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CONFORMANCE CHECK
WITH ARIS PROCESS MINING

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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 (page 2) 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 Portal 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. Connect ARIS Process Mining with ARIS Portal (page 25).
2. Transfer the process data from ARIS Portal to ARIS Process Mining. (page 5)
3. Create an activity mapping (page 18).
4. Use the **Conformance** app (page 20) 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 conformance check is performed. Knowing the basic terms helps you to understand how ARIS Process Mining works.

2.1 Process conformance analysis

An executed process is non-conformant if it deviates in any way from the corresponding reference process. You can analyze your process conformance using the **Conformance** app (page 20) in ARIS Process Mining. The new **Conformance rate (page** 2**), Fitness (page** 3**)** measures, and **Conformance issue type** (page 3) dimensions are provided in ARIS Process Mining just like all other criteria and are handled analogously. For example, you can use filters to see the conformance of just a particular subset of process instances.

2.2 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 conformance 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-conformant.

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

2.3   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.

2.4   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.
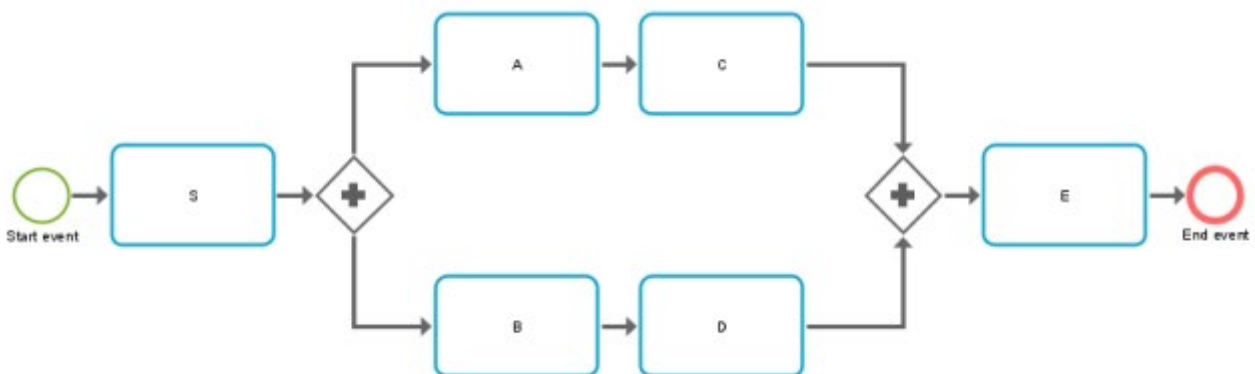
- A particular pair of activities occurs in the wrong order.

   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 Portal 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 7) 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 connection between ARIS Portal and ARIS Process Mining.
- You have the ARIS Process Mining administrator function privilege in ARIS Portal.
- You have created a data set in ARIS Process Mining.

Procedure

1. Open a **BPMN** process model in ARIS Portal.
2. Open the **Model** tab.
3. Click the 🖳 **Conformance check** icon. The icon is only available if you have created a connection to ARIS Process Mining (page 25), and if you have the **ARIS Process Mining administrator** function privilege.
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 data sets that contain data can be selected.
7. Click **Transfer** to start the transfer process.

8. After ARIS Portal has transferred the reference process, you can open ARIS Process Mining to create an activity mapping (page 18). 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 18).

