CONFORMANCE CHECK WITH ARIS PROCESS MINING

VERSION 10.0 - SERVICE RELEASE 22 AND HIGHER

APRIL 2023

Contents

1   How to perform a process conformance check

ARIS Portal is the main repository for modeling target (to-be) processes. These reference processes are modeled using **BPMN** models. ARIS Process Mining is used to discover and analyze executed processes that are imported from source systems, such as an SAP system. The process conformance analysis compares the reference process with the actually executed process instances and calculates relevant measures and dimensions.

Before you can perform a process conformance analysis, you must connect ARIS Process Mining with ARIS and transfer the reference process data to ARIS Process Mining. The transferred data is also available for later analyses. You do not have to perform this procedure for every conformance check. You must perform it only if you change the reference process data that you want to analyze, for example, after a process redesign.

To make the processes comparable, you must map the tasks of the reference process to the activities of the executed process. This mapping is the basis for your process conformance analysis using the **Conformance** app.

Procedure

1. Integrate ARIS and ARIS Process Mining for conformance analysis.
2. Transfer the process data from ARIS to ARIS Process Mining.
3. Create an activity mapping .
4. Use the **Conformance** app for your process conformance analysis.

You have performed a process conformance check.

2   Basic terms

This section describes the most important terms used when a process compliance check is performed. Knowing the basic terms helps you to understand how ARIS Process Mining works.

2.1   Process conformance

A case is conformant if it matches against the reference process step by step. A case is non-conformant if any occurrence of an activity is inconsistent with the reference process.

A calculation provides a conformance measure for each case, with the possible values **conformant** and **non-conformant**. The **conformance rate** shows the percentage of conformant cases in a given selection. For example, a conformant rate of 0.87 would mean that 87% of the available cases conform to the reference process.

The ARIS reference model establishes the sequence and logic in which tasks should be executed. The model can contain a great number of task sequences. For example, the model may contain splitting parallel gateways. The branches emanating from such a gateway may be executed in any order, so that many task sequences are compatible with such a structure. Joining gateways, on the other hand, are synchronization points: Such a gateway indicates that all tasks from the gateway's incoming branches must be completed before any task from the gateway's outgoing branches can be executed.

The conformance check converts an event log into a linear sequence of activities. It then determines whether the activity sequence corresponds to an order of tasks that is in accordance with the reference model. In addition, for the activity sequence to be considered conformant with the model, the last step must terminate in one of the end events that have been modeled for the process. This implies that unfinished processes (that is, processes that require further imports from the source system to be completed) are most likely classified as non-compliant.

The conformance check distinguishes different reasons for the non-conformance of cases. These reasons are called conformance issues (page 3).

2.2   Fitness

Fitness expresses how well a case complies with the reference process. The fitness value quantifies the extent to which the activities of a case match the reference process. A fitness value of 100 is assigned to a conformant case.

2.3   Conformance issues

The conformance check distinguishes different reasons for the non-conformance of cases. These reasons are called conformance issues.

There are several types of conformance issues.

Example

The following figure shows a schematic BPMN process. The process is the reference model for the examples of the non-conformance types described below.
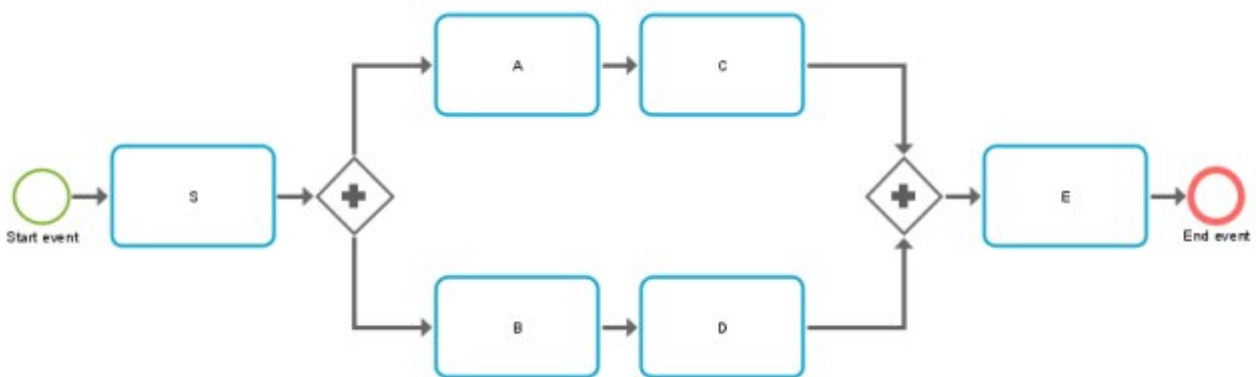
- A particular pair of activities occurs in the wrong order.

  Example

  Non-conformant activity order: S,C,A,B,D,E

- The activity sequence starts with a wrong activity.

  Example

  Non-conformant activity order: E,A,C,B,D,E

- All steps of the activity sequence are completed, but no end event is reached. This indicates an incomplete process.

  Example

  Non-conformant activity order: S,A,C,B,D

- An activity in the activity sequence does not match any model task.

  Example

  Process type Z occurs. If Z is not part of the model, any process that includes Z falls into this category.

  Non-conformant activity order: S,A,C,B,Z,D,E

Note that due to the algorithmic complexity, the conformance issues are reported on a best-guess basis. This means that there may be more reasons for non-conformance than ARIS Process Mining reports.

3 Transfer reference process

You can transfer a BPMN model as reference model from ARIS to ARIS Process Mining to perform a process conformance check.

For better auditability and understanding of the logic used for the conformance check, the BPMN model is transformed into a reduced transfer model. This transfer model contains only object types and connections that are relevant for the conformance check. The transfer model is available for you to review the logic that has been sent to ARIS Process Mining. It is stored separately and has no effect on the original BPMN model.

In order to serve as reference model for the conformance check, the transfer model is transferred to a data set in ARIS Process Mining. The data set should contain the data of the processes on which you want to perform the conformance analysis.

Note that the BPMN process must follow certain modeling conventions (page 6) that are supported by ARIS Process Mining. If the reference process does not conform to these conventions, an error log model is created. The invalid reference process is not transferred to ARIS Process Mining. You can open the error log model to view the error description. You can then adjust the original BPMN process accordingly.

Prerequisites

You have created a data set for your conformance analysis in ARIS Process Mining.

Procedure

1. Open a **BPMN** process model in ARIS.

2. Open the **Model** tab.

3. Click the 🖥 **ARIS Process Mining** icon.

4. Click ⛢ **Transfer as reference process to ARIS Process Mining** in the drop-down menu.

5. If the **BPMN** model contains more than one pool, a corresponding dialog opens. Select a pool and click **Next**. The transfer model may only contain content from one pool.

6. In the **Transfer reference process** dialog select the data set to which the reference process is to be transferred. Only the data sets for which you have write permissions are displayed. You can only select data sets that contain data.

7. Click **Transfer** to start the transfer process.

8. After ARIS has transferred the reference process, you can open ARIS Process Mining to create an activity mapping (page 17). To start the activity mapping in ARIS Process Mining, click **Open ARIS Process Mining**.

You can also create the activity mapping later. Open ARIS Process Mining and navigate to the data set containing the transfer model. For more details, see chapter create an activity mapping (page 17).

9. To view the reduced model that has been transferred to ARIS Process Mining, click **Open transferred model**. The model is opened on a new tab.

10. If the reference model does not match the modeling convention, an error dialog is opened.

    a. Click **Show details in model** to view the created error log model.

    b. Click **Show details as list** to view the error description.

The BPMN process model is transferred to ARIS Process Mining and stored as reference model in the selected data set.

After the model has been transferred to ARIS Process Mining, you can create an activity mapping in ARIS Process Mining (page 17).

