

Cinegy PCS 3

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Preface

Cinegy Process Coordination Service (PCS) is a Windows service that is responsible for managing all Cinegy Convert components interaction. It runs as a standard Windows service, yet along with that the convenient configurator and user-friendly interface is at user's disposal.

This component is used as a storage for all the task processing resources and allows monitoring all registered tasks and their statuses.

The machine where PCS is running is a central part of the system, any Cinegy Convert components installed on other machines should have access to this machine and report on the performed tasks. The task(s) processing progress as well as the preview images can be tracked on-the-fly.



User Manual

Chapter 1. Cinegy PCS Installation

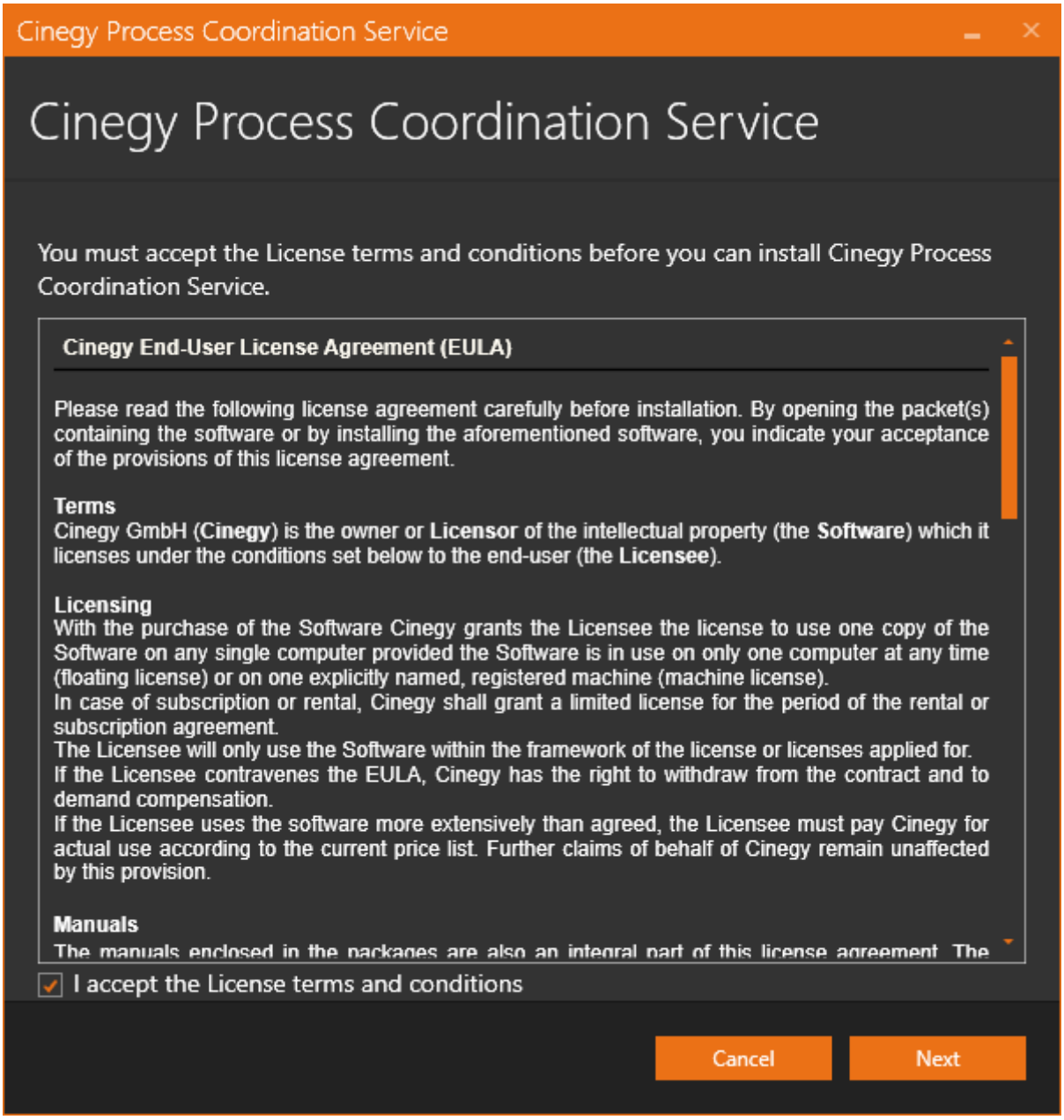


It is required to install critical Windows updates before the application installation.



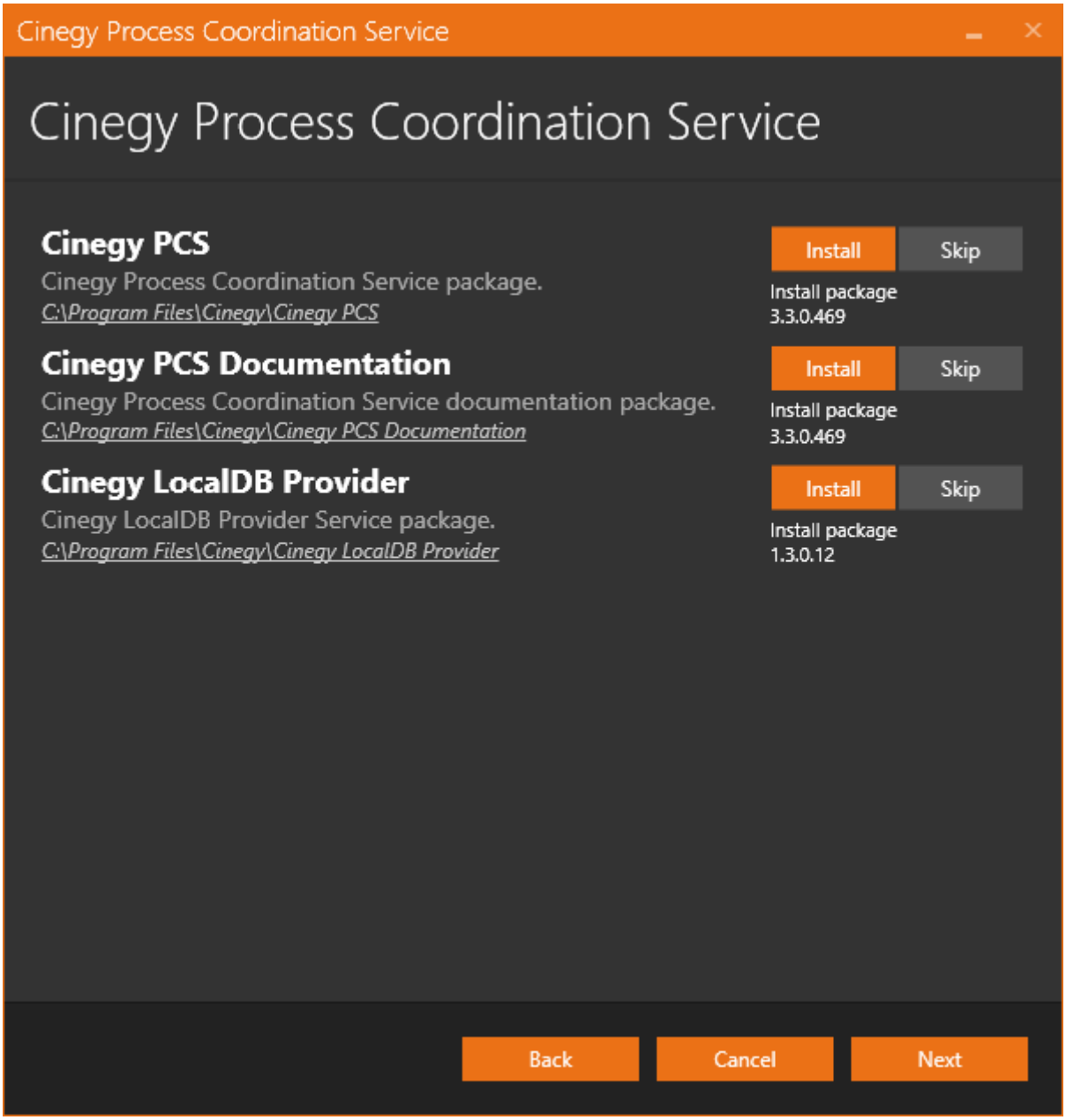
Installation of .NET Framework 4.6.1 or later is required prior to the Cinegy PCS installation. In case online installation takes place, the web installer will update the system components, if necessary. The offline installer can be used if the web installer is unavailable due to lack of Internet connection. In this case, make sure the .NET Framework 4.5 is activated as a Windows feature, then download the corresponding offline installer package directly from **Microsoft website**. After the .NET Framework 4.6.1 is installed, the OS reboot is required. Otherwise, the installation may fail.

To install Cinegy Process Coordination Service, run the Cinegy.Process.Coordination.Service.Setup.exe file. The setup wizard will be launched:



Read the License agreement and check the box to accept its terms.

All the package components are listed in the following dialog:



Install — Installation of each package component is enabled by default, which is indicated by the "Install" option selected and highlighted with orange.

Skip — Select the "Skip" option next to the relevant component to disable its installation.

Upgrade — If previous Cinegy Process Coordination Service version is detected on your machine, the "Upgrade" option substitutes the "Install" button for the Cinegy PCS upgrade to be performed.

Before upgrading Cinegy Process Coordination Service, it is recommended to back up your PCS database stored on SQL server. For more information on database backup, please visit the **Microsoft website**.

If you are using SQL LocalDB instance, perform "Batch export" of the required resources via Cinegy Process Coordination Explorer. Refer to the **Batch Export** section within **Cinegy Process Coordination Explorer Manual** to learn more about batch export.

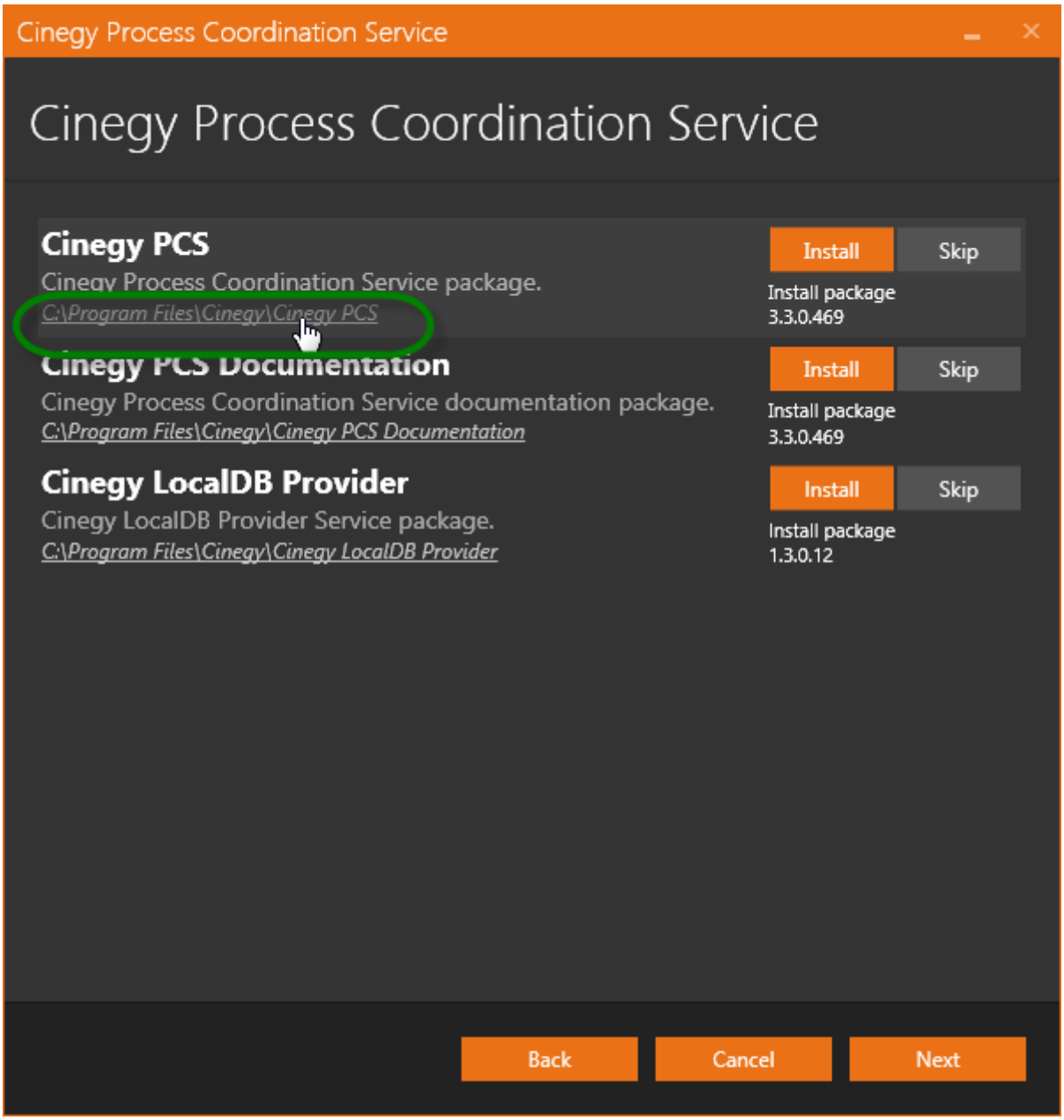
- **Cinegy PCS** – installs the Cinegy Process Coordination Service software on your machine.
- **Cinegy PCS Documentation** – creates a shortcut to the manual on Cinegy Open on your Windows Desktop.

- **Cinegy LocalDB Provider** – installs the service required for the local database creation to be used by PCS for storing data.

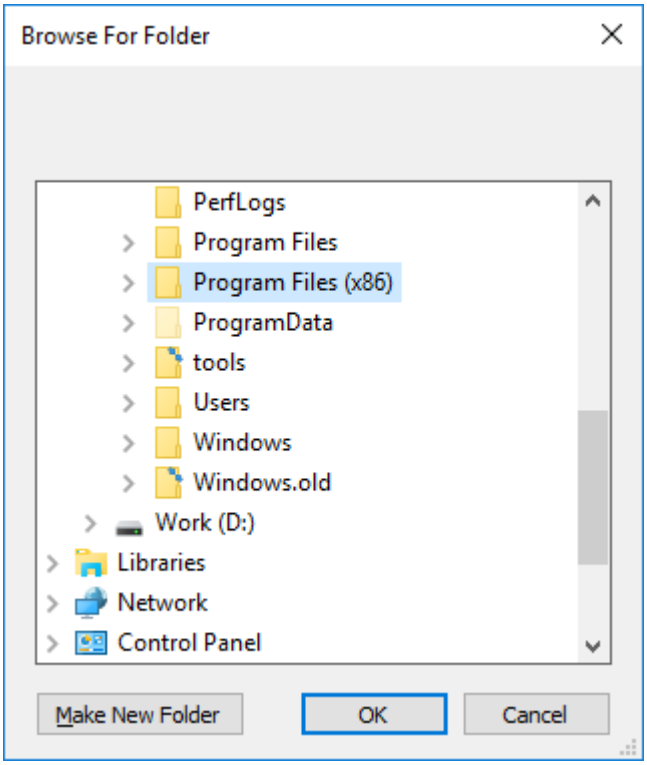


The Cinegy LocalDB Provider installation is required for creation of a local **Cinegy PCS database** under the current Windows user.

The default installation directory, which is indicated underneath the package component name, can be changed by clicking the path:



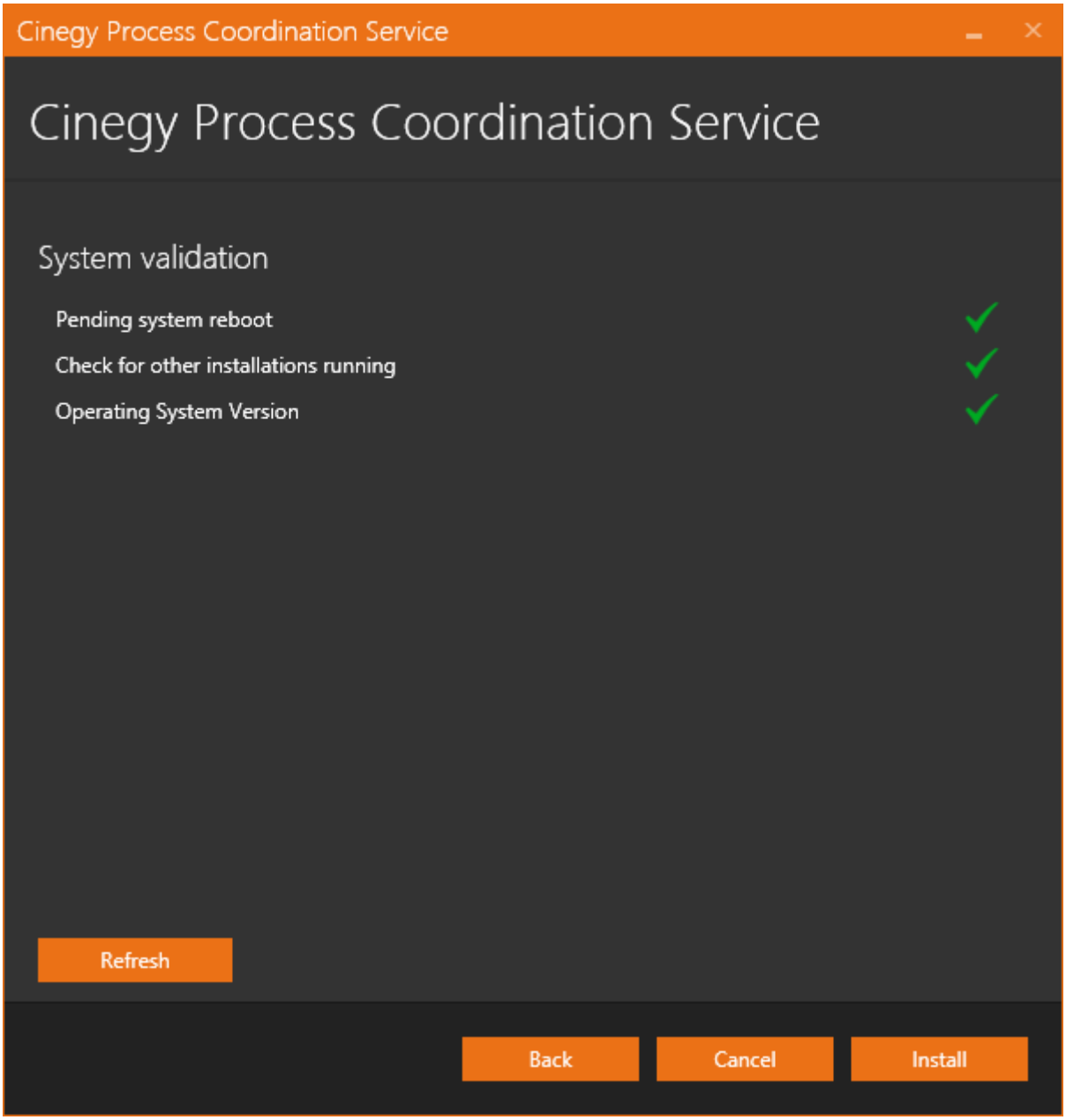
In the "Browse for folder" dialog that appears, select an existing folder and press "OK".



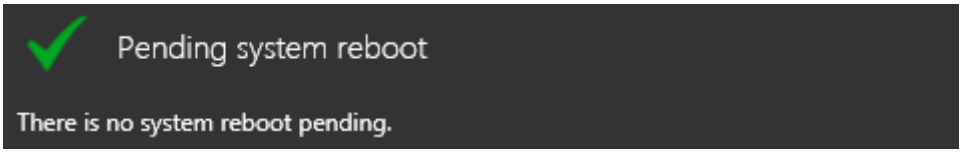
Make New Folder You can also create a new folder by pressing the "Make New Folder" button and entering a new folder name.

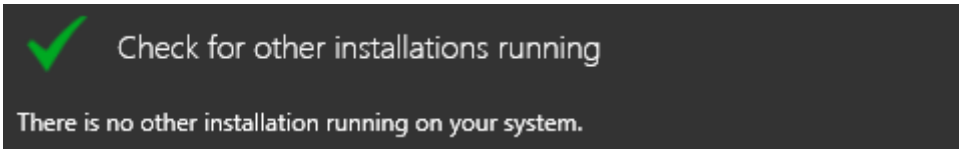
Press "Next" to proceed with installation.

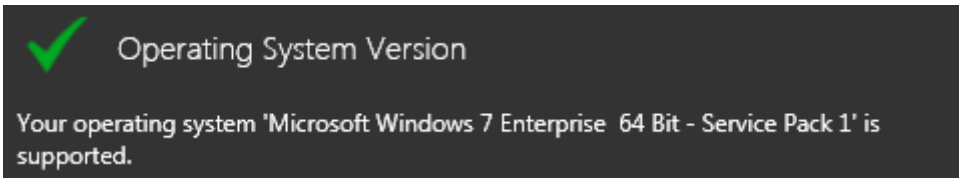
Check whether your system is ready for installation in the following dialog:



The green tick indicates that the system resources are ready and no other processes may prevent installation. Clicking the validation entry field displays its detailed information:

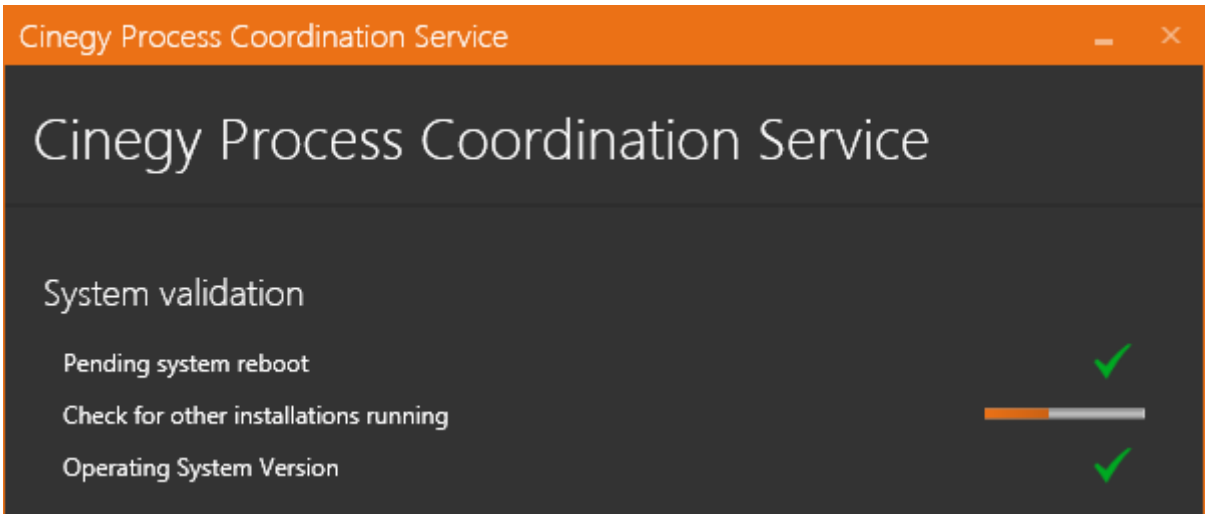






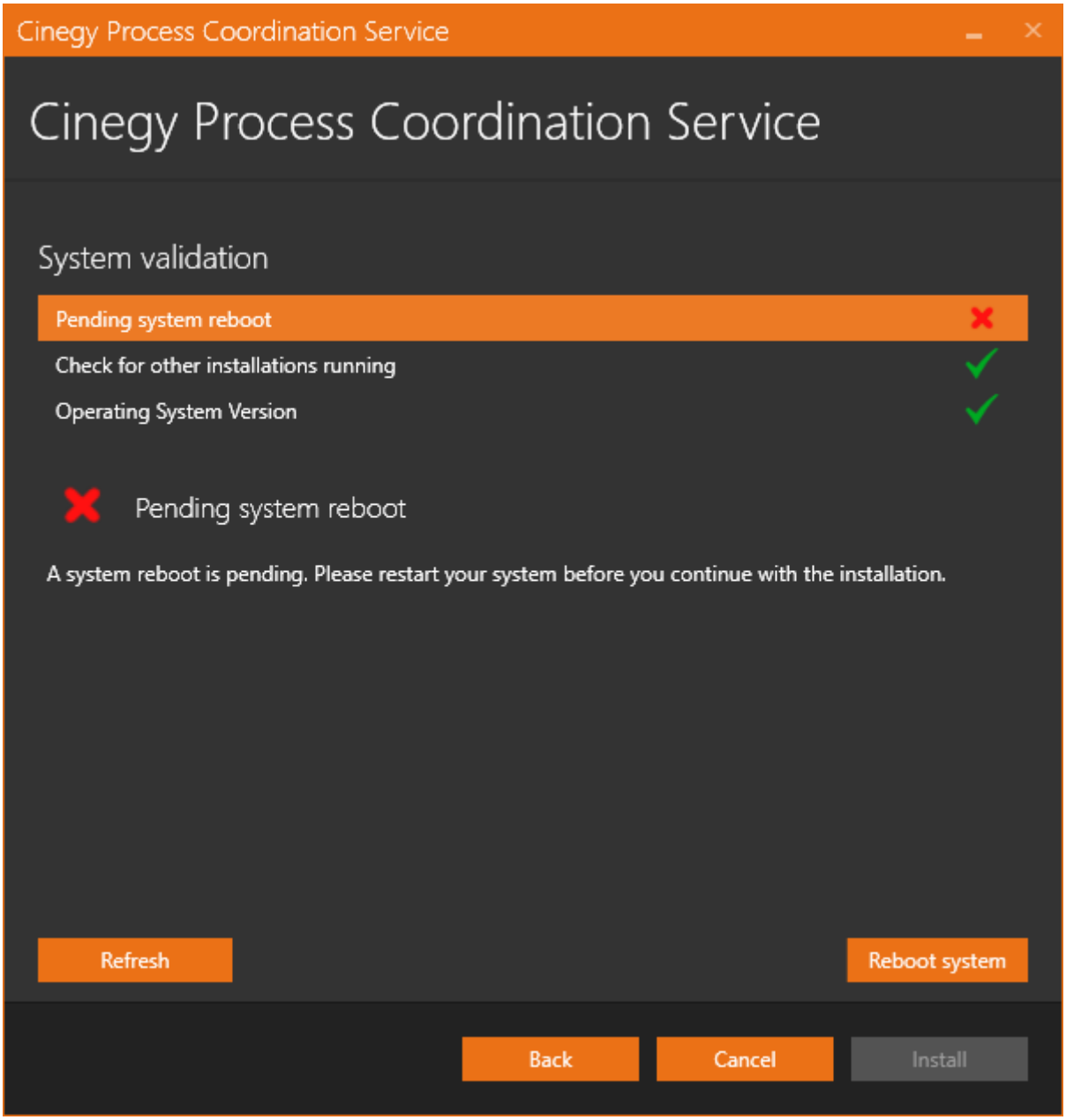


While the system performs verification of any parameter, the checking progress is displayed:





If validation reveals that installation cannot be started, the respective field becomes highlighted and the red cross is displayed with the detailed information on the reason below:



The explanation differs depending on the reason why the installation cannot be proceeded. If validation reveals system reboot pending, you can press the "Reboot system" button that appears.