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.
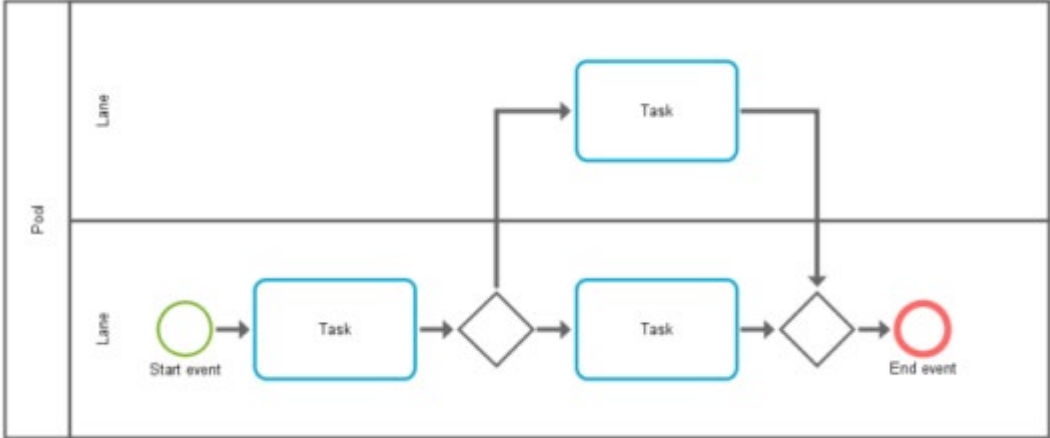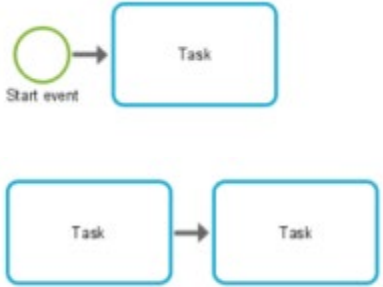
After the model has been transferred to ARIS Process Mining, you can create an activity mapping in ARIS Process Mining.
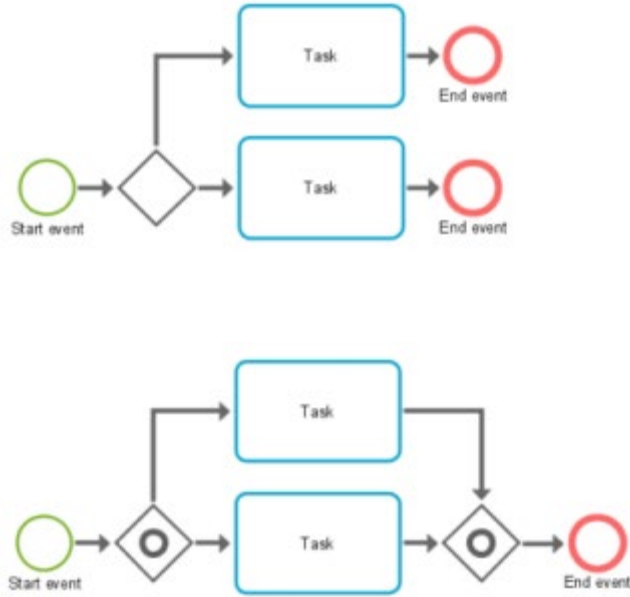
3.1   BPMN modeling convention
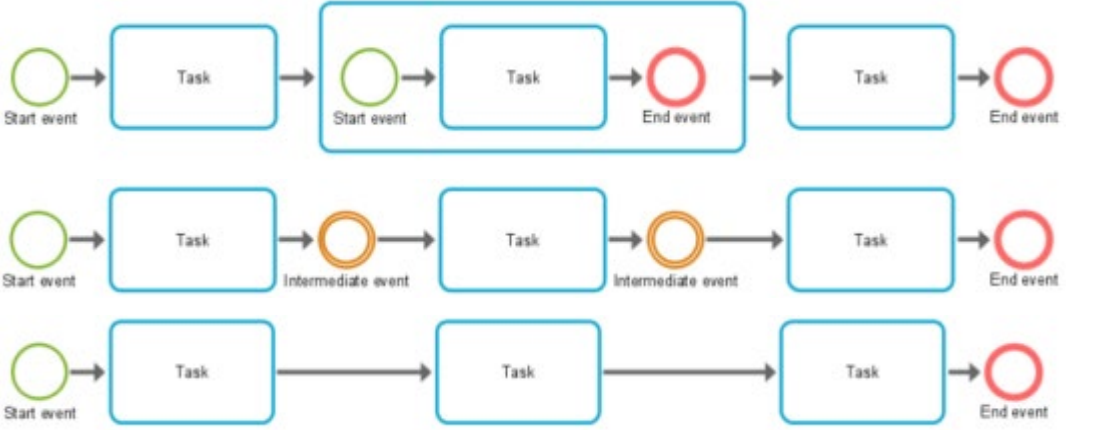
The reference model created in ARIS Portal must conform to the following modeling conventions.
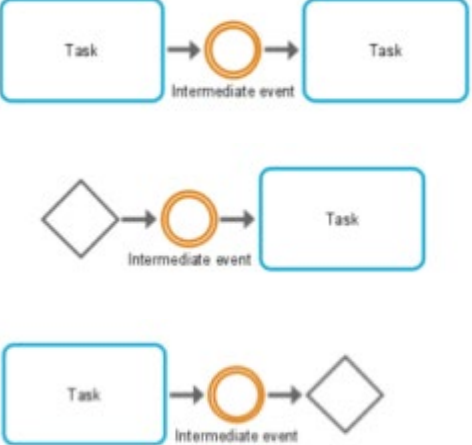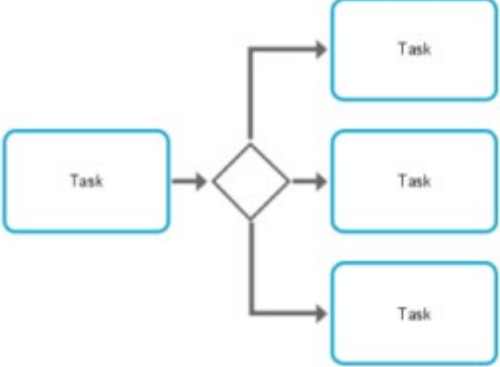
Context	Convention	Reason / example
Model types	The following BPMN models are currently supported: ▪ Enterprise BPMN collaboration diagram ▪ Enterprise BPMN process diagram ▪ BPMN process diagram (BPMN 2.0) ▪ BPMN collaboration diagram (BPMN 2.0)	
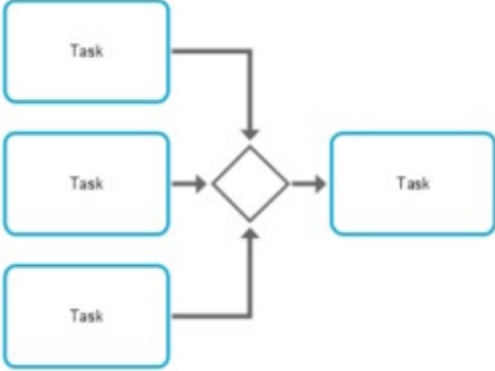
Context	Convention	Reason / example
Object types	Object types are reduced to: ▪ Start event ▪ Intermediate event ▪ End event ▪ Activities / Tasks ▪ Inclusive gateway ▪ Exclusive gateway ▪ Parallel gateway	
Connection types	Connection types are reduced to sequence flow connections.	
Pools	Only items from 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
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 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 Portal. 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. (page 5)