Example
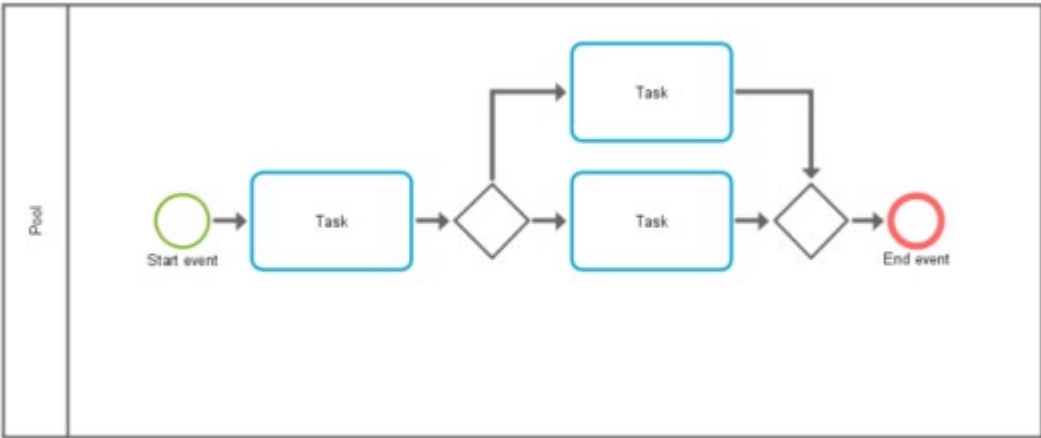
BPMN process model opened in ARIS to be transferred to ARIS Process Mining as reference model.
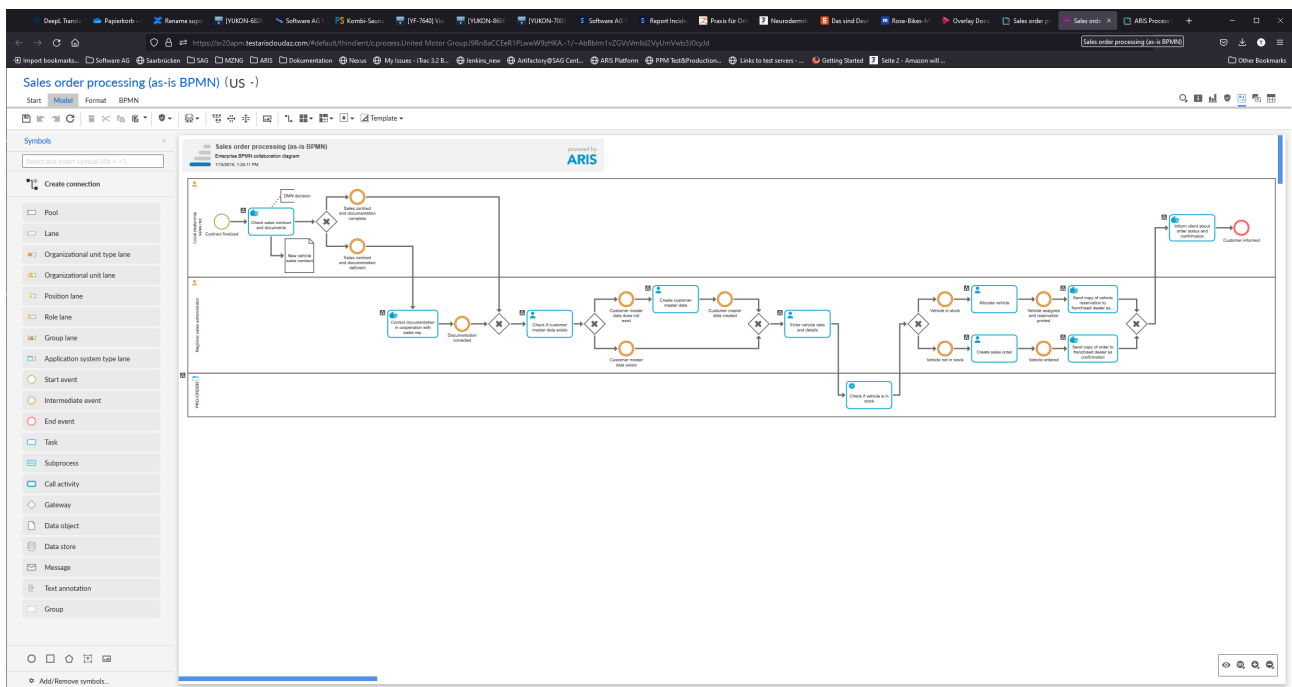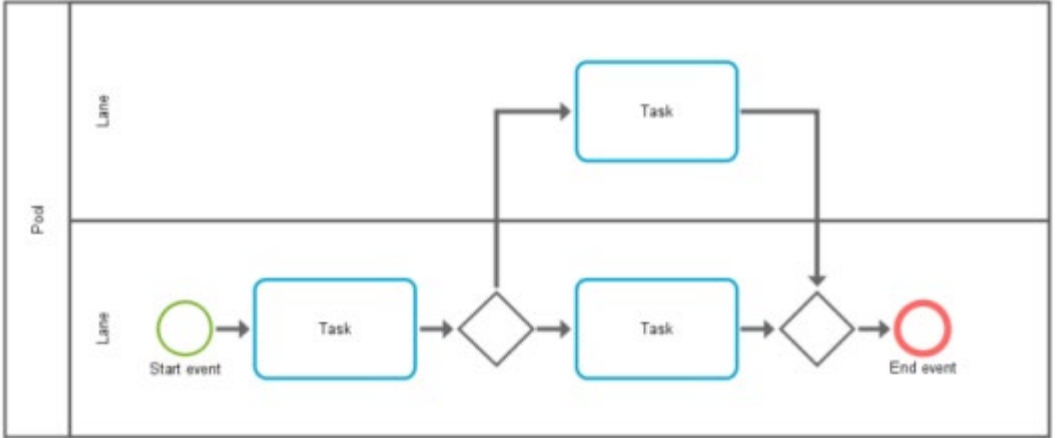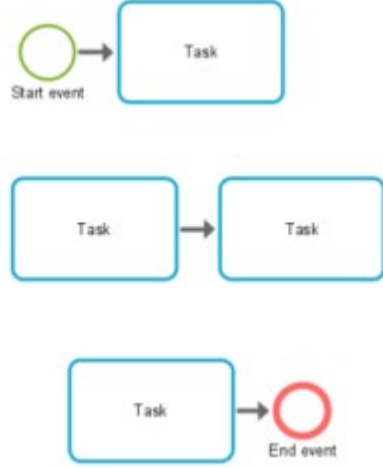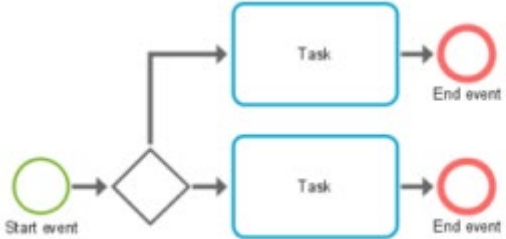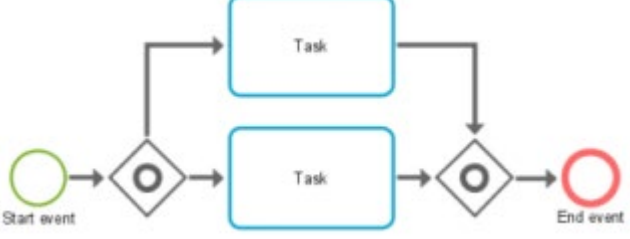
3.1 BPMN modeling convention
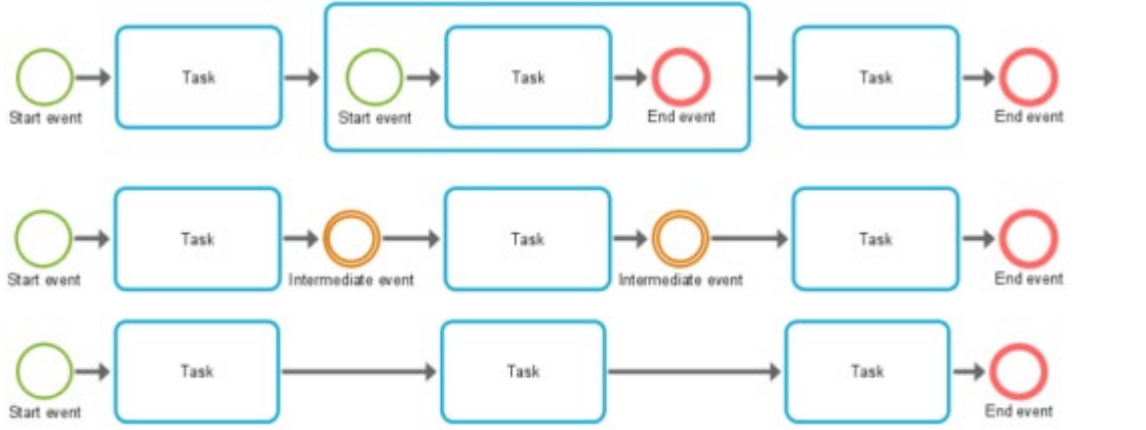
The reference model created in ARIS must conform to the following modeling conventions.
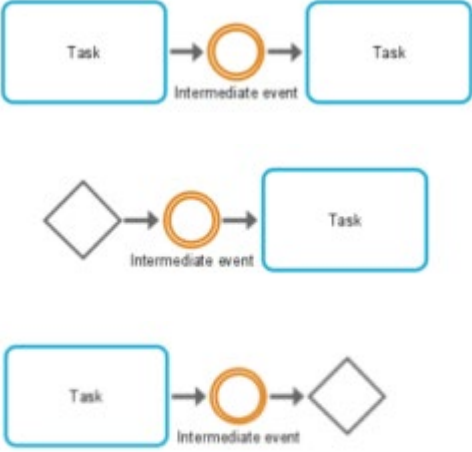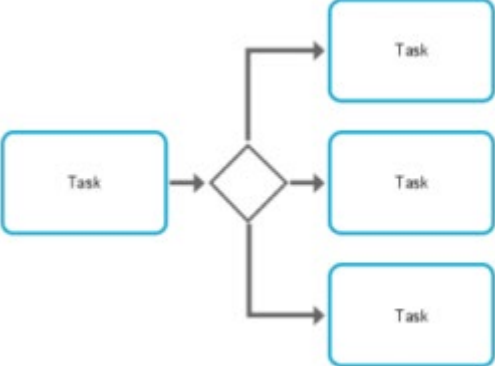
Context	Convention	Reason / example
Model types	The following BPMN models are currently supported: ▪ Enterprise BPMN collaboration diagram ▪ Enterprise BPMN process diagram ▪ BPMN process diagram (BPMN 2.0) ▪ BPMN collaboration diagram (BPMN 2.0)	
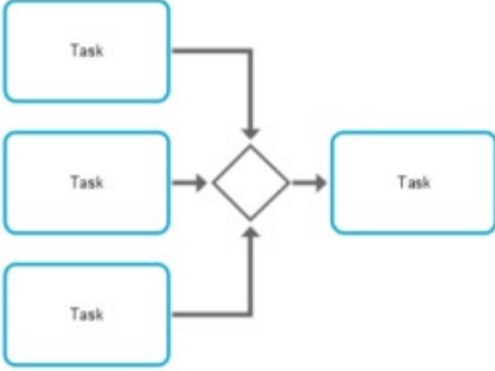
Context	Convention	Reason / example
Object types	Object types are reduced to: ▪ Start event ▪ Intermediate event ▪ End event ▪ Activities / Tasks ▪ Inclusive gateway ▪ Exclusive gateway ▪ Parallel gateway	
Connection types	Connection types are reduced to sequence flow connections.	
Pools	Only items from exact one pool are considered.	

Context	Convention	Reason / example
Lanes	All lanes will be integrated.	
Start event	Only start events with any start event symbol are allowed. Only one start event is allowed. Start event have exactly one outgoing connection. Note that the structure of multiple nested start events is simplified and partially consolidated for the transfer model.	

Context	Convention	Reason / example
Tasks	A task has exact one incoming and one outgoing connection. Only tasks that are somehow reached from the start event are considered (no isolated tasks).	
End event	Only end events with end event symbol are allowed. More than one end event is allowed. End event have exactly one incoming connection. Note that for inclusive gateways, the rules of 'closed brackets' must be followed (see below).	

Context	Convention	Reason / example
Start and end events at embedded (sub)processes	Only start events with start event symbol are allowed Only one start event is allowed. Only one end event is allowed. Only end events with end event symbol are allowed. Result in intermediate event. Note that embedded subprocesses are included in the reference process but assigned subprocesses are not, as they are not on the same model. If you collapse an embedded subprocess, it is converted into an assigned subprocess, although it may be shown like an embedded subprocess after expanding it afterwards.	

Context	Convention	Reason / example
Intermediate events	Intermediate events are allowed but will be eliminated in the transfer model.	
Split gateways	Split gateways have exactly one incoming and more than one outgoing connection.	

Context	Convention	Reason / example
Join gateways	Join gateways have more than one incoming and exactly one outgoing connection.	

Context	Convention	Reason / example
Cycles and loops	Self-loops are not allowed. Cycles are allowed, according the following rules: Since the sequence of split and join gateways is usually reversed (the first in the model is the join gateway and the second is the split gateway), exclusive gateways are recommended. Any gateway that is opened within the cycle must be closed within the cycle.	

Context	Convention	Reason / example
OR-gateways: ▪ closed bracket ▪ nested gateway brackets	An inclusive join gateway (OR gateway) and the next preceding split gateway create a "closed bracket". Each 'closed brackets' split and join gateway must have direct and completed branches between both with not overlapping or crossing connections. Each join gateway must close all branches opened with the next predecessor split gateway. All opened branches must be closed in a 'closed bracket' style. 'Closed bracket' style split-join sets can be nested.	

