

MID

Innovator 16.0

Migration Manual



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Introduction into Migrating Innovator

This chapter informs you about the purpose of the information about the migration and the basic procedure for an upgrade (version change).

Brief Description

Who Should Read This Information?

All those wishing to use models, licenses or user customizations from the previous version in Innovator version 16.0.

Who Does Not Need to Read This Information?

All those wishing to start working with Innovator 16.0 using the new models based on the current model templates and initial settings and who do not wish to use licenses from a previous version's pool. Anyone who is simply carrying out an update to a new release within the same version (e.g. from Innovator 16.0.1 to Innovator 16.0.2; see Help, chapter "[Installing an Update](#)").

Purpose of Information

You only need to carry out these steps if you are migrating from Innovator version 15.2 to Innovator 16.0.

The information describes the worksteps necessary for migrating models from previous versions to Innovator 16.0. Please note the "[Migration of Versions Before Innovator 15.2](#)" section when switching from older versions than Innovator 15.1.

The information should protect you against the loss of information during the transformation process and when editing models in Innovator 16.0.

Migration Files

Innovator develops in such a way that changes are made to plug-ins and profiles; these make up the basis of modeling, along with configuration settings and are part of model templates. Plug-ins and changes are made available in migration profiles; you can import these as migration files in the configuration editor. Import only changes the profiles included by MID within scope of delivery for migration profiles. Customization profiles are not modified.

The Migration*.aob migration files can be found in the \$INODIR/config/ directory and are language independent. They can be used in both languages to update the profiles included within the scope of delivery of Innovator and used in your models.

Basic Information about Migrating Innovator Models

What is Migration?

Migrating Innovator models means moving models from the previous versions to the current version. The migration comprises the transformation of the model data using the **Transformer** program or PowerShell script. Model data can be found within one or more data repositories or in the managed model versions of the project directory. In exceptional cases, preparation and postprocessing are required in the models or their configuration.

Migration can also affect subsequent use of your own templates, initialization files, scripts etc. without concrete models being migrated. You may need to carry out further steps for migrating licenses.

Taking care to read information about migration can avoid loss of information during transformation and can protect Innovator models from being changed.

Note

Ensure that you have taken all measures to protect your models from loss of data:



- You do not receive any notable verification messages in the models to be migrated
- You have made an external back-up of the complete model data (in particular with regard to necessary transformation preparations in the models of the previous version)

Smooth transfer from Innovator 15.2 to Innovator 16.0 is ensured for all models.

Migration of Versions Before Innovator 15.2

Transformation from versions older than Innovator 15.2 may have to be carried out in several migration steps due to the specific preparations and post-processing that may be necessary for earlier version changes. We would be happy to help you with this.

A migration manual always provides a detailed description of the migration from the last version and the version prior to that.

Restriction

As of version 16.0, **Transformer** can only transform repositories and model versions from version 14.1 onwards.



If your source version is older, then you need to use the transformer for an older version (14.1 - 15.2) as an intermediate step, install it if necessary and then carry out the preparations and post-processing described in the applicable Help documentation.

The following table indicates whether you need to carry out specific preparation or postprocessing for the individual **version changes from the relevant predecessor version** in addition to the work that is normally required for version 14.1 onwards and which products are affected. For details, please see the migration manual for the respective Innovator version, which is linked in each case.

You require the **specifications for the version subsequent to your current version** in the following table when migrating to the current version. You are not migrating onto your current version, do not forget.

Example

- If you are migrating **from Version 14.3** to the current version 16.0 and use Enterprise Edition, you must e.g. carry out the preparation and postprocessing **from line 15.0**.

Overview of the Preparations and Postprocessing for Transformation from Version 14.1

Migration to version	Preparation (with product reference)	Postprocessing (with product reference)
14.2	<p>General</p> <ul style="list-style-type: none"> ▪ Guest logins are prevented as standard (Applies to all transformations from versions 14.1 and older) (Can be carried out up to Version 16.0.) 	<p>Innovator for Information Architects</p> <ul style="list-style-type: none"> ▪ Mapping ER-DB and DB-ER: «depend_mapping» stereotype was removed (Can be carried out up to Version 16.0.) <p>Innovator for Business Analysts</p> <ul style="list-style-type: none"> ▪ Assigning Event Definitions to Events (Can be carried out up to Version 16.0.)
14.3	<p>General</p> <ul style="list-style-type: none"> ▪ Changing to UTF-8 and Adopting Passwords (Applies to all transformations from versions 14.1 and older) (Can be carried out up to Version 16.0.) ▪ Naming Conventions for Model Names (Applies to all transformations from versions 14.1 and older) (Can be carried out up to Version 16.0.) 	<p>General</p> <ul style="list-style-type: none"> ▪ Postprocessing for Agent Settings (Can be carried out up to Version 16.0.) ▪ Quickly Creating Impact Analysis Diagrams (Can be carried out up to Version 16.0.) ▪ Concept Relationship in the Whiteboard Diagram (Can be carried out up to Version 16.0.) <p>Innovator for Business Analysts</p> <ul style="list-style-type: none"> ▪ Assigning Boundary Events to a Task (Can be carried out up to Version 16.0.)
15.0		<p>General</p> <ul style="list-style-type: none"> ▪ Environment Variables for Individual Icon Path (Can be carried out up to Version 16.0.) <p>Innovator for Enterprise Architects</p> <ul style="list-style-type: none"> ▪ Models based on "Enterprise Architect for ArchiMate" (Use import option in foreign tools) (Can be carried out up to Version 16.0.) <p>Plug-ins</p> <ul style="list-style-type: none"> ▪ Your own plug-ins: Load mechanism changed (Can be carried out up to Version 16.0.)