The "Install" button remains inactive until validation verifies that the system resources are ready for installation.

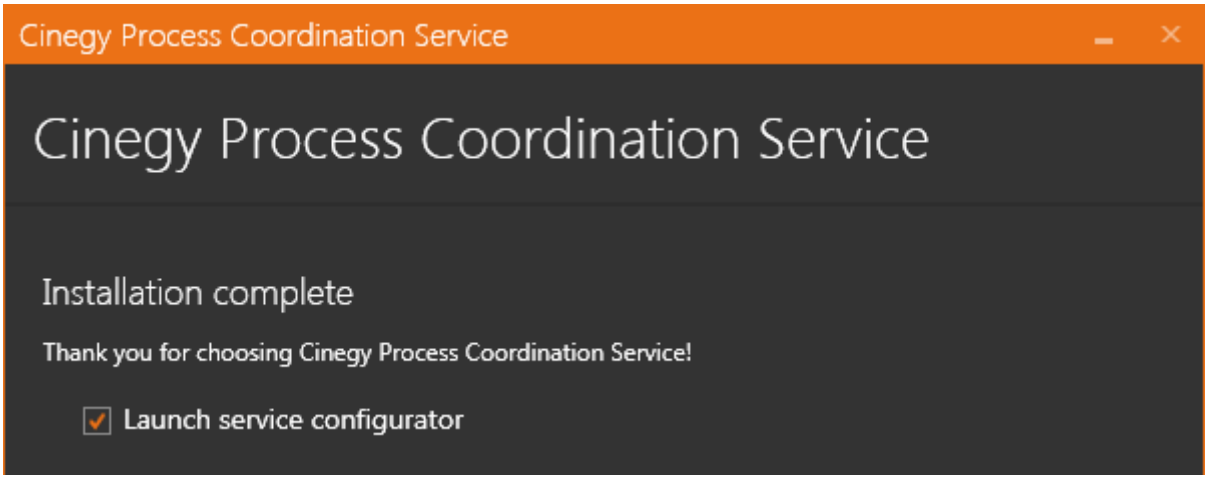
Refresh — Press the "Refresh" button for the system to recheck installation availability. Once the reason of prevention is excluded, you can proceed with installation.

Press "Back" to change the installation settings or "Cancel" to abort and exit the setup wizard.

Install — Press the "Install" button to begin the installation.

The progress bar indicates the progress of the installation process.

The following dialog informs that installation is completed successfully:



With the "Launch service configurator" option selected, the Cinegy Process Coordination Service configuration tool will be launched automatically immediately after you quit the installation wizard. Deselect this option if you want to launch it manually later.

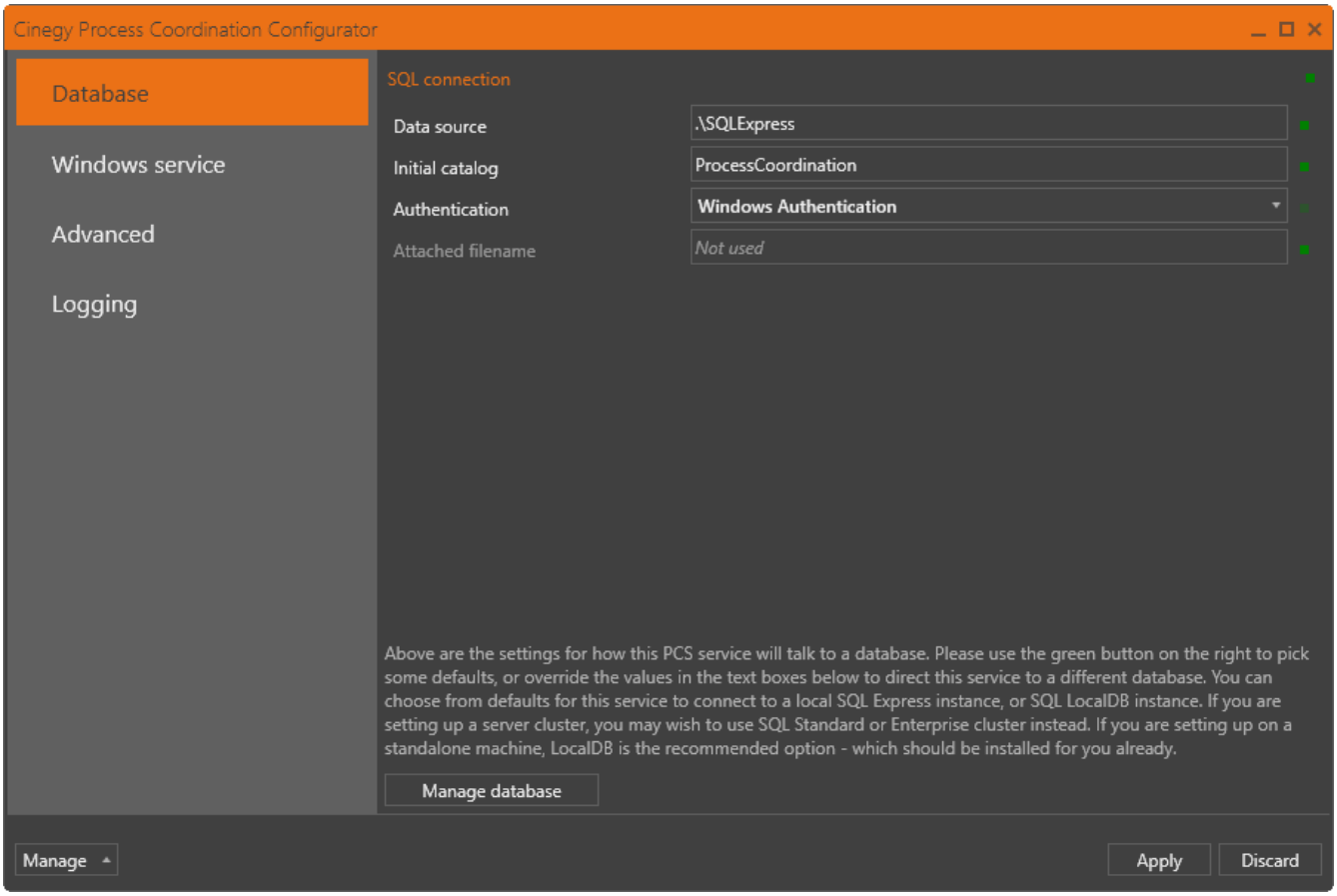
Close Press "Close" to exit the wizard.

Chapter 2. Configuration

2.1. Cinegy PCS Configurator

By default, the Cinegy Process Coordination Service configurator launches automatically immediately after the installation is complete.

To manually launch the configurator, double-click the Process Coordination Service Configurator shortcut created on your Windows desktop after the installation. Alternatively, you can go to Start > All Programs > Cinegy > Cinegy Process Coordination Service > Cinegy Process Coordination Service Configurator.

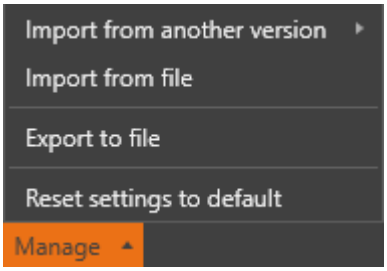


The database settings, as well as Windows service parameters, advanced settings and logging settings should be specified here.

Managing PCS Databases

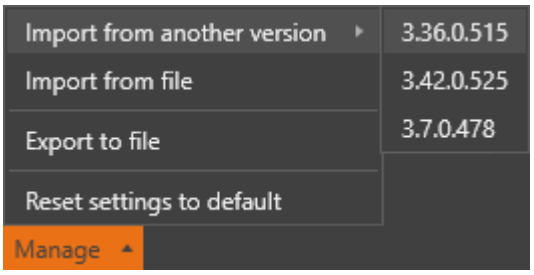


Press the "Manage" button, the following drop-down list with all available options appears:

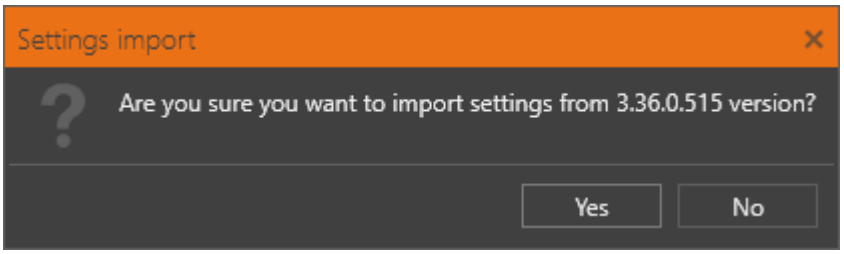


Import from another version

Use the "Import from another version" button to import all settings from previously installed and configured PCS versions and apply settings to the current one:



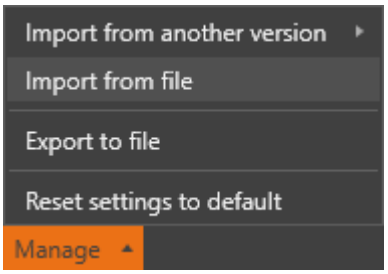
Select the required version from the list, the following confirmation window appears:



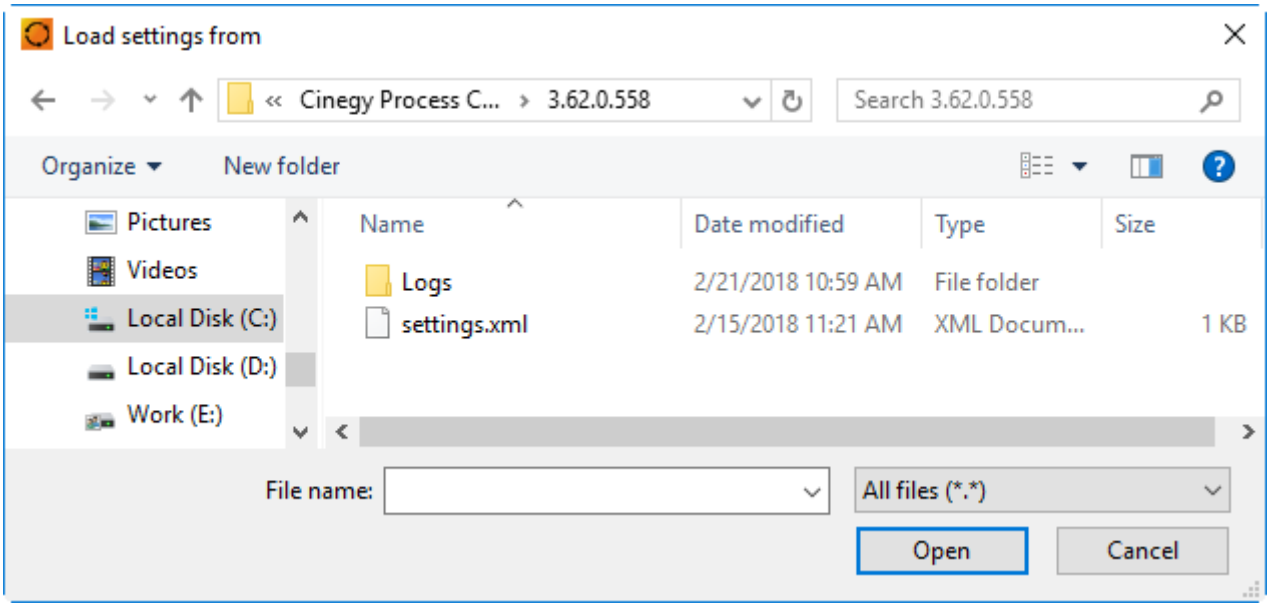
Press the "Yes" button to save and apply the imported settings to the current version.

Import from file

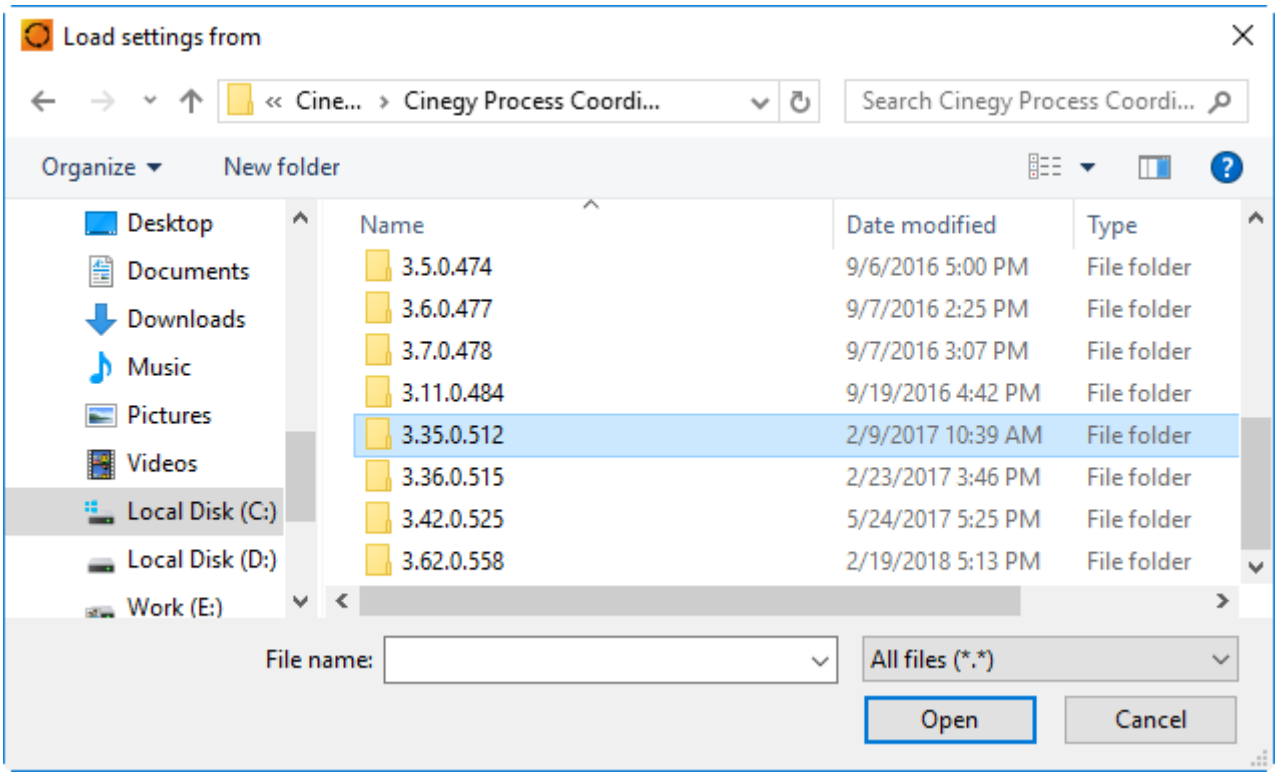
Use the "Import from file" button to import previously exported or setting files from previous versions in XML format:



Use the "Load settings from" window that appears to import settings file from the selected folder:

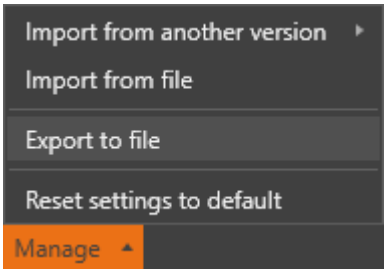


All log and settings files of previously installed PCS versions are stored in separate folders named according to the PCS version. Navigate to the *C:\ProgramData\Cinegy\Cinegy Process Coordination Service* and select the required version to import the specific settings file:

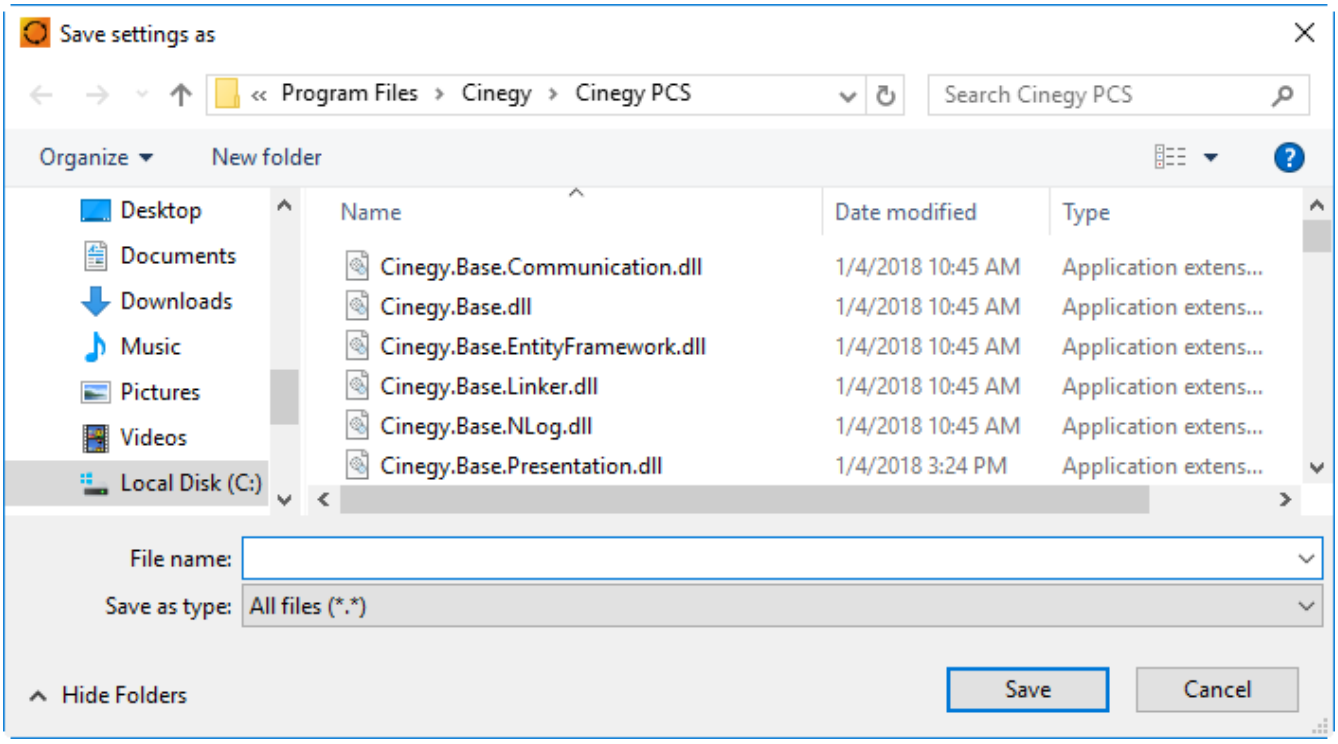


Export to file

Use the "Export to file" button to export all current settings to the XML file:

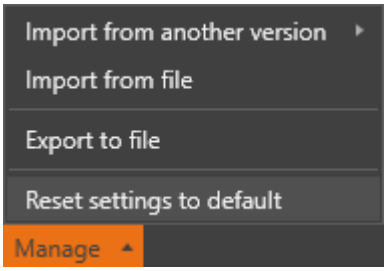


On the "Save settings as" window that appears, define the file name and save the settings file to the selected folder:



Reset settings to default

Press the "Reset settings to default" button to return to the default settings:



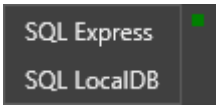
Having specified all the required settings, press the "Apply" button to save changes.

2.2. Database



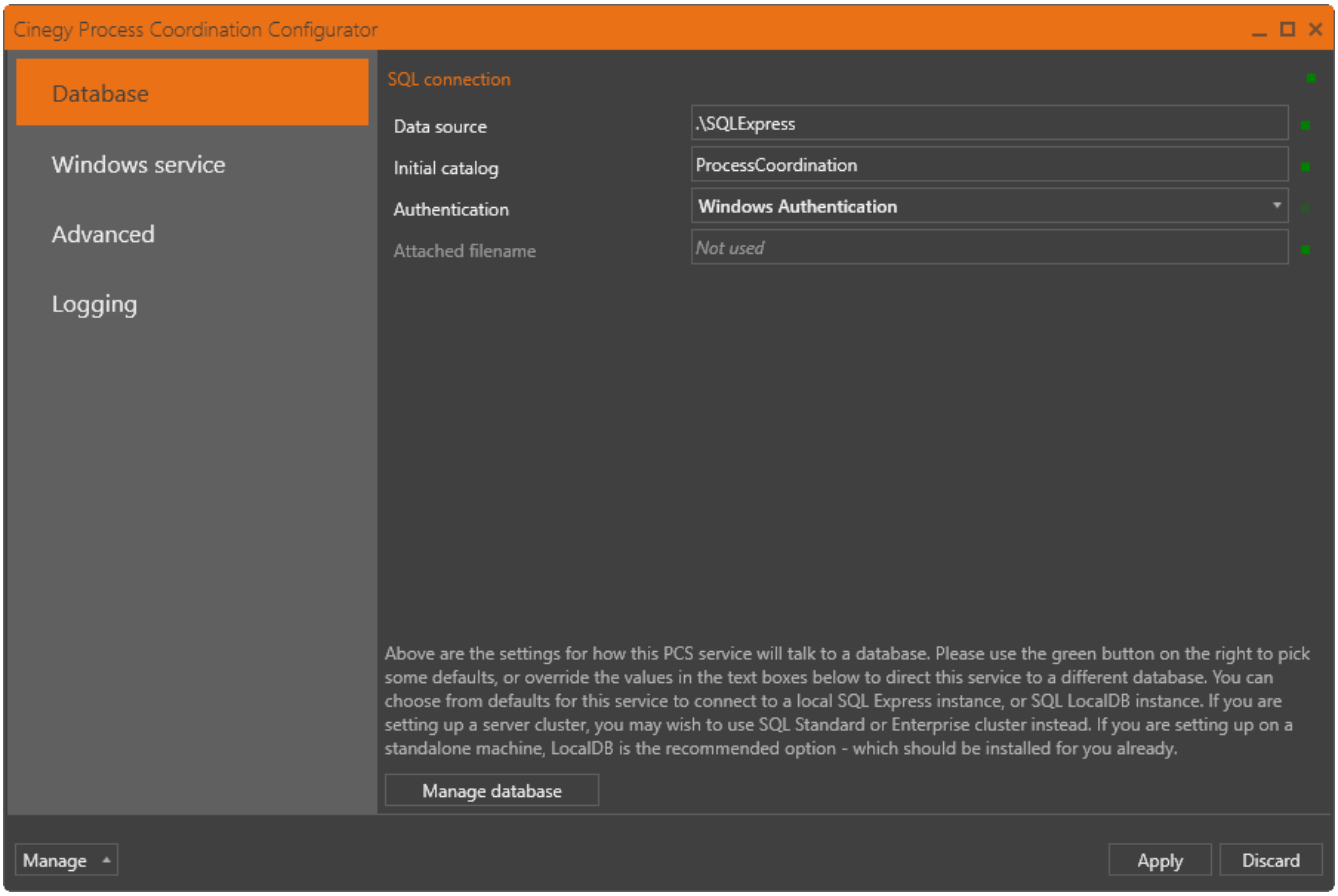
The database is created while configuring Cinegy Process Coordination Service. It is a separate unit, which is not related to Cinegy Archive database.

Use the ■ button next to "SQL connection" to select whether the database will be created on a local machine or an SQL server:

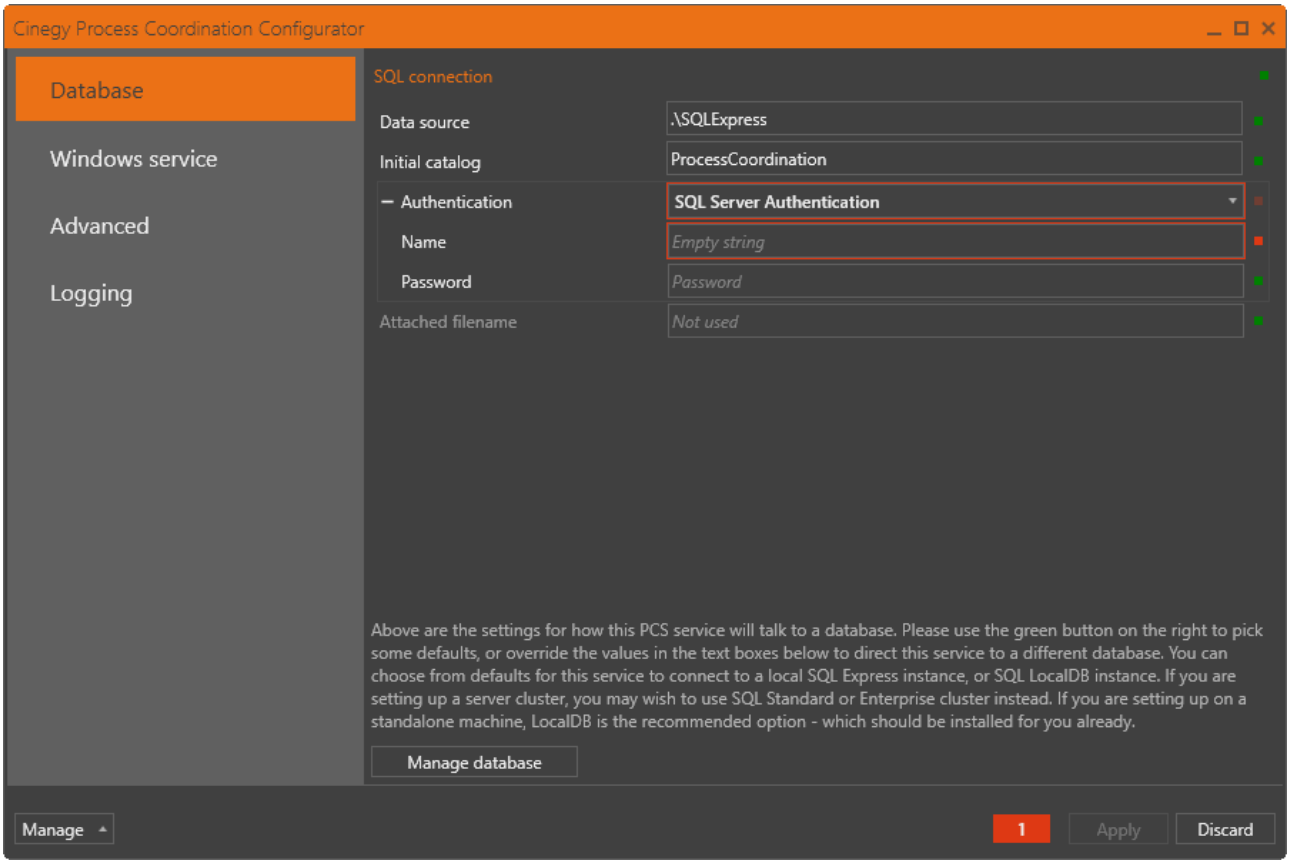


Then configure the database parameters depending on the chosen option: SQL Express or SQL Local DB.

