



SAP S/4HANA 1610 to 1809 Upgrade



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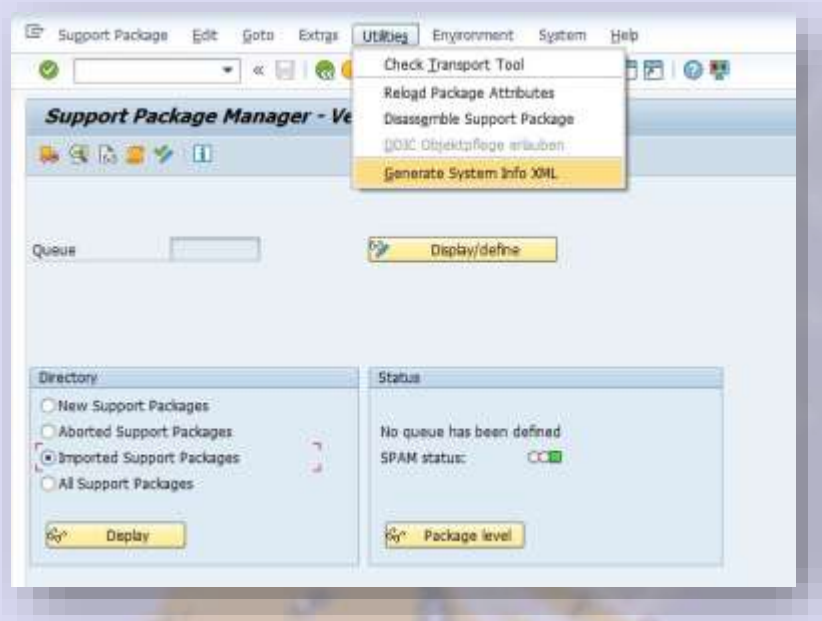


info@ambikeya.com||www.ambikeya.com||+917746805189

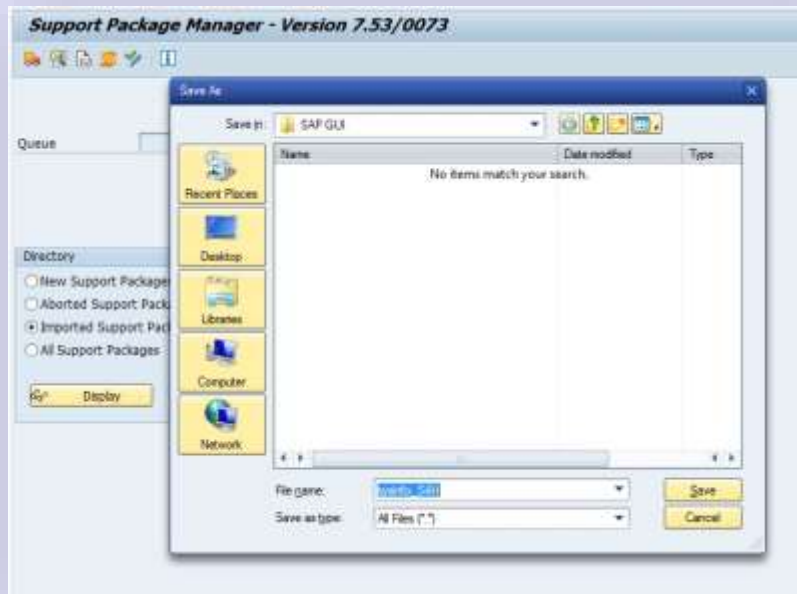
S/4 HANA UPGRADE (1610 to 1809)

A. Generate XML stack file for Maintenance planner

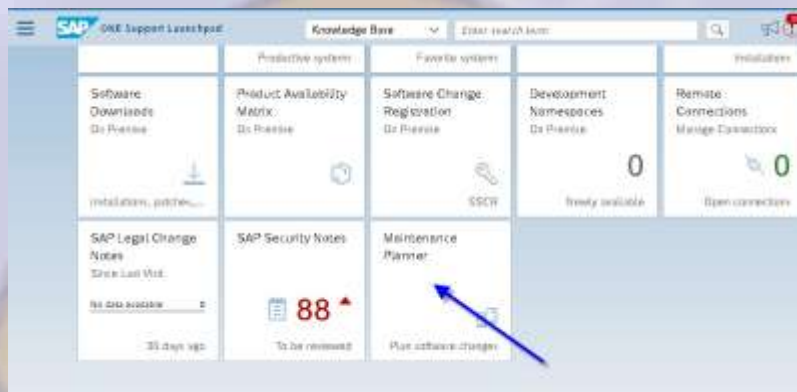
Execute codes SPAM to generate XML system info , click Utilities → Generate system info for XML



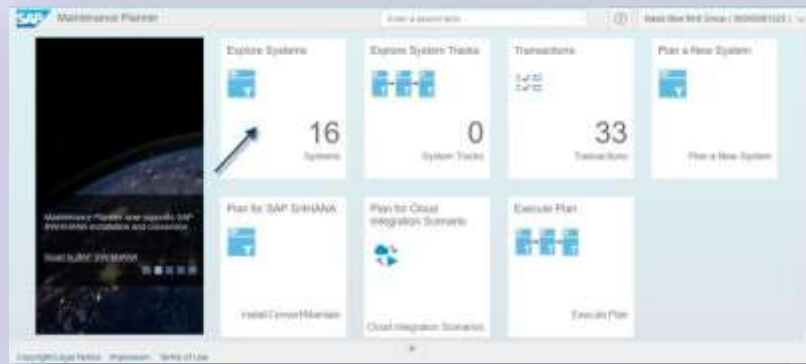
Save XML system info to local PC



Access maintenance planner on SAP Portal

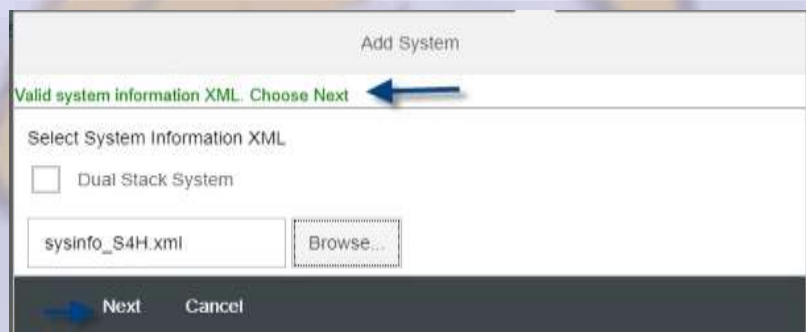


Click explore system and add system




System ID	System Type	Name	SAP System Name	SAP System Instance	SAP System Version	Last Update
S4H	System	SAP RETEHEAD	S4H	00	00	18.08.2018 12:00:00
S4H001	System	SAP RETEHEAD	S4H	00	00	18.08.2018 12:19:40
S4H002	System	SAP RETEHEAD	S4H	00	00	18.08.2018 12:19:40
S4H_003	System	SAP RETEHEAD	S4H	00	00	18.08.2018 12:19:40
S4H	System	SAP RETEHEAD	S4H	00	00	18.08.2018 12:21:21
S4H	System	SAP RETEHEAD	S4H	00	00	18.08.2018 12:21:21
S4H	System	SAP RETEHEAD	S4H	00	00	18.08.2018 12:21:21
S4H	System	SAP RETEHEAD	S4H	00	00	18.08.2018 12:21:21
S4H	System	SAP RETEHEAD	S4H	00	00	18.08.2018 12:21:21
S4H	System	SAP RETEHEAD	S4H	00	00	18.08.2018 12:21:21

Browse generated system XML , and follow steps in next screenshot



Add System

System Details

SID: S4H

Host: s4hanaides

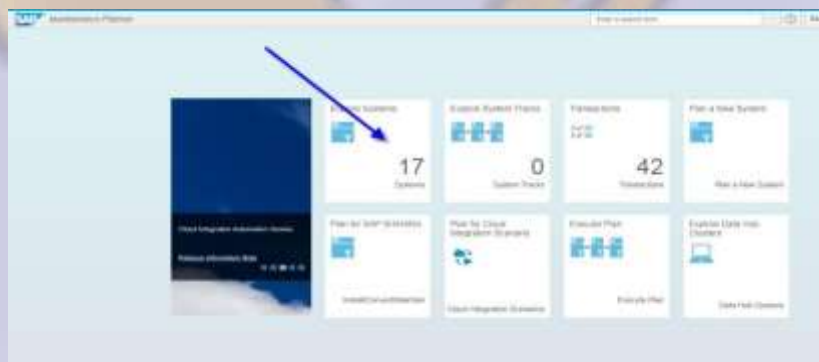
Type: ABAP

Add System

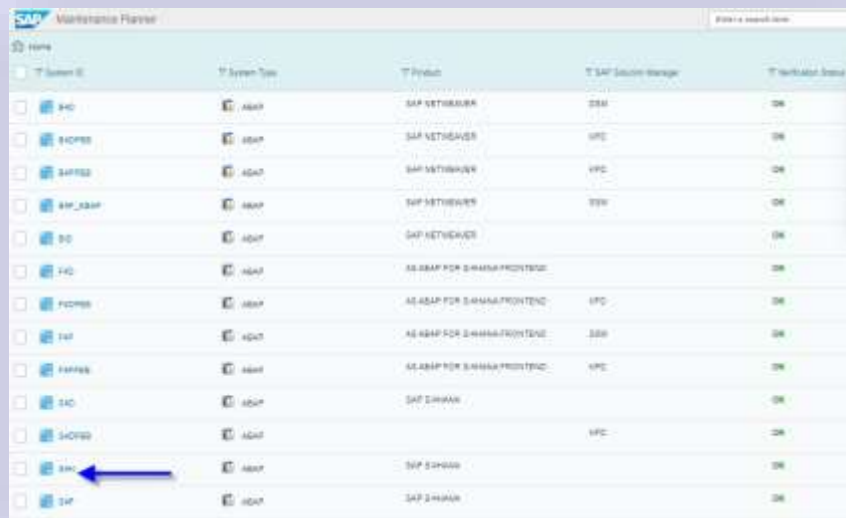
Select the option why you are adding the system using system information XML.

