-down list or click the icon to create a new Smart filter. |
| No. of Displayed Entries | Number of entries displayed in the block |
| Sort By Date | Sort order. If a template or Smart template for a date is specified, sorting by values derived from the template is used. If there is no template, tasks from the calendar are sorted by period, while other categories are sorted by task creation date. |
| Group By Days | If the flag is set, tasks are displayed grouped by days. |
| Display As Links | If the flag is set, tasks are displayed in the block as links. |
| Date Template for Headers<br><br>Element Template | The text supports expressions that are replaced with values of different task parameters when displayed.<br>• $Text is replaced with the task text<br>• $TaskID displays the task ID<br>• $CreatedTime displays task creation date<br>• $OrderedTime displays task due date<br>• $ExtBPNumber outputs BP with ID equal to BPNumber value.<br>*For example, $Ext15 is replaced by BP value with ID=15.* |
| Date Smart Template<br><br>Element Smart Template | Select an existing Smart template from the drop-down list or click the icon to create a new Smart template. |

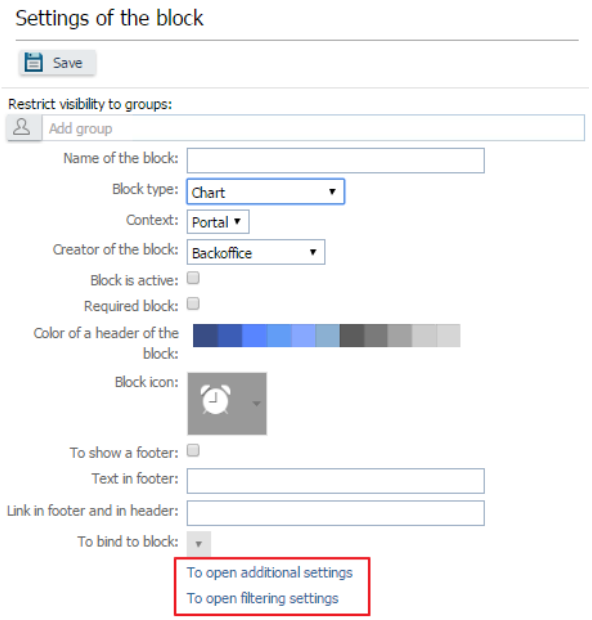
### 13.3.5.5 Filter Settings

Data filtering parameters can be maintained for Task Search, Table and Chart blocks. If filtering parameters are maintained, this block displays an **icon in the top right corner of the UI,** which you can click to open filter settings.



> **IMPORTANT**: Filtering only defines data selection conditions. For selection to work, the developer must maintain filter parameter retrieval and processing.

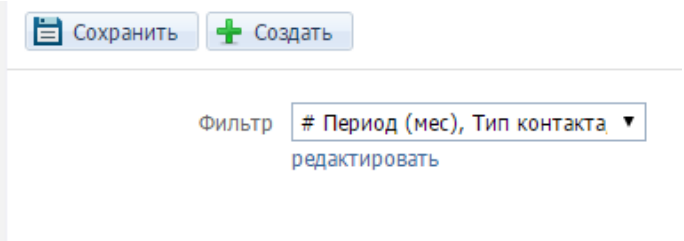
To configure filters in administrative UI, click the Open Filter Settings link.



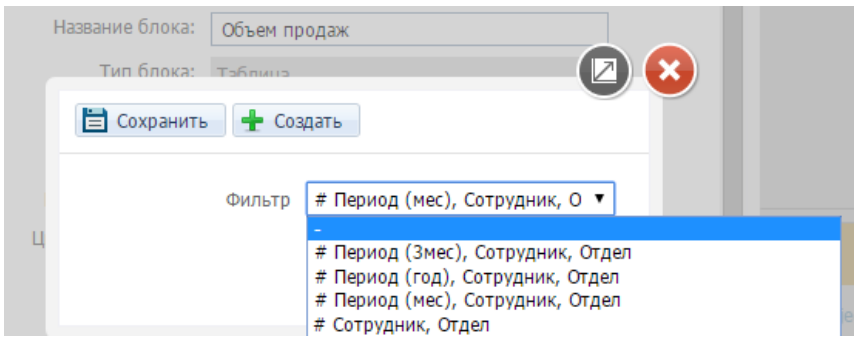

A window for filter selectionappears. Here you can select one of the existing system filters, edit it if required, or create a new filter.

13.3.5.5.1 Selecting, Creating and Editing Filters

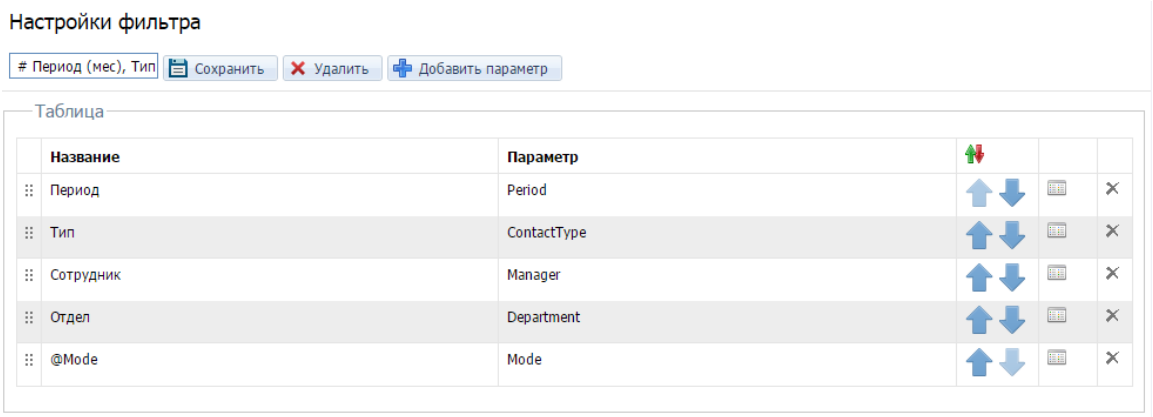
Use the filters window to select one of the predefined system filters (*in the drop-down menu*) and edit it if required (*Edit link*) or to create a new filter (*Create button*).




A filter can contain one or several selection conditions. A filter can be applied to different system objects (portal blocks, reports). Therefore, we recommend assigning meaningful filter names for easy use:

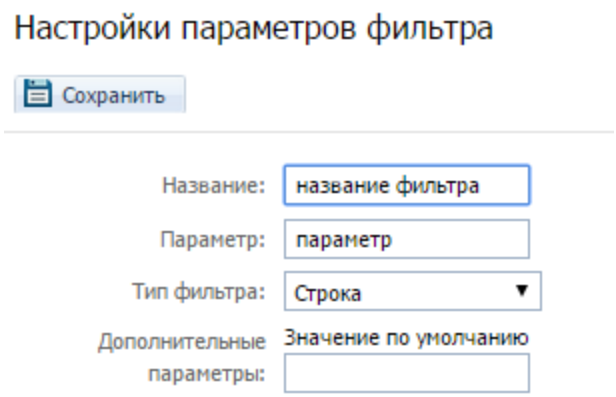



When creating a new filter, enter its name and save it. Then options for maintaining filtering conditions appear (*Add Parameter button*). In edit mode, the user is navigated directly to the parameter settings window:



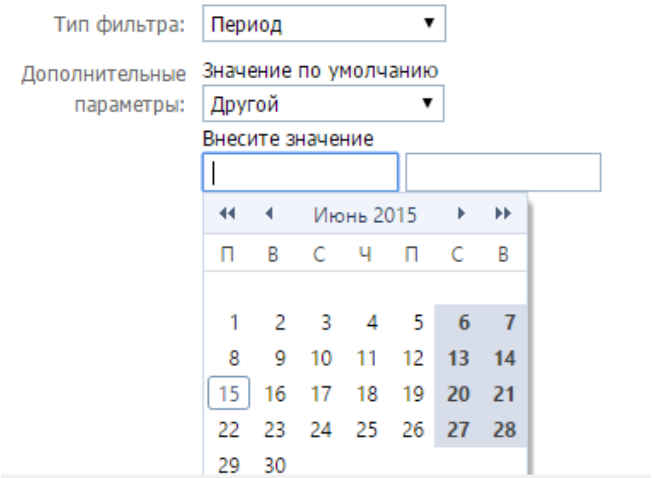

To add a new condition, click *Add Parameter*. Click the icon to edit a condition or the icon at the end of a row to delete the condition. To change the selection criteria order, use the arrows .

Selection condition create/edit mode opens with the **window for filtering parameters** where you enter the filter name and filtering parameter and select one of the types: string, number, date range, drop-down list, or hidden filter defined by a Smart expression. To save the maintained selection conditions, click Save .

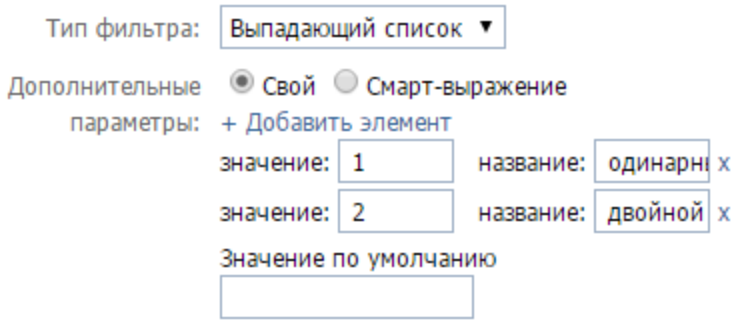



13.3.5.5.2 Configuration Specifics by Filter Type

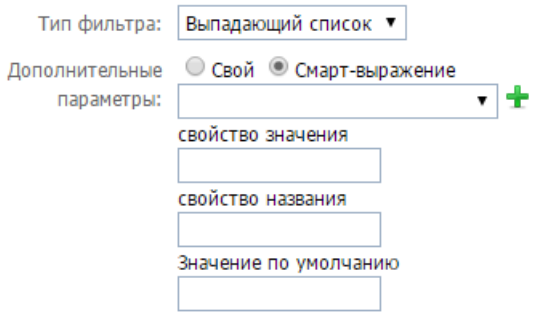
- If selection by period is configured, you can choose one of the following values: current week, current month, last three months, current year, or enter any period:



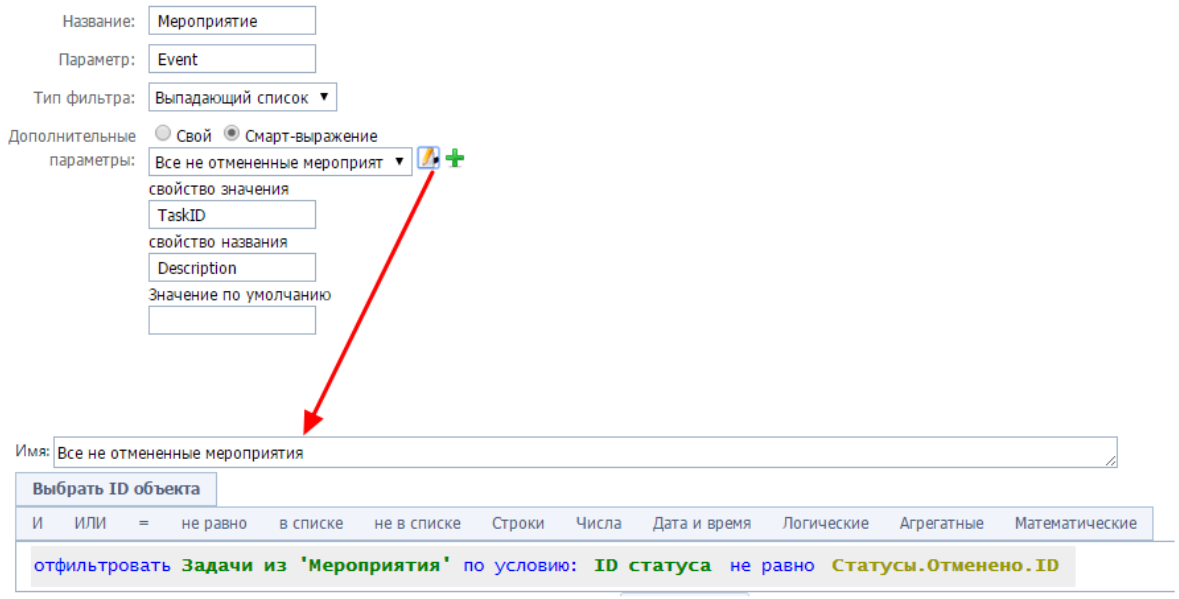

- If selection from a drop-down list is configured, you can create your own drop-down list by entering all of its elements:



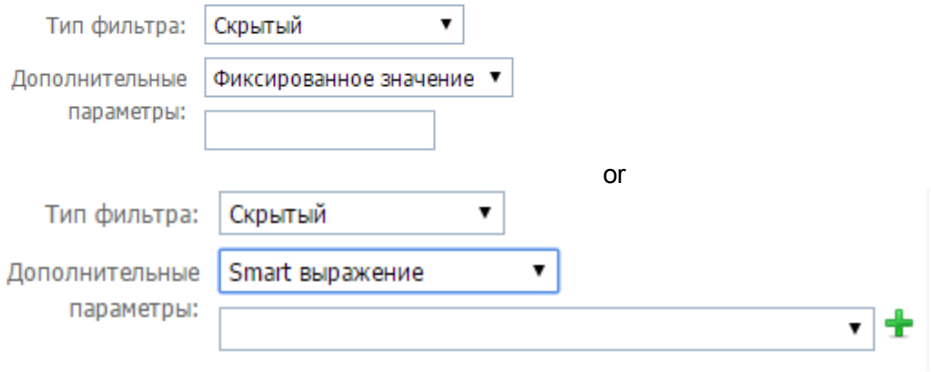

Alternatively, you can use a Smart expression:




The Smart expression must return a selection of elements. In this case, the Value Property field must identify this element (for example, by returning its ID), while the Name Property field must contain the element description displayed to users. For example:

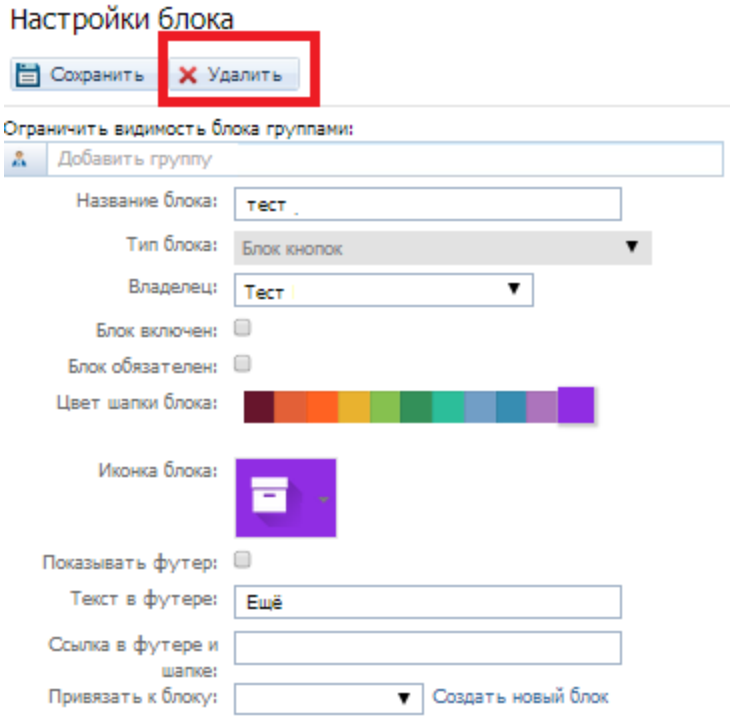



- If data displayed in the block must be additionally selected by a specific parameter value, use Hidden filter type. Here you can specify a condition as a fixed value or a Smart expression:



#### 13.3.5.6 Deleting a Block

To delete a block, open it in the edit settings window and click Delete:

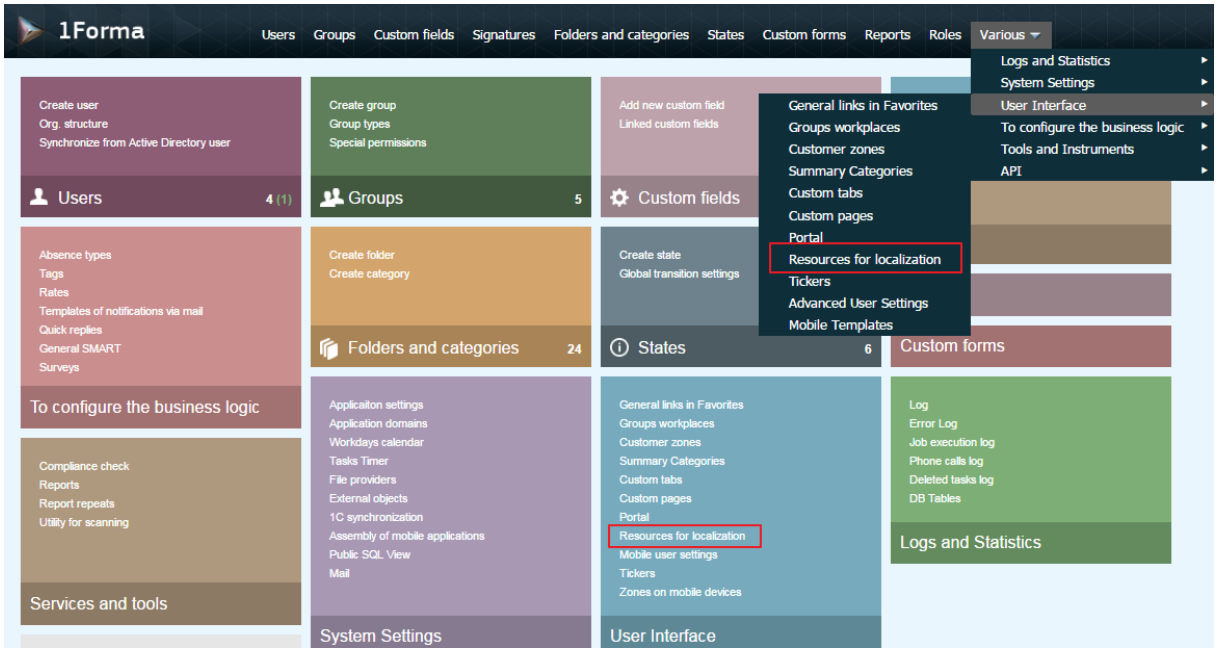



### 13.3.6 Localized resources

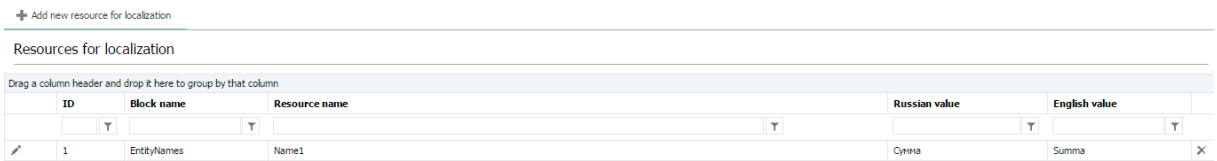
This functionality is used to adapt entity names for application custom fields to multilanguage settings. Entities that contain a localized resource value in their names are displayed in Russian or in English depending on the UI language selected in user settings (*UI language can be changed in user mode from the user profile by choosing: Settings — Profile in the main menu and editing Language field*).

**IMPORTANT:** To use the configured localized resources, open general application settings and set the Replace Resources with the Text flag.

To navigate to the localized resources setup page, click the Localized Resources link on the home page or choose the corresponding item in Miscellaneous — User Interface.



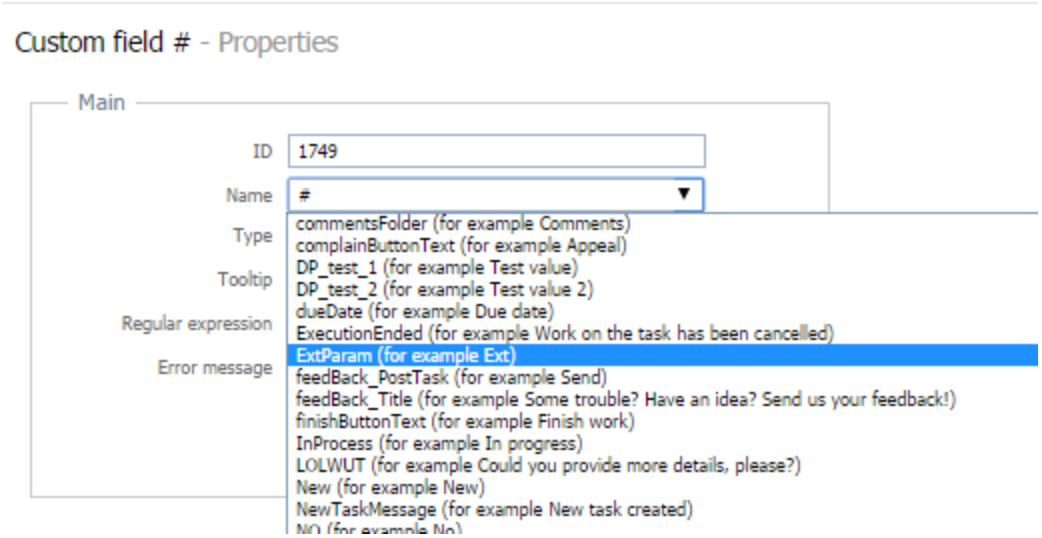

A table with the existing localized resources opens.




| Name | Description |
|---|---|
| ID | ID number of the localized resource, which is assigned automatically and cannot be edited |
| Block Name | Title of the localized resource block. This is used for technical reasons and cannot be edited. |
| Resource Name | Name of the localized resource. A meaningful resource name is recommended. |
| Russian Value | Entity name in Russian |
| English Value | Entity name in English |

After resources are added to the table, custom field settings display a drop-down list in the parameter name field which you can use to select the display option with existing localized resources.

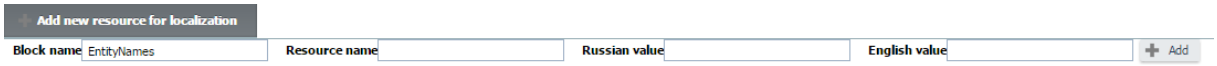
UI in English uses the English value:




Along with localized resources created in administrative UI, a standard non-editable set of standard resources is also delivered.

### 13.3.6.1 Creating a New Localized Resource

To add a new localized resource, click the Add New Resource button. A window for adding a resource appears.



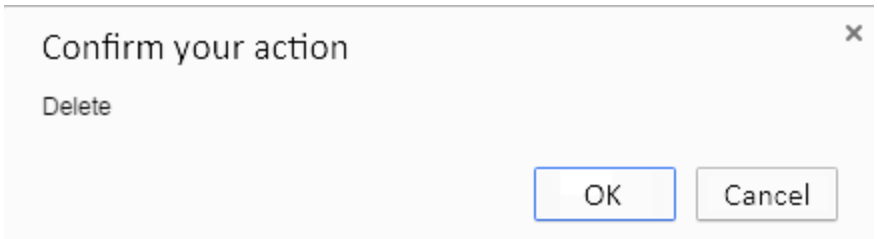

Enter the required values and click Add. The new resource appears in the summary table.

### 13.3.6.2 Editing a Localized Resource

To edit a localized resource, hover the mouse over the required table row and click . Make changes and click the icon at the beginning of the row to save the changes or the icon to cancel.

### 13.3.6.3 Deleting a Localized Resource

To delete a resource, click the delete icon in the corresponding table row. A confirmation window opens.

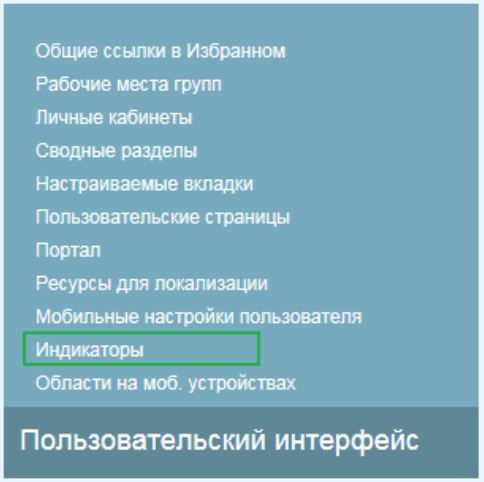



Click OK to confirm deletion. If deletion has been chosen by mistake, click Cancel.

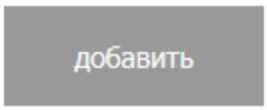
## 13.3.7 Indicators

### General settings

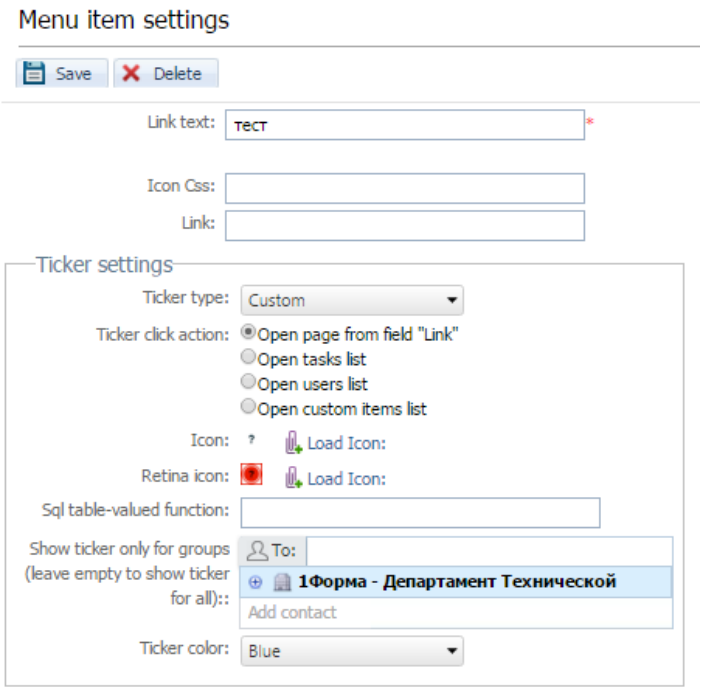
Choose Indicators from the User Interface block.




In the window that opens click Add.




The Indicator setup form opens in a new browser window.




This form contains two areas: a top area with link fields, and a bottom area with indicator settings. Action buttons are displayed above the top area.

### Link fields

The following fields are available here:

*Link Text* (mandatory): specify the name that will be used to hide the link.

*Icon CSS*: the field can contain a fragment of CSS code declaring the indicator display format, e.g., *color:yellow; background:green*

*Link*: enter link to the 1Forma web page (https://ru.1forma.ru), if Open Page From Link Field is selected below. If another action is selected, the field can be blank.

### Indicator settings

*Indicator Type*: select Custom for creating a new indicator. Other values are standard 1Forma indicator types.

*Action on Indicator Click*
- Open page from Link field
- Open task list
- Open user list
- Open free form list

*Icon* displays an icon. Click Upload Icon to upload another icon. File size has no limit; however, the image is resized to 36x36 px for display on the indicator panel.

*Retina Icon* contains an icon for Retina displays (on mobile devices). Click Upload Icon to upload another

icon. The size limit for this image is twice the size of a standard display (72x72 px).

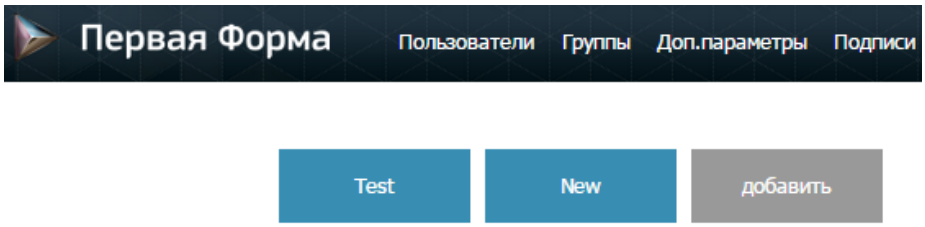
*SQL Table Function* can be used to assign an SQL function defined by the system administrator for executing Open Task List, Open User List, or Open Free Form List actions. For sample functions, see the recommendations inSQL Queries".

*Indicator Color* is used to select the default indicator layout: white font on blue or red background. This field is overridden by Icon CSS if specified

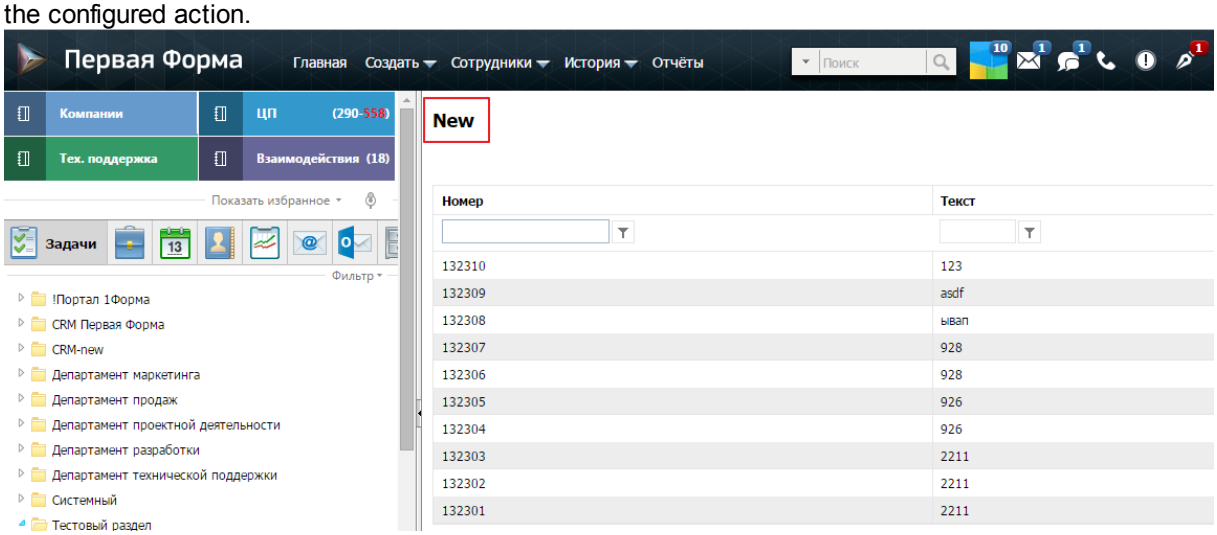
> **IMPORTANT**: The column alias returned by SQL functions must be identical to the names of existing DB table columns.

*Indicator Available to Groups*: select user groups that can access the indicator.

Maintain the required indicator settings and click Save on top of the screen. A button for the new indicator appears in the administrative UI. To change the counter order on the control panel in UI, you can drag and drop the buttons.




To make a new counter visible on the control panel, refresh the page. Click the new indicator to execute the configured action.



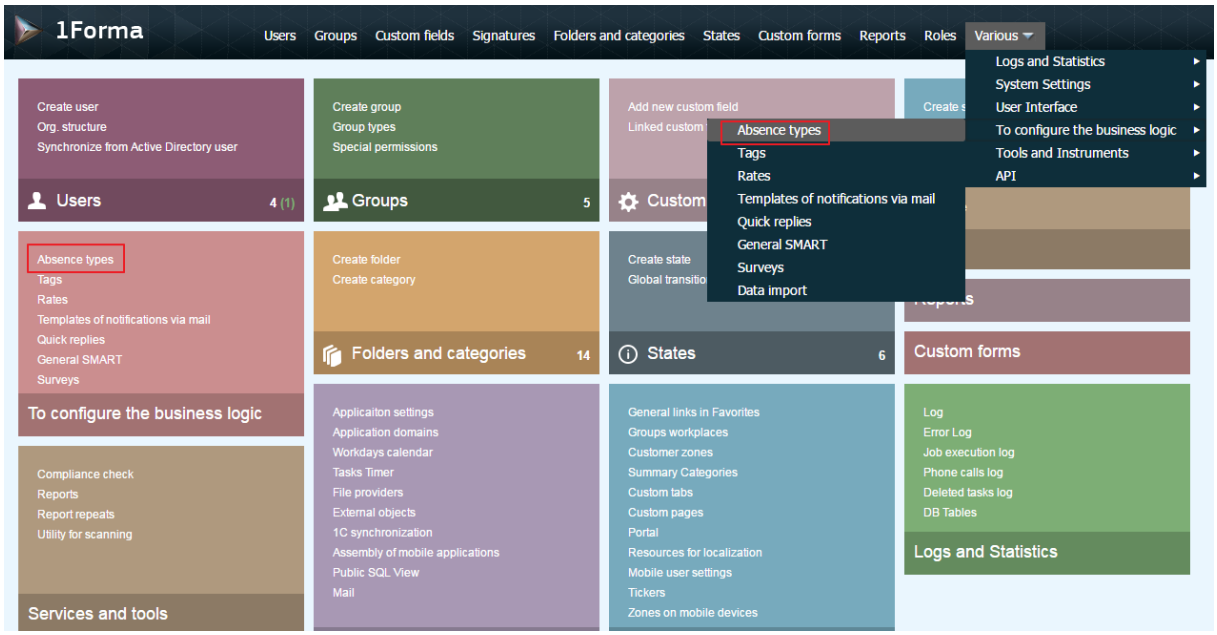
## 13.4 Business Logic Setup



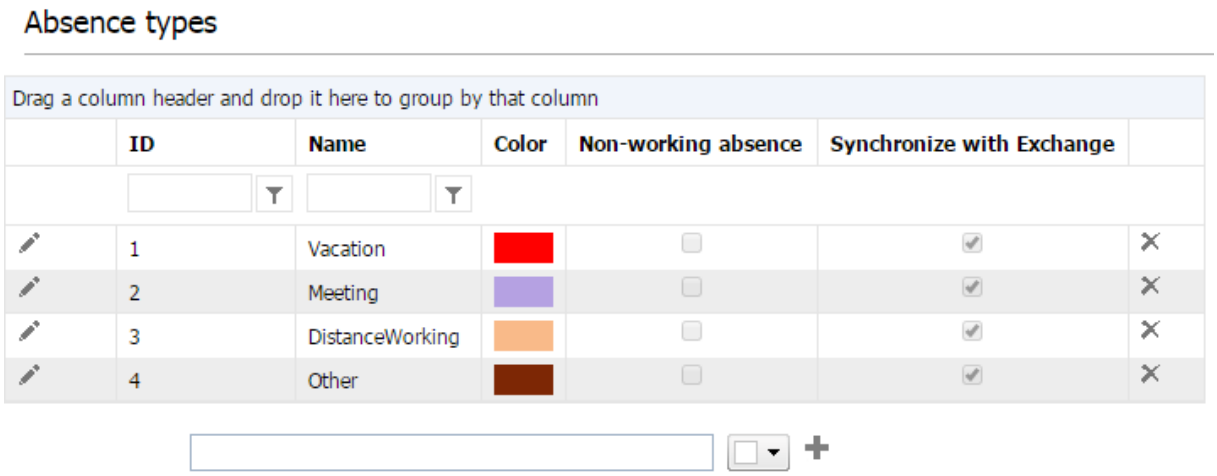
### 13.4.1 Absence Types

If a user marks himself/herself as absent, his/her name is displayed in italics and highlighted in another color depending on the absence type. This helps other users to quickly and easily determine the reason for their colleague's absence.

