

APPLIES TO:

WORK PROCESSES

SUMMARY

This article explains how to Perform the WORK PROCESSES.

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There are seven work processes available in SAP.

1. Dialog Work process
2. Update Work process
3. Enque Work process
4. Background Work process
5. Message server
6. Gateway
7. Spool Work process

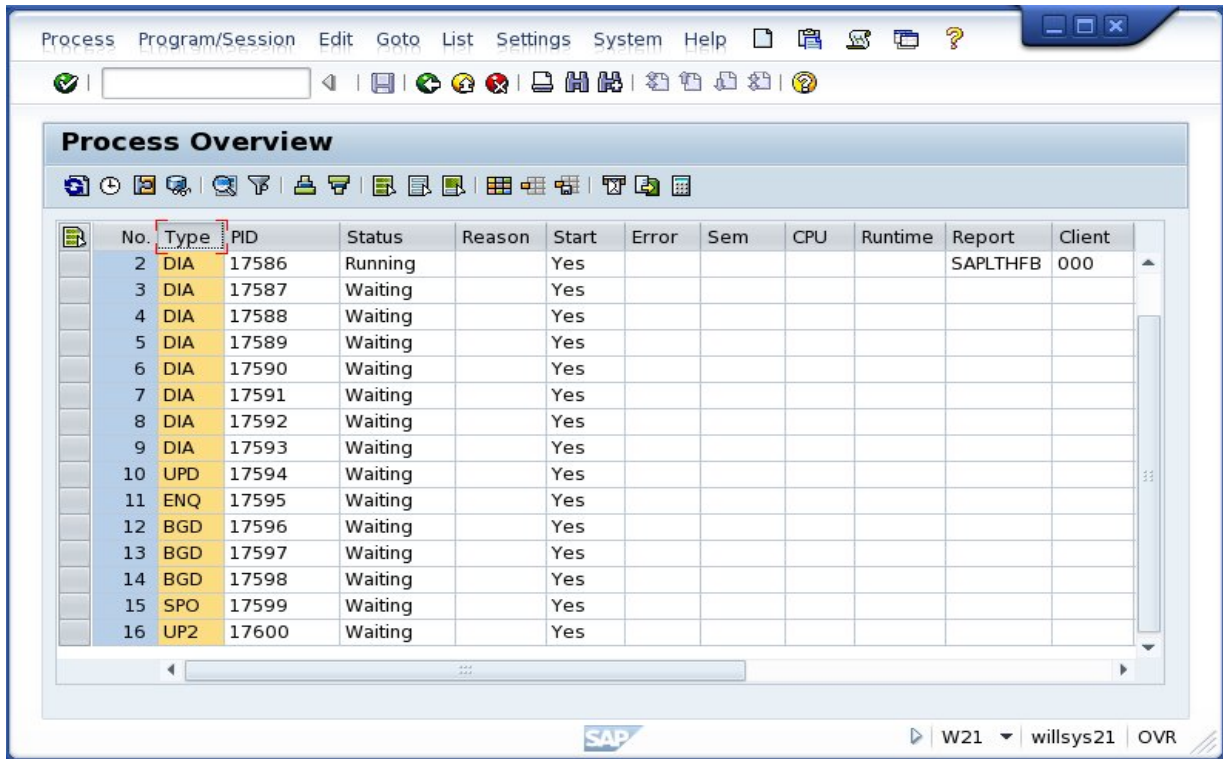
*Enque and Message are called as SAP central services

*Message and Gateway are services, we cannot monitor in SM50 or SM66

SM50 and SM66 Transactions are used to monitor overall status of work process and status of individual work process .So you know

1. Overall system activities and load.
2. System work process status
3. Individual job or online transaction execution status
4. Memory usage of individual job or transaction

SM50 Transaction is used to report information for all configured SAP Work processes under one SAP server/instance



No.	Type	PID	Status	Reason	Start	Error	Sem	CPU	Runtime	Report	Client
2	DIA	17586	Running		Yes					SAPLTHFB	000
3	DIA	17587	Waiting		Yes						
4	DIA	17588	Waiting		Yes						
5	DIA	17589	Waiting		Yes						
6	DIA	17590	Waiting		Yes						
7	DIA	17591	Waiting		Yes						
8	DIA	17592	Waiting		Yes						
9	DIA	17593	Waiting		Yes						
10	UPD	17594	Waiting		Yes						
11	ENQ	17595	Waiting		Yes						
12	BGD	17596	Waiting		Yes						
13	BGD	17597	Waiting		Yes						
14	BGD	17598	Waiting		Yes						
15	SPO	17599	Waiting		Yes						
16	UP2	17600	Waiting		Yes						

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SM66 Reports all occupied SAP work process from all servers/instances of SAP system.

