

RunaWFE. User guide

Version 3.0

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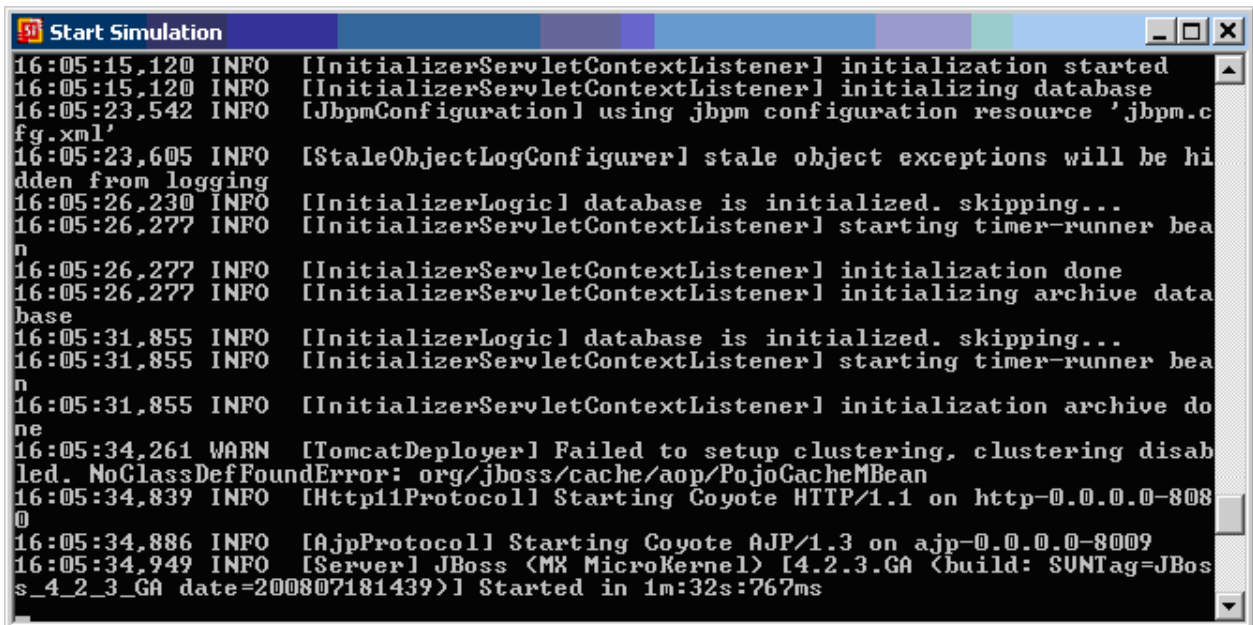
Logging In

In order to be able to log in to the system, the RunaWFE-server (simulator) must be running.

For Windows OS distributive Simulator can be run on the client computer via system menu Start / Programs / RunaWFE / Start simulation or via desktop icon "Start simulation". If you've installed server or remote bot station, then jboss is installed as service and it will be started automatically every time the system is started.

For Linux OS distributives Simulator can be run on the client computer via system menu or via desktop icon "Start simulation". If you've installed server or remote bot station, then jboss is installed as demon and it will be started automatically every time the system is started.

If you used "Start simulation" command, a console window will appear:



```

16:05:15,120 INFO [InitializerServletContextListener] initialization started
16:05:15,120 INFO [InitializerServletContextListener] initializing database
16:05:23,542 INFO [JbpmConfiguration] using jbpm configuration resource 'jbpm.c
fg.xml'
16:05:23,605 INFO [StaleObjectLogConfigurer] stale object exceptions will be hi
dden from logging
16:05:26,230 INFO [InitializerLogic] database is initialized. skipping...
16:05:26,277 INFO [InitializerServletContextListener] starting timer-runner bea
n
16:05:26,277 INFO [InitializerServletContextListener] initialization done
16:05:26,277 INFO [InitializerServletContextListener] initializing archive data
base
16:05:31,855 INFO [InitializerLogic] database is initialized. skipping...
16:05:31,855 INFO [InitializerServletContextListener] starting timer-runner bea
n
16:05:31,855 INFO [InitializerServletContextListener] initialization archive do
ne
16:05:34,261 WARN [TomcatDeployer] Failed to setup clustering, clustering disab
led. NoClassDefFoundError: org/jboss/cache/aop/PojoCacheMBean
16:05:34,839 INFO [Http11Protocol] Starting Coyote HTTP/1.1 on http-0.0.0.0-808
0
16:05:34,886 INFO [AjpProtocol] Starting Coyote AJP/1.3 on ajp-0.0.0.0-8009
16:05:34,949 INFO [Server] JBoss (MX MicroKernel) [4.2.3.GA (build: SUNTag=JBos
s_4_2_3_GA date=200807181439)] Started in 1m:32s:767ms
  
```

«...INFO [Server] JBoss ... Started in ...» means that simulator has been started. After it you can use web-interface to work with the system. This can be done via task-notifier or via a web-browser. You can start web-interface with the help of command «...RunaWFE / Simulation Web Interface» or using a desktop icon.

Graphical Interface

Once the system is installed, its graphical interface is available at: <http://<servername>:8080/wfe>. <servername> is the address of the server where the system is installed.

