PROCESS EXTRACTOR FOR ARIS PROCESS MINING

ARIS Process Mining 10

October 2026

This document applies to ARIS Process Mining Version 10 and to all subsequent releases.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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1. Overview

This manual describes the installation and configuration of **Process Extractor for ARIS Process Mining SaaS** (Process Extractor).

Process Extractor for ARIS Process Mining is a service that provides a generic interface between ARIS Process Mining and various data sources. You can use Process Extractor to extract data from any SAP® source system or JDBC database. Process Extractor is tested with Oracle® and Microsoft® SQL database.

- Note the Hardware and software requirements [6].
- If you extract data from an SAP system,
  ensure that the SAP source system meets the requirements of Process Extractor. [22]

You need to perform the following steps to install and configure Process Extractor.

- Install and run Process Extractor [6]
  - Install and run Process Extractor on a Windows system [7]
  - Install and run Process Extractor on a Linux system [9]
- Configure and activate connections [11]
  - Configure the connection to ARIS Process Mining [11]
  - Configure the connection to the SAP system [12]
  - Configure the connection to a JDBC database [14]
- Test and activate connections
  - Test connection configurations [17]
  - Activate connection configurations [17]

See the Appendix [19] for more information.

- How the data extraction [19] and system communication [20] works.
- Configure Process Extractor system settings [21]
- Requirements of the SAP source system [22]
- Configure SAP Secure Network Connection [26]
- Update Process Extractor [27]
- Extend memory for Process Extractor [28]
- How to use the Command Line Interface [31] tool.
- Important security notes [37]
- Possible errors and solutions [32]
- Create an SAP/JDBC integration in ARIS Process Mining [34]

After the installation of Process Extractor, you must configure a connection to the data source and extract the source data in ARIS Process Mining. For information on configuring a data extraction and how to use the extracted source data, see the ARIS Process Mining online help.

2. Product changes

- Since October 2022 upgrade only works with Process Extractor version 10 Service Release 18 (SR 18) or later.
- Process Extractor version 10 Service Release 23 (10.0.23.0) and lower do not support pseudonymization of data. This functionality is only available with version 10.0.23.1 and higher and may also have restricted availability even running with ARIS Process Mining version 10.0.23.1 and later.
- Please note that ARIS Process Mining from Service Release 28 (SR 28) no longer supports Process Extractor for ARIS Process Mining older than version 10 Service Release 27. We recommend installing Process Extractor for ARIS Process Mining at least with Service Release 27 or newer.
- The SAP transport request **ProcessMiningTransport_v2.zip** delivered with Process Extractor version 10 Service Release 26 (SR 26) does not work with previous Process Extractor versions. Process Extractor version 10 SR 26 only works with the new SAP transport request.
- Process Extractor version 10 Service Release 28 (SR 28) and higher is using Java 21 as Java runtime environment. To extract data from any supported JDBC source, such as Oracle, MS SQL Server databases, or other database systems, you must use a Java 21 compatible JDBC database driver. Please ask your database manufacturer for further details on Java 21 support for JDBC drivers. To extract data from an SAP system, you must use a Java 21 compatible SAP JCo driver.
- The support for Snowflake is deprecated.

Release Notes

Note that the latest ARIS Release Notes include information about functionality that has been added, removed, deprecated, or changed for this product.

3. Process Extractor installation

You can install Process Extractor on a Windows-based operating system [7] or on a Linux-based operating system [9].

With a Process Extractor installation, you can configure a connection to either an SAP system or a JDBC database.

A Process Extractor installation cannot contain different backend driver classes at the same time. Either, the **driver_jdbc** directory should contain only one single JDBC driver or the **driver** directory should contain the SAP Java Connector.

If both SAP system and JDBC databases or different JDBC database types are to be connected, then Process Extractor must be installed on several systems if it is to run as a service. On one system (Windows or Linux) Process Extractor can only be installed once as a service.

3.1. Hardware and software requirements

Please note the following software and hardware requirements for installing Process Extractor.

Source system drivers

Process Extractor does not support different drivers per installation at the same time.

The driver must be compatible with Java 21.

SAP

- SAP Java Connector (SAP JCo, version >= 3.1) must be installed. [7] You can download SAP JCo directly from SAP.
- The transport with the RFC must be imported into the SAP system from which the data is extracted. See the chapter SAP function modules [23].

JDBC

- The driver of the database to be connected must be installed. See the chapter Configure the connection to a JDBC database [14].

Memory

When using the default settings, we recommend providing at least 9 GB of free memory on the computer where Process Extractor is installed. If you are using a VM, this memory should be reserved exclusively for that machine.

Disk space

The required disk memory depends on the settings of Process Extractor. For example, it depends on how large the block size is, and on the performance of the upload over the Internet to the ARIS Process Mining server, since the files are temporarily written to disk before upload. We recommend 5-10 GB of free disk space.

Network

Process Extractor requires a fast network connection between the connected source system and the internet.

Process Extractor must be able to connect to the source system and ARIS Process Mining server.

SUPPORTED JAVA VERSION

- Java 21

SUPPORTED PLATTFORMS

Process Extractor can be installed on physical servers and on cloud platforms:

- Red Hat Enterprise Linux 8 x86-64
- Red Hat Enterprise Linux 9 x86-64
- SUSE Linux Enterprise Server 15 x86-64
- Windows Server 2022 x86-64
- Windows Server 2025 x86-64
- Cloud Provider Amazon EC2 64bit
- Cloud Provider Microsoft Azure 64bit

3.2. Install and run Process Extractor on a Windows system

You can install Process Extractor on a computer on which a Windows operating system is installed [7]. After the installation, you can start Process Extractor in console mode [8] or alternatively install Process Extractor as a Windows service [8].

3.2.1. Install Process Extractor

You can download the appropriate Process Extractor ZIP file for Windows in the ARIS Download Center using the following Link. You need to register in the ARIS Download Center.

Procedure

1. Create an empty folder, for example, C:\ProcessExtractor. Avoid spaces in the folder name. Note that the process extractor must not be installed on a substituted drive.
2. Unpack the contents of the Windows-specific Process Extractor ZIP file into the created folder.
3. Install the source system driver files. To do this, copy the corresponding driver files to the appropriate subfolder of the installation directory.
   a. For an SAP source system, copy the SAP JCo driver files to the **driver** subfolder.
      Consider the prerequisites in the installation description of SAP JCo. For example, JCo 3.1.13 requires the “Microsoft Visual C++ 2015-2022 Redistributable Package“ to be installed on the system.
   b. For a JDBC database, copy the JDBC database driver JAR files to the **driver_jdbc** subfolder.

You have installed Process Extractor on a Windows system.

3.2.2. Start Process Extractor in console mode

You can start Process Extractor on Windows in console mode.

Prerequisite

Process Extractor service is not installed.

Procedure

1. Open a command line with administrator privileges in the **<Process Extractor installation>\bin** directory.
2. Run **startup.bat** to start Process Extractor.

Process Extractor starts.

To stop Process Extractor, run **shutdown.bat** from the command line.

3.2.3. Install Process Extractor as a Windows service

You can install Process Extractor as a Windows service.

Procedure

1. Open a command line with administrator privileges in the **<Process Extractor installation>\bin** directory.
2. Run the **wrapper service** command.
   Example:

```
C:\ProcessExtractor\bin>wrapper.bat install
```

Process Extractor service is installed. The startup type is **Automatic.**

The service is not started.

To start the service, run **startup.bat** from the command line.

To stop the service, run **shutdown.bat** from the command line.

To remove the service, run **wrapper remove**.

3.3. Install and run Process Extractor on a Linux system

You can install Process Extractor on a computer on which a Linux operating system is installed [9]. After the installation, you can start Process Extractor in console mode [9] or alternatively install Process Extractor as a Linux daemon [10].

3.3.1. Install Process Extractor

You can download the appropriate Process Extractor ZIP file for Linux in the ARIS Download Center using the following Link. You need to register in the ARIS Download Center.

https://ariscommunity.com/download-center/product-groups

Procedure

1. Create an empty folder, for example, /opt/ProcessExtractor. Avoid spaces in the folder name.
2. Unpack the contents of the Linux-specific Process Extractor ZIP file into the created folder. Make sure that the unpacking tool preserves the file permissions.
3. Install the source system driver files. To do this, copy the corresponding driver files to the appropriate subfolder of the installation directory.
   a. For an SAP source system, copy the SAP JCo driver files to the **driver** subfolder.
      Consider the prerequisites in the installation description of SAP JCo.
   b. For a JDBC database, copy the JDBC database driver JAR files to the **driver_jdbc** subfolder.

You have installed Process Extractor on a Linux system.

3.3.2. Start Process Extractor in console mode

You can start Process Extractor on Linux in console mode.

Prerequisite

Process Extractor daemon is not installed.

Procedure

1. Open a terminal in the **<Process Extractor installation>/bin** directory.
2. Run **./startup.sh** to start Process Extractor.

Process Extractor starts.

To stop Process Extractor, run **./shutdown.sh** from the terminal.

3.3.3. Install Process Extractor as a Linux daemon

You can install Process Extractor as a Linux daemon.

Procedure

1. Open a terminal in the **<Process Extractor installation>/bin** directory.
2. Run **./wrapper.sh install**.
   Must be root to perform this action.

Process Extractor daemon is installed. The daemon is configured to start automatically when the Linux system is started.

The daemon is not started.

1. To start the daemon, run **./startup.sh** from the terminal.
2. To stop the daemon, run **./shutdown.sh** from the terminal.
3. To remove the daemon, run **./wrapper.sh remove**.
   Must be root to perform this action.

4. Configure and activate connections

After the Process Extractor installation, you must configure the connections between Process Extractor and ARIS Process Mining [11] and the connection between Process Extractor and the data source system. Process Extractor provides different configuration files to adjust the connection settings.

Note that you can configure only one connection type per Process Extractor installation, either to an SAP system or to a JDBC database. A Process Extractor installation can serve a number of connections to several source systems as long as they are of the same type of source system (several SAP source systems OR several JDBC databases).