Dialog work process:

- Only process to communicate interactively with user.
- Minimum 2 maximum 100 processes per instance(from NW730 onwards maximum 600 processes allowed)
- Max runtime 600seconds. Parameters to define max runtime is **rdisp/max_wp_run_time = 600sec**
- Each process having 75 to 300MB of memory.
- Each process serves 5 to 10 users.
- Average response time is 600milliseconds to 2 seconds.
- Sum of dialog process is greater than non dialog processes.
- Dialog multiplexing.
- Dialog process handles other processes (UPD, SPO, and BTC) tasks.
- Parameters to define number of dialog processes **rdisp/wp_no_dia**.
- Dpmon, sapmmc, SM50, SM66 are used for monitoring.

Background work Process:

The program which run with long run time, expensive (utilizing, memory, expensive sql, more CPU) programs should be scheduled to running in background during off-peak hours in non-interactive mode.

Background processes are configured by using **rdisp/wp_no_btc = 2**

- Two minimum background processes are required for the entire system. It is possible to configure as many background processes as required based on available resources.
- Background jobs are dedicated to the background job and remains with the job until it is completed or canceled.
- The background process handles the complete transaction , where as dialog process handles single step only.
- The background process could not be timed out by any runtime parameter and it can run for hours/days to complete the job.

Mechanism:

1. User submits the request to run a program in the background mode.
2. The request is handled by dispatcher and allocates a freely available dialog work process to the user(request)

3. The dialog process receives the request from the user and updates the background Job in TBTC*(TBTCT,TBTCS,TBTCP) using SM36/ SE38/ SA38/ DB13 or using any traditional programs like SPAM, SAINT, SMLT, SCCL etc..
4. A background scheduler "**SAPMSSY8**"(which is a cyclic ABAP program) run for every 60sec in dialog mode to pick the jobs with status ready from TBTC* tables. This program run in dialog mode, the scheduler time is defined by parameter "**rdisp/btctime = 60sec**".
5. Freely available background processes are allocated to the BTC job (background job) and the job is active until it is completed/cancelled.

BTC Job status:

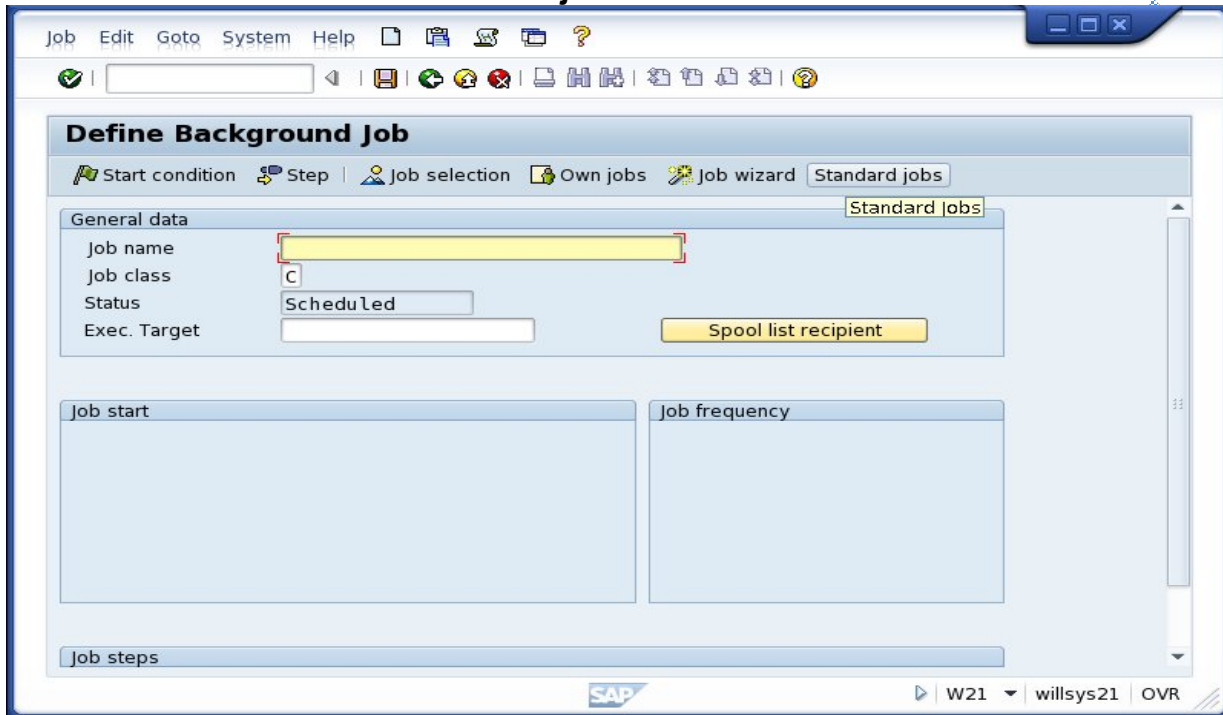
1. **Scheduled**: When the job is defined and saved.
2. **Released** : When the execution time is specified and saved.
3. **Ready** : The job execution time occurs and ready to be picked up by the scheduler based on the available free BTC process.
4. **Active** : The jobs are running (processing request).
5. **Finished** : The job is completed successfully or terminated successfully.
6. **Cancelled** : The job is cancelled / failed.