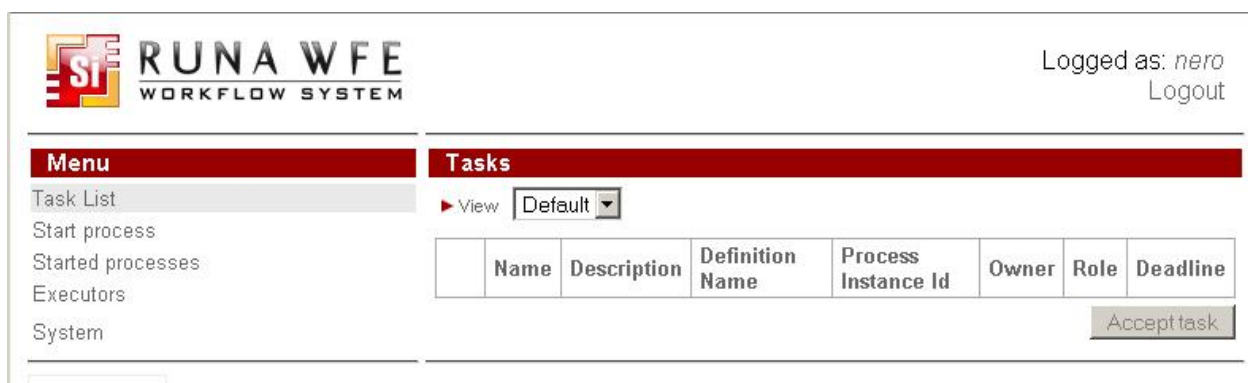
Note. In case of AltLinux, port 8080 is used by system services, so a different port should be specified in the URL (see "System Installation Instructions"). Under AltLinux, the following URL is usually used for the graphical interface: <http://<servername>:28080/wfe>.

Note. If the SSL protocol is used for the graphical interface, use the following URL: <https://<servername>:8443/wfe>
A web-browser, opened at the above address, should display a page to enter user login and password.




After entering the system, the user will see the system menu in the upper left-hand part of the page. The menu includes the following items:

- Task List
- Start process
- Started processes
- Executors
- System



Task List

The page of the "Task List" menu item contains a list of tasks for the user. If bold font is used in the name of the task, the user hasn't viewed the task yet (hasn't opened the task form). Under the task list to the right there is a button "Accept task". If the task is assigned to the group of users, it appears on the list of every member of the group. When user clicks "Accept task" the task disappears from task lists of other members of the group and stays only on the list of the user that accepted the task. When user clicks on the name or description of the task the corresponding form appears:



Logged as: *julius*
[Logout](#)

Menu

- Task List
- Start process
- Started processes
- Executors
- System

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Feedback email or forum

Task form

	Process Instance Id	Name	Description	Definition Name	Owner	Role	Deadline
<input checked="" type="checkbox"/>	4321	Evaluate a request	Evaluate a vacation request	Vacation	julius	boss	

[Accept task](#)

Task form

Evaluate a vacation request

User request

Employee: Nero Claudius Caesar
 Since: 03.08.2010
 Till: 04.08.2010
 Reason: wanna rest
 Comments: Long time no rest

Your decision


Boss comments

☒ Approve ☐ Reject

[Task is done](#)

Task Sorting, Grouping and Filtering

Click the small red triangle or "View" link near it in the upper part of the task list, and a sub-form with sorting, grouping and filtering properties will appear (to close the sub-form click the triangle again):



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Tasks

▼ View: **Default**

Field name	Display Position	Sorting Type	Sorting Position	Grouping	Filter Criteria
Process Instance Id	1	desc	1	<input type="checkbox"/>	<input type="text"/>
Name	2	asc	none	<input type="checkbox"/>	<input type="text"/>
Description	3	asc	none	<input type="checkbox"/>	<input type="text"/>
Definition Name	4	asc	none	<input type="checkbox"/>	<input type="text"/>
Owner	5	asc	none	<input type="checkbox"/>	
Role	6	desc	2	<input type="checkbox"/>	<input type="text"/>
Deadline	7	asc	none	<input type="checkbox"/>	<input type="text"/>
Variable:					<input type="text"/>


[Save](#) [Save As...](#)

Total:2

	Process Instance Id	Name	Description	Definition Name	Owner	Role	Deadline
<input checked="" type="checkbox"/>	4321	Evaluate a request	Evaluate a vacation request	Vacation	julius	boss	
<input checked="" type="checkbox"/>	4320	Evaluate a request	Evaluate a vacation request	Vacation	julius	boss	

Note. When you check a field in Grouping column the Display position value for the corresponding row is automatically set to "none". You may want to change the Display position value. Because when Display position is set to "none" for the name and the description fields there's no way to navigate to task form from the task list.

An example of grouping properties, grouping tasks by process instance id:


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Tasks

▼ View Default

Field name	Display Position	Sorting Type	Sorting Position	Grouping	Filter Criteria
Name	1	asc	none	<input type="checkbox"/>	<input type="text"/>
Description	2	asc	none	<input type="checkbox"/>	<input type="text"/>
Definition Name	3	asc	none	<input type="checkbox"/>	<input type="text"/>
Owner	4	asc	none	<input type="checkbox"/>	<input type="text"/>
Role	5	desc	2	<input type="checkbox"/>	<input type="text"/>
Deadline	6	asc	none	<input type="checkbox"/>	<input type="text"/>
Process Instance Id	none	desc	1	<input checked="" type="checkbox"/>	<input type="text"/>
Variable:	<input type="text"/>				

Save
Save As...

Total:2


	Name	Description	Definition Name	Owner	Role	Deadline
Process Instance Id: 4321						
<input checked="" type="checkbox"/>	Evaluate a request	Evaluate a vacation request	Vacation	julius	boss	
Process Instance Id: 4320						
<input checked="" type="checkbox"/>	Evaluate a request	Evaluate a vacation request	Vacation	julius	boss	

Clicking the "Save as" button in the sub-form will create a new profile with the current properties of the sub-form. The name of the profile should be specified in the field to the right of the button. Once the new profile is saved, its name appears in the selection field next to the red triangle and "View" link. When a profile is selected in the selection field, the representation of the current tasks changes according to the properties in the selected profile.

The sub-form also contains an "empty" field. This field allows to sort, group and filter tasks by values of a business process variable. To do so, enter the name of the variable in the "empty" field. Click "Save" or "Save As". Now the sub-form contains a new line with the name of the variable and fields to make sorting, grouping and filtering by its value. Enter desirable parameters and "Save" again. The filter will be applied to all the tasks for business process instances that contain a variable with this name.

Start process

The page of the “Start process” menu item contains a list of business process definitions, accessible to the logged in user for reading.