After installation, you must register Process Extractor in ARIS Process Mining [34]. ARIS Process Mining is then able to manage either SAP or JDBC connections. You use this registration to establish a connection between Process Extractor and ARIS Process Mining. This connection must be unique.

- The **UpdateProcessMiningConfiguration.json** file contains the parameters to configure the connection to ARIS Process Mining [11].
- The **UpdateSourceSystemConfiguration.json** file contains the parameters to configure the connection to the SAP source system [12] or to configure the connection to a JDBC database [14].

You can use any text editor to edit the configuration files.

After you have configured the connection settings, you must activate the changed settings [17] by running a CLI tools. Process Extractor will use the changed settings only after the activation.

For more configuration options, see the chapter Configure ARIS Process Mining system settings [21].

4.1. Configure the connection to ARIS Process Mining

To establish the connection between ARIS Process Mining and Process Extractor, edit the **UpdateProcessMiningConfiguration.json** configuration file. The file is located in the **<Process Extractor installation>\conf** directory.

The file contains an example configuration for the ARIS Process Mining connection. The parameters are described in **UpdateProcessMiningConfiguration.md** file located in the same directory.

> **Warning**
> Do not change the **ProcessMiningConfiguration.json** file manually. The file is automatically updated with your settings by the CLI tool.

4.1.1. Configure connection settings

You must specify the ARIS Cloud URL and the project room name used for the SAP data extraction. By default, you receive this information by e-mail from SAG ARIS GmbH.

Note that each Process Extractor installation requires its own connection. It is not allowed to use the same connection for different Process Extractor installations.

Configure the **arisCloudUrl** and **projectRoom** parameters in the **UpdateProcessMiningConfiguration.json** file accordingly.

Sample snippet

```
{
"arisCloudUrl": "https://mc.ariscloud.com",
"projectRoom": "exampleProjectRoom",
...
}
```

4.1.2. Set the ARIS Process Mining credentials

Use the CLI tool [31] to set the encrypted credentials in the configuration file. The credentials are used to authenticate Process Extractor against your ARIS Process Mining cloud tenant. The CLI tool creates a **key.secret** file that is used to encrypt the credentials for ARIS Process Mining and SAP. The file is used for the user authentication.

Prerequisite

The Process Extractor service must run.

Procedure

1. Create a client-credentials key in ARIS Process Mining and copy it to the clipboard. For details on creating a client-credential key, see the chapter Create an SAP or JDBC system integration [34].
2. Open a command line in the **<Process Extractor installation>\bin** directory.
3. Run **configureExtractor.bat/.sh -crd <new_credentials>**.
   Replace <new_credentials> with the client-credentials key created in ARIS Process Mining.

You have set the ARIS Process Mining credentials.

> **Warning**
> Do not manually change the ARIS Process Mining credentials in the **UpdateProcessMiningConfiguration.json**

file.

> **Warning**
> If you delete the **key.secret** file, you must reset the ARIS Process Mining credentials and SAP passwords, otherwise no connection can be established.

4.2. Configure the connection to the SAP system

You can adjust an existing or add a new connection to the SAP source system.

Use the **UpdateSourceSystemConfiguration.json** configuration file to adjust the settings. The file is located in the **<Process Extractor installation>\conf** directory.

The parameters are described in **UpdateSourceSystemConfiguration.md** file located in the same directory. The file contains a sample configuration for an SAP connection that you can customize and use to configure the connection to your source SAP system.

If you want to use SAP Secure Network Communication (SAP SNC) for the communication with the SAP system, see the chapter Configure SAP Secure Network Connection [26].

> **Warning**
> Do not change the **SourceSystemConfiguration.json** file manually. The file is automatically updated with your settings by the CLI tool.

Example 1.

```
{
"sapconfigurations" : [ {
"configurationAlias" : "SAP Prod",
"secret" : "",
"user" : "pm_user",
"password" : "",
"client" : "100",
"applicationServer" : "sapprod.my.company",
"systemNumber" : "00",
"gatewayHost" : "",
"gatewayServiceNumber" : "",
"messageHost" : "",
"r3SystemName" : "",
"group" : "",
"sncMode" : false,
"sncMyName" : "",
"sncPartnername" : "",
"sncQop" : "HIGHEST_AVAILABLE",
"sncSso" : false,
"retries" : 0,
"secondsBetweenRetry" : 60,
"blockSize" : 100000,
"metadataLanguage" : "E",
"delimiter" : ";"
},
{
...
}
]
}
```

4.2.1. Set the SAP password

You must use a CLI tool to set the SAP password, which will be stored encrypted. For more details on using the CLI tool, see the chapter Command Line Interface [31].

Prerequisite

The Process Extractor service must run.

Procedure

1. Open a command line in the **<Process Extractor installation>\bin** directory.
2. Run **configureExtractor.bat -sys <sap_configurationAlias> -usr <name> -pwd <password> <password_confirmation>**

   or

   configureExtractor.bat -sys <sap_configurationAlias> -usr <name> -pwd

   Enter the password using the console (hidden).

   Depending on the console encoding, the hidden password input may not process special characters correctly. In this case, it is recommended to specify the passwords only in the command line.

You have set the SAP password.

4.3. Configure the connection to a JDBC database

You can adjust an existing or add a new connection to a JDBC database.

Use the **UpdateSourceSystemConfiguration.json** configuration file to adjust the settings. The file is located in the **<Process Extractor installation>\conf** directory.

The parameters are described in **UpdateSourceSystemConfiguration.md** file located in the same directory. The file contains a sample configuration for a JDBC connection that you can customize and use to configure the connection to your JDBC database.

Note that for the database user used to read from the database, the required access privileges are configured. For security reasons, the user should have read-only privileges for the required data.

> **Warning**
> Do not change the **SourceSystemConfiguration.json** file manually. The file is automatically updated with your settings by the CLI tool.

Example 2.

```
{
"jdbcconfigurations" : [ {
"configurationAlias" : "some_unique_alias",
"secret" : "",
"dbURL" : "database_url",
"dbDriverClass" : "database_jdbc_driver_class",
"dbUser" : "database_user",
"dbPassword" : "password_set_with_configure_extractor",
}, {
...
}]
}
```

4.3.1. Set the JDBC password

You must use a CLI tool to set the JDBC database password, which will be stored encrypted. For more details on using the CLI tool, see the chapter Command Line Interface [31].

Note that for the database user used to read from the database, the required access privileges are configured. For security reasons, the user should have read-only privileges for the required data.

Prerequisite

The Process Extractor service must run.

Procedure

1. Open a command line in the **<Process Extractor installation>\bin** directory.
2. Run **configureExtractor.bat -sys <jdbc_configurationAlias> -usr <dbUser> -pwd <dbPassword> <password_confirmation>**

   or

   configureExtractor.bat -sys <jdbc_configurationAlias -usr <dbUser> -pwd

   Enter the password using the console (hidden).

   Depending on the console encoding, the hidden password input may not process special characters correctly. In this case, it is recommended to specify the passwords only in the command line.

You have set the JDBC password.

4.3.2. Configure authentication using connection properties

Some JDBC databases do not use username and password as primary authentication. For example, Databricks supports token-based personal access tokens, OAuth M2M credentials, and Unity Catalog service principals, none of which fit the classic dbUser/dbPassword model. For these databases, you can specify authentication parameters directly in the **UpdateSourceSystemConfiguration.json** file using the **dbConnectionProperties** array. In this case you can omit the **dbUser** and **dbPassword** fields.

Each entry in the **dbConnectionProperties** array is an object with the following fields:

Field	Required	Description
key	Yes	The JDBC connection property name as expected by the driver.
value	Yes	The property value. Encrypted hex if encrypted is true, cleartext otherwise
encrypted	No	If true, the value is stored AES-encrypted on disk using the same mechanism as dbPassword. Default: false

Example 3.

Databricks with a personal access token

```
{
  "jdbcconfigurations" : [ {
    "configurationAlias" : "databricks_prod","jdbcconfigurations" : [ {
    "secret" : "",
    "dbURL" : "azuredatabricks.net:443/default;httpPath=&lt;path&gt;",
    "dbDriverClass" : "com.databricks.client.jdbc.Driver",
```

```
    "dbConnectionProperties" : [
        { "key" : "AuthMech", "value" : "3" },
        { "key" : "UID", "value" : "token" },
        { "key" : "PWD", "value" : "dapiXXX", "encrypted" : true }
    ]
  } ]
}
```

When **dbConnectionProperties** are specified alongside **dbUser** and **dbPassword**, the connection properties take precedence for keys that overlap. For example, a user entry in **dbConnectionProperties** overrides the value of **dbUser**.

The CLI command **configureExtractor -pwd** manages only the legacy **dbPassword** field and cannot be used with configurations that omit **dbUser**. To validate and activate a configuration that uses **dbConnectionProperties**, use the **-set** option described in the next section.

For sensitive values such as access tokens, set "encrypted" : true in the configuration entry. The value must be encrypted using the same AES key (key.secret) that the extractor uses for **dbPassword**. Use the **-set** option described to encrypt and store the value.

For non-sensitive properties such as the authentication mechanism identifier, the warehouse name, or the catalog name, "encrypted" can be omitted (defaults to false).

4.3.3. Set connection properties from the command line

The **configureExtractor** tool provides a **-set** option that adds or replaces a single entry in the **dbConnectionProperties** list of a JDBC source system. This is the recommended way to store encrypted property values because it handles encryption automatically.

Syntax

configureExtractor -sys <alias> -set <key> <value>

configureExtractor -sys <alias> -set <key> <value> -encrypt

configureExtractor -sys <alias> -set <key> -encrypt

Table 1.

Variant	Effect
-sys <alias> -set <key> <value>	Stores the property value in cleartext ("encrypted": false). Use for non-sensitive properties such as AuthMech, warehouse, or catalog.
-sys <alias> -set <key> <value>	Encrypts the value using the instance-local **key.secret** file before storing it ("encrypted": true). Use when the value is already known and can be passed on the command line.
-sys <alias> -set <key> <value>	Prompts for the value on the console without keyboard echo, then encrypts and stores it. Use for secrets such as access tokens or API keys.

