SAP Patch Assembly/Distribution Engine (SPADE) (BC-UPG-OCS)

HELP.BCUPGOCSSPADE

Release 4.6C

Copyright

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Use

Using Transaction SPADE, SAP partners can create their own Conflict Resolution Transports (CRTs) or Collective CRTs [Page 20] for their add-ons and offer them to their customers.

CRTs are necessary if the add-on from an SAP partner modifies parts of the SAP standard. Here, there is danger that the changed objects may be overwritten when importing Support Packages.

Therefore, the SAP Patch Manager (SPAM) always checks if there are conflicts between the installed add-ons and the Support Packages to be applied. If this is the case, the Support Package import is terminated with a corresponding message (in SPAM step ADDON_CONFLICTS_?). To be able to continue, you must have resolved all conflicts using CRTs.

For add-ons delivered by SAP, the relevant CRTs are offered in the SAPNet R/3 frontend or in the SAPNet Web frontend. You can request and download CRTs from there. After the queue has been completed with the required CRTs, you can continue with the importing the Support Packages.

Since SAP partners cannot offer their own CRTs in the SAPNet, they have to make them available to their customers in another way.

Not that a CRT resolves conflicts between **one** Support Package and **one** add-on. A Collective CRT resolves conflicts between a **series of continuos Support Packages** and **one** add-on.

In SAP terminology, the term *patch* has been replaced by *Support Package*.

Note that you can only use this transaction with SAP GUI for Java and SAP GUI for Windows.

Prerequisites

The SAP Patch Assembly/Distribution Engine (SPADE) can be installed on any SAP System with Release 4.0 or higher, on which the newest SPAM/SAINT update has already been imported. Transaction SPADE is included in the standard SAP System as of Release 4.6A.

Call Transaction SPADE (client **000)**.

Functions

- Create, register and provide for CRTs for the customer
- Define and test RFC connections [Page 19]
- Modify CRTs

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- Check requirements

Activities

1. Creating CRTs [Page 7]
2. Registering CRTs [Page 8] or Registering Collective CRTs [Page 10]
3. Modifying CRTs [Page 12]
4. Getting CRTs [Page 15]
5. Checking Requirements [Page 17]

Creating CRTs

Use

Before you can provide customers with a Conflict Resolution Transport (CRT), you must first create it. To do this, you have to create and export a transport request.

The following description on applies to CRTs and Collective CRTs [Page 20].

Procedure

1. In the source system call the Transport Organizer using Transaction **SE01**. The *Transport Organizer (extended view)* screen appears.
2. Choose the tab *Delivery* (Delivery Transport [Ext.]).
3. Under *Request type*, select *Piece list for patch*.
4. Create a delivery transport following the CRT naming convention.
5. Include the objects to be transported in the request.
6. Release the request.

Result

The CRT is created and now has to be registered [Page 8].

Registering CRTs

Use

To be able to provide customers with a created Conflict Resolution Transport, you must first register and then release [Page 12] it.

Prerequisites

You have already created [Page 7] the CRT you want to register.

Procedure

1. Call Transaction **SPADE** (client 000). The initial *SPADE* screen appears.
2. In the field *RFC destination* enter the name of the CRT and the RFC destination of its source system.
3. The default here is the destination *NONE* if the CRT is located on the local system. However, you can enter any other RFC destination to get the CRT from a remote system.
4. Choose *Patch* → *Register*.
5. Set the following attributes:
   - Predecessor (Support Package) whose conflicts are to be resolved using the CRT
   - Add-on ID
   - Add-on release

   You can also change the attributes *Short description* and *Generation* (*O* = optional, *N* = never).

The CRT SAPKJ40B01 with the following attributes resolves all conflicts between add-on IS-X/1.0 and Support Package SAPKH40B01:

Release	40B (not modifiable)
Patch type	CRT (not modifiable)
Generation	O
Predecessor	SAPKH40B01
Add-on	IS-X
Add-on release	1.0

While the Support Package is being imported, the generation is only performed is the customer has set this option in the SAP Patch Manager. **See also**: SAP Patch Manager [Ext.]

5. Choose *Patch* → *Register*.
6. Confirm the prompt.

Result

The Conflict Resolution Transport has been registered.

You must first release [Page 12] the CRT before customers can get it.

Registering Collective CRTs

Use

Tp provide customers with a Collective Conflict Resolution Transport (Collective CRT), you must first register it and then release [Page 12] it.

Prerequisites

You have already created [Page 7] the Collective CRT that you want to register.

Procedure

1. Call Transaction **SPADE** (client 000). The initial SPADE screen appears.
2. In the field *RFC destination*, enter the name of the Collective CRT and the RFC destination for its source system.

   The default is the destination *NONE* if the Collective CRT is located on the local system. However, you can enter any other RFC destination to get the Collective CRT from a remote system.
3. Choose *Patch* → *Register*.
4. Set the following attributes:
   - *Predecessor*: "Lowest" Support Package whose conflict is resolved with the Collective CRT
   - *Add-on ID*
   - *Add-on release*
   - *Highest predecessor*: "Highest" Support Package whose conflicts are resolved with the Collective CRT

Note that only the last 2 digits are displayed, which is the current number.