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Process Definitions

▶ View
Default ▼

Total:14

	Start	Name	Description	Process type	
<input type="checkbox"/>		Hello World	This is the simplest process	Script	Properties
<input type="checkbox"/>		BPMNDemo	BPMN demo process	Script	Properties
<input type="checkbox"/>		ExecuteFormulaDemo	Example of ExecuteFormulaActionHandler using (no start form provided)	Script	Properties
<input type="checkbox"/>		AjaxFormDemo	AJAX support demo	Script	Properties
<input type="checkbox"/>		FileUpload	This is sample workflow process demonstrates work with file	Script	Properties
<input type="checkbox"/>		TimerDemo	Demo for element timer (no start form provided)	Script	Properties
<input type="checkbox"/>		Report	Example of a simple process. Participants of this process are members of manager and staff groups	Script	Properties
<input type="checkbox"/>		Overtime Work	Participants of this process are members of manager and staff groups	Script	Properties
<input type="checkbox"/>		Vacation	Participants of this process are members of manager, all and human resource groups	Script	Properties
<input type="checkbox"/>		Businesstrip	Participants of this process are members of manager, staff, bookkeeper and human resource groups	Script	Properties
<input type="checkbox"/>		MainProcess	MainProcess for subprocess demonstration (no start form provided)	Script	Properties
<input type="checkbox"/>		SubProcess	SubProcess for subprocess demonstration	Script	Properties
<input type="checkbox"/>		BotDemo	Bot demo process (no start form provided)	Script	Properties
<input type="checkbox"/>		TextFileCreation	Bot creates text file (no start form provided)	Script	Properties

Business Process Sorting, Grouping and Filtering

Click the small red triangle or "View" link in the upper part of the definitions list, and a sub-form with sorting, grouping and filtering properties will appear (to close the sub-form, click the triangle again):


The sub-form properties are similar to those of the sub-form for tasks.

How to Start a Business Process

Clicking the name of a business process or process icon will start a new business process instance or a start form will be opened, if it is present in the process definition. If a start form is present, then the process instance will be started only after the start form is filled and executed.

How to View a Business Process Properties

Click the “Properties” command if you want to open a page with business process properties.


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Started processes

View Default


1 2 3 4 5 6 7 8 9 10 11 > >
Total:737

Name	Id	Started ▾	Ended	Version
Vacation	4321	02.08.2010 19:01		1
Vacation	4320	02.08.2010 18:40		1
AjaxFormDemo	4319	02.08.2010 18:39	02.08.2010 18:40	1
BPMNdemo	4318	02.08.2010 17:01	02.08.2010 19:02	1
Hello World	4317	02.08.2010 17:00	02.08.2010 17:00	1
ExecuteFormulaDemo	4316	02.08.2010 16:17	02.08.2010 18:18	1
TimerDemo	4315	02.08.2010 16:17	02.08.2010 18:17	1
TimerDemo	4314	02.08.2010 16:17	02.08.2010 18:17	1
ExecuteFormulaDemo	4313	02.08.2010 16:17	02.08.2010 18:17	1
SubProcess	4312	01.08.2010 13:38	01.08.2010 15:38	1

1 2 3 4 5 6 7 8 9 10 11 > >
Total:737

Started processes

The page of the “Started processes” menu item contains a list of business process instances, accessible to the logged in user for reading.


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Process Instance

Permission Owners
[View history](#)

Name	TimerDemo
Id	4315
Version	1
Started	02.08.2010 16:17
Ended	02.08.2010 18:17

Active tasks

State	Executor

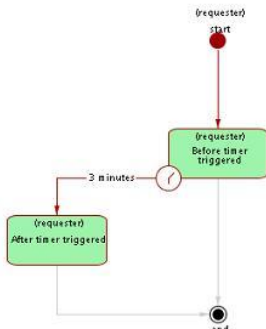
Process Roles

Name	Executor	Organization Function
requester	Unauthorized	value is unset

Process Variables

Name	Value

Process Graph



```

graph TD
    start((start)) --> timer((3 minutes))
    timer --> end((end))
  
```

A click on a business process instance will open the properties of the instance.



Logged as: *nero*
Logout

Menu		Executors																																																	
Task List		View <input type="button" value="Default"/>																																																	
Start process																																																			
Started processes																																																			
Executors																																																			
System																																																			
SOURCEFORGE.NET Feedback email or forum		Total:15																																																	
		<table border="1"> <thead> <tr> <th>Name</th> <th>Full Name</th> <th>Description</th> </tr> </thead> <tbody> <tr><td><input type="checkbox"/> manager</td><td></td><td>group for managers</td></tr> <tr><td><input type="checkbox"/> human resource</td><td></td><td>group for human resource department</td></tr> <tr><td><input type="checkbox"/> bookkeeper</td><td></td><td>group for bookkeepers</td></tr> <tr><td><input type="checkbox"/> staff</td><td></td><td>group for main work personal</td></tr> <tr><td><input type="checkbox"/> all</td><td></td><td>group for all employees</td></tr> <tr><td><input type="checkbox"/> julius</td><td>Gaius Julius Caesar</td><td></td></tr> <tr><td><input type="checkbox"/> nero</td><td>Nero Claudius Caesar</td><td></td></tr> <tr><td><input type="checkbox"/> cleopatra</td><td>Cleopatra VII The Daughter of the Pharaoh</td><td></td></tr> <tr><td><input type="checkbox"/> octavia</td><td>Octavia Minor</td><td></td></tr> <tr><td><input type="checkbox"/> tiberius</td><td>Tiberius Claudius Drusus</td><td></td></tr> <tr><td><input type="checkbox"/> marcus</td><td>Marcus Aurelius Antoninus</td><td></td></tr> <tr><td><input type="checkbox"/> gaius</td><td>Gaius Flavius Valerius Constantinus</td><td></td></tr> <tr><td><input type="checkbox"/> attila</td><td>Attila the King of Huns</td><td></td></tr> <tr><td><input type="checkbox"/> caligula</td><td>Gaius Iulius Germanicus</td><td></td></tr> <tr><td><input type="checkbox"/> UniversalBot</td><td>Bot for a Demo</td><td></td></tr> </tbody> </table>	Name	Full Name	Description	<input type="checkbox"/> manager		group for managers	<input type="checkbox"/> human resource		group for human resource department	<input type="checkbox"/> bookkeeper		group for bookkeepers	<input type="checkbox"/> staff		group for main work personal	<input type="checkbox"/> all		group for all employees	<input type="checkbox"/> julius	Gaius Julius Caesar		<input type="checkbox"/> nero	Nero Claudius Caesar		<input type="checkbox"/> cleopatra	Cleopatra VII The Daughter of the Pharaoh		<input type="checkbox"/> octavia	Octavia Minor		<input type="checkbox"/> tiberius	Tiberius Claudius Drusus		<input type="checkbox"/> marcus	Marcus Aurelius Antoninus		<input type="checkbox"/> gaius	Gaius Flavius Valerius Constantinus		<input type="checkbox"/> attila	Attila the King of Huns		<input type="checkbox"/> caligula	Gaius Iulius Germanicus		<input type="checkbox"/> UniversalBot	Bot for a Demo		Total:15 <input type="button" value="Remove"/>
Name	Full Name	Description																																																	
<input type="checkbox"/> manager		group for managers																																																	
<input type="checkbox"/> human resource		group for human resource department																																																	
<input type="checkbox"/> bookkeeper		group for bookkeepers																																																	
<input type="checkbox"/> staff		group for main work personal																																																	
<input type="checkbox"/> all		group for all employees																																																	
<input type="checkbox"/> julius	Gaius Julius Caesar																																																		
<input type="checkbox"/> nero	Nero Claudius Caesar																																																		
<input type="checkbox"/> cleopatra	Cleopatra VII The Daughter of the Pharaoh																																																		
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<input type="checkbox"/> caligula	Gaius Iulius Germanicus																																																		
<input type="checkbox"/> UniversalBot	Bot for a Demo																																																		