SQL Express Database



- **Data source** – specify the existing SQL Server instance name using the keyboard.
- **Initial catalog** – define the database name.
- **Authentication** – use the drop-down list to select whether the Windows or SQL Server authentication will be used for access to the created database. With the "SQL Server Authentication" option selected, the required field becomes highlighted with a red frame; press the + button to expand the "Authentication" settings:



Type in the username and password in the corresponding fields.

Please mind that the database settings cannot be saved until all required fields are filled in; the red indicator shows a tooltip explaining the reason why settings cannot be applied.

- **Attached filename** – specify the path to the database file. This option can be left empty for most configuration scenarios. Modifications are recommended for advanced users only.

Manage database

Press the "Manage database" button to check validity of the selected database and create one if required.

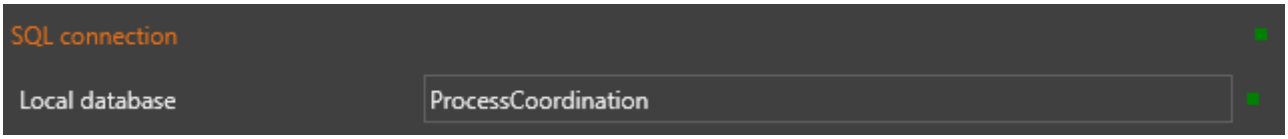
SQL Local Database

The internal database based on the MS SQL Local DB database engine suits evaluation purposes only; it works out of the box and requires no additional setup. However, we strongly recommend using an external database as a back-end Cinegy PCS database in a production environment. An external database is usually more reliable and provides better performance. Also, the internal database may become extremely slow on large data sets. Please also note that our support does not cover any performance or database data loss issues if you are using the internal database.

Please pay special attention that we strongly recommend not to use internal MS SQL Local DB database for production Cinegy PCS instances.

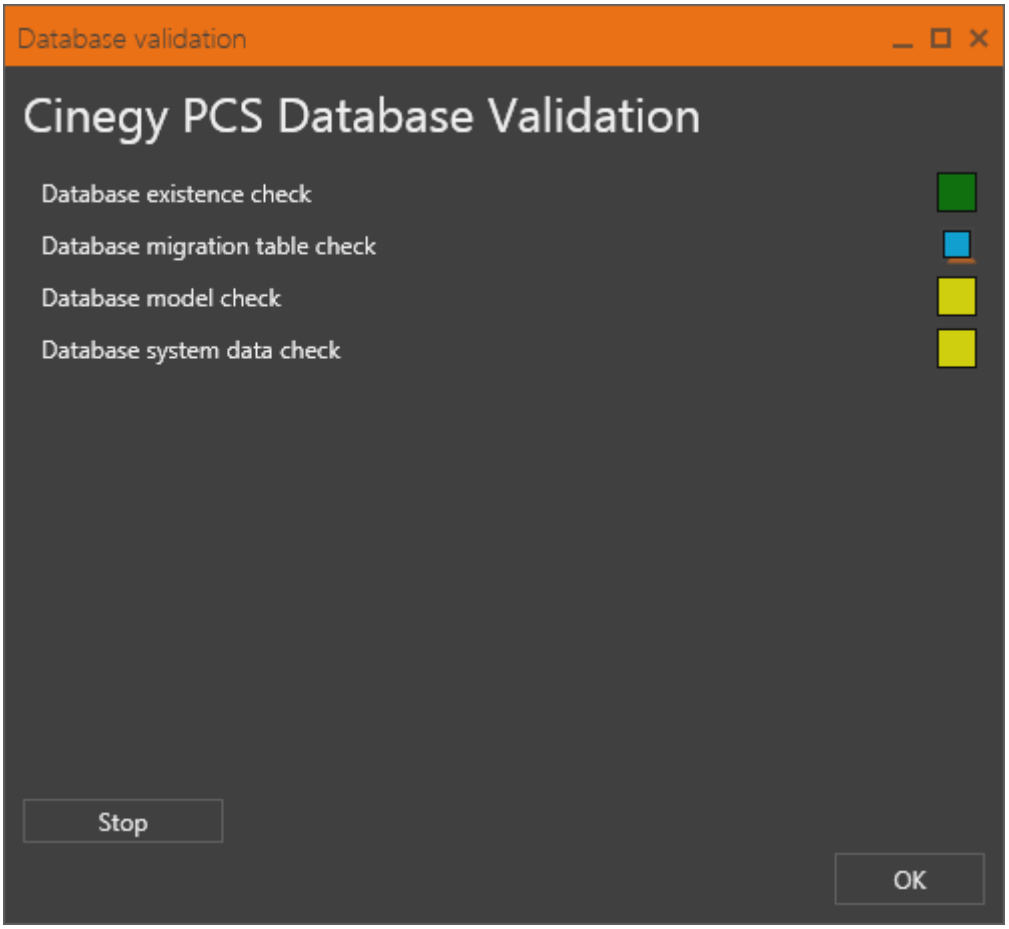
The **Cinegy LocalDB Provider installation** is required for creation of a local Cinegy PCS database. The local database is configured automatically by the Cinegy LocalDB Provider service.

Specify the database name:



Database Validation

Having pressed the "Check database" button, you will see the "Database validation" dialog with the four steps of the database check:



The following color indication is used for each validation step status:

 database parameter is being checked

 database parameter is valid

 database parameter validation is pending

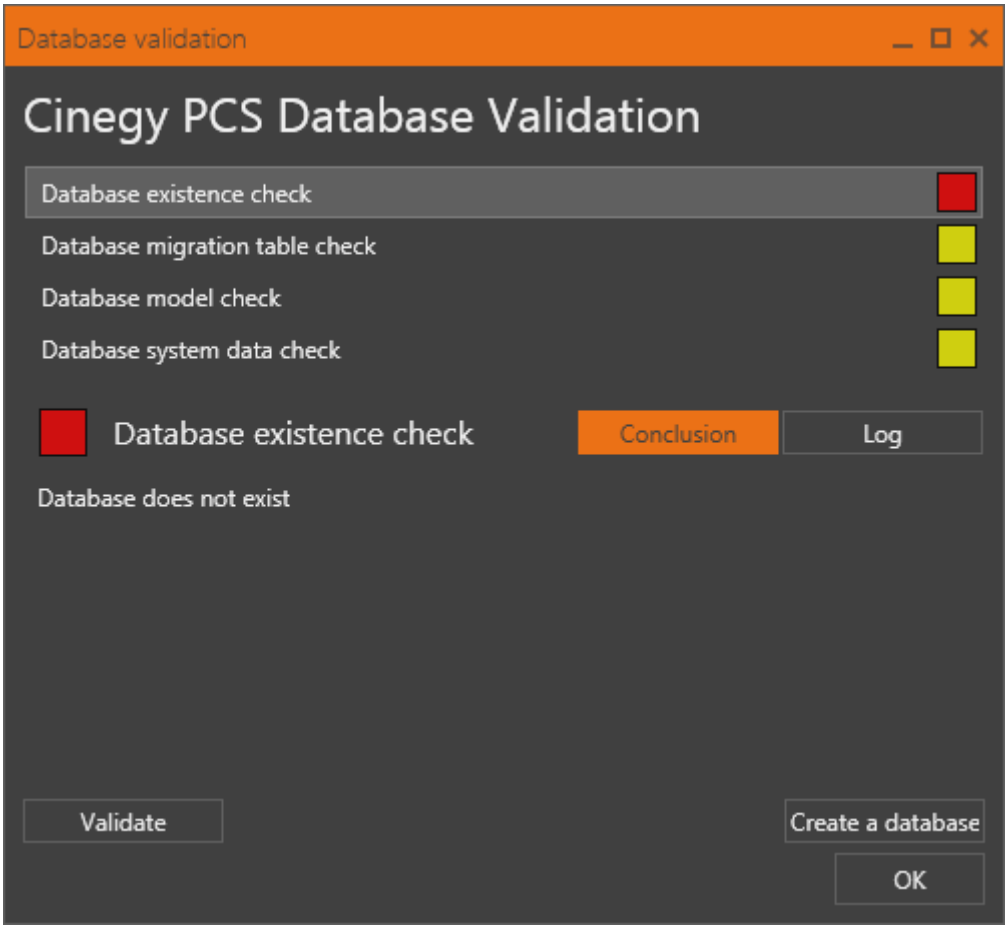
 database parameter is invalid



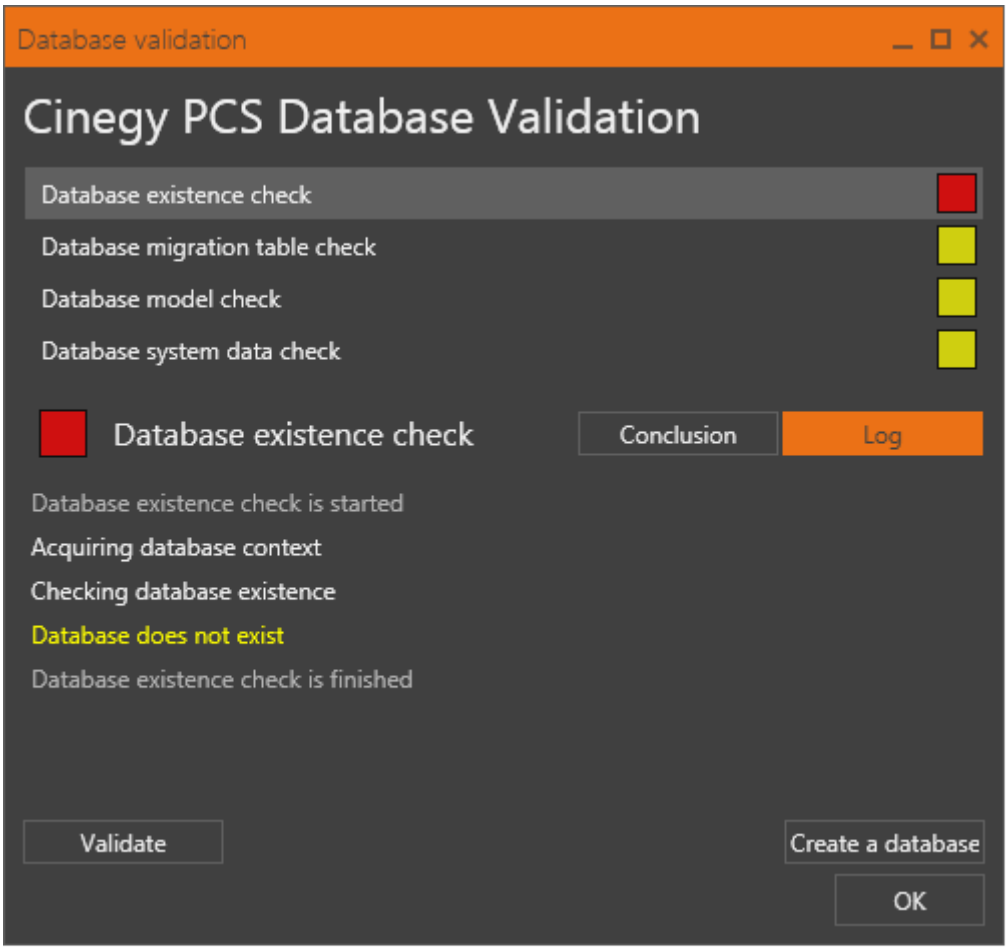
Press the "Stop" button if you need to stop the database validation process.



If database check reveals problems on any step of validation, the invalid parameter becomes highlighted and the detailed explanation is given in the "Conclusion" section:



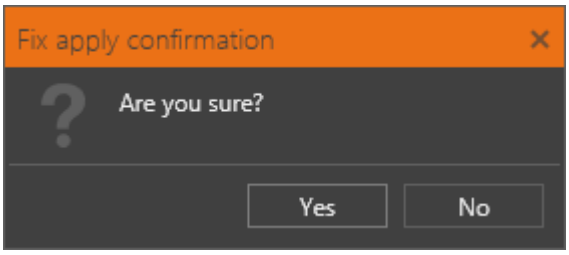
Log Switch to the "Log" section to view the validation log details:



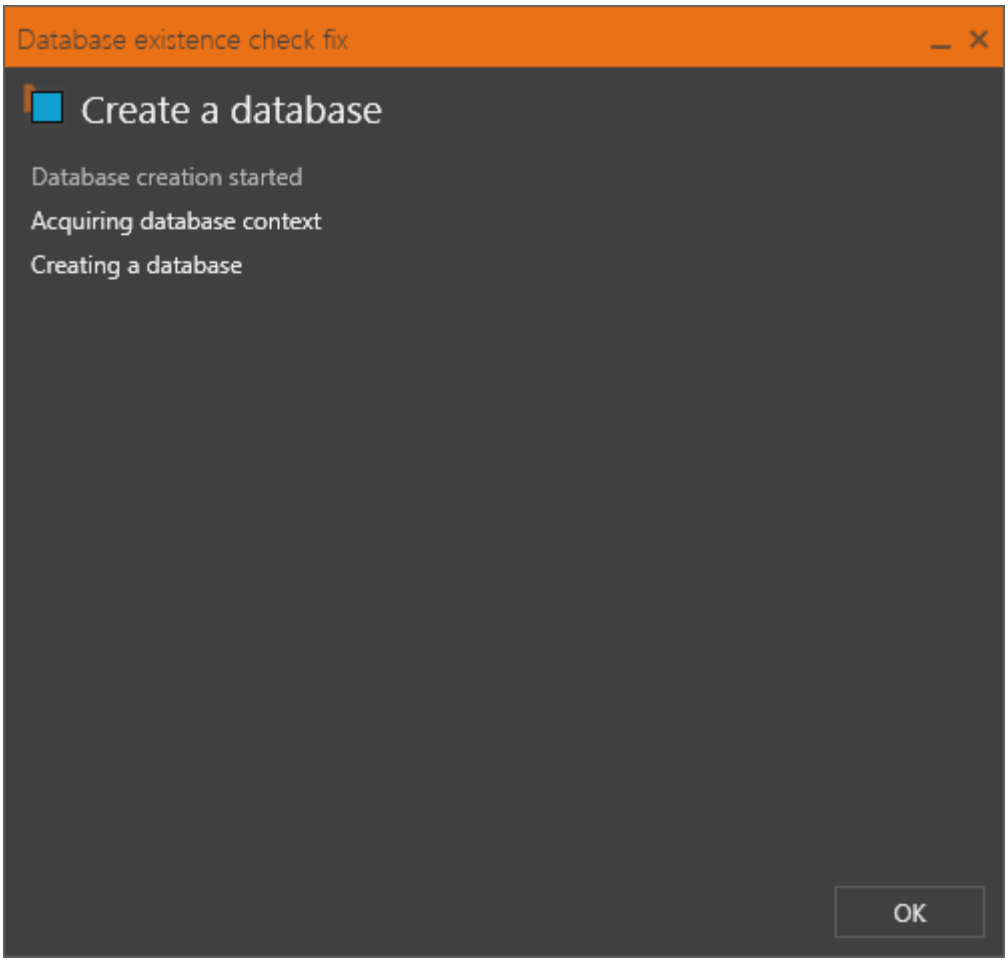
Create a database If validation reveals that the specified database does not exist, press the "Create a database" button.

Updating data If validation reveals that any database parameter is outdated, press the "Updating data" button.

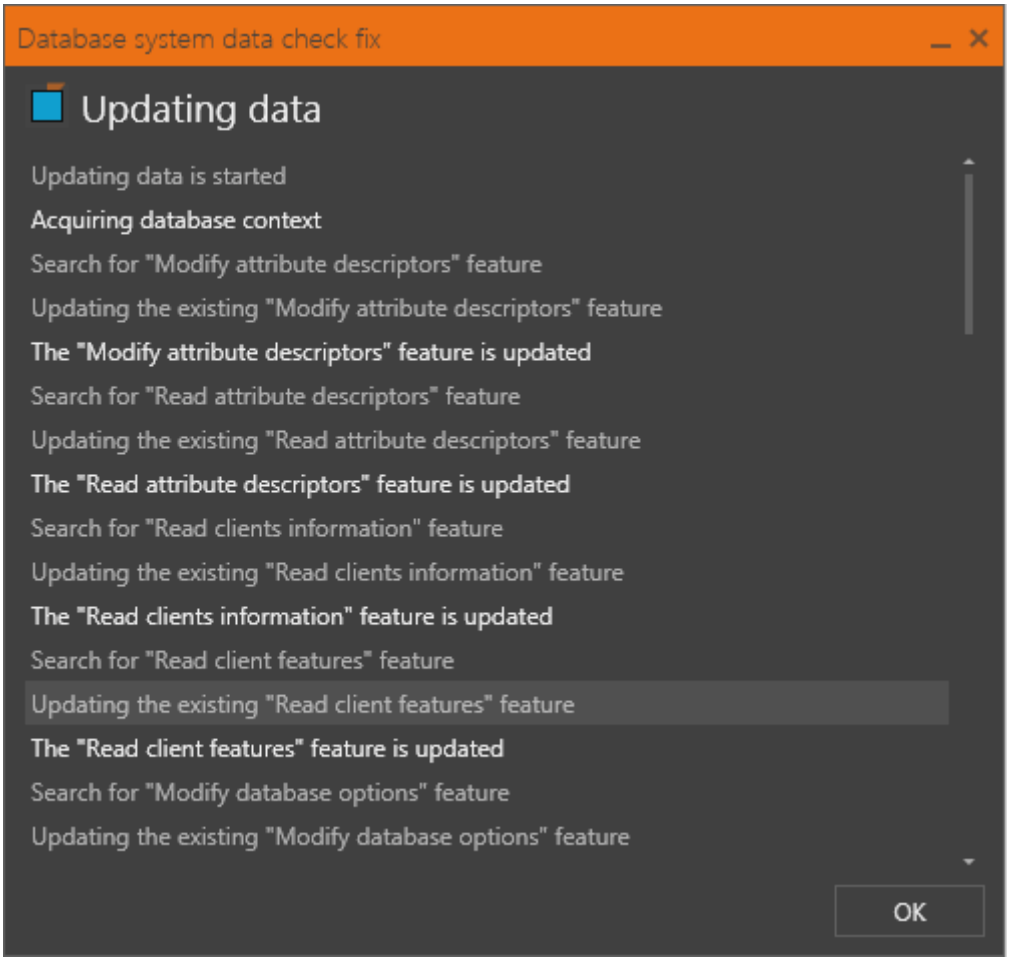
Press "OK" to confirm applying the fix of any invalid database parameter, press "Yes" in the dialog that appears:



The following dialog gives the detailed information on the database creation progress:

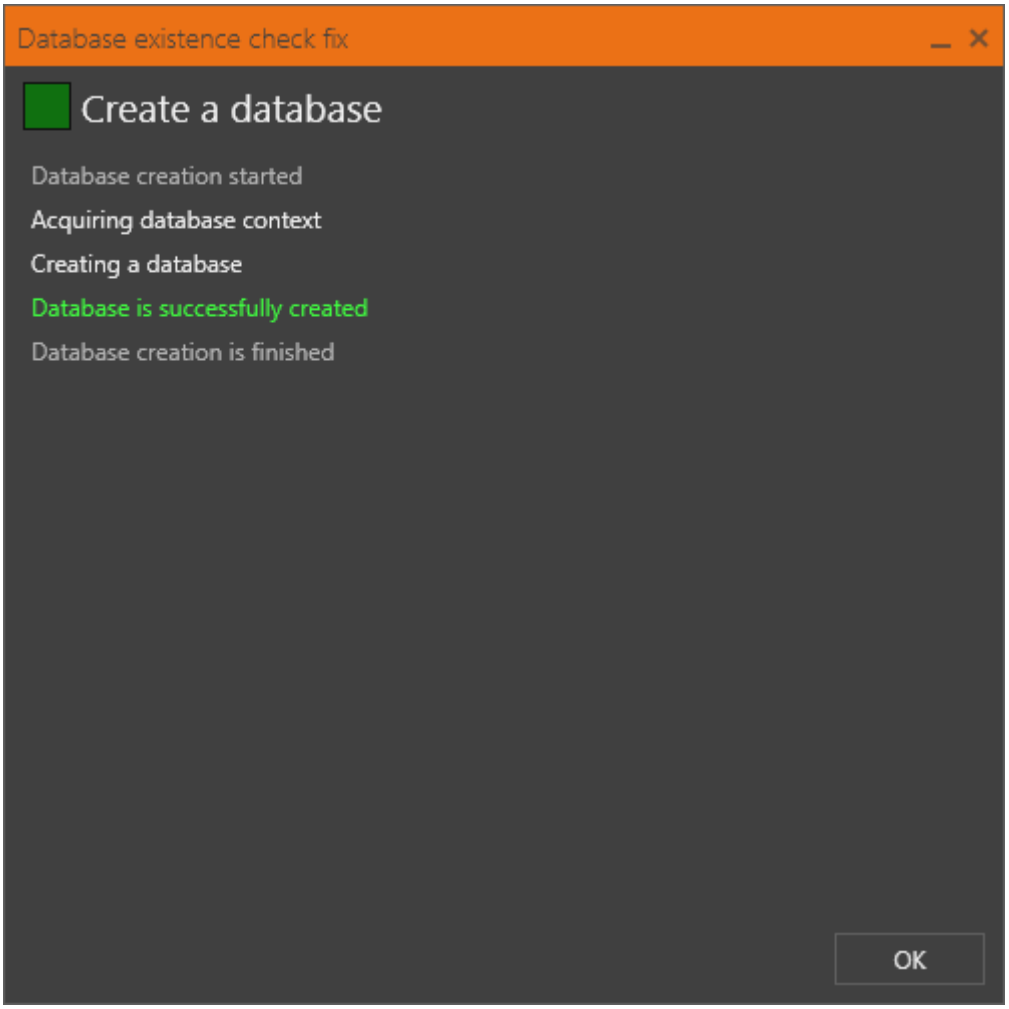


The following dialog gives the detailed information on the progress of updating:

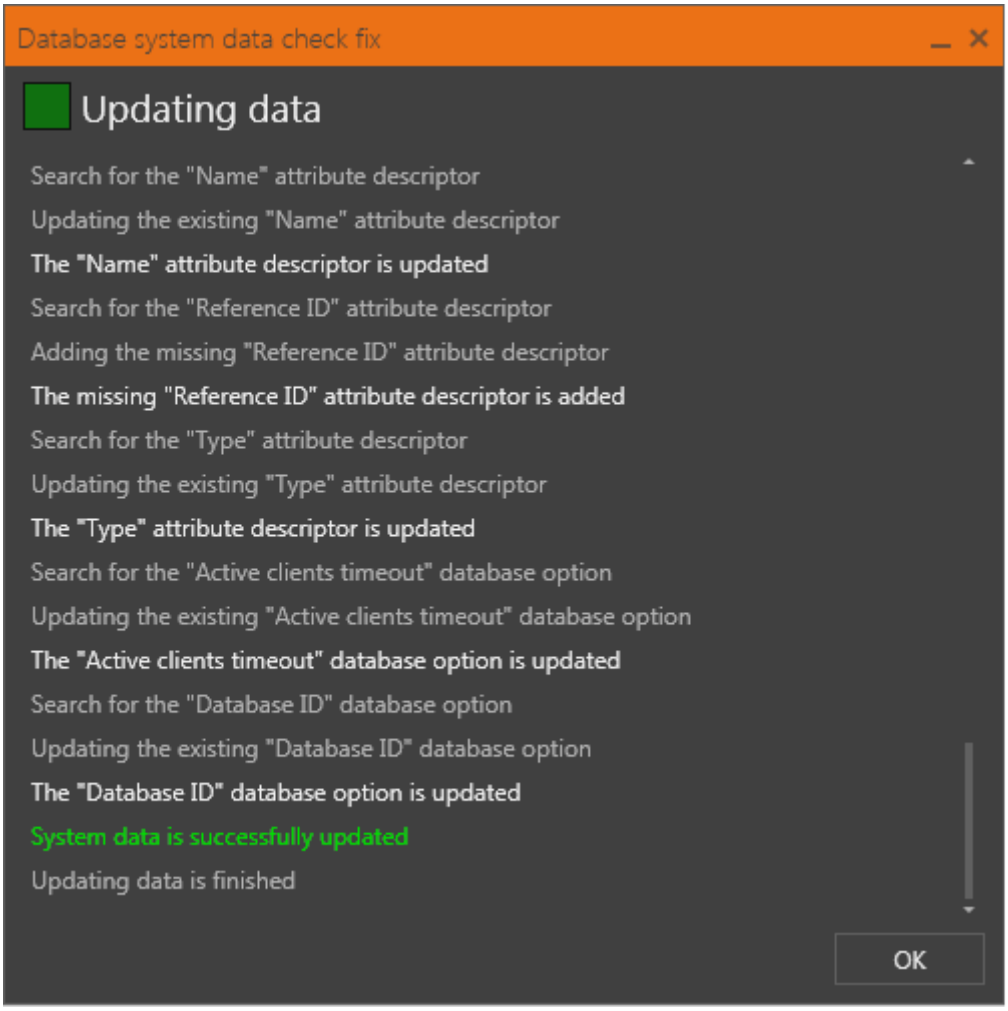


Wait until the updating process is finished.