- No SAP Solution Manager system is available
- SAP Solution Manager is temporarily not available
- SAP Solution Manager is not connected to SAP Support Portal
- Not able to register the system with SAP Solution Manager
- Not able to view the system even after registering the system with SAP Solution Manager. The SAP Solution Manager is connected to SAP Support Portal.
- Others

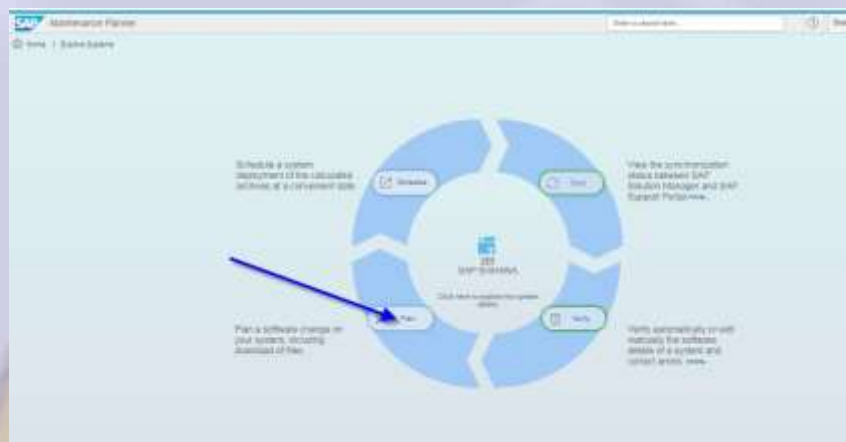
Return to explore system



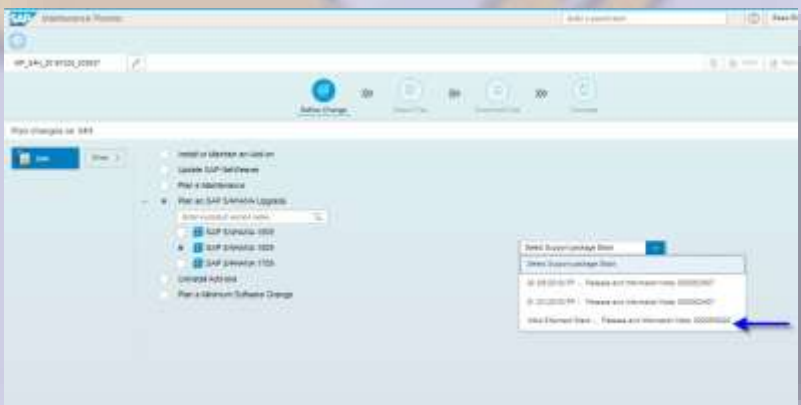
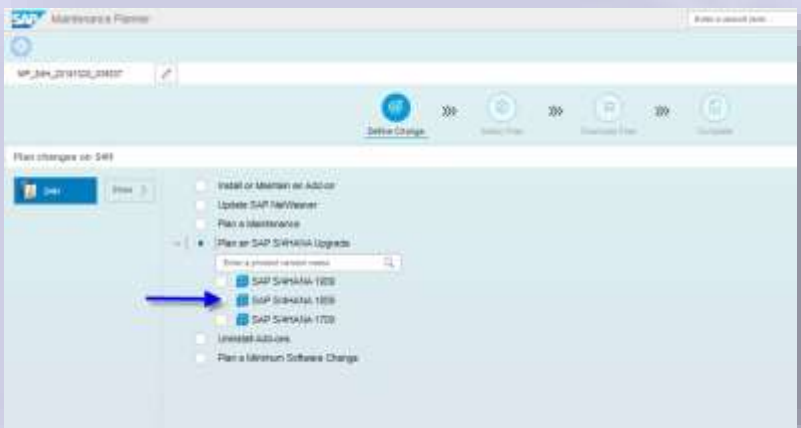
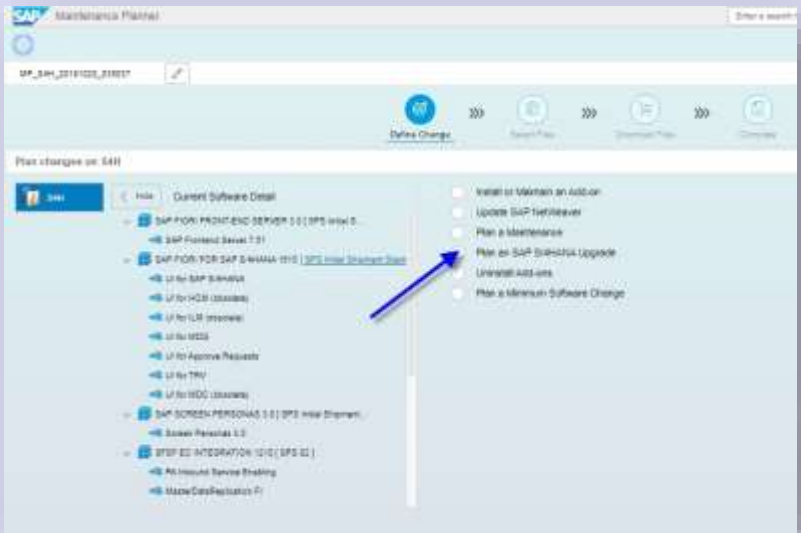
Click system which want to be upgraded, and choose plan



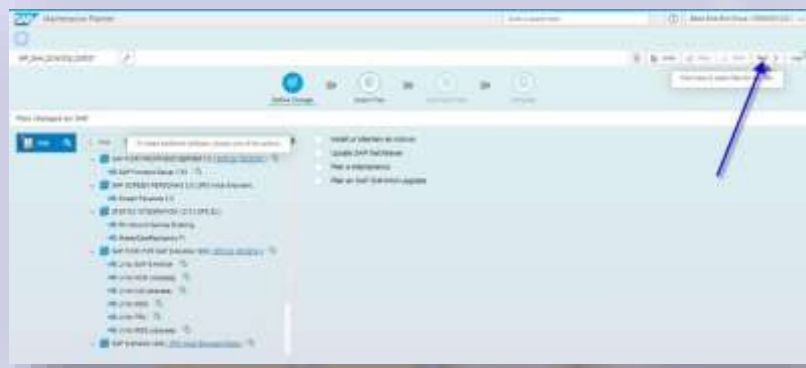
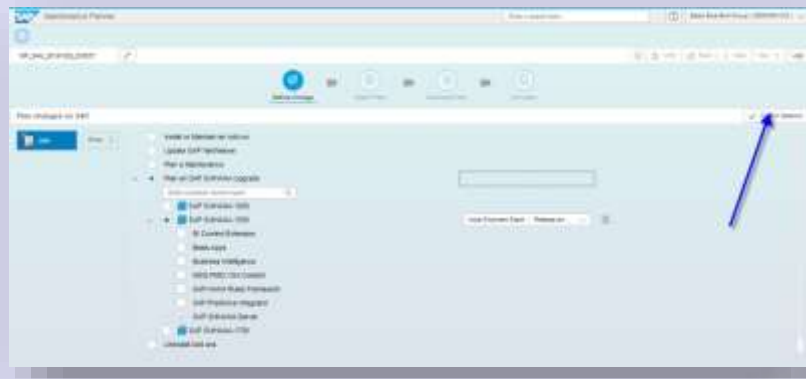
T System ID	T System Type	T Product	T SAP Solution Manager	T Hardware Status
S4C	ASAP	SAP NETWEVER	DSM	OK
S4CPES	ASAP	SAP NETWEVER	VFC	OK
S4PTES	ASAP	SAP NETWEVER	VFC	OK
S4P_XAP	ASAP	SAP NETWEVER	DSM	OK
S0	ASAP	SAP NETWEVER		OK
F0	ASAP	AS ASAP FOR S/4HANA FRONTEND		OK
F0PES	ASAP	AS ASAP FOR S/4HANA FRONTEND	VFC	OK
Z4P	ASAP	AS ASAP FOR S/4HANA FRONTEND	DSM	OK
Z4PES	ASAP	AS ASAP FOR S/4HANA FRONTEND	VFC	OK
Z4C	ASAP	SAP S/4HANA		OK
Z4CPES	ASAP		VFC	OK
SAP	ASAP	SAP S/4HANA		OK



