# **UPDATE GUIDE**

Version 1.6

Corresponding Software Version SAP Process Mining by Celonis 4.3

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# TABLE OF CONTENTS

REVISION HISTORY	3
INTRODUCTION	4
ABOUT THIS GUIDE	4
TARGET AUDIENCE	4
LIST OF ABBREVIATIONS	5
SOFTWARE CHANGE MANAGEMENT	6
SOFTWARE UPDATE PROCEDURE	6
LATEST CELONIS VERSION	6
INTEGRITY OF CELONIS CONFIGURATION FILES	7
BACKUP OF THE CELONIS APPLICATION AND CONFIGURATION STORE	7
GENERAL UPDATE PROCEDURE	8
PERFORM CLEAN-UP OPERATIONS	10
SUPPORT DESK MANAGEMENT	10
REFERENCES	11

# **REVISION HISTORY**

VERSION NUMBER	VERSION DATE	SUMMARY OF REVISIONS MADE
1.1	FEB 16, 2017	Application Version 4.2
1.6	FEB 23, 2018	Updated version for application version 4.3

# INTRODUCTION

### **ABOUT THIS GUIDE**

SAP Process Mining by Celonis is a powerful software for retrieving, visualizing and analyzing real as-is business processes from transactional data stored by the SAP ERP systems. It provides users with the possibility to create and share comprehensive process analyses giving them full transparency about the business processes at hand.

This guide provides a step-by-step instruction on how to update SAP Process Mining by Celonis or apply a patch downloaded from SAP Marketplace. An overview of the changes and new features can be found in the release notes.

### **TARGET AUDIENCE**

This guide covers all relevant technical information about correctly updating SAP Process Mining by Celonis environments and is meant to be consulted by the following target audiences:

- System Administrators
- Support Personnel
- Technical Staff

# LIST OF ABBREVIATIONS

ABBREVIATION	EXPLANATION
ADFS	Active Directory Federation Service
AFL	Application Function Library
CIC	SAP Customer Interaction Center
CPML	Celonis Process Mining Library
ERP	Enterprise Resource Planning
HSQLDB	HyperSQL Database
ID	Identifier
JDBC	Java Database Connectivity
OS	Operating System
SAML	Security Assertion Markup Language
SSO	Single Sign-On
URL	Uniform Resource Locator
ZIP	Zipper (Archive File Format)

## SOFTWARE CHANGE MANAGEMENT

New releases and support packages are announced via the SAP service marketplace and can be retrieved from there. Regardless of the type of patch, you will be provided with a full installer file. The procedure for updating an installation is described in the next chapter SOFTWARE UPDATE PROCEDURE. For detailed installation instructions, please refer to the SAP Process Mining by Celonis Installation Guide to find the latest application prerequisites. For detailed operating instructions, please refer to the SAP Process Mining by Celonis application in depth.

Please note:

- A Celonis Patch is a resolution or fix for one specific issue
- A Celonis Service Pack resolves multiple issues
- Patches or Service Packs may be available in advance, if critical
- A Celonis Release is a new version of the software, including new features

When you want to promote configurations and artifacts to production, there is a built-in export/import mechanism for all transportable artifacts in the web interface of SAP Process Mining by Celonis; for usage instructions, please refer to the SAP Process Mining by Celonis Manual. Technical configurations can be copied on a file level.

# SOFTWARE UPDATE PROCEDURE

### LATEST CELONIS VERSION

The SAP Process Mining by Celonis software is shipped as an installer. The installer type depends on the Operating System it's going to be installed on. You always need to update both components: the SAP HANA AFL plugin (CPML) as well as the SAP Process Mining by Celonis on the Celonis Application Server. Verify the correct SAP Process Mining by Celonis software version before you deploy any update. The latest SAP Process Mining by Celonis software version can be downloaded from the SAP Marketplace.

The general update procedure is described below, however there may be several other instructions specific to a certain release. If any specific instructions should apply, they will be shipped out together with the release.

There will be a short downtime of the Celonis Application for the duration of steps 2 to 7, and a short downtime of the SAP HANA database during step 3 in section GENERAL UPDATE PROCEDURE.

### INTEGRITY OF CELONIS CONFIGURATION FILES

Celonis updates may require changes on configuration files. The following configuration files exist:

- "config.properties"
- "config-custom.properties"
- "config-custom.properties.sample"

The configuration files "config.properties" and "config-custom.properties.sample" will be overwritten by the new version. Your custom configuration file "config-custom.properties" remains unchanged. Please check the new "config-custom.properties.sample" file for changed and updated parameters.

#### SAML configuration changes with version 4.3

If you are utilizing Single Sign-On (SSO) with ADFS (SAML authentication), it is mandatory to update the SAML configuration in the "config-custom.properties" file. The parameters "saml.url.scheme", "saml.url.serverName", "saml.url.serverPort", and "server.url" must be added to your SAML configuration. For details on how to set these parameters refer to "Celonis ADFS Setup Guide 1.6".

### BACKUP OF THE CELONIS APPLICATION AND CONFIGURATION STORE

#### Step 1: Stop the Celonis service

- Windows: Start the Celonis Service console or Windows services.msc and stop the service.
- Linux: Execute the "stop.sh" script.

Verify that the Celonis processes have been terminated successfully.

- Windows: Investigate the currently running processes using the Task Manager
- Linux: Investigate the currently running processes by the Linux Process Table

#### Step 2: Create a backup of the SAP Process Mining by Celonis configuration store and files

Create a backup of the following files and folders:

- <installPath>/component\_configuration
- appfiles/appdata.\* (on Windows), root/appdata.\* (on Linux)
- <installPath>/start.sh, <installPath>/stop.sh

Optional: Perform a file system level backup of the installation and appfiles folder using customer specific backup solution (e.g. Tivoli Storage Manager, Symantec/Veritas Backup Exec, etc.).

