

SAPEX Installation from Transport Request



Contents:

- [SAP Server Requirements](#)
 - [How to know the SAP NetWeaver version](#)
 - [What permissions are needed to run SAPEX in SAP](#)
 - [Common permissions for both \(Local and Remote\) usage](#)
 - [Permissions for Remote usage](#)
 - [Permissions for Local usage](#)
- [Distribution of SAPEX as a Transport Request](#)
- [How to import the SAPEX Transport Request](#)
 - [1. Get the Transport Request files](#)
 - [2. Copy the Transport Request files to your SAP System](#)
 - [3. Import the Transport Request files](#)
 - [4. Create OS Commands \(ZKW_MKDIR and ZKW_RMDIR\)](#)
- [Additional steps for local execution](#)
 - [5. Create OS command to launch the analysis \(ZKW_KLA_AGENT\)](#)

Related pages:

SAP Server Requirements



To analyze ABAP code with the Kiuwan Solutions, the source code and the information from the SAP system need to be exported before they can be analyzed.

The SAP Extractor (SAPEX) for Kiuwan performs these tasks.

NOTE: SAPEX is expected to run in any **SAP NetWeaver 7.4+** platform. Read below how to learn which version you are using.

[Contact Kiuwan Technical Support](#) Kiuwan Support if you have a previous platform version.

How to know the SAP NetWeaver version

1. Log on to the system using SAPGUI
2. On the main menu, choose **System > Status...**
3. In the **System: Status window** you'll see a section in the middle-right called **SAP System data**
4. Click the icon next to **Product version** to show the details of all the components installed on your system

System: Status

Usage data

| | | | | |
|---|-----------|----------------|------------|----------|
| Client | 001 | Previous logon | 22.02.2017 | 22:04:35 |
| User | DEVELOPER | Logon | | 22:04:10 |
| Language | EN | System time | | 22:13:48 |
| Number of Failed Password Logon Attempts: | | 0 | | |

SAP data

| Repository data | | SAP System data | |
|------------------|-----------------|---------------------|------------------|
| Transaction | SESSION_MANA... | Product Version | SAP NETWEAVER... |
| Program (screen) | SAPLSMTR_NAV... | Installation Number | DEMOSYSTEM |
| Screen number | 100 | License Expires On | 22.03.2017 |
| Program (GUI) | SAPLSMTR_NAV... | Unicode System | Yes |
| GUI status | SESSION_ADMIN | | |

Host data

| | |
|------------------|-------------------|
| Operating system | Linux |
| Machine type | x86_64 |
| Server name | vhcalnplci_NPL... |
| Platform ID | 390 |

Database data

| | |
|-----------------|------------|
| Database System | SYBASE |
| Release | 16.0.02.02 |
| Name | NPL |
| Host | vhcalnplci |
| Owner | SAPSR3 |

Buttons: [Checkmark] [Navigate] [Refresh] [Close]

5. Look for **SAP_BASIS**
 - a. **Release** = major release version of NetWeaver
 - b. **SP-Level** = installed support pack

Installed Software

Installed Software Component Versions | Installed Product Versions

| Component | Release | SP-Level | Support Package | Short Description of Component |
|-----------|------------|----------|----------------------|--------------------------------|
| SAP_BASIS | 750 | 0002 | SAPK-75002INSAPBASIS | SAP Basis Component |
| SAP_ABA | 750 | 0002 | SAPK-75002INSAPABA | Cross-Application Component |
| SAP_OVPND | 750 | 0002 | SAPK-75002INSAPOVND | SAP Gateway Foundation |
| SAP_UI | 750 | 0002 | SAPK-75002INSAPUI | User Interface Technology |
| ST-PI | 740 | 0001 | SAPK-74001INSSTPI | SAP Solution Tools Plug-In |
| BI_CONT | 757 | 0007 | SAPK-75707INRIBCONT | Business Intelligence Content |
| SAP_BW | 750 | 0002 | SAPK-75002INSAPBW | SAP Business Warehouse |
| DMIS | 2011_1_731 | 0010 | SAPK-11610INDMIS | DMIS 2011_1 |

What permissions are needed to run SAPEX in SAP

Depending on your use of SAPEX ([Remote](#) or [Local](#)) the permissions are different.