Background job definition:

- The background jobs are defined in the transaction **SM36**.
- As part of the post installation activities the SAP standard background jobs are defined in **SM36** and database specific background jobs are defined in **DB13**.
- Background jobs are also defined in **SA38/SE38**(SE38 is not allowed in production system)
- SAP standard or housekeeping jobs are used to reorganize the background job tables/update tables/spool tables/abap dump tables etc...

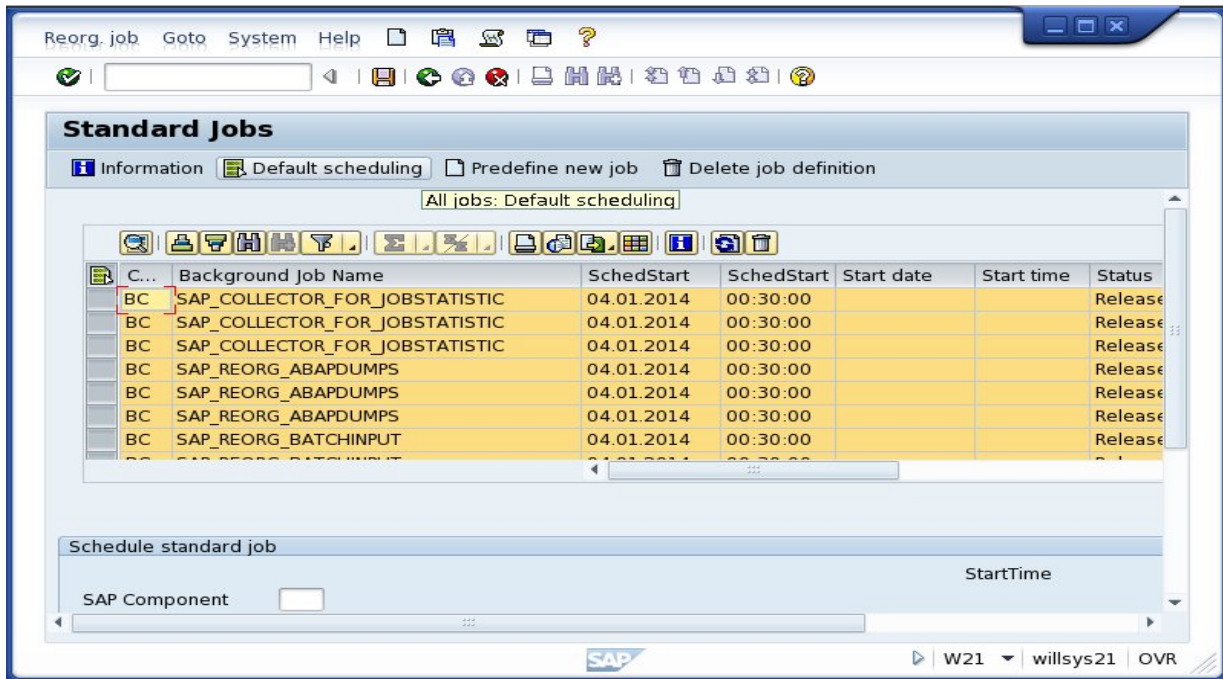
Standard background job definition:

EXECUTE SM36→Click on standard jobs



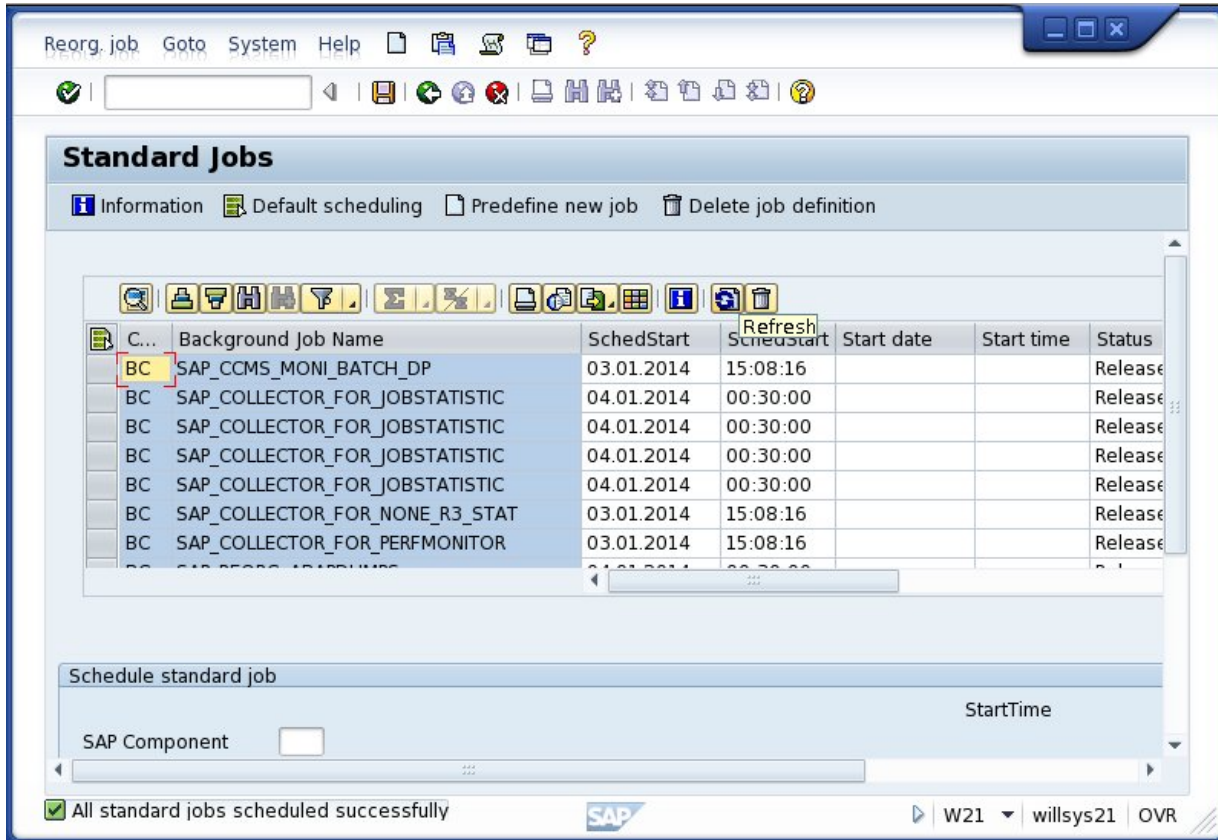
→Click on Default scheduling.