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** section.

2. Open the **Conformance mapping** component of the data set. The tab 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.

5   Use the Conformance app

You can use the **Conformance** app to perform process conformance analyses. It provides all relevant criteria for your conformance analysis, such as Conformance rate (page 2), Fitness (page 3), and Conformance issues (page 3). The **Conformance** 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 18).

Prerequisites

You have created an activity mapping (page 18).

Procedure

1. Create an analysis for a project that contains the data set with the created reference process.

2. Add the **Conformance** 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 conformance criteria of your analysis.

On the Analysis (page 21) tab, you can dive deeper into your conformance analyses.

You can set the time dimension and scaling (page 22) and select the time frame   (page 23)for your conformance analysis.

5.1   Overview

The **Overview** tab shows the most important conformance criteria of your analysis.

- Number of conformant and non-conformant cases
- Conformance rate (page 2)
- Fitness (page 3)
- Number of variants and their fitness

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 AND NON-CONFORMANT CASES

The pie chart shows the total number of conformant (marked blue by default) and non-conformant (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 conformant or non-conformant 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.

VARIANTS AND THEIR FITNESS

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.

5.2   Analysis

The **Analysis** tab allows you to dive deeper into your 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 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.

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 enable automatic scaling of the values displayed on the Y-axis.

Your settings are applied.

Example

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 Portal for conformance analysis

Before you can transfer process data between ARIS Portal and ARIS Process Mining to perform a conformance analysis, you must connect both applications to each other. Please follow the steps below.

6.1   Create ARIS system integration

First, you must create an ARIS system integration to connect ARIS Process Mining to ARIS Portal.

A dedicated client ID and secret key are generated for the ARIS system integration. You need the client ID and secret key for the integration of ARIS Process Mining and ARIS Portal.

Procedure

1. Open ARIS Process Mining.
2. Click the ⋮⋮⋮ **Navigation menu** icon -> **Administration** in the program header.
3. Click **System integration** in the **Administration** panel.
4. Click **Add system integration** -> **ARIS**. The corresponding dialog opens.
5. Enter a name, for example, ARIS ConfCheck, and an optional description.
6. Select **Client credentials** as authentication method in the **Grant type (OAuth)** drop-down menu. The **Client credentials** as authentication method uses the technical user for authentication. The authentication is performed in the background, for example, during the data transfer for process conformance analysis. You do not need to log in manually.
7. Click **Add**. The **Connect access data** dialog opens. The dialog provides the client ID and secret key.
8. Click **Copy to clipboard** if you want to use the data in another application, for example ARIS Portal.
9. Click **Done**.

The system integration is created and listed with the name you specified.

Tip

The access data is saved in the system integration you created. Select the system integration in the list and click **Show system access data**. Then you can copy the required data to the clipboard.

6.2 Configure the connection to ARIS Process Mining

To be able to transfer data between ARIS Portal and ARIS Process Mining, you must configure the connection to ARIS Process Mining in ARIS Portal.

Depending on which ARIS Portal version you have installed, the procedure for enabling process transfer differs.

If you have installed ARIS Portal Enterprise, you must register ARIS Process Mining as a trustworthy application in ARIS Portal. The application will be provided in the User Management of ARIS Portal. For more details on configuring applications, see the ARIS Portal online help.

If you have installed ARIS Portal Advanced or Basic, you must enable the transfer of reference processes.

CLIENT-CREDENTIALS KEY

You need the client-credentials key to configure the connection to ARIS Process Mining. The client-credentials key consists of two parts, the client ID and the secret key, both connected by a "/". Copy the client ID and the secret key to the clipboard as described in chapter Create ARIS system integration (page 25). Connect the client ID and secret key to the client-credentials key as follows:

<client ID>/<secret key>

Example

ef1bf998-9658-4433-94d6-1fe8209ab36b/81cbce47-1e67-43c3-a26c-764d85a47126

Prerequisite

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

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

Procedure

1. Start ARIS Portal.

2. If you have installed **ARIS Portal Enterprise**, perform the following steps.

   a. Click ⠿ **Application launcher >** ⚙ **Administration**.

   b. Click 🔲 **Applications**.

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

4. Click the ✏ **Edit** button.

5. 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. For details see above.

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**.

The ARIS Process Mining application is configured. The **miningserver** application is provided on the **Applications** tab of the **Application management**.

6.   If you have installed **ARIS Portal Advanced** or   **Basic**, perform the following steps.

a.   Click ⦂⦂⦂ **Application launcher >** ⚙ **Administration**.

b.   Click **Process Mining**.

c.   Enter the ARIS Process Mining project room name you want to integrate.

