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1 SAP Note Transport-Based Correction Instructions

This guide describes a new way to deliver ABAP correction instructions to customers in a flexible manner: SAP Note transport-based correction instructions (TCI).

The guide addresses the following audience:

- System Administrators
- Technology Consultants

Up to now, corrections have been delivered in the following ways:

- SAP Notes automatic correction instructions
- SAP Notes manual correction instructions
- Support packages (SP)

**Note**
In this document, manual and automated correction instructions are not differentiated and are both called CI.

The following table gives an overview over the standard delivery methods and the new TCI:

<table>
<thead>
<tr>
<th>SAP Note with Correction Instruction</th>
<th>SAP Note transport-based correction instruction</th>
<th>Support Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contains specific, single corrections</td>
<td>Contains corrections of only one specific functional area, which is an encapsulated sub-component</td>
<td>Contains all corrections that were made after a previous SP shipment</td>
</tr>
<tr>
<td>CI can be valid for an SP range and can depend on other CIs</td>
<td>Can contain multiple single corrections, which reduces CI dependencies and update artifacts</td>
<td>Corrects the release or the previous SP</td>
</tr>
<tr>
<td>Can be implemented automatically for all supported objects</td>
<td>Can be valid for an SP range and can have dependency on other TCIs and CIs</td>
<td>Is imported automatically</td>
</tr>
</tbody>
</table>
| **Note**
Objects that are not supported must be implemented manually, which requires developer knowledge. | Contains an ABAP transport similar to SP deliveries, but is delivered together with SAP Notes as a new type of CIs | |
| | Simplified and accelerated consumption of corrections | |

TCIs support all ABAP objects that have a transport connection. A single TCI consists of exactly one ABAP transport request and a set of installation attributes, for example, software component version, minimal SP, languages.
The validity of a TCI is defined by the software component version and a range of SP levels. If you import in your system an SP that exceeds the validity range of an implemented TCI, all corrections of the TCI are imported with the SP, and the TCI becomes obsolete.

**Note**
A mixture of different software component versions or code lines is not supported. For this reason, you receive individual TCIs for each software component version.

**Example**
A correction for the software component SAP_BASIS 7.00, SAP_BASIS 7.01, SAP_BASIS 7.02 is delivered in one SAP Note and three TCIs.

The concept described above is depicted in the following figure:

### 1.1 Benefits and Limitations

**Benefits**
SAP Note transport-based correction instructions (TCI) have the following benefits compared to SAP Notes with correction instructions (CI):

The guide addresses the following audience:

- Fast consumption of consolidated CIs
- No development skills needed for implementation due to an automatic installation process
- Support of all transport-enabled SAP ABAP objects such as DDIC, Table Content, and MIME
No adjustment activities during SP import and upgrade for SAP standard objects.
Clear functional focus and less side-effects.

**Implications**
TCIs are supported with the following SAP NetWeaver releases, and products that are based on these releases:
- SAP NetWeaver 7.00 SP24
- SAP NetWeaver 7.01 SP09
- SAP NetWeaver 7.02 SP07
- SAP NetWeaver 7.31 SP01
- SAP NetWeaver 7.4 SP02
- All higher SAP NetWeaver releases from 7.40 onwards

**Note**
A TCI can be applied to one software component version only.

You furthermore need an additional SPAM authorization for the import that is included one of the following SPAM roles:
- **SAP_OCS_STD** (complete SPAM authorizations)
- **SAP_OCS_TCI_IMPORT** (minimal SPAM authorization for TCI Import)

**Note**
A process with an explicit hand-over between the Note Assistant and SPAM activities is described in Implementing SAP Note Transport-Based Correction Instructions without Import Authorization [page 9]

**Caution**
When you have implemented a TCI, you can currently **not** deimplement it. To delete the TCI from the system, you must revert your system to the status it had before you implemented the TCI. This procedure necessarily requires a system backup.

### 1.2 Enabling Note Assistant for SAP Note Transport-Based Correction Instructions

**Prerequisites**
- SPAM version 59 or higher
- If you use a CRM system, you need SPAM version 60 or higher to enable the Note Assistant (NA) for SAP Note transport-based correction instructions (TCIs).
Context

To import TCIs, you must first enable the NA for this usage.

Note

You cannot revert the enablement of NA. However, only users with authorization SAP_OCS_STD can implement TCIs. For more information, see Benefits and Limitations [page 4]

TCIs should be implemented with NA like SAP Notes. This approach ensures a seamless integration of TCIs into your system. NA cannot consume TCIs by default; it must be enabled to import TCIs. To do so you implement SAP Note 1995550 that includes TCIs for the NA enablement.

Note

Make sure that you import the TCIs for the NA enablement using the Support Package Manager (transaction SPAM) as described below. Be aware that you cannot use the NA since the bootstrap TCI has not yet been implemented.

Procedure

1. **Download the TCI:** Search the SAP Note 1995550 that contains the Note Assistant enablement e.g. via https://support.sap.com/kb-incidents/notes/assistant.html. Add the SAP Note and the attached TCIs to your download basket by clicking Download. In your download basket, you will find next to the SAP Notes the TCIs for all supported basis releases with the name SAPK<release><nr>CPSAPBASIS (e.g. SAPK700003CPSAPBASIS). Download the relevant TCI.