If an entry with the same key already exists, it is replaced. Otherwise, the new entry is appended to the list. The command writes directly to **UpdateSourceSystemConfiguration.json** and does not test the connection. After setting all required properties, validate and activate the configuration as usual:

1 Run configureExtractor -chk to check the configuration.
.
2 Run configureExtractor -upd to activate it.
.

Example 4. set a Databricks personal access token

configureExtractor -sys databricks_prod -set AuthMech 3

configureExtractor -sys databricks_prod -set UID token

configureExtractor -sys databricks_prod -set PWD -encrypt

Enter a value for property "PWD" of source system alias "databricks_prod":

- configureExtractor -chk
- configureExtractor -upd

4.4. Test connection configurations

You can check the changed configurations of the ARIS Process Mining and JDBC or SAP connection.

The changed configurations are configured in the **UpdateProcessMiningConfiguration.json** and **UpdateSourceSystemConfiguration.json** files.

Prerequisite

The Process Extractor service must run.

Procedure

1. Go to the **<Process Extractor installation>\bin** directory.
2. Open a command line
3. Run **configureExtractor.bat -chk**.

A connection test is performed.

4.5. Activate connection configurations

Finally, you must activate the connection configurations in the **UpdateProcessMiningConfiguration.json** and **UpdateSourceSystemConfiguration.json** configuration files. You must use the CLI tool [31] to activate the configurations.

The files are located in the **<Process Extractor installation>\conf** directory.

Prerequisite

The Process Extractor service must run.

Procedure

1. Open a command line in the **<Process Extractor installation>\bin** directory.
2. Run **configureExtractor.bat -upd**.

The connection configurations are activated.

If you activate the settings of the **UpdateProcessMiningConfiguration.json** file and the Process Extractor service is running, you must restart the Process Extractor service to apply the changes.

You can now extract the SAP or JDBC source data using ARIS Process Mining. For information on configuring and using the extracted source data, see the ARIS Process Mining online help.

4.5.1. Notes

The CLI tool automatically creates a backup of the activated configurations contained in the **ProcessMiningConfiguration.json** and **SourceSystemConfiguration.json** files before they are updated. The aliases of the activated SAP/JDBC connections will be transferrd to ARIS Process Mining.

If the **ProcessMiningConfiguration.json** file was empty before the update, the new settings are used by the service immediately. The file is empty if no ARIS Process Mining configuration was activated successfully before. If this file was not empty, you must restart the service to complete the activation of this configuration.

If no SAP/JDBC secret exists for an SAP/JDBC system in the **UpdateSourceSystemConfiguration.json** file, the CLI tool automatically creates a new one for every system without SAP/JDBC secret.

If you want to use a new secret for an existing SAP/JDBC configuration, you must first delete the secret for this SAP/JDBC data source in the **UpdateSourceSystemConfiguration.json** file. Then you must activate the configuration again using the CLI tool.

All keys and values in the JSON configuration files must be in quotation marks.

5. Appendix

5.1. Data extraction process

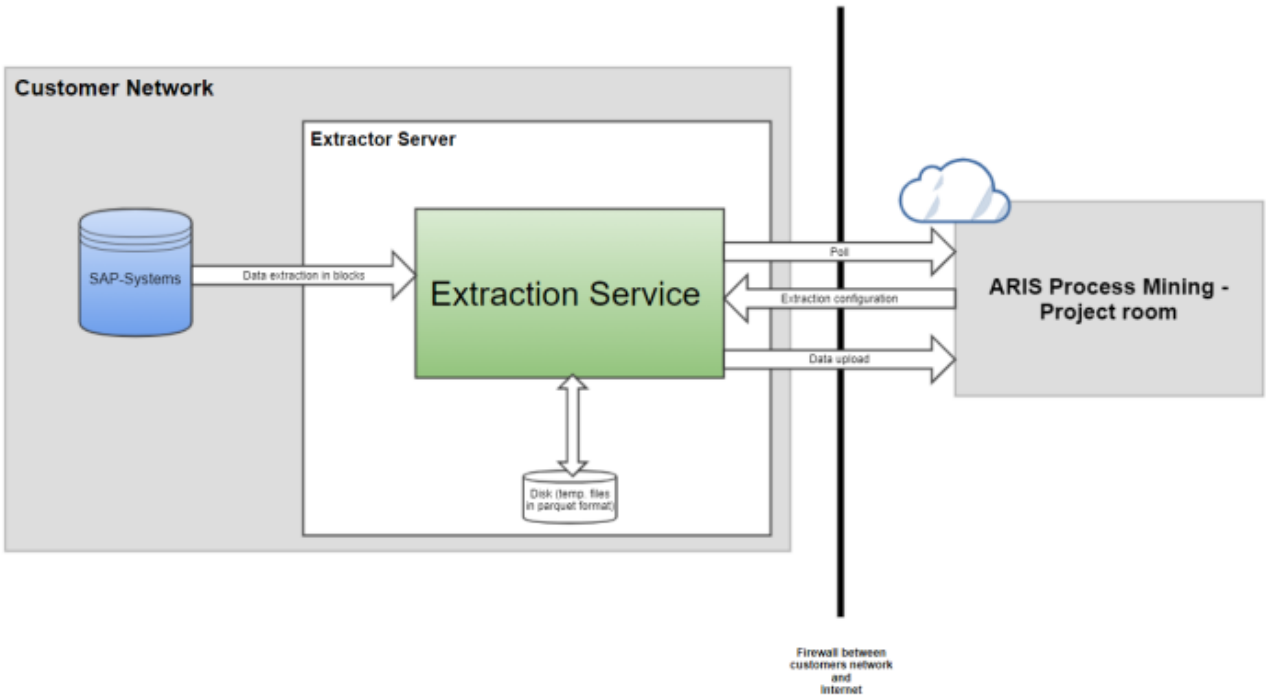
The data extraction process is illustrated below using SAP as the data source. The process works similarly for SAP systems and JDBC databases.

Process data (events) is extracted and transferred from the SAP source systems to ARIS Process Mining Cloud where it is stored for further processing.

For this purpose, Process Extractor must be installed as a service in your system environment, and it must have access to the SAP systems from which data is to be extracted. Once Process Extractor is started, it queries the process mining cloud at cyclical intervals to determine whether extraction tasks are available for it. If this is the case, these extraction tasks are downloaded and executed by Process Extractor. The extraction is done in chunks. These chunks are temporarily stored as parquet files into a sub folder of the **<Process Extractor>\data** directory and then transferred to ARIS Process Mining Cloud.

The data extraction from the SAP system is performed following an extraction description. This extraction description is defined by the customer based on a visual data model description in ARIS Process Mining. This description defines the data tables and data columns to be extracted from the respective SAP systems.

Schematic representation of the data extraction process



When Process Extractor service is started, the service connects to ARIS Process Mining with the configured client credentials.

- If ARIS Process Mining could not be reached:
  Process Extractor tries to reconnect in a loop at a fixed time interval.

- If the connection fails because of wrong credentials:

  An error message is logged and the service continues running. This is necessary because otherwise the CLI tool [31] can not connect to update the configuration.

If the connection is successful:

Process Extractor logs on to the configured project room.

ARIS Process Mining reads the table meta data (table names and description) of the SAP system if required.

If the registration is completed successfully, the Process Extractor service starts polling for new jobs.

When ARIS Process Mining sends an extraction configuration, Process Extractor schedules it.

Depending on the configuration, one or multiple RFC connections are used for data extraction from SAP system.

Data extraction is done with the configured block size.

Every extracted data block is written to a file located in a subdirectory of the data folder. The files are uploaded one after the other.

If the upload of a file is interrupted, Process Extractor will try to upload the file again until the configured upload time is reached.

If a scheduled data extraction is canceled either by ARIS Process Mining or, for example, by network errors, ARIS Process Mining cleans up the temporary data files.

Data extraction

When a data extraction is canceled or the connection between SAP and the Extractor is lost, it could be that entries remain in RFCs temp table /SOFWAG/INDX_V2. The remaining data is automatically removed after a few days during a data extraction.

5.2. Communication protocols

The communication process is illustrated below using SAP as the data source. The process works similarly for SAP systems and JDBC databases, except that a JDBC connection is used instead of an RFC connection when reading from JDBC databases.

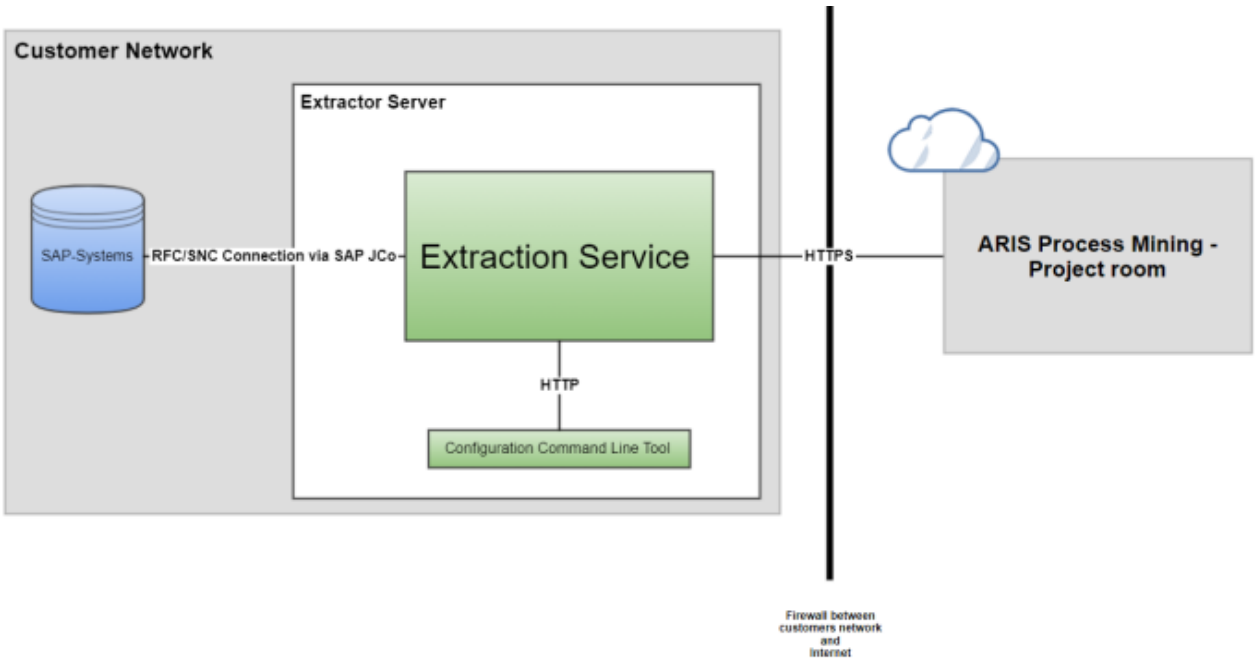
Process Extractor communicates with SAP systems using the Remote Function Call (RFC). This is the SAP standard interface for realizing such kind of communication. Process Extractor uses RFC to call the function (contained in the delivered SAP transport request) to extract the data.