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

e.   Enter the client ID and client secret from the ARIS system integration (page 25).

f.   Click **Save**.

You have configured the connection to ARIS Process Mining to transfer process data.

Before you can transfer data from ARIS Portal to ARIS Process Mining, you must enable ARIS Process Mining in ARIS Portal (page 27).

6.3   Enable ARIS Process Mining in ARIS Portal

To enable ARIS Process Mining in ARIS Portal, you must specify the ARIS Process Mining URL and the project room you want to connect to.

Depending on which ARIS Portal version you have installed - Enterprise, Advanced, or Basic - the procedure for enabling ARIS Process Mining differs.

Prerequisite

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

▪   You have an ARIS Process Mining system running.

▪   You have the **ARIS Process Mining administrator** function privilege.

▪   You have configured the connection to ARIS Process Mining. (page 26)

Procedure

1.   Start ARIS Portal.

2.   If you have installed **ARIS Portal Enterprise** version, perform the following steps.

a.   Click ⦂⦂⦂ **Application launcher >** ⚙ **Administration**.

b.   Click **User management**.

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

d.   Click **General**.

e.   Click ✐ **Edit**.

f.   Enable the **Enable link to ARIS Process Mining** option.

g.   Enter the ARIS Process Mining URL.

h.   Enter the ARIS Process Mining project room name in the **Tenant** input box.

i.   Click 💾 **Save**.

You have enabled ARIS Process Mining in ARIS Portal.

3.   If you have installed **ARIS Portal Advanced** or **Basic** version, perform the following steps.

a.   Click ⁝⁝⁝ **Application launcher >** ⚙ **Administration**.

b.   Click **Process Mining**.

c.   Enter the ARIS Process Mining project room name you want to integrate.

d.   Under **Include ARIS Process Mining to navigation menu** enable the **Include in navigation menu** option.

e.   Enter the ARIS Process Mining URL.

f.   Click **Save**.

You have enabled ARIS Process Mining in ARIS Portal.

Now ARIS Portal provides the following additional features.

You can open ARIS Process Mining from within ARIS Portal.

▪   The **ARIS Process Mining** button is available in the **Application launcher** menu in the ARIS Portal program bar. Click **ARIS Process Mining** to open ARIS Process Mining. The **ARIS Cloud** login screen opens.

▪   You can transfer BPMN models from ARIS Portal 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 Portal 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.

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7.2 Support

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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**.**

SOFTWARE AG EMPOWER PORTAL

You can find documentation on the Software AG Documentation website (https://empower.softwareag.com/). The site requires credentials for Software AG's Product Support site **Empower**. If you do not yet have an account for **Empower**, send an e-mail to empower@softwareag.com with your name, company, and company e-mail address and request an account.

If you have no account, you can use numerous links on the TECHcommunity website. For any questions, you can find a local or toll-free number for your country in our Global Support Contact Directory and give us a call.

TECHCOMMUNITY

On the **TECHcommunity** website, you can find documentation and other technical information:

- Use the online discussion forums, moderated by Software AG professionals, to ask questions, discuss best practices, and learn how other customers are using Software AG technology.
- Access articles, code samples, demos, and tutorials.
- Find links to external websites that discuss open standards and web technology.
- Access product documentation, if you have **TECHcommunity** credentials. If you do not, you will need to register and specify **Documentation** as an area of interest.

EMPOWER (LOGIN REQUIRED)

If you have an account for **Empower**, use the following sites to find detailed information or get support:

- You can find product information on the Software AG Empower Product Support website.
- To get information about fixes and to read early warnings, technical papers, and knowledge base articles, go to the Knowledge Center.
- Once you have an account, you can open Support Incidents online via the eService section of Empower.
- To submit feature/enhancement requests, get information about product availability, and download products, go to Products.

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If you do not have an account, register as a customer or as a partner.