To navigate to the absence type management page, click the Absence Types link on the home page or the corresponding item in the Miscellaneous — Business Logic Setup menu.

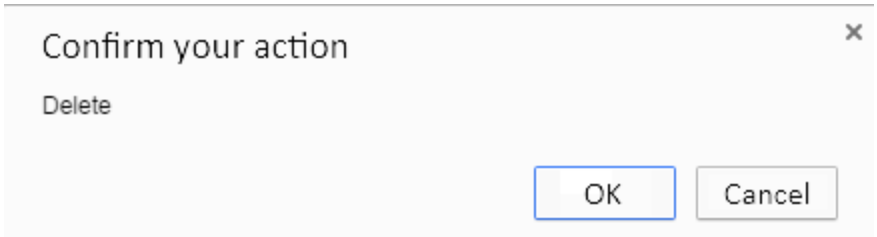



This opens a list of absence types configured in the system.




To **add a new absence type**, enter its name in the field below the table and choose a color for highlighting names of users with this type of absence, then click ✚.

To **delete an absence type**, click the ✕ icon at the end of the corresponding row. A confirmation window opens.

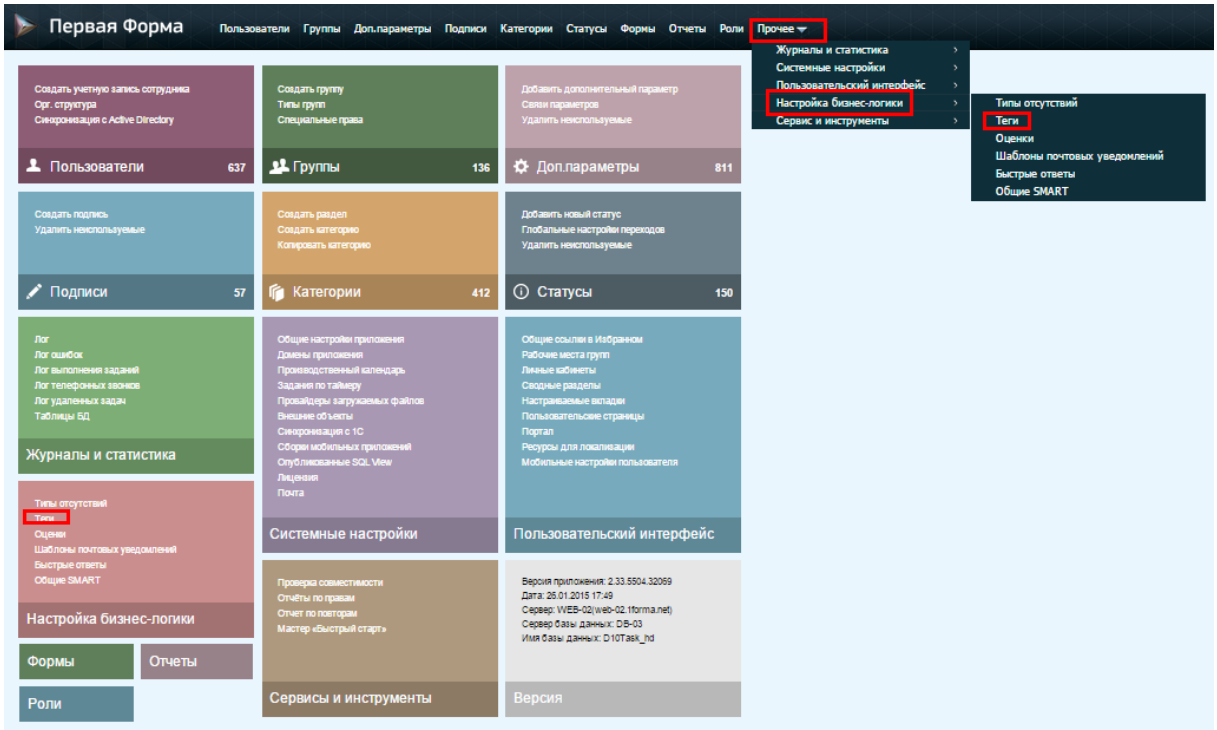



Click OK to confirm deletion. If deletion has been chosen by mistake, click Cancel.

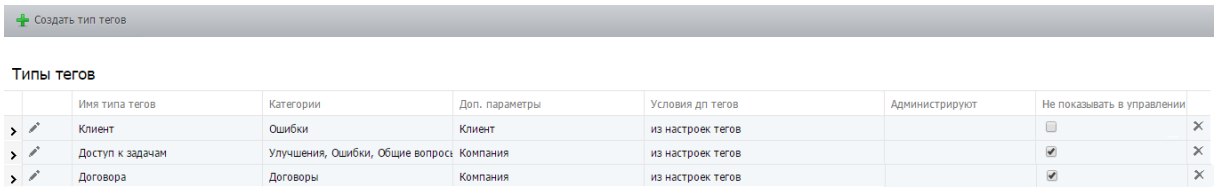
## 13.4.2 Tags

Tags are a tool designed to restrict viewing of user group tasks by the value of a specific custom field within a single category. For example, tags can be used to restrict viewing of customer data for customers assigned to each manager in order to improve customer data protection and decrease information load on company employees.

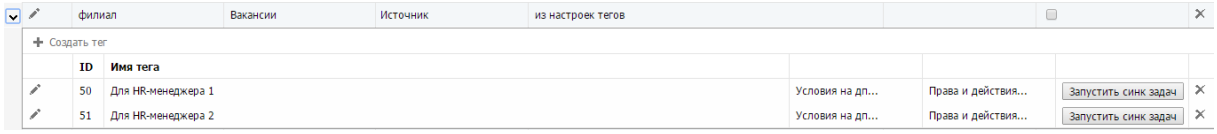
To navigate to the tag management page, click Tags link on the home page or the corresponding item in Miscellaneous — Business Logic Setup.




This opens a list of tag types configured in the system.



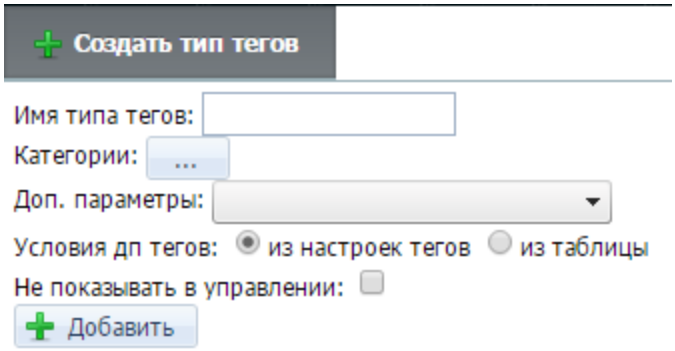

Expand the tag type entry (by clicking the black triangle at the beginning of the row) to display all entries for this tag type.




Tag types define access restriction conditions, i.e.,, a category and a custom field that manage access to tasks of this category. Tag values for this tag type determine the values of this custom field.

### 13.4.2.1 Creating and Editing Tag Types

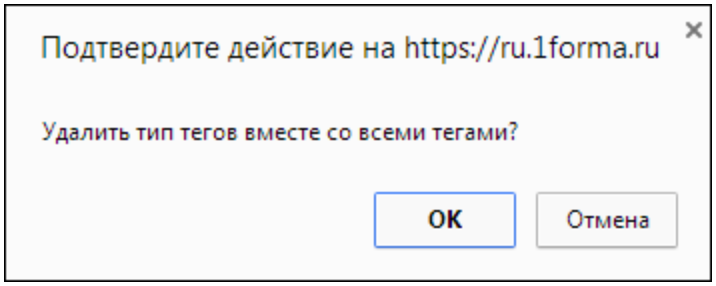
To create a new tag type, click New Tag Type. An entry form opens.




Enter tag name. Select one or more categories in which this tag type will be valid. A list of custom fields assigned to these categories is automatically uploaded to available custom fields in the Custom Fields area. Select the required custom field from the drop-down list. Select a condition source for custom fields to create tags (from tag settings or a table, see below). If the flag Do Not Show in Management is set, this tag type is not displayed on the Reports tag in UI. Then click Add. The new tag type appears in the summary list.

To edit a tag type, click the **icon at the beginning of the corresponding row.** The window for editing a created tag type opens. Along with initial settings,here you can use the Administered By column to add users who will be granted administrator permissions for this tag type. To add an administrator group, click , select the group and save changes by clicking at the beginning of the row.

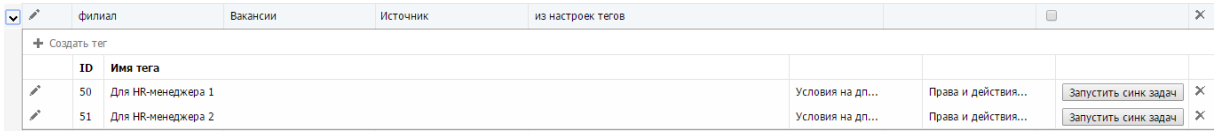
To delete a tag type, click the icon at the end of the corresponding row. A confirmation window opens:




Click OK to confirm deletion. If deletion has been chosen by mistake, click Cancel.

### 13.4.2.2 Creating and Editing Tags

To navigate to creating tags, expand the list of the selected type of tags by clicking the black triangle at the beginning of the row.



To create a tag of this type, click New Tag. In the window that opens enter the tag name (such as the name of the manager's department). Click ✓ to save data (or ✕ to cancel).


Custom field conditions

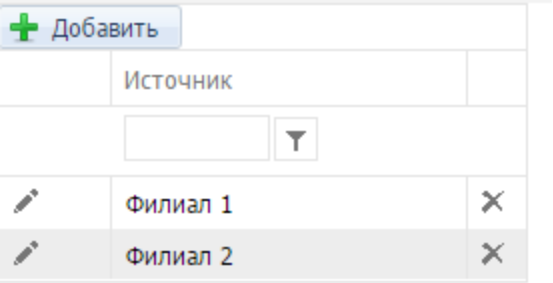
Permissions and actions

Click Start Task Synchronization to assign existing tasks to this tag.

13.4.2.2.1 Custom field conditions

**Tag custom field conditions: from tag settings**

If this tag type generates conditions from settings, to enter conditions click Custom Field Conditions in the tag line. A window for entering conditions opens:




Create the required entries with all custom field values one by one.

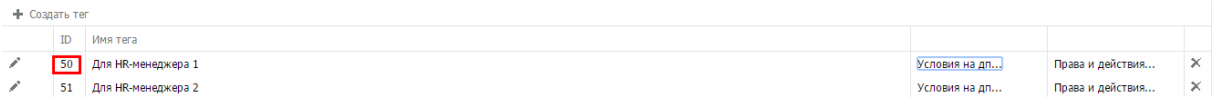
**Tag custom field conditions: from table**

If this tag type generates conditions from a table, to enter conditions create a data table in the 1Forma database. The table must have the following format:

| tagID | ExtParamValueXXX |
|---|---|
| 27 | 408-17-810-0-0001 |
| 27 | 408-17-810-0-0352 |
| 28 | 408-17-810-0-0623 |
| 28 | 408-17-810-0-0740 |
| 29 | 418-19-810-0-0301 |
| 29 | 472-65-487-0-5485 |

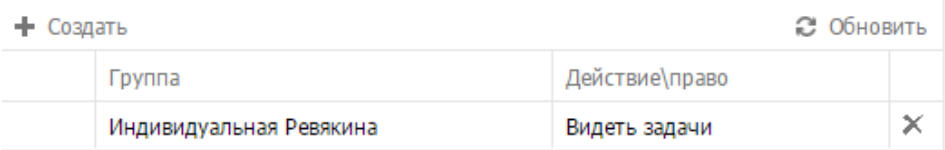
Where XXX is the customer field ID used to grant permissions. You can find this custom field ID in the common list of custom fields.

See Tag IDs for tagID column in the table of tags:




13.4.2.2.2 Permissions and actions

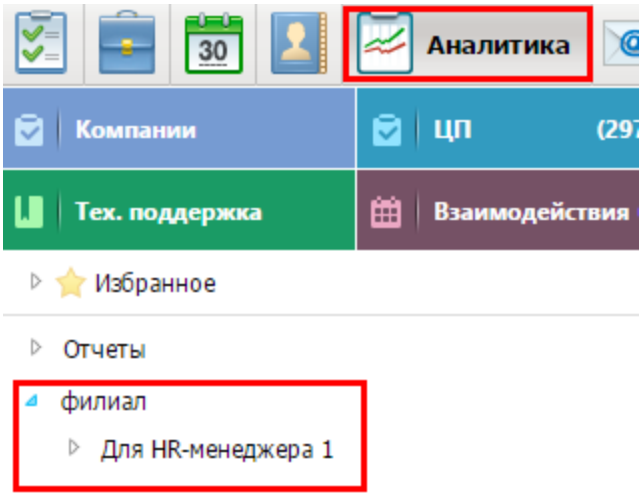
To grant a permission to a user group in a tag, click the Permissions and Actions link. In the window that opens click Create, select a group and maintain permissions granted to this user group.




Possible actions are:

- View tasks

  Users who belong to groups with view permissions according to the custom field can view tasks in the Analytics directory of the navigation menu.




- Appoint assignee
- Appoint responsible assignee

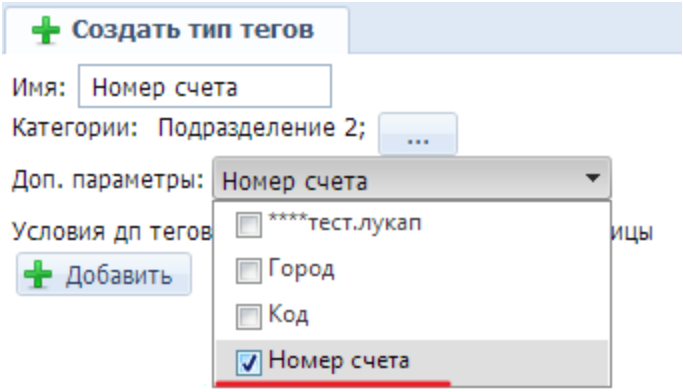
  **IMPORTANT**: Assignees are appointed in two cases only: if one or more custom fields that are used in tag conditions are changed, or if a new task is created and the corresponding custom fields were populated in the new task form. To appoint or change assignees at other events, instead of tags use SMARTs.

- Sign
- Notify of a new task.

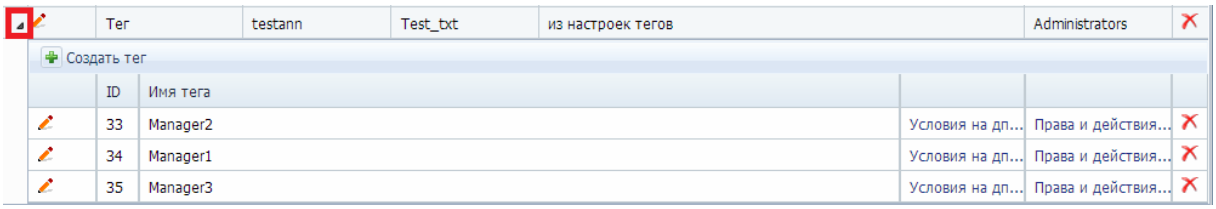
#### 13.4.2.3 Tag Usage Example

The example shows how to create tags for delimiting task access permissions by customer account number. This requires a custom field of text or drop-down list type, and enabled Show option at task creation (for creating and editing custom fields, see Custom Fields; for configuring category custom fields, see Categories Directory).

