Handbook for SPDD and SPAU adjustment and FAQs for the SPAU-Adjustment

Rami Kumar Munagala has written a handbook describing the SPDD and SPAU adjustment. You can find it using this link: https://archive.sap.com/kmuuid2/709abcf3-7d77-2c10-8d86-b9d2cb01cf18/SPDD%20and%20SPAU%20Adjustments%20Handbook.pdf

FAQs for the SPAU adjustment

Selection screen
[1] What should I bear in mind during the selection on the selection screen?
[2] Why do the modification browser (transaction SE95) and the modification adjustment (transaction SPAU) display an object with "Last changed by" or with the last change request, even though other selection conditions were entered on the initial screen?

Modification adjustment
[3] Why does the system display such a large number of objects in transactions SE95 and SPAU after upgrading from a Release lower than Release 4.5A to Release 4.5A or higher?
[5] Can I save the transferred changes in the modification adjustment so that another developer can transfer further changes?
[6] Do I have to perform a modification adjustment after each upgrade or Support Package import?
[7] When do I have to import the SPAU adjustment transport of a development system into the consolidation system or production system?
[8] Can I also retrieve versions of objects in the modification adjustment?
[9] How do I proceed if versions of modifications with Modification Assistant were still retrieved?
[10] How can I mark the objects of an advance development in the system so that they can be provided in transaction SPAU for an adjustment during the next upgrade or Support Package import?
[12] How can I quickly delete objects from transaction SPAU or SE95?
[13] Does the system change the active object when resetting to original?

Resetting to original
[14] How can I display objects that were reset to original?
[15] Why was the "Return to SAP standard" function replaced with "Reset to Original"?
[16] Why does the system have to be modifiable for resetting to original?
[17] Why does the system require a transport request when resetting to original?

SPAU and note corrections
[18] Which are the advantages of the Note Assistant?
[19] Can I also install the Note Assistant in a system with a large number of modifications?
[20] Which requirements must be met for installing the Note Assistant?
[21] How can I find out in which notes an object is used?
[22] Why can I not reset to original a note correction with a yellow or green traffic light symbol in transaction SPAU?
[23] Why can I not reset to original a modification with Modification Assistant if the object is contained in a note correction?
[24] Why can I not adjust a modification in transaction SPAU if the object is contained in a note correction?

Tips and tricks
[25] Where do I find documentation about transaction SE95_UTIL?
[26] Where should I check in the event of problems?
[27] How can I display the change history of an object?
[28] How can I display the developers that have modified an object?
[29] How can I display the requests in which the object was processed or imported?
[30] Which versions should I compare if a problem occurs in the modification adjustment?
[31] What should I bear in mind when I compare versions in version management?
[32] What is important when comparing modification versions?
[33] Which information can I obtain from the transport logs?
[34] Under which components should I open a message if problems occur?

Selection screen

[1] What should I bear in mind during the selection on the selection screen? [2] Why do the modification browser (transaction SE95) and the modification adjustment (transaction SPAU) display an object with "Last changed by" or with the last change request, even though other selection conditions were entered on the initial screen?

Modification adjustment


Resetting to original

[14] How can I display objects that were reset to original? [15] Why was the "Return to SAP standard" function replaced with "Reset to Original"? [16] Why does the system have to be modifiable for resetting to original? [17] Why does the system require a transport request when resetting to original?

SPAU and note corrections

[18] Which are the advantages of the Note Assistant? [19] Can I also install the Note Assistant in a system with a large number of modifications? [20] Which requirements must be met for installing the Note Assistant? [21] How can I find out in which notes an object is used? [22] Why can I not reset to original a note correction with a yellow or green traffic light symbol in transaction SPAU? [23] Why can I not reset to original a modification with Modification Assistant if the object is contained in a note correction? [24] Why can I not adjust a modification in transaction SPAU if the object is contained in a note correction?

