Perceptive Intelligent Capture

Migration Guide

Version : 5.6.x

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Introduction

This guide provides instructions for upgrading from Perceptive Intelligent Capture versions 5.4 and older to version 5.6. It is recommended that you contact Perceptive Professional Services about project-specific customization.

Perceptive Intelligent Capture versions 1.3.x and 2.x

The earlier versions of Perceptive Intelligent Capture, 1.3.x and 2.x, require Professional Services assistance in upgrading as there have been several changes in the software architecture.

Upgrade from version 5.3 or later versions

The installation process provides a Repair option to upgrade version 5.3 or later versions to version **5.6**.

Refer to **Upgrade from version 5.3 to newer versions** for the specific instructions on how to migrate from version 5.3 to 5.6.

Upgrade from versions prior to 5.3

You must uninstall any versions of Perceptive Intelligent Capture prior to version 5.3 before installation of the latest version. Refer to **Backup and preparation**, **Uninstall,** and **Installation procedures** for additional information.

Features and enhancements for version **5.6**

Refer to the *Perceptive Intelligent Capture Release Notes*, *Version 5.6*, for a complete list of new features, enhancements, and bug fixes provided with this release.

Backup and preparation

It is imperative that you perform backups of projects, data, and configuration files prior to migration.

As it is expected that some downtime may be incurred during the migration, you should plan with all user groups prior to the migration.

The migration for this entails updating the following workstations or servers.

- Perceptive Intelligent Capture Runtime Server Machines
- Perceptive Intelligent Capture Verifier Workstations (Thick Client install only)
- Perceptive Intelligent Capture Development Workstations
- Perceptive Intelligent Capture Web Verifier Server

Back up the following materials in accordance with the internal processes implemented at site.

- All project related data. Refer to **Project Related Data** for more information. Related data may include the following items.
  - Project SDP file
  - Project Learnset
  - ASSA Pool files
  - Project utilization files such as INI, Custom DLLs, and so on
- Batch folder. If the batch folder is not empty and resides on the file system, back up the Batch folder.
- License file that is located in Program Files\Perceptive\Components\Cairo.
- Back up the application files located in Program Files\Perceptive. Refer to **Application files backup** for more information.
- Back up the configuration files (.Config). These files are located throughout Program Files\Perceptive.
- Settings files. Refer to **Runtime Server Settings** for more information.
  - DVS –Verifier Settings
  - SET – Runtime Server Settings
- Database backup. Consult your administrator for more information on database backup. Create a full database backup prior to the upgrade. Refer to **Database data** for more information.
- OCR Language files. Note any additional language files that were added post installation as you will need to add these manually.
- OCR engine used within the Project files (FineReaderversion, Kadmos version and so on).

Migration prerequisites

This section provides tasks you need to perform prior to upgrading your version of Perceptive Intelligent Capture.

Note After you save a project in a higher version of Perceptive Intelligent Capture, you cannot open it in an earlier version of the product. The backed up data must be kept for at least one month in read-only format.

- Stop the Perceptive Intelligent Capture services before performing a Database or File backup.
- Reference project-related documentation for further information that may be specific to your project requirements and installations. This can include scheduled tasks, custom DLLs, special configurations, and so on.
- Familiarize yourself with the permissions and security settings of any shared folders that are used, such as a Shared License folder or Project Data folder. You may also want to ensure that the share names remain the same for any folders you move.
- Ensure that no batch exports are pending prior to the migration.
- Ensure that there are no Accumulated Documents pending in the Learnset Manager prior to the upgrade. These should be completed (Rejected/Accepted) and migrated into the project prior to the migration.