Context	Convention	Reason / example

Context	Convention	Reason / example
OR-gateways: brackets with second way out	An inclusive join gateway (OR gateway) and the next preceding split gateway ('closed brackets') must not have a 'second way out' so that the process may leave the 'closed bracket'. This modeling can result in conforming cases not being identified as such, but being presented as non-conformant.	

4 Create an activity mapping

In order to evaluate the process flow in ARIS Process Mining   in line with the reference process, you must map the modeled tasks of the reference process to the activities of the source system.

The mapping is created based on the names of modeled tasks and activities from the source system. Various modeled tasks of the reference process with equal names are reduced to one task and treated as one accordingly.

The source system may provide activity names that differ from the modeled task names in ARIS. If modeled tasks and provided activities have equal names, they can be mapped automatically.

Prerequisites

A data set has been loaded from the source system.

You have transferred the reference process to the data set.

Procedure

1. In ARIS Process Mining, open the data set that contains the process for which you want to create an activity mapping. Data   sets are stored in the **Data collection**.

2. Click **Compliance** on the data set panel. The **Compliance** section opens with the **Conformance** page. The **Compliance** section opens with the **Conformance** page. The page lists all reference process tasks on left side and data set activities on the right side.

3. You can filter the elements in the lists. Click the   **Filter by mapping status** icon and select a filter.

4. Click   **Automatic mapping** to automatically map the tasks and activities of the same name. If there are no identical names, the option is not available.

5. You can map tasks and activities manually.

    a. First select a task or an activity on one of the two sides. The selected element is placed at the top of the list, all other elements are grayed out.

    b. Select the element to be mapped according to your first selection on the other side. The mapped elements are connected and placed on the same line below the unmapped elements.

    c. To undo a mapping, move the mouse pointer over a mapped element and click the **Reset** icon.

6. You can mark a task or an activity as   **disregarded**. The marked element is not used for the conformance analysis. Move the mouse pointer over an element and click   **Mark as disregarded**.   The element is displayed crossed out.

To undo your selection, move the mouse pointer over an element and click the **Reset** icon.

7. You can mark an activity as **unwanted**. The marked element is considered in the analysis as an "**is unwanted**" issue type (page 3). Move the mouse pointer over an element and click **Mark as unwanted**. The element is displayed crossed out.

   To undo your selection, move the mouse pointer over an element and click the **Reset** icon.

8. You can add an activity to the data set if, for example, there is a task that you want to include in your analysis, but there is no matching activity yet.

   a. Click **+ Add activity**.

   b. Enter a name and click **Add**.

   The new activity is added to the activity list. To delete the activity, move the mouse pointer over the activity and click the **Delete** icon.

9. Click **Activate mapping** to save and activate your mapping for the conformance check.

10. Click **Load data** to (re) calculate the conformance. ARIS Process Mining calculates the respective conformance of the cases.

    If you now change your mapping again, you must reactivate the mapping and reload the data into the data set.

You have created an activity mapping and loaded it into the data set.

You can now use the **Conformance** app to analyze the conformance of your processes. (page 20)

You can remove the reference process from the data set, for example, if you loaded a reference process into the wrong data set and want to revert this. Click **Remove reference process** and click **Remove** to confirm. The reference process and the mapping are deleted from the data set, and cannot be restored.

Example

Activity mapping of the ARIS reference process and ARIS Process Mining activities.

5   Use the Compliance app

You can use the **Compliance** app to work with process conformance analyses and compliance rule checks. The **Compliance** app is a standard app and ready to use. You can add the app to your analysis if you have created your activity mapping and loaded it to the data set (page 17) or you have created a compliance rule.

Prerequisites

You have created an activity mapping (page 17) or a compliance rule.

Procedure

1. Create an analysis for a project that contains the data set with the created activity mapping (page 17) and/or compliance rule set.

2. Add the **Compliance** app to the analysis.

The **Conformance** app is added to your analysis and ready to use.

▪   The Overview (page 20) tab shows the most important compliance criteria of your analysis.

▪   On the Conformance (page 22) tab, you can dive deeper into your conformance analyses.

▪   On the Rule checks tab, you can check your processes for rule compliance.

You can also set the time dimension and scaling (page 24) and select the time frame   (page 25)for all your compliance analyses.

5.1   Overview

The **Overview** tab provides a unified view of conformance and rule check results. This view lets you quickly determine the compliance of your cases. The tab shows the most important compliance criteria of your analysis.

▪   Number of conformant and non-conformant cases

▪   Number of compliant and non-compliant cases

▪   Conformance rate (page 2)

▪   Compliance rate

In the **Detailed compliance** view in the lower section of the **Overview** tab, you can display both the conformance and compliance check results together, or only the conformance or compliance check results at a time.

SET SELECTIONS

You can set selections in the individual charts. All other charts on the tab are filtered according to your selection. As with all other analysis apps, you can use selections and filters

in the **Conformance** app. For example, you can save and combine selections. For details, see the chapter Filter processes using selections.

CONFORMANT VERSUS NON-CONFORMANT AND COMPLIANT VERSUS NON-COMPLIANT CASES

The pie charts show the total number of conformant/compliant (marked blue by default) and non-conformant/non-compliant (marked red by default) cases. The corresponding column chart shows the distribution of the cases within a period.

You can select the individual parts of the pie chart to filter the corresponding cases.

You can also filter the period in the column chart. Select a column to filter the cases at a specific point in time. When you select a column, a slider is displayed. Move the slider with the mouse pointer to set a period on the timeline.

CONFORMANCE RATE AND FITNESS VALUE

The **Conformance rate** and the **Fitness** chart display their values corresponding to your selection, for example, the conformant cases at a selected time. If you have not filtered any cases, the values apply to all cases. The corresponding line charts show the distribution of the conformance rate or fitness value within a period.

As with the column chart, you can select a point in time, or you can set a period using the slider. The slider is displayed as soon as you select a point in the line chart.

Example
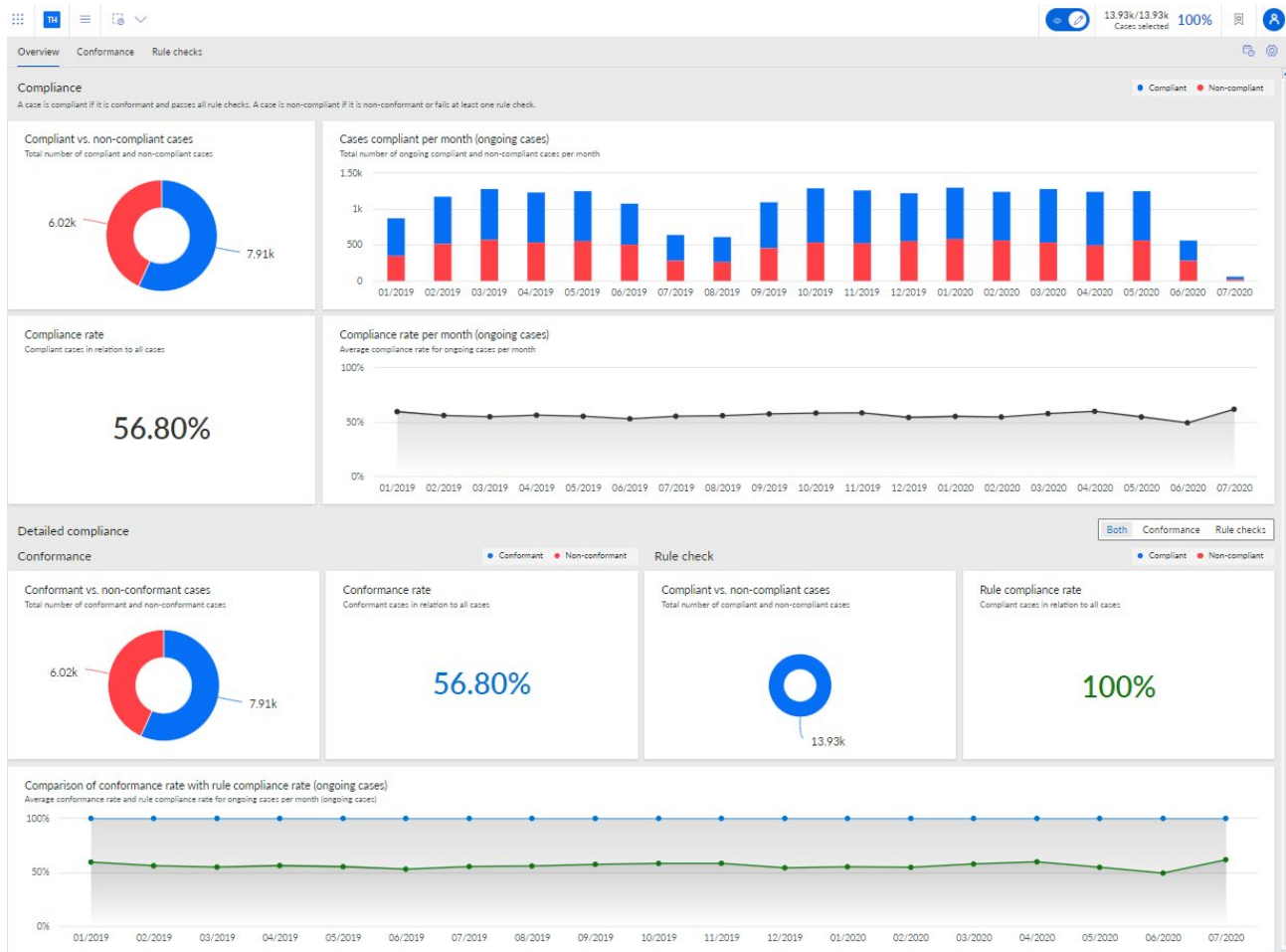
5.2   Process conformance

The **Conformance** tab allows you to dive deeper into your process conformance analyses by examining the individual conformance issues. You can select individual conformance issues that have been identified by ARIS Process Mining and display the corresponding conformance measures. The app provides all relevant criteria for your conformance analysis, such as Conformance rate (page 2), Fitness (page 2), and Conformance issues (page 3).

The tab shows the relevant conformance measures in the first line of the dashboard.

- Total number of non-conformant cases

- Total number of individual issues

- Throughput time of conformant and non-conformant cases

- Activities per conformant and non-conformant cases

The **Conformance issue types** chart graphically shows the proportion of different issue types for all cases, such as **Invalid start activity**, **Invalid end activity**, and **Unexpected consecutive activities**.

The **Individual conformance issues table** lists the individual conformance issues with the corresponding measure values. You can select one or more conformance issues to filter your analysis accordingly.