Follow steps in next screenshots, our target version is S/4 HANA 1809 initial shipmen stack



Click confirm selection, and next

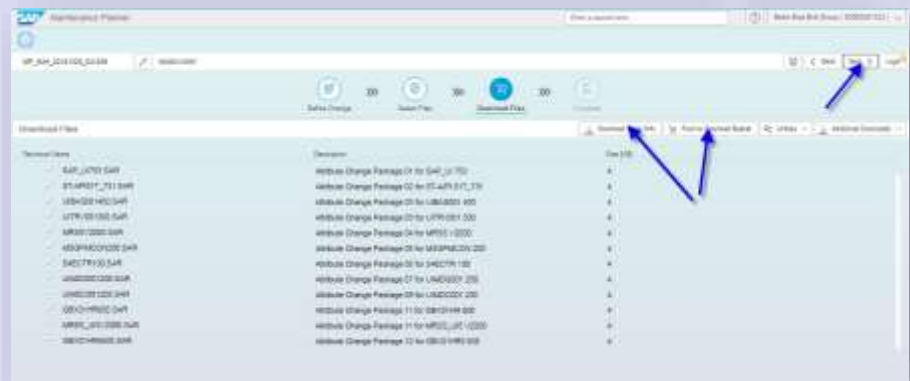


Select Linux on x86_64 64 bit for OS/DB dependent files, and click confirm





Download XML stack file to local PC and push archive file to download basket



B. Enabling and Implement Transport Correction Instruction (TCI)

Update SPAM at least lev 70

Implement following note for SAP Basis 751, using snotes

<p>SAP_BASIS 751</p>	<ul style="list-style-type: none"> • Downloaded and implement following SAP Notes if they are valid: <ul style="list-style-type: none"> ○ SAP Note 2536585 ○ SAP Note 2606986 ○ SAP Note 2615270 ○ SAP Note 2569813
----------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Implement bootstrap note 1995550 :

1. Search and open the SAP Note 1995550 that contains the Note Assistant enablement from SAP Support Portal Home.
 2. Choose *Correction Instructions tab* and select *SAP_BASIS* under the *Software Component* tab.
 3. On the *Correction Instruction* view, select the relevant software component version (i.e SAP_BASIS 751) and choose *Download*.
- The system provides a SAR file. Save the downloaded SAR file into your directory.
4. Log into client 000 of the system you want to install the TCI.
 5. Upload the bootstrap TCI SAP Note 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 (for example, K70003CPSAPBASIS.SAR).
 6. Define Queue:
 - 6.1. In transaction SPAM, display the new support packages.
 - 6.2. From the *OCS Package Directory: New Packages* view, select the respective bootstrap TCI SAP Note.
 - 6.3. To define the TCI queue, choose the *Calculate Queue* button.

Note

If you receive the following message "*Not allowed Support Package is already applied*," the import of TCI is not required as the required changes are already available in the system.

7. Import the TCI queue: Choose the *Import queue* button to import the TCI queue.
7. Confirming the queue:

Once the queue is imported, you are prompted with the next action - to go to the SAP Note Assistant (transaction *snote*) and download (Even if the Note is available download it again) and implement the bootstrap note (SAP Note 1995550). Ensure that the status of the SAP Note is completely implemented.

Doing this will automatically confirm the SPAM queue.

Implement note 2408383 with TCI:

1. Search and open the SAP Note 2408383 that contains the TCI rollback enablement from SAP Support Portal Home.
2. Choose *Correction Instructions tab* and select *SAP_BASIS* under the *Software Component* tab.
3. On the *Correction Instruction* view, select the relevant software component version (i.e SAP_BASIS 751) and choose *Download*.

The system provides a SAR file. Save the downloaded SAR file into your directory.

4. Log into client 000 of the system you want to install the TCI.
5. Upload the bootstrap TCI SAP Note 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 (for example, K70003CPSAPBASIS.SAR).
6. Define Queue:
 - 6.1. In transaction SPAM, display the new support packages.
 - 6.2. From the *OCS Package Directory: New Packages* view, select the respective bootstrap TCI SAP Note.
 - 6.3. To define the TCI queue, choose the *Calculate Queue* button.

Note

If you receive the following message "*Not allowed Support Package is already applied*," the import of TCI is not required as the required changes are already available in the system.

7. Import the TCI queue: Choose the *Import queue* button to import the TCI queue.
7. Confirming the queue:



Once the queue is imported, you are prompted with the next action - to go to the SAP Note Assistant (transaction *snote*) and download (Even if the Note is available download it again) and implement the bootstrap note (SAP Note 2408383). Ensure that the status of the SAP Note is completely implemented. Doing this will automatically confirm the SPAM queue.

Implement note 2502552 with TCI and prerequisite note, its procedure same as above

Implement note 2617167 with TCI, its procedure same as above

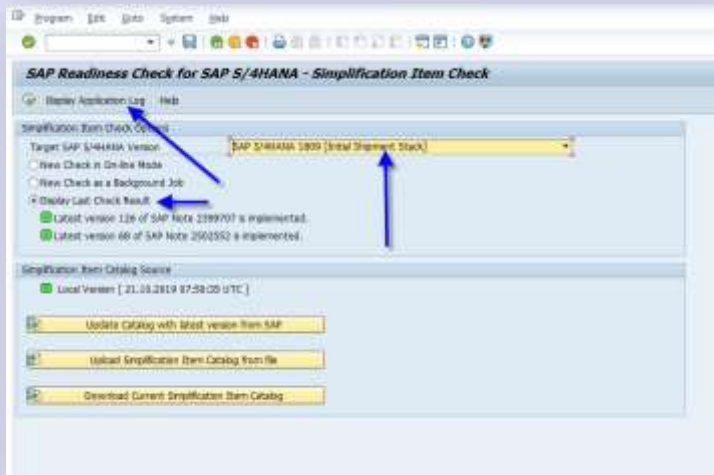
Implement note 2399707

Execute SI Check :

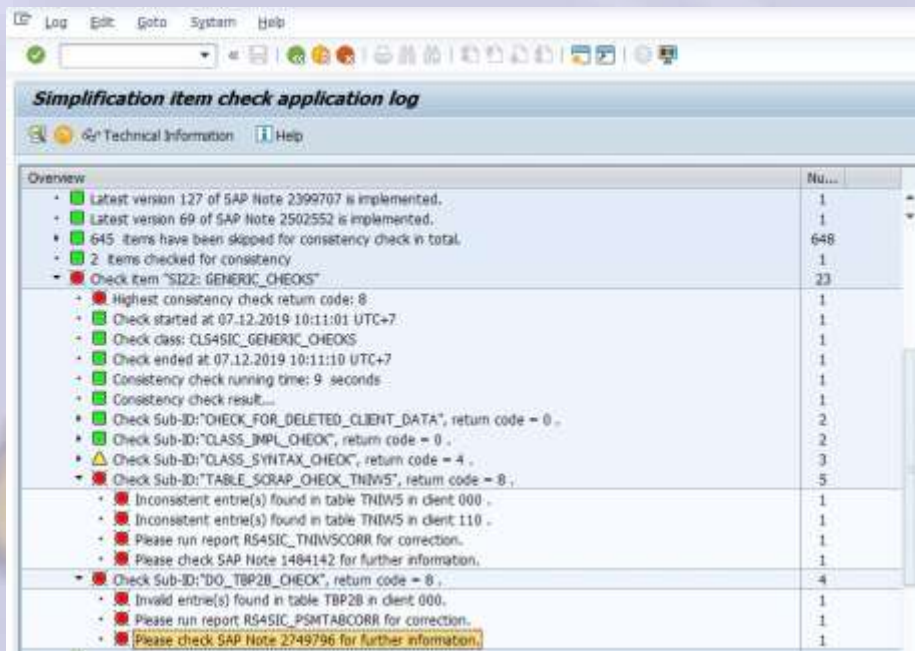
<p>Afterwards you can execute the report "/SDF/RC_START_CHECK" to get the check results of the S/4HANA conversion checks for S/4HANA 1709 and above. The report is delivered with note 2399707.</p>	
<p>Select Target SAP S/4HANA Version = "SAP S/4HANA 1709 [Initial Shipment Stack]"</p> <p>Select new Check as a background job.</p>	