The following dialog informs you about successful database creation:



The following dialog informs you about successful updating completion:



Press "OK" to exit the dialog.

With failure of any parameter validation, a respective button will appear on the bottom right corner of the window, pressing which will apply a required fix to the problem.

Validate — Once the fix is successfully applied to the invalid parameter, press the "Validate" button to repeat the parameter check.

When the database validation is finished successfully, press "OK" to proceed with the PCS configuration.

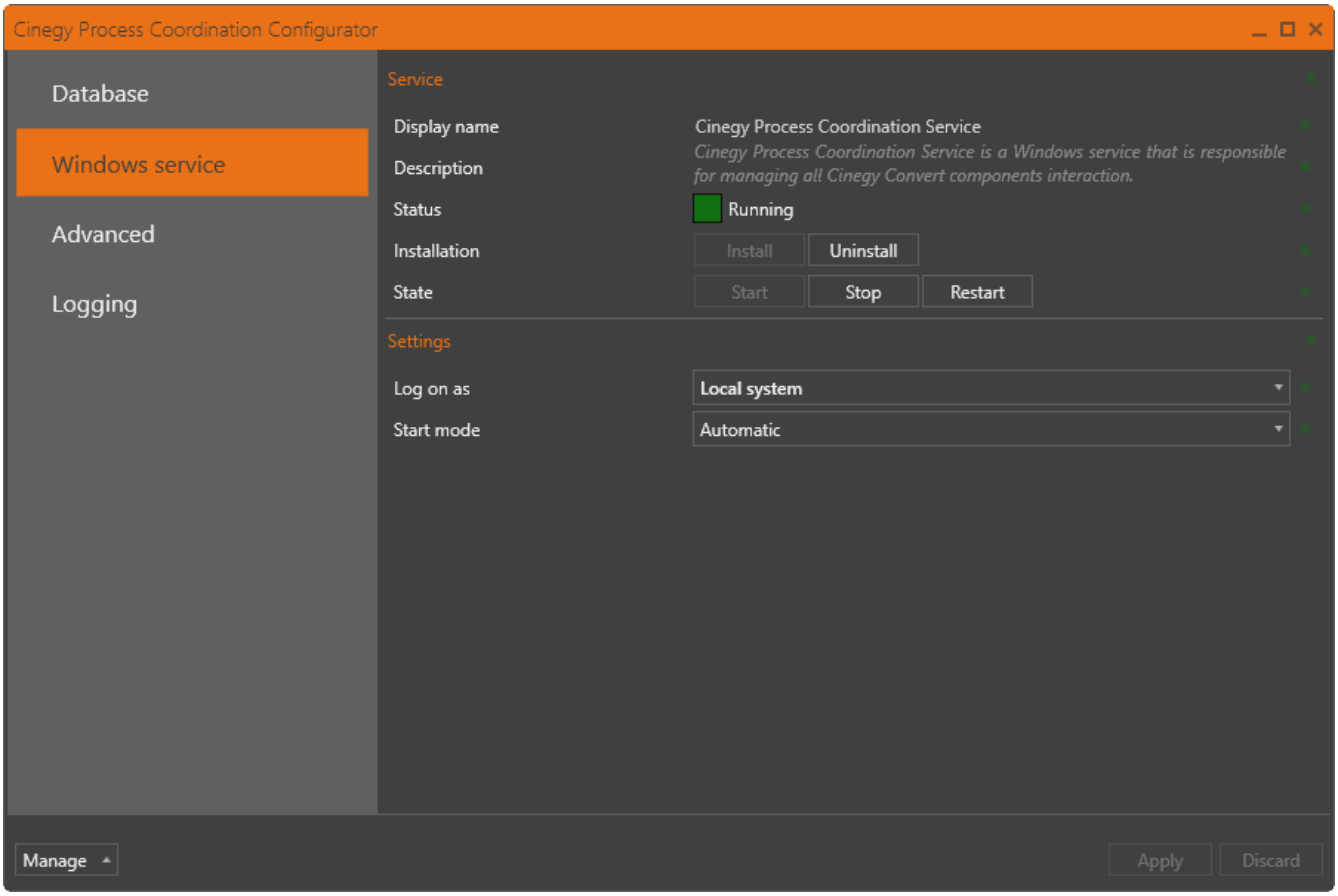
Apply — Having completed specifying the database settings, press the "Apply" button to save them.

Discard — If you do not want to save the specified settings, press the "Discard" button.

Go to the "Windows service" tab to proceed with Cinegy PCS configuration.

2.3. Windows Service

To run Cinegy Process Coordination Service as a Windows service, go to the "Windows service" tab of the configurator and specify all the necessary parameters:



Service

The service display name and description are filled in by the system.

The status indication uses the following coloring:

Color indication	Service status
	Service is not installed.
	Service is not started.
	Service start is pending.
	Service is running.

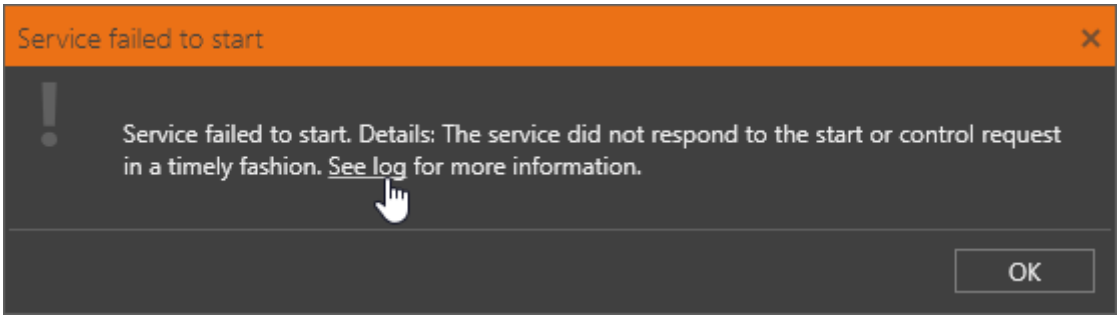


Press the "Install" button in the "Installation" field.



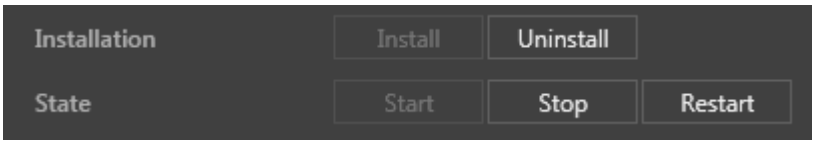
Once the service is installed, it should be started manually by pressing the "Start" button in the "State" field.

In case of failure to start the service, an error message with the reason of failure and a link to the log file appears:

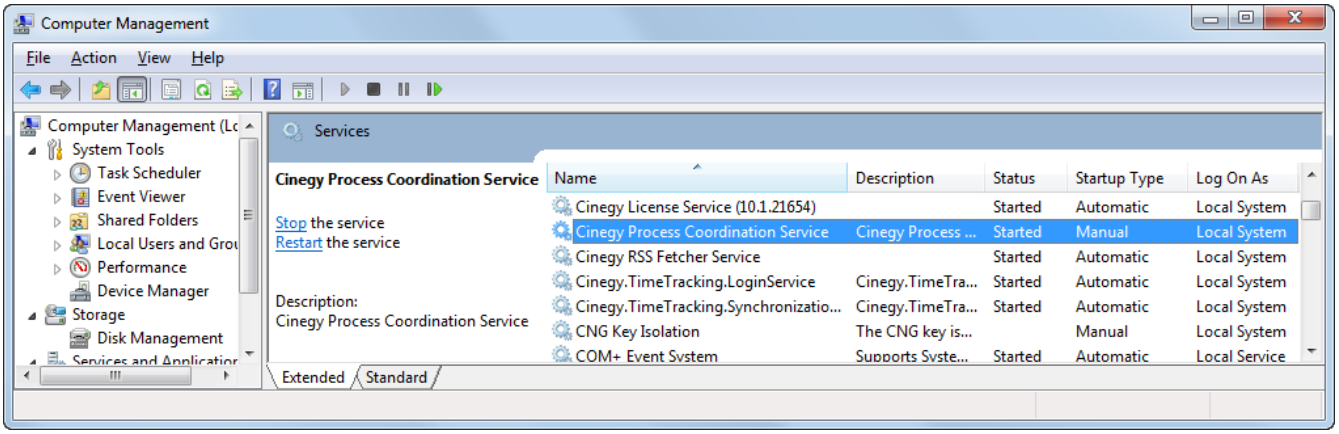


Click the link to open the log and view the details of failure.

The service can be uninstalled, stopped or restarted by pressing the corresponding buttons:



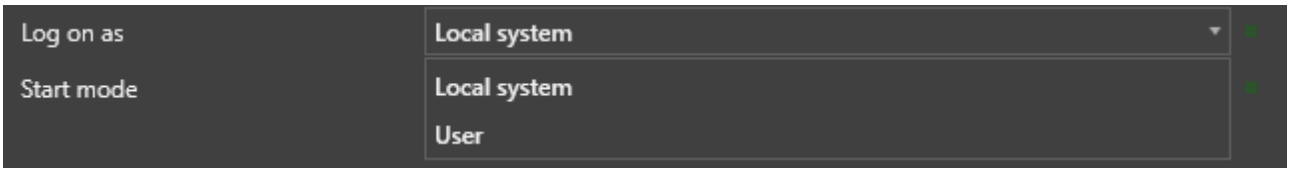
For your convenience, the information is duplicated in the configurator tab; it can also be monitored as a standard Windows service:



Settings

The following Windows service settings are available:

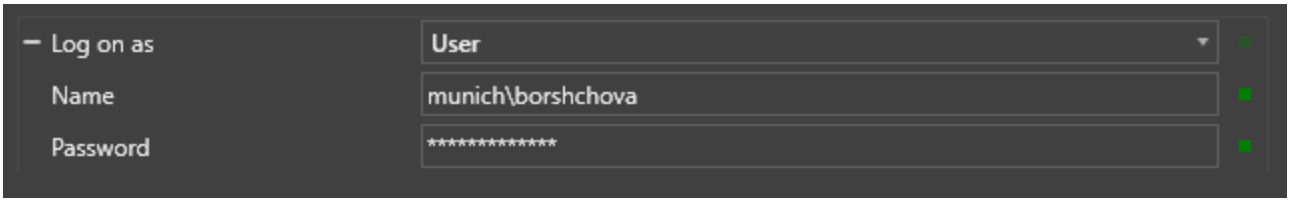
- **Log on as** – use the drop-down list to define the service logon mode:





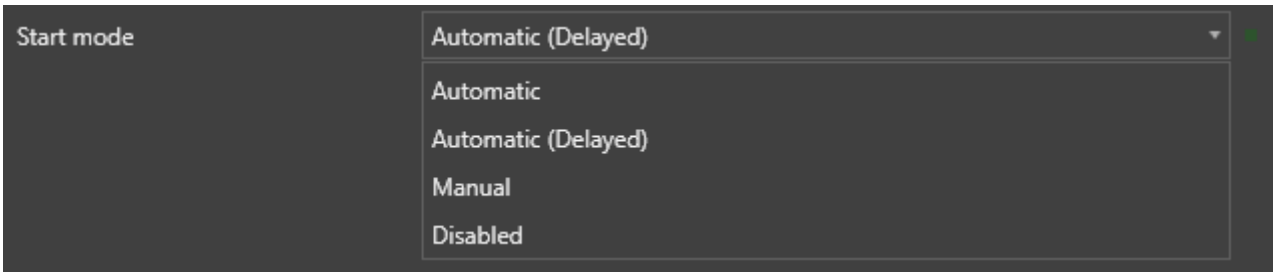
This option should be selected depending on the user's permissions assigned locally by the system administrator.

With the "User" option selected, the required field becomes highlighted with a red frame; press the ➕ button to expand the "Log on as" settings and enter the user name and password in the corresponding fields:



Please mind that the Windows service settings cannot be saved until all required fields are filled in; the red indicator shows a tooltip explaining the reason why settings cannot be applied.

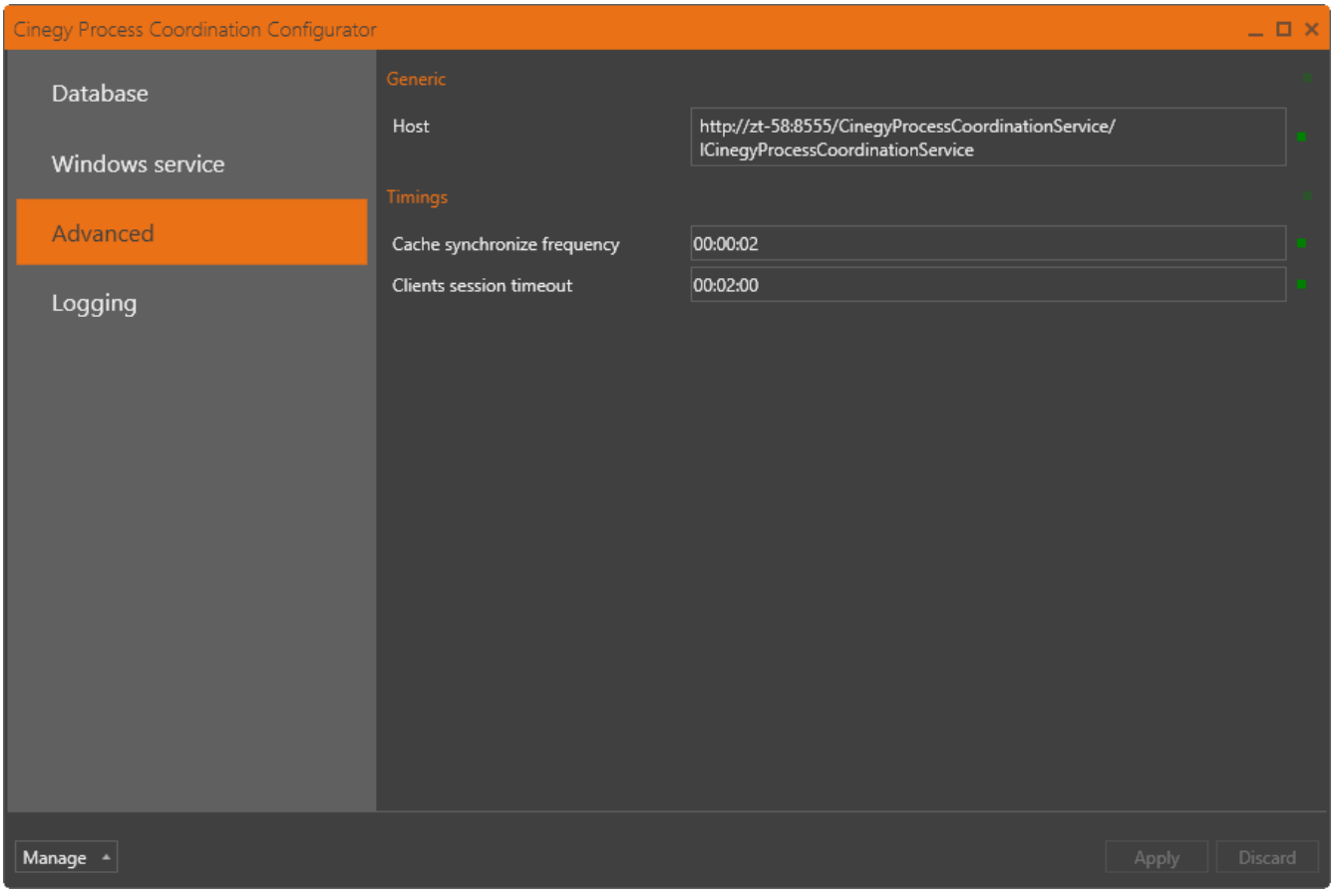
- **Start mode** – use the drop-down list to define the service start mode.



It is recommended to use the "Automatic (Delayed)" service start mode, which enables automatic service start immediately after all the main system services have been started.

2.4. Advanced Parameters

Service host and timing parameters are defined on the "Advanced" tab of the configurator:



The "Host" field value is defined automatically. Use the keyboard to change the default host location, if needed.

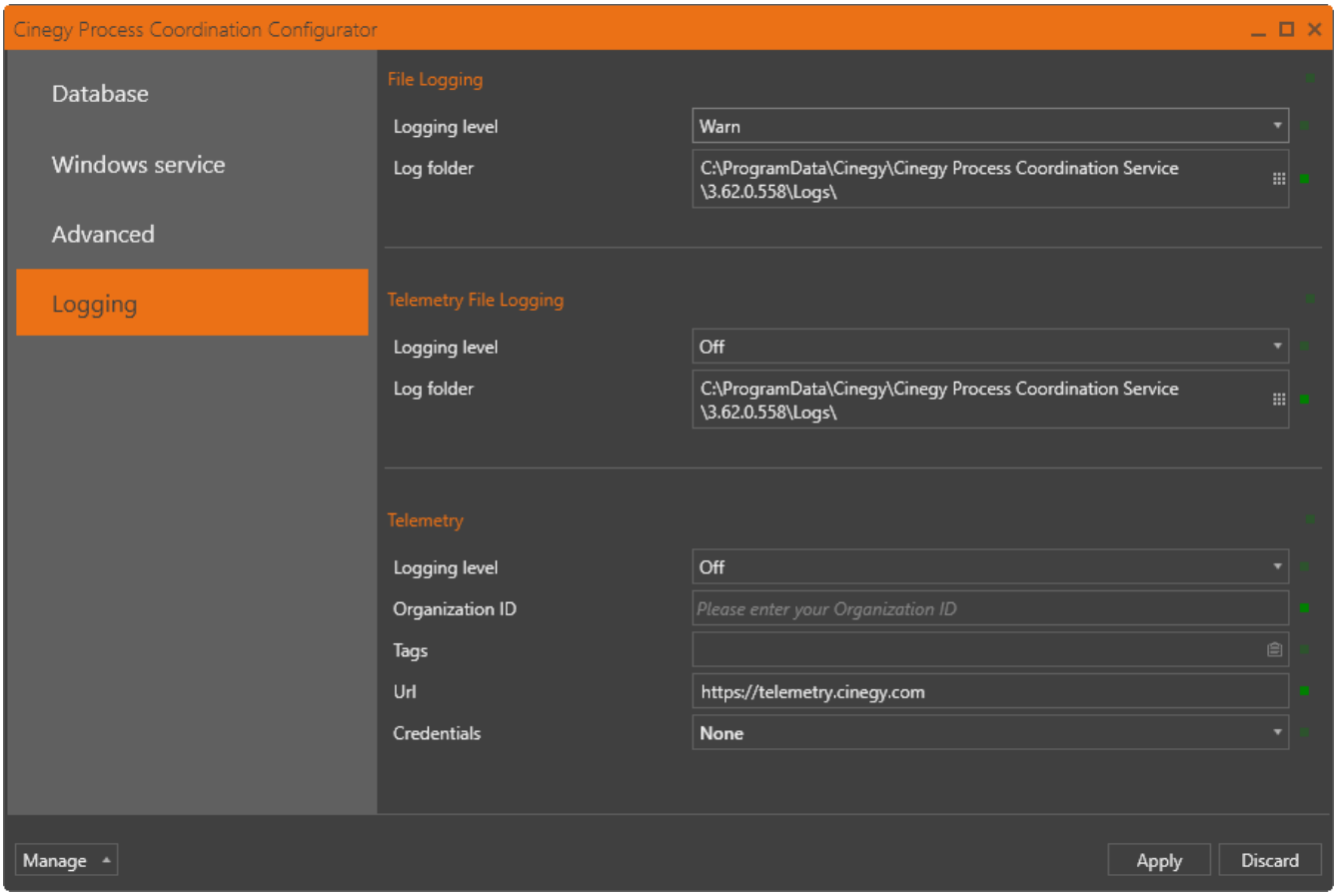
"Cache synchronize frequency" defines how often PCS receives updates from the database. "Clients session timeout" is the time after which the client session is terminated.

Apply — Having specified all the required settings, press the "Apply" button to apply them.

Discard — If you do not want to save the specified settings, press the "Discard" button.

2.5. Logging

Cinegy Process Coordination Service logging parameters are defined on the "Logging" tab of the configurator:



The following logging parameters are displayed:

File Logging

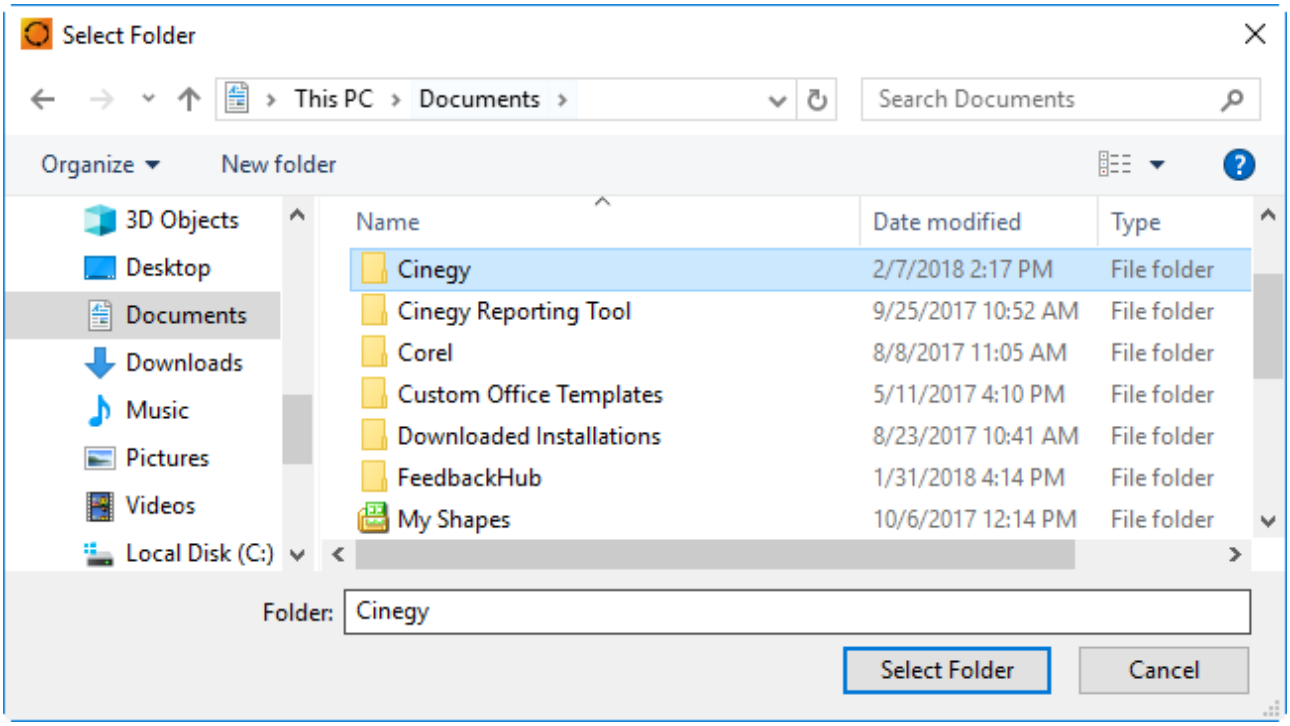
Defines the settings for log report saved to a text file.

- **Logging level** – use the drop-down list to define one of the following available log levels, ordered from highest to least severity:
  - **Off** – disable file logging.
  - **Fatal** – logs for failures like data loss scenarios that require immediate attention and can lead the application to abort.
  - **Error** – logs for errors, non-application wide failures, exceptions and failure in the current activity or operation, that might still allow the application to continue running.
  - **Warn** – logs for unexpected events in the application flow like errors, exceptions or conditions that do not cause application crash.

- **Info** – logs for general application flow and progress tracking with long-term value.
- **Debug** – logs for short-term and fine-grained information used for development and debugging.
- **Trace** – logs for information used for debugging that may contain sensitive application data.

  The default log level is "Debug".

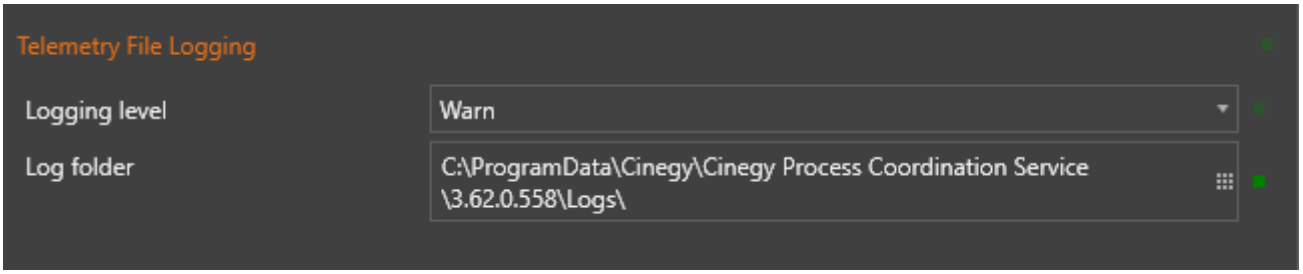
- **Log folder** – define the destination folder for storing log files. By default, logs are written to the folder where Cinegy Process Coordination Service is installed. You can change the directory by entering a new path via the keyboard or using the button to select the required folder:



Telemetry File Logging

Defines the settings for log report saved to a text file by using the telemetry cluster.

The Administrative user rights are required to set up the Telemetry logging functionality.

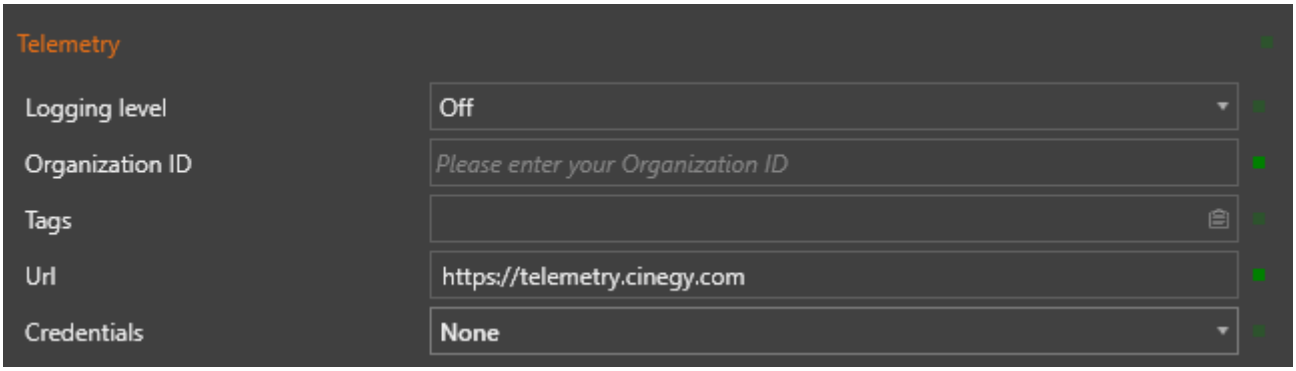


To configure the telemetry file logging, define the following parameters:

- **Logging level** – use the drop-down list to define one of the following available log levels, ordered from highest to least severity: Off, Fatal, Error, Warn, Info, Debug and Trace.
- **Log folder** – define the destination folder for storing log files. By default, logs are written to the folder where Cinegy Process Coordination Service is installed. You can change the directory by entering a new path via the keyboard or using the button to select the required folder.