You can view the process history log page by clicking "View History" link in the right upper corner:



Logged as: *Administrator*
Logout

Menu		Process history	
Task List		Process Instance	
Start process			
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SOURCEFORGE.NET Feedback email or forum		<p>2010-08-02 16:17:45.046: Process instance has been started.2010-08-02 16:17:45.06: Swimlane 'requester' assigned to executor 'nero'. 2010-08-02 16:17:45.06: Executed action 'org.jbpm.scheduler.def.CreateTimerAction' (with configuration ") as 'node-enter' at state 'Before timer triggered'</p> <p>2010-08-02 16:17:45.062: Entering node 'Before timer triggered' (Activity). Assigned executor is 'Unknown executor with id null' (swimlane is 'requester').</p> <p>2010-08-02 16:20:48.928: Task 'Before timer triggered' was done by 'nero'. 2010-08-02 16:20:48.928: Executed action 'org.jbpm.scheduler.def.CancelTimerAction' (with configuration ") as 'node-leave' at transition from 'Before timer triggered' to 'After timer triggered'</p> <p>2010-08-02 16:20:48.932: Entering node 'After timer triggered' (Activity). Assigned executor is 'Unknown executor with id null' (swimlane is 'requester').</p> <p>2010-08-02 18:17:45.982: Process has been cancelled by 'StopBot'.</p>	


Sorting, Grouping, and Filtering Business Process Instances

Click the small red triangle or "View" link in the upper part of the instances list, and a sub-form with sorting, grouping and filtering properties will appear (to close the sub-form, click the triangle again):

The sub-form properties are similar to those of the sub-form for tasks.

Executors

The page of the "Executors" menu item contains a list of potential task executors (actors or groups of actors), accessible to the logged in user for reading.



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Logged as: *nero*
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Executors

[View](#) Default

Total:15

	Name	Full Name	Description
<input type="checkbox"/>	manager		group for managers
<input type="checkbox"/>	human resource		group for human resource department
<input type="checkbox"/>	bookkeeper		group for bookkeepers
<input type="checkbox"/>	staff		group for main work personal
<input type="checkbox"/>	all		group for all employees
<input type="checkbox"/>	julius	Gaius Julius Caesar	
<input type="checkbox"/>	nero	Nero Claudius Caesar	
<input type="checkbox"/>	cleopatra	Cleopatra VII The Daughter of the Pharaoh	
<input type="checkbox"/>	octavia	Octavia Minor	
<input type="checkbox"/>	tiberius	Tiberius Claudius Drusus	
<input type="checkbox"/>	marcus	Marcus Aurelius Antoninus	
<input type="checkbox"/>	gaius	Gaius Flavius Valerius Constantinus	
<input type="checkbox"/>	attila	Attila the King of Huns	
<input type="checkbox"/>	caligula	Gaius Iulius Germanicus	
<input type="checkbox"/>	UniversalBot	Bot for a Demo	

Total:15
Remove

Clicking an executor will open a page of executor properties:



Logged as: *nero*
Logout

Menu	Executor Details												
Task List Start process Started processes Executors System	<div>Permission Owners</div> <table border="1"> <tr> <td>Name *</td> <td>nero</td> </tr> <tr> <td>Full Name</td> <td>Nero Claudius Caesar</td> </tr> <tr> <td>Description</td> <td></td> </tr> <tr> <td>Code</td> <td>-20</td> </tr> <tr> <td>E-mail</td> <td>null</td> </tr> </table> <div>Apply</div>	Name *	nero	Full Name	Nero Claudius Caesar	Description		Code	-20	E-mail	null		
Name *	nero												
Full Name	Nero Claudius Caesar												
Description													
Code	-20												
E-mail	null												
<div>SOURCEFORGE.NET</div> <div>Feedback email or forum</div>	<div>Executor Groups</div> <div>► View Default</div> <div>Add</div> <table border="1"> <thead> <tr> <th></th> <th>Name</th> <th>Full Name</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td>manager</td> <td></td> <td>group for managers</td> </tr> <tr> <td><input type="checkbox"/></td> <td>all</td> <td></td> <td>group for all employees</td> </tr> </tbody> </table> <div>Remove</div>		Name	Full Name	Description	<input type="checkbox"/>	manager		group for managers	<input type="checkbox"/>	all		group for all employees
	Name	Full Name	Description										
<input type="checkbox"/>	manager		group for managers										
<input type="checkbox"/>	all		group for all employees										
	<div>Substitutors</div> <table border="1"> <thead> <tr> <th>Organization Function</th> <th>Substitutors Criteria</th> <th>Enabled</th> </tr> </thead> <tbody> <tr> <td colspan="3"><div>Ok</div></td> </tr> </tbody> </table>	Organization Function	Substitutors Criteria	Enabled	<div>Ok</div>								
Organization Function	Substitutors Criteria	Enabled											
<div>Ok</div>													

