



**PUBLIC**

SAP Service and Asset Manager

Document Version: 2305 – 2025-06-06

# Upgrading SAP Service and Asset Manager

# Content

- 2    SAP Service and Asset Manager to Back End Compatibility and Relevant Release Notes ..... 4**
- 2.1    SAP S/4HANA and SAP Service and Asset Manager App Compatibility. .... 5
- 2.2    SAP ERP and SAP Service and Asset Manager App Compatibility. .... 5
  
- 3    SAP Service and Asset Manager High Level Upgrade Process. .... 7**
- 3.1    Applying SAP Notes and Patches. .... 8
- 3.2    Creating a New SAP Service and Asset Manager App on the SAP Business Technology Platform  
..... 9
  
- 4    SAP Service and Asset Manager Metadata Upgrade Tool. .... 10**
- 4.1    Upgrading SAP Service and Asset Manager Metadata. .... 11
  
- 5    Appendix. .... 22**
- 5.1    Migrating SAP Service and Asset Manager 2105 or Earlier Metadata to Mobile Development Kit 6.x  
..... 22

# 1 Document History

Before you begin reading this guide, be sure that you have the latest version. Find the latest version at [https://help.sap.com/docs/SAP\\_SERVICE\\_ASSET\\_MANAGER](https://help.sap.com/docs/SAP_SERVICE_ASSET_MANAGER).

The following table provides an overview of the most important document changes.

Document Version	Date	Description of Changes
1.0	JUN 2023	Original release of the <i>Upgrading SAP Service and Asset Manager</i> guide, version 2305

## 2 SAP Service and Asset Manager to Back End Compatibility and Relevant Release Notes

Mobile App Release	Minimum Required SAP S/4HANA Back End	Minimum Required SAP S/4HANA 1610+ Add-On Component	Minimum Required SAP ERP 6.0 EHP7 SP14+ Add-On Component
2010	1909	SP08	SP07
		S4MFND 100 SP08	SMFND 630_740 SP07
		S4MERP 100 SP08	SMERP 630_740 SP07
		S4MISU 100 SP06	SMISU 630_740 SP07
2005	1909	SP07	SP06
		S4MFND 100 SP07	SMFND 630_740 SP06
		S4MERP 100 SP07	SMERP 630_740 SP06
		S4MISU 100 SP05	SMISU 630_740 SP06
1911	1909	SP06	SP05
		S4MFND 100 SP06	SMFND 630_740 SP05
		S4MERP 100 SP06	SMERP 630_740 SP05
		S4MISU 100 SP04	SMISU 630_740 SP05
4.0	1909	SP04	SP03
		S4MFND 100 SP04	SMFND 630_740 SP03
		S4MERP 100 SP04	SMERP 630_740 SP03
		S4MISU 100 SP02	SMISU 630_740 SP03

### Release Notes

Use [2924633](#): SAP Asset Manager - Upgrade Procedure to determine capability.

## 2.1 SAP S/4HANA and SAP Service and Asset Manager App Compatibility

	2019				2020			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
S/4 HANA 1909		SAM 40						
S/4 HANA 1909 FPS01				SAM 1911				
S/4 HANA 1909 FPS02					SAM 2005			
S/4 HANA 1909 SPS03								SAM 2010
S/4 HANA 1909 SPS04								
S/4 HANA 1909 SPS05								
S/4 HANA 1909 SPS06								
S/4 HANA 1909 SPS07								
<b>S/4 HANA 2020</b>								SAM 2010

\*SAM stands for SAP Service and Asset Manager

## 2.2 SAP ERP and SAP Service and Asset Manager App Compatibility

The SAP Mobile Add-On for SAP ERP 6.3 provides integration services for various mobile applications in SAP ERP systems.