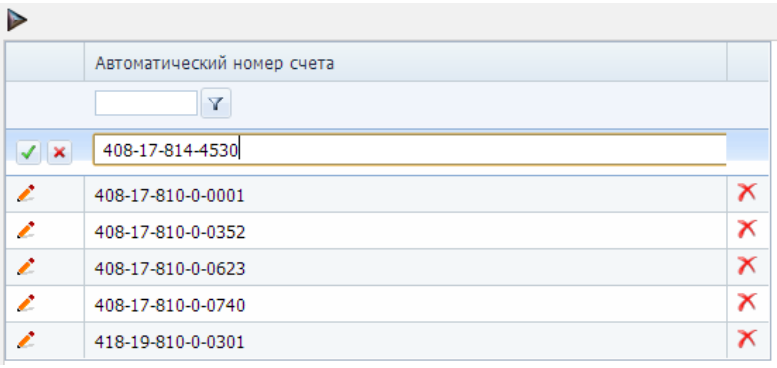
An Account Number tag type is created.




To grant permissions to user groups, create the corresponding tags.




Maintain the required Account Number custom field values in the tags by entering them into the Custom Field Conditions field.

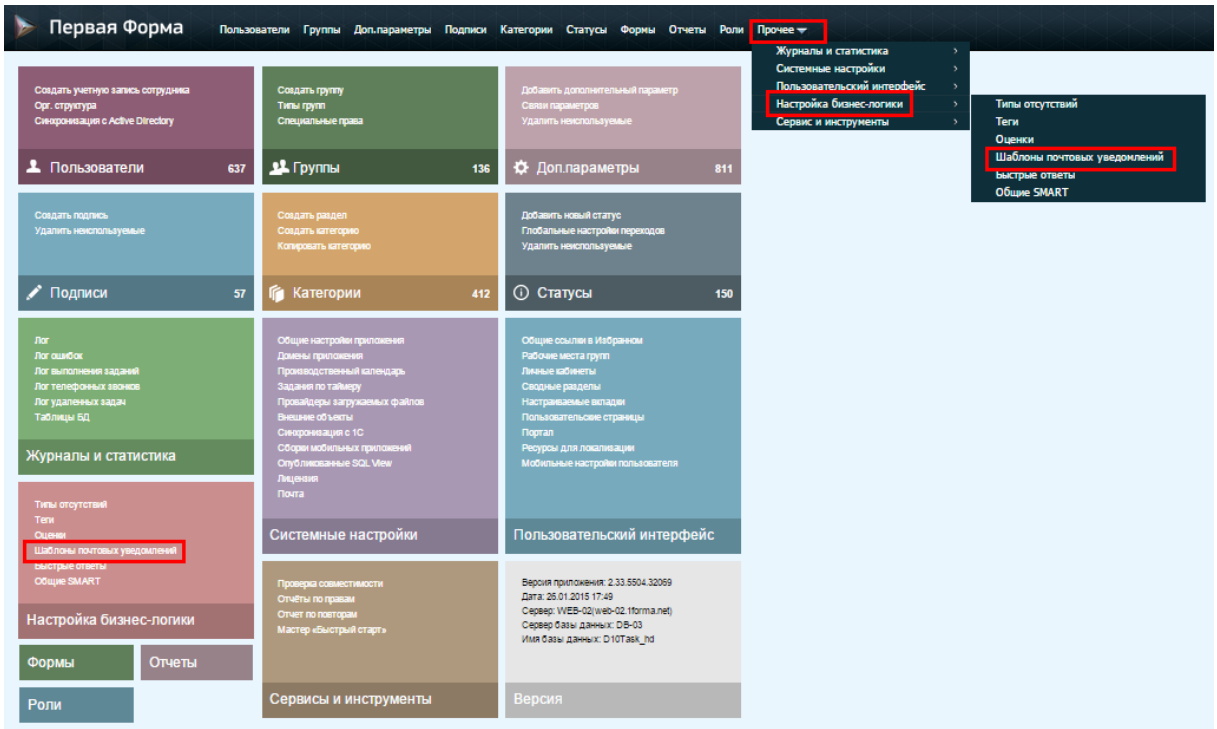



For another sample tag configuration, see the 1Forma Configuration Guide.

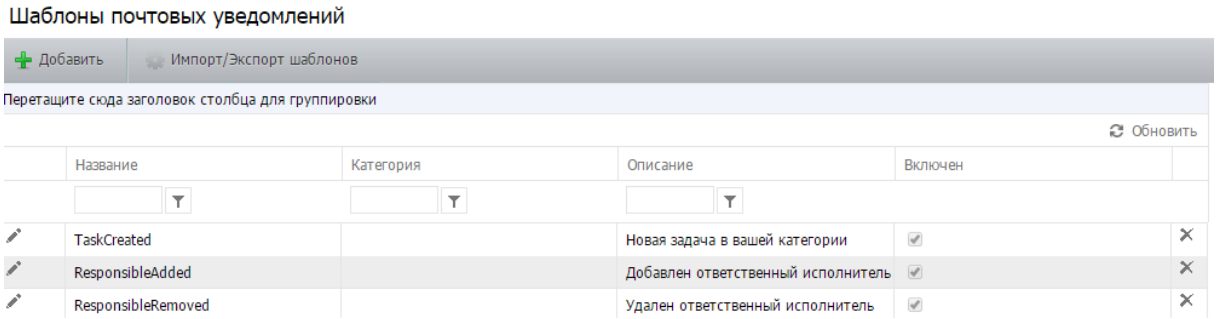
### 13.4.3 Notification Email Templates

Notification email templates are patterns used to standardize MS Outlook emails for different types of 1Forma notifications.

To navigate to the template management page, click the Notification Email Templates link on the home page or the corresponding item in Miscellaneous — Business Logic Setup.

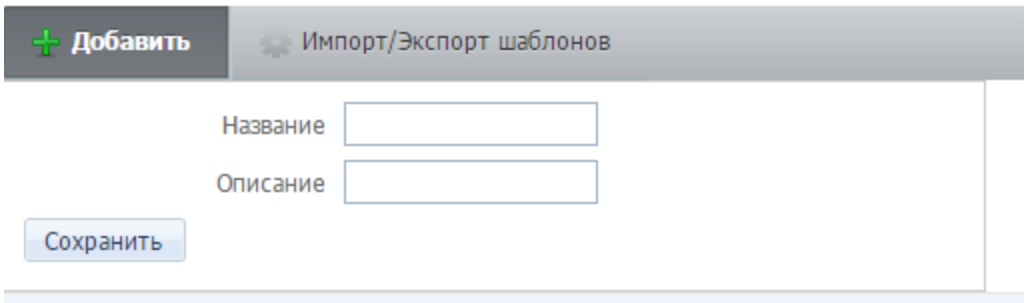



The list that appears contains notification email templates used in 1Forma as the default.




### 13.4.3.1 Creating a Notification Email Template

To add a new template, click the Add button. A new email template window opens.



Enter the required data and click Save.

**IMPORTANT:** The name of the new email template must be identical to the name of the event it is mapped to (see Events List below). For instance, the TaskCreated template is applied only to tasks, while StateChanged is used only for changing task status. Names cannot be changed! Description can contain any information.

**Events that support email templates:**

| Name | Explanation |
|---|---|
| AcceptantAssigned | An acceptor is assigned to a signature |
| AcceptantAssignedEscalate | Acceptor escalates signature |
| AcceptantAssignedWithEmptyFields | An acceptor is assigned, signature fields are blank |
| AcceptantAssignedWithEmptyFieldsEscalate | Acceptor escalates signature, signature fields are blank |
| AcceptantDelegated | Acceptor delegates signature |
| AcceptantDelegatedEscalate | Acceptor to whom the signature has been delegated escalates it |
| AcceptantDelegatedWithEmptyFields | Acceptor delegates signature, acceptance request fields are blank |
| AcceptantDelegatedWithEmptyFieldsEscalate | Acceptor to whom the signature has been delegated escalates it, acceptance request fields are blank |
| AccessDenied | Task access is denied |
| AssistantAdded | Assignee stand-in is added |
| AssistantAddedwDates | Stand-in for a specific period is added |
| AssistantRemoved | Stand-in deleted |
| ChangeGroupSubcatPermission | Category access permissions are changed for a user group |
| DueChanged | Task due date is changed |
| DueChangedOverdue | Overdue task due date is changed |
| DynSignatureAccepted | Dynamic signature is accepted |
| DynSignatureRejected | Dynamic signature is rejected |
| EditComment | A comment is edited |
| EditCommentSimple | A comment from the feed is edited |
| ExtParamsChanged | A custom field value is changed |
| FileDescriptionUpdated | A file description is edited |
| HelperNotification | Stand-ins are notified of appointment as an assignee |
| NewComment | A new comment is received |
| NewCommentSimple | A new comment is received (for external users who have never logged in) |
| NewPassword | Password is changed |
| Noacceptant | A task has no assignees |
| PerformerAdded | A new assignee is added to the task assignee list |
| PerformerAddedToOwner | A new assignee is added to the task assignee list (email to requestor) |
| PerformerRefused | An assignee rejects the task |
| PerformerRemoved | An assignee is deleted from the task assignee list |
| RemindPassword | Forgot password request is sent |
| ResponsibleAdded | Responsible assignee is appointed for a task |
| ResponsibleRemoved | Responsible assignee is changed for a task |
| SignatureAccepted | Signature is accepted |
| SignatureRejected | Signature is rejected |
| SignatureSnapshot | An HTML snapshot of all task parameters is created. This is used to save current task status (for example, on |

| Name | Explanation |
|---|---|
| | acceptance). |
| StateChanged | Status is changed |
| StateChangedForcibly | Forced status change occurs |
| StateChangeNotificationToAll | All subscribers are notified of task status change |
| SubscriberAdded | A subscriber is added to a task |
| TaskAccepted | A task is accepted |
| TaskCreated | A task is created |
| TaskCreateNotifySend | A new task notification is sent |
| TaskCreatePerformerSend | A new task notification is sent to the assignee |
| TaskCreateSubscriberSend | Task status notification is sent to a subscriber |
| TaskFromYourNameCreated | A new task notification is sent on behalf of the user (who is a requestor) |
| TaskTextChanged | Task text is changed |
| TaskTextChangedWithoutDifferencies | Task text is saved without any changes |

### 13.4.3.2 Importing/Exporting Email Notification Templates

**Exporting email templates**

For exported templates, a TemplatesExportFile.xml file is generated and populated with all templates configured in the system.

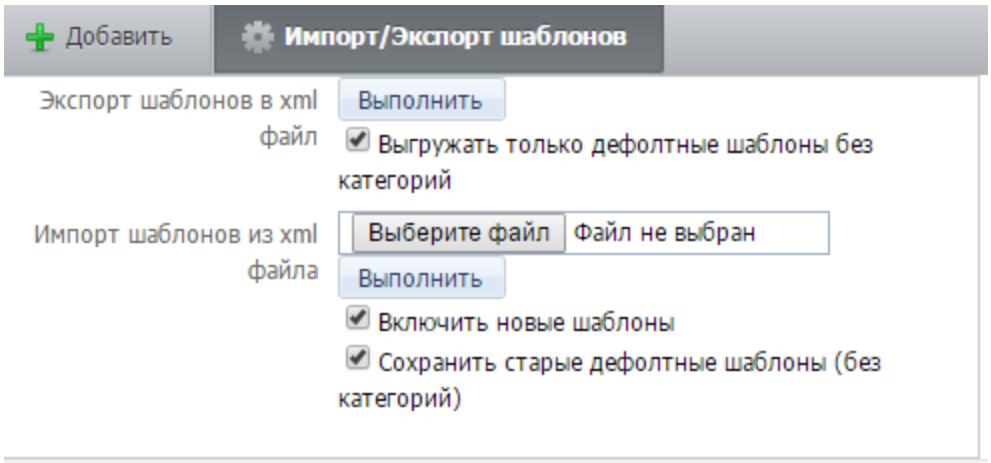
If **Download Default Templates Without Categories Only** is set, only templates with names that match event names (and thus have no specified category) are downloaded.

**Importing email templates**

All new templates imported from an XML file are appended at the end of the summary list.

If the **Enable New Templates** flag is set, templates are uploaded with the Enable flag set (see summary list).

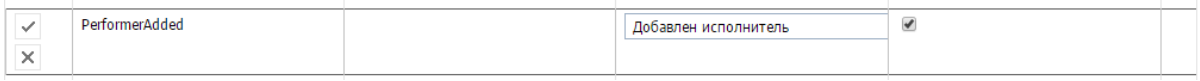
If the **Save Old Default Templates (Without Categories)** flag is set, imported templates are appended at the end of the summary list without overwriting existing templates with the same names.



### 13.4.3.3 Editing Notification Email Templates

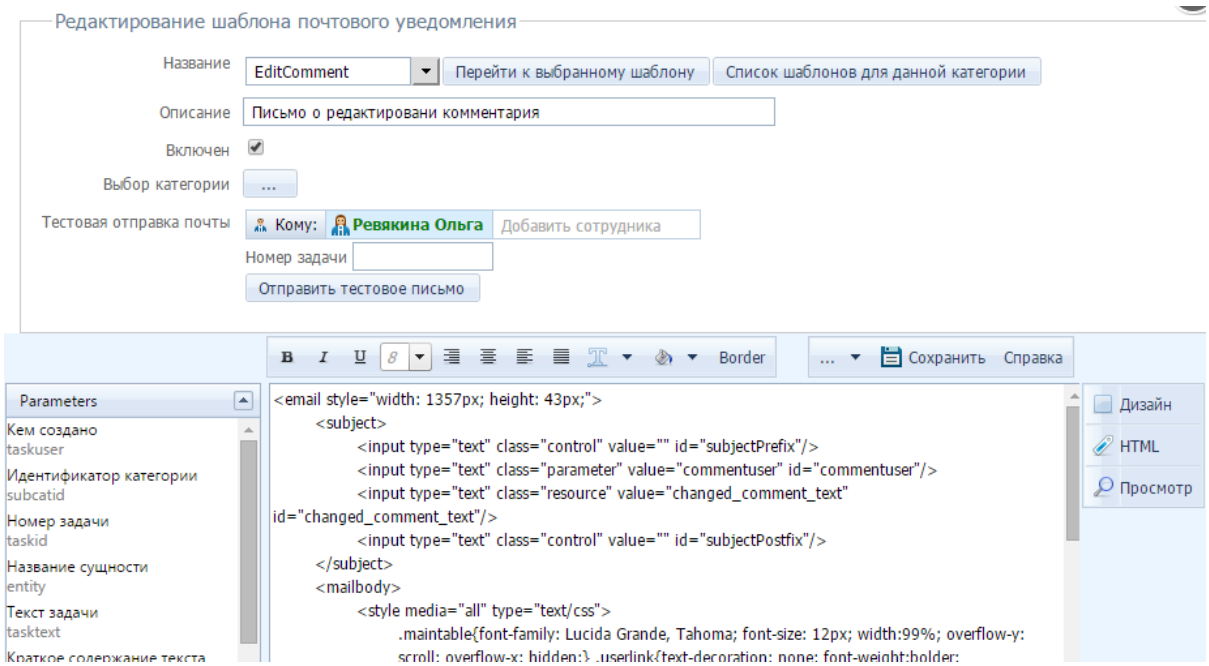
#### Editing email templates

To edit notification email template description, click at the beginning of the corresponding row. You can change the template description and manage the template enabled/disabled flag. Click to save changes or at the beginning of the row to cancel.




To delete a template, click the icon at the end of the corresponding row.

To navigate to editing the notification email template contents, click the corresponding table row. The window for template editing opens.




| | |
|---|---|
| Name | Specify the transition that initiates the created template when executed.<br><br>You can enter a new template name that is not on the list and click Go to Selected Template to create and open this template. |
| Description | Free text description of template actions |
| Enabled | Enables/disables the template |
| Category Selection | Assigns the template to a specific category |

| | |
|---|---|
| Test Email | To send a test email, enter the sender's user name and the number of an existing task. |

Notification email templates are based on HTML and customized similarly to category design.

Designer is used to edit the email template for an event. All actions are executed on the HTML tab (in the right menu).