- Review any scheduled tasks or additional services that may be running on the system as these also need to be temporarily stopped during the upgrade process.
- Prior to commencing with any upgrade, ensure that you adhere to the following pre-requisites.
  - All users logged out of the system (Designer, Verifier, Learnset Manager, Web Verifier)
  - All RTS instances are in a stopped state, and the **Perceptive Intelligent Capture** services have been stopped.
- Download new software to a disk.
- It is highly recommended that the migration process is tested on a development environment prior to migration to a production environment.
- Review the Windows Services used and locate any account credentials used to run the services, such as the **Perceptive Intelligent Capture** Runtime Server Service. You need to reenter these credentials after you complete the installation process.

Back up procedures

This section provides information about back up procedures you need to perform prior to product installation.

Runtime Server Settings

To upgrade the runtime server settings, complete the following steps.

1. Launch **Perceptive Intelligent Capture** Runtime Service Management Console.
2. Select the instances from the first RTS Group/Machine.
3. Stop the instances.
4. Right-click the instance and select **Export Settings** from the menu list.
5. Save the RTS settings file, using an appropriate name, to a secure backup location.

   Note In the file name, use the RTS machine name to simplify re-importing the settings.
6. Repeat the previous step for all the RTS instances on all the Perceptive Intelligent Capture machines.
7. Close Perceptive Intelligent Capture Runtime Service Management Console.
8. Stop Perceptive Intelligent Capture services for Runtime Service Manager and System Monitoring. You can accomplish this using the Windows Services pane or through the application shortcut.
9. Check **Task Manager** to ensure that no **DstHost.exe** or **DstMgr.exe** tasks are present.

Project related data

The project files are typically located in one folder, which may include the following items.

- SDP files (Global, Local, Template, and so on)
- Learnset folder and files
- ASSA Pool
- Batch folder
- License Share (if it exists in the project folder)

- Custom DLLs
- Any other project related data. Consult your solutions documentation for further details regarding the upgrade.

The batch folder should not contain any batches for verification. It is not a requirement to have an empty batch list for the migration but it can simplify the process.

Application files backup

To back up the application files, complete the following steps.

1. Program files. Back up all files in C:\Program Files\Perceptive to a secure backup location.

   Note You may want to delete all historical logs prior to archiving to reduce the size of the backup.

2. Save the **Config** files for Designer, Verifier, Runtime Server, Learnset Manager, and Web Verifier for future reference in the migration steps.

Database data

To back up data in your database, complete the following steps.

1. Consult your Database Administrator to facilitate a backup of the ORACLE or SQL Server database.
2. Save and name the backup file with an appropriate name.

Database export

When performing Database Export from the Runtime Server, the first part of the batch name refers to the database ID and the second part is the original file system based ID. This affects only the batches exported from the old file system and is required to keep the string ID unique. If the batches are imported directly into the database, the string ID consists from just the reference to the database ID.

For example, the batch name will appear as:

00000001_00000000

00000002_00000001

00000003_00000002

Uninstall a previous version

You must uninstall any versions of Perceptive Intelligent Capture prior to version 5.3. Complete the uninstall process prior to install the latest version.

Note Refer to the **Back up and preparation** section for more information on preparation steps.

Prerequisites to the uninstall

To prepare for the uninstall process, complete the following steps.

1. Review and ensure that all back up steps and precautions are taken and that all users have exited the application.
2. Verify that all services and scheduled tasks that relate to the application are in a stopped state.

Uninstall procedure

The following steps outline the process for removing the software from the machine.

1. Launch the Windows Control Panel
2. Navigate to **Add or Remove Programs** or **Programs and Features**.
3. Select **Perceptive Intelligent Capture** in the **Programs** list.
4. Select **Remove**.
5. Follow the steps to remove the selected application and all its features.

   Note For additional information, refer to the *Perceptive Intelligent Capture Installation and Setup Guide* when uninstalling the application.
6. After you complete the uninstallation, reboot the server and workstation.
7. After the reboot, delete all files that are left inside the **C:\Program Files\Perceptive**. Retain the **C:\Program Files\Perceptive** folder.
8. Navigate to the **Windows\Temp** folder and delete the **Bwe**, **Dist** and **CdrDbCache** folders. This step is only applicable for the Runtime Server machine.