The **Conformance rate** and the **Fitness** chart display their values corresponding to your selection, for example, the conformant cases at a selected time. If you have not filtered any cases, the values apply to all cases. The corresponding line charts show the distribution of the conformance rate or fitness value within a period.

As with the column chart, you can select a point in time, or you can set a period using the slider. The slider is displayed as soon as you select a point in the line chart.

The **Variants and their Fitness** diagram shows the different variants with their specific fitness. When you move the mouse pointer over a variant in the column chart, a tooltip is displayed. It shows, for example, 25 cases and a fitness rate of 87. This means that there are 25 cases of this variant with a fitness rate of 87.

Example
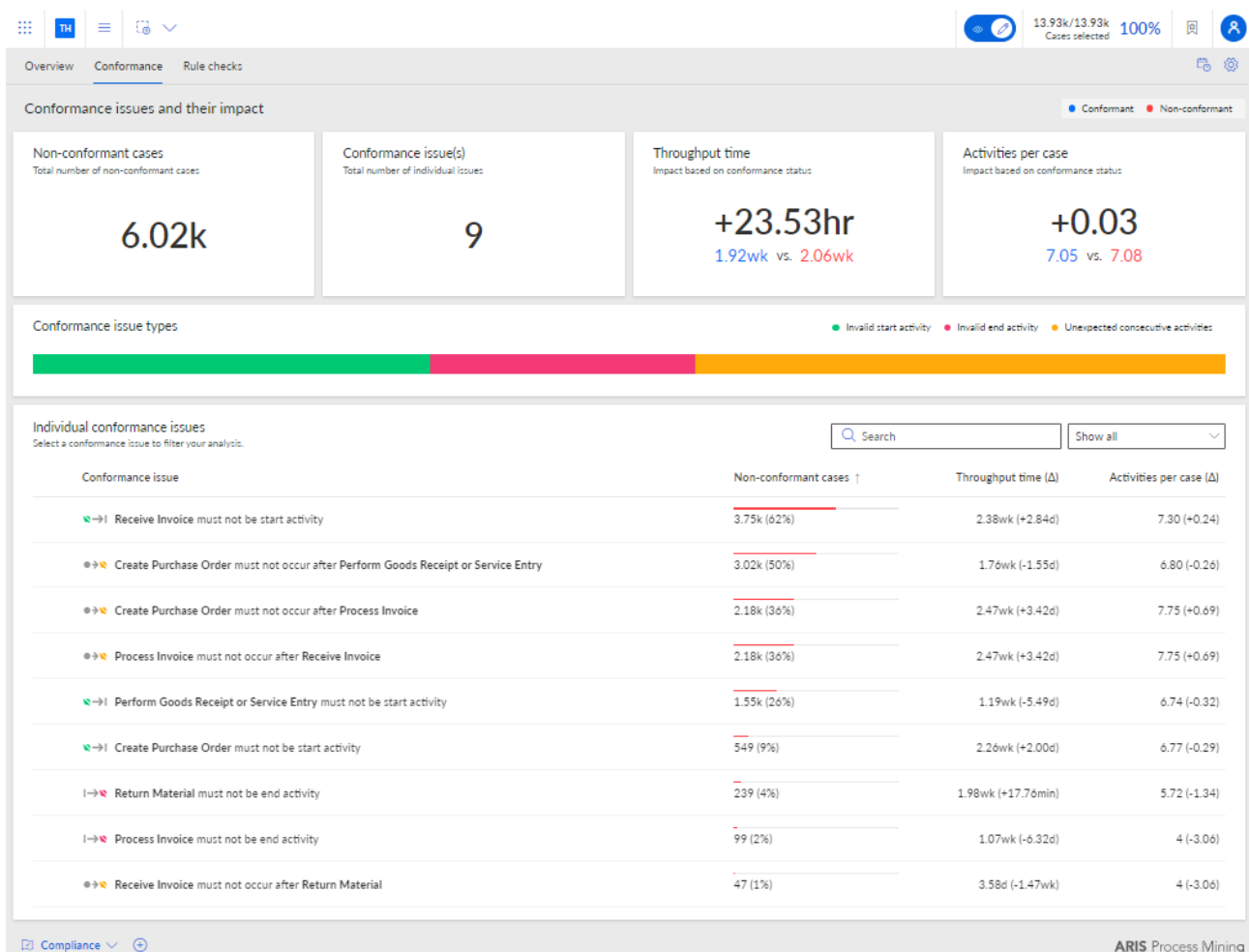
5.3   Set time dimension and scaling

You can select the time dimension for case-related graphs, time scale for graphs, and enable automatic scaling for key metrics and current cases.

Procedure

1. Click   **Options** in the app header. The **Options** panel opens.

2. In the **Time dimension for case-related graphs** drop down-menu, you can select whether you want to analyze ongoing or started cases. Started cases are cases whose start time is in the time period under consideration. Ongoing cases are cases that have not yet been completed in the considered period.

    For example, if the considered period is January, the started cases are all cases that were started in January. Ongoing cases are all cases that are not yet completed in January.

3. In the **Time scale for graphs** drop-down menu, You can set the scaling of the period displayed in the charts.

4. Enable the **Auto-scale Y-axis** option to enable automatic scaling of the values displayed on the Y-axis.

5. To set your settings as default, click **Set as default**. The option is available only if one of the options here has been changed.

Your settings are applied.

Example

Options   ✕

Time dimension for case-related graphs

| Started cases | ⌄ |

Time scale for graphs

| Month | ⌄ |

Scale of key metrics and current cases

Auto-scaling of Y-axis   ◉

| Set as default |

5.4   Select time frame

You can change the time range to filter the data to be analyzed.

Procedure

1.   Click   **Time frame** in the app header. The **Select time frame** panel opens.

2.   Select a predefined time range, such as **This week** or **Previous month**.

Your settings are applied.

Example

Select time frame   ✕

Days

Last 7 days of data set

Last 14 days of data set

Last 28 days of data set

Weeks

This week

Previous week

The week before last

Months

This month

Previous month

Previous 3 months

Previous 6 months

Previous 12 months

Quarters

Quarter-to-date (QTD)

Q3 2021

Q2 2021

Q1 2021

Q4 2020

6 Integrate ARIS and ARIS Process Mining for conformance analysis

The integration of ARIS and ARIS Process Mining allows you to perform a conformance analysis.

The procedures for configuring the integration depend on the ARIS edition - **Basic**, **Advanced**, or **Enterprise** - that you are using.

ARIS BASIC AND ADVANCED EDITION

If you are using ARIS **Basic** or **Advanced**, follow the configuration steps described in chapter Integration of ARIS Basic and Advanced (page 27).

ARIS ENTERPRISE

If you are using ARIS **Enterprise**, follow the configuration steps described in chapter Integration of ARIS Enterprise (page 36).

6.1 Integration of ARIS Basic and Advanced

6.1.1 Prerequisites

PREREQUISITES FOR ARIS PROCESS MINING

You have the **User admin** function privilege.

You have the **Data admin** function privilege.

PREREQUISITES FOR ARIS BASIC AND ADVANCED

You have the **Project room management** privilege.

NOTE

To be able to use the variants transfer from ARIS Process Mining to ARIS, a user account with the same name and the email address as user name must be available in ARIS Process Mining and ARIS.

6.1.2   Configure the integration

To configure the integration of ARIS Process Mining and ARIS, open both applications in parallel in separate web browser tabs. For some settings, you need to copy data from one application to the other.

Procedure

OPEN THE ARIS INTEGRATION PAGE IN ARIS PROCESS MINING

1.   Open ARIS Process Mining.
2.   Click the ⣿ **Navigation menu** icon > **Administration** in the program header.
3.   Click **ARIS integration** in the **Administration** panel.

The **ARIS integration** page opens.
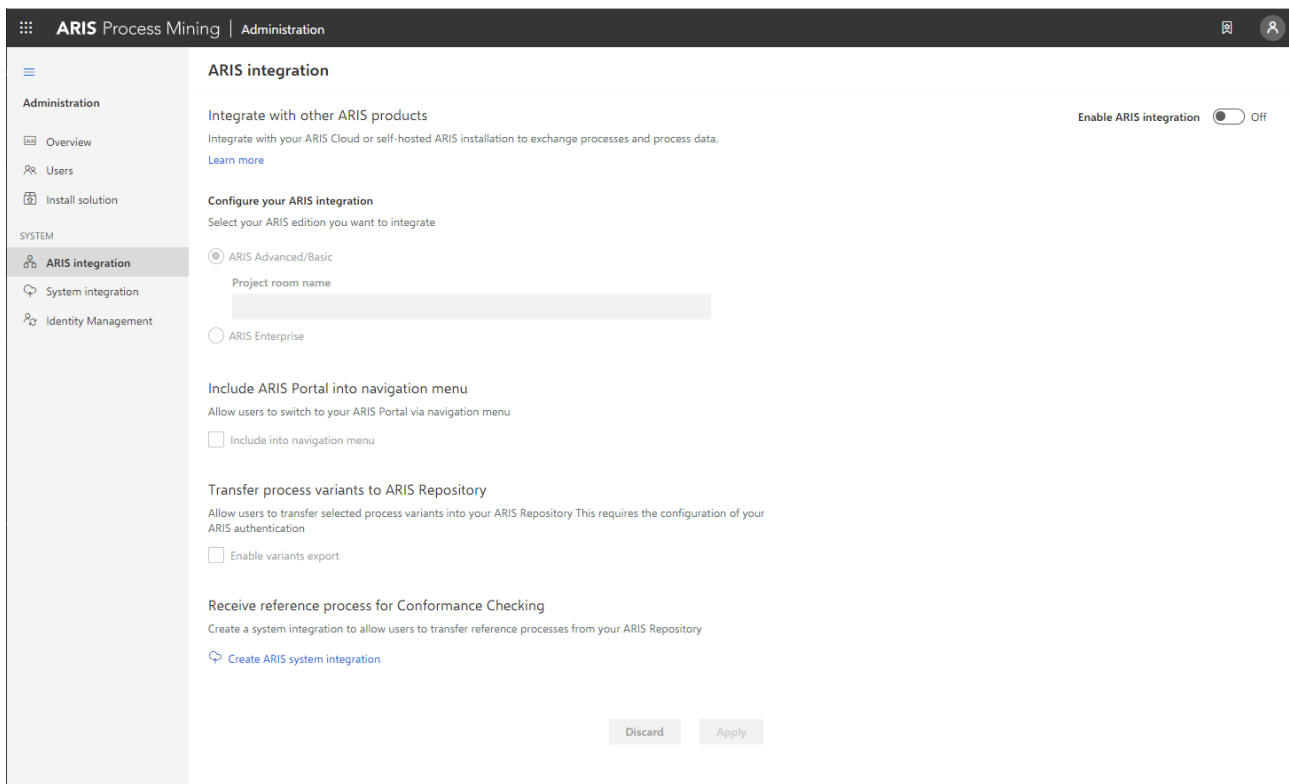
CONNECT ARIS PROCESS MINING TO ARIS AND ENABLE THE LINK TO ARIS

Specify the ARIS project room that you want to connect to and enable the link to ARIS that allows you to jump from ARIS Process Mining to ARIS.