If the executor is an actor, this page contains information on the actor, a list of groups the actor belongs to, and a list of substitution rules. Also there is a link to a permission owners page for this actor in the right upper corner:

Menu	Permission Owners																		
Task List Start process Started processes Executors System	<div>Executor Details</div> <table border="1"> <thead> <tr> <th></th> <th>Name</th> <th>Read</th> <th>Update Permissions</th> <th>Update Executor</th> <th>Update Status</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/></td> <td>all</td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>nero</td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table> <div>Apply</div>		Name	Read	Update Permissions	Update Executor	Update Status	<input checked="" type="checkbox"/>	all	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	nero	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Name	Read	Update Permissions	Update Executor	Update Status														
<input checked="" type="checkbox"/>	all	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>														
<input checked="" type="checkbox"/>	nero	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>														
<div>SOURCEFORGE.NET</div> <div>Feedback email or forum</div>																			

Note. If the activity indicator of the actor is reset, substitution rules are activated for this actor, redirecting his or her tasks to substitutes.

If the executor is a group, this page contains information on the group, a list of groups that this group belongs to and a list of actors and groups that are members of this group. There's also a link to permission owners page for this group in the right upper corner.



Logged as: *julius*
Logout

Menu

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Executor Details

Permission Owners

Name *	manager
Description	group for managers
LDAP group	

Apply

Executor Groups

► View **Default**

Add

	Name	Full Name	Description

Remove

Group Members

► View **Default**

	Name	Full Name	Description
<input type="checkbox"/>	julius	Gaius Julius Caesar	
<input type="checkbox"/>	nero	Nero Claudius Caesar	

Remove

Executor Sorting, Grouping, and Filtering

Click the small red triangle or "View" link near it in the upper part of the executors list, and a sub-form will appear where you can set properties for sorting, grouping, and filtering (to close the sub-form, click the triangle again):

The sub-form properties are similar to those of the sub-form for tasks.

System

The page of the "System" menu item contains a list of executor permissions to perform actions on the system.



Logged as: *nero*
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Permission Owners

View history

	Name	Read	Update Permissions	Login	Create Executor	Deploy Process Definition
<input checked="" type="checkbox"/>	all	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Apply

Subprocesses

Subprocess is explained by example demo process in WF-system Demo description, see [MainProcess_with_SubProcess](#)

This includes a special case of subprocesses named multiinstance, see [MultiInstanceProcess_with_MultiInstanceSubProcess](#)

Details of Table Display Properties

The upper part of the tables of the system graphical interface contains a “View” command, represented by a red triangle (▼) and a "View" link.

A click on this icon or link opens a window with table properties:

The screenshot shows the 'Started processes' window in the RunaWFE system. The window has a menu on the left with options like 'Task List', 'Start process', 'Started processes', 'Executors', and 'System'. The main area is titled 'Started processes' and contains a 'View' dropdown set to 'Default'. Below this is a table with columns for 'Field name', 'Display Position', 'Sorting Type', 'Sorting Position', 'Grouping', and 'Filter Criteria'. The table lists fields: Name, Id, Started, Ended, Version, and Variable. Each field has a display position (1-5), a sorting type (asc, desc), a sorting position (1), and a grouping checkbox. Below the table is a 'Size' dropdown set to 10, and 'Save' and 'Save As...' buttons. At the bottom, there is a table of started processes with columns: Name, Id, Started, Ended, and Version. The table shows 11 rows of data, including 'TextFileCreation', 'TimerDemo', 'BPMNDemo', 'Hello World', 'Vacation', 'ExecuteFormulaDemo', etc. The total count is 741.

Field name	Display Position	Sorting Type	Sorting Position	Grouping	Filter Criteria
Name	1	asc	none	<input type="checkbox"/>	<input type="text"/>
Id	2	asc	none	<input type="checkbox"/>	<input type="text"/>
Started	3	desc	1	<input type="checkbox"/>	<input type="text"/>
Ended	4	asc	none	<input type="checkbox"/>	<input type="text"/>
Version	5	asc	none	<input type="checkbox"/>	<input type="text"/>
Variable:					<input type="text"/>

Size: 10

Save Save As...

1 2 3 4 5 6 7 8 9 10 11 > > Total:741

Name	Id	Started	Ended	Version
TextFileCreation	4325	03.08.2010 15:21		1
TimerDemo	4324	03.08.2010 15:21	03.08.2010 15:21	1
BPMNDemo	4323	03.08.2010 15:20		1
Hello World	4322	03.08.2010 7:30	03.08.2010 7:30	1
Vacation	4321	02.08.2010 19:01	02.08.2010 21:02	1
Vacation	4320	02.08.2010 18:40	02.08.2010 20:40	1
AjaxFormDemo	4319	02.08.2010 18:39	02.08.2010 18:40	1
BPMNDemo	4318	02.08.2010 17:01	02.08.2010 19:02	1
Hello World	4317	02.08.2010 17:00	02.08.2010 17:00	1
ExecuteFormulaDemo	4316	02.08.2010 16:17	02.08.2010 18:18	1

1 2 3 4 5 6 7 8 9 10 11 > > Total:741


In this window you can:

- specify the position of a column on the display;
- specify sorting type and position;
- set grouping options;
- set filtering criteria;

create a new profile based on the current one. Here are some detailed examples of these properties. Note. In online demo application ^[2] you should use not "Save" but "Save As" your profile with some name other than "Default". (As it is described in the example 5). Then the following examples will work with your new profile. It is done so for the sake of keeping "Default" profile configuration stable while many other users share the same login (thus the same configurations) in demo.