Installation and migration procedures

Use the following guidelines to ensure that you are prepared to upgrade to this version of Perceptive Intelligent Capture.

Upgrade guidelines

Review the *Perceptive Intelligent Capture Installation and Setup Guide* prior to following the steps outlined below.

1. Do not copy the old configuration (.config) files into the root of the installation setup folder.

   Note The database schema cannot be reverted to the older version once it is upgraded.
2. Do not use the backup configuration (.config) files with the new version. This renders the system unstable. You can use them as reference points to any custom settings used in previous versions.
3. Check the script for upgraded use of properties: **Filename** refers to the database workdoc ID and **DocFileName** corresponds to the original image file (refer to the Script migration and Scripting Reference Guide for details).

Installation procedure

To install this version of Perceptive Intelligent Capture, complete the following steps.

1. Run the Setup for Perceptive Intelligent Capture 5.6.
2. Install the WIBU Key Runtime Kit when prompted.
3. When prompted on Database installation, select **Do not install Database** and continue.
4. On completion of the installation, proceed to the next step. If a reboot is required, after the restart, proceed to the next step.

5. Replace the demo License file in the `Components\Cairo` folder with a valid license file. For example, select the one that was backed up prior to the upgrade.

   Note There should only be one license file in the `Components\Cairo` folder. You can delete or rename the demo license.

6. Install the additional CJKT languages for FineReader if that is needed.
7. Launch the SCB Library Version (SCBLibVersion) to ensure that the application has installed.

   Note Any shared and security customizations that were in the previous installation should now be configured against the application folders.

Database schema update

The setup folder contains database migration scripts to move the database to the current version. The scripts are located near the setup.exe (application install files) in *FirstPart\Database\UpdateScripts*.

To edit the update database script, complete the following steps:

1. Navigate to **<*installerFolderLocation*>\FirstPart\Database\UpdateScripts** and open the appropriate folder for your Oracle or SQL Server database.
2. Open the script file.
3. To update the script so that it is applicable to your Perceptive Intelligent Capture database, complete one of the following substeps.
   - Oracle script: Search for the TargetDBSchemaName string and replace all instances with the proper database schema name.
   - MS SQL script: Search for the TargetDatabaseName string and replace all instances with the proper database name.
4. Run the Update Database script.

You can rerun the database upgrade script multiple times without any problems.

Upgrade from version 5.3 to newer versions

The installation process provides a Repair option to upgrade to version 5.6.

Note All **Perceptive** Intelligent **Capture 5.6 i**mplementations should be using the Database option, not the File System option. Customers with a file system are required to upgrade to Database as described in the **Script migration** section.

To upgrade your version, complete the following steps.

1. Stop all RTS instances.
2. Exit all application sessions.
3. Stop IIS.
4. Back up everything as described in the **Backup and preparation** section.
5. Run the **setup.exe** file from the new installation folder.
6. **Select the Repair option and follow the wizard instructions.**
7. Edit the Database scripts as described in the **Database schema update** section.
8. Run the DB Upgrade scripts.

9. Load the project in Designer and save it.
10. Restart all processes.

Template classification engine

The automatic creation of classification subclasses is now performed by the Brainware Layout Classification engine. The previously used Template Classification engine was removed from the product. Refer to the *Perceptive Intelligent Capture Designer User Guide* for more details.

Open FineReader 8.1 Projects after upgrade

If you perform a "Repair" action, all existing files update. If FineReader 11 was not previously installed, you need to rerun the installer after the system is upgraded. The modify option in the installer allows installation of the new version of FineReader.

Note Existing projects that use FineReader 8.1 are unaffected by the new version. However, it is recommended that you upgrade to FineReader 10/11.

If you open an older project using the FineReader 8.1 engine for the first time after the upgrade, complete the following steps to change to FineReader 10/11.