Tips and tricks


Selection screen

[1] What should I bear in mind during the selection on the selection screen? Answer: In the upper part of the selection screen, you can, for example, enter "Last changed by", the number of a transport request, or the package or development class. If you enter the number of a request in the "Last Transport Request" field, the system displays only the objects of the request that were not changed again in requests that were created at a later stage. If you enter the number of the request in the "Request/task" field, the system displays all modified objects of the object list (the "Request/task" input field is available only as of Release 4.6D and with the SAP Note Assistant). The selected fields on all tab pages are active at the same time, regardless of which tab page is currently the active tab page.

[2] Why do the modification browser (transaction SE95) and the modification adjustment (transaction SPAU) display an object with "Last changed by" or with the last change request, even though other selection conditions were entered on the initial screen? Answer: If several developers have modified the object one after the other, the tree display always displays only the name of "Last changed by" and the transport request that was used last. Certain transport objects (for example, function modules, report sources, and screens) can consist of several modularization units (FORM routines, PAI and PBO modules, interfaces, and so on). These units may have a different "Last changed by" or different transport requests that were used last. The transport object with the "Last changed by" name and the name of the transport request that was used last is always displayed in the tree display if at least one of these user names or request numbers was selected on the selection screen. See also: Note 309315: SPAU / SE95 display more objects than selected.
Modification adjustment

[3] Why does the system display such a large number of objects in transactions SE95 and SPAU after upgrading from a Release lower than Release 4.5A to Release 4.5A or higher? Answer: The modification adjustment (transaction SPAU) was changed for the upgrade of relaeses lower than Release 4.5A to Release 4.5A or higher. During this upgrade, the system adds all objects to the modification browser display (transaction SE95) that were processed in customer requests. Complete objects with their own object directory entries (R3TR) are broken down into all existing subobjects (LIMU). During an upgrade or a Support Package import, a subset of the modified objects is provided for a modification adjustment in transaction SPAU. These are the objects that were newly imported with the upgrade or the Support Package. See also: Note 2074460: SPAU: More objects displayed than in request

[4] Why does transaction SPAU display objects with a question mark? Answer: If transaction SPAU displays objects with a question mark, the adjustment mode (automatic, semi-automatic, obsolete note, manual) is still undetermined. The system displays a dialog box when accessing transaction SPAU or when clicking the question mark. The dialog box provides you with the option to start the background process for determining the adjustment modes. In the background process, the report SAPRUPGM calculates the adjustment modes (automatic, semi-automatic, manual) for these objects. They correspond to the green, yellow, or red traffic light symbols in the tree display. If the system still displays the question marks after the tree display was updated, you should restart the background process for determining the adjustment modes and wait for a little while. If the question marks are still displayed, you should check the status of this background process. To do this, choose "Tools -> CCMS -> Background Processing -> Jobs: Overview and Administration" (transaction SM37) and display the spool list of this process.

Note the following: If the adjustment mode is determined for at least one modularization unit of a transport object but not for another, the system issues a "Manual" adjustment mode and displays a red traffic light.

See also: Note 209331: SPAU: Adjustment mode is not defined Note 569128: SPAU/PFCG: Indefinite comparison mode for SAP roles Note 1375402: SPAU: Adjustment mode cannot be determined - enhancement Note 1522295: Function modules cannot be determined in transaction SPAU

[5] Can I save the transferred changes in the modification adjustment so that another developer can transfer further changes? Answer: As of Release 6.10, you can save an intermediate status. All changes that can be performed automatically are transferred. This also applies if the changes were made by other developers. The changes are saved in the splitscreen editor. After saving, the system displays a dialog box asking the user if all changes were made. Answer the question with "No" if you want another developer to continue transferring the changes. Choose "Back" and confirm the saved intermediate status in the subsequent dialog box. The program will still be displayed in transaction SPAU with an "Intermediate status saved" symbol.

[6] Do I have to perform a modification adjustment after each upgrade or Support Package import? Answer: You MUST adjust Dictionary objects in transaction SPDD to avoid the possible loss of data. It is not urgently required that you adjust the Repository objects in transaction SPAU, but you should do so as soon as possible. Objects to be adjusted should no longer be displayed in transaction SPAU when importing the next Support Package or during the next upgrade.