You can secure the communication with the SAP systems using the SAP Secure Network Protocol (SNC). [26]

All communication between Process Extractor and ARIS Process Mining is initiated by Process Extractor. For security reason, the communication is done using HTTPS.

Example 5.

The following figure shows a schematic representation of the system communication.



5.3. Configure Process Extractor system settings

If required, you can configure some additional system settings of Process Extractor, such as the port number of Process Extractor, the number of parallel read access to the SAP system, or the usage of IPv4 or IPv6.

You can configure the system settings in the **ExtractorConfiguration.json** configuration file. The configuration file is located in the **<ARIS Process Mining installation>\conf** directory.

The parameters are described in the **ExtractorConfiguration.md** file located in the same folder.

5.4. SAP data types

Process extractor determines the target type of an extracted field (this is the type that the field will have in extracted ARIS Process Mining source tables) from the internal ABAP data type of the field.

The internal ABAP data type of every field in the SAP system is specified in the INTTYPE field of the corresponding row of the DD03L table.

List of the mapping from internal ABAP data types to ARIS Process Mining data types.

Internal ABAP data type	ARIS Process Mining data type
C	Text
X	Text
g	Text
y	Text
V	Text
N	Text

I	Long
b	Long
s	Long
D	Text
T	Text
P	Double
F	Double
u	Text
v	Text
h	Text
r	Text
l	Text

For descriptions of the internal ABAP types, please refer to the SAP documentation or the INTTYPE domain in the SAP Data Dictionary.

Some extracted fields may need to be converted to their intended data type in ARIS Process Mining using a transformation. For example, it is not possible to extract directly data into columns of type Timestamp. You must therefore use a transformation in ARIS Process Mining to convert a date (or a combination of a date and a time) to a Timestamp value.

Example 6.

to_timestamp(concat(`UDATE`,`UTIME`), 'yyyyMMddHHmmss')

5.5. Requirements of the SAP source system

If you use SAP as a source system, it must meet the following requirements.

- Ensure that SAP system can be accessed via network. [22]
- An ARIS Process Mining-specific development class has been imported into the SAP system using the SAP transport request. The required transport request is included in the ARIS Process Mining installation. [23]
- An SAP user [24] with system access via Remote Function Call (RFC) and execution privilege for the ARIS Process Mining function modules exists.
- In some cases, you must create additional indices in the SAP database [26] to improve the performance during data extraction or to prevent data extraction being canceled by a timeout in the SAP system.

5.5.1. SAP access

If a firewall restricts communication between Process Extractor and the SAP backend, the ports used by the SAP Java Connector (JCo) must be enabled.

- For standard RFC connections, JCo uses the dispatcher port 3300 + system number. For example, if the system number is 01, the corresponding port is 3301.
- For connections via a gateway server, message server, or the SNC protocol, other standard ports may be required. For example, RFCs over SNC often use the legacy port 4800.

- SAP administrators may also configure custom ports for specific connection types.

Refer to the official SAP documentation and and ask your SAP and network administrators to specify the correct settings in the **SourceSystemConfiguration.json** file.

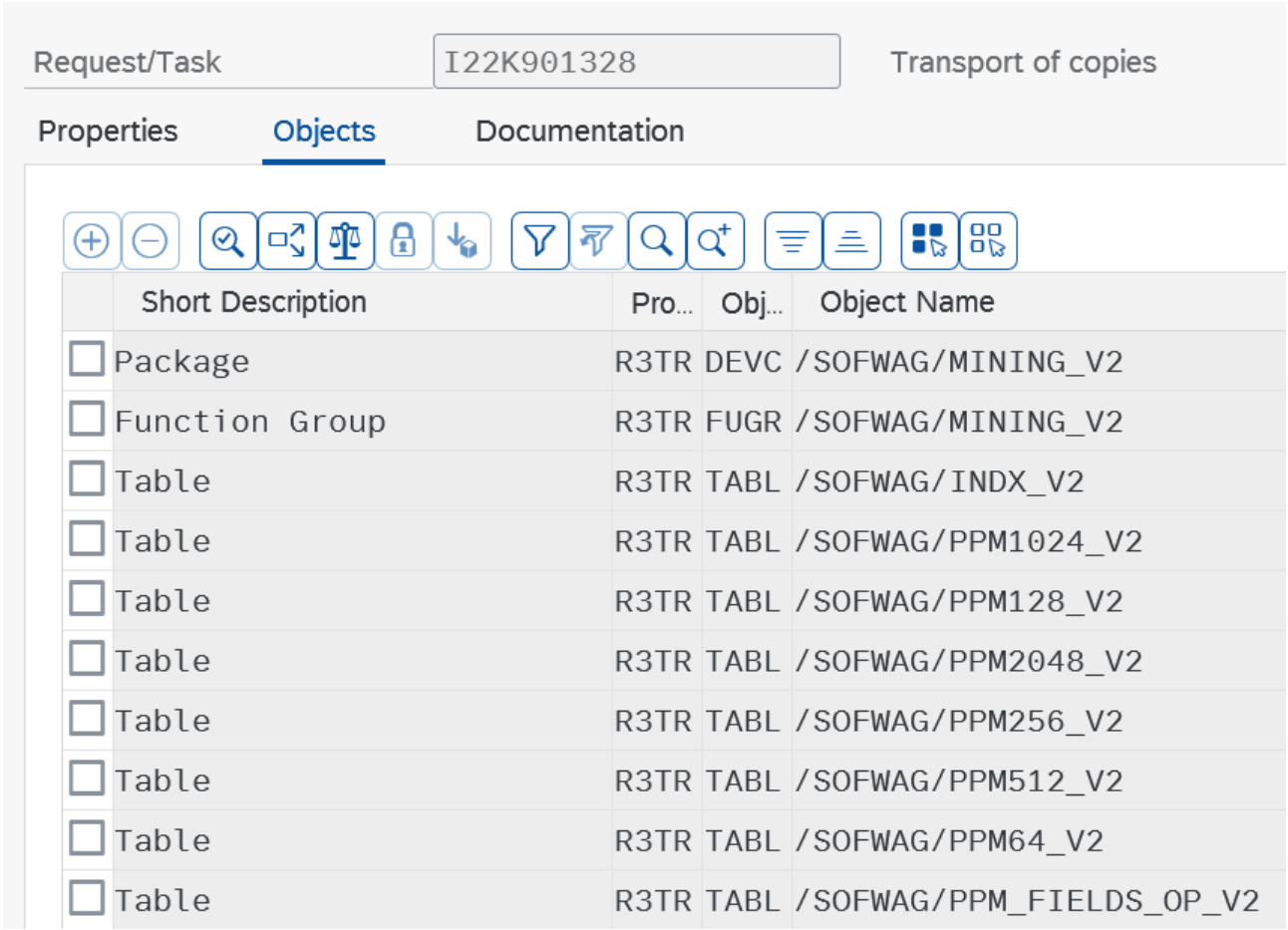
5.5.2. SAP function modules

Process Extractor requires specific function modules to access SAP data. For the following SAP systems, ARIS provides a SAP transport request to be used for importing all required function modules into the SAP system.

SAP version	Transport request (file name)
from 700 of the SAP basis component	ProcessMiningTransport_v2.zip

Import the transport request into the SAP system version from which you want to extract data. Only one transport request may be imported. The file with the transport request is located in the **<Process Extractor installation>\SAPTransports** directory. After you have imported the function modules, the **/SOFWAG/MINING_V2** development class with the **/SOFWAG/MINING_V2** function group and all necessary structures and function modules are created in the SAP system.

The following objects are included in the SAP transport request.