Remote usage of SAPEX means that the SAPEX functionality is executed within an external system. This means that you will use KLA to remotely connect to the SAP Server to extract the code and analyse it. In this remote scenario, the SAP Server acts as a pure server host. It provides the needed APB source files for KLA to analyze. Therefore, KLA will use an SAP user to connect to the SAP server to extract the code (i.e. to invoke the SAPEX RFCs).

In a **Local** usage of SAPEX, you will need to configure a SAP user with permissions to run the code extraction and execute the SAPEX programs.

Common permissions for both (Local and Remote) usage

Regardless of local vs remote usage, there are some common permissions the SAPEX user needs to be granted:

- Object : S_DATASET
 - ACTVT = 06, 33, 34
 - FILENAME = DIR_HOME/sape4k/*
 - Note: if you configure the SAP instance to be balanced to a group of SAP servers, you will need to configure this permission in every SAP server (because DIR_HOME will be different for every SAP instance)
- Object : S_LOG_COM
 - COMMAND = 'ZKW_MKDIR', 'ZKW_RMDIR'
 - OPSYSTEM = Operating System type (SY-OPSYS system variable) established for SM69 commands (for example, Linux, UNIX, ANYOS, Windows NT, etc...)
 - HOST = SAP server where above commands will be executed (*** or SY-HOST system variable, recommended *)
- Object : S_RZL_ADM
 - ACTVT = 03
 - Needed to remove export temporary directories of SAP server

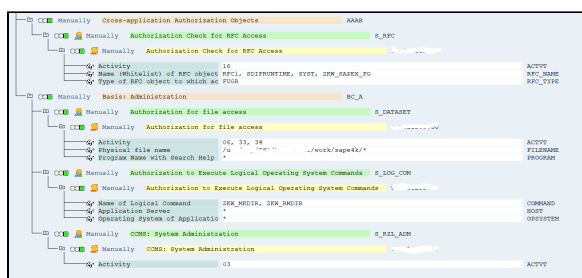
Permissions for Remote usage

For SAPEX **remote** usage, SAP user must be **type B (system)**.

A **type B** user with above privileges should also be granted the following authorizations:

- Object : S_RFC
 - ACTVT = 16
 - RFC_TYPE = 'FUGR'
 - RFC_NAME = 'ZKW_SAPEX_FG', 'SYST', 'RFC1', 'SDIFRUNTIME'

The above permissions as displayed in SAP:



Permissions for Local usage

In a **Local** scenario, SAP user must be **type A (dialog)**.

Besides the common authorizations (above explained), this SAP user must also have next ones:

- Object : S_TCODE
 - To execute SAPEX transactions :
 - ZKW_COD,
 - ZKW_MET
 - ZKW_ANA
- Object : S_PROGRAM
 - To execute ABAP programs through SA38 :
 - ZKW_SAPEX_CODE
 - ZKW_SAPEX_METADATA
 - ZKW_ANALYSIS
 - ZKW_ANALYSIS_TO

Distribution of SAPEX as a Transport Request



SAP Extractor for Kiuwan (SAPEX) is distributed as a **Transport Request**.

This way, you can easily install all the required SAPEX source programs importing the transport request into your target SAP system.

SAPEX binary files (*data-file* and *co-file*) are contained into **sapex_transport.zip** (located at **\$(AGENT_HOME)/resources/abap** directory of your Kiuwan Local Analyzer installation).

Note: If you cannot use this installation mechanism you can also install SAPEX by manually installing source code (please visit [Manual Installation of SAP Extractor](#))

How to import the SAPEX Transport Request

In this section, we will import the Transport Request for SAPEX that is included in your Kiuwan Local Analyzer distribution.

1. Get the Transport Request files

Find the **Transport Request** as a zip file (**sapex_transport.zip**) in the `$(AGENT_HOME)/resources/abap` directory of your Kiuwan Local Analyzer installation.

Unzip the file into your local system. This will extract two files :

- a data-file: *R900039.NPL*
- a co-file: *K900039.NPL*

Please note that the last 3 digits of the transport numbers might be different in the most recent versions.