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→Scheduled successfully

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Custom job/program definition:

→Execute SM36

Specify the

Job name (the job name should be self explanatory and identify uniquely in the Instance)

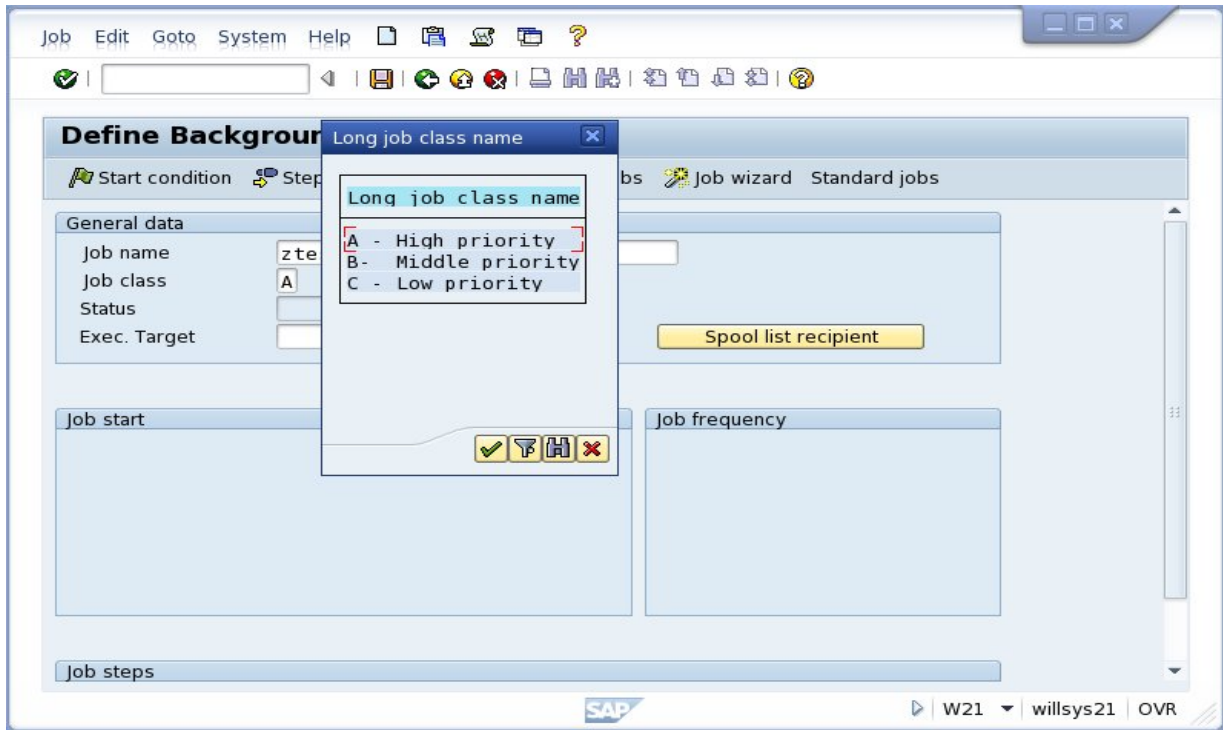
Job class: Class A has High priority
 Class B has medium priority
 Class C has low priority

Class A jobs are always processed before jobs of other classes, if the system has several background work processes, the background processing system reserves at least one process for the processing of a job.

Jobs with high priority, whose execution is necessary for further processing are categorized as 'A'.