1.   Enable the **Enable ARIS integration** option.
2.   Under **Configure your ARIS integration**, enable **ARIS Advanced/Basic**.

Enter the project room name you want to connect to, for example, my_ARIS_ProjectRoom.

3. Under **Include ARIS Portal into navigation menu**, enable the **Include into navigation menu** option.

4. Click **Apply**.

The link to ARIS is enabled.

Keep the **ARIS integration** page open.

To display the **ARIS Portal** link in the **Navigation menu** (⁛), you must reload the ARIS Process Mining tab. It may take a few minutes before the link is available in the menu.

Example

Connect ARIS Advanced or Basic and enable the **ARIS Portal** link.
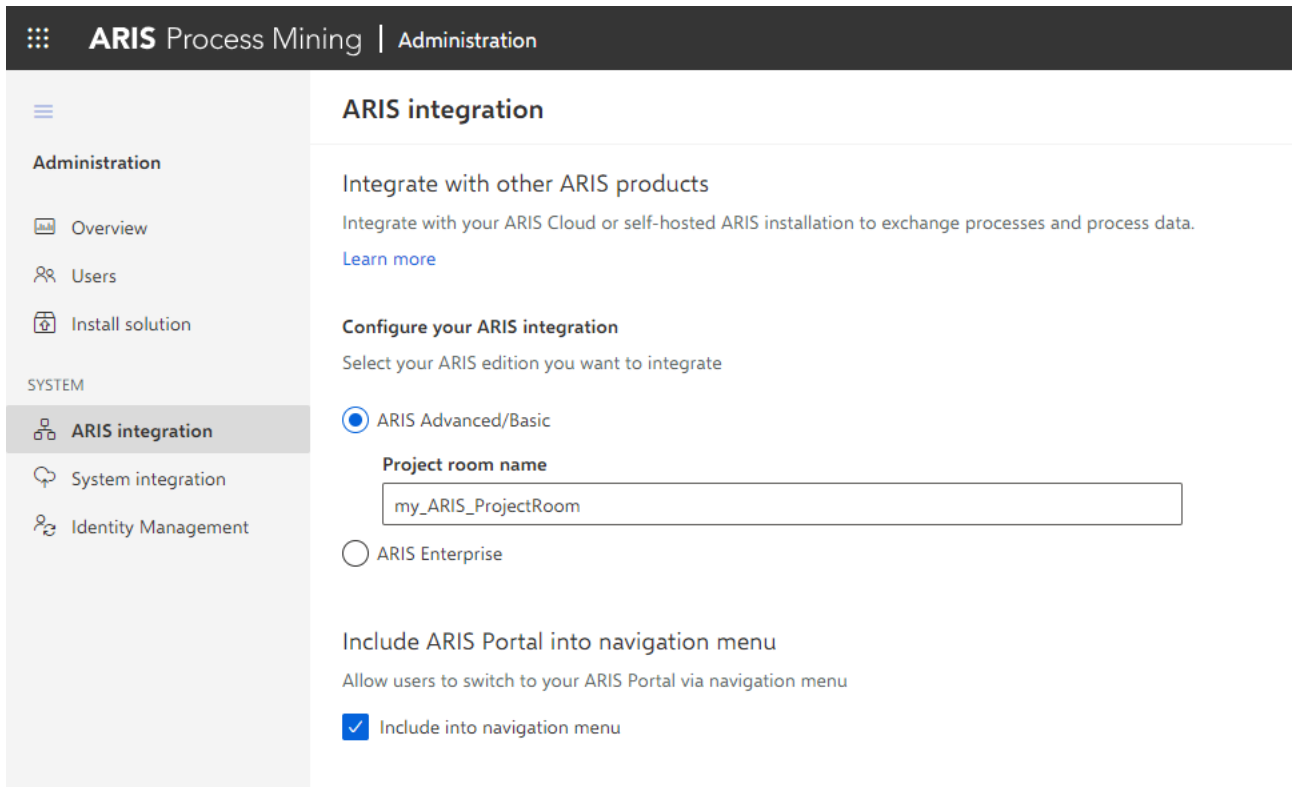
OPEN THE ARIS PROCESS MINING INTEGRATION PAGE IN ARIS

1. Open ARIS in a separate tab of your web browser.

2. Click ⁛ **Application launcher >** ⚙ **Administration**.

3. Click **Process Mining**.

The **ARIS Process Mining integration** page opens.

CONNECT ARIS TO ARIS PROCESS MINING AND ENABLE THE LINK TO ARIS PROCESS MINING

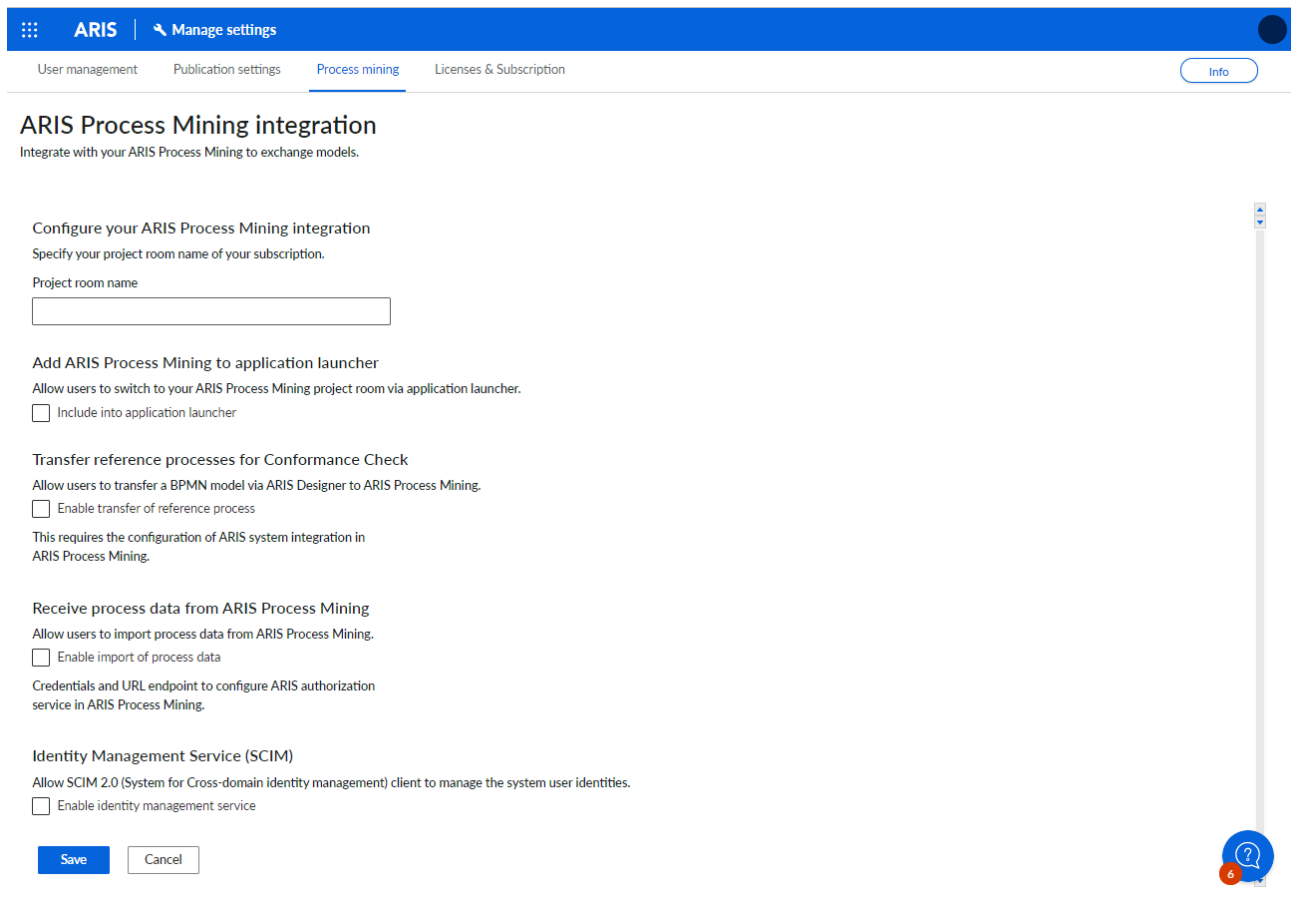Specify the ARIS Process Mining project room that you want to connect to and enable the link to ARIS Process Mining that allows you to jump from ARIS to ARIS Process Mining.

1. Under **Configure your ARIS Process Mining integration**, enter the name of the ARIS Process Mining project room you want to connect to, for example, my_ProcessMining_ProjectRoom.

2. Under **Add ARIS Process Mining to application launcher**, enable the **Include into application launcher** option.

   Enter the **ARIS Process Mining URL**, for example, https://mc.ariscloud.com.

3. Click **Save**.

The link to ARIS Process Mining is enabled.

To display the link in the **Application launcher** menu, you need to reload the ARIS tab. It may take a few minutes before the link is available in the menu.

Example

Connect ARIS Process Mining and enable the ARIS Process Mining link in ARIS.

ENABLE AND CONFIGURE THE VARIANT TRANSFER

You must first enable the import of process data in ARIS before you can configure the variant transfer in ARIS Process Mining.

1. Under **Receive process data from ARIS Process Mining,** enable the **Enable import of process data** option.

2. Enter the **Callback URL** for your ARIS Process Mining project room.

    https://<host name>/umc/rest/oauth/callback?tenant=<tenant ID>&provider=umc

    Replace **<host name>** with the host name of the ARIS Process Mining installation. Default host name is **processmining.ariscloud.com**. Replace <tenant ID> with the name of the ARIS Process Mining project room for which you want to enable data transfer, for example, my_ProcessMining_ProjectRoom.

    Example

    https://**processmining.ariscloud.com**/umc/rest/oauth/callback?tenant=**my_Process Mining_ProjectRoom**&provider=umc

3. Click **Save**.

   A client ID, client secret, and well-known URL are provided. You need the access data in the next step to configure the process transfer in ARIS Process Mining. Copy the data to the clipboard and paste it into the corresponding fields on the **ARIS integration** page, as described in step 6 below.

   Example

   Receive process data from ARIS Process Mining

   Allow users to import process data from ARIS Process Mining.

   ☑ Enable import of process data

   Credentials and URL endpoint to configure ARIS authorization service in ARIS Process Mining.

   Callback URL

   https://processmining.ariscloud.com/umc/rest/oauth/callbac...