2. Copy the Transport Request files to your SAP System



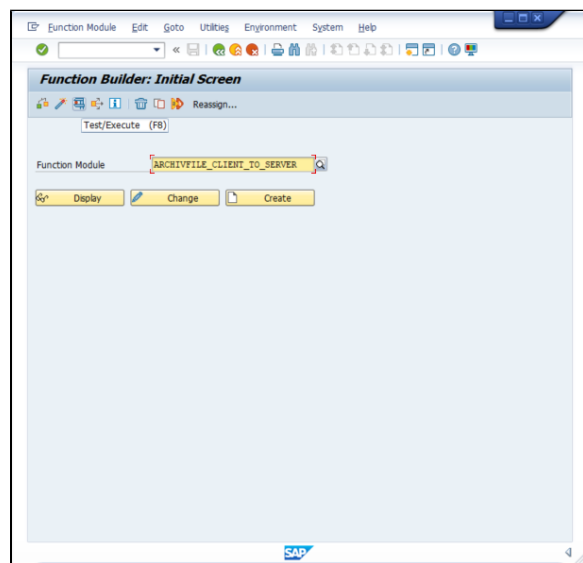
Next, you need to copy the extracted co-file and data-file to your SAP System.

- **K900039.NPL** to your `/usr/sap/trans/cofiles` directory
- **R900039.NPL** to your `/usr/sap/trans/data` directory

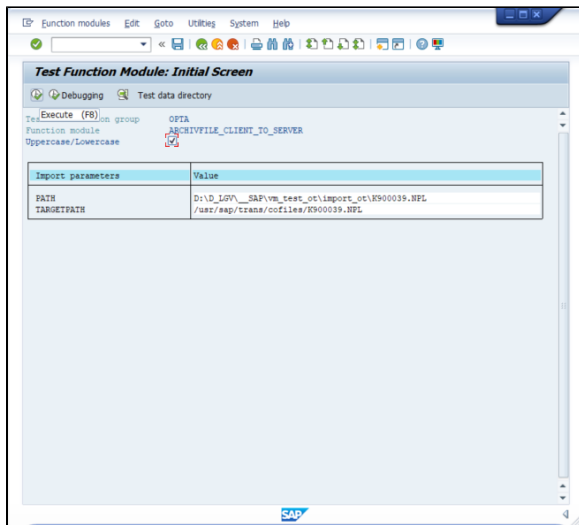
Please note that destination directories are for a unix sap system. In case of a SAP Windows system, it typically is `<drive>:\usr\sap\trans`

If you have direct access to your SAP system, you can copy them directly.

Otherwise, execute **SE37** and execute the **ARCHIVFILE_CLIENT_TO_SERVER** function. Click on Test /Execute

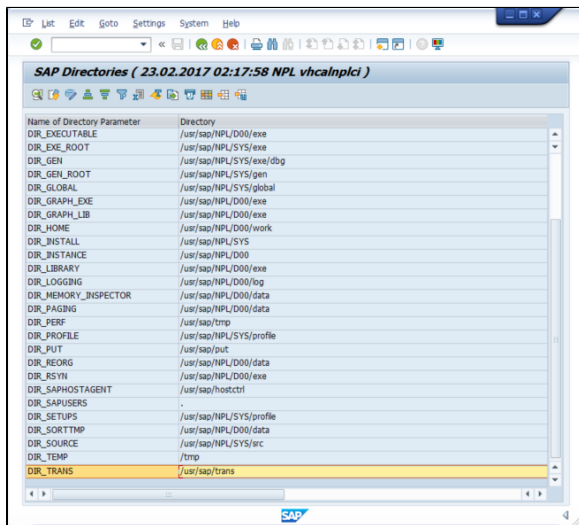


Then select the files you want to import (in your local machine) and the target path (in the SAP server), check **Uppercase/Lowercase** and **Execute** it.

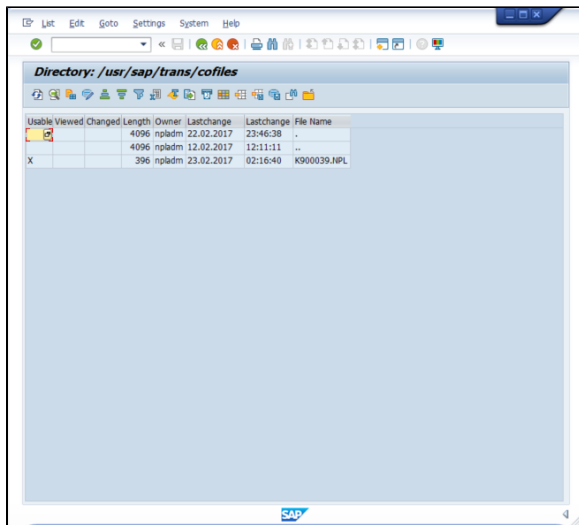


In order to confirm the copy, you can use **AL11** to check the transfer was done to the correct places.