In case you are already using the Celonis Configuration Store on an external database system, create a backup of the Celonis Configuration Store.

In case you are using the integrated Celonis Configuration Store powered by HSQLDB, consider migrating the Celonis Configuration Store to an external database system. For more information, please refer to the Celonis Configuration Store Setup Guide.

#### Step 3: Backup additional files

Verify to have a recent backup of all files, which you might have modified (e.g. the default Java keystore/truststore file "cacerts" in "jre/lib/security") or added additionally (e.g. HANA JDBC driver in appfiles/app/WEB-INF/lib (on Windows), root/app/WEB-INF/lib (on Linux)) as they may be overridden by an update.

#### **GENERAL UPDATE PROCEDURE**

#### Step 1: Download the new release from the SAP Service Marketplace

Download the installers (all contained in a single zip file on the SAP Service Marketplace) and identify the correct installers regarding your HANA architecture (Intel or Power) for the SAP HANA AFL plugin (CPML) and regarding your Celonis Application Server distribution and version for the core SAP Process Mining by Celonis application.

#### Step 2: Stop the Celonis service

- Windows: Start the Celonis Service console and stop the service.
- Linux: Execute the "stop.sh" script.

Verify that the Celonis processes have been terminated successfully:

- Windows: Investigate the currently running processes using the Task Manager
- Linux: Investigate the currently running process by the Linux Process Table

Make sure to close any other applications afterwards (esp. the Celonis Service console on Windows and any Windows Explorer windows or Linux command line locations inside the installation/application path).

#### Step 2a: Rotate logfiles (Linux only – optional)

On Linux systems, there is no automatic log file rotation for the files stdout and stderr. We recommend performing a manual rotation by moving the files stderr and stdout to e.g. stderr.0 and stdout.0 respectively, such that after the update the files stderr and stdout can be written to from scratch.

Consider compressing the rotated files (stderr.0, stdout.0). In case such a rotated file already exists, consider deleting or renaming these old log files.

#### Step 3: Run the CPML installer on SAP HANA

Please note, updating CPML requires a restart of the SAP HANA system, which will be executed **automatically** when running the CPML installer.

#### Step 4: Run the SAP Process Mining by Celonis installer and follow the installation instructions

On Windows, the installer will recognize your current setup and keep your system configuration settings. The installer will automatically update SAP Process Mining by Celonis to the latest version.

Continue only if the installation finished successfully.

On Linux, you will have to re-enter the initial configuration parameters even for an update.

#### **Step 5: Start the Celonis service**

- Windows: Start the Celonis Service console and start the service.
- Linux: Re-apply your custom changes to the "start.sh" and "stop.sh" scripts. Execute the "start.sh" script.

Verify that the Celonis processes have been started successfully:

- Windows: Investigate the currently running processes using the Task Manager
- Linux: Investigate the currently running process by the Linux Process Table

#### Step 6: Verify that logs files are written

Login to the SAP Process Mining by Celonis application. Verify if the log files are written:

- Windows: Log-files are separated per service start and can be found in "<installPath>\logs".
- Linux: Log-files are combined in "<installPath>/logs".

#### Step 7: Verify the SAP Process Mining by Celonis release ID

Login to the SAP Process Mining by Celonis application and access the "About" page in the bottom left corner of the start screen. Validate that the displayed version ID equals the new release.

If you want to check the version of SAP Process Mining by Celonis while the software is not running, you can do so by viewing the "config.properties" file in the root directory of the SAP Process Mining by Celonis application (parameter "application.version").

#### Step 8: Reinstall Wrapper Functions and Reload Datamodels

For each datamodel, you need to reinstall the wrapper functions and reload the datamodel.

### PERFORM CLEAN-UP OPERATIONS

- 1. We recommend keeping at least the latest backup archive
- 2. Delete obsolete backup archives
- 3. Verify and update the integrity of Celonis configuration files
- 4. We recommend cleaning up the old wrapper functions by deleting them (visible in HANA Studio via Catalog -> <SCHEMA\_NAME> -> Procedures), once you have verified the successful update. New procedures will follow the naming scheme CPML\_PREPARE(\_WRAPPER)\_V4\_3\_<TableName>. Wrapper functions with V4\_2 or V4 only in the name can be deleted after you have verified the successful update.

### SUPPORT DESK MANAGEMENT

Support for SAP Process Mining by Celonis is delivered jointly by SAP and Celonis. 1<sup>st</sup> and 2<sup>nd</sup> level support services for end users are provided by SAP. 3<sup>rd</sup> level support services are provided by Celonis. In case 3<sup>rd</sup> level support is necessary, incidents are automatically forwarded to Celonis. Support is available 24x7. To contact support, you can create an incident in component "XX-PART-CEL". Please include at least the following items in your incident description:

- The browser and version you are using (e.g. Internet Explorer 11)
- Installation which you are trying to access (in case of multi system landscape)
- URL used to access the system (sometimes, there can be more than one URL to reach a single installation. This will also help to identify the installation you are trying to access)
- User name used to log in
- Screenshot of the error message/situation
- Stack trace of the error message (if any) only accessible on the server log files.

Before contacting support, make sure you have had a look in the Celonis manual (accessible via "Help" in the Celonis application) and related SAP notes for component "XX-PART-CEL". In case you need to escalate your incident, you can send an <u>email</u> to and/or contact SAP CIC.

# REFERENCES

- Celonis Installation Guide
- Celonis Operation Guide
- Celonis Manual
- Celonis Release Notes
- Celonis ADFS Setup Guide 1.6
- Celonis Migration Store Setup Guide
- <u>SAP Customer Interaction Center</u>