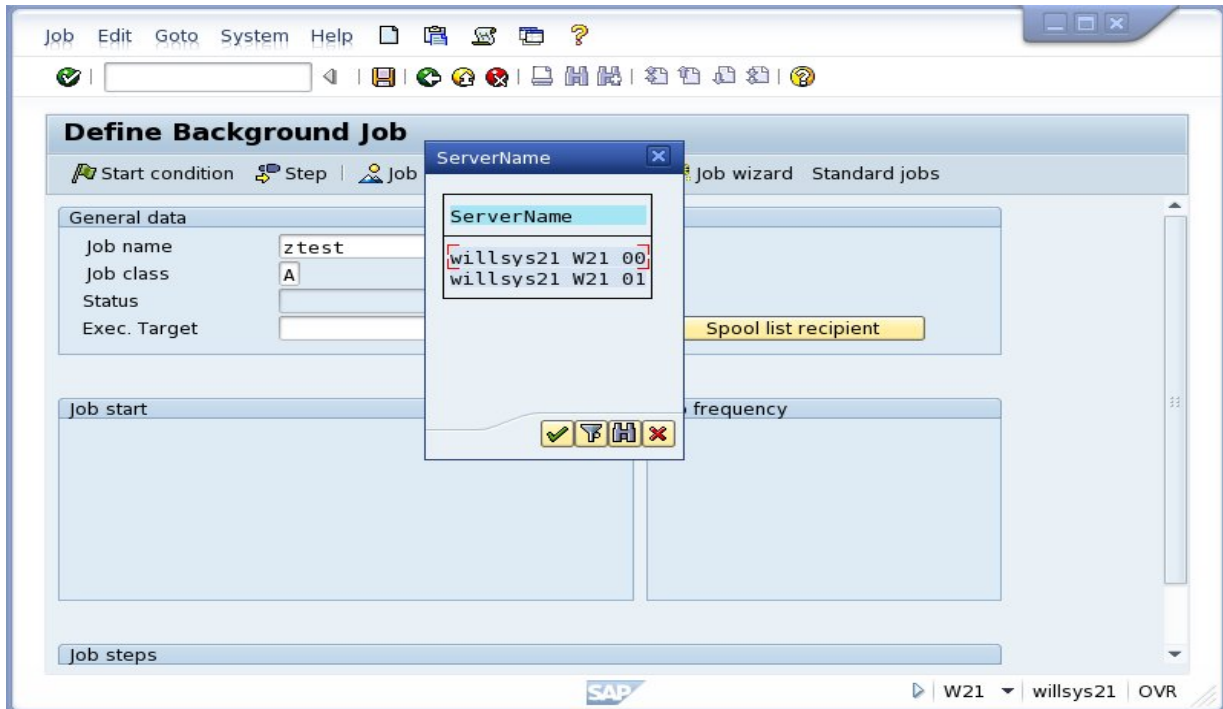
Class B jobs are processed before class C jobs.

Class C is the default class.



Exec. Target: The name of the application server where the job need to be executed (ensure that at least two BTC processes are available on that app server).

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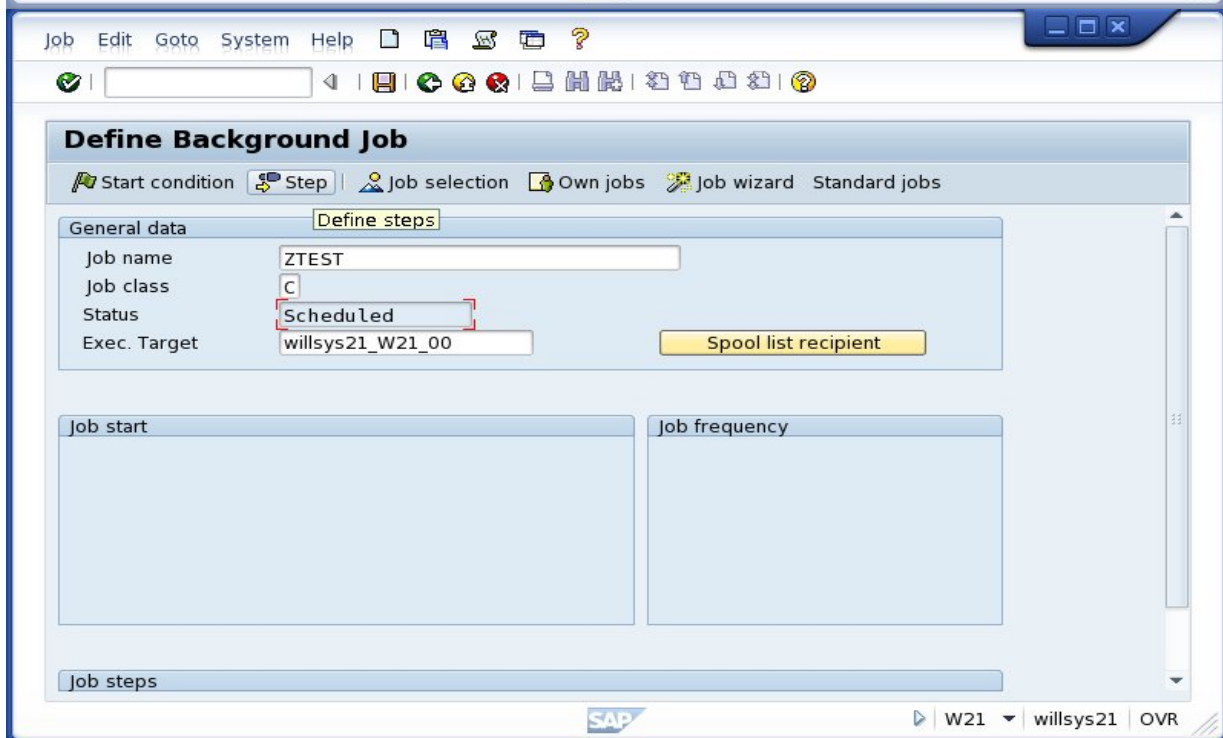
The screenshot shows the 'Define Background Job' dialog in SAP. The 'General data' section contains the following information:

Job name	ztest
Job class	A
Status	
Exec. Target	

A pop-up window titled 'ServerName' is open, displaying a list of server names:

ServerName
willsys21 W21 00
willsys21 W21 01

The 'Job start' and 'Job frequency' sections are currently empty. The status bar at the bottom indicates 'W21 | willsys21 | OVR'.



The screenshot shows the 'Define Background Job' dialog with the 'Define steps' tab selected. The 'General data' section is populated with the following information:

Job name	ZTEST
Job class	C
Status	ScheduLed
Exec. Target	willsys21_W21_00

The 'Job start' and 'Job frequency' sections are empty. The status bar at the bottom indicates 'W21 | willsys21 | OVR'.

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Spool list recipient: When the job is executed it generates the output which can be sent to a printer, to user email ID in pdf format, SMS message to mobile or any other device.

→SAVE

Job step: It is used to specify the name of the ABAP program or external command or external program.

→ click on step ( Step)

ABAP Program: Is used to run the ABAP programs.

External command:

→These commands are defined in SM49/SM59, these are used to trigger the jobs at OS level. External commands use a executable called **sapxpg** (sap external program)

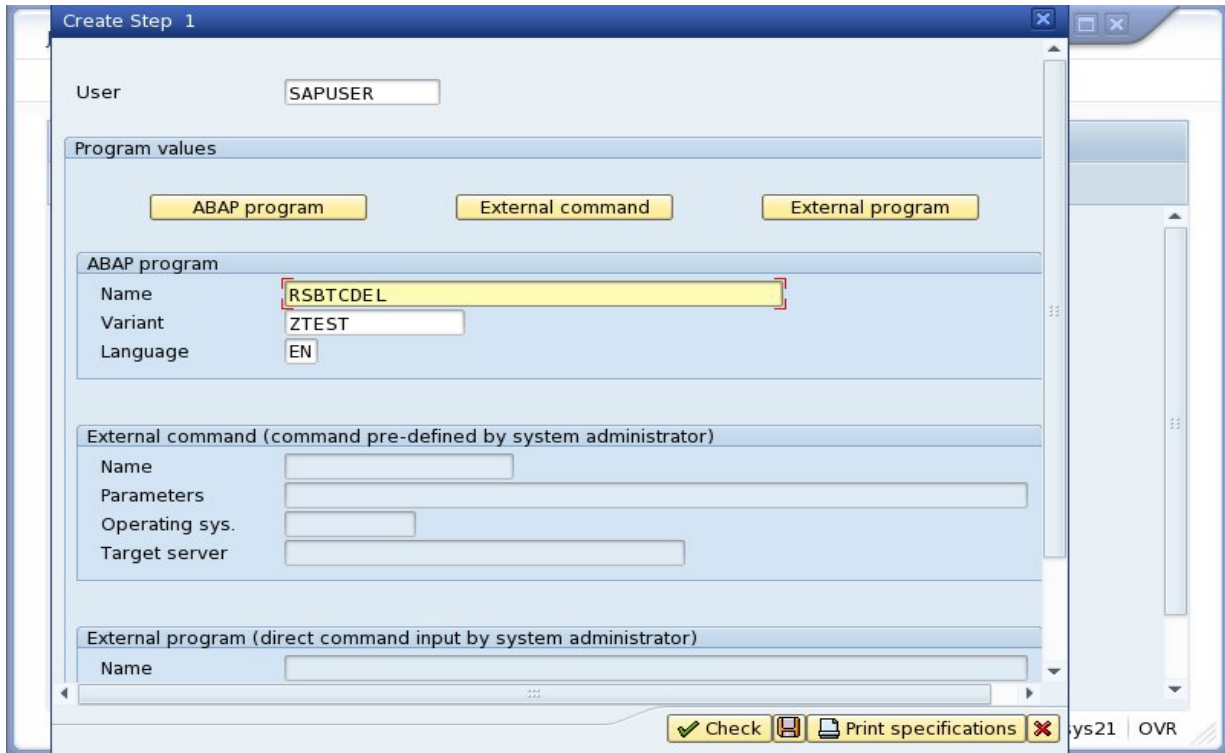
EX: Database housekeeping jobs in DB13 uses external commands (brconnect -f check, brconnect -f next etc...).