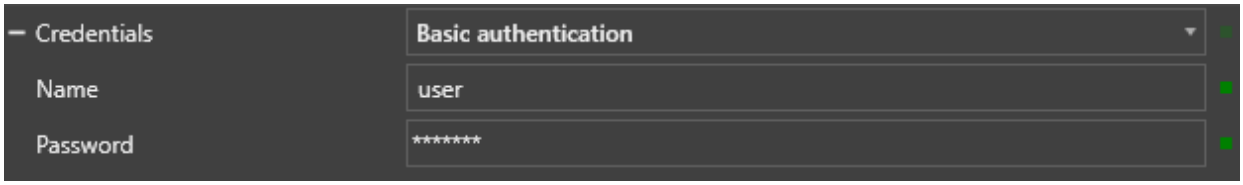
Telemetry

The telemetry notifications are logged into Grafana portal deployed inside the Cinegy Telemetry cluster, that allows to secure customer data by organization ID and provide a direct access to the exact data stored.



To access the telemetry portal, specify the following parameters:

- **Logging level** – use the drop-down list to define one of the following available log levels, ordered from highest to least severity: Off, Fatal, Error, Warn, Info, Debug and Trace.
- **Organization ID** – specify the Organization ID, unique for each customer.
- **Tags** – set the system tags to filter telemetry results.
- **Url** – enter the link to access the telemetry portal. The default value is *https://telemetry.cinegy.com*
- **Credentials** – use the drop-down list to define the credentials to access the telemetry portal:
  - **None** – is no credentials are required.
  - **Basic authentication** – select this option and enter the username and the password to access the telemetry portal:



Having specified all the required parameters, press the "Apply" button to save changes.

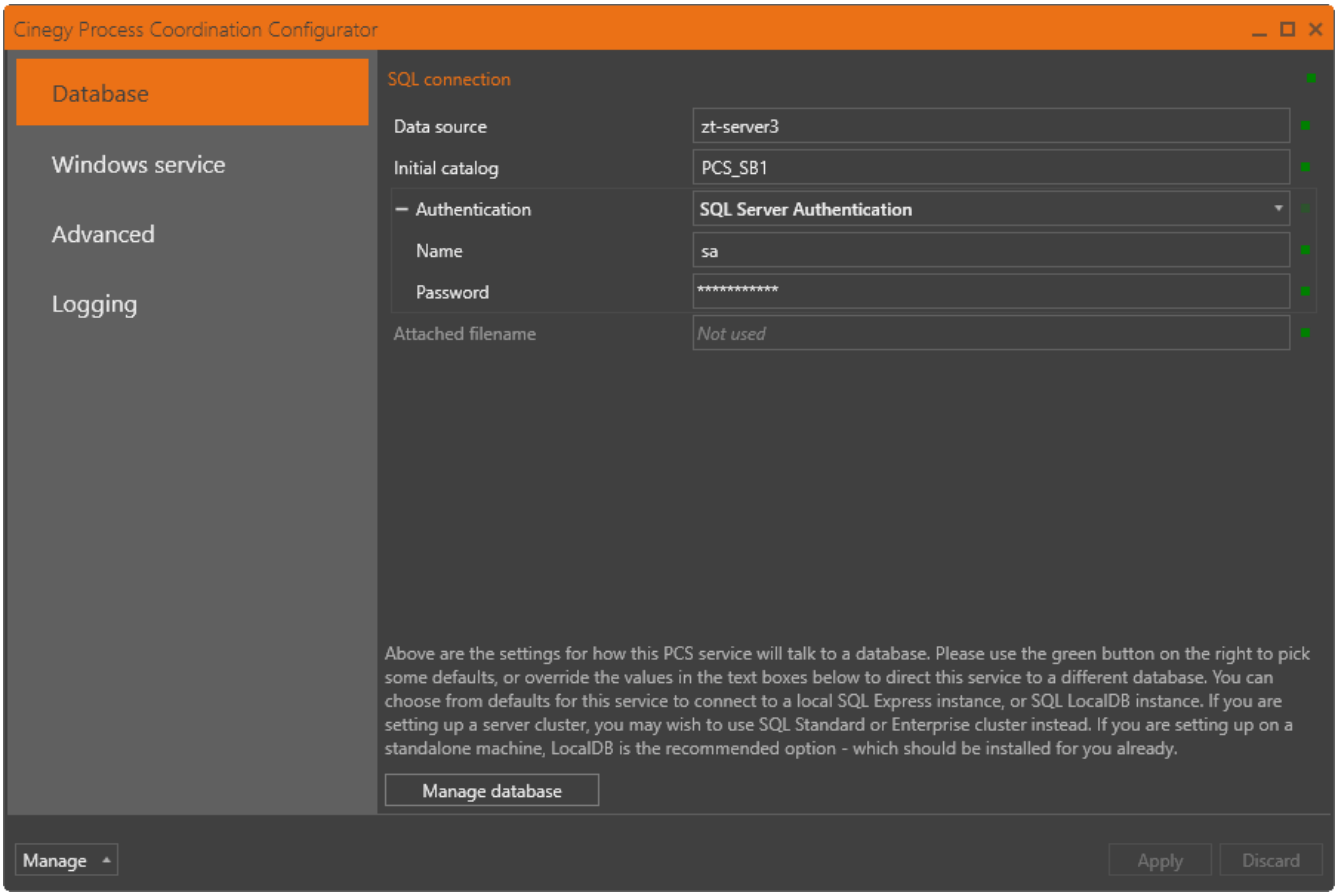
2.6. Tasks History Cleanup



Administrative rights are required to perform history cleanup.

The history of processed tasks in Cinegy Convert Monitor can be cleaned up according to different filter parameters.

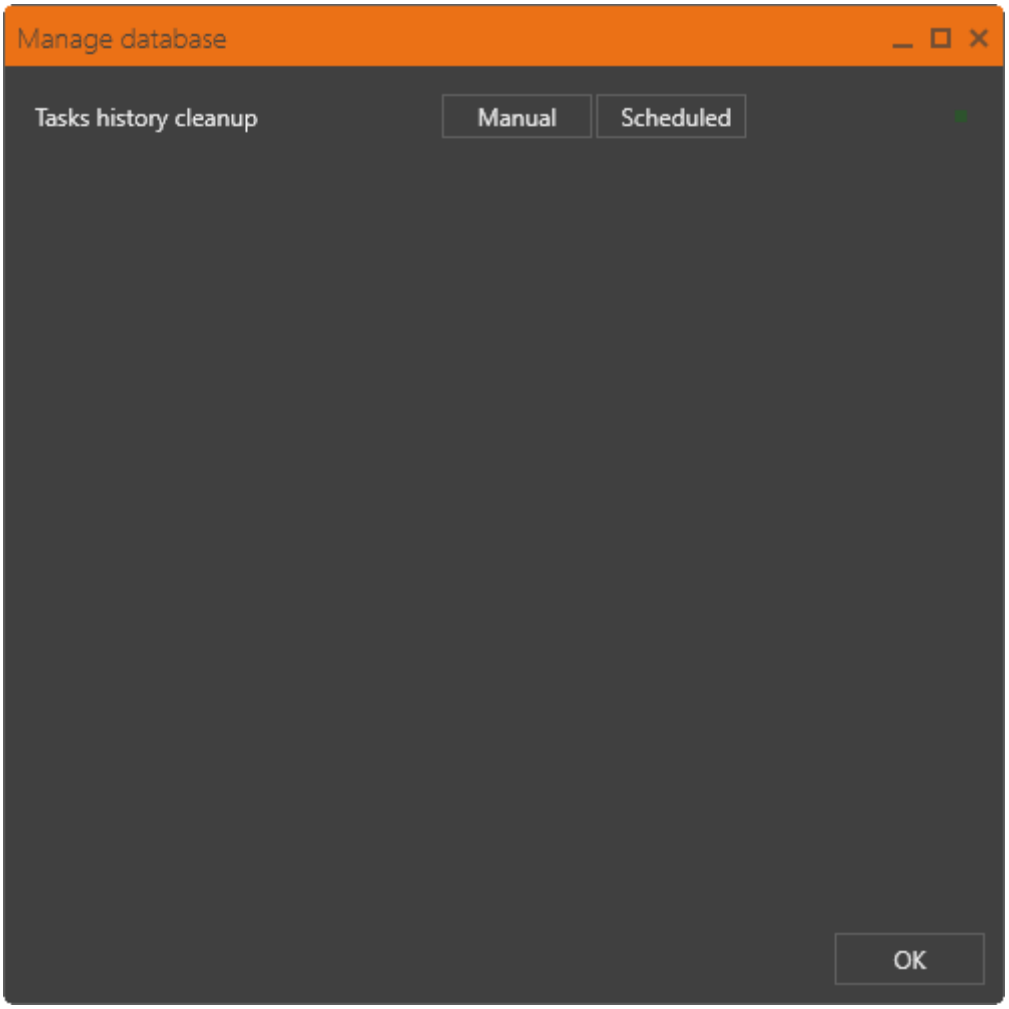
To clean up the history, navigate to the "Database" tab of the Cinegy Process Coordination Configurator window:





Then press the "Manage database" button.

Once the database validation is successfully completed, the following "Manage database" windows appears, providing two options for history cleanup – manual or scheduled:

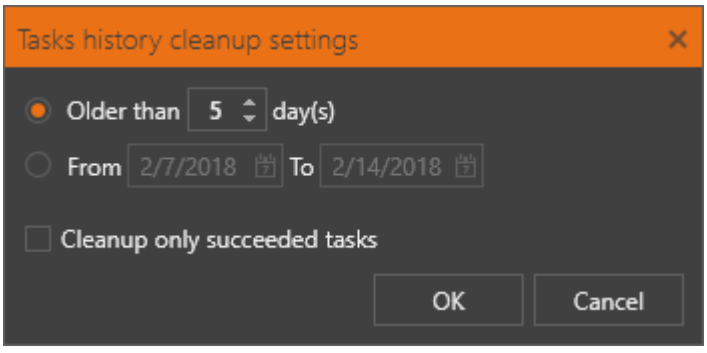


Manual Cleanup

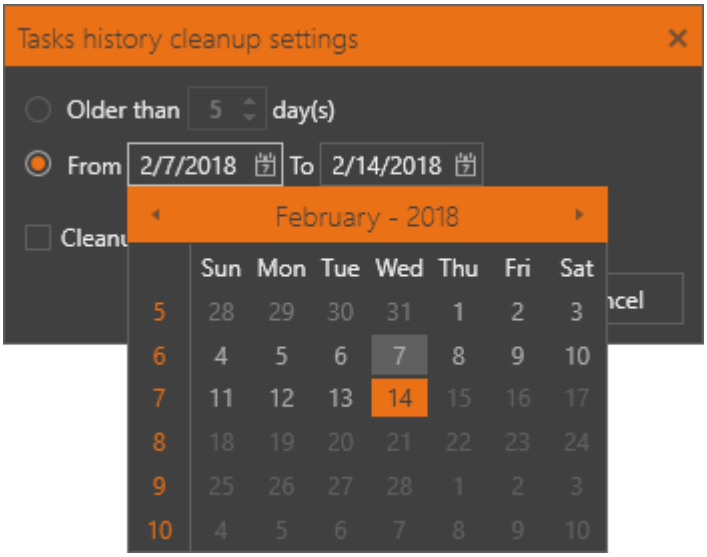
The manual cleanup can be performed as required.

Choose one of the options: delete records which are older than specified number of days or within the specified range of days.

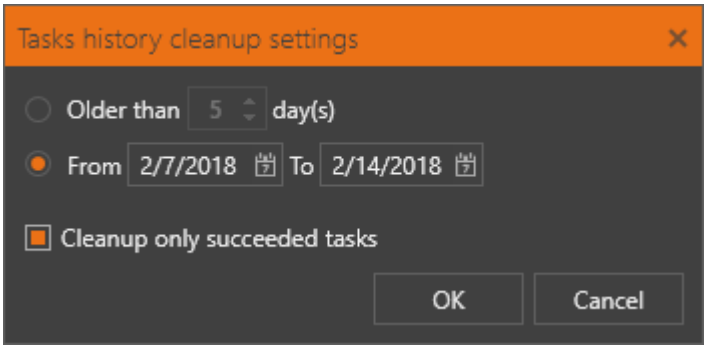
In the "Older than" numeric field define the number of days using the up/down arrow buttons or enter the desired value via the keyboard:



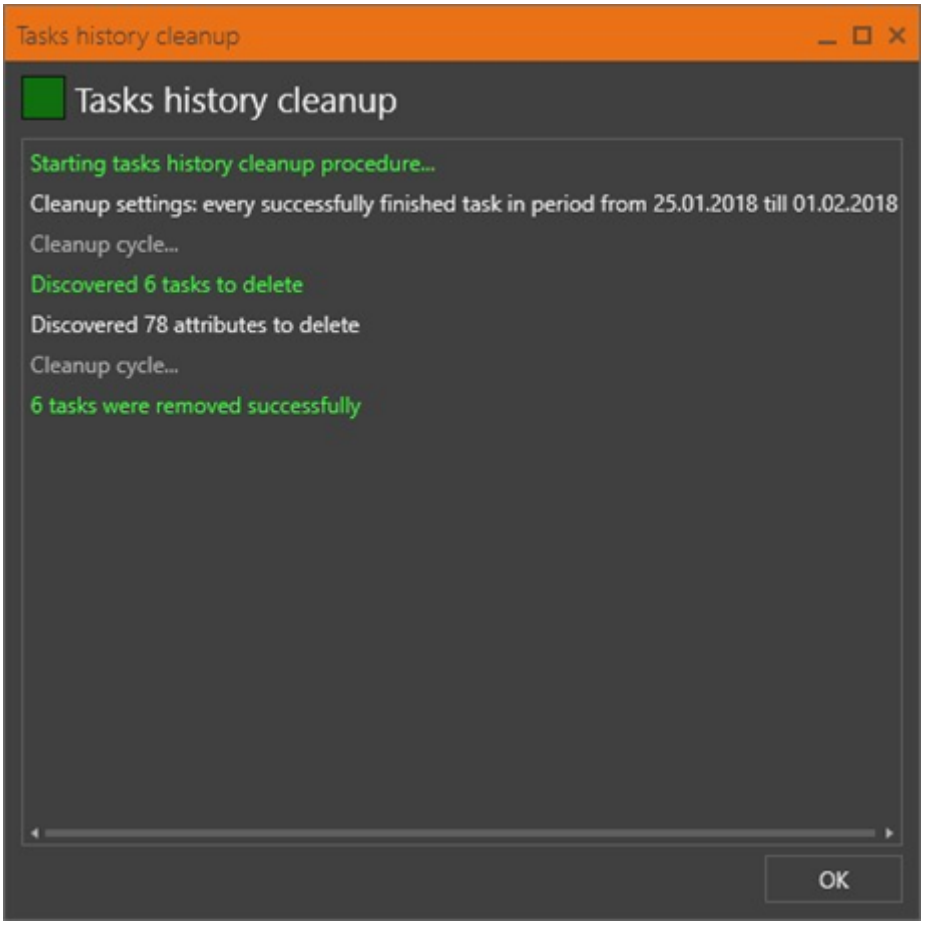
To narrow the filter to the specific time period, use the "From/To" fields to set the desired dates on the drop-down calendars:



Select the "Clean up only succeeded tasks" option to clean up only successfully processed tasks that correspond to defined filter parameters:



Having specified all the required parameters, press the "OK" button. The following progress window with detailed description of each step appears:



Once the cleanup operation is successfully executed, the changes will be displayed on the "History" tab of the Cinegy Convert Monitor.

Refer to the **Tasks History Cleanup** paragraph within the **Cinegy Convert Monitor Manual** for details on history cleanup in Cinegy Convert Monitor.

Scheduled Cleanup

The scheduled cleanup will be performed automatically according to the defined parameters.

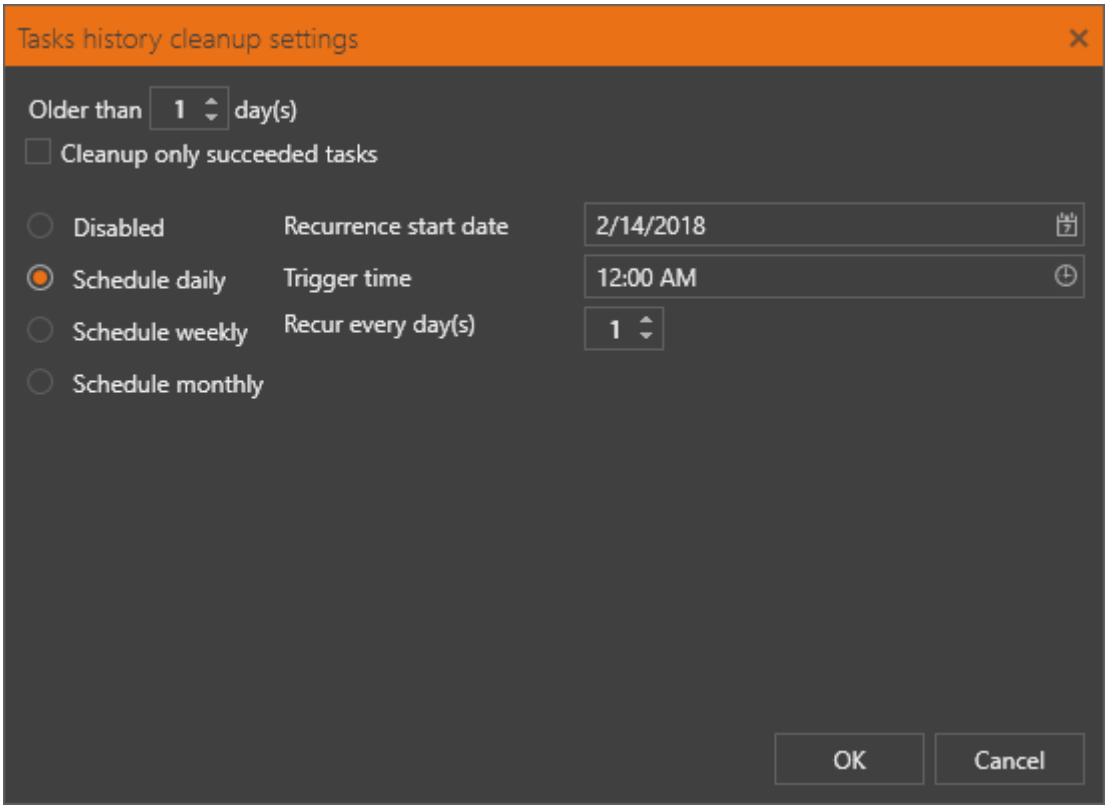
If the "Disabled" option is selected, the cleanup will not be performed automatically.

To automatically delete records which are older than specified number of days, define the number of days in the "Older than" field.

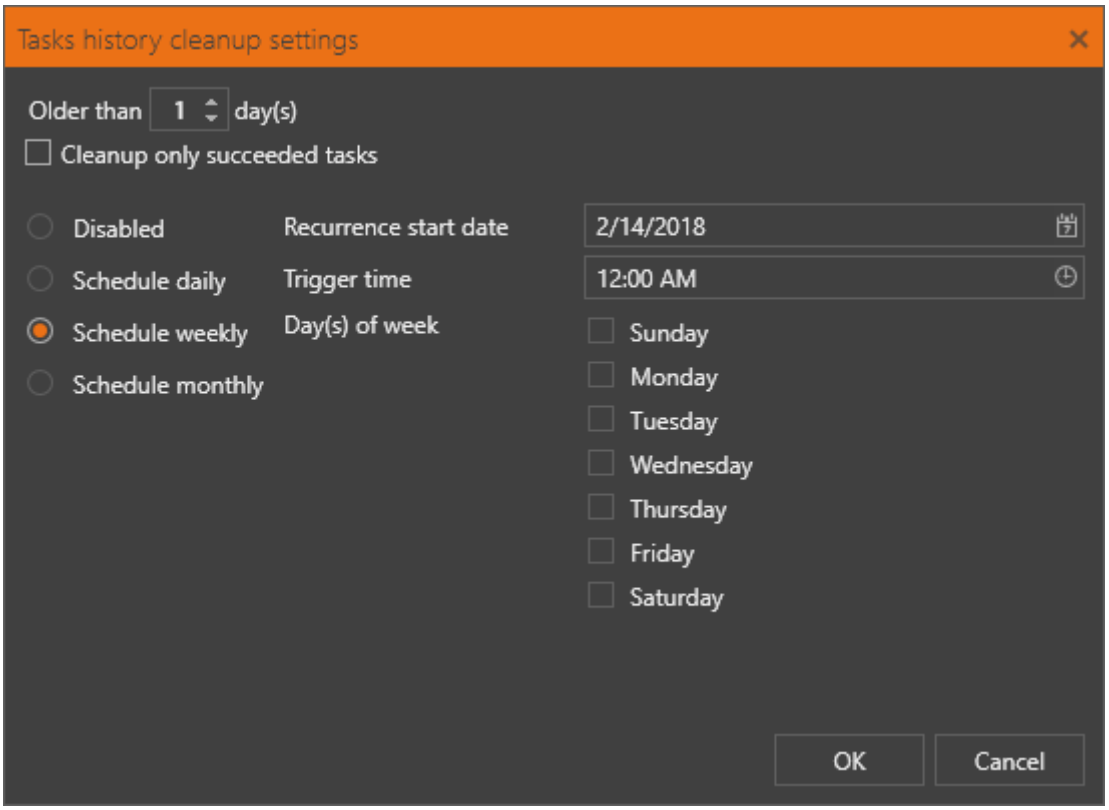
Select the "Clean up only succeeded tasks" option to clean up only successfully processed tasks that correspond to defined filter parameters.

Then define the frequency of scheduled cleanup. The following types of scheduled cleanup depending on recurrence time are available:

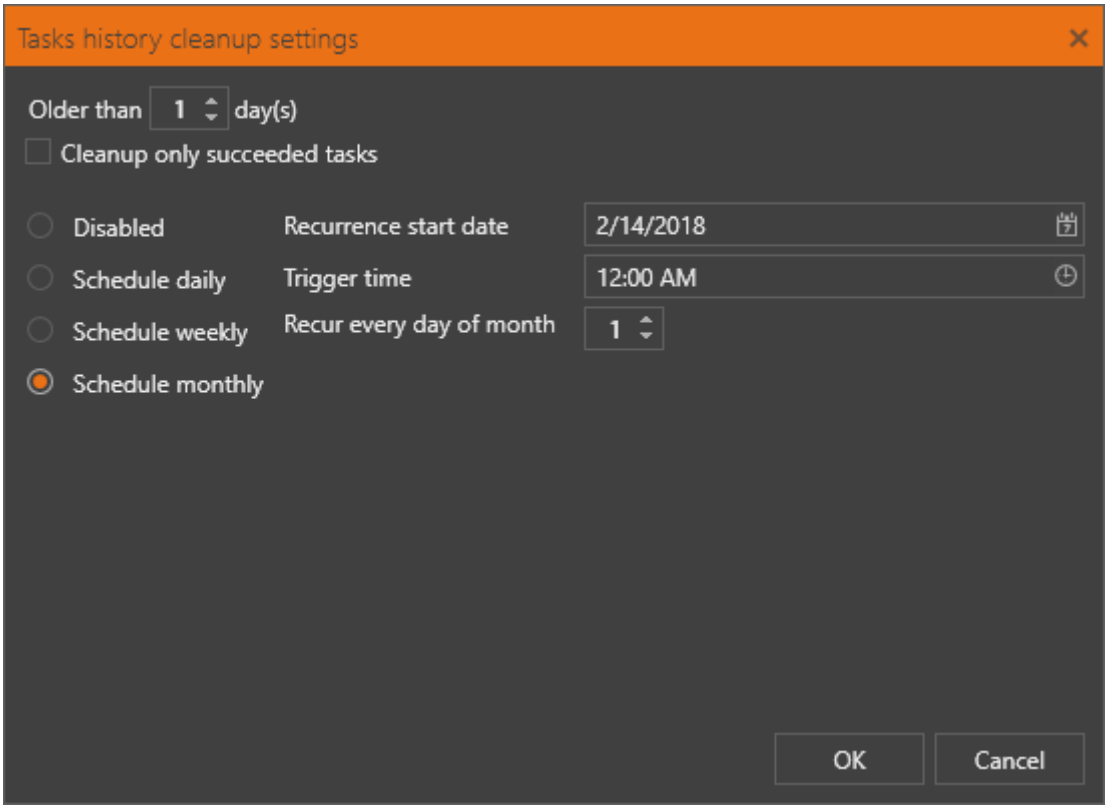
- **Schedule daily** – the cleanup will be performed automatically starting from the date defined in the "Recurrence start date" on time defined in the "Trigger time" field with the frequency defined in "Recur every day(s)" field:



- **Schedule weekly** – the cleanup will be performed automatically starting from the date defined in the "Recurrence start date" on time defined in the "Trigger time" field on selected day(s) of the week:



- **Schedule monthly** – the cleanup will be performed automatically starting from the date defined in the "Recurrence start date" on time defined in the "Trigger time" field with the frequency defined in "Recur every day of month" field:



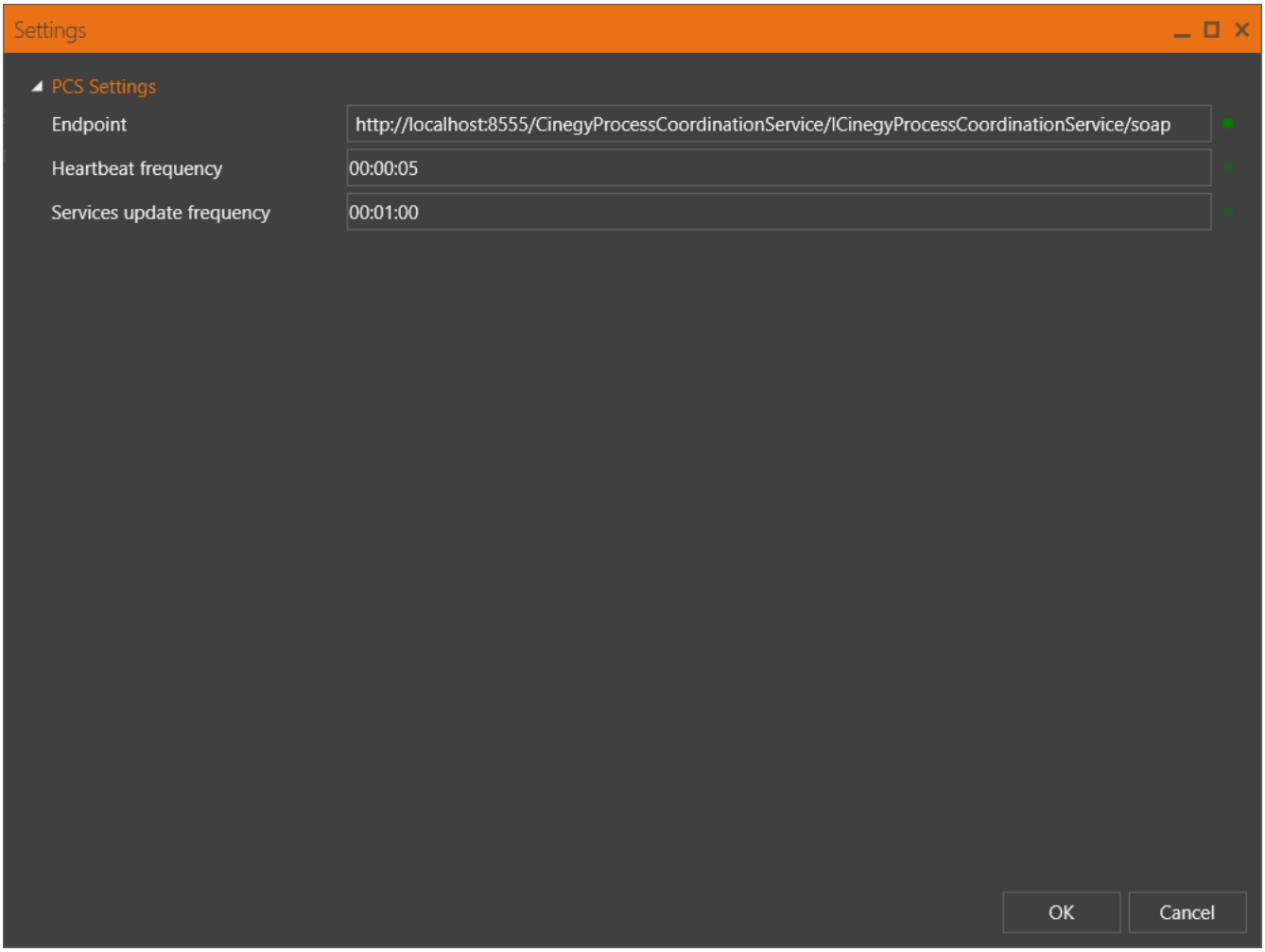
Having specified all the required parameters, press the "OK" button to save changes. The cleanup operations will be automatically executed according to the defined parameters.