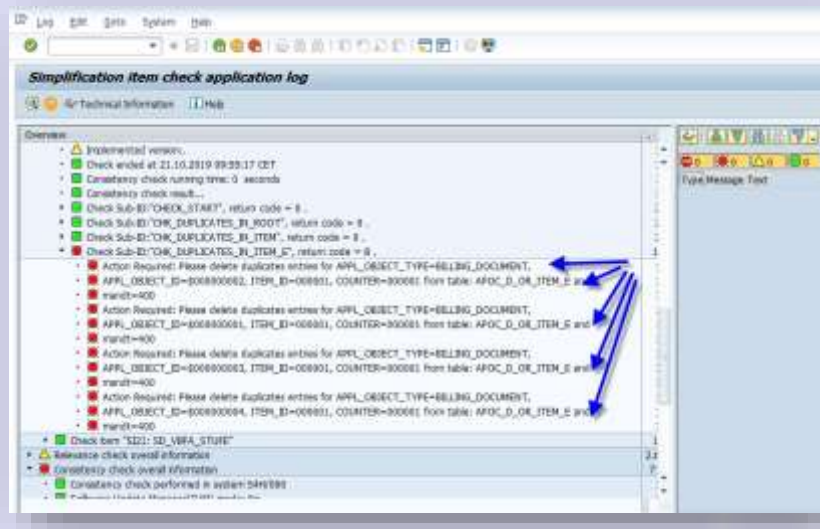
<p>New Job: "RC_NEW_CHECK_01_100" will be scheduled in the background.</p>	
<p>Once job has been successfully completed, click on Display last Check Result.</p>	

Display SI check result :



Review and analyze result





As shown above some duplicate entries need to be deleted

Deletion procedure :

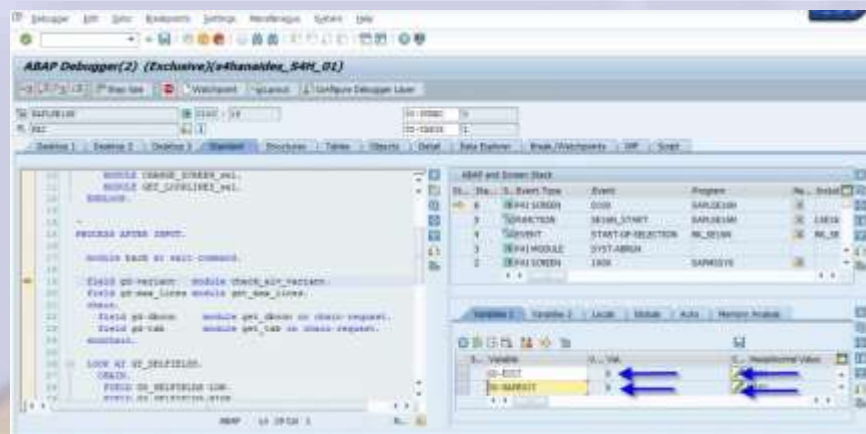
1. Execute SE16N then fill filtered value as reported by SI check above, then execute debug mode by call /H then enter



2. Press F8 and it bring to debug window , then enter GD-EDIT and GD-SAPEDIT in variable column and press enter



3. Click change pencils and insert "X" into Val. Column, then press enter



4. Press F8 , then delete duplicate key value as described in SI Check result

C. Upgrade Execution with SUM

Copy all downloaded files to a directory and change their ownership to s4hadm:sapsys and its permission to 777.

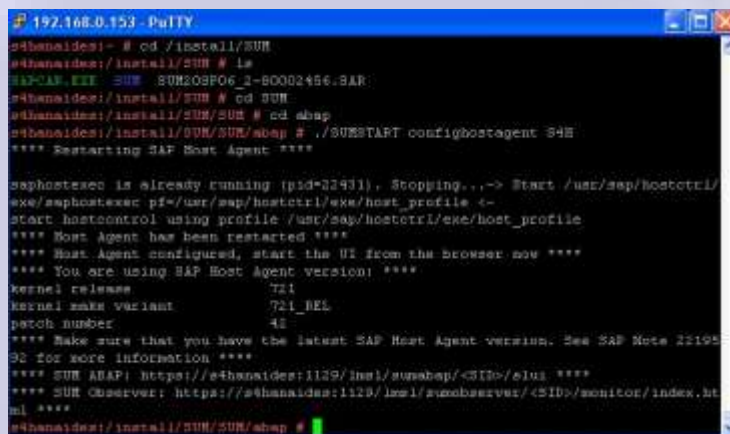
Ensure that all instances are in green status as below ,

```
s4hanaides:s4hadm 56> sapcontrol -nr 02 -function GetSystemInstanceList

13.12.2019 15:22:54
GetSystemInstanceList
OK
hostname, instanceNr, httpPort, httpsPort, startPriority, features, dispstatus
s4hanaides, 2, 50213, 50214, 3, ABAP|GATEWAY|ICMAN|IGS, GREEN
s4hanaides, 3, 50313, 50314, 1, MESSAGESERVER|ENQUE, GREEN
s4hanaides:s4hadm 57> █
```

Allocate sufficient batchjob number to instance profile , do not allocate too small , because SUM will raise error and stop.

Extract SAR file of SUM packages to directory i.e /install/SUM and cd to directory /install/SUM/SUM/abap, then execute following command as root :



```
192.168.0.153 - PuTTY
s4hanaides:~ # cd /install/SUM
s4hanaides:/install/SUM # ls
SAP-CAF-EXT SUM SUM20SP06_1-80082456.SAR
s4hanaides:/install/SUM # cd SUM
s4hanaides:/install/SUM/SUM # cd abap
s4hanaides:/install/SUM/SUM/abap # ./SUESTART confighostagent S4H
**** Restarting SAP Host Agent ****

saphostexec is already running (pid=22931). Stopping...-> Start /usr/sap/hostctrl/
exe/saphostexec pf=/usr/sap/hostctrl/exe/host_profile <-
start hostcontrol using profile /usr/sap/hostctrl/exe/host_profile
**** Host Agent has been restarted ****
**** Host Agent configured, start the UI from the browser now ****
**** You are using SAP Host Agent version: ****
kernel release      721
kernel smp variant  721_REL
patch number       41
**** Make sure that you have the latest SAP Host Agent version. See SAP Note 21195
93 for more information ****
**** SUM ABAP: https://s4hanaides:1128/lmsl/sumabap/<SID>/slui ****
**** SUM Observer: https://s4hanaides:1128/lmsl/sumobserver/<SID>/monitor/index.ht
ml ****
s4hanaides:/install/SUM/SUM/abap # █
```

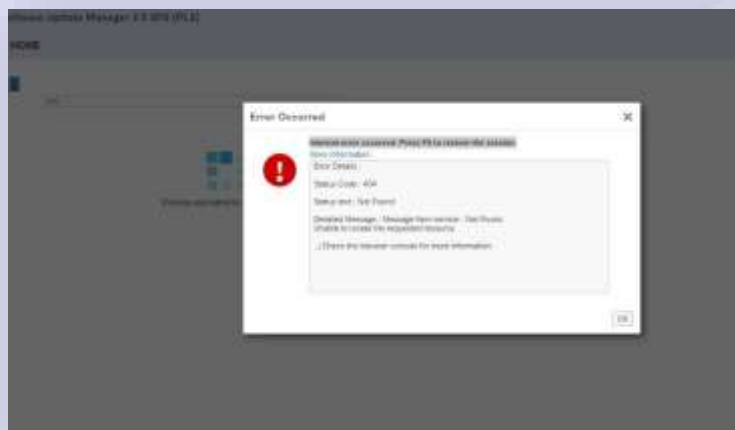
S4H → SID of S/4HANA system

Access link <http://s4hanaides:1128/lmsl/sumabap/S4H/slui/> using browser and enter <sid>adm credential,

Sign in
 https://s4hanaides:1129

Username

Password

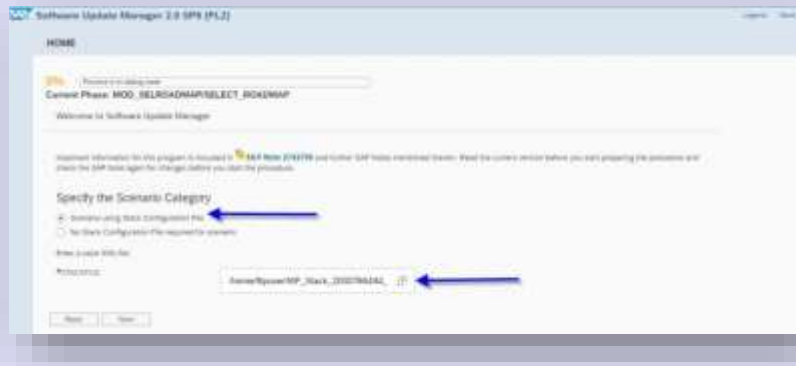


Error raise as above check file `/usr/sap/hostctrl/work/sapstartsrv.log`, and perform following steps :