Example of a simplified template:

**Example of customizing a design in HTML**

```
<email>
        <subject>

        </subject>
        <mailbody>
                <style media="all" type="text/css">

                </style>

                <div class="previewForMailAgents" style="display: none;">

                </div>

                <table class="maintable" align="left" cellpadding="3" cellspacing="0">
                        <tbody>

                        </tbody>
                </table>
        </mailbody>
</email>
```

- **The email subject** is derived from the parameters enclosed in <subject> tags. *For example, the following subject will display as "New task: short task text":*

```
<subject>
  <input style="" class="resource" value="taskcreatedSubj" id="taskcreatedSubj" type="text"/>
  <span style="" class="inlinetext">
  :
  </span>
  <input class="parameter" style="" value="tasktextshort" id="tasktextshort" type="text"/>
</subject>
```

- **Email body** is enclosed in <mailbody> tags and embedded <table> tags.

- **Styles** are enclosed in <style> tags. *For example, you can define the table font as:*

```
<style media="all" type="text/css">
.maintable{font-family: Lucida Grande, Tahoma;}
</style>
```

- To change **button color** for the Go To Task button in CSS class .gototask, change the background-color and border-color values:

**.gototask**{color:**#165082**; background-color:#d9d9d9; display:block; width: 200px; text-align:center; border-style: solid; border-width: 5px; border-color: #d9d9d9; text-decoration: none; font-weight:bolder;  font-size: 13px;}

- **For header color,** use class.header value background-color:

.header{**background-color**:**#008000**; color:#ffffff; padding-top:0px;padding-bottom:0px;height:40px;}

- **User link styles** for users such as Requestor or Responsible are defined by class:
.userlink{text-decoration: none; font-weight:bolder; color:#165082}

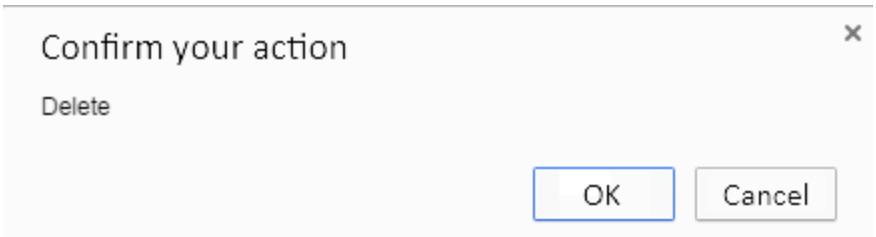
- Additionally, you can assign a **class** to the required element. For example:
<tr class="test"> with appended style class .test { color:#ffffff; }

Default classes:

| | |
|---|---|
| Main table | maintable |
| User links | .userlink |
| Custom fields list | .acllextparams |
| Go To Task link button | .gototask |
| Category link | .subcatlink |
| Email subject | .header |
| Task text | .tasktext |
| Sign link button | .acceptsignature |
| Save link button | .rejectsignature |
| Unsubscribe link | .unsubscribe |
| Alternative task link | .altlink |

### 13.4.3.4 Deleting a Notification Email Template

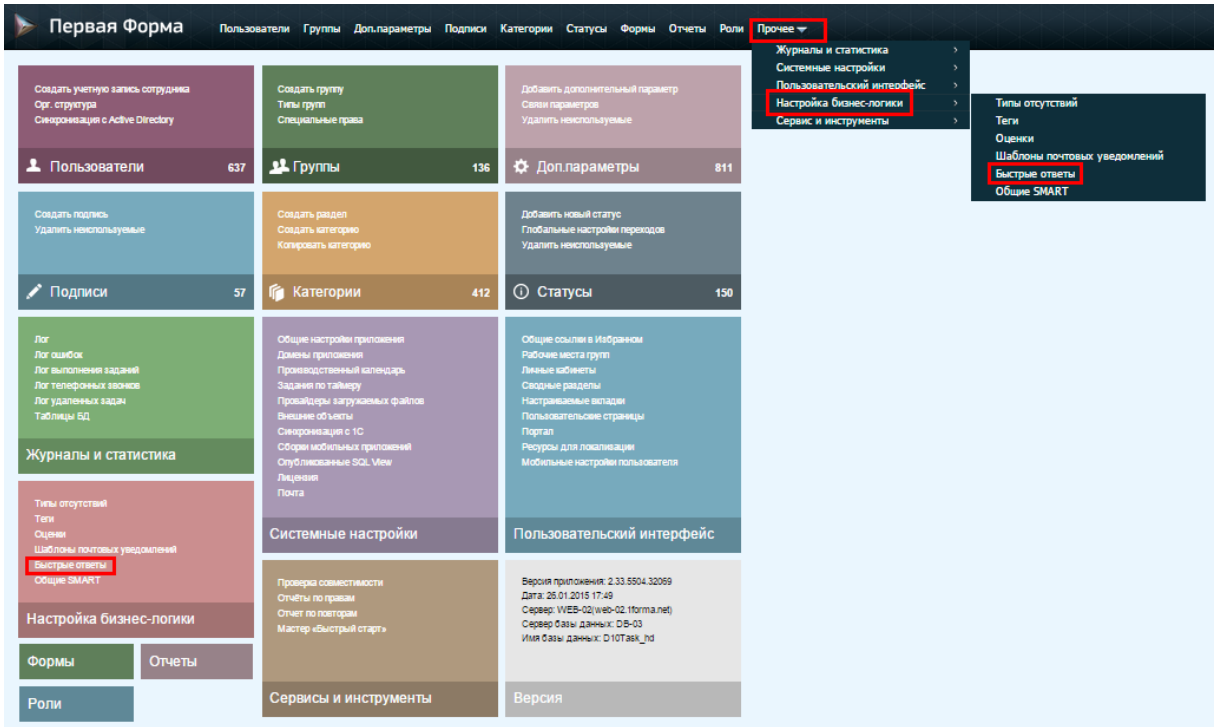
To delete a notification email template, click the delete icon ✕ in the corresponding table row. A confirmation window opens.



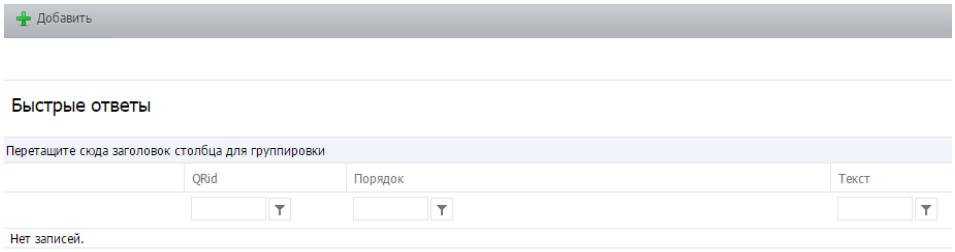
Click OK to confirm template deletion. If deletion has been chosen by mistake, click Cancel.

## 13.4.4 Quick Replies

To navigate to the quick reply management page, click the Quick Replies link on the home page or the corresponding item in: Miscellaneous — Business Logic Setup.

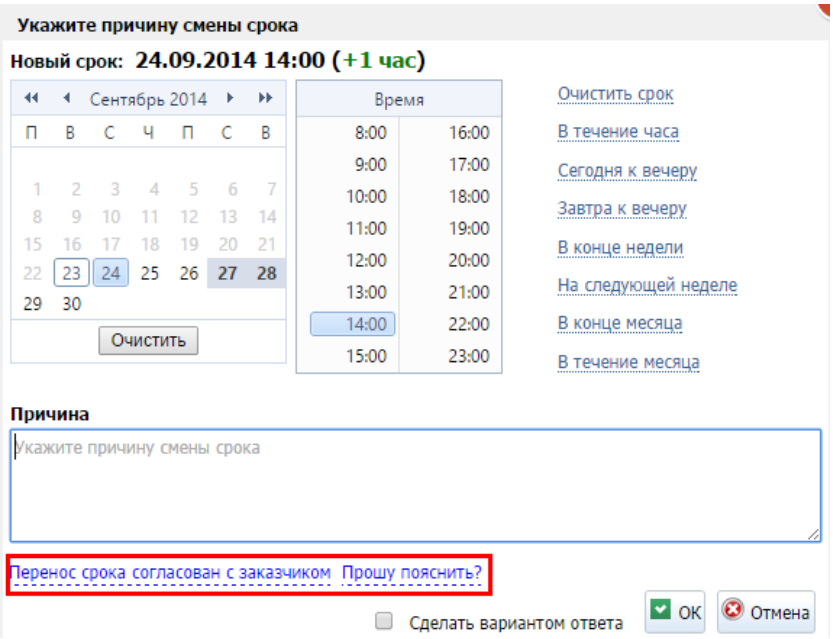



A table with all quick replies configured in the system opens.

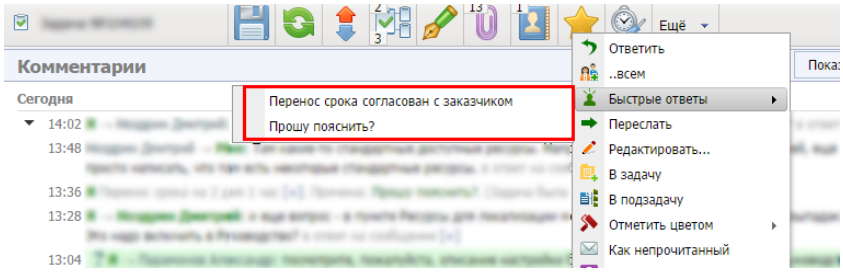



### 13.4.4.1 Using Quick Replies

Quick replies are used to prevent repeated entry of the same explanations by selecting pre-configured texts. For example, for changing task due date:




Or for adding task comments:




Users cannot edit a reply or comment created with quick replies. However, users can create their own quick repliesthat will be displayed in the summary list together with the quick replies created by the administrator.

### 13.4.4.2 Creating and Editing Quick Replies

To add a new quick reply, click Add. A window for adding a reply appears:


The system supports three ways of creating quick replies:

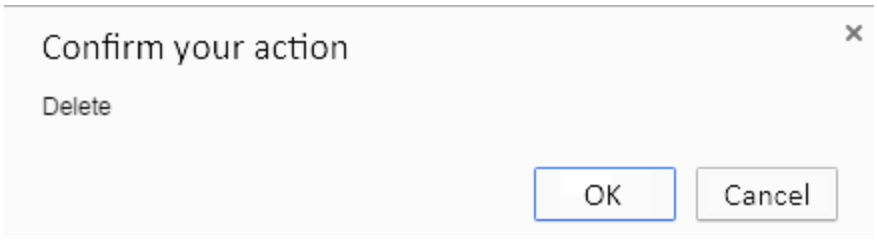
- Enter reply text in the Text field
- Select a reply in two languages (Russian and English) from the drop-down list (the list contains configured localized resources)

- Create a new reply in two languages using the localized resources function by clicking .

The new quick reply appears in the summary table. To edit a reply, click the icon at the beginning of the corresponding row. You can edit reply text or specify the order (the Order field value is considered when generating a list of quick replies: replies with the smallest numbers appear at the top of the list, while replies with similar Order field values are sorted in alphabetical order). Make changes and click the icon at the beginning of the row to save the changes or the icon to cancel.

#### 13.4.4.3 Deleting Quick Replies

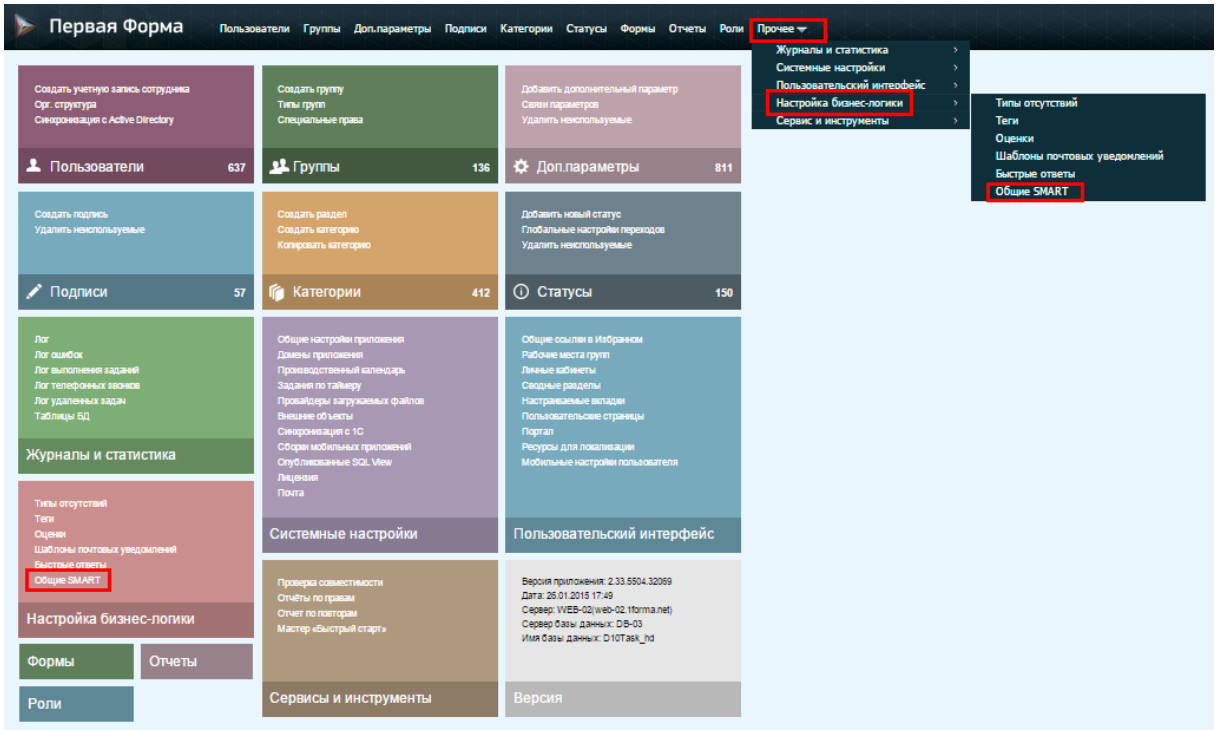
To delete a reply, click the delete icon at the end of the corresponding table row. A confirmation window opens:



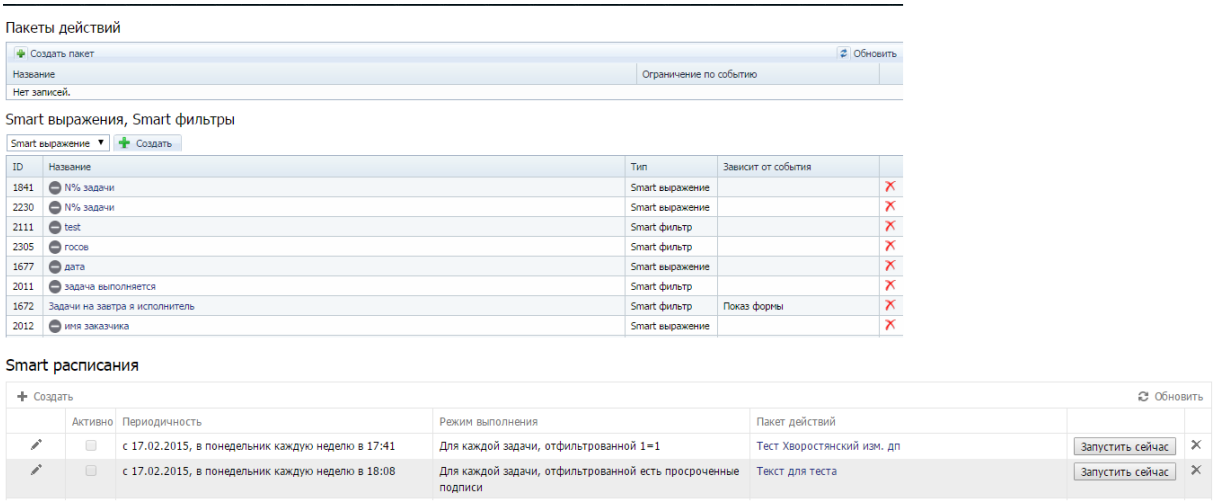

Click OK to confirm deletion. If deletion has been chosen by mistake, click Cancel.

### 13.4.5 General SMARTs

To navigate to the management page for general Smart expressions, Smart filters, and Smart actions packages, click the General SMARTs link on the home page or choose the corresponding item in Miscellaneous — Business Logic Setup.



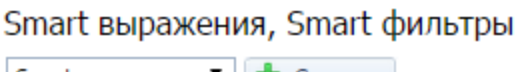

On the page that opens you will see a table with Smart actions packages in the top part, and a table with Smart expressions, Smart filters and Smart schedules in the bottom part.