[7] When do I have to import the SPAU adjustment transport of a development system into the consolidation system or production system? Answer: The sequence in which the upgrades are performed or the Support Packages are imported should be the same in all systems. The adjustment transport should be imported into the target system at the time when it is exported from the source system.

[8] Can I also retrieve versions of objects in the modification adjustment? Answer: You can retrieve previous versions for object types that were changed without using the Modification Assistant. You should not retrieve versions for objects that were changed by using the Modification Assistant because inconsistencies may occur.

[9] How are versions of modifications with Modification Assistant were still retrieved? Answer: Use a temporary version. Reset the object to original. Implement the changes manually by comparing them with the temporary version.

[10] How can I mark the objects of an advance development in the system so that they can be provided for an adjustment during the next upgrade or Support Package import? Answer: Transaction SE95_UTIL provides a help function which you can use, for example, to mark the prototypes of an advance development in the customer system. If you want to add or update modification logs, you must enter the number of the transport request. In the third line of the selection conditions, you can exclude the objects whose originals are in a certain system. This may be your development system for example. On the initial screen, you continue to define the new values for the log entries: the number of the last transport request, the name of the last person having changed the object, and the date of the last change. You may choose the values randomly. The objects of the transport request are displayed in the modification browser under "Without Modification Assistant". After the upgrade or Support Package import, these objects can be provided for an adjustment in transaction SPAU. See also: Note 328680: SE95_UTIL: Utility programs modification browser

[11] Why does transaction SPAU display Dictionary objects? Answer: During the ACT_<REL> (upgrade) or RUN_SPDD_? (Support Package) phase, Dictionary objects are displayed in transaction SPDD and transaction SPAU. However, you should adjust the Dictionary objects only in transaction SPDD. If you do not adjust Dictionary objects during the ACT_<REL> or RUN_SPDD_? phases, data may be lost. Once the adjustment in transaction SPDD is complete, Dictionary objects (domain, tables, and so on) may only be displayed in the "Without Modification Assistant" subtree in transaction SPAU. Here, you can reset the Dictionary objects to original. This does not change the objects in the system only deletes the log entry. Refer to note 415863 for detailed information: SPAU: Display of dictionary objects

[12] How can I quickly delete objects from transaction SPAU or SE95? Answer: You can select the subtree under "Without Modification Assistant" and choose the "Reset to Original" function. You can use transaction SE95_UTIL to delete the modification logs for modifications without Modification Assistant.

[13] Does the system change the active object when resetting to original? Answer: The modification behavior when resetting to original depends on whether the object was processed with Modification Assistant or without Modification Assistant, and if the object was already adjusted in transaction SPAU. - Modifications with Modification Assistant If the object was not yet adjusted in transaction SPAU, the system displays a traffic light in front of the object. In the modification browser, these objects are highlighted in color. When resetting to original, the system confirms the active version on the database as the new original version. The object remains unchanged. The system only deletes the modification information. If the object was adjusted, the system displays a green checkmark or a stop sign in front of the object in transaction SPAU. If an adjusted object is reset to original, the active version is replaced with the original version that is saved in the modification logs. The modifications made using the Modification Assistant are lost when an object is reset to original.

- Modifications without Modification Assistant If the object is displayed in the tree under "Without Modification Assistant", "Translations", or "Migration Object", the active version always becomes the original version when resetting to original. Regardless of whether or not the object was already adjusted, the system deletes only the modification log. The object remains unchanged. If the object was already adjusted, the system displays a warning. Unlike objects that are supported by the Modification Assistant, the original version no longer exists. The modified active version is confirmed as the original version. For more information about this: Note 546803: FAQs: Modification Assistant

Resetting to original

[14] How can I display objects that were reset to original? Answer: As of Release 6.10 (with the delivery of the SAP Note Assistant), you can select on the selection screen if reset objects are to be displayed. (However, the system displays only objects that were reset to original after the installation of the SAP Note Assistant.) In releases lower than Release 6.10 for which the SAP Note Assistant was not installed, you can use
transaction SE95_UTIL to display objects that are reset. For more information about this, refer to Note 309143: SPAU: Display of objects reset to original value. For information on installing the SAP Note Assistant for releases lower than Release 6.10, refer to note 364804: Installation of the Note Assistant.