1. Verify that the license file contains a FineReader 10 or FineReader 11 entry.
2. Start setup again and select the **Modify** mode. Select FineReader 10/11.
3. Open the **OCR Properties** dialog box.
4. Change the engine to **FR10** or **FR11**.
5. Apply your settings on the appropriate settings tabs. The settings previously available with FR8.1 are now rearranged and spread across three tabs along with the additional FR10/11 settings. Refer to the *Perceptive Intelligent Capture Designer User's Guide* for more information.
6. If applicable for your project, review the CJKT languages. It is now possible to choose Korean and English in one selection and to perform a combined OCR. Select this option instead of separated Korean and English languages.

Open FineReader 8.1 Projects after new installation

To migrate a project with FineReader 8.1 engine to the new product version, complete the following steps.

Note As FineReader 8.1 is no longer installed, the change to FineReader10/11 engines is mandatory for Perceptive Intelligent Capture, version 5.6.

1. Open the project.
2. Confirm the error message about the missing FineReader 8.1 engine to open the project.

   Note The OCR engine previously associated with your project automatically changes to the OCR engine that is selected as the default on the **Designer OCR** settings dialog box. All settings are automatically mapped to the new FineReader 10/11 properties tabs.
3. Double-check the OCR project settings.
4. If applicable for your project, review the CJKT languages. It is now possible to choose Korean and English in one selection and to perform a combined OCR. Select this option instead of separated Korean and English languages.

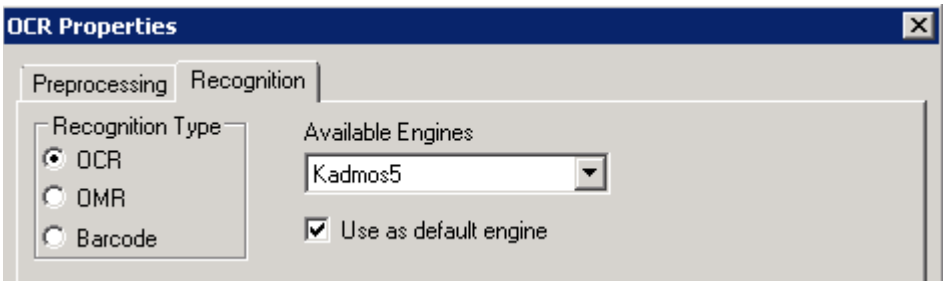
Kadmos 5 upgrade

If you perform a "Repair" action, all existing files are updated. As Kadmos5 was not previously installed, complete the following steps.

1. Start setup again and select the **Modify** mode. Select **Kadmos5**.
2. Verify that a Kadmos5 entry exists in your license file.

Note If a project is configured to use an OCR engine that is no longer installed, such as Kadmos 4, the first time the project is opened with the upgraded Perceptive Intelligent Capture version, the currently defined default engine will be assigned. Refer to the *Perceptive Intelligent Capture Designer User Guide* for details.

For example, if you use a no longer available Kadmos engine in a number of zones, you can make Kadmos 5 your default OCR engine before the project is opened to update all such zones automatically.



Transliteration differences

Transliteration is an advanced feature that is not commonly used in projects. The transliterated text of extended languages, such as Russian or Thai, was incorrectly changed in previous 5.5 versions when the project setting "Use multi-byte encoding" was enabled. Transliteration in versions 5.3 and 5.4 was correct). Projects using transliteration built in version 5.5 SP1 or SP2 may require a correction to utilize the correct transliterated texts in later versions.

Example The Russian word for "Invoice" was incorrectly transliterated to "Sqet" in 5.5 SP1 and SP2, but in 5.3, 5.4, and 5.5 SP3, it is correctly transliterated to "SChET".