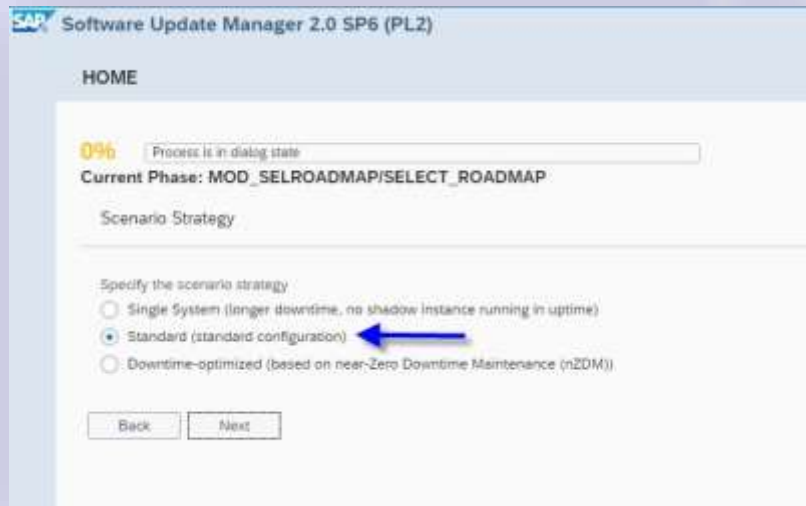
```
s4hanaides:/usr/sap/hostctrl/work # rm /tmp/.saphostagent_lmsl_sumabap_S4H
```

Reexecute SUM

Put xml stack file in next dialog :



Choose suitable strategy for scenario , we choose Single System with shadow instance



Select check archive authenticity

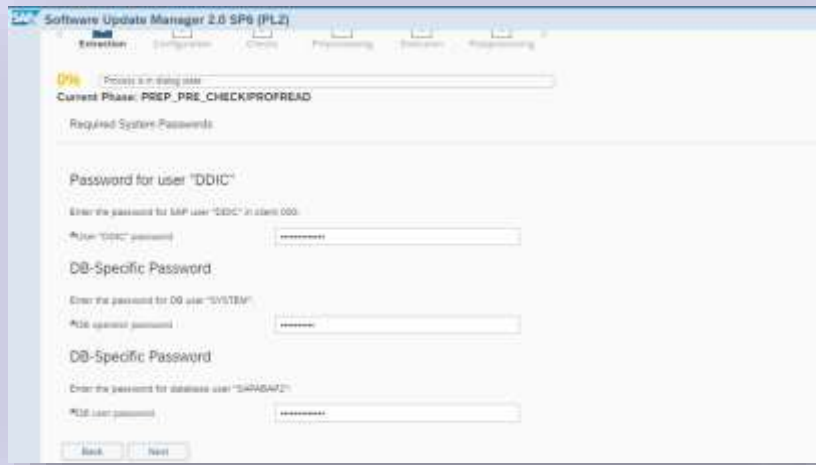


Put download directory which consist archive files

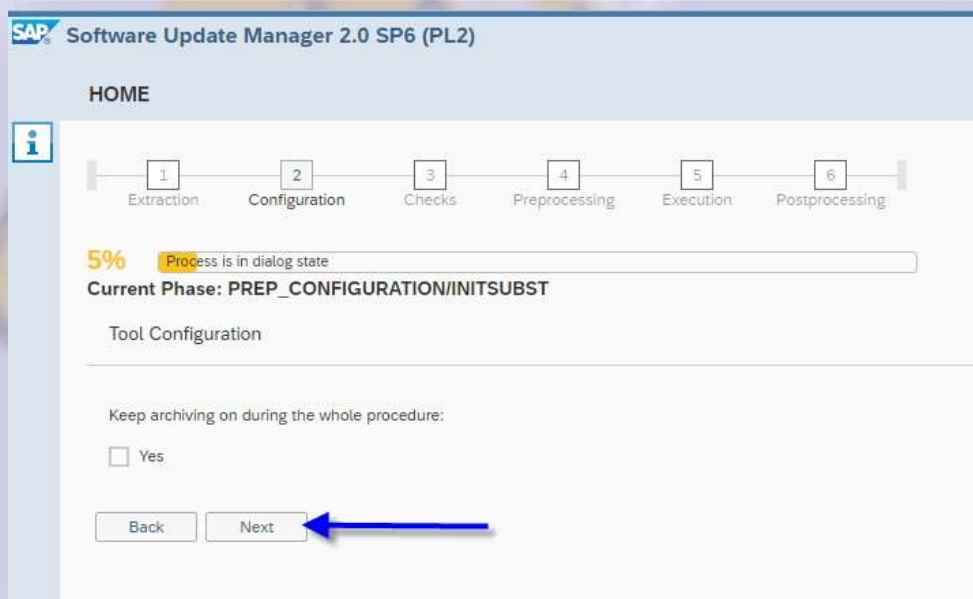


Error raised as above, both archive files are corrupted, need to download them again and upload into download directory.

Enter DDIC and SYSTEM (HANA) credential



Archive is disabled , as its consequence production must be stopped



SAP Software Update Manager 2.0 SP6 (PL2)

HOME

1 Extraction 2 **Configuration** 3 Checks 4 Preprocessing 5 Execution 6 Postprocessing

5% **Progress** is in dialog state

Current Phase: PREP_CONFIGURATION/INITSUBST

Parameters for procedure

The tool uses strategy Single System. Provide further parameters to configure the procedure. To return to the main configuration screen, choose "Back".

Choose a phase in which the archive mode shall be disabled.
 Note that if archiving is disabled, you must stop the production operation of your system.

Archive mode

- No disabling of the archive mode (archiving = on)
- Disabling of the archive mode in phase STOPSAP_EUIMP
- Disabling of the archive mode in phase STOPSAP_SHDSYS

Enter the maximum number of ABAP processes (dialogue and batch) during the upgrade:

*ABAP PROCESSES (UPTIME)

*ABAP PROCESSES (DOWNTIME)

Enter the maximum number of parallel processes for execution of SQL commands:

*SQL PROCESSES (UPTIME)

Leave it as default and click Next



SAP Software Update Manager 2.0 SP6 (PL2)

*R3TRANS PROCESSES (UPTIME)
 *R3TRANS PROCESSES (DOWNTIME)

Enter the maximum number of parallel R3load or table comparison processes:

*R3LOAD PROCESSES (UPTIME)
 *R3LOAD PROCESSES (DOWNTIME)

Select the instance of your system that shall be used as background server:

Note: If it is different from the central instance (primary application server instance) host, /install/SUM/abap must be mounted on the background host.

Also note that during the system downtime, all background jobs are started on your central instance (primary application server instance) while the background server has to be shut down.

- Automated batch job distribution (system will decide where to run the jobs)
- s4hanaides_S4H_01 (3 batchprocesses located)

Choose an execution strategy for transaction SGEN.

Execution mode

- Do not start ABAP load generation during the upgrade.
- Generate ABAP loads on shadow system during uptime.
- Start asynchronously in post downtime.
- Generate ABAP loads on shadow system during uptime and start asynchronously in post downtime.

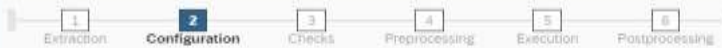
Enter the maximum number of processes to be used for load generation.

Note: Generation of ABAP program loads needs high CPU resources. Choosing a number too high might affect productive operation.

SGEN PROCESSES

SAP Software Update Manager 2.0 SP6 (PL2)

HOME



79% Process is in dialog state

Current Phase: PREP_CONFIGURATION/LANG_SELECT

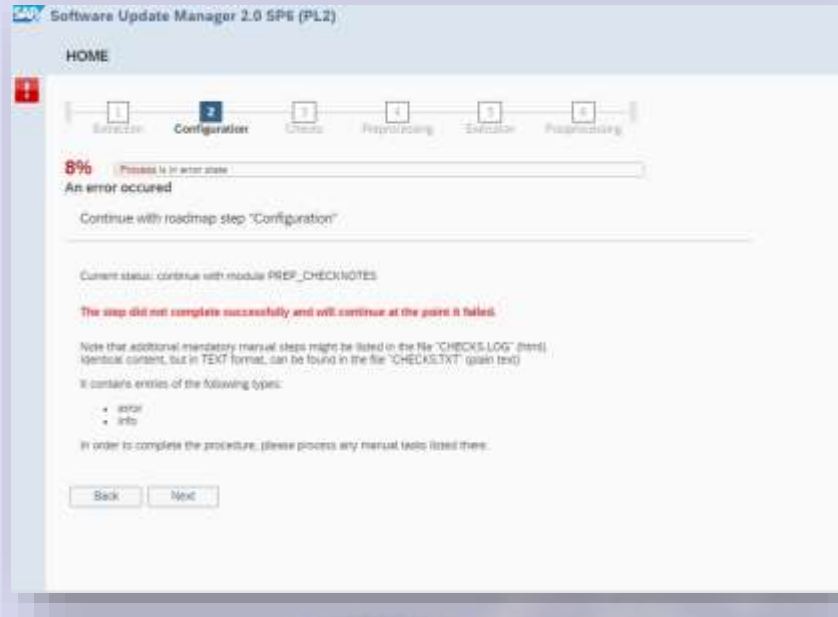
Summary of Language Updates or Installations

Check your selected languages listed below, and **provide the necessary archives** for their installation or update.