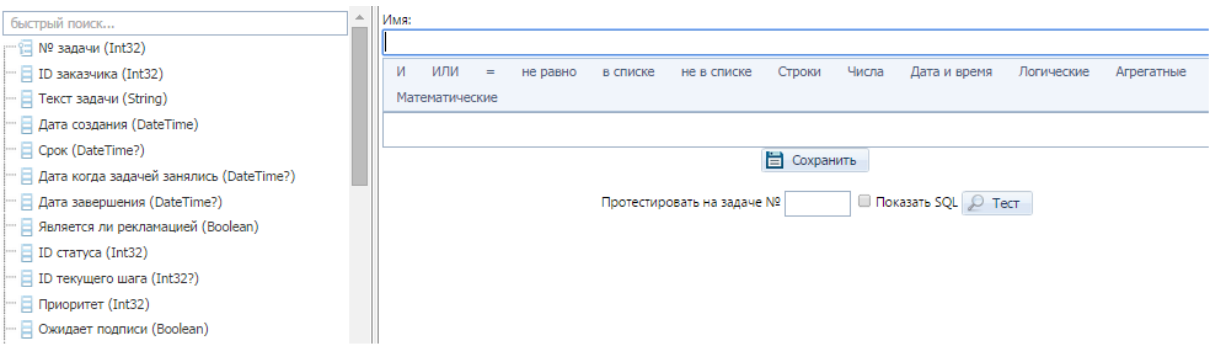

For details on working with SMARTs, see the 1Forma Configuration Guide.

### 13.4.5.1 Creating and Editing General Smart Expressions and Smart Filters

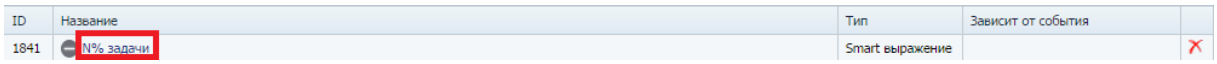
To create a new Smart expression or a Smart filter, select the required value in the drop-down list and click Create.



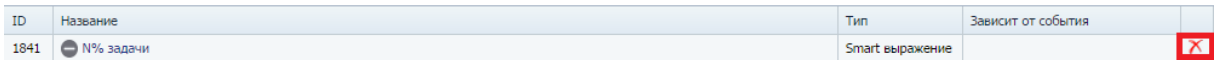

A new tab with the tools for creating and editing SMARTs opens.




To edit an existing Smart expression or Smart filter, click its link in the Name column.




To delete a Smart expression or Smart filter, click the ✕ icon at the end of the corresponding row.

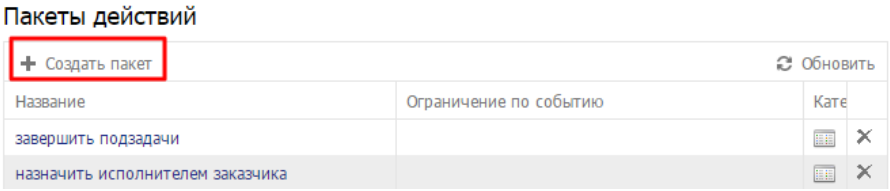



Smart expressions and Smart filters that are not used by the system are marked with ⊖.

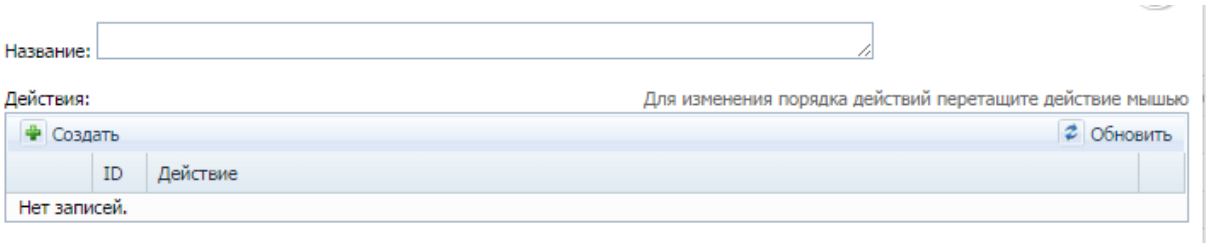
### 13.4.5.2 Creating and Editing Actions Packages

To edit an existing package, click its link in the Name column.

To create a new Smart actions package, click the Create Package button:

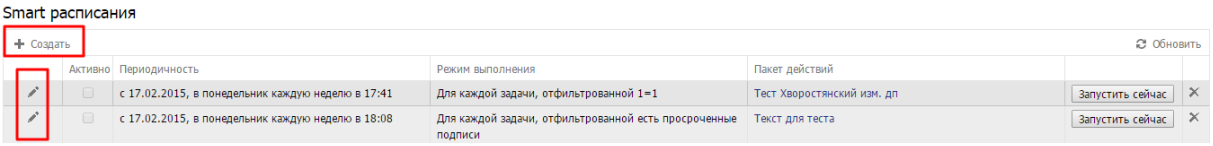



In the window that opens create the required Smart actions and group them in an actions package:



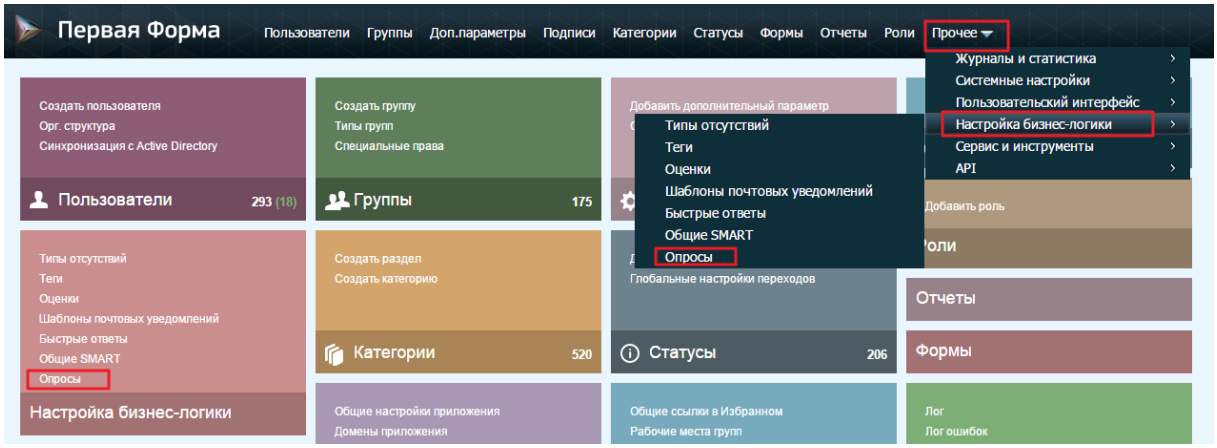
### 13.4.5.3 Creating and Editing Schedules

To edit an existing schedule, click at the beginning of the corresponding row. To create a new schedule, click Create.

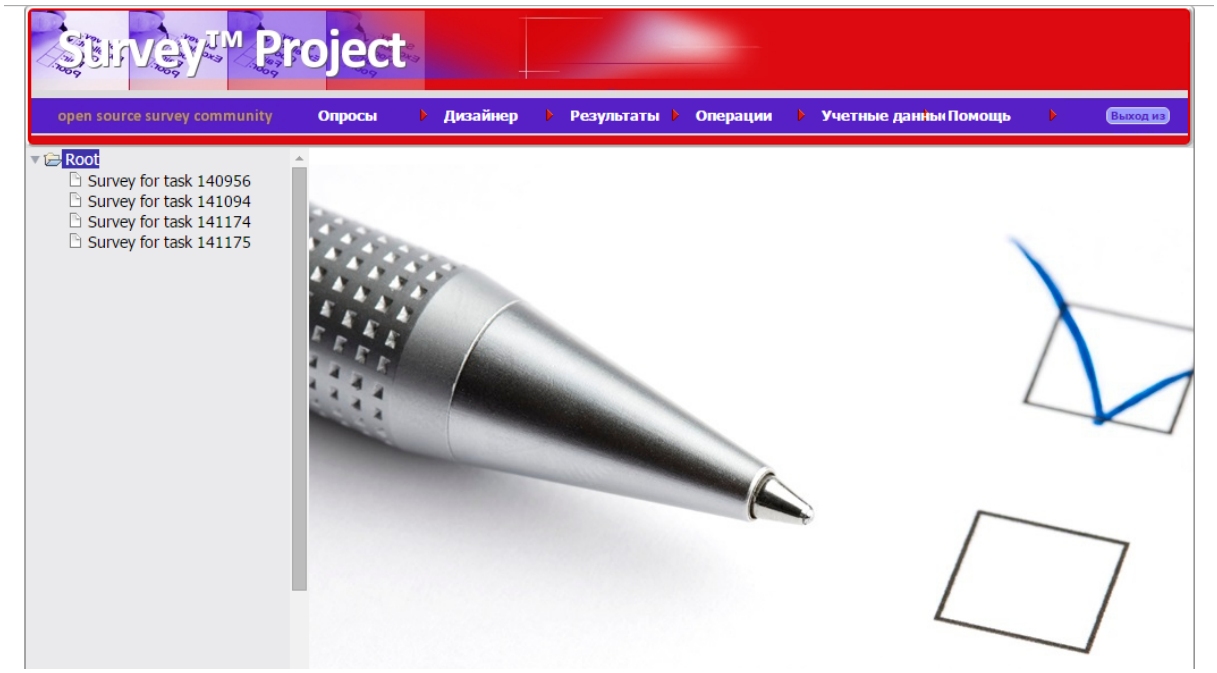



## 13.4.6 Surveys

To navigate to the survey management page, click the Surveys link on the home page or the corresponding item in Miscellaneous — Business Logic Setup.




A page for editing surveys in administrator mode opens.



For details on survey functionality, see the Administrator's Guide.

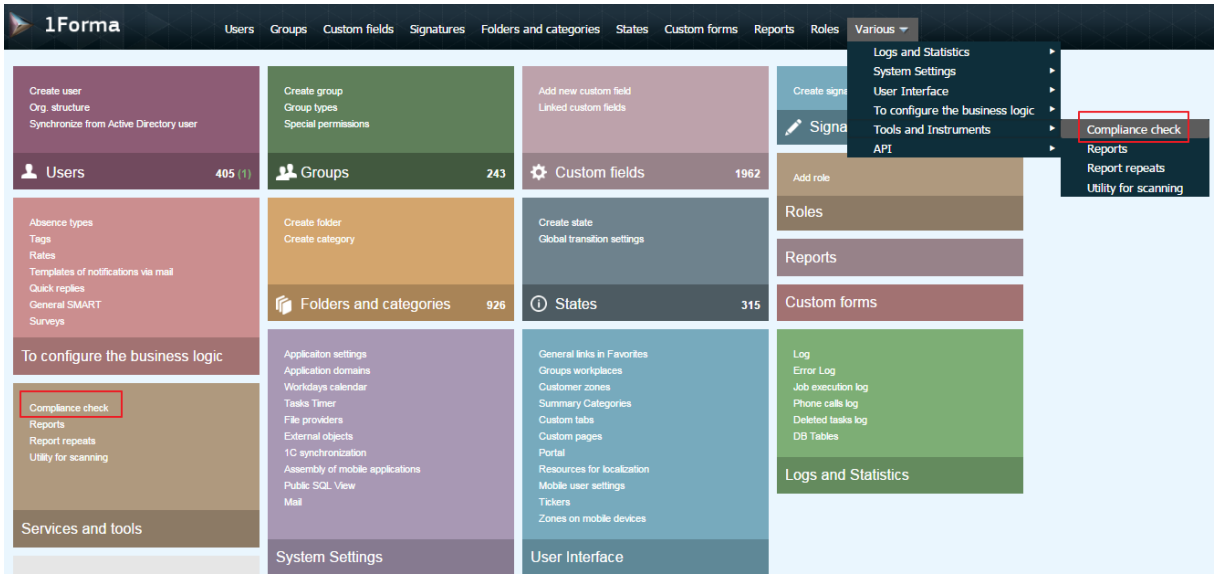
## 13.5 Service and Tools

Compatibility check
Permissions reports
Repeat report

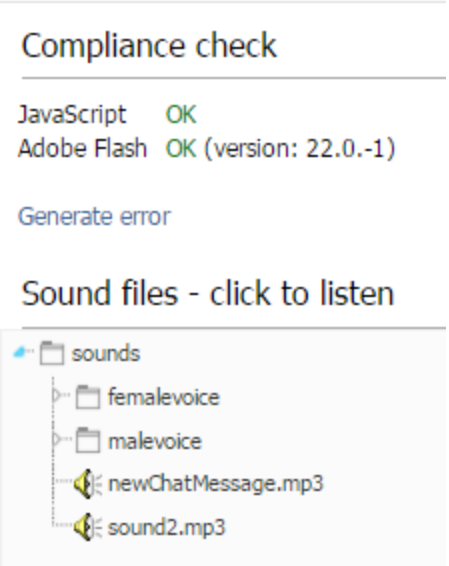
### 13.5.1 Compatibility check

Use this utility to check 1Forma system compatibility with add-ons (JavaScript, Adobe Flash, Microsoft Silverlight) installed on the local workstation It helps the administrator identify the cause of issues related to outdated components used on user workstations. To solve these issues, upgrade to the latest versions available free on developer websites.

To launch the compatibility check utility, click the Compatibility Check link on the home page or choose the corresponding item in Miscellaneous — Service and Tools.



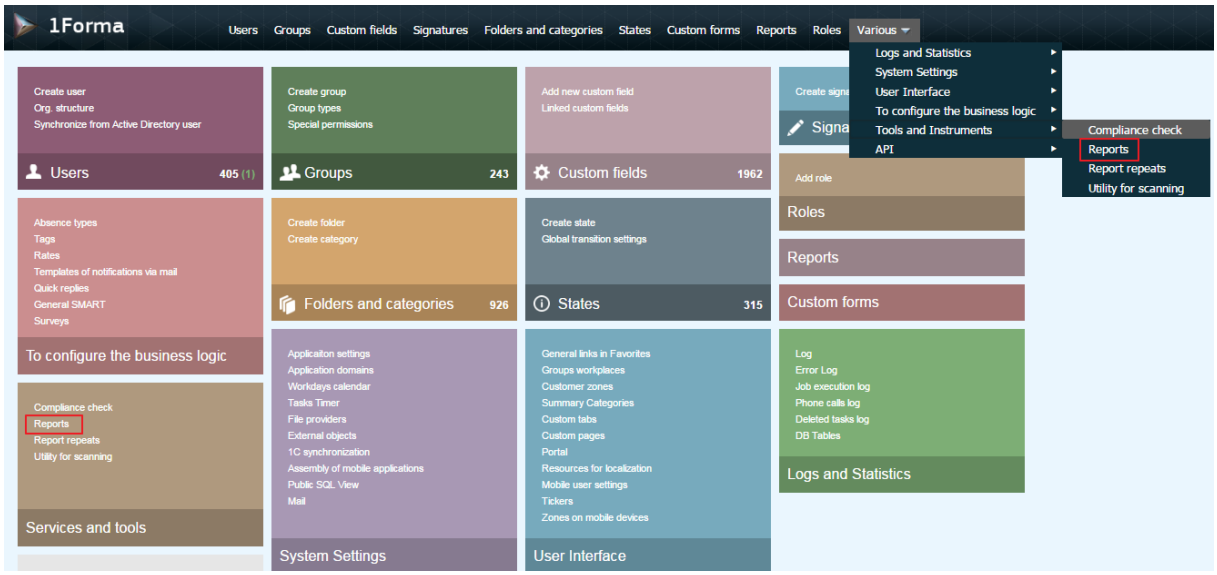

A window with check results opens.