Configure the application for the database

1. Locate the core product configuration files listed below. These files are located in **C:\Program Files\Perceptive\Perceptive Intelligent Capture\bin**.
   - **DstDsr.exe.config**
   - **DstHost.exe.config**
   - **DstSlm.exe.config**
   - **DstWkBrw.exe.config**
   - **DstVer.exe.config**
2. Open each file in Notepad.
3. Locate the Connection String tag in the **<connectionStrings>** file.

4. Replace **Data Source**, **Initial Catalog**, **User ID**, and **Password** with the one adapted to the installed database.

   Alternatively, review those values from the backed up configuration files.

5. Locate the Web Verifier configuration file, **web.config.Template**, in the setup folder.

   Note You must use this file to configure the Web Verifier Configuration. You can access the correct values from your backed up **web.config** file if needed.

6. Open the **web.config** in notepad.
7. Locate the **Connection String** tag in the file **<connectionStrings>**.
8. Replace **Data Source**, **Initial Catalog**, **User ID**, and **Password** with the one adapted to the installed database.

   Alternatively, review those values from the backed up configuration files.

9. Locate the **Path** tag in the file, and change the **pathToProjectExe** value to correspond to the location of the Designer application executable (**DstDsr.exe**). For example, **C:\Program Files\Perceptive\Perceptive Intelligent Capture\bin**.
10. In the **web.config** file, compare all settings in the **<appSettings>** section with the backed up configuration file and port potential customizations, such as user timeout, where needed.
11. Locate the **project licensePath** tag and change it to reflect the correct settings.
12. Copy the content of the **web.config** file to **C:\Program Files\Perceptive\Perceptive Intelligent Capture\bin\Brainware.System.Project.exe.config** or
    copy the **web.config** file to **C:\Program Files\Perceptive\Perceptive Intelligent Capture\bin** and rename it **Brainware.System.Project.exe.config**.

Configure the application modules

Designer projects on Server and Development workstations

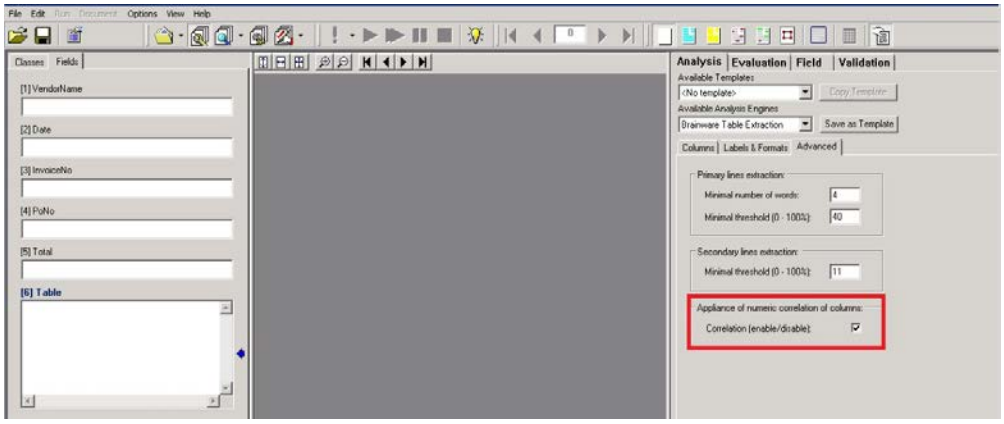
To configure designer projects on the server and development workstations, complete the following steps.

1. Launch Designer and verify that the correct license displays in the **Help/Info About Perceptive Intelligent Capture** window.
2. Open the Project File in Designer.

   Note The backup should not be modified. After a project is saved in **Perceptive Intelligent Capture**, it cannot be opened in a previous version of the product.

3. From the **Options** menu, select **Settings** and configure the Batch root and Global Learnset path to the location of the project file.
4. Navigate to **Definition Mode**.
5. Open up the **Settings Panel** for the project node.
6. Select **OCR** and ensure that the OCR engine is correctly installed and configured with all used OCR language files.
7. After the OCR engine review is completed, proceed to the next step.