For detailed information, see [2495578](#): Release Information Note - Mobile Add-On for SAP S/4HANA and Support Packages

Mobile Add-On Release	Release Date	Release 2010	Release 2005	Release 1911	Release 4.0
SP07 (SMFND 630_740 SP07, SMERP 630_740 SP07, SMISU 630_740 SP07)	OCT 2020	Yes	Yes	Yes	Yes
SP06 (SMFND 630_740 SP06, SMERP 630_740 SP06, SMISU 630_740 SP06)	MAY 2020	No	Yes	Yes	Yes
SP05	NOV 2019	No	No	Yes	Yes

<b>Mobile Add-On Release</b>	<b>Release Date</b>	<b>Release 2010</b>	<b>Release 2005</b>	<b>Release 1911</b>	<b>Release 4.0</b>
(SMFND 630_740 SP05, SMERP 630_740 SP05, SMISU 630_740 SP05)					
SP03	JUN 2019	No	No	No	Yes
(SMFND 630_740 SP03, SMERP 630_740 SP03, SMISU 630_740 SP03)					

# 3 SAP Service and Asset Manager High Level Upgrade Process

Use the following high-level process table for information on the process steps to take when upgrading the SAP Service and Asset Manager application.




Step	High Level Procedure
1	<p>Know which back end version and which SAP Service and Asset Manager version you are upgrading to and determine their compatibility. See the following topics for more details:</p> <ul style="list-style-type: none"><li>• <a href="#">SAP S/4HANA and SAP Service and Asset Manager App Compatibility [page 5]</a></li><li>• </li></ul>
	<p><b>Note</b></p> <p>If you are upgrading on an SAP S/4HANA Mobile Application Integration Framework, locate and implement the FPS upgrade.</p>
2	<p>Collect and read the SAP release notes that are necessary for your upgrade. See <a href="#">SAP Service and Asset Manager to Back End Compatibility and Relevant Release Notes [page 4]</a>.</p>
3	<p>Implement the release notes and associated patches when needed during the upgrade procedure. See <a href="#">Applying SAP Notes and Patches [page 8]</a></p>
4	<p>Activate the BC set for your upgraded version of SAP Service and Asset Manager</p>
4a	<p>If you are performing a full upgrade, ensure that you upgrade MFND, ISU, etc.</p>
5	<p>Access the ConfigPanel. Replicate any customizations you have made to the app to your new version of SAP Service and Asset Manager. Your upgraded app does not contain any of your customizations.</p>
	<p><b>Note</b></p> <p>If you have not kept a record of customizations, use the <a href="#">Compare</a> program.</p>
6	<p>Activate the oData service. See the <a href="#">Updating Offline Settings for SAP Service and Asset Manager</a> procedure.</p>
7	<p>Create the new version of the SAP Service and Asset Manager application on the SAP Business Technology Platform. See <a href="#">Creating a New SAP Service and Asset Manager App on the SAP Business Technology Platform [page 9]</a>.</p>
8	<p>Phase in the new app. See the <a href="#">Building the SAP Asset Manager Application Client</a> procedure for details.</p>
9	<p>Update the metadata. See <a href="#">Deploying Metadata Definitions to Mobile Services</a>.</p>

Step	High Level Procedure
10	<p><b>OPTIONAL:</b> Upgrade the SAP Service and Asset Manager metadata by using the <a href="#">SAP Service and Asset Manager Metadata Upgrade Tool [page 10]</a>.</p>
	<p><b>Note</b></p> <p>The new SAP Service and Asset Manager Metadata Upgrade Tool is available in an experimental stage for customers upgrading their customized metadata to a new version of the application. If you would like to be part of the beta testing program, please submit a <a href="#">TEA (Test and Evaluation Agreement)</a>.</p>

## 3.1 Applying SAP Notes and Patches

### Context

### Procedure

1. Use the *SNOTE* transaction in the SAP GUI on your back end system.
2. Read the note carefully. Check for validity, preimplementation steps, post-implementation steps, and prerequisites.
3. Download or upload the desired note by performing the procedure found in [How to Download/Upload SAP Note in SNOTE](#) .
4. If necessary, perform any preimplementation steps.
5. If necessary, perform any prerequisite steps.
6. Implement the note. Then, navigate to **Goto**  *SAP Note Browser* .
7. Make sure that the implementation status of the note is *Can be Implemented* or *Obsolete version Implemented*.
8. Select the note, and press *F8* to proceed with implementation. SNOTE also allows you to implement a set of notes together.
9. Select the request from the pop-up window, or create a new request. SNOTE lists out objects.
10. Press *Ctrl+F5* to see the final status and log of note implementation.

## Next Steps

If post-implementation steps are required, perform the steps.