Overview of the Preparations and Postprocessing for Transformation from Version 14.1

Migration to version	Preparation (with product reference)	Postprocessing (with product reference)
15.1	<p>General</p> <ul style="list-style-type: none"> ▪ Type of primitive type modified (Can be carried out up to Version 16.0.) 	<p>Innovator for Business Analysts</p> <ul style="list-style-type: none"> ▪ Display Options for Diagram Notation in BPMN Diagrams (Can be carried out up to Version 16.0.) ▪ Using concepts as business resources (Can be carried out up to Version 16.0.) <p>Innovator for Information Architects</p> <ul style="list-style-type: none"> ▪ Display options for diagram notation in Entity Relationship and Data Vault diagrams (Can be carried out up to Version 16.0.) ▪ Include columns in the database index (Can be carried out up to Version 16.0.)
15.2	<p>General</p> <ul style="list-style-type: none"> ▪ Configuration: Reversed naming for requirement properties (Can be carried out up to Version 16.0.) <p>Innovator for Enterprise Architects</p> <ul style="list-style-type: none"> ▪ ArchiMate: Diagram Stereotypes Omitted (Can be carried out up to Version 16.0.) ▪ ArchiMate Junctions (Can be carried out up to Version 16.0.) 	<p>Innovator for Enterprise Architects</p> <ul style="list-style-type: none"> ▪ ArchiMate profiles revised (Can be carried out up to Version 16.0.) <p>Innovator for Information Architects</p> <ul style="list-style-type: none"> ▪ Virtual Columns in Oracle 11g (Can be carried out up to Version 16.0.)

How to Proceed With the Upgrade

As standard, proceed with the following steps during an upgrade in order to keep the interruption as short as possible for running projects:

Note



Please note that a bus is also required as a central communication component for every license server as of version 14.0. A bus is assigned to precisely one license server.

The bus is implicitly started if a license server is not started as a service. The bus must also be started as a service if the license server is started as a service.

1. Set a new port number area for Innovator 16.0 and deactivate the firewall if necessary.
(see Installation Manual or Help, chapter "[Managing the Architecture](#)", sections "[Server and Port Ranges](#)" and "[Port Range for Main License Servers and Project License Servers](#)")
2. Install Innovator in a new, empty directory on the computer which the main license server is to run on, preferably in parallel with the existing installation directory.
(see Installation Manual or Help, chapter "[Installation](#)")
3. You determine the computer ID using a command and use an upgrade order to request the license key to activate your licenses for the new Innovator version of MID.
If you are also carrying out a license extension as part of the upgrade order, you receive a new license repository as well as the license key (`ino1ic.l1r`).
(see "[Determining the Host ID Beforehand with a Command and Sending it Off](#)")
4. Once you have received the license key and, if applicable, an extended license repository, shut down the main license server of the previous Innovator release in order to place your license repository into a consistent state. User logins are not possible, but users can continue to work in the models.
(see Help, chapter "[Starting and Closing License Servers](#)")
Copy your license repository (`ino1ic.l1r`) from the previous Innovator release to the license directory of the new release. This is normally `$INOLIC`, otherwise it will be `$INODIR`.
5. To retain the data of the central license repository as well as central user management with the login rules, configured projects (internal and external project servers), the license administrator password, and the serial numbers, proceed as follows.

Start the main license server and the administration program of Innovator 16.0.

- Change the license key in the administration program to be able to use your previous licenses and other constellations in the new version.
- If you have received an extended license repository, then load this license file in the administration program so that you can use your extended or modified licenses in the new version.

Attention



Never copy this license file directly to the `$INOLIC` directory, since doing so can overwrite your current constellations.

The license repository is updated to the main license server computer. Innovator is now ready for use with all products you have purchased.

(see "[Activating your Licenses on the Main License Server](#)")

6. If you have not yet set up an internal project license server for the projects of the previous Innovator release, you can do this now in the administration program. Use the port number used up to now and assign the required licenses.
(see Help, chapter "[Structuring Licenses with Internal Projects](#)")
7. You adjust any set up services by switching them to the project license server.
(see Help, chapter "[Executing Servers as Windows Services](#)")
8. Start the project license server. User logins to the project models are then possible again.
(see Help, chapter "[Starting and Closing License Servers](#)")
9. Transform your own model templates so you can use them again.
(see "[Adopting Your Own Base and Add-On Templates](#)")
10. For projects that you wish to continue working with in Innovator 16.0, shut down the repository's model server and the model versions so that you can transform the data repository and/or model versions.
(see Help, chapter "[Starting and Closing Model Servers](#)")
11. You migrate the projects that you wish to continue to use with the new functions of Innovator 16.0. You can start new projects in Innovator 16.0.
(see "[Transforming Repositories and Model Versions](#)")
12. Ensure that directories used by the new version in the network are updated, e.g. the \$INOPRJ project path contains the current model templates in the /config directory.
13. You must start the model server for the migrated projects to be able to edit the models.
(see Help, chapter "[Starting and Closing Model Servers](#)")
14. You prepare the transformed models in Innovator 16.0 for updating the configuration.
(see "[Preparing the Update of the Configuration](#)")
15. You load the configuration extensions for the migrated models in Innovator 16.0.
(see "[Loading Configuration Extensions](#)")
16. You carry out the postprocessing work that is required in exceptional cases for the transformed models in Innovator 16.0.
(see "[Postprocessing after Transformation](#)")
17. You transfer further data that you want to use in the new version. This can include your own icons, checks, engineering actions, plug-ins and settings.
(see "[Migration of Further User Data](#)")