Execute it and double click on the **DIR_TRANS** row.



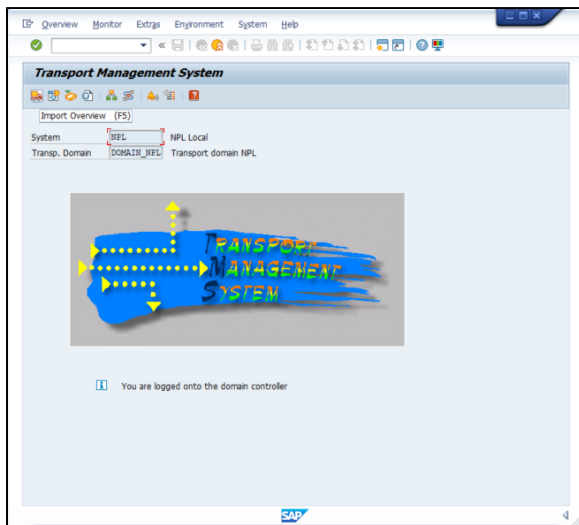
For **cotiles**, you should see something like the below image. Similarly to **data** directory.



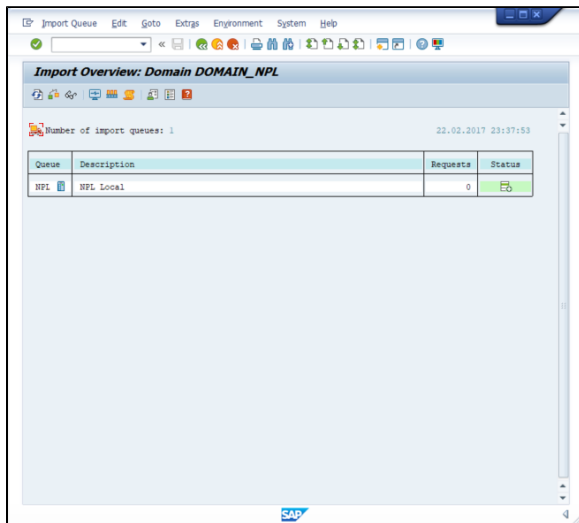
3. Import the Transport Request files

Next, the SAPEX Transport Request must be imported into your SAP system

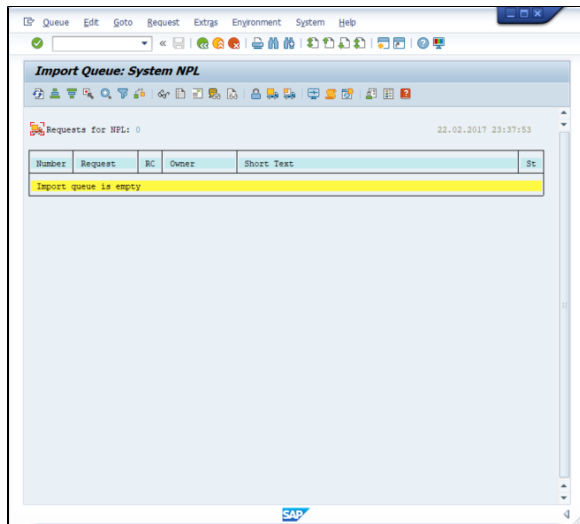
Execute **STMS** and click on **Import Overview**



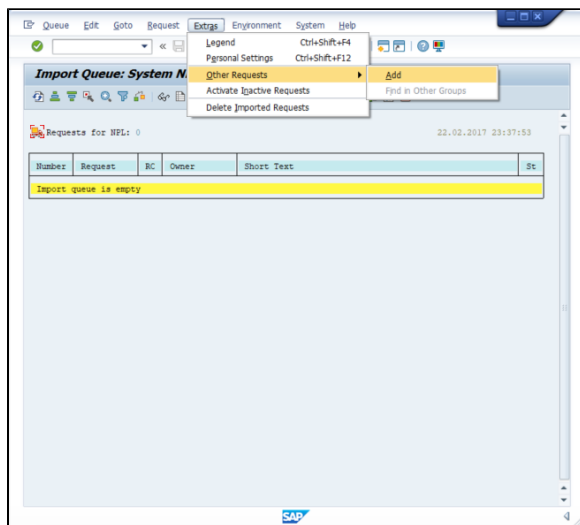
Then you will see your Import Queue(s).