2. **Log on into client 000 of the system you want to install the TCI.**

3. **Upload the TCI to the system:** Call transaction SPAM, then choose Support Package > Load Packages From Front End and navigate to the directory, into which you downloaded the SAR file (e.g. K70003CPSAPBASIS.SAR).

4. **Define queue:**
   a. In transaction SPAM, display the new support packages.
   b. From the OCS Package Directory: New Packages screen, select the respective TCI.
   c. To define the TCI queue, click the Calculate Queue button.

5. **Import the TCI queue:** Click the Import queue button to import the TCI queue.

6. **Confirm the queue:** Choose Support Package > Confirm Queue

If your system is not connected to the Online Service System (OSS) confirming the queue is not possible. In this case you first need to upload SAP Note 1995550 using the Note Assistant and then confirm the queue.

7. **Verify the SAP Note status:** Verify if the status of the SAP Note 1995550 is set to Completely Implemented.
Results

The Note Assistant is now able to consume TCIs.

Note

Sometimes the first installation fails with the following message: CALL_FUNCTION_NOT_ACTIVE. In this case call transaction SPAM again and continue the installation.

Related Information


Benefits and Limitations [page 4]

1.3 Consumption of SAP Note Transport-Based Correction Instructions

SAP Note transport-based correction instructions (TCI) are implemented with the Note Assistant (NA) like regular SAP Notes. A TCI can be transported through the system landscape via customer transport like any SAP Notes correction.

The following sections describe different scenarios for consuming TCIs:

- Implementing a TCI for the first time.
- Re-implementing a TCI when doing a support package (SP) update.
- Implementing a TCI during an upgrade.

Implementing SAP Note Transport-Based Correction Instructions

You want to correct a system defect by implementing a TCI.

1. Under https://support.sap.com/kb-incidents/notes/assistant.html search for the SAP Note that contains the TCI.
2. To add the SAP Note and the attached TCI to your download basket, choose Download. Next to the SAP Note you will find the TCI package with following naming pattern: SAPK<rel><nr>CP<component> e.g. SAPK70005CPASAPBASIS.)
3. From the download basket, download the SAP Note and the corresponding TCI.
4. To implement the SAP Note with the corresponding TCI in your development system, use the Note Assistant via transaction SNOTE. In the Note Assistant, proceed as follows:
   1. Upload the TCI SAR archive. Choose Goto Upload TCI.
Note

Alternatively you can upload the TCI SAR archive (e.g. K700005CPSAPBASIS.SAR) via SPAM or SAINT from front end to your development system (SPAM needs to be called in client 000.). To do so, call transaction SPAM or SAINT in client 000 and choose Support Package > Load Packages > From Front End in transaction SPAM or Installation Package > Load Package > From Front End in transaction SAINT.

2. Upload the SAP Note. Choose Goto > Upload SAP Note.

3. Start the note implementation. Choose SAP Note > Implement SAP Note.

5. Export the adjustment transport. For more information, see the Support Package Manager documentation and SAP Add-On Installation Tool documentation.

Note

Warnings about objects without directory entry can be ignored, since TCIs can contain deletions.

6. Import the adjustment transport into your productive system. For more information, see the Support Package Manager documentation and SAP Add-On Installation Tool documentation.

You have implemented the TCI in your productive system.

Related Links

- Note Assistant Documentation
- Support Package Manager Documentation
- SAP Add-On Installation Tool Documentation

Re-Implementing SAP Note Transport-Based Correction Instructions with Update by Support Package

You have already implemented a TCI and want to update your system with a support package (SP).

Proceed as follows:

1. From the SAP Service Marketplace, download the SP that you want to implement.

2. To implement the SP into your development system or productive system, use transaction SPAM.

If the TCI is still valid for the SP, the TCI is automatically re-implemented in your system.

Note

No transport request is filled with the TCI objects, and the TCI package must be available in all systems, so it can be included during the support package import.
Implementing SAP Note Transport-Based Correction Instructions with Upgrade

The handling of a TCI during an upgrade is very similar to the process described in Re-Implementing SAP Note Transport-Based Correction Instructions with Update by Support Package. When you upgrade your system, the following default scenario applies:

You have implemented a SAP Note that contains additional TCIs that are valid for the target release. TCIs that are not implemented yet and that are valid for the target release are automatically implemented. These TCIs have to belong to SAP Notes that you have already implemented in your system. This supports SAP Notes with multiple TCIs for different releases.

**Note**

The TCI SAR archive (e.g. K740005CPSAPBASIS.SAR) must be available in the EPS/in the transport directory folder. You can download the package from the SAP Support Portal. Then call transaction SPAM, choose Support Package ➤ Load Packages ➤ From Front End and navigate to the directory, into which you downloaded the SAR file.

Implementing SAP Note Transport-Based Correction Instructions without Import Authorization

Implementation of an SAP Note Transport-Based Correction Instruction without SPAM authorization for the import is not possible. You will get the information that a SPAM queue is defined, but the import is not possible due to missing authorization. You have now two possibilities to continue:

1. Restart the note implementation with an user with sufficient authorization.
2. Import the SPAM queue directly with Transaction SPAM (works in any client) and resume the note implementation in the Note Assistant afterwards to confirm the SPAM and Note Queue.
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