[15] Why was the “Return to SAP standard” function replaced with “Reset to Original”? Answer: Since the delivery of the software does not assume a two-level (SAP, customer) but a multilevel (SAP, country versions, IS solutions, partner, customer, and so on) system landscape, “Reset to Original” is a more appropriate name. Each level of the system landscape may contain an original that can be modified.

[16] Why does the system have to be modifiable for resetting to original? Answer: Even if the actual sources remain unchanged, the system changes the modification logs when resetting to original. The system must be modifiable for at least a short time so that the objects can be reset to original. You can also reset the objects to original in a different system of the development landscape and import them with a transport request.

[17] Why does the system require a transport request when resetting to original? Answer: As of Release 4.5, the system requires a transport request when resetting to original. The transport request is necessary because the modification information for an object is to be available in the entire customer transport track. This also means that an object that was reset to original must be transported into subsequent systems. During a consolidation transport (transport category: K) or during a transport of copies (transport category: T), the system transports the information that the object has not been modified together with the object. In the subsequent system, the object is then treated as an unmodified original during the next Support Package import or upgrade, even if the object is included in a request. The object is overwritten without saving the previous status and is no longer provided for an adjustment in transaction SPAU.

SPAU and note corrections

[18] Which are the advantages of the Note Assistant? Answer: The Note Assistant provides the option of an automatic or semi-automatic installation of note corrections. The Note Assistant add-on provides additional functions for transaction SE95 and transaction SPAU: You can enter the relevant data on the selection screen to display objects that were reset to original after the installation of the Note Assistant. The “Request/Task” input field on the selection screen enables you to select all of the objects of an object list that were modified. You can use the “Utilities -> Modification versions” menu option to display modification versions. You can use the “Search in Requests” function to determine the requests in which an object was included.

[19] Can I also install the Note Assistant in a system with a large number of modifications? Answer: Yes. You can further process objects that were modified with Modification Assistant in note corrections.

[20] Which requirements must be met for installing the Note Assistant? Answer: Read the information in Note 364804: Installation of the Note Assistant For current changes, please refer to Note 875986: Note Assistant: Important notes.

[21] How can I find out in which notes an object is used? Answer: Position the cursor on the object and choose the function “Utilities -> Use in function” or “Utilities -> Use in objects” with Modification Assistant.

[22] Why can I not reset to original a note correction with a yellow or green traffic light symbol in transaction SPAU? Answer: You can reset note corrections to original during the modification adjustment (transaction SPAU) only if they have become obsolete after importing a Support Package. If you want to undo the implementation of the note, you must select the “Undo implementation of note” function in the note entry.

[23] Why can I not reset to original a modification with Modification Assistant if the object is contained in a note correction? Answer: A note correction would become inconsistent if individual objects were reset to original. You can only undo the implementation of the entire note.

[24] Why can I not adjust a modification in transaction SPAU if the object is contained in a note correction? Answer: When implementing a note automatically, the SAP Note Assistant should start with the unmodified status, that is, the original of the last upgrade or Support Package import should not have been changed. Subsequently, you can use the Modification Assistant again to transfer modifications.

Tips and tricks


[26] Where should I check in the event of problems? Answer: For subobjects (function modules, includes, screens, and so on) that are displayed in the modification browser and transaction SPAU, use the “Utilities -> Modification versions” function. This function is available as of Release 6.10 (with the installation of the SAP Note Assistant). If objects are no longer displayed in the browser, you can also execute the report RS_VERSIONS_MODINFO_SHOW. You can use version management to track the changes made to these subobjects. Determine the requests in which an object is contained. You can use the Transport Organizer tools (transaction SE03) for this. Choose the “Search for Objects in Requests/Tasks” option. As of Release 6.10 (with the installation of the SAP Note Assistant), you can also position the cursor on an object in transaction SE95 and transaction SPAU and choose "Utilities -> Search in Requests". Check the transport logs in the Transport Organizer (transaction SE09). To do this, select the relevant transport request and then choose "Transport logs".

