Task Scheduler - planning a task and configuration

Task scheduler is a tool in CzechldM which manages long running operations. One can plan for tasks to run automatically at scheduled times or start them manually. Tasks manage personnel processes such as End of contract or Enabled contract, to name but a few. Password expiration, automatic roles assigning and other tasks are also administered by the task scheduler.

We can make use of this tool by selecting **Settings** in menu, than choose **Task Scheduler**. Now it gives you the option of three tabs at the top of the window.

🛱 Schedul	er		
Running tasks	Scheduled tasks	All tasks	
			0
No running tas	ks found		
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Currently we are on the **Running tasks** tab. This tab will show you the detailed information of all running tasks which are processed at the moment. Example of this page will be shown bellow.

Scheduled Tasks

Let's move to another tab named **Scheduled Tasks**. On this tab, we can add new Scheduled tasks by clicking on the **Add** button in the right corner of the window.



This will create a new Scheduled task in the table located on this tab.

Create task		×
Task type		
βelect		* *
Description		
Instance		
ldm-primary		*
Execute on server (instance identifier)		
	Close	Save

The information in this Create Task window is optional.

						+Add C
	Task type	Description	Instance	Task parameters	Scheduled starts	Actions
۹	ProvisioningQueueTaskExecutor	Default	idm- primary		06.10.2017 12:35:00 × + Add	
Q	HrEndContractProcess	Test Process #1	idm- primary		+ Add	

Task Type: Usually refers to what the current task does. In the picture, we have an *HrEndContractProcess* task which will find all contracts with expired validity and take them out.

Description: This column is optional, to be filled in by the person who creates this Scheduled task.

Instance: We currently support only *Idm-primary*.

Task Parameters: Not every task has parameters filled. Just a few of them have some parameters. (For example *AddNewAutomaticRoleTaskExecutor* has the parameter *roleTreeNode*).

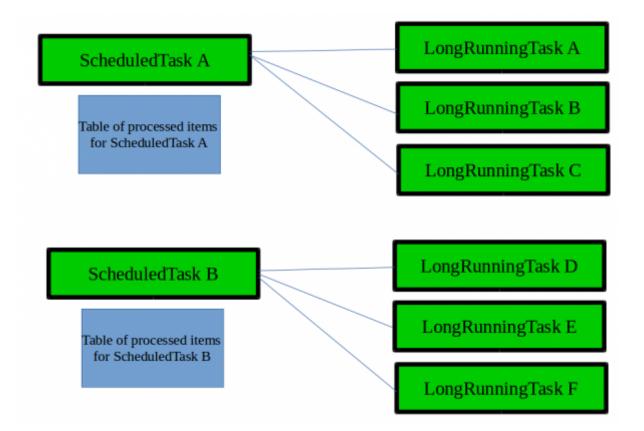
Scheduled Starts: Here we can schedule start of this Scheduled Task by clicking on the **Add** button or we can see its scheduled time.

Actions: We can see three buttons here

• Red Bin Button deletes this task.

- **Blue DryRun Button** run demo process (shows only what items it will process in the future run).
- Green Run Button run this Scheduled Task and creates a Long Running Task in All Tasks tab.

The difference between a Scheduled Task and a Long Running Task



ScheduledTask is created on page Scheduled tasks by clicking on the **Add** button in the right corner of the page. After that we have a ScheduledTask which has its own list of processed items empty, of course. The first run of this ScheduledTask is created when we hit the **Run** button.

The run creates a **LongRunningTask** that is available on the page All tasks. A new LongRunningTask, let's say "A", works with the ScheduleTask A history of the processed items and won't process them again.

All Tasks

On this tab we can find our created **Long Running Tasks**. Let's take a closer look at columns in this table.

				► Run all created tasks 🔻 Filter 💌 🗯			
	State 🌣	Created 🜩	Task type 🌼	Parameters	Description 0	Processed 0	Id
Q	O Created	06.10.2017 16:05:21	HrEndContractProcess	dryRun: false core:instanceld: idm-primary	Test Process #1		ca36930
Q	✓ Executed	06.10.2017 14:31:01	HrEndContractProcess	dryRun: false core:instanceld: idm-primary	Test Process #1	171	6b7db0a
	✓ Executed	06.10.2017 14:31:00	HrEndContractProcess	dryRun: true core:instanceld: Idm-primary	Test Process #1	1/1	8b406f9

State: Shows the result of Long Running Task or created instead.

Created: Date and time when was this Long Running Task created on page Scheduled Task(Run button or DryRun button were hit).

Task Type: Refers to Task Type of Scheduled Task.

Parameters: Refers to Parameters of Scheduled Task.

Description: Refers to Description of Scheduled Task.

Processed: How many entities were processed by this Task.

Id: This is identifier of Long Running Task.

As shown in the picture, if you have a Created-state Task and want to process it, then you need to hit the **Run all created tasks** button in the right corner of the table or select the respective row and then choose **Run the selected task** in the right corner of the table.

Detail of a Long Running Task

6/30 21:11	5/6	Task Scheduler - planning a task a	nd configuratior
Basic inform	nation		
Created		Instance	
15.12.2017 11:46:58		idm-primary	
Started		Task will be executed on server (instance identifier)	
15.12.2017 11:47:04			
Task type		Parameters	
HrEnableContractPro	ocess	core:InstanceId: Idm-primary core:dryRun: false	
Description			
Start of contract's	validity.		
Processed		Task duration	h
6/6		a few seconds	
Result			
✓ Executed			
			Back

Created: Date and time when this Long Running Task was created on page Scheduled Task (**Run** button or **DryRun** button were hit).

Instance: Refers to Instance of a Scheduled Task.

Task Type: Refers to Task Type of a Scheduled Task.

Parameters: Refers to Parameters of a Scheduled Task.

Description: Refers to Description of a Scheduled Task.

Processed: How many entities were processed by this Task.

Task Duration: How long the process takes. You can see the time if you roll over the information.

Started: When the Task started.

Processed items

There is also a table of the processed items. The table shows what items were processed by this task. You can also create a table of all processed items using this **Scheduled Task** by clicking on the **History of processed entities** button.

Processed Items	State 🕀	Entity 🗘	Entity type 🗘	Created 📮	Id
Queue	O Not executed	Marek Klement (klemema) - Boss	eu.bcvsolutions.idm.core.api.dto.idmidentityContractDto	15.12.2017 11:35:31	fbc8089

Queue

On this page we can delete items. When we delete some item than in next run of our Scheduled Task this item will be processed too.

Basic Information			Ŧ	Filter 🕶 🕽
O Processed Items	🔲 State 🗘	Entity 0	Entity type 🗘	Created
O Queue	Executed	Marek Klement (klemerna) - Default	eu.bcvsolutions.idm.core.api.dto.idmidentityContractDto	15.12.201 11:47:04
	Executed	Administrator (admin) - Organization Two (two)	eu.bcvsolutions.idm.core.api.dto.idmidentityContractDto	15.12.201 11:47:04

Dry-run

This feature allows you to see a preview of items which will be processed by this task without actually processing them. Basically, you initiate this task with the blue **Run** button which sets the task parameter Dryrun to True.

State ≑	Entity 🗘	Entity type 🗘	Created \Rightarrow	Id
○ Not executed	Marek Klement (klemema) - Boss	eu.bcvsolutions.idm.core.api.dto.ldmldentityContractDto	15.12.2017 11:35:31	fbc8089

The final result will show the table items which were "dry-run" and but won't be included in the history table.