The following languages will be **updated**:

ISO Name	Name	Location	Comment	Status
EN	English	/install/SUM/abap/tm...		Update
DE	German	/install/SUM/abap/tm...		Update

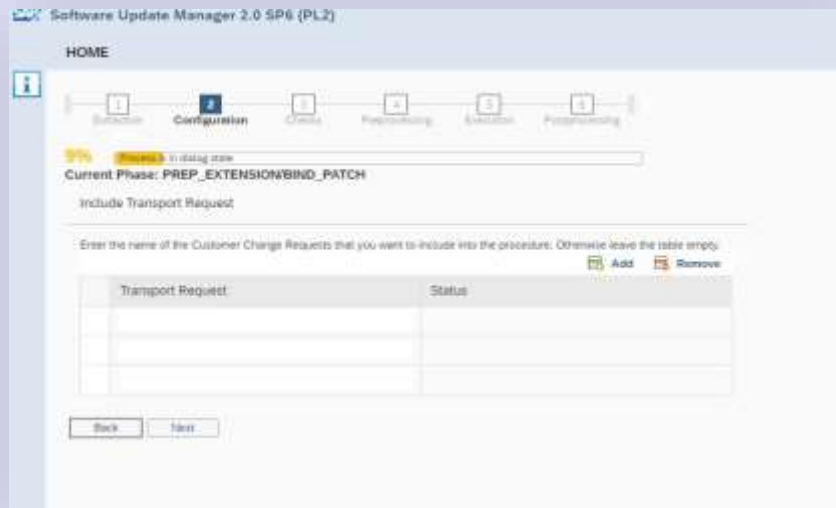
Error raised :



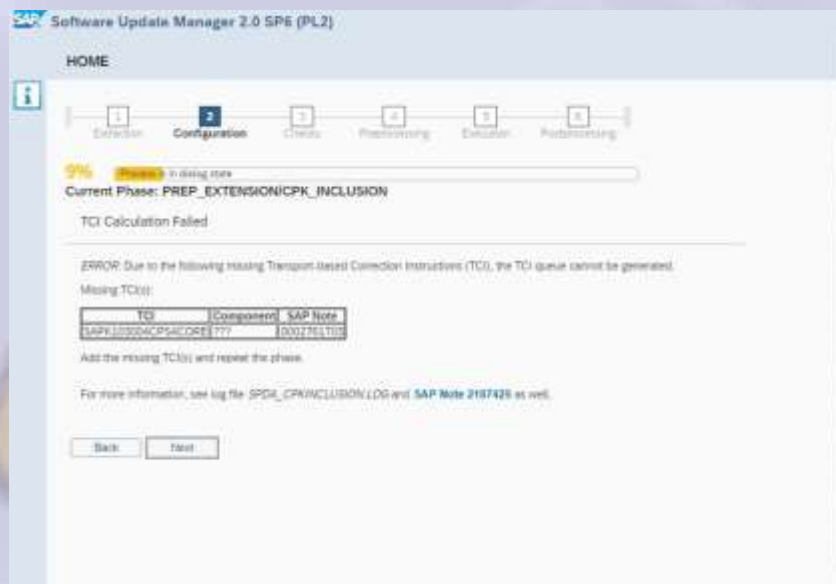
Check CHECKS.TXT file and implement following notes :



Leave it empty if no transport requests included, then click next



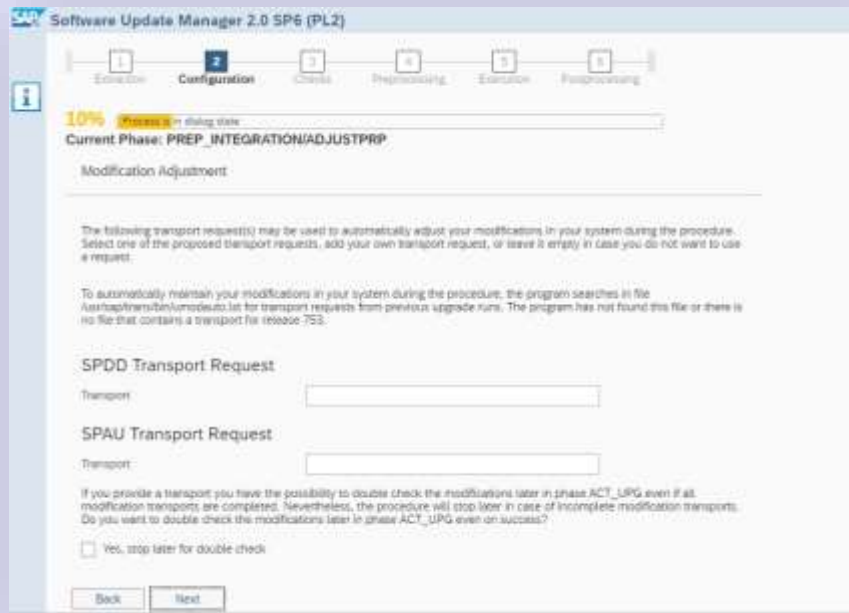
TCI missing error :



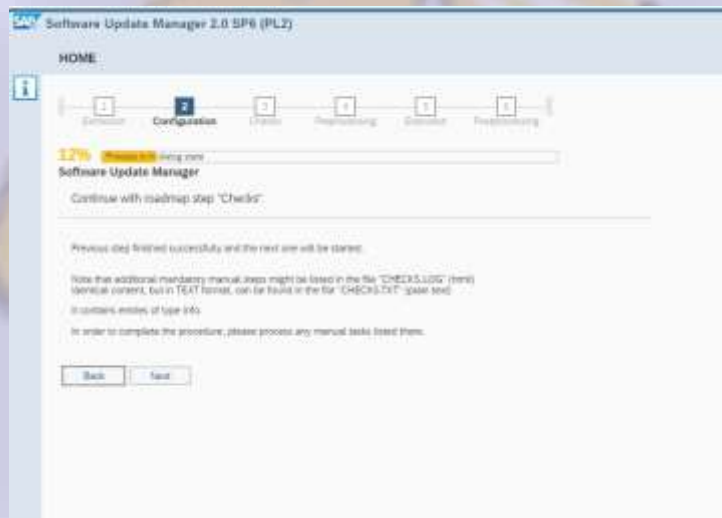
Download the TCI package (in this example, SAPK618009CPSAPAPPL.SAR) from the Software Download Center

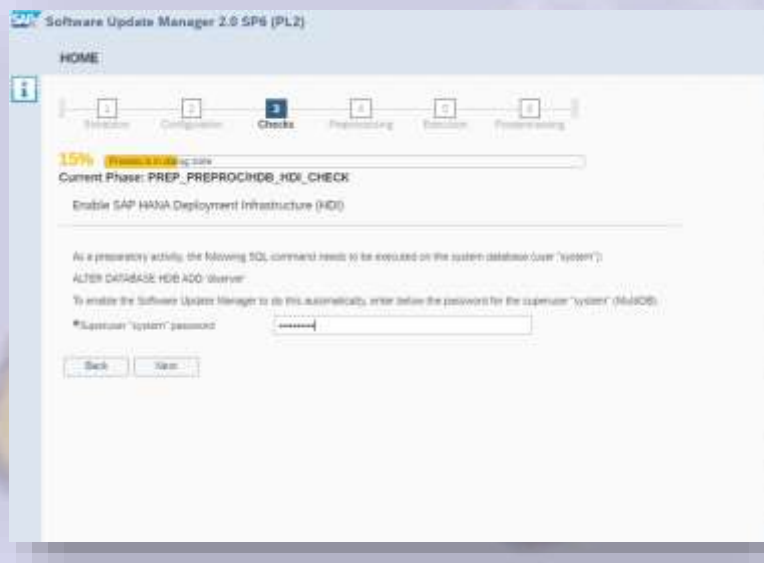
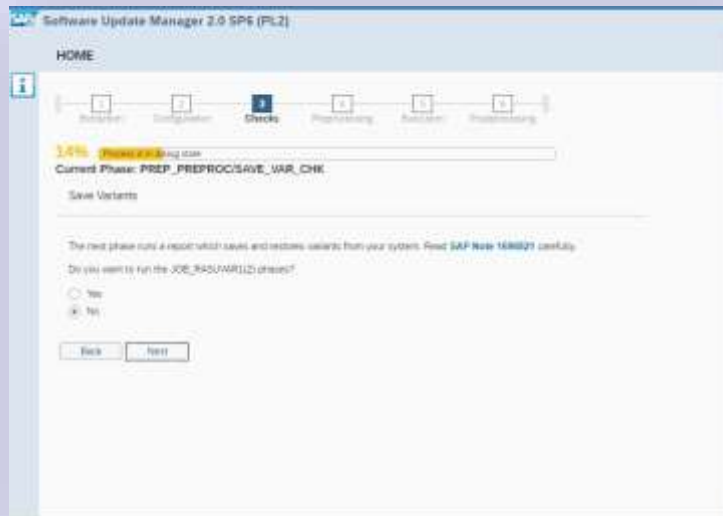
In Client 000, upload the file via SPAM: Select Support Package -> Load packages -> SAR Archives from Front End -> Navigate to the directory where you have downloaded the SAR file to Repeat the SUM phase on stopped point