   Client ID

   |xxxxxxxxxxxxxxxxxxxxxxxxxxxx-030cc9b1ae08

   Client secret

   |xxxxxxxxxxxxxxxxxxxxx-924a-a805dbad0dc2

   Well-known URL

   https://mc.ariscloud.com/api/oauth/region/my_ARIS_ProjectR

4. Open the ARIS Process Mining tab with the **ARIS integration** page.

5. Under **Transfer process variants to ARIS Repository**, enable the **Enable variants export** option.

6. Copy the client ID, client secret, and well-known URL provided on the **ARIS Process Mining integration** page and insert them in the corresponding input fields.

Example

Transfer process variants to ARIS Repository

Allow users to transfer selected process variants into your ARIS Repository This requires the configuration of your ARIS authentication

☑ Enable variants export

Configure your ARIS authorization service

Provides the credentials and URL endpoint to connect the ARIS authorization service

Where do I get Client ID, Client Secret and URL endpoints?

Client ID

xxxxxxxxxxxxxxxxxxxxxxxxx-030cc9b1ae08

Client Secret

****

Well known URL (for self configuration)

https://mc.ariscloud.com/api/oauth/region/my_ARIS_ProjectRoom

☐ Configure endpoints manually

7. Click **Apply**.

The variants transfer is enabled and configured.

ENABLE AND CONFIGURE PROCESS TRANSFER FOR CONFORMANCE ANALYSIS

You must first create an ARIS system integration in ARIS Process Mining before you can configure the process transfer in ARIS.

Prerequisite

The link to ARIS Process Mining must be enabled, as shown above.

1. Click   **Create ARIS system integration** at the bottom of the **ARIS integration** page. The corresponding dialog opens.

2. Enter a name, for example, ARIS ConfCheck, and an optional description.

3. Ensure that **Client credentials** is selected as **Grant type (OAuth)**.

4. Click **Add**. The **Connect access data** dialog opens.

The dialog provides the client ID and secret. Keep the dialog open. You need the access data in the next step to configure the process transfer in ARIS. Copy the data to the clipboard and paste it into the corresponding fields on the **ARIS Process Mining integration** page, as described in step 8 below.

Example

Access data of the ARIS system integration.

When you click **Done**, the dialog closes and the ARIS system integration is created and listed in the **System integration** component with the name you specified. You can ignore the status of the system integration displayed in the list.

5. Open the ARIS tab with the **ARIS Process Mining integration** page.

6. Ensure that the link to ARIS Process Mining is enabled, as shown above.

7. Under **Transfer reference process for Conformance Check**, enable the **Enable transfer of reference process** option.

8. Copy the client ID and secret provided from the **ARIS system integration** you created in ARIS Process Mining, as described in step 4. Insert the data in the corresponding input fields.

Click **Save**.

The process transfer for conformance analysis is enabled and configured.

You can now transfer BPMN models from ARIS to ARIS Process Mining. This feature enables you to perform a conformance check using ARIS Process Mining.

The ⚏ **Transfer as reference process to ARIS Process Mining** button is available in the ARIS Model designer. Open a BPMN model, open the **Model** tab, click the ⚏ **Conformance check** button -> ⚏ **Transfer as reference process to ARIS Process Mining**.
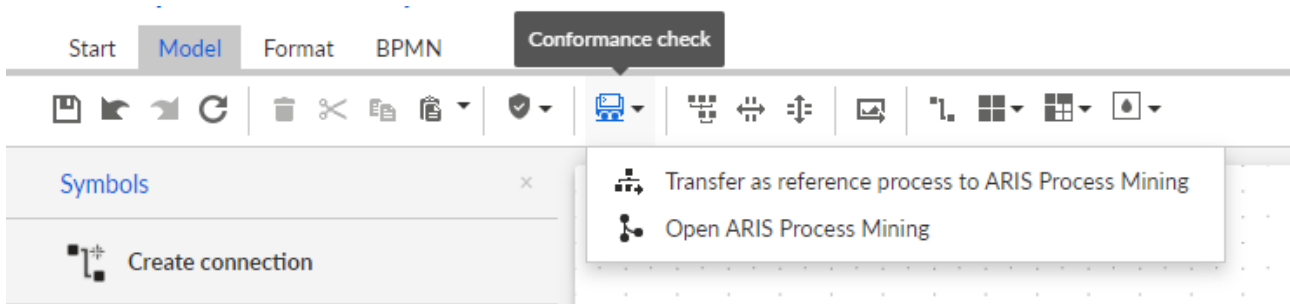
6.2   Integration of ARIS Enterprise

6.2.1   Prerequisites

PREREQUISITES FOR ARIS PROCESS MINING

You have the **User admin** function privilege.

You have the **Data admin** function privilege.

PREREQUISITES FOR ARIS

You have the **User administrator** function privilege.

You have the **Technical configuration administrator** function privilege.

NOTE

To be able to use the variants transfer from ARIS Process Mining to ARIS, a user account with the same name and the email address as user name must be available in ARIS Process Mining and ARIS.

6.2.2   Configure the integration

To configure the integration of ARIS Process Mining and ARIS, open both applications in parallel in separate web browser tabs. For some settings, you must copy data from one application to the other.

Procedure

OPEN THE ARIS INTEGRATION PAGE IN ARIS PROCESS MINING

1.   Open ARIS Process Mining.

2.   Click the ⦂⦂⦂ **Navigation menu** icon >   **Administration** in the program header.

3.   Click **ARIS integration** in the **Administration** panel.

The **ARIS integration** page opens.
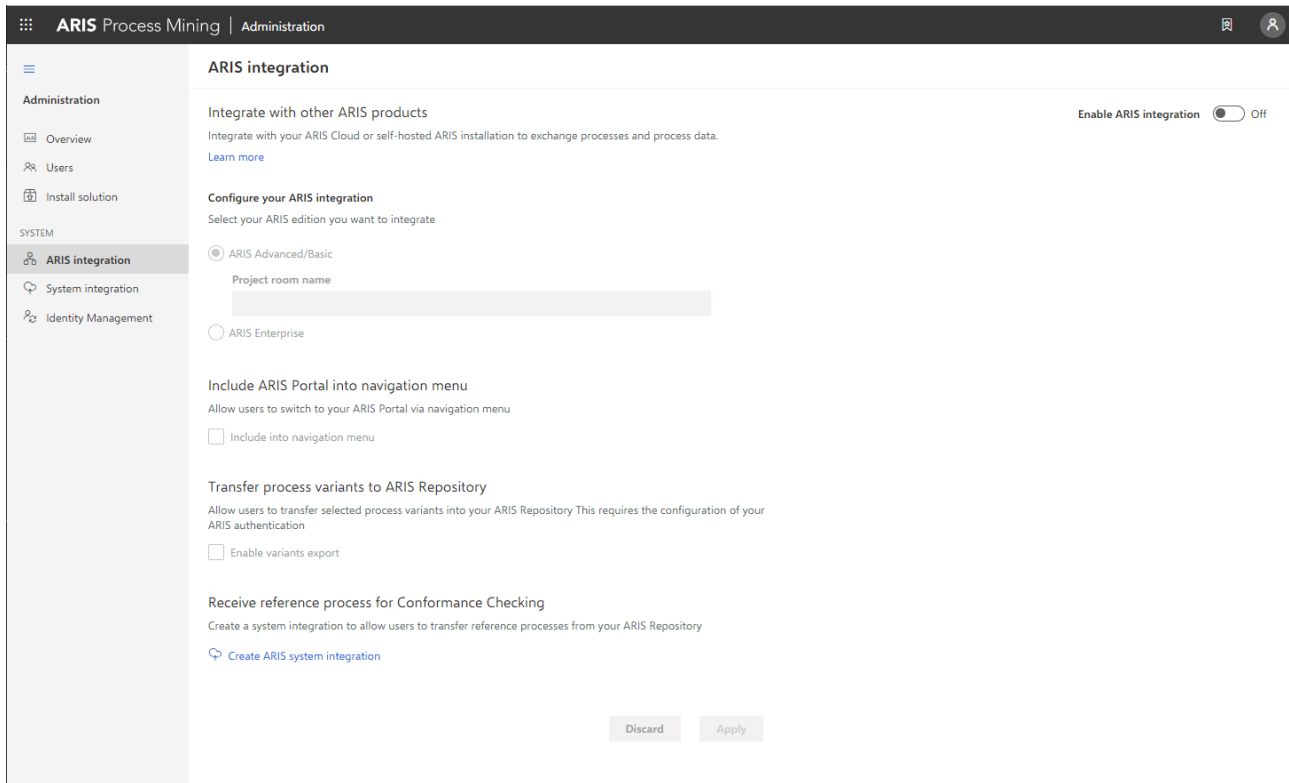
CONNECT ARIS PROCESS MINING TO ARIS AND ENABLE THE LINK TO ARIS

Specify the ARIS project room that you want to connect to and enable the link to ARIS that allows you to jump from ARIS Process Mining to ARIS.

1. Enable the **Enable ARIS integration** option.

2. Under **Configure your ARIS integration**, enable **ARIS Enterprise**.

    Specify the URL of your ARIS Enterprise edition including the project room to which you want to connect. You can copy the URL from the browser address bar. Specify the URL in the following form.

    https://<host name>/#<ARIS project room name>

    Example

    https://mycompany.ariscloud.com/#my_ARIS_ProjectRoom

3. Under **Include ARIS Portal into navigation menu**, enable the **Include into navigation menu** option.

4. Click **Apply**.

The link to ARIS is enabled.

Keep the **ARIS integration** page open.

To display the **ARIS Portal** link in the **Navigation menu** (⠿), you must reload the ARIS Process Mining tab. It may take a few minutes before the link is available in the menu.