### 3.2 Creating a New SAP Service and Asset Manager App on the SAP Business Technology Platform

Depending on how you installed the SAP Service and Asset Manager on the SAP Business Technology Platform initially, your upgrade will proceed in one of the following methods:

- If you installed the app on the SAP Business Technology Platform using a version number, install the new app version with a new version number.
- If you installed the app without a version number, because you don't plan on keeping the old app:
  1. Open the SAP BTP services Cockpit and navigate to the SAP Service and Asset Manager app.
  2. Update the connectivity feature so that the destination points to the oData service.

#### 📌 Note

If you've created a custom name that's version-dependent, update the destination name in your metadata. This way the destination name matches the destination you're connecting to in SAP BTP servicesSAP BTP services.

Once you've determined the correct method you need to install the app, follow the appropriate procedure:

- [Setting Up and Deploying an App in Cloud Foundry](#)
- [SAP BTP services - Setting Up a Neo Environment](#)

# 4 SAP Service and Asset Manager Metadata Upgrade Tool

The SAP Service and Asset Manager Metadata Upgrade Tool is a cross-platform Electron application for upgrading and merging **customized** SAP Service and Asset Manager metadata with new out-of-box releases, with a focus on usability, transparency, and control.

## ⓘ Note

Currently this feature is in Beta testing, available to customers only upon request. If you would like to be part of the Beta testing program and use the Metadata Upgrade Tool for SAP Service and Asset Manager, you need to sign the following TEA (Test and Evaluation Agreement) form: [SAP Preshipment Request Form](#).

## Introduction

The SAP Service and Asset Manager Metadata Upgrade Tool streamlines the process of upgrading your customized SAP Service and Asset Manager metadata to new versions, minimizing manual effort and maximizing confidence in the results. It provides a visual, interactive workflow for merging, editing, and validating metadata changes.

See the following video to learn about the tool and how to use it:

## Features

- Visual file tree for easy navigation and searching
- Side-by-side and 3-way merge editor with block-level controls
- Auto-merge (per-file and batch)
- Real-time progress and statistics
- Customizable merge editor options
- Cross-platform builds (macOS, Windows)

## Getting Started

1. Prepare your customized metadata ZIP (includes original out-of-box and customizations).
2. Download the new version ZIP you wish to upgrade to.
3. Launch the application.

## Workflow Overview

Perform the following steps as described in [Upgrading SAP Service and Asset Manager Metadata \[page 11\]](#):

1. [Initial upload \[page 11\]](#)
2. [Upload progress & Home Page \[page 13\]](#)
3. [File tree & search \[page 14\]](#)
4. [Auto-merge individual files \[page 14\]](#)
5. [Merge manually using the Merge Editor \[page 15\]](#)
6. [Merge Editor Settings \[page 18\]](#)
7. [Conflict Resolution \[page 17\]](#)
8. [Statistics and progress tracking \[page 18\]](#)
9. [Project-level batch auto-merge \[page 19\]](#)

## 4.1 Upgrading SAP Service and Asset Manager Metadata

### Prerequisites

Before completing the procedure below, see [SAP Service and Asset Manager Metadata Upgrade Tool \[page 10\]](#) for getting started and general information.

#### Note

- Currently this feature is in Beta testing, available to customers only upon request. If you would like to be part of the Beta testing program and use the Metadata Upgrade Tool for SAP Service and Asset Manager, you need to sign the following TEA (Test and Evaluation Agreement) form: [SAP Preshipment Request Form](#).
- For a video introduction of the tool and how to use it, see [Introduction \[page 10\]](#).

### Context

This procedure describes how to upgrade **customized** SAP Service and Asset Manager metadata to new versions, using the SAP Service and Asset Manager Metadata Upgrade Tool.

### Procedure

1. Upon launching, the application opens the initial Upload screen. Click [Upload](#) to start:



## Metadata Upgrade Process ?

 **UPLOAD**

No files to review. Please upload MDKproject.zip files using the Upload button above.

The MDK project zip should contain both base and custom definitions.

The new version should be out-of-box definitions from software downloads:

### Note

Download links are provided for convenience.

2. Upload your customized metadata ZIP and the target upgrade version ZIP, and click *Upload*:

## Upload Files

The MDK project zip should contain both base and custom definitions. The new version should be out-of-box definitions from software downloads.

[Download new version](#)

### Customer .mdkproject.zip file

Click or drag and drop customer zip file here!

### New version zip file (downloaded)

Click or drag and drop new version zip file here!