Note

If the above recommendations fail to provide the required support or problems occur, please contact the MID hotline.

E-mail: support@mid.de or phone: +49 911 96836-222 (9 a.m. to 5 p.m.).

Check List - Roles and Tasks for Migration

Migration Check Lists

Task	Leading Role	Optional ¹	Done
Install Innovator with new port range on the computer the main license server will be running on and determine host identification	Innovator administrator		[]
Upgrade order to receive a license key for releasing the licenses in the new version and to receive a new license repository for license modification or extensions, if required.	License manager		[]
Receive license key and MID license repository, if necessary	License manager		[]
Shut down main license server from previous Innovator release, then copy its license repository in the new Innovator release's license directory.	Innovator administrator		[]
Start main license server and administration program for the new version and activate licenses on the main license server to make Innovator ready for use in the new version	Innovator administrator		[]
If required, set up internal project license server for projects from previous Innovator releases and migrate established services to the project license server	Innovator administrator		[]
Start project license server for the projects from previous Innovator releases running there and use them as normal	Innovator administrator		[]
Transform your own model templates	Innovator administrator or project manager		[]
Update the directories in the network used by the new version (e.g. the \$INOPRJ repository path must contain the current model templates in the /config directory)	Innovator administrator		[]

¹Optional means that this step can also be carried out for the next migration.

Task	Leading Role	Optional ¹	Done
<p>Migrate projects that should be continued in the new version:</p> <ul style="list-style-type: none"> ▪ Create a back-up copy of model data before carrying out necessary preparatory work and then carry out the preparations in the previous Innovator version. ▪ Download the data repository's model server and the model versions which you want to transform and then transform the data repositories and model versions. ▪ Starting the Model Server for Migrated Projects in the New Innovator Version ▪ Reload migration files with configuration extensions for new functions ▪ If necessary, carry out necessary post-processing in the new Innovator version ▪ Continue editing 	Project manager		[]
If necessary, set-up project license server for projects of the current Innovator releases and set-up services for the project license server (services do not have to be converted upon upgrade)	Innovator administrator	X	[]
Add extra user information	Innovator administrator or project manager or user		[]

¹Optional means that this step can also be carried out for the next migration.

Migration of Your Own Licenses and Templates

This chapter tells you about the main migration steps and the migration of your licenses and templates.

Main Steps

To activate your licenses:

- Install the new Innovator version on the main license server in order to determine the host ID ([see "Preparing for the Activation of Your Licenses"](#))
- Determine the host ID of the main license server and, if you have multiple main license servers, the serial number, too ([see "Determining the Host ID and Serial Number"](#)).
- With your upgrade order, request your license key from MID ([see "Determining the Host ID Beforehand with a Command and Sending it Off"](#))
- Activate your licenses with the license key received from MID GmbH ([see "Activating your Licenses on the Main License Server"](#))

To transfer your own model templates and add-ons:

Note



The creation and maintenance of a separate "master repository" are recommended for the management of your model templates and add-ons. You merely need to transform this master repository in order to be able to use your own model templates and add-ons in the new version as normal after saving them.

- If you do not yet use a master repository, create a master repository prior to the transformation in the predecessor version that contains your self-defined specifications for Innovator models ([see "Adopting Your Own Base and Add-On Templates"](#))
- Transform the Master repository ([see "Transforming with the Transformer"](#))
- Export the model templates and add-ons you defined from your transformed master models into configuration files in Innovator 16.0 ([see "Adopting Your Own Base and Add-On Templates"](#))

Licensing an Innovator Upgrade

What Happens with the Licenses During the Upgrade?

Innovator 16.0's license server reads the license repository of your predecessor version and reuses all of your licenses, your configured internal and external projects, central user management with the login rules and the license administrator password.

Your existing license distributions for older versions' projects are retained when licenses from your predecessor versions are adopted into Innovator 16.0.

Your licenses must be activated for Innovator 16.0 as described below before being reused.

Prerequisites for Activating Your Licenses

The prerequisites for activating your licenses for Innovator 16.0 are as follows:

- You have filled out the order form for an upgrade to Version 16.0, legally signed it and sent it to MID GmbH, preferably by fax (+49 911 96836-100).

- You have sent the order processing (Auftragsbearbeitung) department the host ID of the main license server of Version 16.0, preferably by e-mail. If you use multiple main license servers, you must also specify the serial number in order to enable a unique assignment.