   Note Upgraded projects may have correlation enabled.



8. To review and disable this setting, complete the following substeps.
    1. Navigate to **Definition Mode.**
    2. Select the class node.
    3. Select the **Fields** tab.
    4. Select the **Table** field.
    5. Open the **Properties** pane.
    6. Select the **Advanced** tab on the **Analysis Property** pane.
    7. Clear the **Correlation** option.
9. For local projects that are configured with a database job, enable the **Allow Database Authentication** setting. You must also export the users to the database. Otherwise, when launching the project in the Verifier application, the user receives an error notification.

    To review and to enable this setting, complete the following substeps.
    1. Select **Options → Users, Groups and Roles**.
    2. Enable the **Allow Database Authentication** option.
    3. Review users in the database and configure them if needed.
    4. Save the project.
10. Navigate to **Train Mode** in the project file.
11. Open the **Options** menu and disable the **Incremental Learning** option.
12. Press **Learn** to rebuild the Learnset under the current version.
13. On completion of the Learnset update, select **File → Save** to update the project to the new version.

Repeat these steps for all project files.

Configure RTS settings on the server

To configure the RTS settings on the sever, complete the following steps.

1. Navigate to the Windows Control Panel.
2. Select the **Administration** panel.
3. Open the **Windows Services** window and locate the two **Perceptive Intelligent Capture** services.
4. Change the **Run As** account credentials for the services to match the ones that were used previously.
5. Start the **Perceptive Intelligent Capture** Runtime Service from Windows Services pane.
6. In **Perceptive Intelligent Capture Runtime Service Management Console**, expand the Console **Root**, and re-create the RTS group, and then proceed to add the RTS machines.

   Note The licensing machine should have a gold key. If it does not, make sure that the correct license is installed.
7. Re-create the RTS instances with same name as the settings (SET file) that are being backed up.
8. For each instance, right-click on the instance and select **Import Settings**.
9. Navigate to the backup location and select the RTS settings for the current configured instance.
10. Check that the batch list displays correctly and no errors appear in the **Statistics** view.

When the Runtime Servers are fully configured, proceed to process a single document from start (Import) to end (Export) to ensure that no errors or issues occur.

Configure Verifier settings on the server or client

To configure Verifier settings on the server or client, complete the following steps.

1. Copy the backup of Verifier settings to the desired location.
2. To launch Verifier, double-click the setting file.
3. When prompted, type the user credentials to log in to the project file.
4. Verify that the batch list displays correctly.
5. Check that the batch is verified correctly with no errors.

Note In a typical environment, a collection of settings files may be present to simulate different roles. The last step in this procedure is only required for one Verifier setting file while the others should be checked to ensure that they open correctly.

Configure Web Verifier settings on the server

To configure Web Verifier settings on the server, complete the following steps.

1. Navigate to the **Perceptive Intelligent Capture** Web Server directory.
2. Start the Web Verifier Application in IIS manager.
3. Run **iisreset** as administrator in a command prompt.
4. Start **http*://localhost/WebVerifier/*** in an Internet Explorer browser.
5. Delete all local cache information from the browser.

6. Log in with a user name and verify that the project is loaded and that it is possible to verify a batch.
7. Click **Menu** > **Help** > **About Perceptive Intelligent Capture Web Verifier** and check that the displayed license is correct.
8. Verify a single batch to completion to ensure that there are no issues.

Configure Web Verifier on a client

To configure the Web Verifier on a client, complete the following steps.

1. Start Web Verifier in an Internet Explorer browser.
2. Delete all local cache information from the browser.
3. Log in with a user name and verify that the project is loaded correctly.