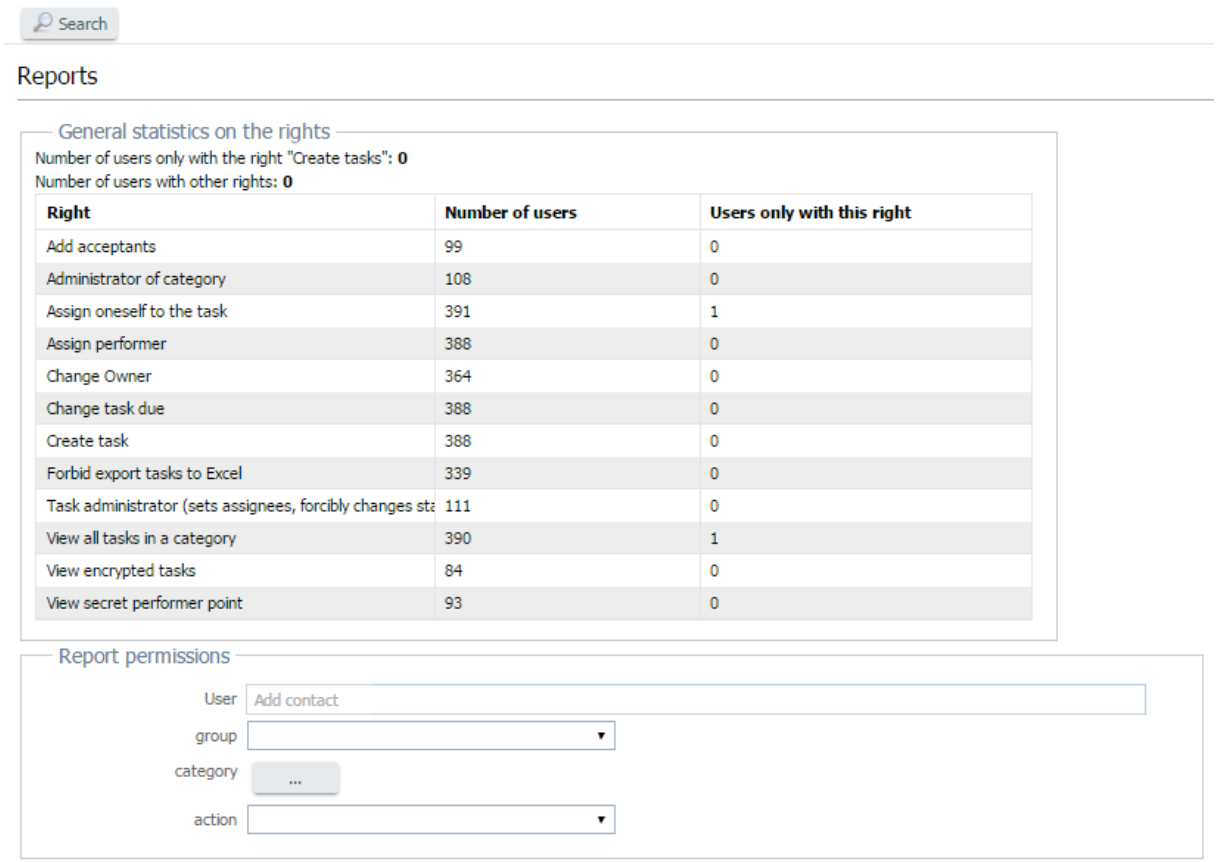

Click **Generate Error** link to check error report service operation.

## 13.5.2 Permissions Reports

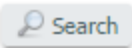
To navigate to the permissions report for system user access permissions, click the Permissions Report link on the home page or choose the corresponding item in Miscellaneous — Service and Tools.




A table of user permissions opens. The selection parameter entry field is displayed below the table.




| Name | Description |
|---|---|
| User | Outputs access permissions for the specified users |
| Group | Outputs access permissions for users who belong to the specified groups |
| Category | Outputs user access permissions for the specified category |
| Action | Outputs user access permissions for the specified action on the category |



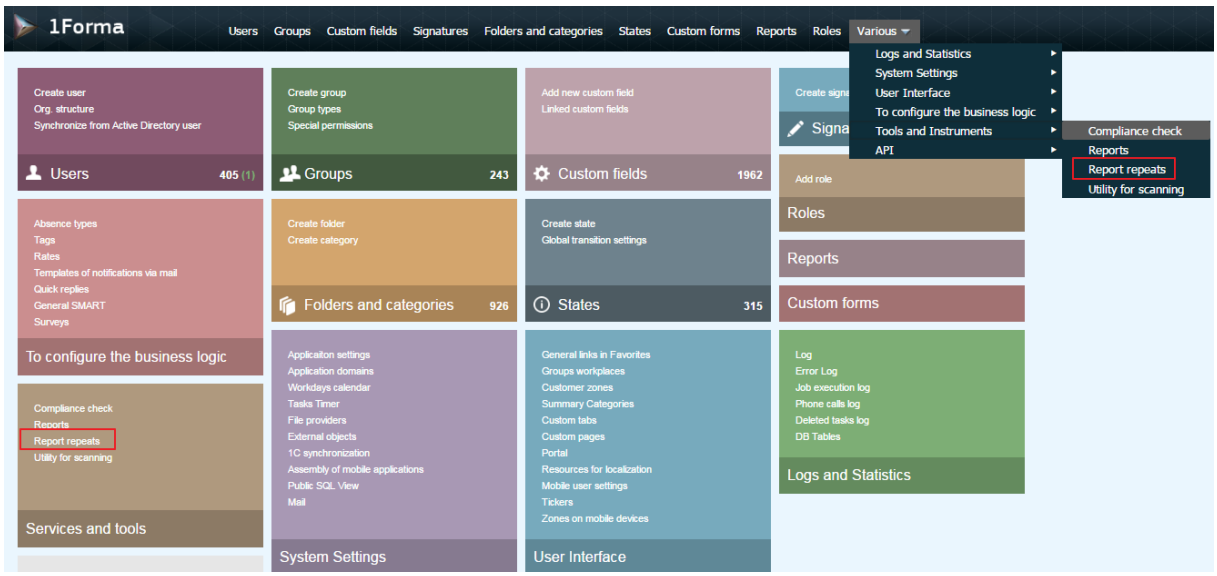
generates the report.

Reports can be generated by a single parameter or several parameters at once. Reports include permissions inherited by stand-ins.

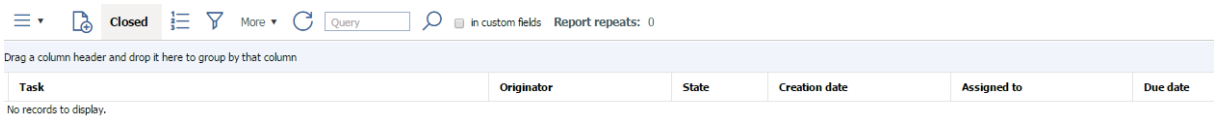
### 13.5.3 Repeat report

This report displays information on all category objects that have configured repeats in their time settings.

To navigate to the report view page, click the Repeat Report link on the home page or the corresponding item in: Miscellaneous — Service and Tools.




A report on the repeated tasks in all system categories opens.




Double-click any task to view or edit it in user mode.

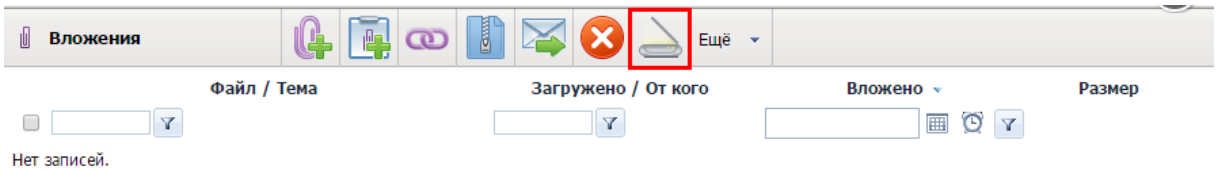
## 13.5.4 Scan Utility

Choose this menu item to download the archived scan utility developed by 1Forma. For details on installing this utility, see the Maintenance Guide.

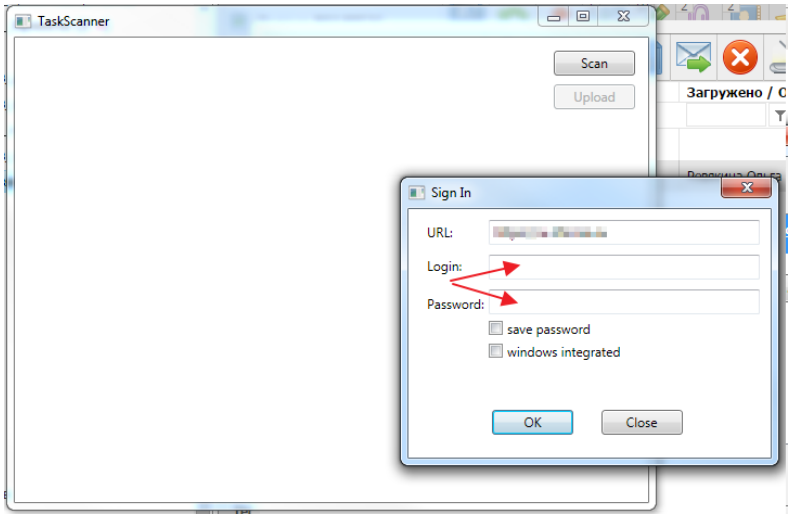
**Using the scan utility**

Attaching a file to a task

The scan utility is accessed in the document upload window by clicking the scan icon.



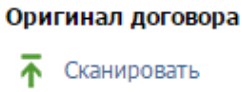

In the window that appears enter your credentials. To prevent repeated entry, set the Save Password flag.




Attachment to a File custom field

**IMPORTANT**: To attach a scanned file to a File custom field, select Enable Scanningin the settings of this custom field.

If a File custom field supports scanning, click the link next to the field to open the document image upload window:




## 13.6 API

Interface elements (menus, portal pages, etc.) for 1Forma mobile applications are configured via the Application Programming Interface (API). For details on key API entities, their roles and dependencies, click here. In administration mode you can configure templates and containers.

### 13.6.1 General Description (Concept)

Key API entities
Navigation on mobile devices
List of containers and types
Mandatory service return values
Errors

#### 13.6.1.1 Key API Entities

This section contains a description of key API entities.

**Container**

Container is a control used for visual grouping of other controls. A container represents the top grouping level and logically joins interface blocks into a single complex entity. The main function of a container is to present all data required to display and process a screen or screen area. In other words, a container defines data context.

Examples of containers:
- Left navigation pane
- Top navigation pane
- Main task form
- Bottom action bar
- Employees section of the top navigation menu.

A container consists of blocks and nodes and provides data for child blocks. If allowed, you can perform actions on containers to show/hide them.

**Block**

A container is populated with blocks. Blocks allow simple page layout setting for different screen resolutions and diagonals and logically group interface elements. Logical breakdown of a container into blocks can be defined by container function or to simplify administration.

Examples of blocks:
- Home menu item
- Favorites tree
- Custom field in the main task form
- Comments feed.

Block layout is configured according to the template and uses data from system objects.

Blocks do not support any actions; however, controls within a block do. Blocks cannot have any child blocks within them, but can either have a child block in the container or child containers. For example, the Categories block in the Left Menu container has a link to Development Department, which either creates or clears the Main Work Area container and enhances it with the corresponding block including a Syndication object and Table template.

**Node**

A node's function is similar to that of a container. It is used for logical grouping of blocks and organizing them into a hierarchy. The key difference between them is that actions on a node can only show/hide blocks within the node.

**Template**

All system entities are defined by templates. The main template function is intuitive presentation of data to a user on a specific device. Templates are implemented on the client side and contain a full description of the related entity's appearance.

Examples of entities:
- Feed
- Calendar
- Button
- Left menu.

By default, any system entity must support the Flat Text system template.

**Object**

Objects provide data for blocks. They contain information from system entities. Objects are divided into

simple objects and syndications.

Examples of simple objects:
- Task
- Contact
- URL.

Examples of syndications:
- All unread system messages
- All tasks of the directory with due date in the current week
- All signatures where I am assigned as the signer
- List of categories with statistics.

#### 13.6.1.2 Navigation on Mobile Devices

The user interface for mobile devices consists of three sections:

1. A menu with hard coded areas that depend on server settings only (these are requested once on application logon).
   This includes Chats, Contacts, Calls and Reports menu items, which are defined directly from the server's global settings (Enable Calls, etc.).

2. Dynamic content lists for each user (mobile interface areas are also requested on application logon). They are formed according to the tree configured on the server with user settings and Favorites taken into account.
   Contents that can be displayed in mobile interface areas:
   - Tasks
   - Comments
   - Users
   - Reports
   - Emails
   - Signatures.

3. Content (upon request).

These types are used as the basis for item types of mobile interface areas:
- Tasks (can have a category, directory, predefined data sets (feed, assignee, Favorites, etc.), search and Smart filter as data source)
- Task assignment (to a specific category)
- Comments (the data source can be a category, directory, predefined data sets (feed, new, discussions, Favorites, etc.), search, Smart filter)
- Email folder (source is a predefined (shared folder) or Smart filter )
- Users (source is a search or predefined sets (colleagues, Favorites, Smart filter))
- Reports
- List of signatures (predefined sets (active, etc.))
- Portal
- Link.

Server setup interface is used to configurethe return value tree. This tree can contain folders and leaf elements. Each element belongs to one of the above-mentioned types and has parameters that specify a data source for data retrieval, a display template name for element display on the mobile device (as a group workplace button, standard element or otherwise), and display the template name for content requested for this element.

#### 13.6.1.3 Mandatory Service Return Values

Example of service return values:

```
{
  "Response": [
    {
      "ID": "%ContainerID%",
      "Action": "GetContainer",
      "Template": null,
      "Data": null,
      "Blocks": [
        {
          "ID": "%BlockID%",
          "Action": "%Verb%%Type%",
          "Template": null,
          "Data": null
        },
        {
          "ID": "%FolderID%",
          "Type": "Folder",
          "Template": null,
          "Data": null,
          "Blocks": null
        }
      ]
    }
  ],
  "Errors": [
    {
      "ID": "%ErrorId%",
      "Type": "%ErrorType%",
      "Date": "%ErrorDate%",
      "Text": "%ErrorText%"
    }
  ]
}
```

Return values consist of two segments: Response and Errors. Errors are errors or notifications that the service transfers to the client. Response is a set of containers transferred from the server to the client as a response to a request. A set can be empty, the contents are provided here as an example only.

Minimum required return values for a container:

```
{
  "ID": "%ContainerID%",
  "Action": "GetContainer",
  "Template": null,
  "Data": null,
  "Blocks": null
}
```

Minimum required return values for a block:

```
{
```

```
  "ID": "%BlockID%",
  "Type": "%Verb%%Type%",
  "Template": null,
  "Data": null
}
```

Minimum required return values for a node (enhancement of a block):

```
{
  "ID": "%FolderID%",
  "Action": "Folder",
  "Template": null,
  "Data": null,
  "Blocks": null
}
```

Minimum required return values for a template:

```
{
  "ID": "%TemplateID%"
}
```

#### 13.6.1.4 Errors

For correct operation of the mobile application, infrastructure errors must be differentiated from application errors. The former are described with an HTTP status code and resolved by infrastructure administrators. The latter must be transferred to the mobile application as an array of json objects.

When a service is called, mobile applications first check the response for infrastructure errors, then for error objects in service return values, and if any are found, they are processed as configured.

All services hosted by the server must have protection from exceptions and must use the above-mentioned json object for transferring error data. All errors of this type must be recorded in the error log of the 1Forma administration site as ClientService category errors. The following information must be recorded:

- Error date and time
- ClientService category
- Error type
- Error text
- Call stack (if applicable)
- User
- User agent
- Application version
- Server.

**Error return values**

```
{
   "ID": "144103",
   "Type": "GeneralError",
   "Date": "2015-07-16",
   "Text": "NavBar template not found on server"
 }
```

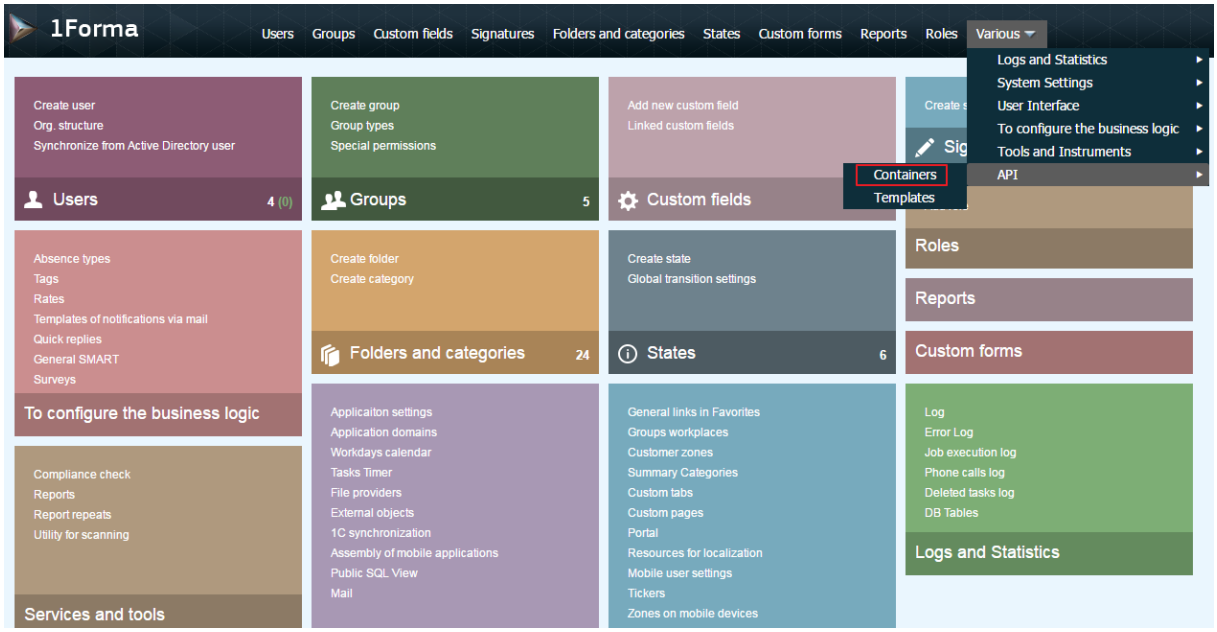
- ID: error ID number
- Type: error type
- Date: error date and time
- Text: error details

**Error types**

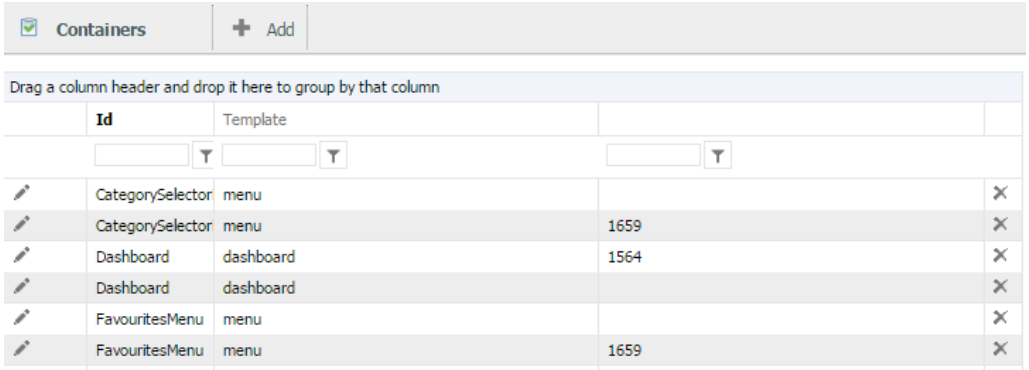
- GeneralError: general error

## 13.6.2 Containers

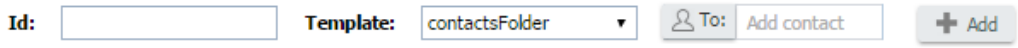
To navigate to container configuration, choose the corresponding item in the Miscellaneous — API menu.