[27] How can I display the change history of an object? Answer: You can use version management to track the changes made to an object. Use the “Utilities -> Modification versions” function to display version management for objects (or the function “Utilities -> Utilities -> Modification versions” for subobjects). If objects are no longer displayed in the browser, you can also execute the report RS_VERSIONS_MODINFO_SHOW. You can use version management to track the changes made to these subobjects. Determine the requests in which an object is contained. You can use the Transport Organizer tools (transaction SE03) for this. Choose the “Search for Objects in Requests/Tasks” option. As of Release 6.10 (with the delivery of the SAP Note Assistant), Note 364804 (Note Assistant installation) contains more information about the installation of the Note Assistant before Release 6.10.

[28] How can I display the developers that have modified an object? Answer: The modification browser (transaction SE95) and modification adjustment (transaction SPAU) display only "Last changed by". Use version management to track the changes made to an object. Position the cursor on the object and choose the function “Utilities -> Modification versions” to display the modifications made to the object.

[29] How can I display the requests in which the object was processed or imported? Answer: As of Release 6.10: Position the cursor on the required object and select “Search in Requests”. Before Release 6.10: In transaction SE03 (Transport Organizer Tools), choose “Search for Objects in Requests/Tasks”. You cannot sort by date of the transport release or the import. Consider only requests or tasks that were created or imported around the time of the modification adjustment.

[30] Which versions should I compare if a problem occurs in the modification adjustment? Answer: Compare the following versions: The active version from the development database and the version of the SPAU adjustment in the version database after the import of a Support Package or after an upgrade. The version of the SPAU adjustment and the version of the upgrade or Support Package. The version of the upgrade or Support Package and the modified version before the upgrade or Support Package. Check which version in the version database matches the active version in the development database.

[31] What should I bear in mind when I compare versions in version management? Answer: Pay attention to source code changes and to deleted or inserted modification brackets. These are blocks that start with "{" and end with "}".

[32] What is important when comparing modification versions? Answer: Pay attention to the following: Were the modifications implemented with or without Modification Assistant? Was the object reset to original? (In this case, modifications no longer exist.) Was the Modification Assistant deactivated, for example, for report sources or function modules? Were the time stamp or the last person having changed the object changed between modifications of consecutive versions?

[33] Which information can I obtain from the transport logs? Answer: Identify the transport category (K, T, D) in the export log. Here, ‘K’ stands for consolidation transports, ‘T’ for transports of copies, and ‘D’ for Support Packages. Check the parameters that were used for transporting. The parameter SMODI must have the value ‘Yes’. Check the export and import log for individual transport objects. In the following example, a
consolidation transport (transport category 'K') was imported. The modification information contained in the tables SMODILOG and SMODIRISC was transferred from the source system and overwritten in the target system. When importing a Support Package, the target system retains the modification information. The system only performs an update and sets the upgrade indicator.

[34] Under which components should I open a message if problems occur? Answer: Under the components BC-DWB-CEX and BC-UPG. Messages that concern the SAP Note Assistant should be opened under the component BC-UPG-NA.

known bugs and trouble shootings:

1. Obsolete SAP Notes were deimplemented during SPAU adjustment. It was caused by a bug, you can read SAP Note 1720495 and SAP Note 1928534, you can also refer to the link How to check invalid deimplementation of notes after upgrade or update as well.
2. Obsolete SAP Notes were reset successfully, but the adjustment mode is still screen. It was caused by a bug, you can read SAP Note 2077553.
3. Error "Modification Adjustment Not Possible, Adjust note correction(s) first" (Error number:0M281) occured on one object during modification or SPAU adjustment. The root reason is because that relevant SAP Note(s) have not been adjusted yet. Please refer to SAP Note 2178447 for the solution.