Note



As a result of your upgrade request and to enable the reuse of your previous licenses and constellations, you receive a **license key** by e-mail, so that you can activate your licenses for the new version.

If you are carrying out a license extension together with the upgrade order, you also receive a **license file** by e-mail. You use this to extend or modify the licenses.

Preparing for the Activation of Your Licenses

Context

The following description presumes that you are installing Innovator 16.0 for the first time and have not activated any licenses for this version yet.

The copying of your license repository to the new Innovator version initially enables the serial number to be automatically determined with the host ID.

How to proceed

1. Install Innovator 16.0 on the computer which the main license server should run on, in a new, empty directory, preferably in parallel with the existing installation directory.
(see Installation Manual or Help, chapter "[Installation](#)")
2. To bring your license repository into a consistent state, please shut down the main license server of the previous Innovator version.
User logins are not possible, but users can continue to work in the models.
3. Please copy the `inolic.lr` license repository from the `$INODIR` directory (Version 15.1) of your Innovator installation to the `$INOLIC` directory of Innovator 16.0.
4. To enable the normal operation of your previous installation until you receive the activation data from MID, please start up the main license server of the previous Innovator version again.

Determining the Host ID and Serial Number

You cannot immediately use the copied license repository in the new Innovator installation. When you start up an application of Innovator 16.0, you initially receive the message which shows that the License server host not registered in license repository.

To be able to use the licenses, you need to determine the main license server computer's host identification and use this to get a license key or license file to activate the licenses for Innovator 16.0 from the MID order processing department.

There are two ways of determining the host identification and serial number:

- A. First of all, determine the host identification via a command. This does not affect work in your previous Innovator version.
- B. Determine the host identification using Innovator 16.0's administration program.

You should always send the information along with the upgrade order to MID order processing (<mailto:auftragsbearbeitung@mid.de>).

Alternatively, send the information to the address below. If you choose to use the traditional postal service, make sure that the host ID reference can be clearly read.

MID GmbH
Order Processing
Kressengartenstrasse 10
90402 Nuremberg / Germany

MID GmbH will generate a host-specific license key (if you are continuing to use previous licenses) and, if necessary, a host-specific license file (in the case of a changed license set) in accordance with your upgrade order and return them to you by e-mail (normally within one working day). You use them to switch the license of the main license server to the new Innovator version.

Determining the Host ID Beforehand with a Command and Sending it Off

Prerequisites

Attention



You need to determine the host ID in Version 16.0 and on the computer the main license server should run on.

If you do not do this, host identification will be invalid and the license repository will not be accepted for the license server computer.

With the host ID, the serial number can be determined at the same time if your previous license repository is available in the license directory of the new Innovator version.

Context

You can determine the host identification **after** installing Innovator 16.0 without having to close the previous version's main license server and start Innovator 16.0. (You cannot operate both main license servers on one computer at once.) This does not interrupt your work on your projects. We therefore recommend this procedure.

How to proceed

1. Execute the `inol_srv -h` command on the main license server host in the installation directory of Innovator 16.0. (Default: `c:\Program Files\Innovator\16.0\inol_srv -h`)
The host identification is identified and is ready to be sent by e-mail.
The serial number is also determined if you have copied your previous license repository to the license directory of the new Innovator version.
2. If the serial number is not determined automatically and you use multiple main license servers, please determine the serial number in your previous Innovator version in the **Help & Support** backstage view in the model editor for unique assignment.
3. Send this information to the MID order processing department (<mailto:auftragsbearbeitung@mid.de>).

In response, you will receive (normally within one working day) a license key (for the further use of the previous licenses) or, if applicable, a license file (for a modified license set) by e-mail in accordance with your upgrade order.

Determining the Host ID with the Administration Program and Sending it Off

Prerequisites

Attention

You first need to determine the host ID in the version you want to activate the licenses for.



The determination of the host ID must take place on the computer which the main license server should run on.

If you do not do this, host identification will be invalid and the license repository will not be accepted for the license server computer.

With the host ID, the serial number can be determined at the same time if your previous license repository is available in the license directory of the new Innovator version.

Context

You can determine the host ID and the serial number with the **Administration Program** (InnoAdministration.exe) of Innovator 16.0. This version's main license server must be running for this. This can only be started if your predecessor version's main license server has already been closed. (Both main license servers cannot be used on one computer at the same time.)

Some fonts contain characters that can hardly be distinguished from each other (e.g., 1, l and I). It is therefore advisable to send the host identification immediately to MID in an e-mail.

E-mail transfer may be supported by an automatic e-mail function in your system. In that case, the only thing you need to do is to select the **E-Mail** command. This way you can easily avoid any kind of misunderstanding.

Read the "[Determining Host Identification](#)" Help chapter for this.

How to proceed

1. If you use the same main license server host, stop the main license server of your predecessor version on the main license server computer.
You do not need to close the project license server for this.
2. Start the main license server (ino1srv.exe) of Innovator 16.0 on this computer.
3. Start Innovator 16.0's **Administration Program**.
4. Select **License>Main License Server>Host Identification**.
The dialog of the same name appears. The dialog displays a unique string as the host ID of your license server computer along with the serial number.
5. To create an e-mail with the displayed information to send to the MID order processing department, click on **E-Mail**.
An e-mail with the information from the dialog is created with your system's standard e-mail application.
6. Add information to your e-mail, particularly your sender information and send it to the MID order processing (Auftragsbearbeitung) department (<mailto:auftragsbearbeitung@mid.de>).
In response, you will receive (normally within one working day) a license key (for the further use of the previous licenses) and, if applicable, a license file (for a modified license set) by e-mail in accordance with your upgrade order.