Chapter 3. PCS Explorer

3.1. Cinegy PCS Connection Configuration

Cinegy PCS Explorer requires valid established connection to Cinegy Process Coordination Service. By default, the configuration is set to connect to Cinegy PCS installed locally on the same machine (localhost) and use the default port 8555. In case PCS is installed on another machine or another port should be used, the parameters should be changed correspondingly.

Press the  button on the bottom right part of the window and choose the "Settings" command. The following window appears:



Here set up the following parameters:

- **Endpoint** – by default, the configuration is set to connect to Cinegy PCS installed locally on the same machine (localhost) and use the default port 8555. In case PCS is installed on another machine or another port should be used, the endpoint value should be modified:

  ```
  http://[machine name]:[port]/CinegyProcessCoordinationService/ICinegyProcessCoordinationService/soap
  ```

  where:

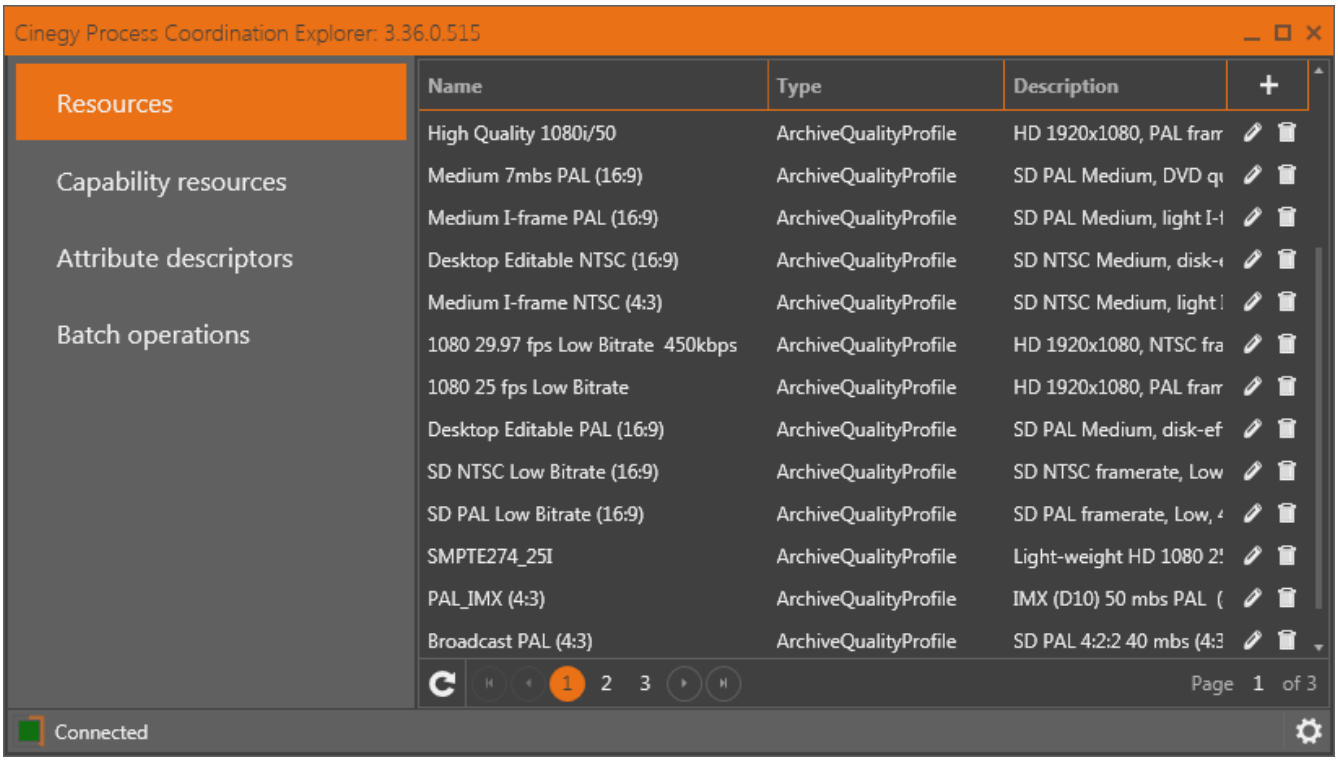
  - **machine name** – specifies the name or IP address of the machine where PCS is installed;
  - **port** – specifies the connection port configured in PCS settings.

- **Heartbeat frequency** – time interval for Cinegy PCS to report it is running properly.
- **Services update frequency** – time interval for Cinegy PCS to update information about the internal services used by clients.

Press "OK" to apply new settings or "Cancel" to discard the changes.

3.2. Profiles Management

With PCS set up and running, Cinegy Process Coordination Explorer can be launched.



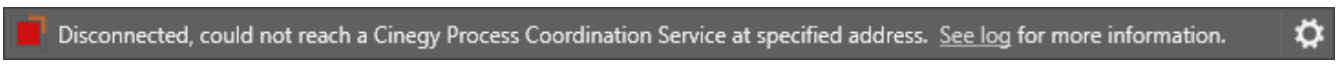
This utility is used for creating, exporting, importing and monitoring all resources of your system stored in PCS database. Initially, the resources list is empty.

It is possible to manually create resources, which then become available for export. It is also possible to import profiles created in Cinegy Convert Profile Editor or the ones from the default profiles set provided during the Cinegy Convert installation.

The green indicator in the bottom part of the window shows successful connection to PCS:



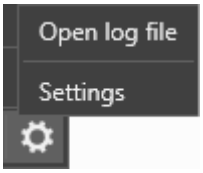
The status of connection to PCS updates every 30 seconds, so that in case of connection loss you will know immediately. In case of failure, the indicator becomes red:



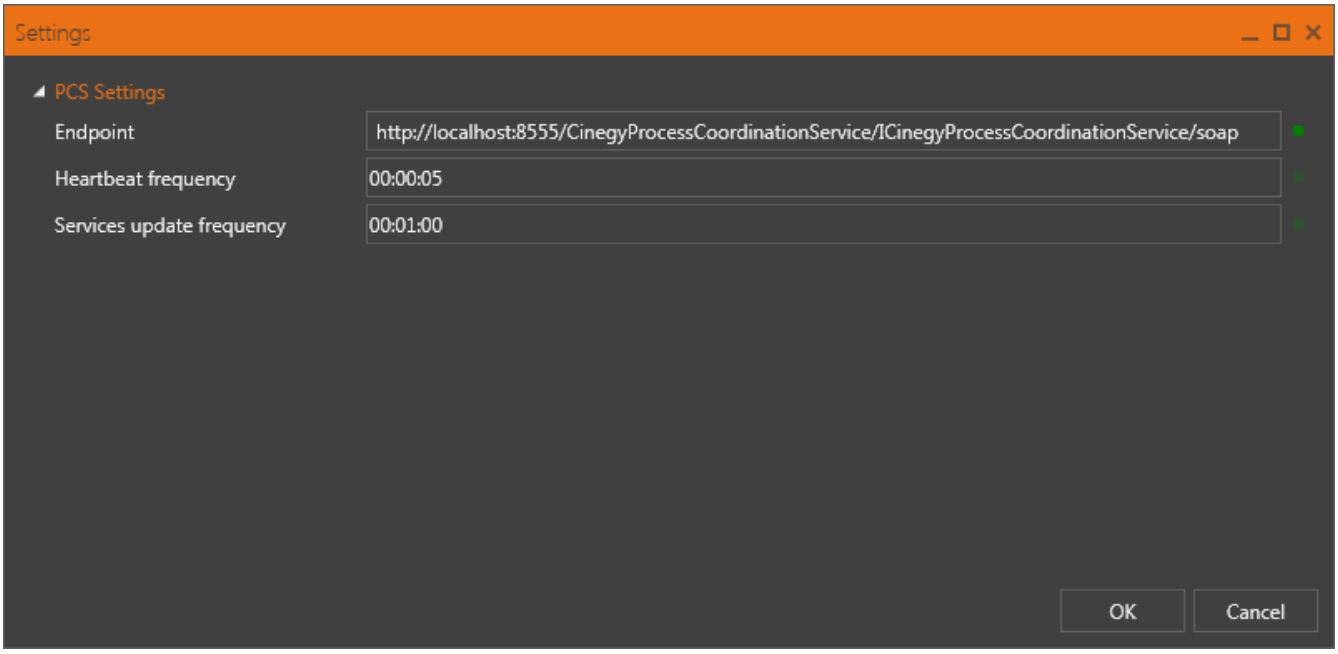


If PCS Windows service is not running, all functions are disabled and the corresponding message is displayed in the Cinegy Process Coordination Explorer window.

Cinegy PCS Explorer creates a log file where all activities are recorded. To open this file, press the  button and use the "Open log file" command:



The "Settings" command launches the following PCS connection settings dialog:



Here you can modify the default values for the following parameters, if needed:

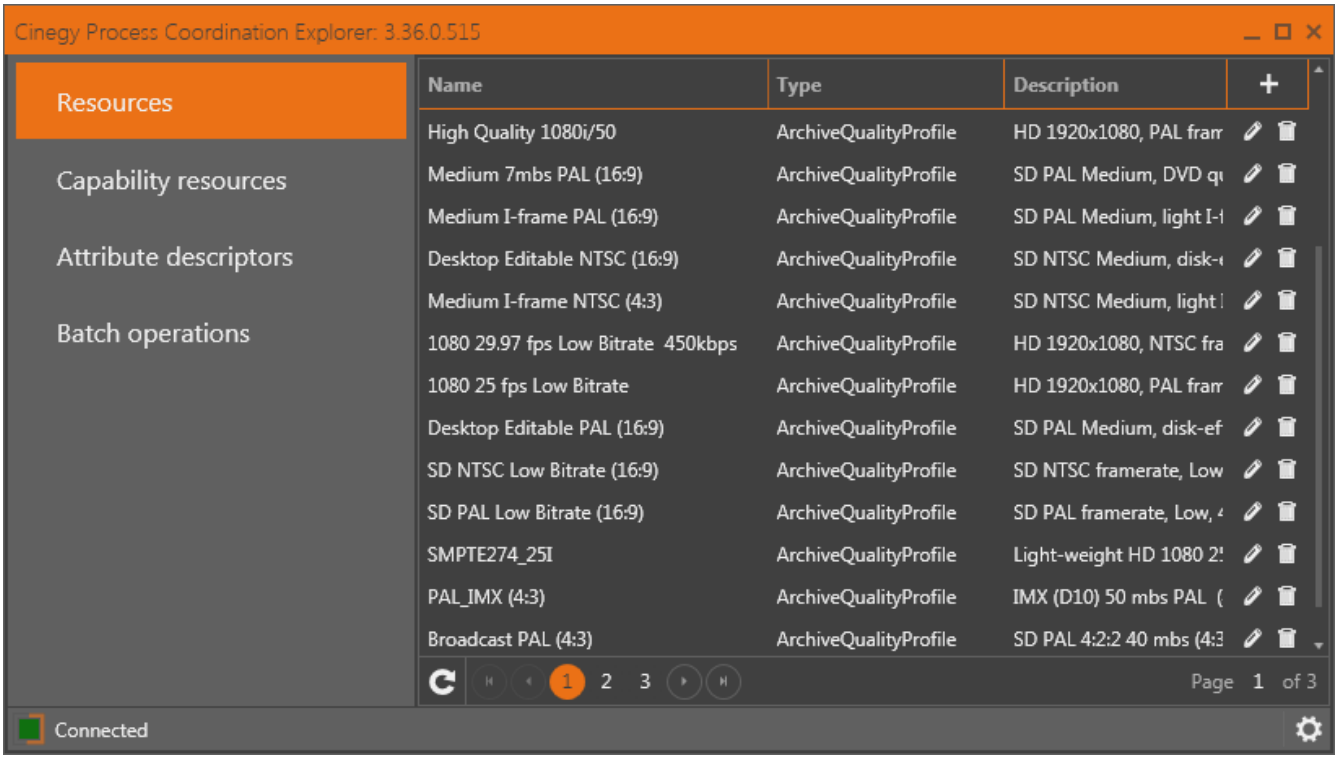
- **Endpoint** – by default, the configuration is set to connect to Cinegy PCS installed locally on the same machine (localhost) and use the default port 8555. In case PCS is installed on another machine or another port should be used, the endpoint value should be modified:

  `http://[machine name]:[port]/CinegyProcessCoordinationService/ICinegyProcessCoordinationService/soap`
  where:

  - **machine name** – specifies the name or IP address of the machine where PCS is installed;
  - **port** – specifies the connection port configured in PCS settings.
- **Heartbeat frequency** – time interval for Cinegy PCS to report it is running properly.
- **Service update frequency** – time interval for Cinegy PCS to update information about the internal services used by clients.

3.3. Resources

All the existing profiles are listed in tabular form on the "Resources" tab:



Navigation through pages buttons and the total pages number are available on the bottom bar.



The current page is highlighted with an orange circle.



To go directly to the desired page, click the corresponding page number.



Use these buttons to jump to the first, previous, next, or last page correspondingly.

Press  across a resource to delete it, or  to edit it.



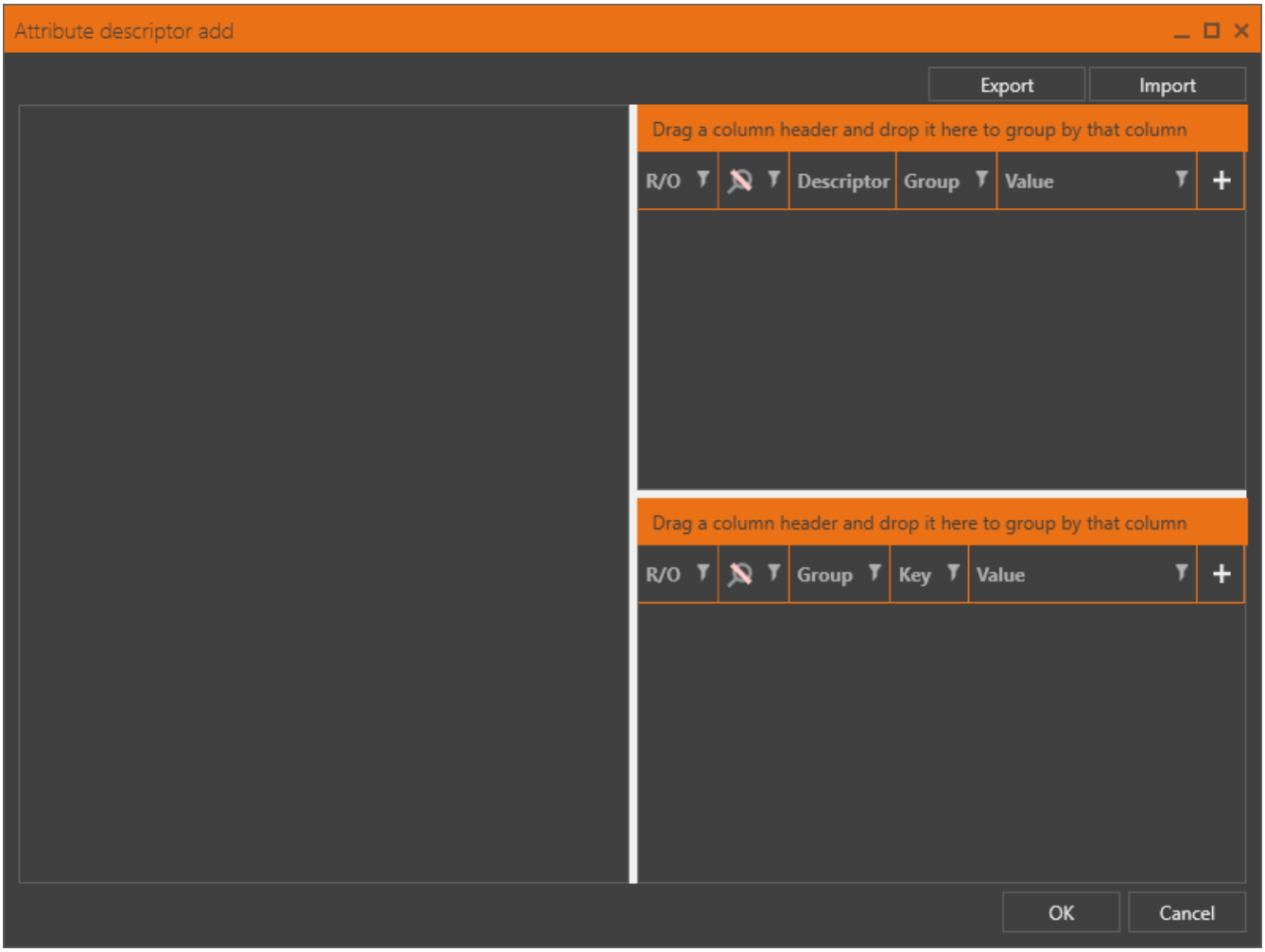
Cinegy Process Coordination Explorer provides only generic resource editing capabilities. Please use dedicated tools for creating/editing profile content.

Importing Resources



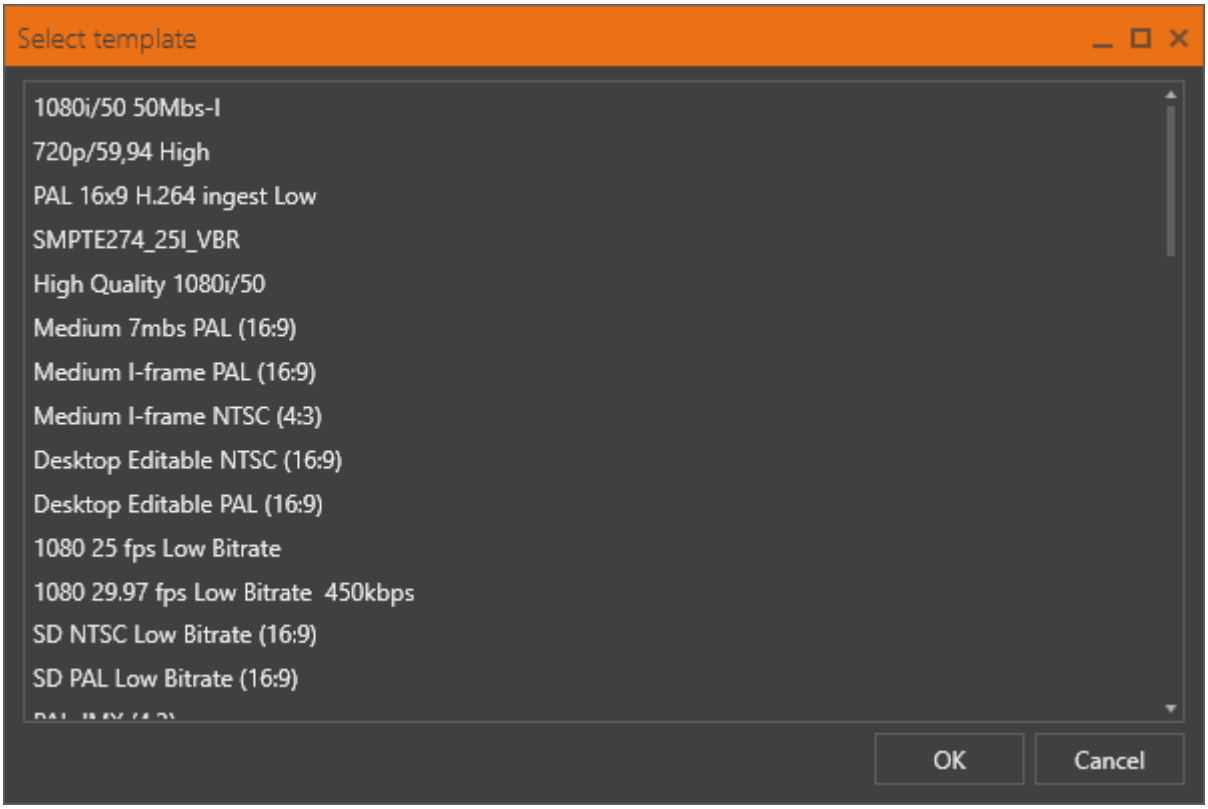
You can use sample profiles installed with Cinegy Convert or create your own profiles via the **Cinegy Convert Profile Editor** tool.

Press the  button to add a resource. The following "Resource edit" dialog appears:

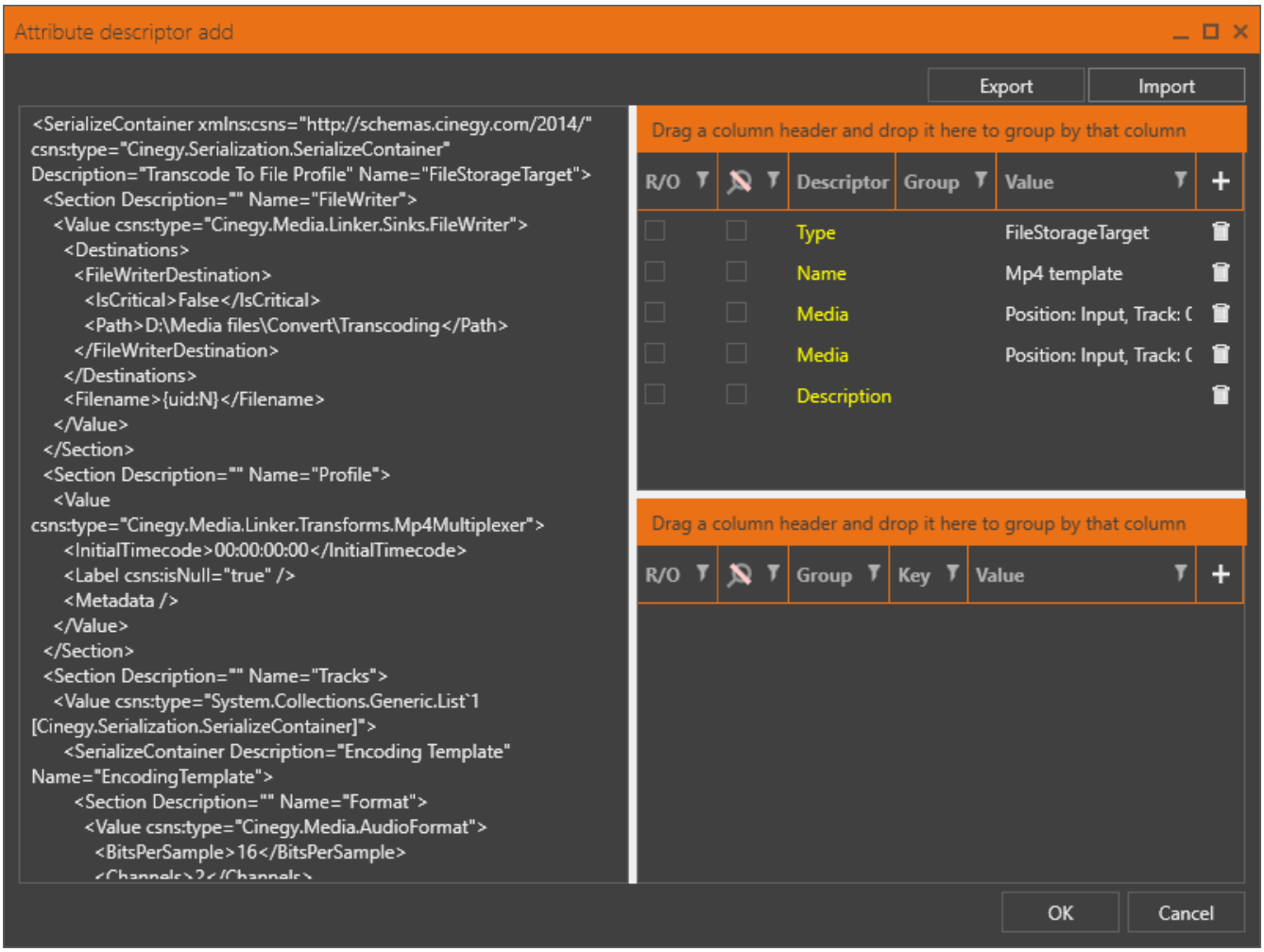


Import An existing previously created profile can be imported to the Cinegy Process Coordination Explorer resources list by pressing the "Import" button and choosing the desired *.crtb file.