CANCEL    UPLOAD

3. After uploading, you will see the upload progress. Once completed, you will land on the main [Home Page](#):

⚙️

## Metadata Upgrade Process ⓘ

VIEW STATS  
AUTO MERGE  
RESET

---

26% Complete
35 of 136 Files

🔍

- > Pages
- > Rules
- > Actions
- > i18n

- The progress bar may show non-zero if some files are unchanged or removed between versions (no review needed for these).
- The file tree is organized by metadata type:
  - [Page](#)

- [Rule](#)
- [Action](#)
- [Properties / i18n](#)

4. You can search for files using the search bar:

The screenshot displays the 'Metadata Upgrade Process' interface. At the top right, there are three buttons: 'VIEW STATS', 'AUTO MERGE', and 'RESET'. The main area shows a progress bar at '26% Complete' and '35 of 136 Files'. A search bar is highlighted with a red box, containing the text 'confirm'. Below the search bar, a tree view of files is shown. The 'Confirmations' folder is expanded, and two files are highlighted: 'ConfirmationsCreateUpdate.page' and 'ConfirmationDetails.page'. Each file has a blue 'Merge' icon next to it.

5. To auto-merge an individual file, click the blue *Merge* icon next to it:

File saved successfully! X

VIEW STATS

AUTO MERGE

RESET



## Metadata Upgrade Process

26% Complete

36 of 136 Files

Search...