7. Alternatively, send the information to the address below. If you choose to use the traditional postal service, make sure that the host ID reference can be clearly read.

MID GmbH
Order Processing
Kressengartenstrasse 10
90402 Nuremberg / Germany

MID GmbH will generate a host-specific license key (if you are continuing to use previous licenses) and, if necessary, a host-specific license file (in the case of a changed license set) in accordance with your upgrade order and return them to you by e-mail (normally within one working day).

8. To be able to use the previous Innovator version without restriction while waiting for your activation data, close the **Administration Program** and the license server of Version 16.0 and start the main license server of the previous Innovator version again.

Activating your Licenses on the Main License Server

Context

You can use the activation data which MID sent you to change the main license server's license to the current version.

- Change the license key in the administration program to be able to use your previous licenses and other constellations in the new version.
- If you have received an extended license repository, then load this license file in the administration program so that you can use your extended or modified licenses in the new version. Never copy this license file directly to the \$INOLIC directory, since doing so can overwrite your current constellations.

How to proceed

1. On your main license server host, stop the main license server of your predecessor version.
You do not need to close the project license server for this.
2. Start the main license server (ino1srv.exe) of Innovator 16.0 on this computer.
3. Start Innovator 16.0's **Administration Program**.
4. Log-in to the main license server with **License>Main License Server>Login** as license administrator.
The license conversion commands become active.
5. Select **License>Main License Server>Change License Key**, copy the received license key into the relevant field in the dialog, and confirm with **OK**.
You then have a run-capable Innovator 16.0 with the same license set.
6. If you have also received a **license file** from MID, select **License>Main License Server>Load License File**, select the received license file in the dialog, and confirm with **OK**.
You then have a run-capable Innovator 16.0 with a modified license set.

Adopting Your Own Base and Add-On Templates

The following contains important information which you should keep in mind when using your own base and add-on templates in version 16.0.

Tip

As a rule, we recommend that you always maintain your own templates in a separate "master repository" and export them from there to use in your projects. Add changes resulting from projects to your master repository to update them. As of Version 14.0, you use the customization profiles for your adjustments.

The advantage of using a master repository when upgrading is that you simply have to transform this one repository in order to be able to use your templates in the new version.

If you do not yet use a master repository for your own base and add-on templates (profiles) and want to use these from your predecessor version for models of the current version, then transform the repositories that contain these templates. You can then export the templates from the models transformed to Innovator 16.0 and transfer them to your master repository.

(You can find more information about model templates in the ["Preparing and Using Model Templates"](#) help chapter.)

Migration of Further User Data

This chapter describes how you can transfer your own plug-ins and engineering actions, user-specific data and further user data in order to use them in the new Innovator version too.

Specific Data for All Users

What is this Data?

Certain data is the same for all users or for certain user groups e.g. icons, checks or layouts. You can use the INODIR environment variable to define, for example, whether this data is to be stored locally (standard, possibly also distributed uniformly) or centrally (in a network directory).

- **Central Settings (Parameter Files)**

Innovator stores settings and certain files (e.g. parameter files, icons and Java files for engineering actions) in a local directory %PROGRAMDATA%\Innovator\<Version> as standard.

If you use a shared workgroup directory in the network, you can synchronize the data stored there with the new version.

Network type information corresponds to the INODIR environment variables.

As a general rule, you synchronize these user-specific settings with the newly installed data in the INODIR directory.

(Find out about the INODIR directory in the installation manual or in the help chapter [Installation](#))

- **Your Own Icons**

If you have specified a directory as the source for your own icons in the **Options** dialog in the **Resources** tab under **Custom Icons** for previous versions, then you can transfer this icon directory to the new version.

The icon directory is managed as an INOICON environment variable from Version 15.0. Adopt your icon directory from the DisplayOptions.xml file into the INOHOME directory from the previous versions.

The directory for your icons can have a total of four subdirectories for the individual image formats:

- <Resource>\default
You can store icons in BMP format in 16x16 pixel size here
- <Resource>\png_default
You can store icons in PNG format in 16x16 pixel size here
- <Resource>\png_large
You can store icons in PNG format in 32x32 pixel size here
- <Resource>\xaml
Icons are stored in XAML format here

(For more information, see the help chapter "[Using Your Own Icons](#)".)

- **Your Own Verifications**

If you have compiled your own verifications, these are managed as a part of the user-specific settings. (inoverify.xml)

(For more information, see the help chapter [Your Own Verifications.](#))

- **Your Own DDL Configurations**

If you have used your own DDL configurations, these are managed as a part of the user-specific settings. (ddllexport*.xml)

(For more information, see the help chapter ["Creating Your Own DDL Configuration".](#))

- **Your Own Engineering Actions**

The Java files for use in engineering actions and batch calls are located in the subdirectories of the \$INODIR/java directory.