Having selected a profile, choose the profile template from the "Select template" dialog box that appears and press "OK":



All the profile data is loaded into the "Resource edit" dialog.



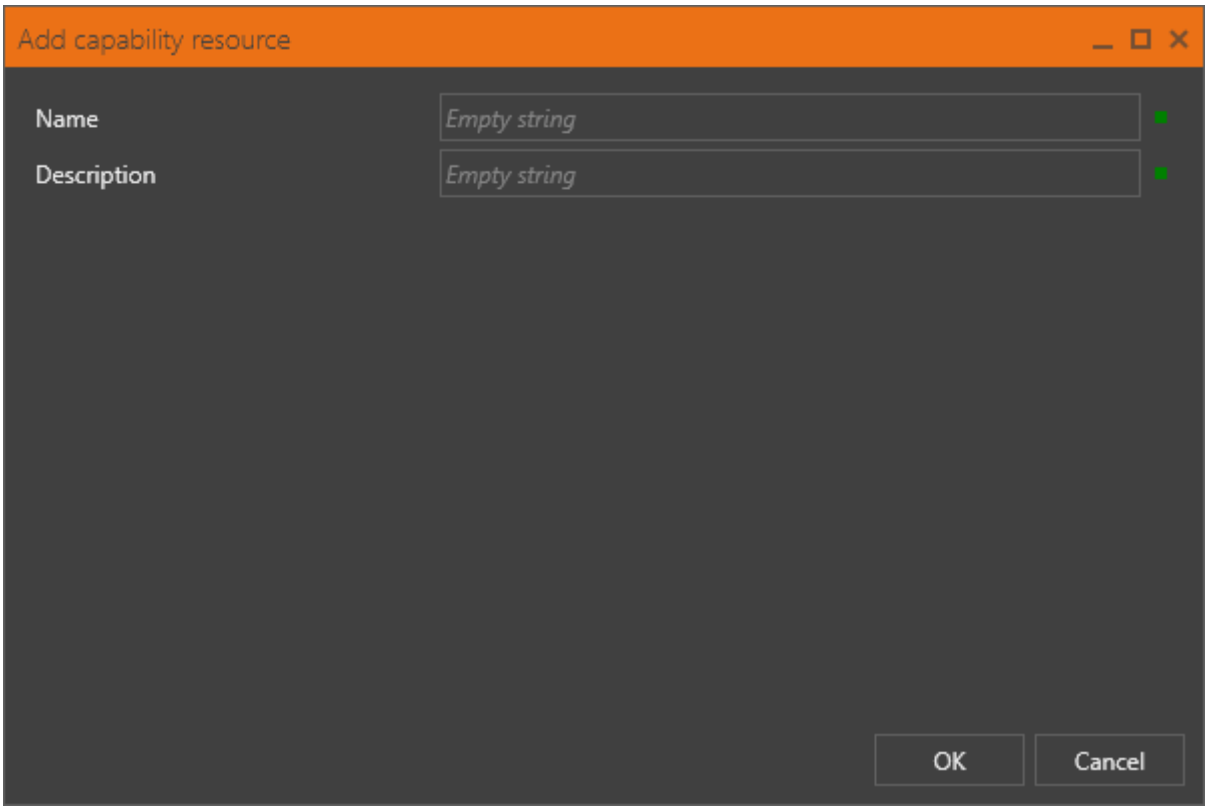
Press "OK"; the imported profile will be added to the resources list.

3.4. Capability Resources

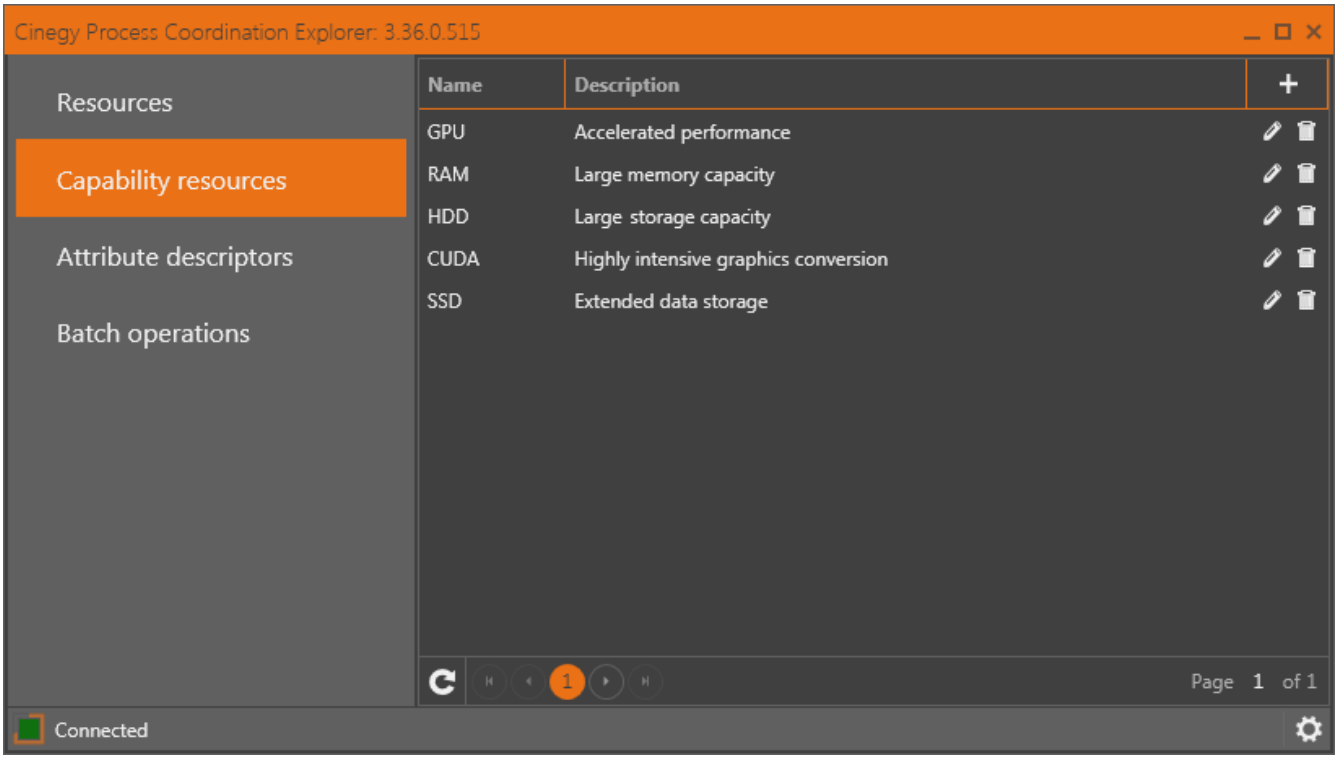
Cinegy Process Coordination Service provides means for managing tasks allocation and processing ability for Cinegy Convert based on certain machine performance parameters and hardware configuration. This function is developed to optimize distribution of resources within the single fully-functioning Cinegy Convert system.

It is possible to add a symbolic definition of the capability resources to allow PCS identify which agent of all the connected and available ones is to pick up the task and start its processing.

Go to the "Capability Resources" tab and press . The following dialog box appears allowing you to add a new capability resource:



Enter the resource name and description according to your preferences in the corresponding fields and press "OK". The resource will be added to the list. You can add as many of them as required for your purposes.



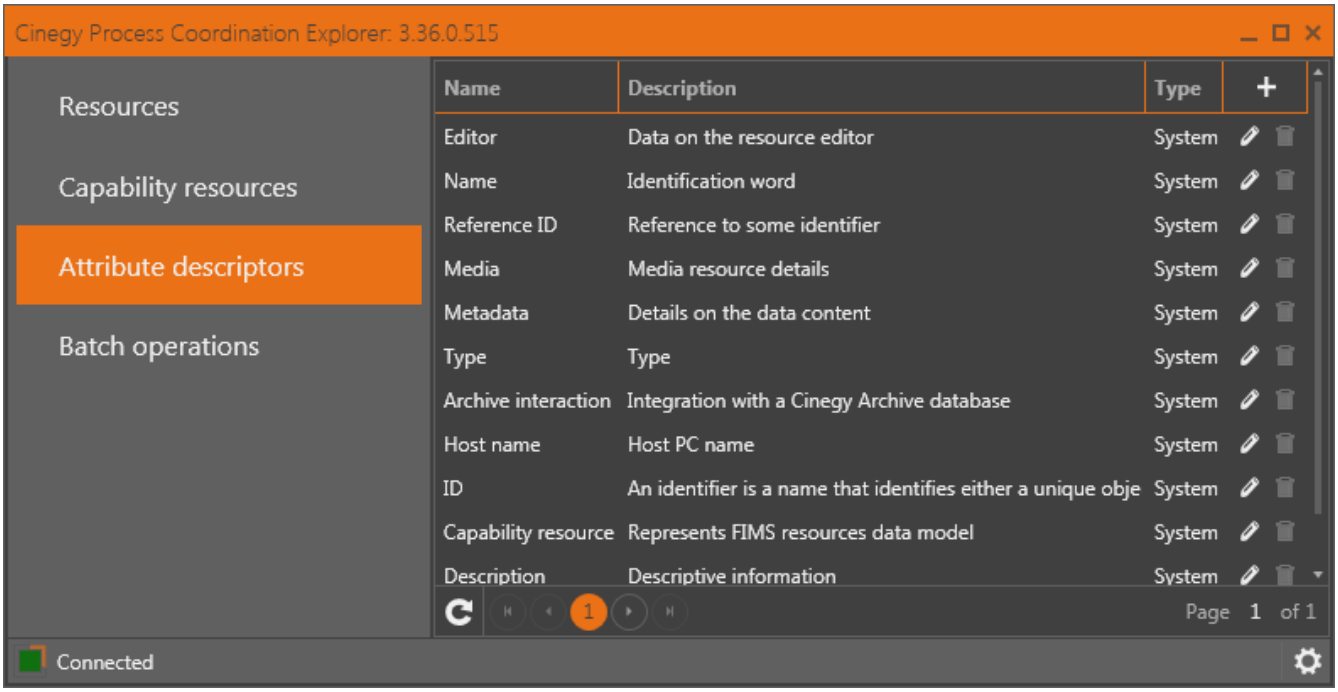
Navigation through pages buttons and the total pages number are available on the bottom bar.

Press across a resource to delete it, or to edit it.

Once all the required capability resources are added, they can be assigned to specific agents via Cinegy Convert Agent Manager.

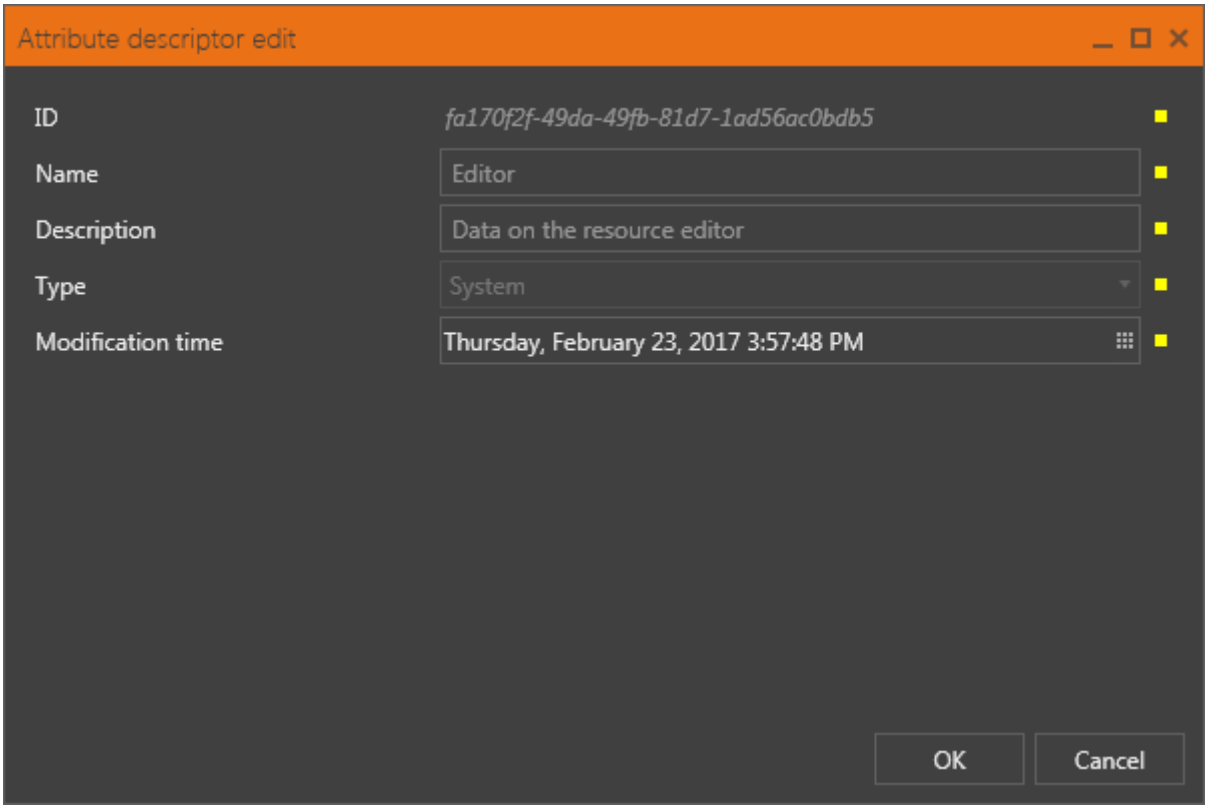
3.5. Attribute Descriptors

The "Attributes descriptors" tab contains the descriptors of attributes available for applying to PCS resources:



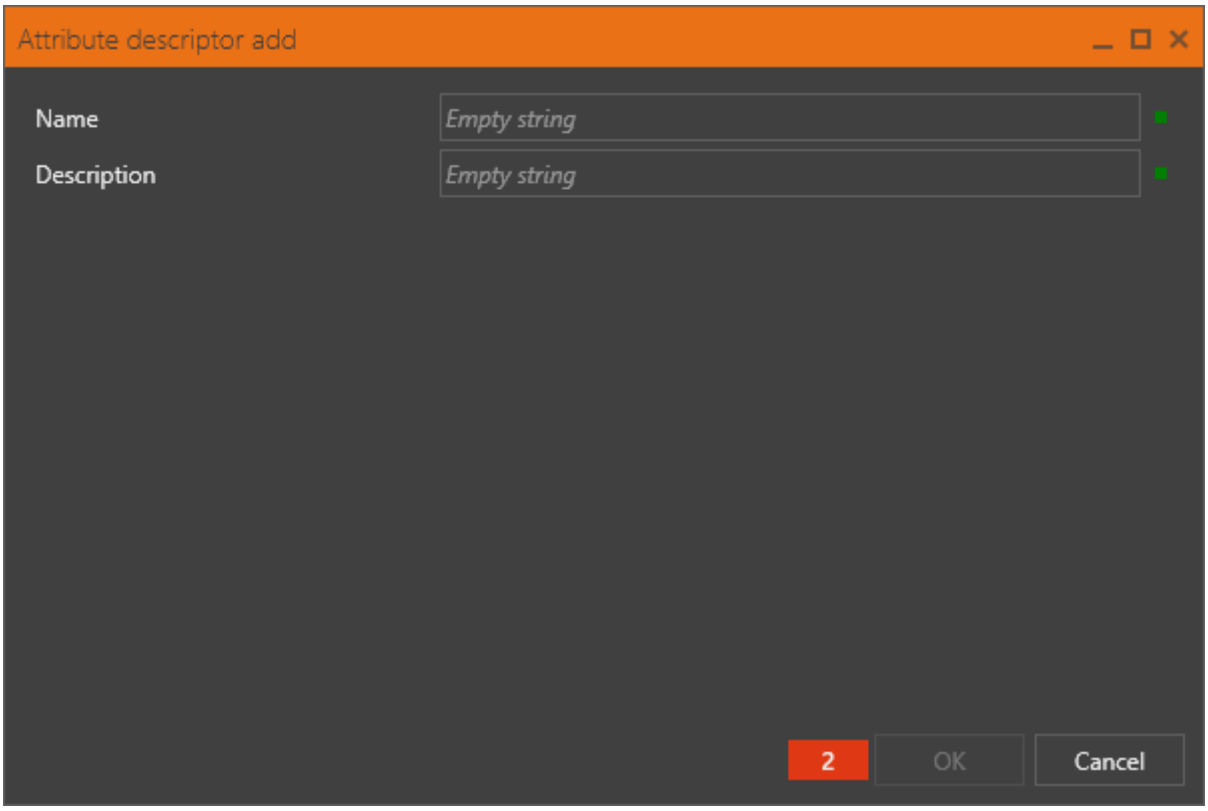
Descriptors are displayed in a table view, where the "Name" column displays the descriptors names, the "Description" column contains their descriptions, and the "Type" column indicates whether the descriptors are system or custom.

Initially, the list contains the default system attribute descriptors. Press this button to view their details in the dialog that appears:



Information about the system attribute descriptors is read-only.

To add a new descriptor, press the + button. Use the keyboard to enter the descriptor name and description in the following dialog:

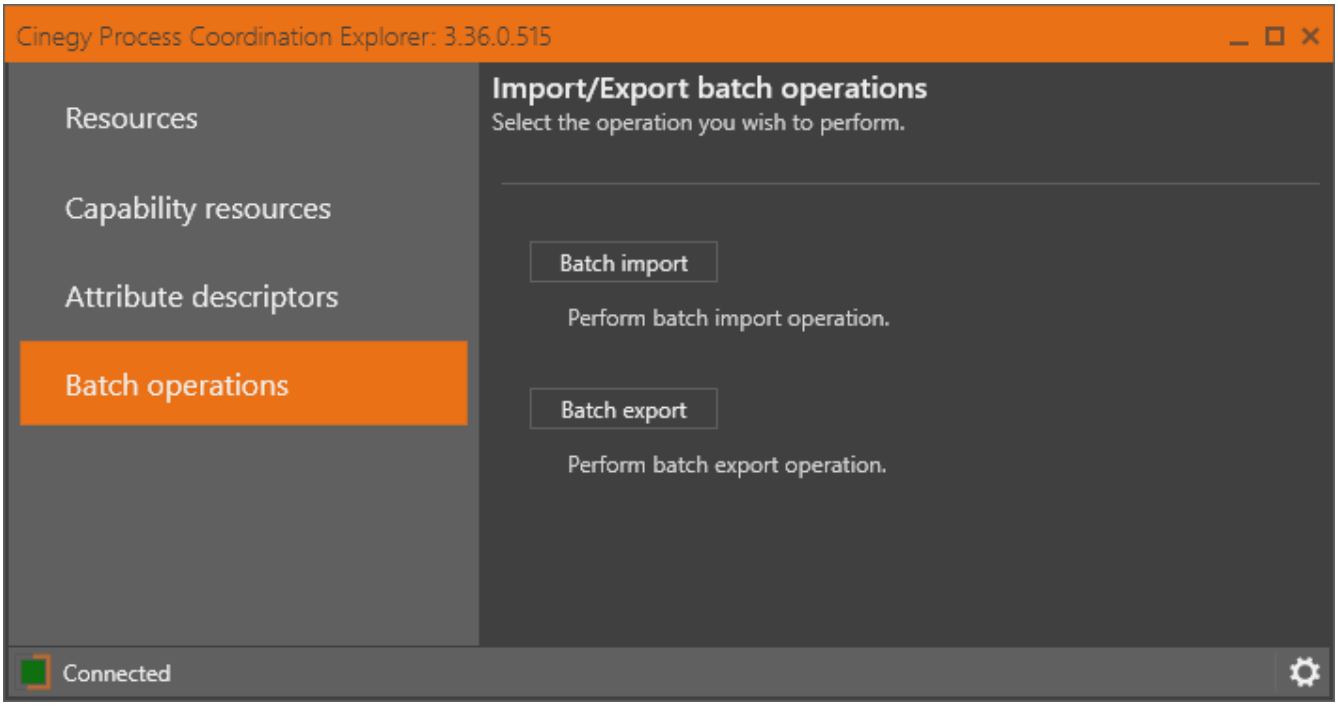


Please mind that the descriptor cannot be created until all required fields are filled in; the red indicator shows a tooltip explaining the reason why settings cannot be applied.

Press "OK"; the newly created attribute descriptor will be added to the list.

3.6. Batch Operations

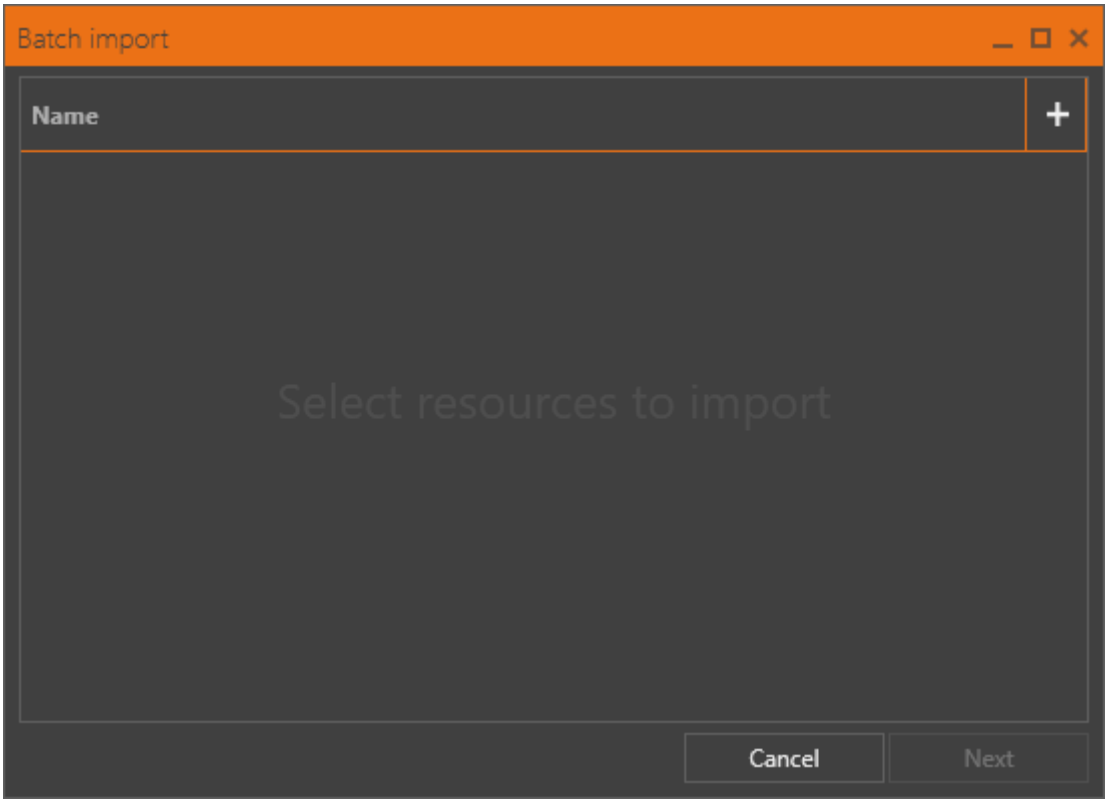
The "Batch operations" tab allows user to perform import or export of multiple resources simultaneously:



Press the relevant button to select the operation you wish to perform: "Batch import" or "Batch export".

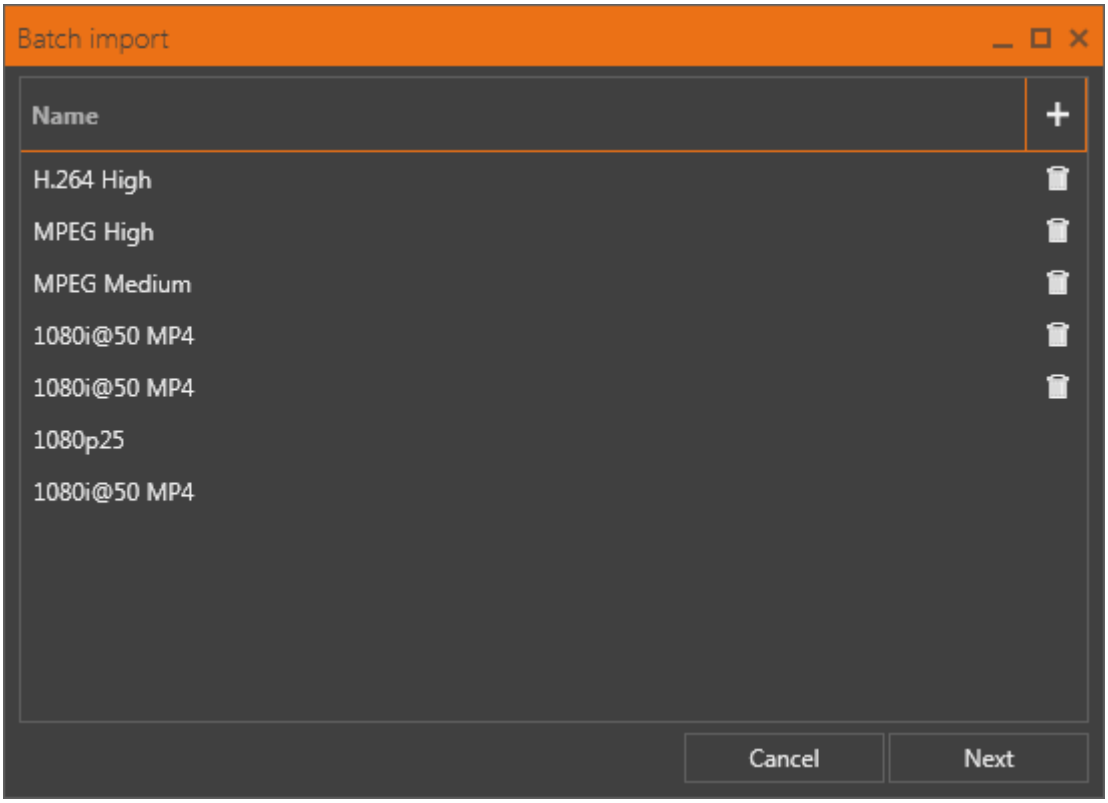
Batch Import

Batch import Having selected the batch import operation, press + in the "Batch import" dialog:



In the dialog that appears, navigate to the location with resources you wish to import. Select the desired file(s) holding the `Ctrl` key down and press the "Open" button to proceed.