confirm



### Pages

Overview.page



#### WorkOrders

#### FunctionalLocation

#### Equipment

#### Notifications

### Confirmations

ConfirmationsCreateUpdate.page



ConfirmationDetails.page



SideMenuDrawer.page



#### User

ApplicationLandingPage.page



#### ObjectList

### Rules

#### Persona

#### Common

#### Operations

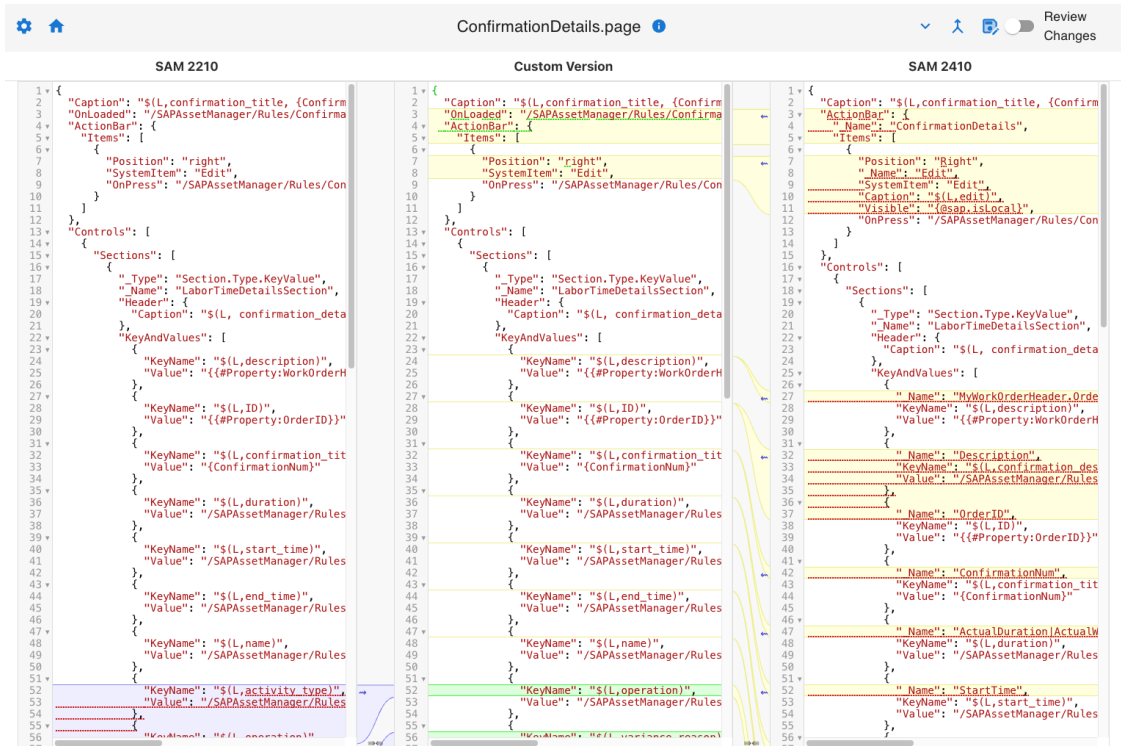
#### MobileStatus

#### WorkOrders

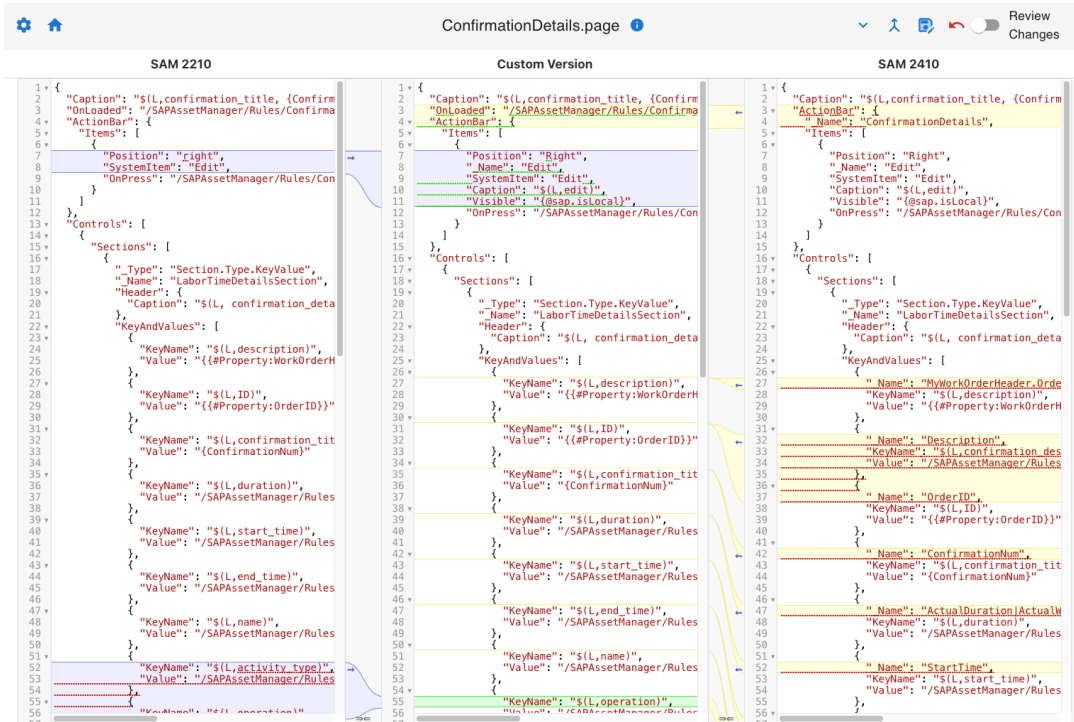
#### Notifications

6. If needed, click a file to open the *Merge Editor*.

1. See the following example, *ConfirmationDetails.page*:

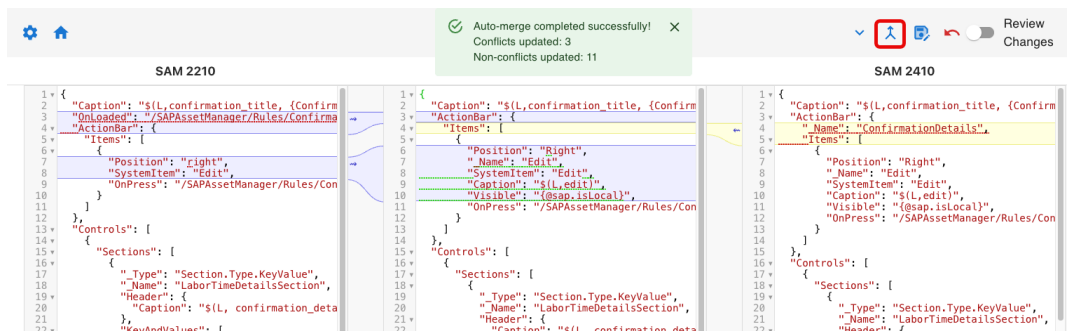


- The center panel is your custom version; edit as needed.
- Use the arrows in highlighted rows for block-level changes.
- The example above after making the manual changes:

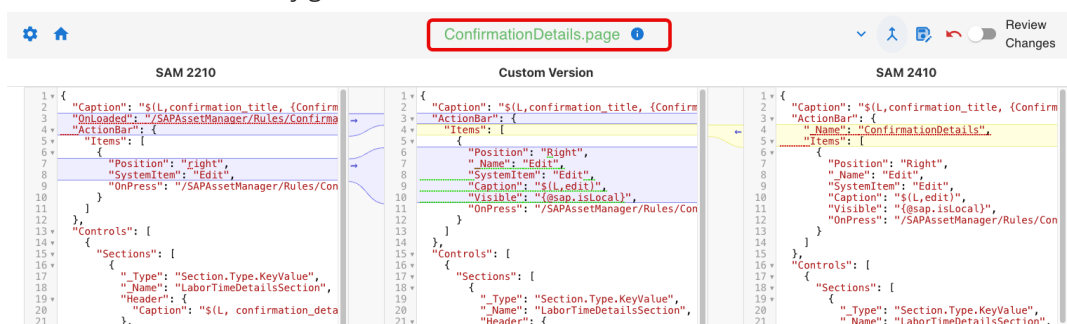


2. See the following common workflow as another example:

1. Click *Auto Merge* in the top bar:



2. Save changes via the *Save* button or pressing *Ctrl/Cmd+S*.
3. Saved files are indicated by green filename text.



## 7. Conflict Resolution:

1. **How conflicts are identified** - Different file types use different approaches to identify conflicts:
  - **Page Files:** Conflicts are tracked at the lowest object level where both custom and new versions modify the same property (for example both versions modify the `OnPress` property of a button).
  - **Action Files:** Conflicts are handled at the property-level since these files have simpler JSON structure and less nesting.
  - **Rules (JS) and i18n (Properties) Files:** These use specialized approaches regardless of the selected conflict strategy.
2. **Conflict resolution strategies** - When a conflict is found, you can choose either of the following strategies:
  - **Keep existing custom code:** Preserves your customizations entirely, but you will miss out any new properties or features.
  - **Replace with new code:** Replaces everything with the new standard version, losing all your custom modifications.
  - **Prioritize custom code, integrate new changes** (recommended for most cases): Preserves your custom modifications for conflicting properties while adding non-conflicting new properties from the standard update.
3. **Conflict resolution examples:**
  - **Page File Example** - When both custom and new versions modify the `OnPress` property:

### Sample Code

```

"old_object": {
  "OnPress": "/SAPAssetManager/Rules/Confirmations/CreateUpdate/BeforeCreateConfirmation.js"
},
"custom_object": {

```

```

    "OnPress": "CUSTOM_CONFLICT_ONPRESS.js"
  },
  "new_object": {
    "OnPress": "NEW_CONFLICT_ONPRESS.js",
    "Caption": "${L,done}"
  }
}

```

- With the **Prioritize custom code, integrate new changes** strategy, the result would be:

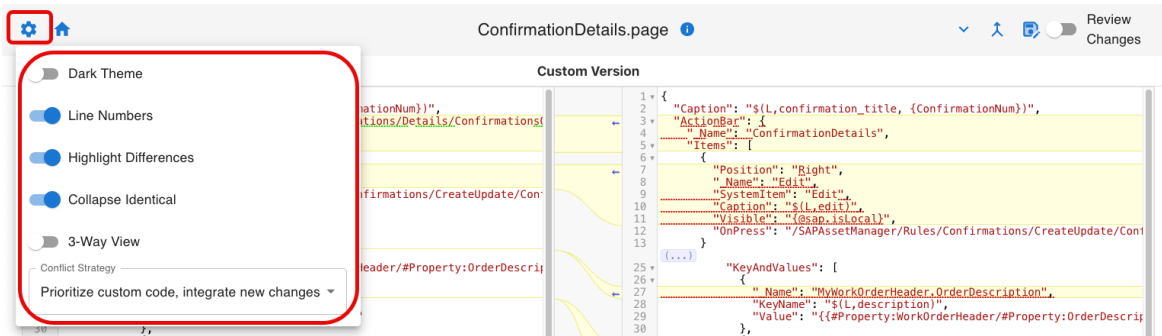
### { } Sample Code

```

"resolved_value": {
  "OnPress": "CUSTOM_CONFLICT_ONPRESS.js",
  "Caption": "${L,done}"
}

```

8. By clicking the *Settings* icon, you can set the following Merge Editor options:



- Enable/Disable dark mode
- Enable/Disable line numbers
- Enable/Disable block change highlights
- Enable/Disable collapsing identical sections
- Toggle between 3-way and 2-way views

9. **Statistics and Progress Tracking:**

On the *Home Page*, click *VIEW STATS* to open the *Processing Statistics* window:

The screenshot shows the 'Processing Statistics' window with the following sections:

- Changed Files (99)**: A table listing files with their total count, initial conflicts, and initial non-conflicts.
 