(For more information, see the help chapter ["Managing Your Own Engineering Actions".](#))

- **Your Own Searches**

If you have created your own searches, these are managed as a part of the user-specific settings. (inoref.xml)

(For more information, see the help chapter ["Using Your Own Searches".](#))

- **Your Own Layouts for XML/HTML Documentation**

If you have made your own layout adjustments, these are managed as a part of the user-specific settings. (docu.css)

(For more information, see the help chapter ["Customizing the Layout of XML/HTML Documentation to Suit Your Corporate Identity".](#))

- **Your Own Mapping References**

If you have set-up your own model references for the ER-OO mapping, these are managed as XML files in the \$INODIR/java directory's subdirectories.

(For more information, see the Help chapter ["Customizing Mapping Between the Conceptual and Object-Oriented Model".](#))

- **Your Own Configuration of the Details Tool Window**

If you have created your own configurations for the Details area, these are copied to the new version implicitly with the migration of the corresponding models.

(For more information, see the help chapter ["Configuring the Details Tool Window".](#))

- **Your Own Plug-Ins**

Plug-ins are located in the <Innovator Installation Directory>/Plugins directory.

You cannot use plug-ins from the previous Innovator version in the new version. You require the version of the plug-ins that corresponds to the Innovator version.

(For more information, see the help chapter ["Creating Plug-Ins for Innovator".](#))

Reusing Specific Data for All Users

Prerequisites

You have made central user adjustments and created your own data for the use of Innovator.

Context

You want to reuse your central user adjustments in the new Innovator version.

- You transfer your own **checks, DDL configurations, searches, layouts and mapping references** as part of the user-specific settings in the \$INODIR directory. Transfer your data or synchronize it with the installed files.
- You transfer your own **icons** to the corresponding directory for the new Innovator version. To enable the use of the icons, this resource path must be entered in the options. You can propagate the icon directory as UserIconPath in the DisplayOptions.xml file in the \$INOHOME directory.
- Your own **Java projects** with the Java files for the use of engineering actions and in batch calls must be compiled against the Innovator SDK of the new version and made available in the subdirectories of the \$INODIR/java directory.

If you have received a customer-specific delivery for engineering actions from MID GmbH Support for the earlier version, you need this for the new version, too. Contact MID GmbH Support.

If you have received a customer-specific delivery from CSI or Consulting from MID GmbH, please contact them.

- **Plug-ins** are located in the <Innovator Installation Directory>/Plugins directory.

If you created the plug-in yourself, set the reference paths to the new version in your plug-in project and recreate your plug-in.

If you have received an on-demand plug-in from MID GmbH Support, contact MID GmbH Support.

If you have received a customer-specific plug-in from CSI or Consulting from MID GmbH, please contact them.

Plug-ins that are included within the scope of delivery for Innovator do not need anything done to them. The new version of the plug-in is installed.

Custom Data of Individual Users

The custom data of individual users generally relates to their specific working environment, so specific options and created perspectives.

Innovator saves these user settings in the \$INOHOME directory (by default, this is %APPDATA%/Innovator/<Version>).

In addition, files containing user-specific, computer-specific, and model-specific settings have arisen in subdirectories.

To ensure that these settings are retained for the user, the content of the \$INOHOME directory 15.2 should be transferred into the \$INOHOME directory of the Innovator 16.0.

The settings must be made for each work station.

Transforming Repositories and Model Versions

This chapter contains a description of general worksteps necessary for transforming the predecessor version 15.2 to Innovator 16.0.


Transformation Process

The Basics

This information is only relevant for users of Innovator 15.2 who want to upgrade to Innovator 16.0. The migration takes place for those projects (repositories or model versions) that you want to continue to use with the new functions and configuration possibilities of Innovator 16.0.

You can carry out transformation with the **Transformer** or using commands (transformer or PowerShell). Further steps may be required for migration.

Attention

- Models which you want to transform cannot generally return any critical verification messages; this is especially the case for verifications such as "Configuration violations" and "Unresolved model references".
-  The model servers of data repositories and the model versions that you want to transform must be shut down. Otherwise, an error message appears when you trigger the transformation.
- If your environment variable PATH contains file paths to Innovator, then change this to the current version's path before transforming.

Transformation Process

You need to transform repositories and model versions if you want to use functions which are available in Innovator 16.0 when working on your projects.


If not, continue running the projects in the existing version (see Help, chapter "[Structuring Licenses with Internal Projects](#)").

You can carry out the transformation process with the **Transformer** or using commands (transformer or PowerShell).

The installation process of the new Innovator version updates the program components. The transformation process makes extensive changes to model data that are accessed for the transformation if this is required due to further development of Innovator. This means you do not have to carry out any automated customizations.

Any customizations you may have already made are created in many situations and automatically converted. However, there are certain customizations that cannot be carried out as standard.

Restriction

-  As of version 16.0, **Transformer** can only transform repositories and model versions from version 14.1 onwards.
- If your source version is older, then you need to use the transformer for an older version (14.1 - 15.2) as an intermediate step, install it if necessary and then carry out the preparations and post-processing described in the applicable Help documentation.