- Let us swap the “Name” and “Number” columns and remove the “Version” column:
 - set display position 2 for the “Name” column;
 - set display position 1 for the “Number” column;

set display position “none” for the “Version” column. After saving, the view will look as follows:


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Started processes

View: Default

Field name	Display Position	Sorting Type	Sorting Position	Grouping	Filter Criteria
Id	1	asc	none	<input type="checkbox"/>	<input type="text"/>
Name	2	asc	none	<input type="checkbox"/>	<input type="text"/>
Started	3	desc	1	<input type="checkbox"/>	<input type="text"/>
Ended	4	asc	none	<input type="checkbox"/>	<input type="text"/>
Version	none	asc	none	<input type="checkbox"/>	<input type="text"/>
Variable:	<input type="text"/>				
Size:	10				
<div style="display: flex; justify-content: space-between;"> Save Save As... <input style="width: 100px;" type="text"/> </div>					

1 2 3 4 5 6 7 8 9 10 11 > >
 Total:741

Id	Name	Started	Ended
4325	TextFileCreation	03.08.2010 15:21	
4324	TimerDemo	03.08.2010 15:21	03.08.2010 15:21
4323	BPMNDemo	03.08.2010 15:20	
4322	Hello World	03.08.2010 7:30	03.08.2010 7:30
4321	Vacation	02.08.2010 19:01	02.08.2010 21:02
4320	Vacation	02.08.2010 18:40	02.08.2010 20:40
4319	AjaxFormDemo	02.08.2010 18:39	02.08.2010 18:40
4318	BPMNDemo	02.08.2010 17:01	02.08.2010 19:02
4317	Hello World	02.08.2010 17:00	02.08.2010 17:00
4316	ExecuteFormulaDemo	02.08.2010 16:17	02.08.2010 18:18

1 2 3 4 5 6 7 8 9 10 11 > >
 Total:741

2. Let us first sort by process name in the ascending order and then by number in the descending order:

set sorting type “asc” (ascending) and sorting position 1 for the “Name”;

set sorting type “desc” (descending) and sorting position 2 for the “Number”. After saving, the view will look as follows:



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Logout

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Started processes
 View test

Field name	Display Position	Sorting Type	Sorting Position	Grouping	Filter Criteria
Name	1	asc	1	<input type="checkbox"/>	<input type="text"/>
Id	2	desc	2	<input type="checkbox"/>	<input type="text"/>
Started	3	asc	none	<input type="checkbox"/>	<input type="text"/>
Ended	4	asc	none	<input type="checkbox"/>	<input type="text"/>
Version	none	asc	none	<input type="checkbox"/>	<input type="text"/>
Variable:					<input type="text"/>

 Size 10
 Save Save As... Remove

1 2 3 4 5 6 7 8 9 10 11 > > Total:745

Name	Id	Started	Ended
AjaxFormDemo	4319	02.08.2010 18:39	02.08.2010 18:40
AjaxFormDemo	4307	01.08.2010 4:10	01.08.2010 6:10
AjaxFormDemo	4297	30.07.2010 15:12	30.07.2010 17:12
AjaxFormDemo	4285	29.07.2010 14:52	29.07.2010 14:52
AjaxFormDemo	4277	28.07.2010 12:43	28.07.2010 14:43
AjaxFormDemo	4276	28.07.2010 12:41	28.07.2010 14:41
AjaxFormDemo	4273	28.07.2010 4:33	28.07.2010 6:33
AjaxFormDemo	4262	26.07.2010 20:54	26.07.2010 20:54
AjaxFormDemo	4250	23.07.2010 22:11	23.07.2010 22:11
AjaxFormDemo	4249	23.07.2010 18:56	23.07.2010 18:56

 1 2 3 4 5 6 7 8 9 10 11 > > Total:745

Note. To change the sort order, just click the column name.

3. Specify grouping by “Name”;

For the “Name” line, check the box in the “grouping” column and execute a Save command.If you open the “Report” line, the view will be as follows:



Logged as: nero
Logout

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Started processes
 View test

Field name	Display Position	Sorting Type	Sorting Position	Grouping	Filter Criteria
Id	1	desc	2	<input type="checkbox"/>	<input type="text"/>
Started	2	asc	none	<input type="checkbox"/>	<input type="text"/>
Ended	3	asc	none	<input type="checkbox"/>	<input type="text"/>
Name	none	asc	1	<input checked="" type="checkbox"/>	<input type="text"/>
Version	none	asc	none	<input type="checkbox"/>	<input type="text"/>
Variable:					<input type="text"/>

 Size 10
 Save Save As... Remove

1 2 3 4 5 6 7 8 9 10 11 > > Total:741


Id	Started	Ended
Name: AjaxFormDemo		
4319	02.08.2010 18:39	02.08.2010 18:40
4307	01.08.2010 4:10	01.08.2010 6:10
4297	30.07.2010 15:12	30.07.2010 17:12
4285	29.07.2010 14:52	29.07.2010 14:52
4277	28.07.2010 12:43	28.07.2010 14:43
4276	28.07.2010 12:41	28.07.2010 14:41
4273	28.07.2010 4:33	28.07.2010 6:33
4262	26.07.2010 20:54	26.07.2010 20:54
4250	23.07.2010 22:11	23.07.2010 22:11
4249	23.07.2010 18:56	23.07.2010 18:56

 1 2 3 4 5 6 7 8 9 10 11 > > Total:741

4. Set the filtering criteria – to display a task, if the name of its process contains letter “m”:

For the “Name” line, check the box in the “Filter Criteria” field and enter the text: %m%

After a Save command is executed, the lines of the “Business trip”, “Report”, and “Hello World” processes will disappear from the view:



Logged as: neta
 Logout

Menu

- Task List
- Start process
- Started processes
- Executors
- System

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Started processes

▼ View: test

Field name	Display Position	Sorting Type	Sorting Position	Grouping	Filter Criteria
Id	1	asc	none	<input type="checkbox"/>	<input type="checkbox"/>
Name	2	asc	none	<input type="checkbox"/>	<input checked="" type="checkbox"/> %m%
Started	3	desc	1	<input type="checkbox"/>	<input type="checkbox"/>
Ended	4	asc	none	<input type="checkbox"/>	<input type="checkbox"/>
Version	5	asc	none	<input type="checkbox"/>	<input type="checkbox"/>
Variable:					

Size: 10

Save Save As... Remove

1 2 3 4 5 6 7 8 9 10 11 > >

Id	Name	Started	Ended	Version
4324	TimerDemo	03.08.2010 15:21	03.08.2010 15:21	1
4323	BPMNDemo	03.08.2010 15:20	03.08.2010 17:20	1
4319	AjaxFormDemo	02.08.2010 18:39	02.08.2010 18:40	1
4318	BPMNDemo	02.08.2010 17:01	02.08.2010 19:02	1
4316	ExecuteFormulaDemo	02.08.2010 16:17	02.08.2010 18:18	1
4315	TimerDemo	02.08.2010 16:17	02.08.2010 18:17	1
4314	TimerDemo	02.08.2010 16:17	02.08.2010 18:17	1
4313	ExecuteFormulaDemo	02.08.2010 16:17	02.08.2010 18:17	1
4310	BPMNDemo	01.08.2010 13:21	01.08.2010 15:21	1
4309	BotDemo	01.08.2010 4:13	01.08.2010 6:13	1

1 2 3 4 5 6 7 8 9 10 11 > >

Total:314

Note. You can enter a string for a direct match search or use wildcards (a “%” symbol, denoting any string, including an empty string).

5. Let us create a new profile, based on the current one.

Enter “Profile Example” in the “Save As” field. Execute a Save As command. In the upper part of the screen, the current profile will change to “Profile Example”, and the choice element will now have two values: “Default” and “Profile Example”. Now if you change properties and click Save command the current profile (that is one selected in the choice) will be changed.

Minimize the properties window (by clicking the ▼ icon) You can switch between saved profiles selecting one from the choice without opening the properties window.

One can now change the view by switching the profiles in the choice element.

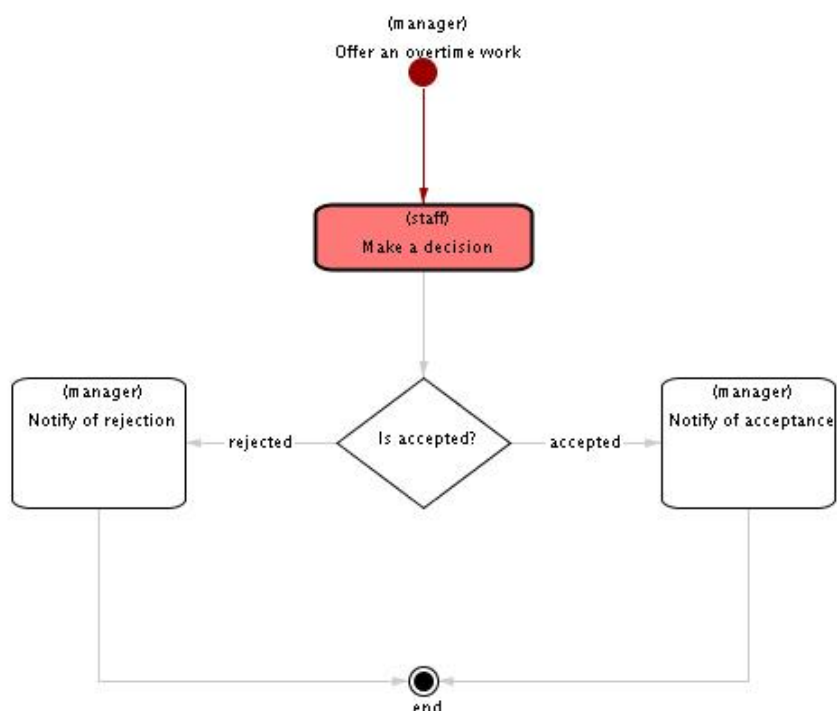
Work with Tasks

In a workflow system the activities of an enterprise are represented as a set of business processes. **A business process is a time-ordered set of tasks, executed both by people and corporate information systems and aimed at achieving a predefined business goal within a predefined time period.**


A business process can be represented as a mathematical graph – a set of nodes, called “Activities” and “route nodes” that are interconnected by possible transitions. The token moves along these transition lines. When the token is transferred to a particular Activity, a task is sent to the corresponding executor.

Example of a business process graph:

Process Graph



If the executor is an employee or a group of employees of the enterprise (not an information system), the appropriate task will appear in the task list of this executor. A click on the task will display a form for this task. Once the task has been performed, the employee must fill in the data entry fields of the form and click “Task is done”:


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	Name	Description	Definition Name	Process Instance Id	Owner	Role	Deadline
<input checked="" type="checkbox"/>	Make a decision	Accept or decline the offering	Overtime Work	4327	attila	staff	

[Accept task](#)

Task form

Accept or decline the offering of overtime work

Proposition

Manager	Nero Claudius Caesar
Employee (staff)	Attila the King of Huns
Since	09.08.2010 17:54
Till	10.08.2010 17:54
Reason	working is fun
Comments	<div style="border: 1px solid #ccc; padding: 5px; min-height: 40px;"> if I'm wrong look to rule number one: "The chief is always right" </div>

Your decision

Employee comments	<div style="border: 1px solid #ccc; padding: 5px; min-height: 40px;"> I don't think I wanna have an extra fun now </div>
-------------------	--------------------------------------------------------------------------------------------------------------------------------------------


⊖ Accept
⊕ Reject

[Task is done](#)

Once the task has been executed, the token moves to the next Activity of the business process.

If a task can be performed by a group of actors, it will appear in the task list of every group member. However, only one actor will actually be able to perform the task – the one who will be the first to do it.

One can always see the state of a business process. Just open the “Started processes” menu and click the required instance. A page with the properties of the instance will appear.