You can also change the attributes *Short description* and *Generation* (*O* = optional, *N* = never).

The Collective CRT SAPKJ40B01 with the following attributes resolves all conflicts between add-on IS-X/1.0 and the Support Packages from SAPKH40B01 to SAPKH40B05:

Release	40B (not modifiable)
Patch type	CRT (not modifiable)
Generation	O
Predecessor	SAPKH40B01

Highest predecessor	05
Add-on	IS-X
Add-on release	1.0

While the Support Package is being imported, the generation is only performed is the customer has set this option in the SAP Patch Manager. **See also**: SAP Patch Manager [Ext.]

5. Choose *Patch* → *Register*.
6. Confirm the prompt.

Result

The Collective CRT has been registered.

You must first release [Page 12] the Collective Conflict Resolution Transport before customers can get it.

Modifying CRTs

Use

In the SPADE patch directory, you see which Conflict Resolution Transports have already been registered in the system. You can also see the following information:

Column	Description
Patch	Name of the registered CRT
Type	Type in this SPADE version must be *CRT*
Rel.	R/3 Release in which the CRT may be applied
EPS parcel	EPS parcel containing the data files, and as of Release 4.0 also the relevant attributes. This parcel is transferred to the target system and is unpacked during the import using the SAP Patch Manager (SPAM), and is divided into its respective components.
Status	Displays if a CRT is locked or released. Only released CRTs can be requested and transferred using RFC.

You can perform the following actions in the patch directory:

- Display attributes and the object list
- Release, lock, delete CRTs
- Request CRTs
- Disassemble CRTs
- Go to the patch requests

The following description only applies to CRT and Collective CRT [Page 20].

Procedure

To display the patch directory, call Transaction **SPADE** and choose in the initial screen *Goto* → *Patch directory*.

Displaying Attributes

To display the attributes that you gave to a CRT at registration, choose *Patch* → *Attributes.*

Displaying the Object List

You can display the contents (the object list)of a CRT. If there are table entries, you can also link to the keys.

To display the object list, choose *Patch* → *Object list*.

Releasing CRTs

If you register a CRT, it is locked at first. After a successful test, you can release it. You can only create patch requests for released CRTs.

To release a CRT, choose *Patch* → *Release*.

Locking CRTs

You can lock a CRT, which prevents creating new patch requests and downloading the EPS parcel for existing requests.

To lock a CRT, choose *Patch* → *Lock*.

Deleting CRTs

A possible reason you might want to delete a CRT is that an error occurred in a CRT, it may be incomplete or it contains incorrect attributes.

After deleting a CRT, all the requests for the deleted CRT are no longer displayed in the request list.

If you delete a CRT and then register a new one with the same name, all requests that are still open for this CRT are appended to the new EPS parcel.

To delete a CRT, choose *Patch* → *Delete*.

Requesting CRTs

You can request a CRT for a recipient system in the same was as in the SAPNet R/3 frontend.

1. Position the cursor on the relevant CRT.
2. Choose *Patch* → *Request*. The dialog box *SPADE: Request patch <X>* appears.
3. In the dialog box, enter the system ID and the installation number of the recipient system.

Disassembling CRTs

You can disassemble the EPS parcel of a CRT into its original data files. These files are written to directory `/usr/sap/trans/tmp`. If necessary, you can copy them to `/usr/sap/trans/data` and create a suitable cofile using the command `tp createcofile <package> -s <SID>`.

To disassemble a CRT, choose *Patch* → *Disassemble.*

Going to the Patch Requests

In the patch requests [Page 17], you see all the CRTs that have already been requested.

To go to the list of patch requests, choose *Goto* → *Patch requests*.

Getting CRTs

Use

There are 2 ways to get Conflict Resolution Transports:

- You can download the EPS parcel from an **FTP** server.
- You can download the EPS parcel using **RFC** from an SAP System.

The following description only applies to CRTs or Collective CRTs [Page 20].

Procedure

FTP Method

1. Copy the PAT and ATT files from `/usr/sap/trans/EPS/out` to your FTP server.

   

   As of Release 4.0, the ATT files are no longer used because the relevant attributes are already contained in the PAT file.

2. After the customer has downloaded the PAT and ATT files using FTP, they have to be put in the directory `/usr/sap/trans/EPS/in`.
3. Depending on the Release, proceed as follows:

   Release 3.1: Run the program RSEPSUPL.

   Release 4.x: Call Transaction **SPAM** and choose in the initial screen *Patch* → *Upload*.

   Now the CRTs have been made known to the SAP Patch Manager (SPAM) in the target system and you can now import them. **See also**: SAP Patch Manager [Ext.]

RFC Method

Unlike the SAPNet R/3 Frontend, a customer cannot request CRTs by themselves.

Only released CRTs can be requested and transferred using RFC.