Important Automatic Changes

General

User Roles Get "Edit Hyphenation" Privilege

During the transformation of repositories, the privileges are automatically extended by **Edit Hyphenation** for all user roles. This does not apply to those user roles that previously had no privileges or only the **Edit Annotations** privilege.

Innovator for Business Analysts

BPMN: Edge Type of Message Flows Changed

What is it about?

If a message flow is connected to a participant on at least one side, then the edge type rectangular is used. Only if a message flow is connected to a process content on source and target side, then a polygon is used as edge type.

What is done automatically?

During migration, the edge types are adopted according to these specifications. If the previous edge type does not fit these defaults, it is adopted as a user-defined edge type. The representation of the message flows is not changed by this.

BPMN: Predecessor/Successor Nodes for Displaying Processes

What is it about?

The predecessor/successor processes of an event node are displayed in a separate predecessor/successor node. The node can be moved independently of the event and its name. A position outside the process frame is also permissible.

The configuration of the display options required for this has moved from the event node to the predecessor/successor node. The **Display Predecessor/Successor Process** display option has moved from the event node to the diagram.

What is done automatically?

During the transformation, the additional nodes are automatically created and displayed at the previous position. The display options are automatically adopted.

Innovator for Enterprise Architects

Dynamic Viewpoints: Tracking Direction of Concept Connections

What is it about?

Dynamic concept diagrams can be built using start elements and path length over connected concept connections. The concept connections followed must be specified. Only concept connections that are allowed as diagram content are available. For the tracked concept connections, the tracking direction can be restricted to incoming or outgoing relationship. With "Default", both directions are tracked. If a concept connection is only allowed as diagram content and not as a tracked concept connection, it will be displayed in the diagram if necessary, but will not be evaluated for the calculation of the required content.

As part of the migration, all configured diagram contents are also automatically adopted as a tracked concept connection without restriction of the direction.

What is done automatically?

As part of the migration, all configured diagram contents are also automatically adopted as a tracked concept connection without restriction of the direction.

Transforming with the Transformer

Transforming Repositories

Prerequisites

You must shut down the repository model servers you wish to transform.

Context


Transformation can occur automatically in consecutive order for various repositories.

Note



You can use PowerShell commands ([see "Transformation Using Commands"](#)) to carry out parallel transformation of repositories.

How to proceed

1. Start the **Transformer** (`inotrans.exe`) in the new Innovator version.
2. Select the **Data Repositories** entry from the **Type** drop-down list.
3. Select the previous version in the **Source** group and use the  button to select the source directory if it is different from the directory suggested.
4. If necessary, enter a pattern for constraining repository selection.
5. Select one or more repositories from your previous version from the **Repository** list.
If you select precisely one repository, you can enter a new name in the **Target** group; if this is not the case, the repositories' names are adopted.
6. Select the target directory (which differs from the source) for the repositories from the **Target** group.
7. If you have selected precisely one source repository, you can enter a new name for Innovator 16.0's target repository in the **Repository** field.
8. Finally, click on **Apply** to start the transformer.

The transformer converts the source repository/repositories into the data format used for Innovator 16.0.

You then need to adopt the content of the change set when transforming the data repository. An additional progress bar appears for this.

Once the transformation has taken place, check whether your model data has been successfully adopted into the new repository.

Transforming Model Versions

Prerequisites

You must shut down the model version servers you wish to transform.

Context

As you would for repositories, you can also use the transformer when transforming model versions of managed models. Select the appropriate **Type**.

All managed models that exist in the project directory are transformed in a single step for the **model versions** type.

Note



The model versions are also automatically transformed when you transform the repository using the PowerShell command; this is because the command refers to the entire project path (INOPRJ)([see "Transformation Using Commands"](#)).

Transformation Using Commands

Attention



You must shut down the repository and model version model servers you wish to transform.

Using the Transformer's Command Line

To use the transformer in the command line, please call the `inotr.exe` program (not `inotrans.exe`) with the following parameters. (Linux: use `-not /`)

Restriction



The model directory's `ivm` source directory name must also be retained if you wish to transform it as well.

- Data repository
`inotr [/d icw] <source repository> <target repository>`
- Model version directory
`inotr /d versDir <source directory> <target directory>`
- Display of supported types and their versions
`inotr /l`
- Copy data repository, if version is up-to-date
`inotr /c`
- Display of Innovator program version
`inotr /v`

Using PowerShell Commands

It is also possible to carry out the transformation using a PowerShell command.

This may make migration length considerably shorter when migrating large amounts of repositories thanks to parallel processing ([siehe "Automatisierung administrativer Aufgaben"](#)).

```
Update-InnoDataDirectory -InoPrjOld <source-InoPrj> -InoPrjNew <target-InoPrj> -  
ParallelTransformations <number of parallel transformations> -LogDirectory <dir-  
ectory for temporary output>
```

Please take both the number of physical cores and the amount of space available into consideration when establishing parallel transformations (default is 1).

Preparing the Update of the Configuration

When is this preliminary work necessary?

A version change may be associated with the relocation of elements of the configuration. Then it is recommended to take measures before importing certain migration files, e.g. to avoid the creation of numerous placeholders.

Innovator for Information Architects

Application Configurations for BI Plug-ins

Prerequisites

The transformed model is a Business Intelligence model.