A table with the existing containers opens.

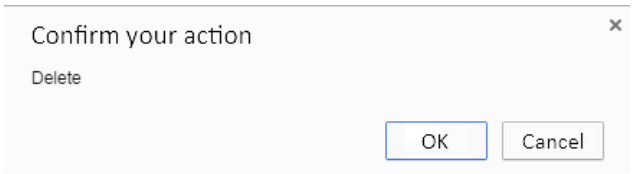



To create a new container, click the Add button. A window for adding a container appears. Select a template here for creating a container and specify user groups. The ID must start with a Latin letter:



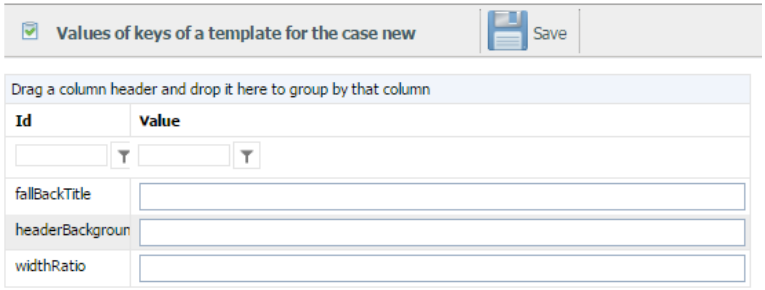
If access to the container is granted to specific groups only, the IDs of these groups will be displayed in the right column of the container list:


To edit a container, hover the mouse over the required table row and click . Make changes and click the icon at the beginning of the row to save the changes or the icon to cancel. To delete a resource, click the delete icon in the corresponding table row. A confirmation window opens.

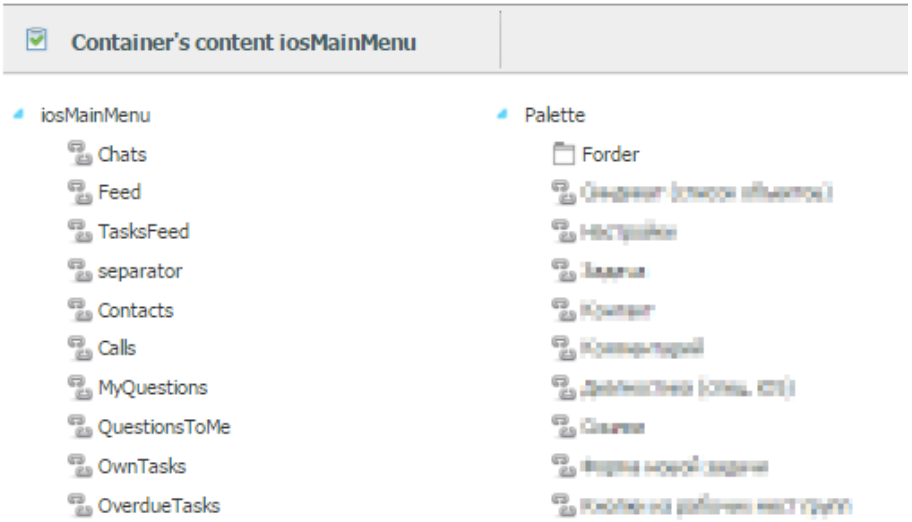



Click OK to confirm deletion. If deletion has been chosen by mistake, click Cancel.

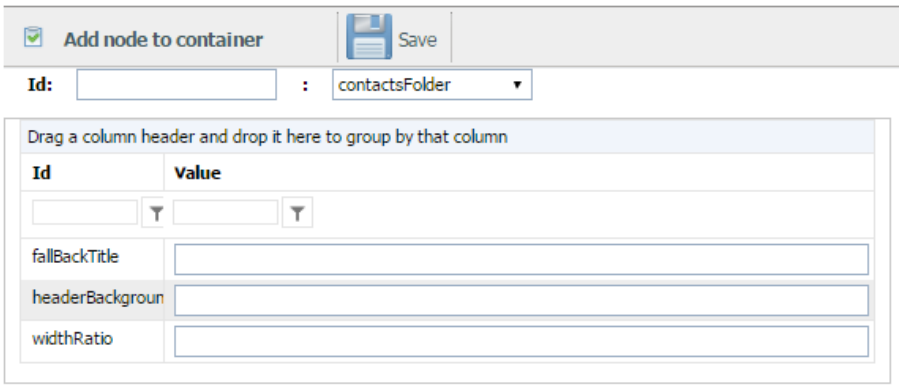
Hover the mouse over a template name to display the tooltip , which you can click to open the window for setting key values configured for the selected template.



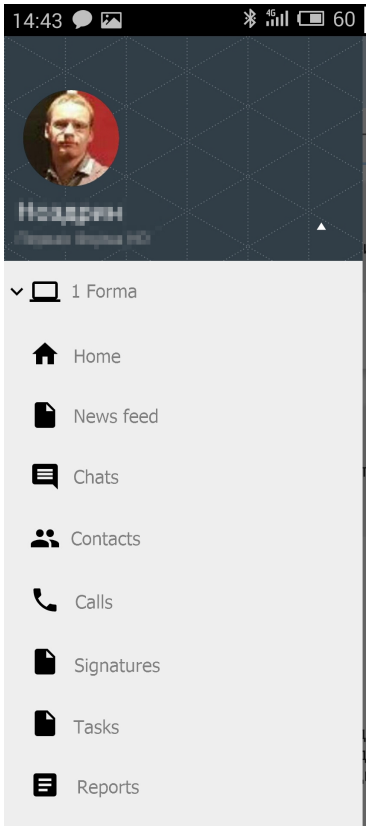

Click the row to open the window for defining container contents. A palette tree on the right displays all available items. Drag and drop the required items to the object tree on the left to define contents of the container, i.e., the response tree:



Dragging and dropping an item from the palette to the tree on the left opens a window for selecting a template and configuring template keys. The ID must start with a Latin letter:




For example, the result for the iosLeftMenu container tree shown above is as follows:




### 13.6.2.1 List of Containers

The palette provides the following container types:

| Name | Description |
|---|---|
| Folder | Directory contents |
| Syndication (object list) | Syndication contents |
| Settings | Settings screen |
| Task | Main task form |

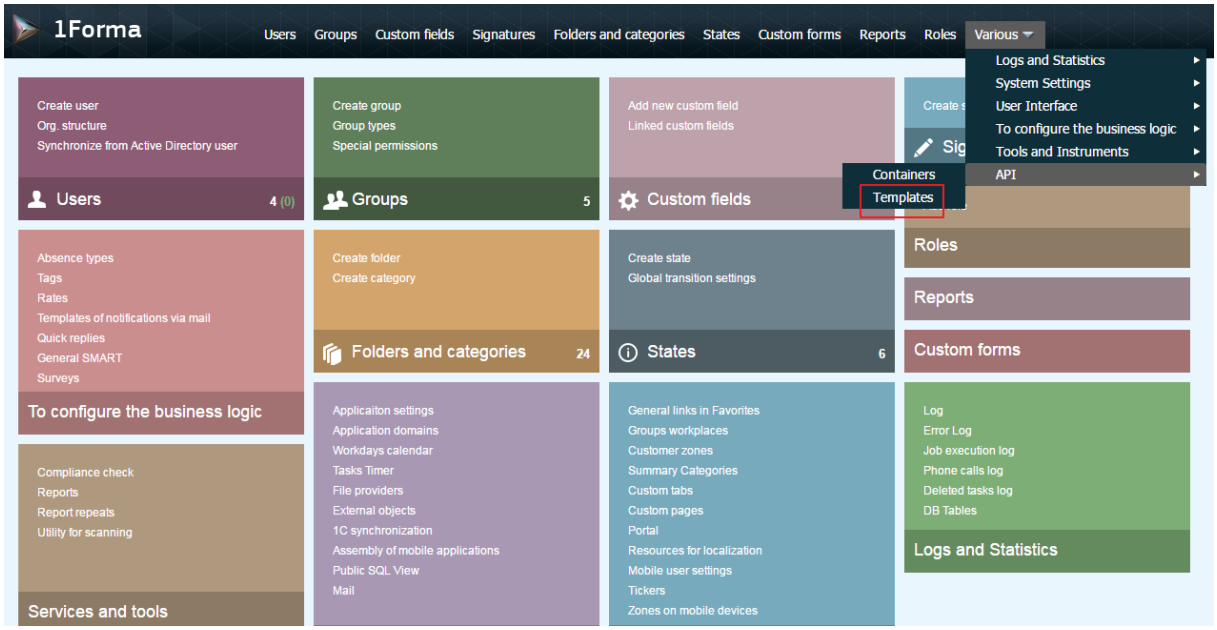
| Name | Description |
|---|---|
| Contact | Main contact form |
| Comment | Comment entry window |
| Diagnostics (for iOS) | Diagnostics screen |
| Link | Link window |
| New task form | Task creation form |
| Buttons from group workplaces | A set of buttons from a group workplace |
| Dashboard | Portal page |
| Favorites | Favorites list |
| Group workplace Favorites | Favorites list from a group workplace |
| User group | List of users in a group |

1Forma currently provides the following containers:

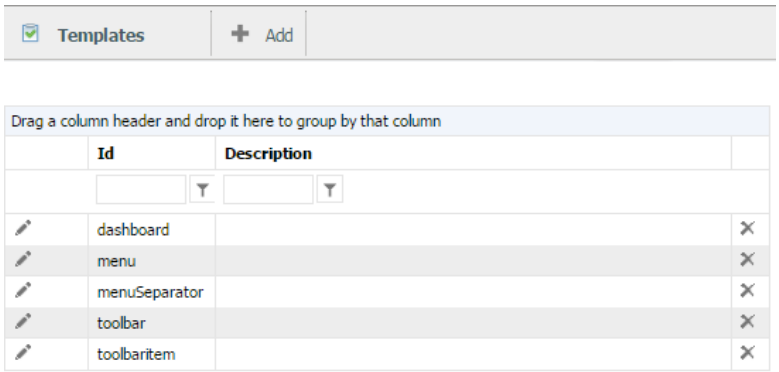
| Name | Description |
|---|---|
| categorySelectorMenu | Drop-down menu on the feed/categories tab |
| dashboard | Portal |
| FavouritesMenu | Bottom part of the main menu, which includes group workplaces and Favorites |
| iosDashboard | Portal |
| iosLeftMenu | Quick navigation pane for an account |
| iosMainMenu | Navigation pane for an account |
| iosToolbar | Bottom navigation bar |
| mainMenu | Main menu of the application with key control blocks (for Android) |
| tabbar | Bottom menu with buttons for navigating tabs |

## 13.6.3 Templates

To navigate to templates configuration , choose the corresponding item in the Miscellaneous — API menu.

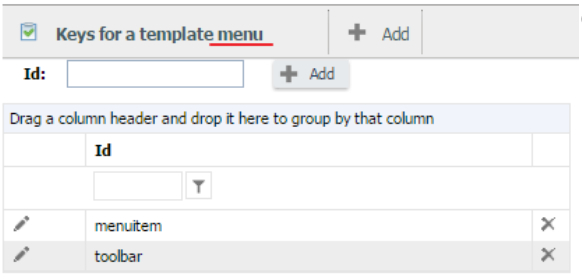


A table with the existing templates opens.

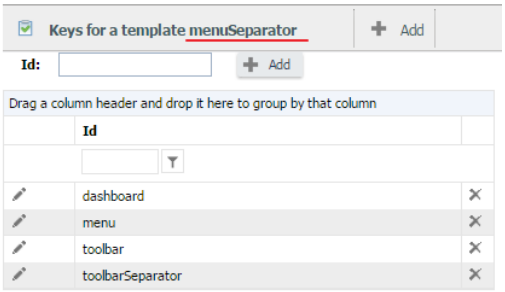



To create a new template, click the Add button. A window for adding a template appears. Enter only the template name; an ID is assigned by the system when the template is saved:

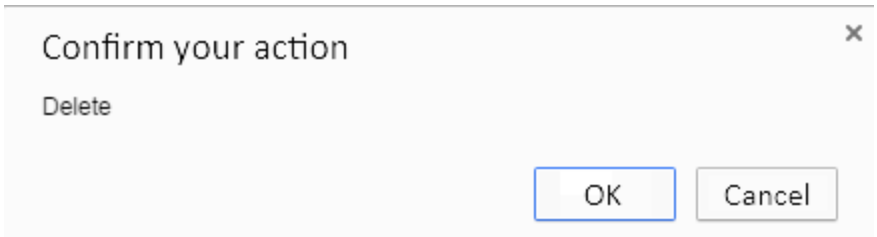

Each template can be assigned a set of keys (empty sets are also supported). To edit keys, click the template row:




or




To edit a template, hover the mouse over the required table row and click . Make changes and click the icon at the beginning of the row to save the changes or the icon to cancel. To delete a resource, click the delete icon in the corresponding table row. A confirmation window opens.




Click OK to confirm deletion. If deletion has been chosen by mistake, click Cancel.

#### 13.6.3.1 List of Templates

The system currently provides the following templates:

| Name | Description | Keys |
|---|---|---|
| dashboard | Portal | None |
| dashboardItem | Portal block | • fallBackTitle<br>• headerBackgroundColor<br>• icon<br>• textColor<br>• widthRatio |
| dashboardMediaItem | Portal block for photos and videos (powered by Vimeo) * | • mediaType<br>• mediaURL<br>• onTouchURL<br>• text<br>• textColor<br>• thumbnailTimestamp<br>• widthRatio |
| menu | Menu | • align |
| menuItem | Menu item | • icon<br>• title |
| menuSeparator | Separator line between menu items | None |
| toolbar | Toolbar | None |
| toolbarItem | Toolbar icon | • color<br>• icon |
| userAreaFolder | User work area | • title |

To create a photo gallery on the dashboard, add a block folder with ID MediaGallery (and the dashboardItem template) and populate it with dashboardMediaItem tiles. Specify the required widthRatio for the folder (usually 3 or 4).

Template keys:

| Key | Description | Possible values |
|---|---|---|
| align | Alignment | Possible values are: left, right, center |
| color | Background color | Expression in format #000000 |
| fallBackTitle | Tile header if no other header is found | A header can be formed from the category name, user profile or other data. If a tile header is empty, you can enter any value in this field, and it will display on the tile. |
| headerBackgroundColor | Header background color | Expression in format #000000 |
| icon | Name of the predefined icon | Possible values are: DBContacts, DBTasks, DBQuestionIn, DBQuestionOut, etc. |
| mediaType | Media type | image or video |
| mediaURL | Content URL | Direct link to image or Vimeo video |
| onTouchURL | Link that opens when clicked | For example, dirclub://media (navigates to Media) |
| text | Text displayed on top of media | Text line |

| Key | Description | Possible values |
|---|---|---|
| textColor | Block text color | Expression in format #000000 |
| thumbnailTimestamp | Thumbnail (preview image) | For a Vimeo video, you can specify the second to make a screenshot that will be displayed when the video is not playing. |
| title | Title | Text line |
| widthRatio | Width | Possible values are:<br>0 — square tile, 1/3 of portal width<br>1 — 1/2 of portal width in portrait mode<br>2 — 2/3 of portal width<br>3 — full width in portrait mode<br>4 — full portal width.<br>The default value is 0. |