5.5.3. SAP user

SAP users must have the following privileges to use Process Extractor:

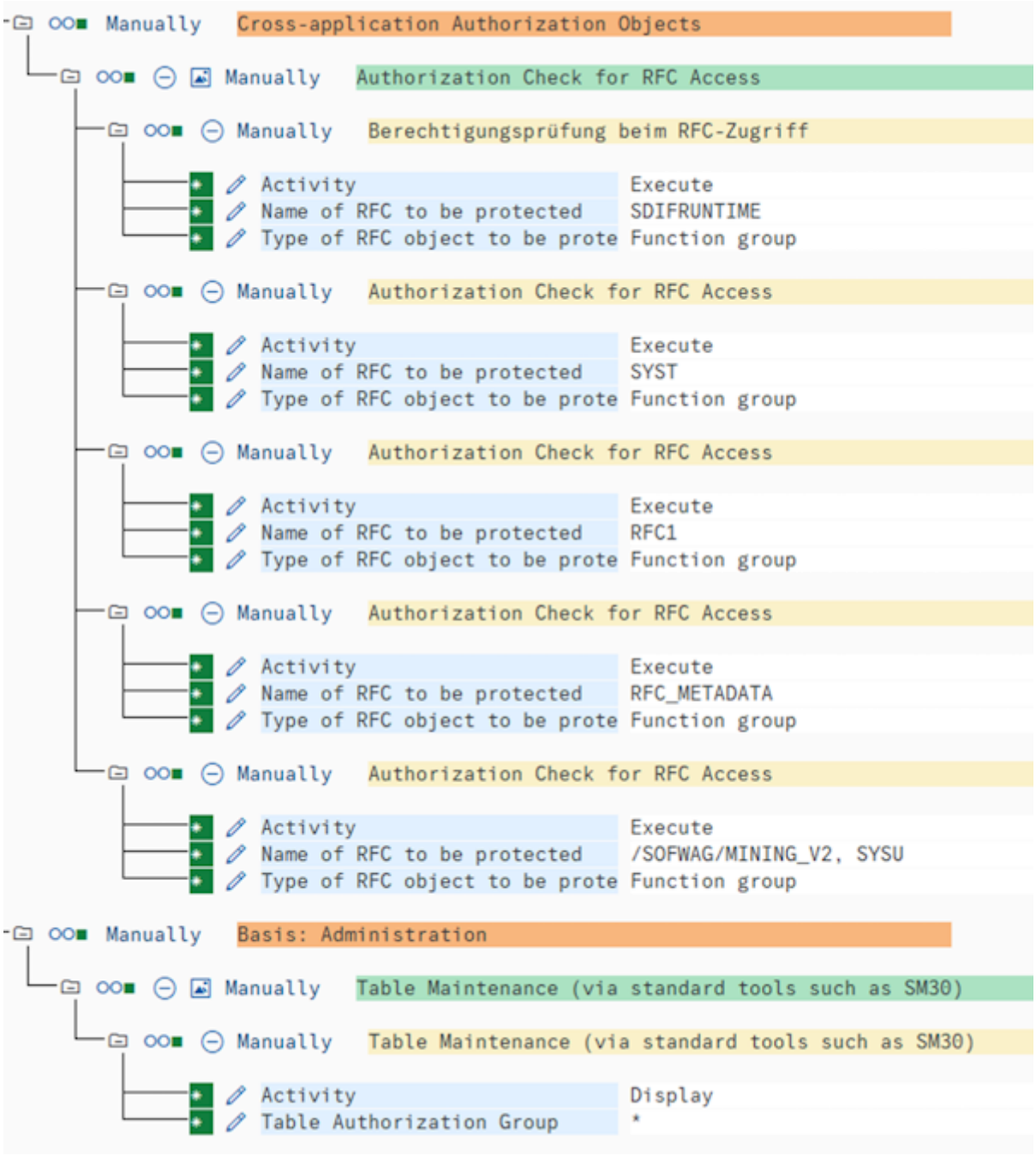
- General Remote Function Call (RFC) [20] privileges
- CPIC authorization
- Unlimited access privilege for the **/SOFWAG/MINING_V2** development class, and **/SOFWAG/RFC_READ_TABLE_V2** function modules contained in the development class.
- Access privilege for **RFC_METADATA** function group.
- Additional privileges depend on the version of the SAP system (see examples below) and on the version of the SAP Java Connector (JCo).

The user needs read privileges for all tables specified in the extraction configuration in ARIS Process Mining. The user also requires read privileges for **the tables DD02L, DD02T, DD03L, DD03T, DD04T.** The read privilege for these tables is necessary because Process Extractor needs to read the meta data of the tables and table fields. Below are two examples of this configuration with privileges to read all tables. One applies to S/4 HANA.

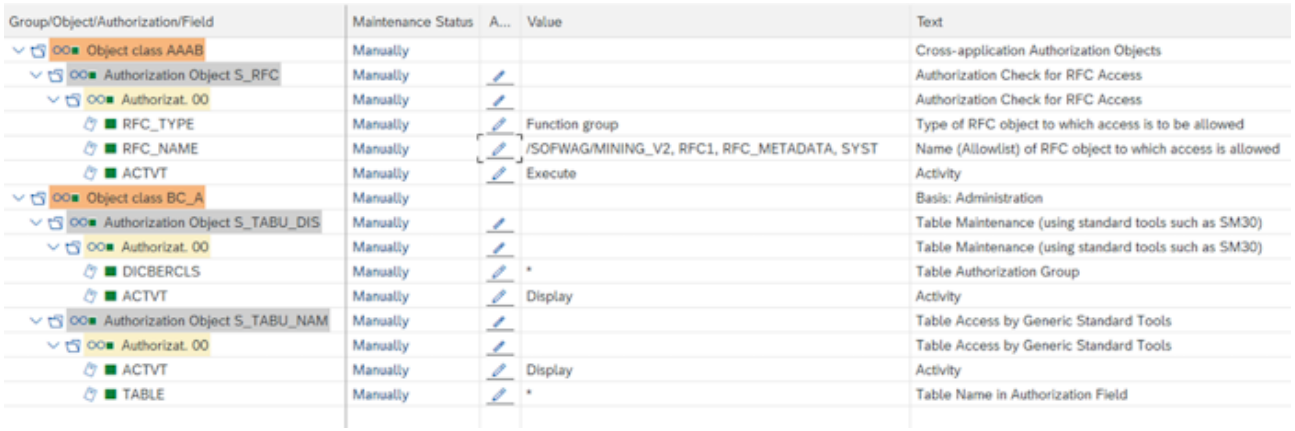
Using the **su02** SAP transaction, you can view and modify the privilege configurations and users assigned to a role. Use the **su01** transaction to display the profiles assigned to a user.

Example 7.

The figure below illustrates an example configuration in the SAP administration component. (The example does not apply to S/4 HANA.)



The figure below illustrates an authorization example for S/4 HANA.



Group/Object/Authorization/Field	Maintenance Status	A...	Value	Text
Object class AAAB	Manually			Cross-application Authorization Objects
Authorization Object S_RFC	Manually			Authorization Check for RFC Access
Authorizat. 00	Manually			Authorization Check for RFC Access
RFC_TYPE	Manually		Function group	Type of RFC object to which access is to be allowed
RFC_NAME	Manually		/SOFWAG/MINING_V2, RFC1, RFC_METADATA, SYST	Name (Allowlist) of RFC object to which access is allowed
ACTVT	Manually		Execute	Activity
Object class BC_A	Manually			Basis: Administration
Authorization Object S_TABU_DIS	Manually			Table Maintenance (using standard tools such as SM30)
Authorizat. 00	Manually			Table Maintenance (using standard tools such as SM30)
DICBERCLS	Manually		*	Table Authorization Group
ACTVT	Manually		Display	Activity
Authorization Object S_TABU_NAM	Manually			Table Access by Generic Standard Tools
Authorizat. 00	Manually			Table Access by Generic Standard Tools
ACTVT	Manually		Display	Activity
TABLE	Manually		*	Table Name in Authorization Field

5.5.4. SAP table indices

In some cases, when data extraction is slow, it may be that additional indices in the SAP system may be needed to speed up the data extraction.

We recommend that you first test an extraction configuration with the SAP test system to identify tables for which an index needs to be created.

5.6. Configure SAP Secure Network Connection

You can configure Process Extractor to establish an SNC-encrypted connection to SAP.

SAP Secure Network Connection (SAP SNC) is a proprietary protocol of SAP AG for encrypted communication with SAP systems. To encrypt the communication between the Process Extractor and an SAP system, an appropriate encryption library must be installed and configured on the local machine, and the SAP system must be configured to allow communication using SNC.

5.6.1. Prerequisites

- All requirements for performing non-encrypted SAP RFCs must be met.
- The SAP application server must be configured for SNC.
- Appropriate SNC users must be set up in the SAP system.
- An SAP-certified cryptographic library compatible with GSS API v2 must be installed on the local machine. We recommend using SAP Common Cryptolib, with which Process Extractor has been tested. This library may be obtained directly from SAP. Please refer to SAP documentation for configuring this library.
- JCo version >= 3.1 must be installed, otherwise SNC connections may not work.
- Define the environment variables **SNC_LIB** and **SECUDIR** in your operating system environment. The RFC library embedded in JCo requires these variables to find the SNC layer and the required credentials.

5.6.2. Configure SNC connection parameters

You can establish an SNC connection either with SSO using a certificate, or with a user/password combination for a basic authentication, where SNC is used only for encryption.

You can use the CLI tool to configure a SNC connection. The relevant attributes are described in the MD files located in the **...\conf** folder.

The relevant attributes are **user**, **password**, **sncMode**, **sncMyName**, **sncPartnername**, **sncQop**, and **sncSso**.

SNC SSO

You must set **sncMode** and **sncSso** to true and not specify a user and password as in the following sample configuration:

"user" : "",

"password" : "",

"sncMode" : true,

"sncMyName" : "p:CN=SAPUSER, OU=TEST, O=SAG, C=US",

"sncPartnername" : "p:CN=SAP-SNC, OU=TEST, O=SAG, C=US",

"sncQop" : "HIGHEST_AVAILABLE",

"sncSso" : true

Basic authentication

You must set sncMode to true, sncSso to false, and specify a user and password as in the following sample configuration. You can encrypt the password with the **configureExtractor** command line tool, as described in the chapter Change the SAP password [13].

"user" : "sapuser",

"password" : "<encrypted>",

"sncMode" : true,

"sncMyName" : "p:CN=SAPUSER, OU=TEST, O=SAG, C=US",

"sncPartnername" : "p:CN=SAP-SNC, OU=TEST, O=SAG, C=US",

"sncQop" : "HIGHEST_AVAILABLE",

"sncSso" : false

5.7. Update Process Extractor

You can update an already installed Process Extractor.

Procedure

1. Download the latest version of the Process Extractor ZIP file from the ARIS Download Center using the following Link.
2. Unpack the contents of the ZIP file into an empty folder, for example, C:\UpdateProcessExtractor. Avoid spaces in the folder name.