The selected resources will be listed in the "Batch import" dialog:

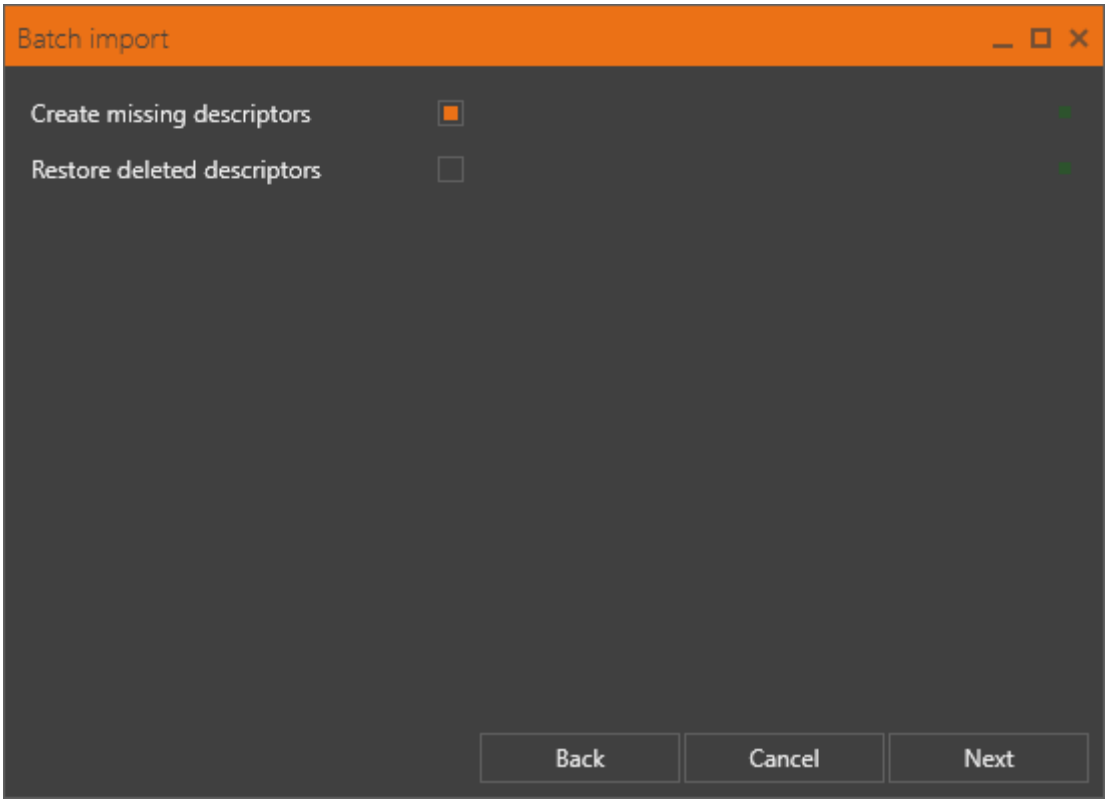




If the selected resource is not required for the current import session, you can remove it from the resources list by pressing the corresponding button next to it.



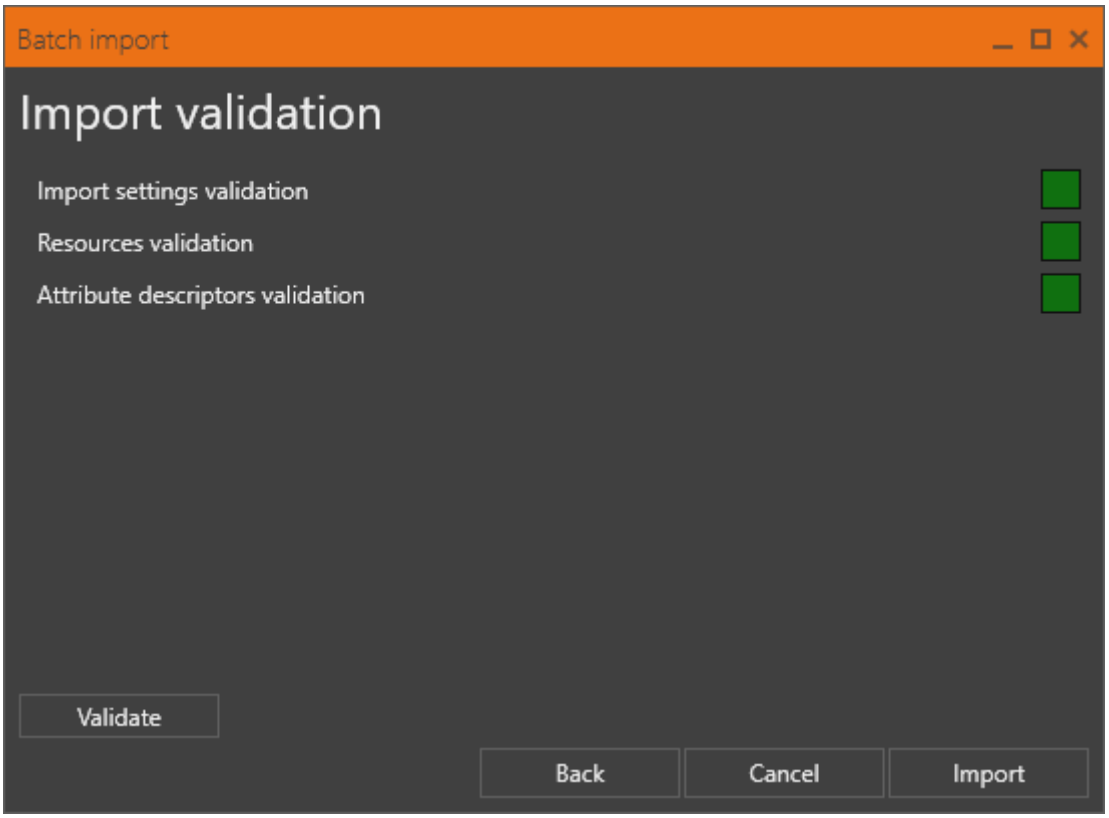
Once all the required resources are selected, press "Next". As a next step, define the following settings for the batch import operation:



- **Create missing descriptors** – check this option to enable creation of the missing descriptors of profiles imported within the given batch import session.
- **Restore deleted descriptors** – check this option to restore the previously deleted descriptors of profiles imported within the given batch import session.

Next

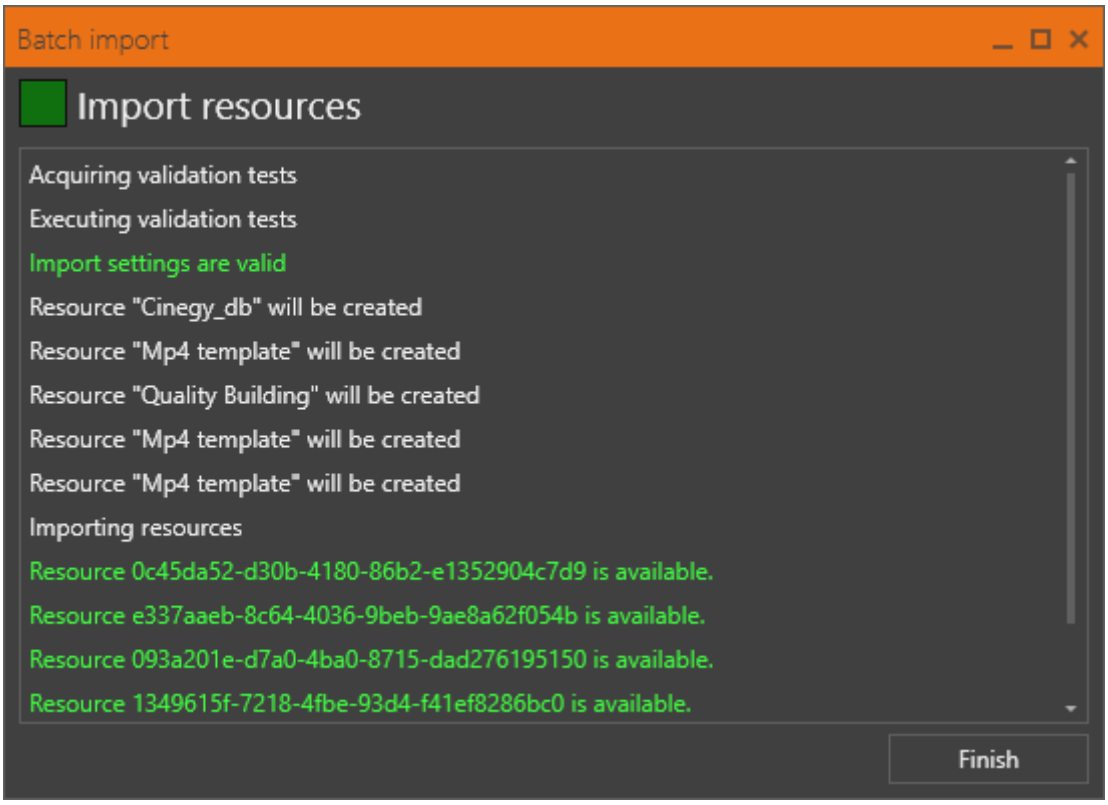
Press "Next" to continue. In the following dialog, the export validation check is performed:



The import validation procedure is similar to the one of the database validation.

Import

Press the "Import" button to launch the operation. The following dialog informs about all the batch import operation related processes execution:



Finish

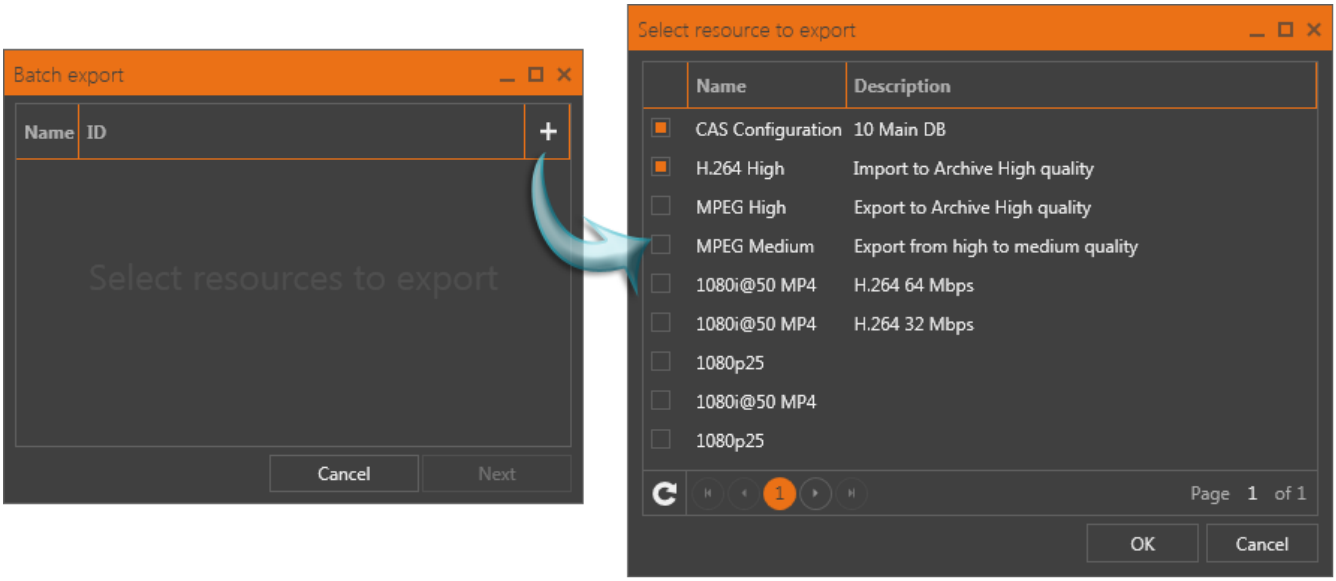
Press "Finish" to complete and quit the dialog.

The imported profiles will be added to the PCS profiles list on the "Resources" tab of Cinegy Process Coordination Service Explorer.

Batch Export

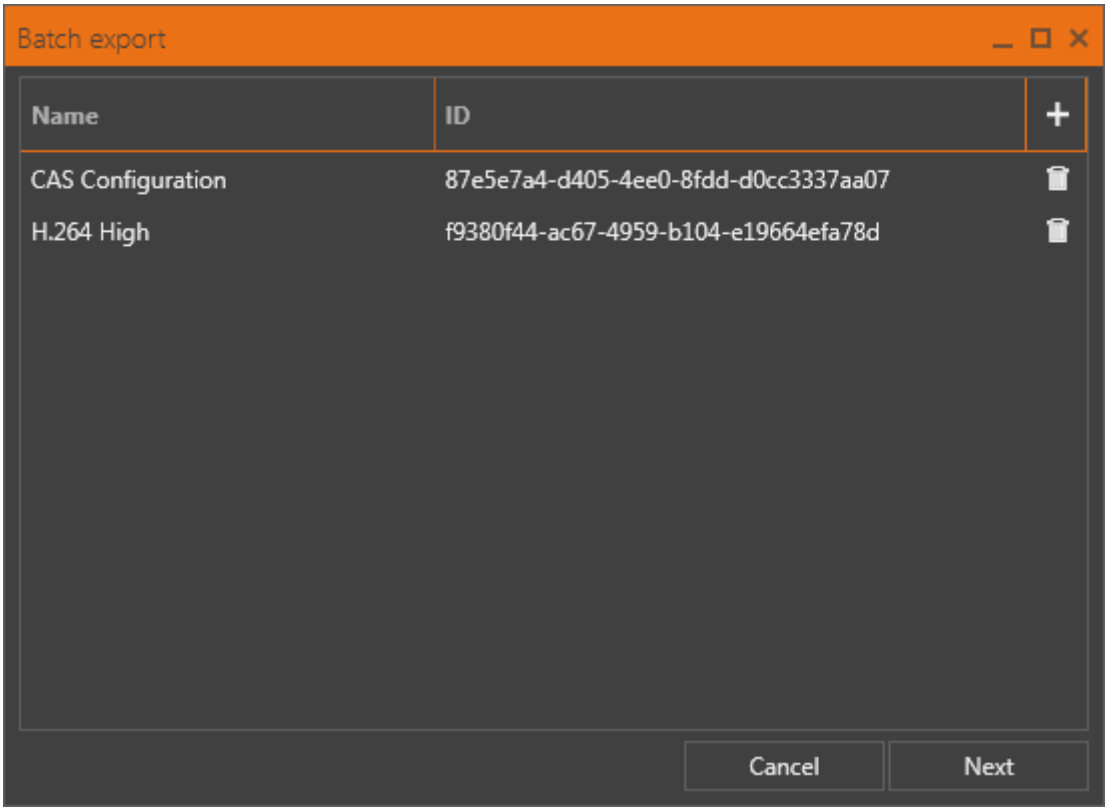
Batch export

Having selected the batch export operation, press + in the "Batch export" dialog. The following dialog appears allowing you to select the resources for export:



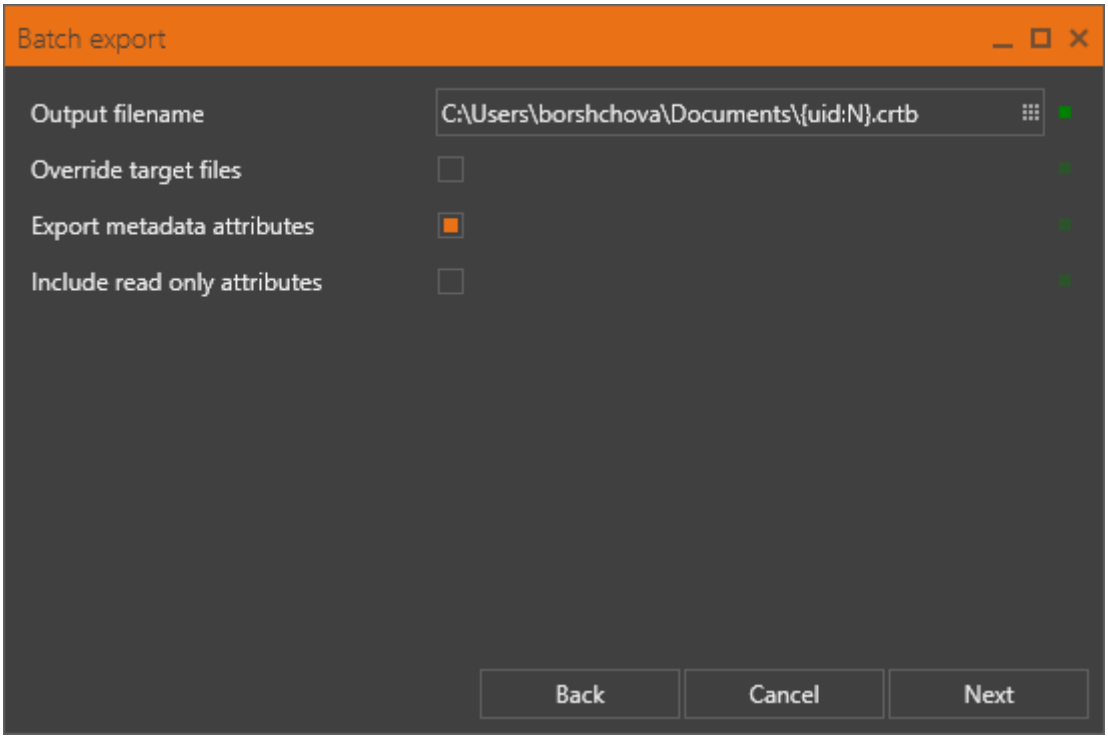
Check the boxes next to the desired resources and press "OK".

The selected resources will appear in the "Batch export" dialog:



If the selected resource is not required for the current export session, you can remove it from the resources list by pressing the button next to it.

Next — Once all the required resources are selected, press "Next". As a next step, define the following settings for the batch export operation:

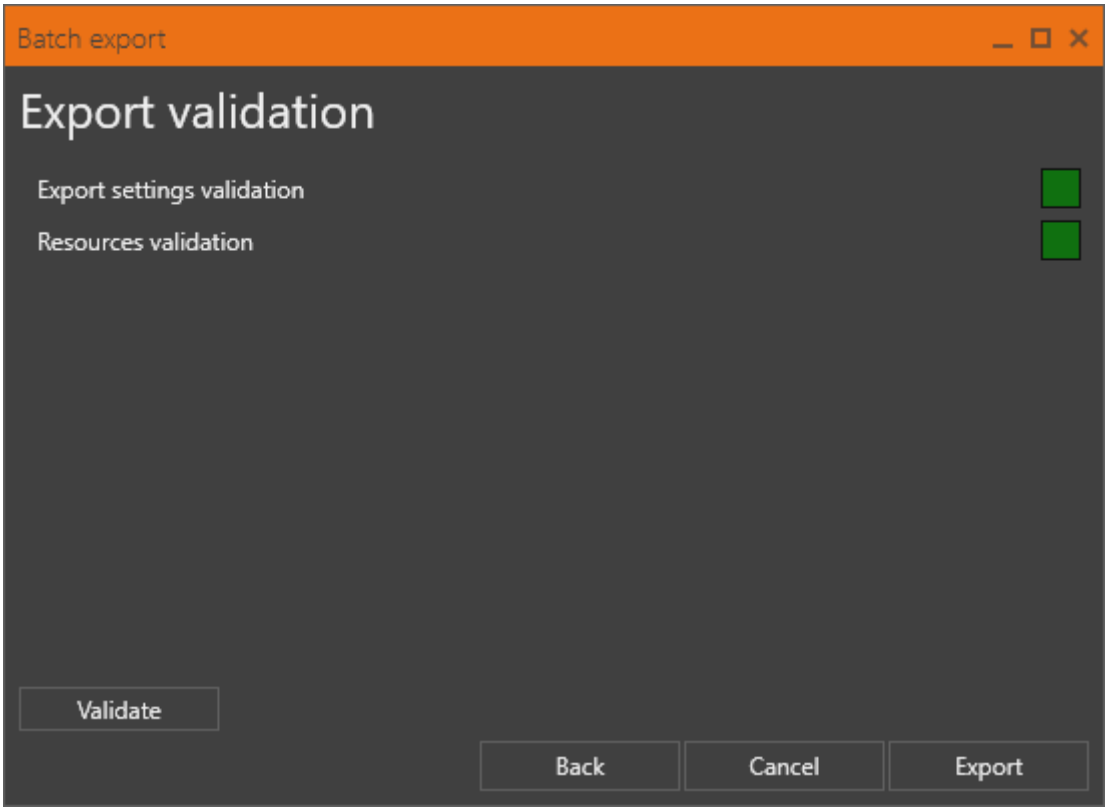


- **Output filename** – use the keyboard or press the button to define the directory for storing the exported profiles.

> To automate naming, the filename macro is supported. Refer to the **Macros** article for details about macro templates.

- **Override target files** – with this option enabled, the existing resource files having the same names will be replaced with the ones being exported.
- **Export metadata attributes** – check this option to enable export of metadata attributes during the batch export operation.
- **Include read only attributes** – check this option to enable export of the read only attributes.

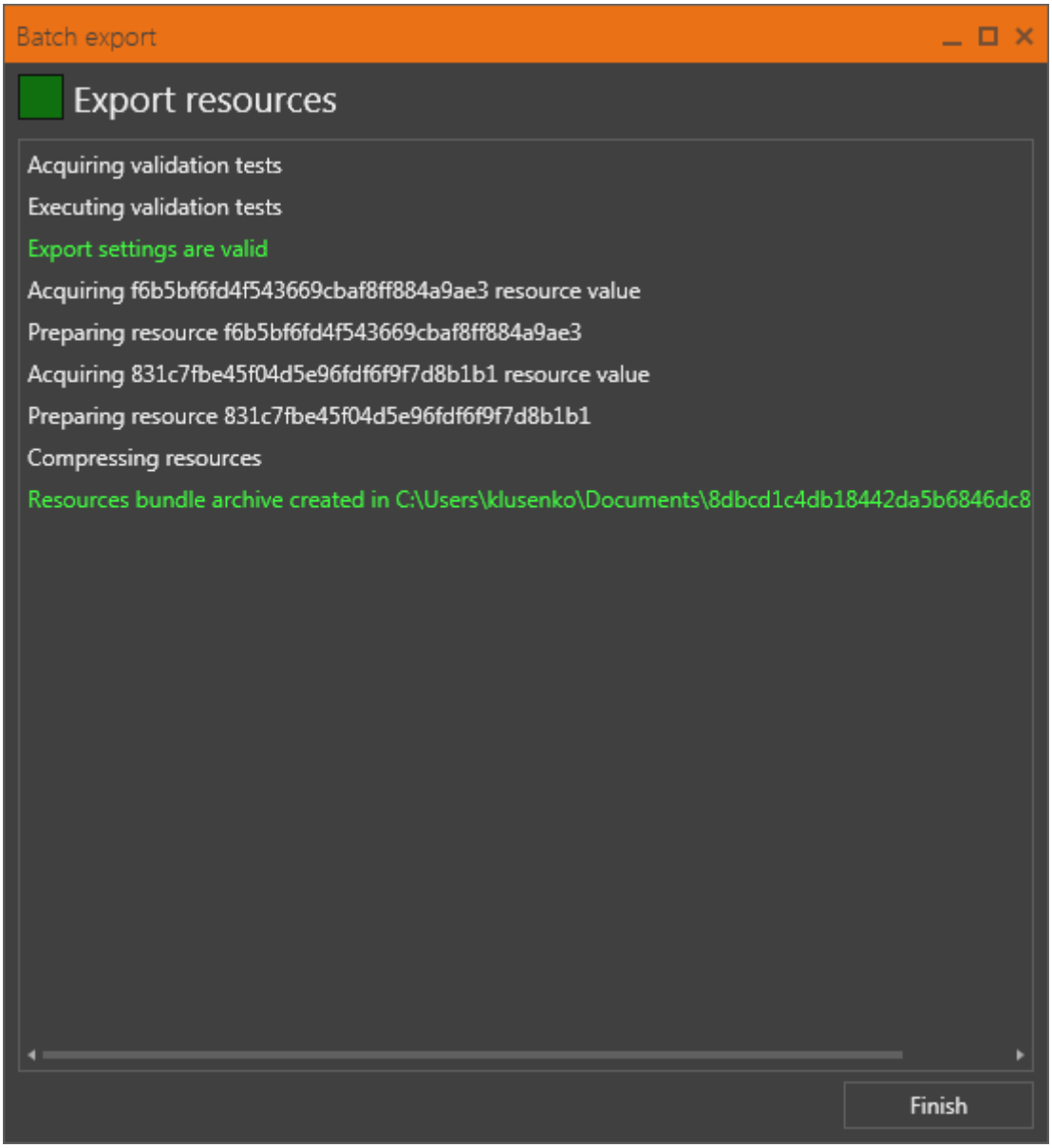
Having specified all the parameters, press "Next" to proceed. In the following dialog, the export validation check is performed:



The export validation procedure is similar to the one of the database validation.

Export

Press the "Export" button to launch the operation. The following dialog informs about all the batch export operation related processes execution:



Finish Press "Finish" to complete and quit the dialog.

The exported resources will be saved in the PCS resource archive file with the specified name.