Leave it empty if we don't want to adjust modification

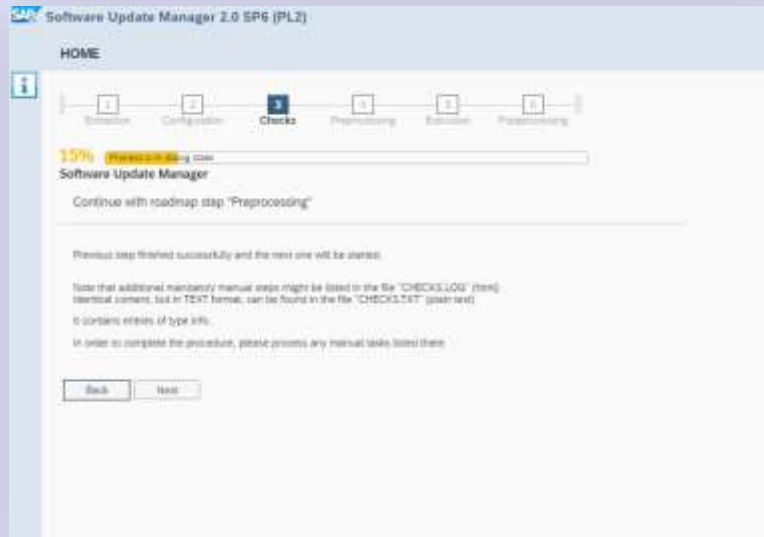


Click next to start check phase , determine whether you want to restore variant , then enter SYSTEM credential

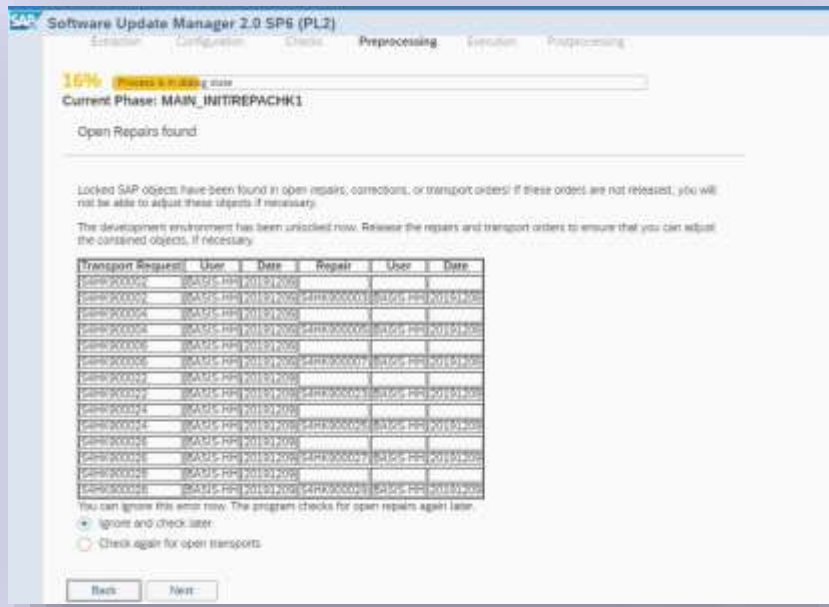




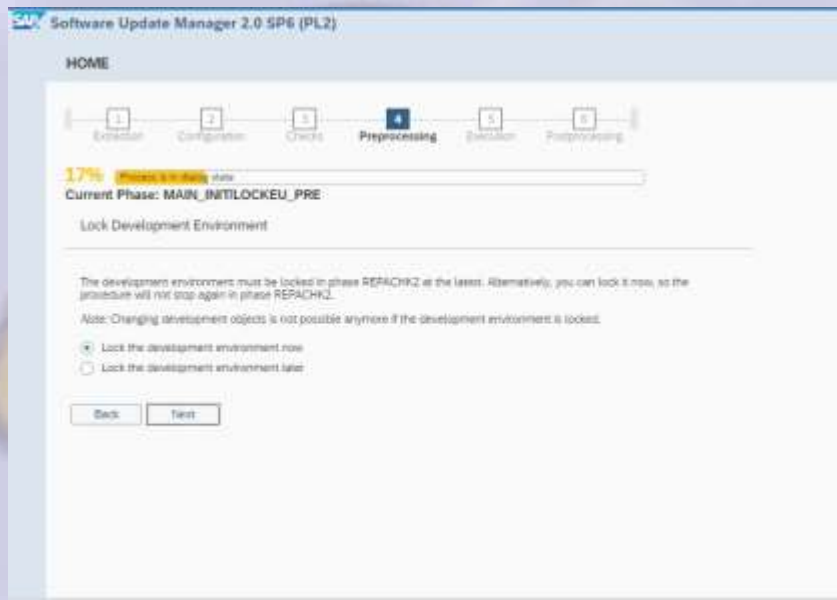
Click next to start next phase (preprocessing)

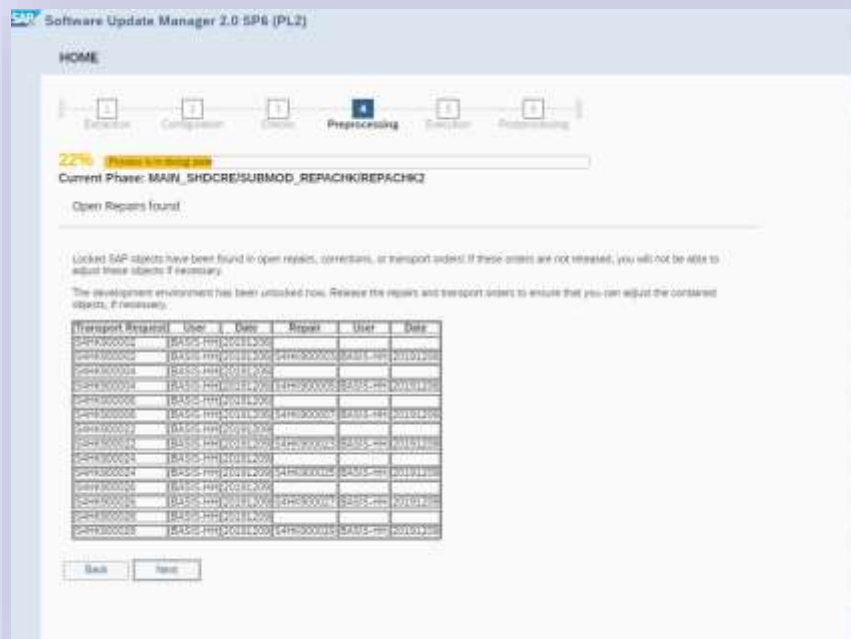


Some objects locked in TR , determine whether we ignore it and check later , check again for open transport