   Do not unpack the file into a folder that contains the already installed Process Extractor.
3. Open a DOS box or Linux terminal on folder <unpackdir>\update, for example, C:\UpdateProcessExtractor\update.
4. Run the script [update.bat|sh] -d <installdir>, for example, update.bat -d C:\ProcessExtractor

Process Extractor is updated in the specified installation directory, for example, C:\ProcessExtractor.

Information about the update can be found in the **update.log** file stored in the **<unpackdir>\update\logs** directory, for example C:\UpdateProcessExtractor\update\logs.

Note

After an update, Process Extractor may no longer work because the JRE, including the certificate used, is also replaced. To ensure that Process Extractor works properly after an update, you must re-import the self-signed certificate into the new trust store of the replaced JRE.

5.8. Adjust the Process Extractor configuration

You can customize the configuration of Process Extractor, for example, increase the maximum heap size or configure a proxy. To do this, you can edit the **custom_wrapper.conf** file. The file is located in the **<ARIS Process Mining installation>\wrapper\conf** directory.

A default configuration is available in the **wrapper.conf** file located in the same directory.

Note that your settings in the **custom_wrapper.conf** file overwrites the properties configured in the **wrapper.conf** file.

5.8.1. Extend memory for Process Extractor

To increase the Maximum Java Heap Size to 16384 MB, you must set the property **wrapper.java.maxmemory=16384** in the **custom_wrapper.conf** file.

Current configurations

Property	Description	Property in wrapper.conf	Property in custom_wrapper.conf
wrapper.java.maxmemory	Maximum Java Heap Size (in MB)	wrapper.java.maxmemory=8192	Not available

5.8.2. Use a proxy server for Process Extractor

You can use an HTTPS proxy server to connect Process Extractor to ARIS Process Mining. You can configure a proxy that considers both external and internal communication.

To configure a proxy for Process Extractor, you must modify the **custom_wrapper.conf** file. The file is located in the Process Extractor installation directory **<installation directory>/wrapper/conf**.

Procedure

1. Open the **custom_wrapper.conf** file in a suitable editor.
2. Set the proxy for an external communication
   a. If Process Extractor needs to communicate with the Process Mining Cloud (mc.ariscloud.com or processmining.ariscloud.com) via an https proxy, add the following to the **custom_wrapper.conf** file:

      wrapper.java.additional.20=-Dhttps.proxyHost=<your proxy host parameter>

      wrapper.java.additional.21=-Dhttps.proxyPort=<your proxy port parameter>
   b. Replace <proxy_host> with the hostname or IP address of your proxy server, and <proxy_port> with the port number.
3. Disable the proxy for an internal communication:
   a. If Process Extractor communicates with internal services (like source systems or ARIS Process Mining OnPrem) that should not use the HTTPS proxy, you must set the following exclusions:

      wrapper.java.additional.22=-Dhttp.nonProxyHosts=<internal_host1>|<internal_host2>
   b. If Process Extractor communicates via a socket connection, add the following line to exclude the communication with these systems from the proxy:

      wrapper.java.additional.23=-DsocksNonProxyHosts=<internal_host1>|<internal_host2>
   c. Replace <internal_host1> and <internal_host2> with the internal hosts that should bypass the proxy.
   d. To exclude any localhost communication, add this text to your hosts list:

      |localhost|127.*|[::1]|0.0.0.0|[::0]

      Example

      wrapper.java.additional.23=-DsocksNonProxyHosts=sqlserver.mydomain.com|localhost|127.*|[::1]|0.0.0.0|[::0]
4. Handling of different scenarios:
   a. No proxy required: If your application does not require a proxy, ensure that no proxy settings are configured in the custom_wrapper.conf.
   b. Only external proxy: Only set the external proxy settings as mentioned in step 2.
   c. Both external and internal: Set both external proxy settings and the nonProxyHosts for internal services as mentioned in step 3.
5. Restart Process Extractor after making changes to the **custom_wrapper.conf** file.

You configured a proxy to use Process Extractor for an internal or external communication.

Notes

- If your source system is an internal system and not accessible via the SSL proxy, the log shows a **502 Bad Gateway** error. In this case you must add the following line to exclude the internal service from the proxy connection (see step 3).

  wrapper.java.additional.22=-Dhttp.nonProxyHosts=<hostname of source system>|localhost|127.*|[::1]|0.0.0.0|[::0]

  Both HTTP and HTTPS use the **http.nonProxyHosts** parameter to exclude proxies.

  If the connection continues to fail with a **502 Bad Gateway** error, the JDBC driver is most likely connecting via a socket connection. In this case you must add add the following line as well. (You can keep the added line mentioned above.)

  wrapper.java.additional.23=-DsocksNonProxyHosts=<hostname of source system>|localhost|127.*|[::1]|0.0.0.0|[::0]
- Proxy authentication is not tested and not supported for Process Extractor.
- The usage of different proxies for external and internal communication is not tested and not supported for Process Extractor.

5.8.3. Import proxy certificates

If your HTTPS proxy replaces the certificates for your target URLs, you must import the proxy certificates into Process Extractor for ARIS Process Mining.

Prerequisite

OpenSSL is installed. Note that OpenSSL is available by default on Linux systems.

Procedure

1. Open a web browser on the computer, where Process Extractor is installed.
2. Configure the network settings of the web browser. The procedure depends on the web browser you use.
   a. Enable the manual proxy configuration.
   b. Specify the settings of your proxy server.
   c. Save your setting.
3. Open the URL to ARIS Process Mining in the web browser, for example, "https://mc.ariscloud.com". If you have a self-signed certificate with your organization as the root-ca, you see a warning that it is not safe to browse this website.
4. On the warning page, click **View certificate**.
5. On the certificate page, scroll down to download the certificate. There are two download links ("PEM"): One for the certificate and one for the certificate chain. Download the certificate chain.
6. To change the **PEM** certificate to **CRT** certificate, run the following command in a shell:

   openssl x509 -outform der -in <downloaded>.pem -out <converted>.crt
7. Navigate to the **<Process Extractor installation>\jre\bin** directory.
8. To import the certificate into the keystore, run the following command in a shell:

   keytool -import -trustcacerts -alias ProxyCert -file <converted>.crt -cacerts -storepass changeit -noprompt
9. Restart Process Extractor.

You imported a proxy certificate into Process Extractor for ARIS Process Mining.

5.9. Command Line Interface (CLI)

You can use the **configureExtractor** Command Line Interface (CLI) to

- Change the SAP- and JDBC-system password in the **UpdateSourceSystemConfiguration.json** file.
- Change the credentials of ARIS Process Mining in the **UpdateProcessMiningConfiguration.json** file.
- Test the SAP and JDBC configuration of the **UpdateSourceSystemConfiguration.json** file.
- Test the ARIS Process Mining configuration of the **UpdateProcessMiningConfiguration.json** file.
- Activate configurations (Update).
- Support multiple languages (The **language** parameter is optional. If the parameter is missing, the OS language is used.)

You can start the command line interface (CLI) using the **configureExtractor** batch or shell-script that are provided with the ARIS Process Mining installation.

This tool is located in the **<Process Extractor installation>\bin** directory.

The **UpdateSourceSystemConfiguration.json** and **UpdateProcessMiningConfiguration.json** files are located in the **<ARIS Process Mining installation>\conf** directory.

> **Warning**
> Do not edit the **SourceSystemConfiguration.json** and **ProcessMiningConfiguration.json** files located in the **<Process Extractor installation>\conf** directory. (These files are only updated by the CLI tool.)

Command line help

usage: configureExtractor

-h,--help: Print usage instructions and exit.

-?: Print usage instructions and exit.

-v: Print version number and exit.

-pwd,--password <arg>: Change password for SAP/JDBC-system alias and SAP/JDBC-system user.

Password is needed twice (password and confirmation).

-crd,--credentials <credentials>: Change credentials for ARIS Process Mining system.

-chk,--check-configurations: Check configurations.

-upd,--update-configurations: Update configurations.

-sys,--system <arg>: Specify SAP/JDBC-system alias.

-usr,--user <arg>: Specify SAP/JDBC-system user.

-lg,--language <arg>: Specify language.

The **ExtractorConfiguration.json** file is not updated by the CLI tool and you can edit it manually. Changes of this configuration requires a restart of Process Extractor.

User actions

- Print help
  configureExtractor -h
- Print version number
  configureExtractor -v
- Change SAP-system password (in the source system update configuration file)
  configureExtractor -sys <sap_system> -usr <name> -pwd [<password> <password_conformation>]
- Change JDBC-system password (in the source system update configuration file)
  configureExtractor -sys <jdbc_configurationAlias> -usr <dbUser> -pwd [<dbPassword> <password_confirmation>]
- Change ARIS Process Mining credentials (in ARIS Process Mining update configuration file)
  configureExtractor -crd <credentials>
- Check current configurations (SAP-, JDBC, and ARIS Process Mining connection checks and validations)
  configureExtractor -chk
- Update current configuration(s), that is, reload current configuration file(s)
  configureExtractor -upd

5.10. Log files and error messages

The chapter gives you hints on what to do in case of certain problems during the installation.

All error messages are written to the Process Extractor log files.

The log files are located in **<ARIS Process Mining installation>\logs** directory.

- **Extractor.log** contains the messages of Process Extractor.
- **ExtractorPerf.log** contains the messages of performance measurements.
- **ExtractorCLI.log** contains the messages of the CLI tool.
- **ExtractorCommunication.log** contains the messages of the communication between Process Extractor and ARIS Process Mining.
- **ExtractorService.log** contains the log messages of the Extractor service wrapper.

Possible errors during startup

ARIS Process Mining denied start of this extractor

```
ERROR||||0000000000|main|communication - ARIS Process Mining denied start of
this extractor. An extractor with the same credentials is recognized as alive
(Timeout after 120s).
```

This error occurs when you restart your extractor or when you try to connect another extractor with the same credentials that are used by an already connected extractor.