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WORKFLOW SYSTEM

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Process Instance

Name	TimerDemo
Id	4324
Version	1
Started	03.08.2010 15:21
Ended	03.08.2010 15:21

Active tasks

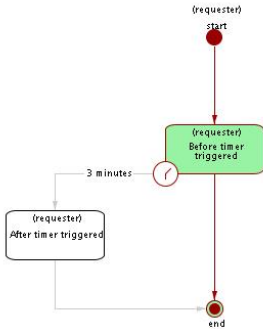
State	Executor
-------	----------

Process Roles

Name	Executor
requester	tiberius

Process Variables

Name	
------	--

Process Graph

```
graph TD; start((start)) --> task1["(requester) Before timer triggered"]; task1 -- 3 minutes --> task2["(requester) After timer triggered"]; task2 --> end((end));
```

Substitution Assignment

If an executor of a task is not “Active” (sick or on vacation), the system can redirect his or her tasks to other executors. Substitution rules are used for this purpose.

The “Active – Not Active” box is checked in the actor properties. (Note. If you don't see "Status" section, then you don't have permission to view it. Ask administrator about it.)



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Executor Details


Permission Owners

Name *	nero
Full Name	Nero Claudius Caesar
Description	
Code	-20
E-mail	null

Status

Is Active
☒

Substitution rules for each actor are set in the properties of this actor.



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Executor Details

Permission Owners

Name *	nero
Full Name	Nero Claudius Caesar
Description	
Code	-20
E-mail	null

Status

Is Active
☒

Password

New password *

Confirm password *

Executor Groups

View

	Name	Full Name	Description
<input type="checkbox"/>	manager		group for managers
<input type="checkbox"/>	all		group for all employees

Substitutors

Add Substitution
Add Terminator

	Organization Function	Substitutors Criteria	Enabled
<input checked="" type="checkbox"/>	ByNameFunction(julius)	Report.manager	<input checked="" type="checkbox"/> / <input type="checkbox"/>
<input checked="" type="checkbox"/>		Vacation.boss	<input checked="" type="checkbox"/> / <input type="checkbox"/>

There are substitution rules of two types:

”Rule” – specifies an Executor’s substitute for a certain case.

"Terminator" – specifies that in a certain case the Executor is not to be replaced. If a rule is set, it is necessary to define a function on the organizational structure and select substitution criteria from a list.

At present, the following functions on the organizational structure can be used:

- `ru.runa.af.organizationfunction.ExecutorByNameFunction` – the only parameter of this function is the name of an actor or group of actors, substituting a particular Executor.
- `ru.runa.af.organizationfunction.ChiefFunction` – the only parameter of this function is the employee number of the current actor. The function returns the actor's immediate superior as a substitute.

Example:

`ru.runa.af.organizationfunction.ChiefFunction(2038)`

The selected criteria correspond to the business process and swimlane, where the substitution will take place. There is also an "always substitute" option.

The screenshot displays the RunaWFE Workflow System interface. The top navigation bar includes the RunaWFE logo, the text "Logged as: Administrator", and a "Logout" link. The left sidebar contains a "Menu" with options like "Task List", "Start process", "Started processes", "Executors", "Bot Stations", and "System". The main content area is titled "Executor Details" and includes a "Permission Owners" section. Below this, there are sections for "Status" (with an "Is Active" checkbox), "Password" (with "New password" and "Confirm password" fields), "Executor Groups" (with a "View" dropdown and a list of groups), and "Substitutors" (with a table of rules). The "Substitutors" table has columns for "Organization Function", "Substitution Criteria", and "Enabled". The "Enabled" column contains checkboxes and small triangles for reordering. The "Substitution Criteria" dropdown is currently set to "always substitute".

If a terminator is specified, just select substitution criteria.

The substitution rules are analyzed "top down". The rules not checked in the "Enable" column are ignored.

For each rule, checked in the "Enable" column, the following is verified:

If substitution criteria are specified and the substitution rule is a terminator, the executor is not substituted and the rest of the rules are not considered.

If substitution criteria are specified, the substitution rule is a not a terminator and the function on the organizational structure returns at least one active executor, other replacement rules will not be considered.

If neither of the above two conditions is true, the next substitution rule is considered (in case the current substitution rule is the last one on the list, no substitution takes place). Note. The small triangles in the "Enable" column allow to change the position of a substitution rule on the list. To remove a substitution rule, uncheck the box in column 1 and click "OK".

Action Confirmation in RunaWFE

There is an action confirmation routine in RunaWFE. For example, user marked a process on the "Start process" page, then clicked "Remove" button.

The screenshot shows the RunaWFE web interface. At the top left is the logo "RUNA WFE WORKFLOW SYSTEM". At the top right, it says "Logged as: Administrator" and "Logout". On the left is a "Menu" with items: Task List, Start process, Started processes, Executors, Bot Stations, System. Below the menu is a "Feedback" link. The main area is titled "Process Definitions" and has a "View" dropdown set to "Default" and a "Deploy Process Definition" button. A table lists process definitions with columns: Start, Name, Description, Process type, and Properties. A modal dialog is open in the center with the title "Remove the process definition?". It contains a checkbox labeled "Perform this action without confirmation" and "Yes" and "No" buttons. The table data is as follows:

Start	Name	Description	Process type	Properties
			Admin	Properties
			Script	Properties
			Script	Properties
			Script	Properties
			Script	Properties
			Script	Properties
<input type="checkbox"/>	TimerDemo	Demo for element timer (no start form provided)	Script	Properties
<input type="checkbox"/>	Report	Example of a simple process. Participants of this process are members of manager and	Script	Properties

Before the actual removal takes place, user receives a notification dialog with a request to confirm removal. User can confirm or cancel the action. Such confirmations might be places on all removals, including removing users from groups, import and export of business process, process instance stop and start, task execution, accepting task for execution. You can stop receiving such confirmation by marking the checkbox "Perform this action without confirmation" on the confirmation dialog. For detailed tuning of action confirmation address your RunaWFE administrator.

References

- [1] <http://www.gnu.org/licenses/lgpl.html>
- [2] <http://wfdemo.runa.ru/wfe>

Image Sources, Licenses and Contributors

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