Example

Connect ARIS Enterprise and enable the **ARIS Portal** link.
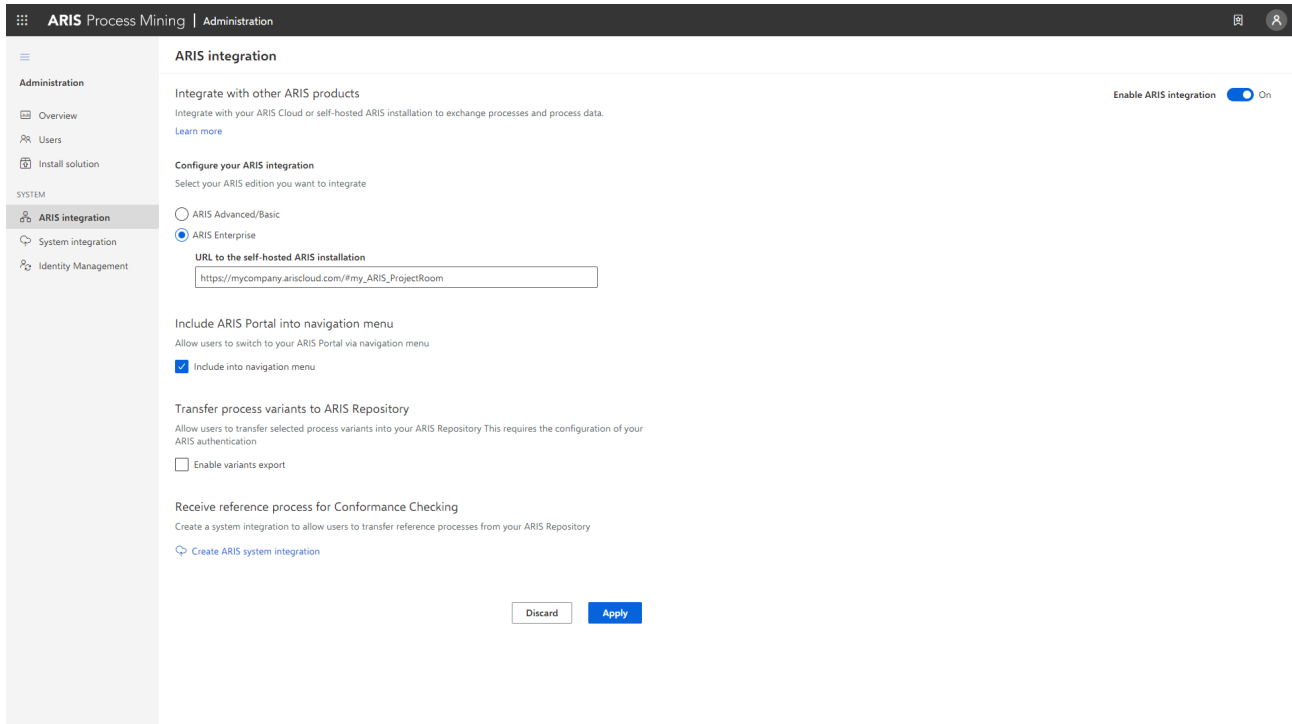
OPEN ARIS ADMINISTRATION

1. Open ARIS in a separate tab of your web browser.

2. Click ⠿ **Application launcher >** ⚙ **Administration**. The 🔲 **Configuration** view is shown.

ARIS Administration opens.

CONNECT ARIS TO ARIS PROCESS MINING AND ENABLE THE LINK TO ARIS PROCESS MINING

Specify the ARIS Process Mining project room that you want to connect to and enable the link to ARIS Process Mining that allows you to jump from ARIS to ARIS Process Mining.

1. Click 🔲 **Configuration** > **User management**.

2. Click the arrow next to **Application switcher**.

3. Click **General**.

4. Click ✏ **Edit**.

5.   Enable the **Enable connection to ARIS Process Mining** option.

6.   Enter the **ARIS Process Mining URL**, for example, https://mc.ariscloud.com.

7.   In the **Tenant** input box, enter the name of the ARIS Process Mining project room you want to connect to, for example, my_ProcessMining_ProjectRoom.

8.   Click 💾 **Save**.

The link to ARIS Process Mining is enabled.

To display the link in the **Application launcher** (⠿), you must reload the ARIS tab. It may take a few minutes before the link is available in the menu.

Example

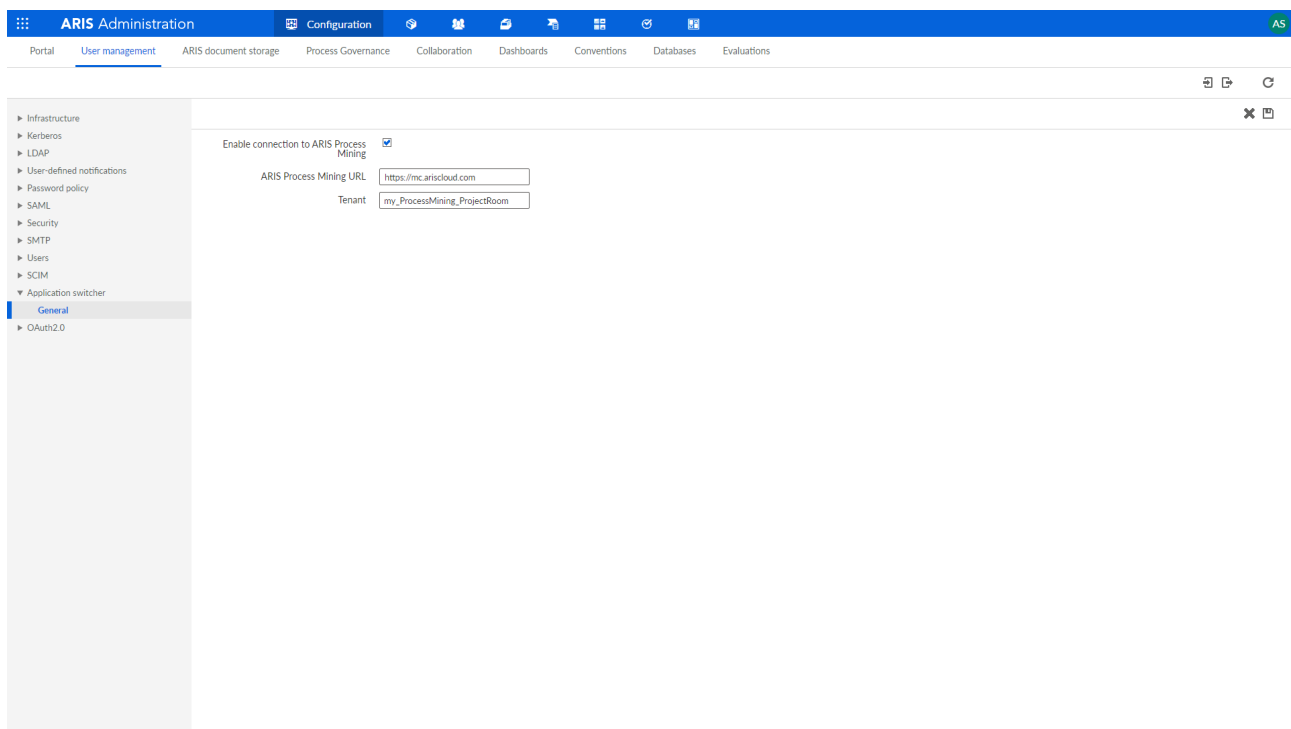Connect ARIS Process Mining and enable the ARIS Process Mining link in ARIS.

ENABLE AND CONFIGURE THE VARIANT TRANSFER

You must first create a connection in ARIS before you can configure the variant transfer in ARIS Process Mining.

1.   Click 🔲 **Applications**.

2.   Click ➕ **Add application**.

3.   Enter a name, for example, Connection to ARIS Process Mining.

4.   Enter an optional description.

5.   Select **Authorization code** in the **Grant type** drop-down menu.

6. Enter **UserProfile** in the **Scopes** input field.

7. Enter the **Redirect URL** for your ARIS Process Mining project room.

    https://<host name>/umc/rest/oauth/callback?tenant=<tenant ID>&provider=umc

    Replace **<host name>** with the host name of the ARIS Process Mining URL. The default
    host name is **processmining.ariscloud.com**. Replace **<tenant ID>** with the name of the
    ARIS Process Mining project room to which you want to connect.

    Example

    https://**processmining.ariscloud.com**/umc/rest/oauth/callback?tenant=**my_Process
    Mining_ProjectRoom**&provider=umc

8. Click **+ Add**.
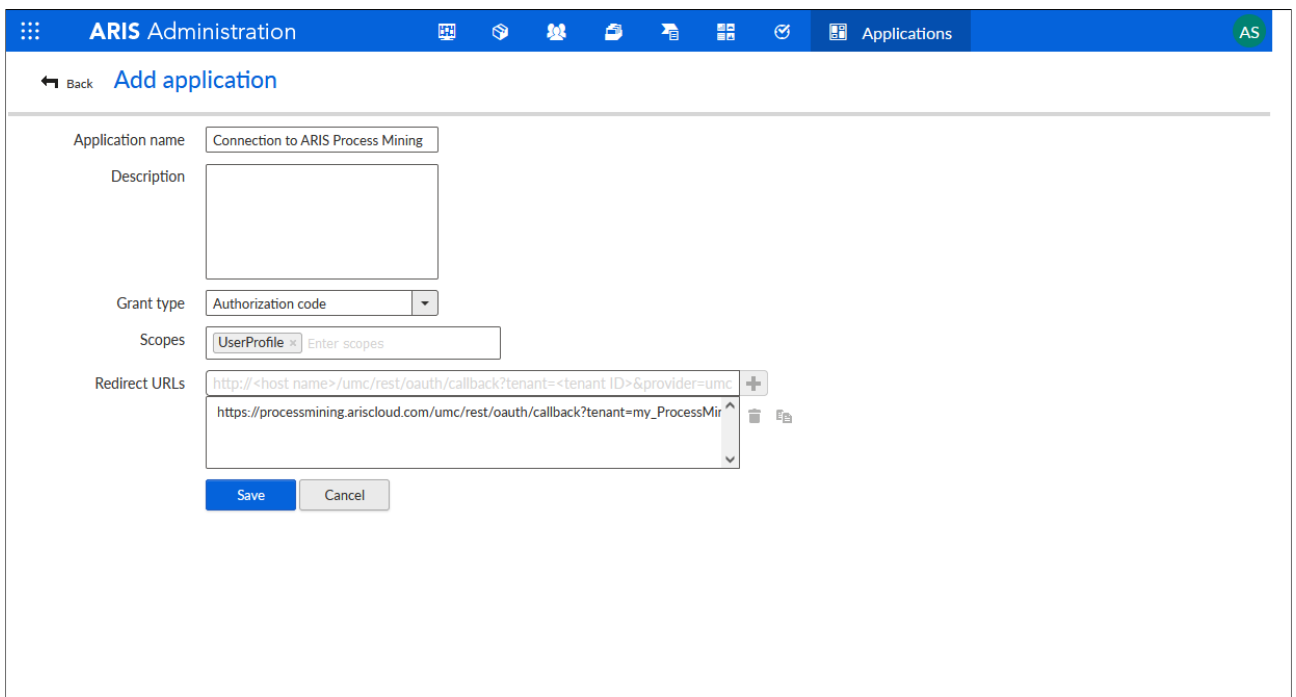
9. Click **Save**.

You have created a connection to ARIS Process Mining.

The created application provides a client ID, client secret, and well-known URL. You need the
access data to configure the variant transfer in ARIS Process Mining. Copy the data to the
clipboard and insert it into the corresponding fields in ARIS Process Mining.

Example

Access data provided by the application.

CONFIGURE VARIANT TRANSFER IN ARIS PROCESS MINING

1. Open the ARIS Process Mining tab with the **ARIS integration** page.

2. Under **Transfer process variants to ARIS Repository**, enable the **Enable variants export** option.

3. Copy the client ID, client secret, and well-known URL provided by the **application** created in ARIS and insert them in the corresponding input fields.