Script migration

The Workdoc.Filename property changed from the file name of the original file to the Workdoc's Database Id/name. To retrieve the file name of the image from which the Workdoc was created, use the DocFileName property instead of FileName property. Update the use of these properties in your projects custom script accordingly. Refer to the *Perceptive Intelligent Capture Scripting Guide* for details.

New behavior in cut and append document process

Resulting from recent product enhancements, the stapling process returns a single multipage document referenced by the associated Workdoc. The consequence is that there is only one single document, and any attempt to extract "**pWorkdoc.DocFileName(x)**" with an index greater than 0 results in an index out of range error.

To retrieve the original file name of a page, use **pWorkdoc.Pages(x).OriginalDocumentFileName**. The scripter should also always check the document count using the **pWorkdoc.DocFileCount** property after Append/Cut operations to get the DocFileCount value.

The following script example uses "**pWorkdoc.Pages(x).OriginalDocumentFileName**" property to create an array of the original File Name of all pages of the Workdoc.

```
Private Sub CreateCollectionofPageOrgFileName(pWorkdoc As
SCBCdrPROJLib.ISCBCdrWorkdoc)


Dim WdcPageCount As Long ' Total Number of pages associated to the Workdoc
Dim CurPage As Long ' Current Page Number
Dim OrgFilename As String ' Original File Name of the selected page
Dim OrgFilenames() As String ' Array of Original File Name of all Pages of the
WorkDocument


WdcPageCount = pWorkdoc.PageCount
ReDim OrgFilenames(WdcPageCount)


For CurPage=0 To WdcPageCount-1
```

```
OrgFilenames(CurPage) = pWorkdoc.Pages(CurPage).OriginalDocumentFileName
Next CurPage

' Write the original file name of all pages to log.
For CurPage=0 To WdcPageCount-1
OrgFilename = OrgFilenames(CurPage)
Project.LogScriptMessageEx CDRTypeInfo, CDRSeverityLogFileOnly, " Original File Name of Page: " & CStr(CurPage+1) & " is [" & OrgFilename & "]"
Next CurPage

End Sub
```

Batch migration from file system to database

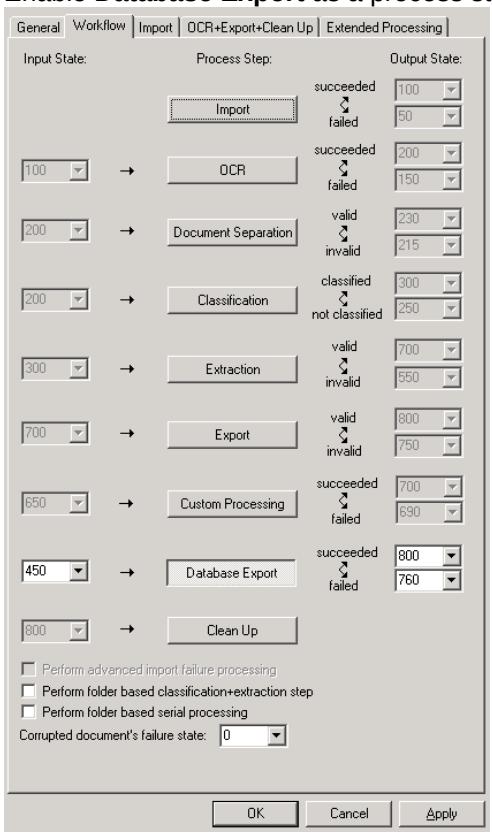
If you have an RTS instance pointing to file system batches, you need to migrate those batches to the database in order to take advantage of the fully database based functionality of **Perceptive Intelligent Capture 5.6**.

To migrate a file system batch to the database, the migration steps have to be executed for each of the states within the batch starting with the lowest batch state. This is necessary because of database requirements: A single batch for each of the states will be created. If a file system batch contains documents at two different states, this batch will be split into two different database batches.