If the extractor looses the connection to ARIS Process Mining, ARIS Process Mining waits 120s for an extractor to reconnect to the previously used connection. After the 120s, ARIS Process Mining does no

longer reserves the connection and it can be renewed by a starting extractor. That is, if you restart the extractor, you must wait 120s. If you want to use another extractor, you must shut down your existing one to be able to use the connection.

Note that when you restart an extractor, all tasks in processing for the connection in ARIS Process Mining to this extractor are set to failed.

ARIS Process Mining connection error

```
WARN ||||0000000000|main|communication - PROCESS_MINING_CONNECTION_ERROR:
INFO ||||0000000000|main|communication - Please import valid ARIS Process
Mining Configuration...
ERROR||||0000000000|main|communication - 401 Unauthorized: [no body]
```

The error occurs when on extractor start up the ARIS Cloud authentication server (**arisCloudUrl** property in the **ProcessMiningConfiguration.json** file) is invalid or could not be reached. Check the value of the **arisCloudUrl** property in the **ProcessMiningConfiguration.json** file.

MCP authorization error

```
2021-01-28T08:36:41,996|WARN ||||0000000000|main|communication -
MCP_AUTHORIZATION_ERROR:
2021-01-28T08:36:41,997|INFO ||||0000000000|main|communication - Please import
valid ARIS Process Mining Configuration...
2021-01-28T08:36:42,005|ERROR||||0000000000|main|communication - 401
Unauthorized: [no body]
```

This error occurs when either the **projectRoom** or the **clientCredentials** are not recognized by the ARIS Cloud authentication server. Check the values of the **projectRoom** and the **clientCredentials** properties in the **ProcessMiningConfiguration.json** file.

Configuration file not correct

```
WARN ||||0000000000|main|communication - CONFIGURATION_FILE_NOT_CORRECT:
conf\ProcessMiningConfiguration.json;arisCloudUrl: PM_CONFIG_MCP_URL_NOT_VALID
INFO ||||0000000000|main|communication - Please import valid ARIS Process
Mining Configuration...
```

The error occurs when mandatory entries in a configuration are missing or are maintained with incorrect values. The error message displays the name of the configuration file and the property that is causing the error.

In the example above, "conf\ProcessMiningConfiguration.json;arisCloudUrl: PM_CONFIG_MCP_URL_NOT_VALID" means that the **arisCloudUrl** property in the **ProcessMiningConfiguration.json** configuration file is invalid.

5.11. Create an SAP/JDBC system integration

You must create a system integration to register a source system in ARIS Process Mining, for example, an SAP system or a JDBC database.

For an SAP system and a JDBC database as source systems, a dedicated client-credentials key is generated for each system integration. You need this key to configure a connection when you install Process Extractor. The client-credentials key consists of two parts, the client ID and the secret key, both connected with a "/".

<client ID>/<secret key>

Example 8.

88ef7ca5-3c54-41a9-8b78-e2051dbf4adc/c0bc46e3-048a-467a-ab1c-9e113fa708c0

Note that each Process Extractor installation requires its own credentials key. You must not use the same credentials key for different Process Extractor installations.

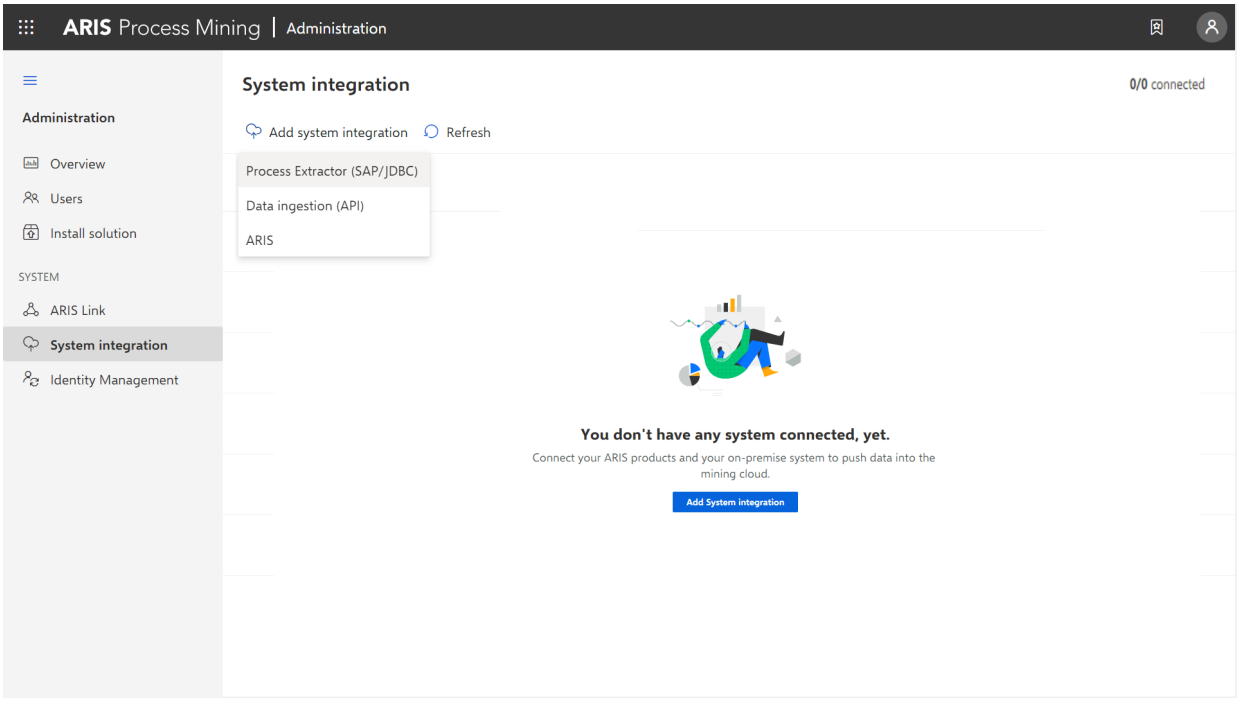
The procedure to create an SAP or a JDBC system integration is almost the same. The procedure is described using an SAP source system as an example.

Prerequisite

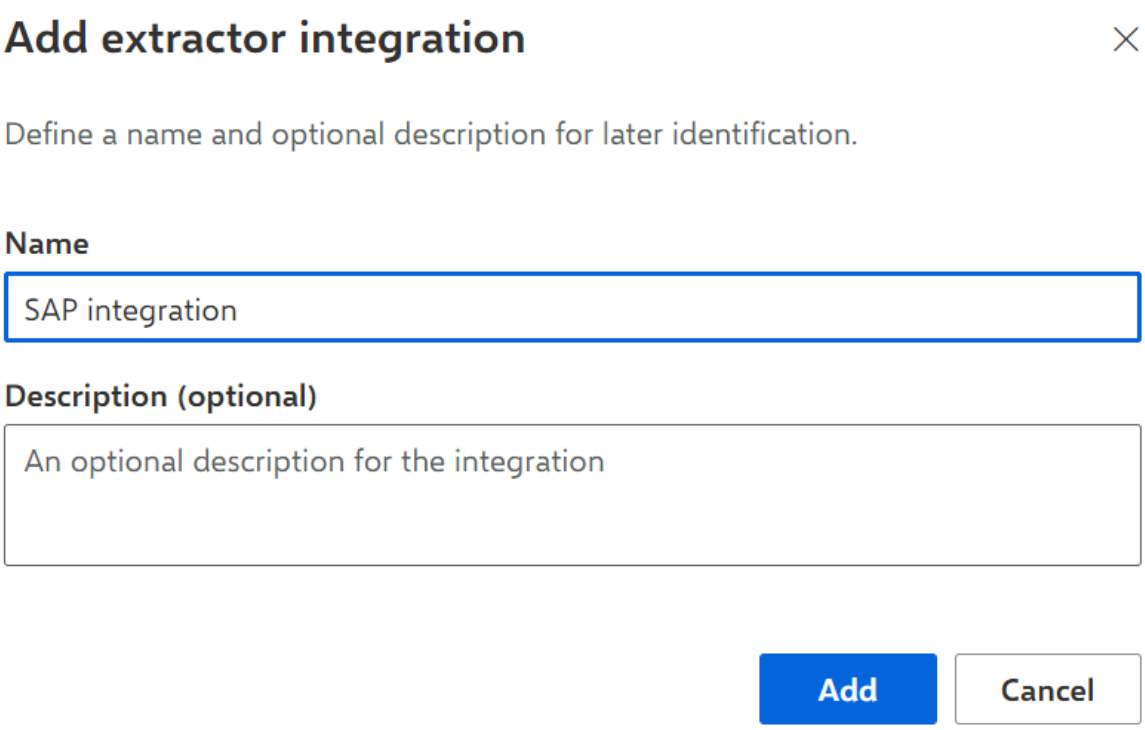
You have installed the ARIS Process Mining Enterprise license.

Procedure

1. Start 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** and select a system integration, for example, **Process Extractor (SAP/JDBC)**. The corresponding dialog opens.