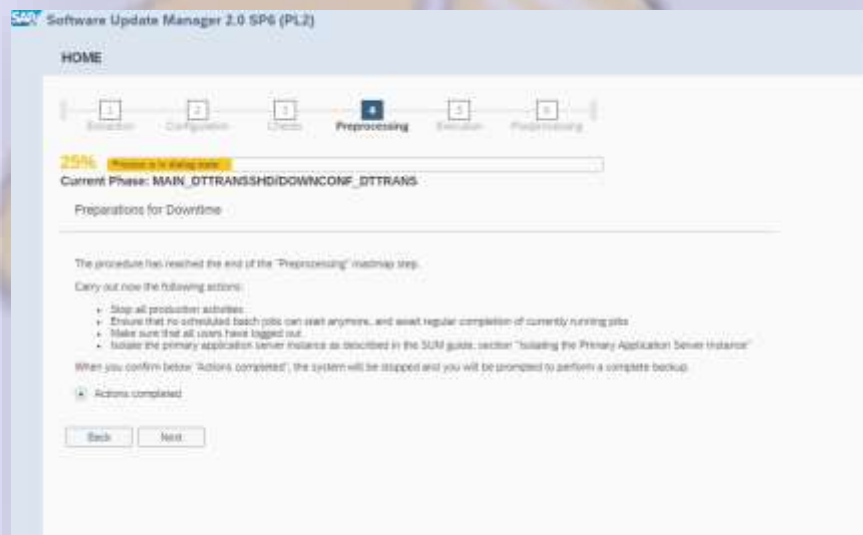
Click lock development now

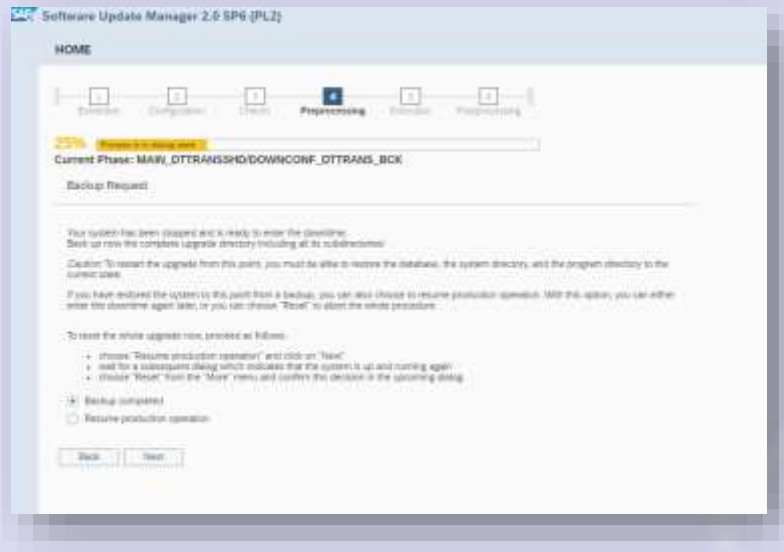




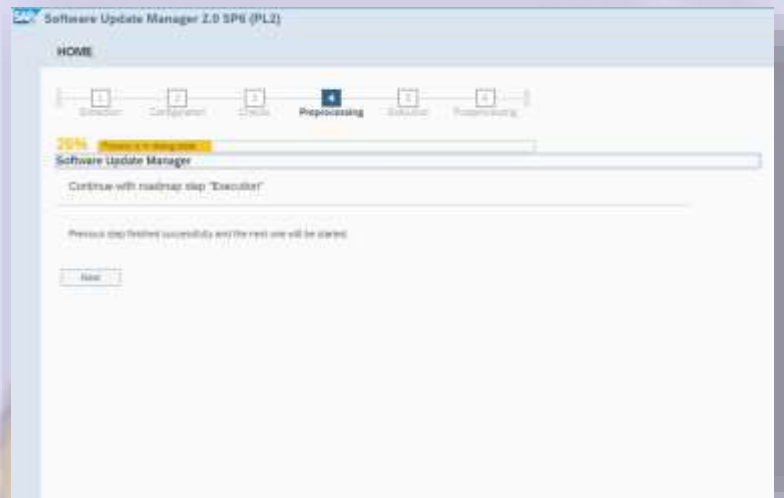
Release TR as above

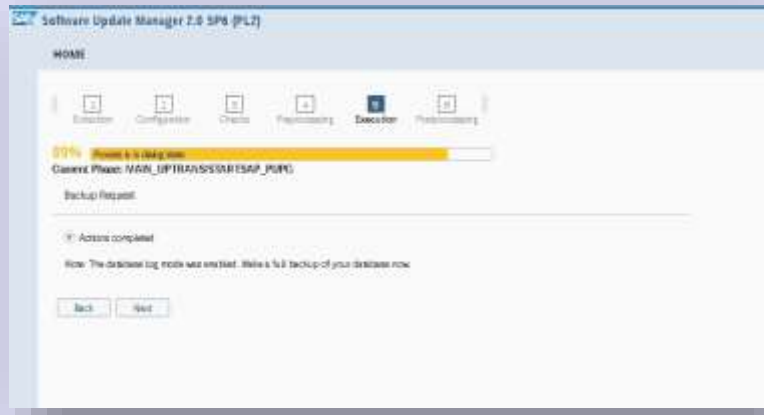
Click next to start next phase (execution), and confirm backup complete





Continue execution phase , click next





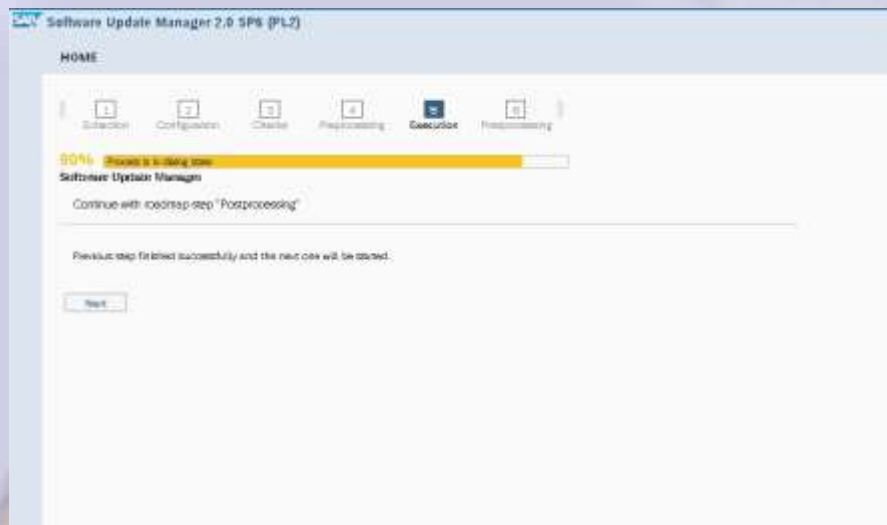
Execution phase running , it will take around 12 hours to complete

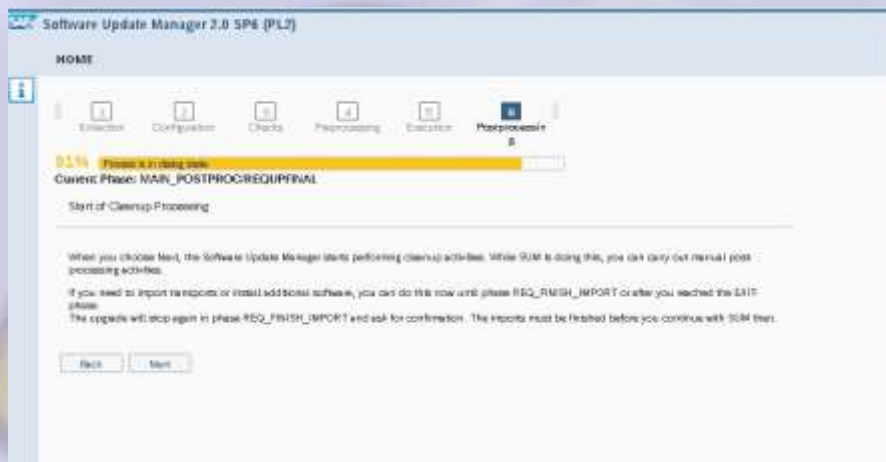
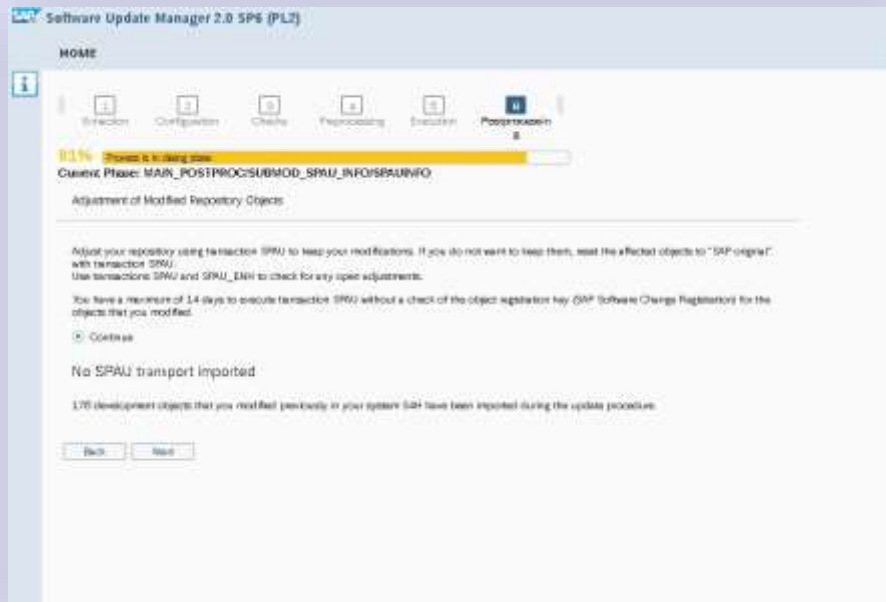


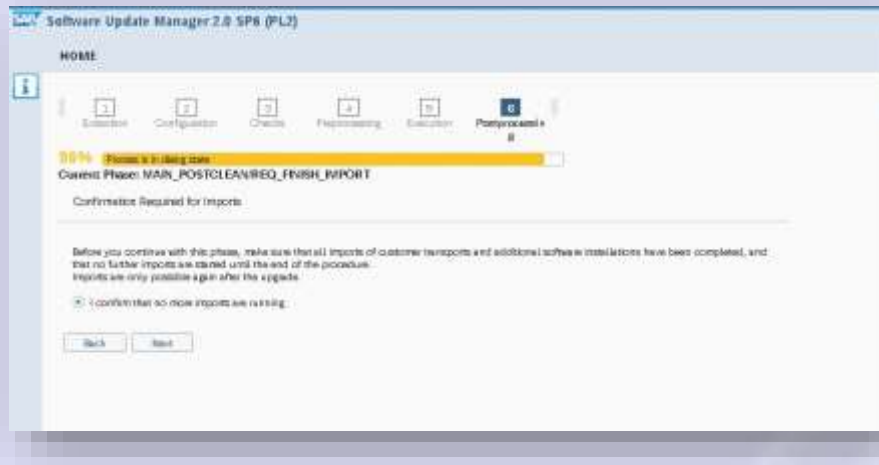
End SUM technical downtime



Click next to start postprocessing steps







Technical upgrade completed successfully



THANK YOU



- **Corporate Training**
- **Instructor LED Training**
- **Seminars & Workshop Internship**
- **Mock Interview**
- **Customised Courses**
- **Project Support For Implementation**
- **Staff Augmentation And Talent**



SAP Knowledge Hub