Example

Transfer process variants to ARIS Repository

Allow users to transfer selected process variants into your ARIS Repository This requires the configuration of your ARIS authentication

☑ Enable variants export

Configure your ARIS authorization service

Provides the credentials and URL endpoint to connect the ARIS authorization service

Where do I get Client ID, Client Secret and URL endpoints?

Client ID

xxxxxxxxxxxxxxx-ab5d-449791f6ca22

Client Secret

****

Well known URL (for self configuration)

https://mycompany.ariscloud.com/umc/api/v1/oauth/.well-known?tenant=my_ARIS_Proje

☐ Configure endpoints manually

4. Click **Apply**.

The variant transfer is enabled and configured.

ENABLE AND CONFIGURE REFERENCE PROCESS TRANSFER FOR CONFORMANCE ANALYSIS

You must first create an ARIS system integration in ARIS Process Mining before you can configure the required connection in ARIS.

Prerequisite

The link to ARIS Process Mining must be enabled, as shown above.

1. Click **Create ARIS system integration** at the bottom of the **ARIS integration** page. The corresponding dialog opens.

2. Enter a name, for example, ARIS ConfCheck, and an optional description.

3. Ensure that **Client credentials** is selected as **Grant type (OAuth)**.

4. Click **Add**. The **Connect access data** dialog opens.

The dialog provides the client ID and secret. You need the access data in the next step to configure the process transfer in ARIS. Copy the data to the clipboard and insert it into the corresponding fields on the **ARIS Process Mining integration** page, as shown in step 8 below.

Example

Access data of the ARIS system integration.

ARIS ConfCheck access data   ×

> **How to connect your ARIS product to the integration end-point?**   Show help
> Learn how to connect your ARIS Cloud or ARIS Enterprise installation.

Client ID and secret
The client ID and secret are configured in ARIS for authentication to the ARIS Processs Mining cloud.

Client ID

| fcdbb76c-57b3-4fdf-9bc3-2cc5f5e88929 | Copy to clipboard |

Secret key

| 0966b08a-8975-41d1-918d-b58adeb40832 | Copy to clipboard |

Done

When you click **Done**, the dialog closes and the ARIS system integration is created and listed in the **System integration** component with the name you specified. You can ignore the status of the system integration displayed in the list.

5.   Open the ARIS tab with the ARIS Administration.

6.   Click ▦ **Applications**.

7.   Click the   **ARIS Process Mining** button. The **Details** page of the **miningserver** application opens.

8.   Click the ✎ **Edit** button.

9.   Specify the application settings.

   a.   You can enter an optional description, for example, Process conformance check.

   b.   Enter the client-credentials key in the corresponding input field.

   Copy the client ID and secret from the ARIS system integration, as shown in step 4. Connect the client ID and secret to the client-credentials key as follows:
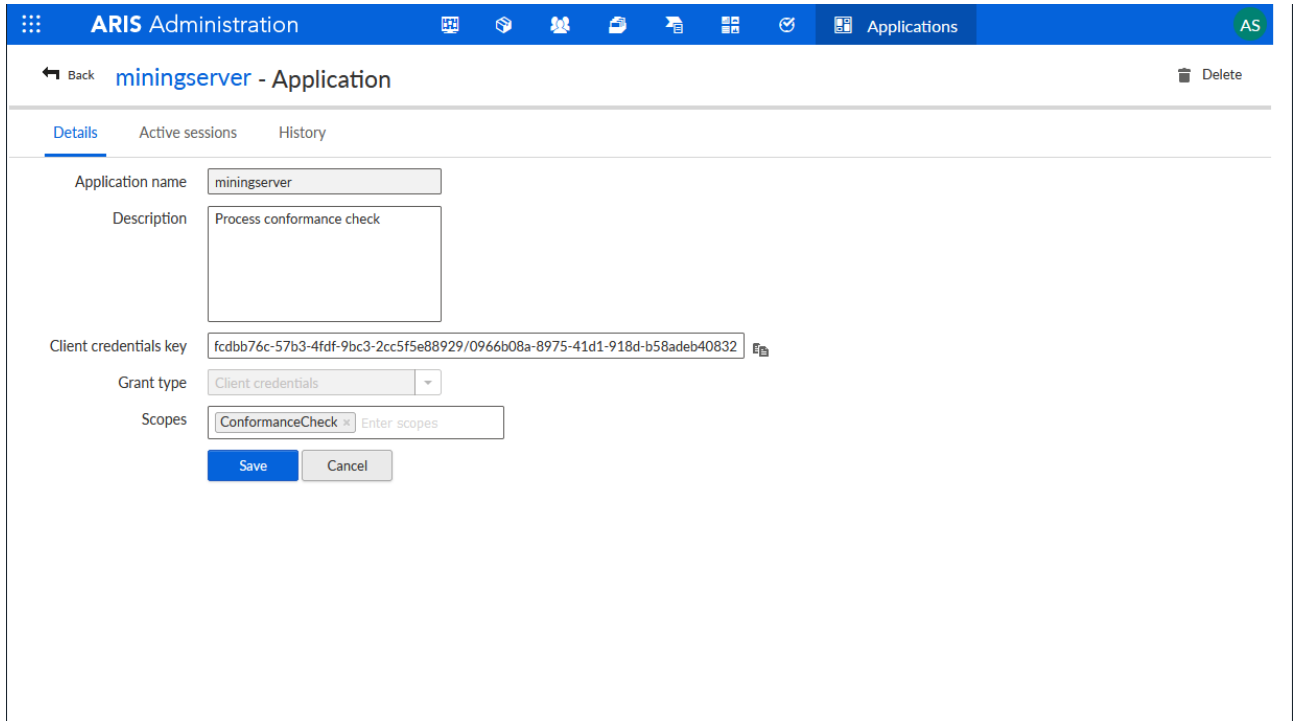
   <client ID>/<secret key>

   Example

ef1bf998-9658-4433-94d6-1fe8209ab36b/81cbce47-1e67-43c3-a26c-764d85a471 26

c. Specify the API scope in the **Scopes** input field. If you register ARIS Process Mining to perform a conformance check, add the **ConformanceCheck** API scope.

d. Click **Save**.

Example

Configure the **miningserver** application.

The reference process transfer for conformance analysis is enabled and configured.

You can now transfer BPMN models from ARIS to ARIS Process Mining. This feature enables you to perform a conformance check using ARIS Process Mining.

The ⛓ **Transfer as reference process to ARIS Process Mining** button is available in the ARIS Model designer. Open a BPMN model, open the **Model** tab, click the 🖥 **Conformance check** button -> ⛓ **Transfer as reference process to ARIS Process Mining**.
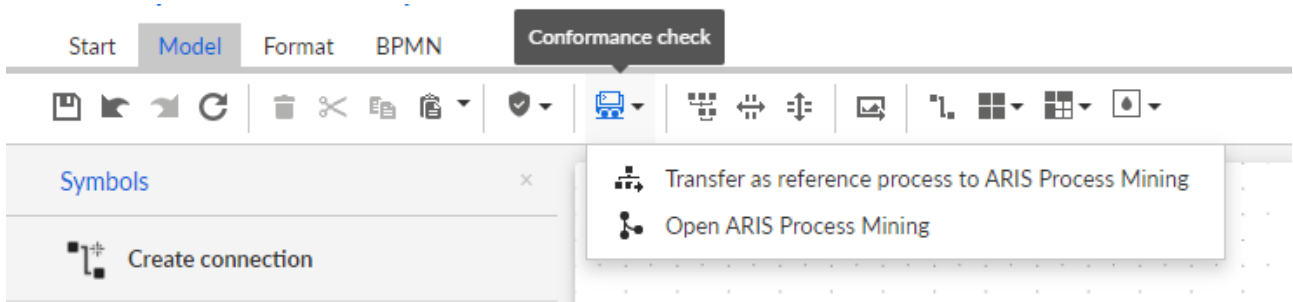
7 Legal information

7.1 Documentation scope

The information provided describes the settings and features as they were at the time of publishing. Since documentation and software are subject to different production cycles, the description of settings and features may differ from actual settings and features. Information about discrepancies is provided in the Release Notes that accompany the product. Please read the Release Notes and take the information into account when installing, setting up, and using the product.

If you want to install technical and/or business system functions without using the consulting services provided by Software AG, you require extensive knowledge of the system to be installed, its intended purpose, the target systems, and their various dependencies. Due to the number of platforms and interdependent hardware and software configurations, we can describe only specific installations. It is not possible to document all settings and dependencies.

When you combine various technologies, please observe the manufacturers' instructions, particularly announcements concerning releases on their Internet pages. We cannot guarantee proper functioning and installation of approved third-party systems and do not support them. Always follow the instructions provided in the installation manuals of the relevant manufacturers. If you experience difficulties, please contact the relevant manufacturer.

If you need help installing third-party systems, contact your local Software AG sales organization. Please note that this type of manufacturer-specific or customer-specific customization is not covered by the standard Software AG software maintenance agreement and can be performed only on special request and agreement.

7.2 Support

If you have any questions on specific installations that you cannot perform yourself, contact your local Software AG sales organization (https://www.softwareag.com/corporate/company/global/offices/default.html). To get detailed information and support, use our Web sites.

If you have a valid support contract, you can contact **Global Support ARIS** at: **+800 ARISHELP**. If this number is not supported by your telephone provider, please refer to our Global Support Contact Directory.

For issues regarding the product documentation, you can also send an e-mail to documentation@softwareag.com (mailto:documentation@softwareag.com).

ARIS COMMUNITY

Find information, expert articles, issue resolution, videos, and communication with other ARIS users. If you do not yet have an account, register at ARIS Community**.**

PRODUCT DOCUMENTATION

You can find product documentation also on our documentation Web site.

In addition, you can also access the cloud product documentation. Navigate to the desired product and then, depending on your solution, go to **Developer Center**, **User Center** or **Documentation**.

PRODUCT TRAINING

You can find helpful product training material on our Learning Portal.

TECH COMMUNITY

You can collaborate with Software AG experts on our Tech Community Web site. From here you can, for example:

- Browse through our vast knowledge base.
- Ask questions and find answers in our discussion forums.
- Get the latest Software AG news and announcements.
- Explore our communities.
- Go to our public GitHub and Docker repositories and discover additional Software AG resources.

PRODUCT SUPPORT

Support for Software AG products is provided to licensed customers via our Empower Portal (https://empower.softwareag.com/). Many services on this portal require that you have an account. If you do not yet have one, you can request it. Once you have an account, you can, for example:

- Download products, updates and fixes.
- Add product feature requests.
- Search the Knowledge Center for technical information and tips.
- Subscribe to early warnings and critical alerts.
- Open and update support incidents.