File Name	Total	Initial Conflicts	Initial Non-Conflicts
Overview.page			
WorkOrderDetails.page	29	6	23
PersonaLibrary.js	4	0	4
CompleteReset.js	4	0	4
WorkOrderOperationsListView.page	9	5	4
- Processed Files (2)**: A section for auto-merged files.
  - AM = Auto-Merged**
  - AM ConfirmationsCreateUpdate.page**:
 

Total	Initial Conflicts	Initial Non-Conflicts	Conflicts Updated	Non-Conflicts Updated
3	2	1	2	1
  - ConfirmationDetails.page**:
 

Total	Initial Conflicts	Initial Non-Conflicts
14	3	11
- Unchanged Files (28)**

Buttons at the bottom: **DOWNLOAD REPORT** and **CLOSE**. In the top right of the window, there are buttons for **VIEW STATS** (highlighted with a red box), **AUTO MERGE**, and **RESET**.

- Shows *Changed*, *Processed*, *Unchanged*, and *Removed* files.
- Differentiates between auto-merged and manually edited files.

#### 10. Batch Auto-Merge:

On the *Home Page*, click *AUTO MERGE* to perform project-level merging and to process all files:

**Batch Merge Results**

VIEW STATS

**AUTO MERGE**

RESET

Total Files Processed	Total Conflicts	Total Non-Conflicts
101	82	2849

Successfully Merged Files (97)

WorkOrderDetails.page	6 Conflicts Updated	9 Non-Conflicts Updated
PersonLibrary.js	0 Conflicts Updated	0 Non-Conflicts Updated
CompleteReset.js	0 Conflicts Updated	1 Non-Conflicts Updated
WorkOrderOperationsListView.page	2 Conflicts Updated	0 Non-Conflicts Updated
WorkOrderOperationsFilter.page	8 Conflicts Updated	1 Non-Conflicts Updated
WorkOrderOperationDetails.page	7 Conflicts Updated	17 Non-Conflicts Updated
FunctionalLocationDetails.page	12 Conflicts Updated	12 Non-Conflicts Updated
EquipmentDetails.page	6 Conflicts Updated	3 Non-Conflicts Updated

DOWNLOAD REPORT

CLOSE

- In the *Batch Merge Results* window, you can see as well as download the report of the number of changes, successful merges, and any failures.
- If needed, you can further investigate issues via *Processing Statistics* as described in [above step \[page 18\]](#):

**Processing Statistics**

**Auto-Merge Results**

Files Processed	Successful	Failed	Conflicts Updated	Non-Conflicts Updated
100	96	4	79	2838

Changed Files (0)

Auto-Merge Failed Files (4)

Overview.page	0 Conflicts Updated	0 Non-Conflicts Updated
FunctionalLocationFilter.page	0 Conflicts Updated	0 Non-Conflicts Updated
SubOperationCreateUpdate.page	0 Conflicts Updated	0 Non-Conflicts Updated
WorkOrderCreateUpdate.page	0 Conflicts Updated	0 Non-Conflicts Updated

Processed Files (97)

Auto-Merge

DOWNLOAD REPORT

CLOSE

**Processing Statistics**

WorkOrderOperationsListView.page	9 Total	5 Initial Conflicts	4 Initial Non-Conflicts	2 Conflicts Updated	0 Non-Conflicts Updated
----------------------------------	---------	---------------------	-------------------------	---------------------	-------------------------

Unchanged Files (28)

- NotificationItemCreate.action
- OperationChangeStatusHoldPopover.action
- WorkOrderOperationCreateUpdateControlKeyValue.js
- InitializeOfflineOData.action
- OperationChangeStatusStartPopover.action
- PushNotificationsDownload.action

Removed Files (7)

- OperationMobileStatusToolBarCaption.js
- NotificationItemCreateUpdateRequired.action
- ZNotificationItemCreateUpdateValidation.js