Context

The configurations of the BI plug-ins are read from application configurations as of version 16.0.

After transforming BI models from previous versions and before importing the migration profiles, the `SystemModelManagement` model, which previously contained the configuration, must be deleted to avoid the creation of numerous placeholders.

Open the BI model after the transformation and select the `SystemModelManagement` submodel in the model structure. Delete the submodel with the command **Delete from Model (Shift+Del)**.

Then you can update the BI migration profiles using the `Migration Business Intelligence Modeling.aob` migration file.

Loading Configuration Extensions

Using New Configuration Options

Version migration initially essentially adopts the previous model configurations.

Configuration modifications may mean that certain customizations need to be carried out upon transformation; these customizations are then automatically made by the transformer.

New configuration options are not automatically entered in the migrated models. If you also want to use these configuration extensions for your migrated models, then you need to import the respective migration files (`$INODIR\config\Migration *.aob`, `$INODIR C:\ProgramData\Innovator\16.0\` as default) into the configuration.

Migration Files Are Partially Language-Dependent

There are two types of migration files:

- Migration files with a language abbreviation in parentheses at the end of the file name should be used for models with the corresponding model language.
These are currently only migration files for application configurations which have a standard configuration for corresponding plug-ins. You should import these migration files if you use the respective plug-in. Please note that application configurations will only be shown in the model editor.
`$INODIR\config\Migration ApplicationConfiguration * (de|en).aob`
- Migration files without a language abbreviation contain profiles and/or application configurations and can be used regardless of which language. They can be used in both model languages to update the profiles included within the scope of delivery of Innovator and used in your models.

Updating the Profiles and Application Configurations

Prerequisites

- Administrator rights for the model
- Transformed model

Context

In the course of a migration to a new Innovator version (XX.X), models must be transformed in order to be able to use the models in the new version. In the process, non-critical updates are carried out automatically.

In order to be able to use new modeling options, it is necessary to reload migration files in the model editor.



In the **Update Configuration** dialog, you are specifically offered the correct migration files for the individual profiles and application configurations.


First, import the  conflict-free migration files step by step from top to bottom.

The import of migration files can change the state of other profiles because corresponding updates have been made.


Restriction



For all   profiles delivered by MID that you have changed, you should first outsource the changes to a Customization profile. The Customization profile is imported into the MID profile to make your changes available. You can then update the cleaned-up MID profile.

 To identify your changes, it can be helpful, for example, to compare the model configurations of a model with the changed profile and a model with the profile from the current installation in the **Align Models** editor. With the **Configure** privilege the profiles can be compared in this editor in the **Compare** mode to identify the own changes.

How to proceed

1. Select the **Model>Administrative Tasks>Update Configuration** command.
The dialog of the same name appears.
2. In the **Migration Files** section, select the top  conflict-free migration file.
For the expanded entry of the migration file, it is specified which profiles and/or application configurations will be updated during the import.
3. To start the update, click on **Import Migration File**.
The states of the profiles and/or application configurations are updated according to the imported content.
4. Repeat steps 2 and 3.
5. If the **Delete Obsolete Profiles** button has become active, then you can use it to safely delete unreachable configuration parts including profile imports that have become useless.
6. To reload the updated configuration in the model, select the model root in the model editor and press [F5].

Postprocessing after Transformation

You may have to postprocess models once they have been transformed so that all functions can be used.

General

Possible Reworks due to Agent Directory

When is Rework Necessary?

When transforming the model versions with the **Transformer** (inotrans) or via PowerShell command, all managed models in the \$INOPRJ project directory are converted to the new Innovator version. In the process, the agent database is also copied to the corresponding directory of the new Innovator version (see "[Transforming with the Transformer](#)").

When transforming the model versions, an attempt is made to update the directory name correctly. This may not succeed if a different computer is to be used or more than one agent directory exists. In these two cases, rework is required.

What is it about?

The database of an agent (InoAgent) stores, among other things, the list of model servers that are booted when the agent is started, as well as the quotas of the managed models and the agent itself.

The agent database is called `agent.sqlite`. It is located in \$INOPRJ subdirectories `/ivm/logs` with the name structure `inoagent.<agenthost>.<agentport>`. Where `<agenthost>` is the machine name where the agent is running, and `<agentport>` is the port of the agent on that machine.

If the agent is running on the same machine in the new and old Innovator versions, then only the `<agentport>` name component needs to be updated. This is done automatically during migration if the updated directory does not already exist (e.g. due to previous migration of a repository) and if there are not multiple agent directories for `<agenthost>` in the project directory.

Here, the transformer makes the assumption that the port of the agent in the new version is the port of the INOHOST variable plus 3. For example, if the INOHOST variable in the new version has the value "inno.16000", then the port "16003" is used for the agent.

The first time the database is loaded by the agent of the new version, the agent database is migrated. The settings of the previous version are available in the new Innovator version.

Use of Another Computer

Automatic updating of the agent directory is not possible if another computer is used. In this case, the `<agenthost>` name component must additionally be adjusted manually.

Multiple Agent Directories in the Project Directory

If there are multiple agent directories (`inoagent.<agenthost>.*`) in the project directory, then a message appears. The correct directory must be determined and renamed manually. The other directories must be deleted.