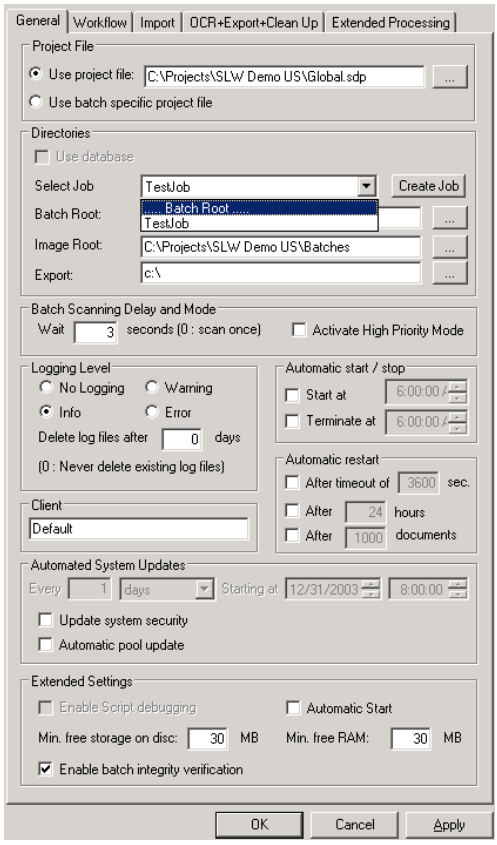
Prior to migration, back up the appropriate file system batches.

1. Open **Runtime Service Management Console**.
2. Right-click the RTS instance pointing to a file system batch.
3. Open the **Properties** window.
4. Access the **Workflow** tab.

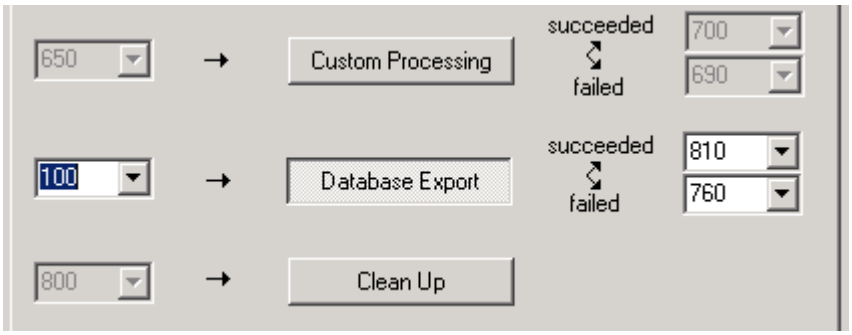
5. Enable **Database Export** as a process step and disable everything else.



6. On the message box, click **OK**, and re-open the settings window. You can then click the **General** tab, and access the **Select Job** option from the drop-down list.



7. Create a new job or select an existing one.
8. Access the **Workflow** tab.
9. Explore your batch list for the lowest state, and type that lowest batch state as **Input State** for **Database Export**.
10. Define separate states as **Output State for Database Export,** which are different from the existing default output states. Verify that the failure state is lower than the succeeded state.



11. Click **OK** and start the export from the toolbar.
12. Create a new RTS instance and import the settings from the RTS instance that points to the file system batches. You can then monitor your exported batches.

    Explore the batch list for the newly created database RTS instance. The exported batches at state 100 can be found there. At export, they were given a new batch ID, similar to the following example.

    00001770_00000016

    The left part of this ID represents the Database ID while the right part represents the previous file system batch ID.
13. Repeat the steps 8 to 11 for all the remaining states in your batch list.

As already mentioned above, in case of two different states, two different database batches will be created. The different parts of the originally one single batch can be easily found by its batch name using the WHERE text field. If you want to display all the parts for batch 16, type in a search request with the following syntax

batch.name like '%_16'

If you switch to the file system RTS instance, the file system batch still shows the original number of documents even if a part of the documents have already been exported. The exported documents are still part of the batch. However, after export they are at a higher state according to the output state you defined for database export.