DOWNLOAD REPORT

CLOSE

11. When ready, you can access the upgraded metadata ZIP file as follows:

✔ New metadata zip version created successfully ✕

File saved as: [SAPAssetManagerExt\\_modified\\_2025-05-05T22-46-33-540Z.zip](#)

Click to copy path to clipboard COPY PATH

VIEW STATS

ZIP METADATA

AUTO MERGE

# 5 Appendix

## 5.1 Migrating SAP Service and Asset Manager 2105 or Earlier Metadata to Mobile Development Kit 6.x

### Context

SAP Service and Asset Manager metadata versions 2105 or earlier aren't compatible with Mobile Development Kit 6.x. Mobile Development Kit 6.0 uses a newer version of NativeScript (8.0).

For detailed information, see the [Metadata / Client Project Migration](#) topic, found in the *SAP Mobile Services Documentation*.

Use the following procedure to migrate older metadata so that it's compatible with Mobile Development Kit 6.x.

### Procedure



1. Import the SAP Service and Asset Manager metadata folder into Business Application Studio.
2. Right-click *Application.app* and select *MDK:Migrate*.
3. Open the *MDK* perspective.
4. Hover over the project folder in the left panel and click on the checkmark icon.  
All pending changes are accepted.
5. Download the attached ZIP file and unzip it on your file system.
6. Return to Business Application Studio, and navigate back to the project view. Replace the *Extensions* folder in the metadata with the unzipped folder on your file system.
7. Deploy the app again by right-clicking *Application.app* and selecting *MDK:Deploy*.

# Important Disclaimers and Legal Information

## Hyperlinks

Some links are classified by an icon and/or a mouseover text. These links provide additional information.

About the icons:

- Links with the icon : You are entering a Web site that is not hosted by SAP. By using such links, you agree (unless expressly stated otherwise in your agreements with SAP) to this:
  - The content of the linked-to site is not SAP documentation. You may not infer any product claims against SAP based on this information.
  - SAP does not agree or disagree with the content on the linked-to site, nor does SAP warrant the availability and correctness. SAP shall not be liable for any damages caused by the use of such content unless damages have been caused by SAP's gross negligence or willful misconduct.
- Links with the icon : You are leaving the documentation for that particular SAP product or service and are entering an SAP-hosted Web site. By using such links, you agree that (unless expressly stated otherwise in your agreements with SAP) you may not infer any product claims against SAP based on this information.

## Videos Hosted on External Platforms

Some videos may point to third-party video hosting platforms. SAP cannot guarantee the future availability of videos stored on these platforms. Furthermore, any advertisements or other content hosted on these platforms (for example, suggested videos or by navigating to other videos hosted on the same site), are not within the control or responsibility of SAP.

## Beta and Other Experimental Features

Experimental features are not part of the officially delivered scope that SAP guarantees for future releases. This means that experimental features may be changed by SAP at any time for any reason without notice. Experimental features are not for productive use. You may not demonstrate, test, examine, evaluate or otherwise use the experimental features in a live operating environment or with data that has not been sufficiently backed up.

The purpose of experimental features is to get feedback early on, allowing customers and partners to influence the future product accordingly. By providing your feedback (e.g. in the SAP Community), you accept that intellectual property rights of the contributions or derivative works shall remain the exclusive property of SAP.

## Example Code

Any software coding and/or code snippets are examples. They are not for productive use. The example code is only intended to better explain and visualize the syntax and phrasing rules. SAP does not warrant the correctness and completeness of the example code. SAP shall not be liable for errors or damages caused by the use of example code unless damages have been caused by SAP's gross negligence or willful misconduct.

## Bias-Free Language

SAP supports a culture of diversity and inclusion. Whenever possible, we use unbiased language in our documentation to refer to people of all cultures, ethnicities, genders, and abilities.

© 2025 SAP SE or an SAP affiliate company. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP SE or an SAP affiliate company. The information contained herein may be changed without prior notice.

Some software products marketed by SAP SE and its distributors contain proprietary software components of other software vendors. National product specifications may vary.

These materials are provided by SAP SE or an SAP affiliate company for informational purposes only, without representation or warranty of any kind, and SAP or its affiliated companies shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP or SAP affiliate company products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. All other product and service names mentioned are the trademarks of their respective companies.

Please see <https://www.sap.com/about/legal/trademark.html> for additional trademark information and notices.