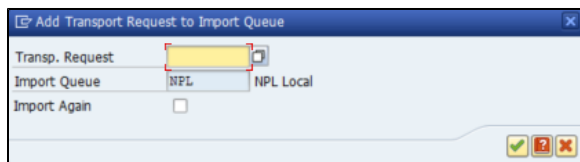
Double-click on the queue and you will see the requests for that queue.



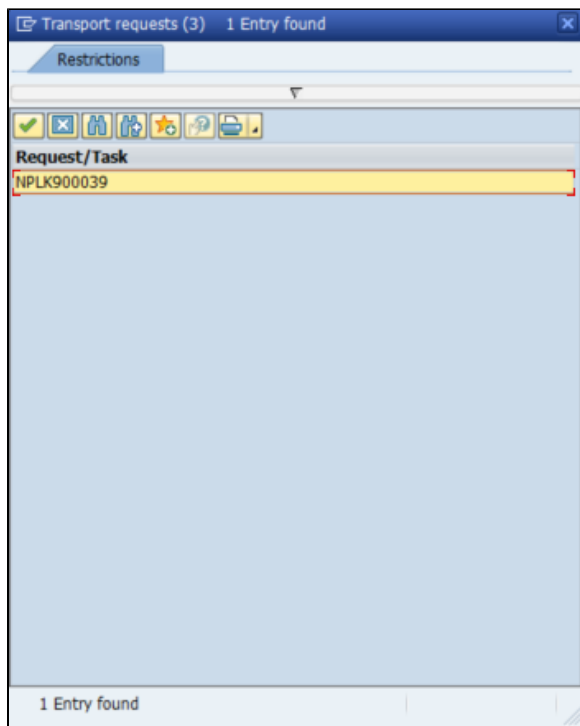
Now, you should add the SAPEX Transport Request (**Extras > Other Requests > Add**)



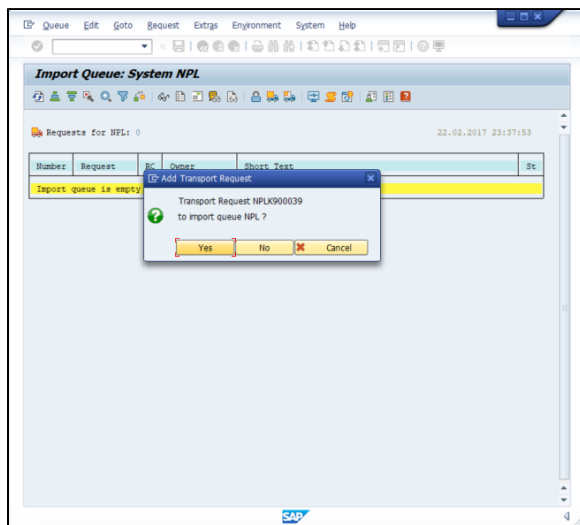
Click **Transp. Request** to see available Transport Requests:



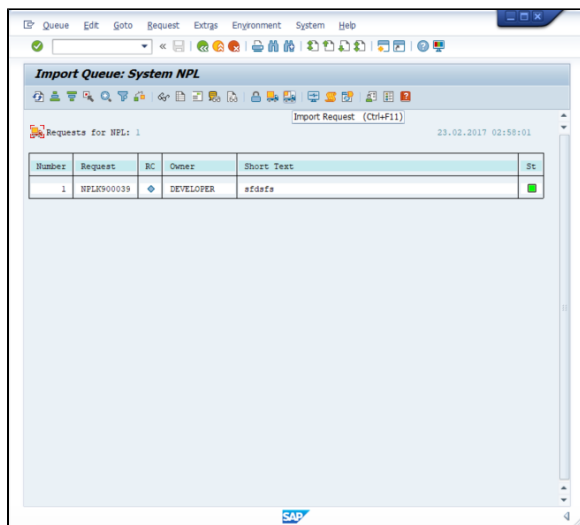
Select it



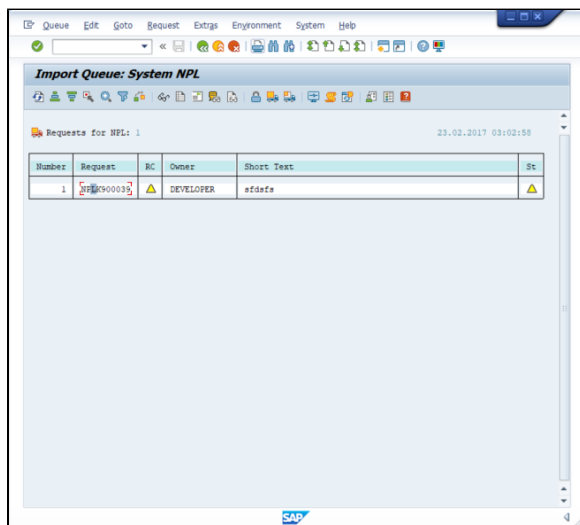
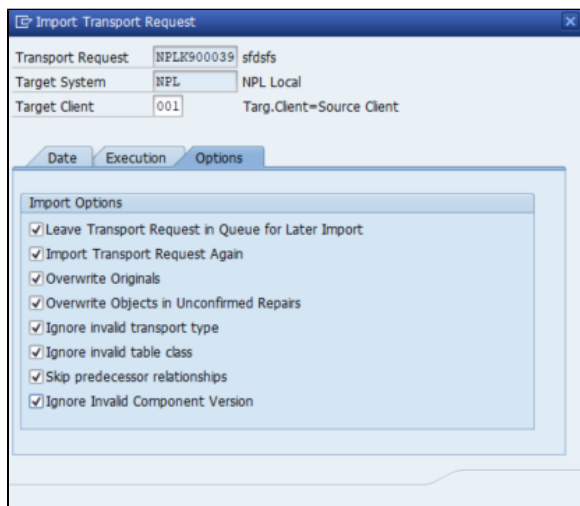
Click **Yes**.



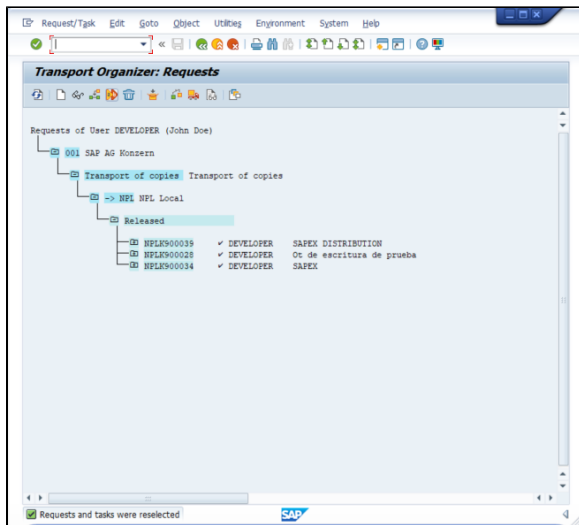
Then you will see the SAPEX Transport Request, select it and click **Import Request**.



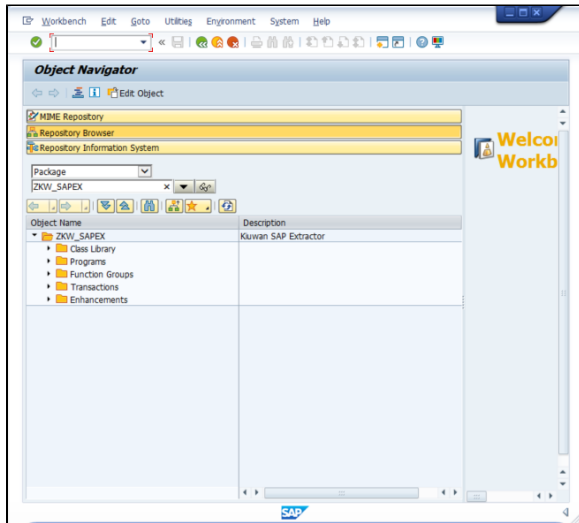
Select the **Options** tab as below.



Once the import process is finished, you can check it using **SE09**.



Use **Object Navigator (SE80)**.
You will see SAPEX installed on your SAP System.



4. Create OS Commands (ZKW_MKDIR and ZKW_RMDIR)

After importing SAPEX Transport Request, you must create **OS commands** (ZKW_MKDIR and ZKW_RMDIR)

To do this, follow the instructions on [Create OS commands \(ZKW_MKDIR and ZKW_RMDIR\)](#)

Additional steps for local execution

5. Create OS command to launch the analysis (ZKW_KLA_AGENT)

If you decide on a local scenario, you must create an **OS command** (ZKW_KLA_AGENT)

To do this, follow the instructions on [Create OS command to launch the analysis \(ZKW_KLA_AGENT\)](#)