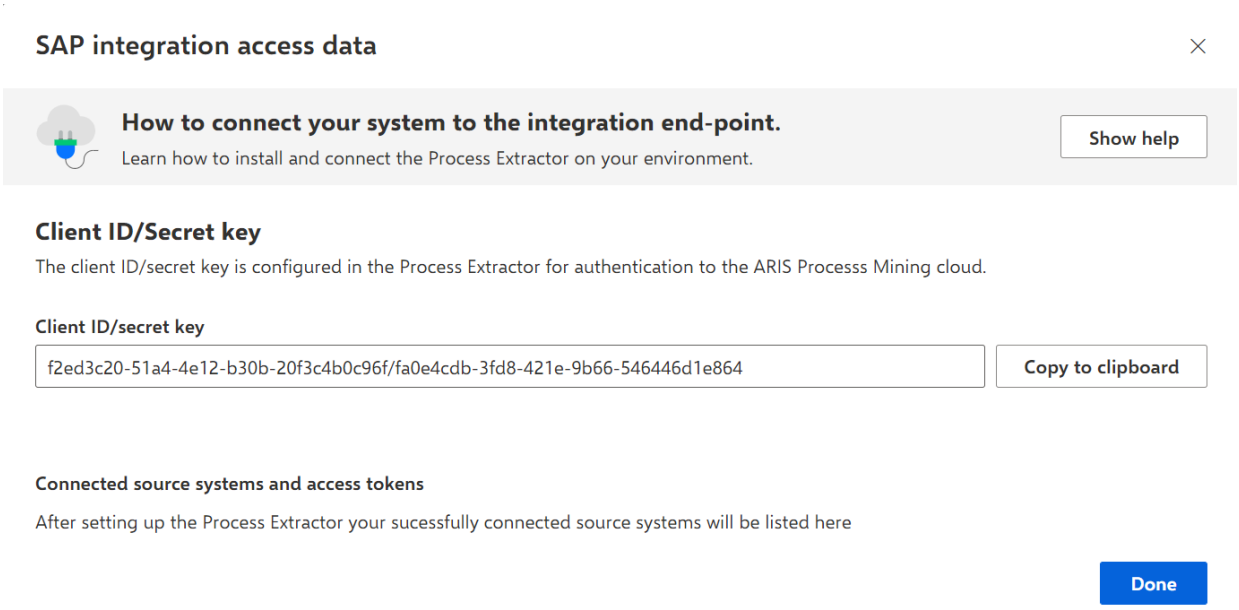


5. Enter a name, for example, SAP integration, and an optional description.

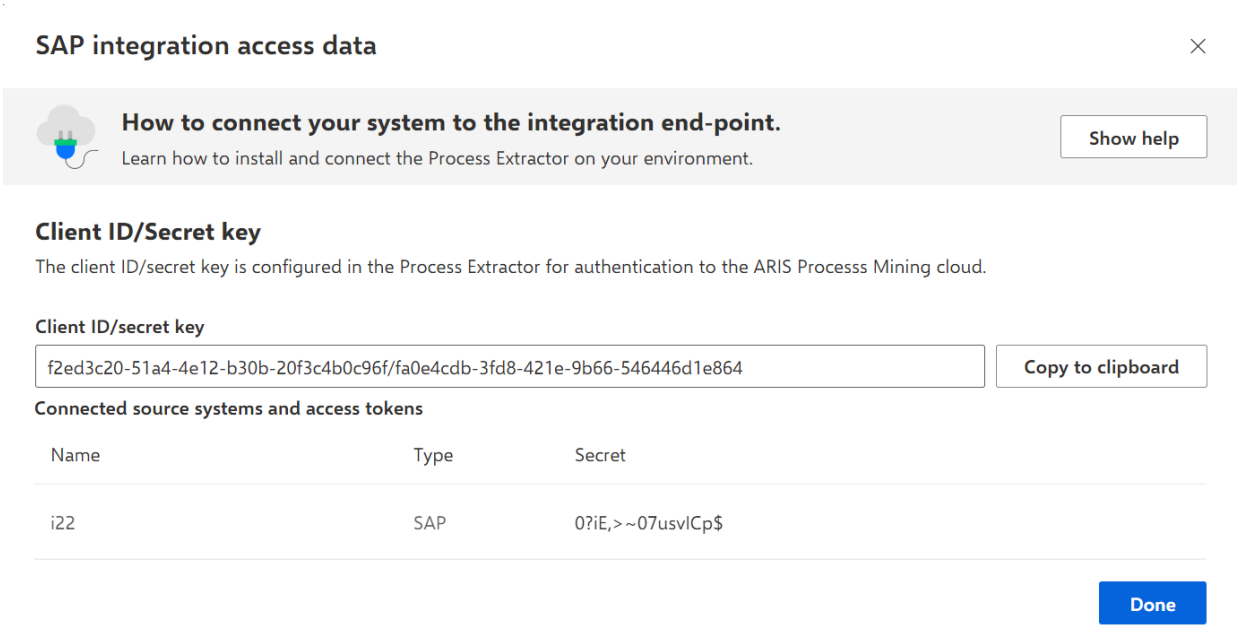


6. Click **Add**. The corresponding dialog opens. The dialog provides the client credentials key that is required to configure Process Extractor to communicate with ARIS Process Mining. For details on how to use the client credentials key, see the chapter Configure the ARIS Process Mining connection [11] in the Process Extractor installation guide.

   After configuring Process Extractor using the client credentials key, Process Extractor is able to connect to ARIS Process Mining and deliver the connected source systems, such as an SAP system or a JDBC database.



   Only if ARIS Process Mining is successfully connected to Process Extractor, the source system connected to Process Extractor and the associated secret key are provided in the dialog. The secret key is required to create a connection to the source system.

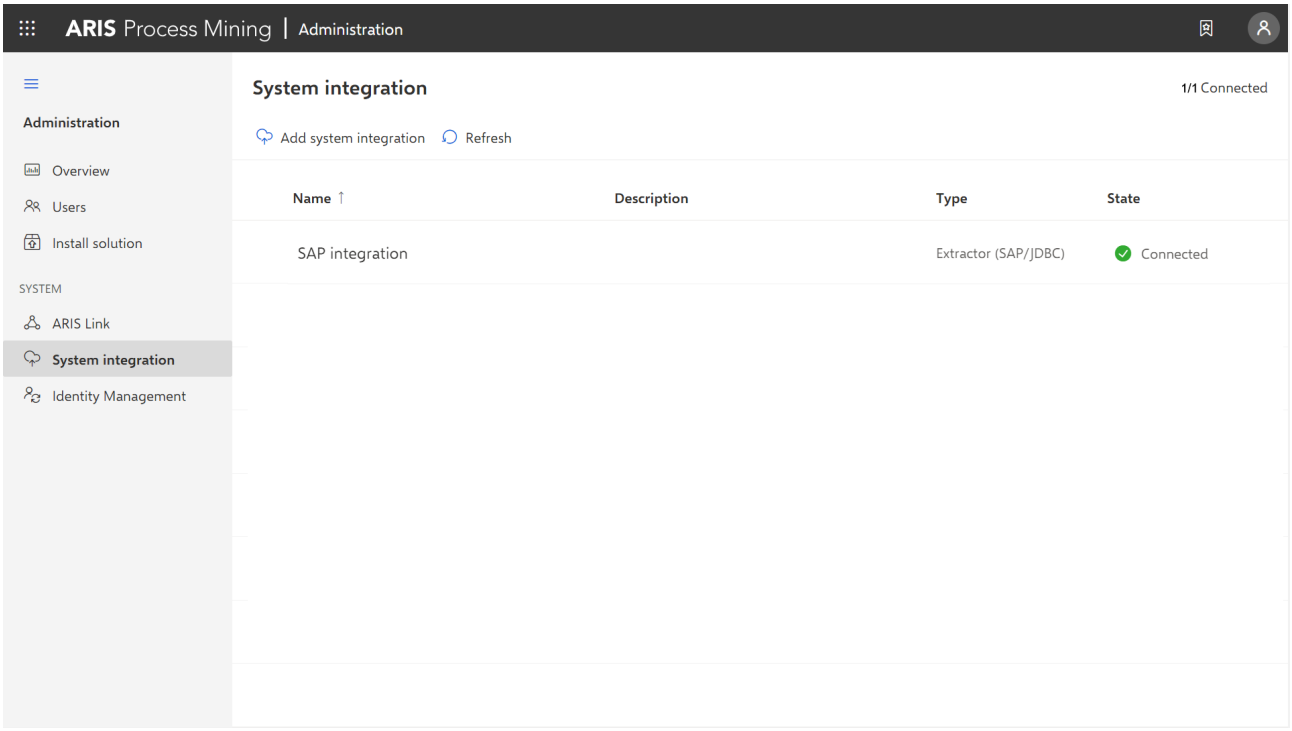


7. Save the client-credentials key to configure the connection to Process Extractor.
   a. Click **Copy to clipboard**.
   b. Save the key, for example, using a text editor.

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

When Process Extractor is installed and configured (Install and configure Process Extractor), click **Refresh** to display the connection status of the system integrations.

Tip
The client credentials key is saved in the system integration you created. You can display the source system access data to access the client credentials key.



5.12. Security aspects

Access to the **<ARIS Process Mining installation>/data** directory should be restricted. This folder is used to temporarily save the extracted data in parquet files. These files are deleted when they are successfully uploaded to ARIS Process Mining or when the upload is canceled, that is, by errors or when user cancels the data extraction.

The first time when credentials are configured using the **configureExtractor.bat** command line tool a **key.secret** file is created in the **<ARIS Process Mining installation>/conf** directory. This file is used to encrypt and decrypt passwords in the configuration files. For this reason, this file should be backed up. If this file is lost, all credentials must be configured again using the **configureExtractor.bat** tool.

Any communication between the extractor and ARIS Process Mining Cloud is initiated by the extractor, that is, the communication is never started from outside of customers network.

Each communication between the extractor and ARIS Process Mining Cloud should be done via HTTPS.

5.13. Firewall settings

To allow data exchange between Process Extractor and ARIS Process Mining, you must allow outbound connections to https://mc.ariscloud.com and to the regional ARIS Process Mining server (for example, https://processmining.ariscloud.com).

6. Support and legal information

This section provides you with some general information regarding product support and legal aspects.

6.1. 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 SAG ARIS GmbH, 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 ARIS sales organization. Please note that this type of manufacturer-specific or customer-specific customization is not covered by the standard ARIS software maintenance agreement and can be performed only on special request and agreement.

6.2. Support

Product support

We provide support for ARIS products to all customers with a valid support contract.

Information on product version availability and support, as well as sustained support dates, is available at ARIS Community.

Contact our Global Support services at ARIS Community to raise and update support incidents, or post ideas and feature requests.

Community

Register with ARIS Community to download products, updates and fixes, find expert information, and interact with other users.

Documentation

For information on how to use and activate products and for other technical support questions, visit the ARIS Documentation website.

If you want to give feedback on any documentation topic, write to documentation@aris.com.

6.3. Legal notices

This document applies to ARIS Process Mining Version 10 and to all subsequent releases.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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