1. The customer must set up an RFC connection from the target system to the server on which the CRT was registered. To do this, the customer must know the host address and the logon data of their SAP System.
2. On the customer system, the customer must temporarily switch the server destination for the Electronic Parcel Service from SAPOCS to the new RFC destination. To do this, call Transaction **SPAM** and in the initial screen choose *Environment* → *EPS* → *Goto* → *Default settings*. **See also**: SAP Patch Manager [Ext.]
3. Request the desired CRT for the customer on your CRT server. To do this, choose in the initial *SPADE* screen *Goto* → *Patch directory* → *Patch* → *Request*. You must know the system ID and the installation number of the customer system.
4. The customer downloads the registered CRT using the SAP Patch Manager. To do this, call Transaction **SPAM** and choose in the initial screen of SPAM *Patch* → *Download*.

Editing Requests

Use

You can either display all the requests or only for a specific recipient. In the list displayed, you can reset or delete requests.

Request Information in the List

Column	Description
Patch	Name of the requested CRT
EPS Parcel	Accompanying EPS parcel (PAT file)
Recipient	Address of recipient consisting of system ID and installation number
Begn. date	Date patch was requested
Pick up dt.	Date of downloading via RFC
Data trans.	Color legend: yellow → requested green → successfully downloaded red → transfer error followed by an error code from the Electronic Parcel Service (EPS)

Procedure

Displaying All Requests

1. Call Transaction **SPADE**.
2. In the initial screen choose *Goto* → *Patch directory*. The *Patch Directory* screen appears.
3. Choose *Goto* → *Patch requests*. The screen *SPADE: List of Patch Requests* appears.

Displaying Requests for Only a Specific Recipient

1. In the screen *SPADE: List of Patch Requests* choose *Edit* → *Filters*.
2. Enter the relevant system ID and the installation number for the desired recipient.

   If you choose *Edit* → *Filters* → *Combined list*, the entire list of patch requests for all recipients is displayed again.

Resetting Requests

To re-deliver a Conflict Resolution Transport to the same recipient that has already been downloaded, you must reset the request.

1. In the screen *SPADE: List of Patch Requests* position the cursor on the relevant request.
2. Choose *Request* → *Reset*.

Deleting Requests

1. To delete a request, in the screen *SPADE: List of Patch Requests*, position the cursor on the relevant request.
2. Choose *Request* → *Delete*. The request is deleted.

You can only delete a request as long as the CRT has not been transferred.

Maintaining RFC Connections

Use

If you want to send Conflict Resolution Transports (CRTs) using, you must maintain the relevant RFC connection. You can call the necessary functions directly from Transaction **SPADE**.

Prerequisites

You are in the initial screen of Transaction **SPADE**.

Procedure

Calling the Transaction for RFC Destinations

To get to the transaction for displaying and maintaining RFC destinations (**SM59**), choose in the initial screen of Transaction SPADE *Extras* → *RFC destinations*.

Creating RFC Destinations

If you want to transfer a CRT from another system, you must first create the corresponding RFC destination.

4. Call Transaction **SPADE**. The screen *SAP Patch Assembly/Distribution Engine (SPADE)* appears.
5. In the field *RFC destination* enter the name of the destination.
3. Choose *Extras* → *Maintain RFC destination*. The screen *RFC Destination <destination name>* appears where you can create this destination.

Checking RFC Connections (RFC Ping)

To check if the RFC connection can be established to the target system, choose in the initial screen of Transaction SPADE *Extras* → *RFC connection test*.

CRTs and Collective CRTs (CCRT)

When the Support Package is being imported, the SAP Patch Manager (Transaction **SPAM**) checks if there are conflicts between the Support Package in the queue and the installed add-ons. Conflicts occur if an object that is delivered with a Support package was also delivered in an add-on. If there are conflicts, the SAP Patch Manager stops and asks you to import the relevant CRTs (Conflict Resolution Transport). You can only continue to import the Support Package when all the necessary CRTs are selected in the queue.

The SAP Patch Manager does not check if the object(s) causing the conflict are contained in the selected CRTs.

There are 2 types of Conflict Resolution Transports:

Conflict Resolution Transport (CRT)

A CRT resolves conflicts between **one** Support Package and **one** add-on.

You have a system in which the add-on IS-X is installed. While the Support Package P1 and P2 are being applied, conflicts between the Support Package and the add-on are determined.

To resolve these conflicts, you need 2 CRTs, CRT1 and CRT2. A consistent queue appears as follows:

1. P1
2. CRT1
3. P2
4. CRT2

The SAP Patch Manager only continues importing the Support Package when the queue has become consistent by adding CRTs.

Collective Conflict Resolution Transport (CCRT)

A Collective CRT resolves conflicts between a **continual series of Support Package**s and **one** add-on.

You have a system in which the add-on IS-X is installed. While the Support Package P1 and P2 are being applied, conflicts between the patches and the add-on are determined.

To resolve these conflicts, you do not need 2 CRTs, rather a collective CRT, Collective CRT1. A consistent patch queue appears as follows:

1. P1
2. P2
3. Collective CRT1

The SAP Patch Manager only continues applying the patch when the queue has become consistent by adding Collective CRTs.