External Program: It is user to trigger jobs at OS level using SAP events and SAP programs. Executables like tp,r3trans are triggered in the background during import/export(executable **sapevt** is used to trigger them).

→**Select ABAP program**→ provide program name, variant , language etc...

Variant: The program requires inputs that are populated during runtime. Variants are a program selection criteria which is used to provide runtime values to the program. They are defined in SA38/SE38

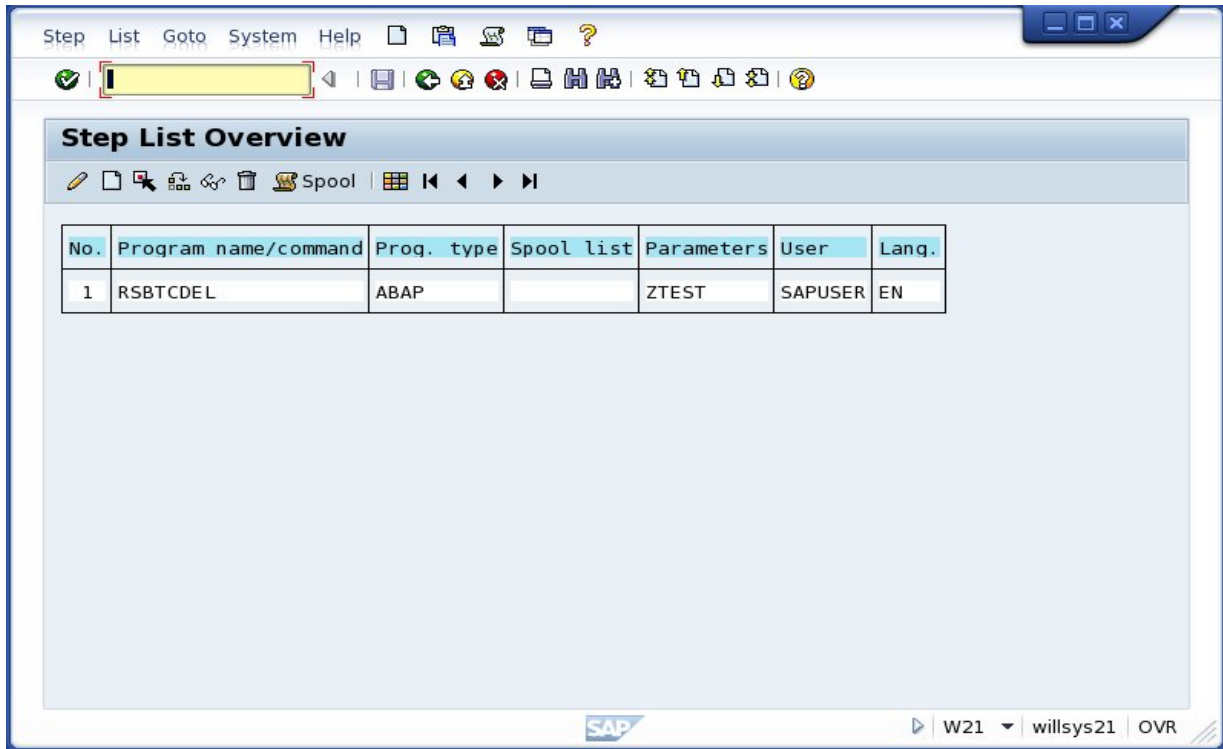
EX: A sales report requires a variant (from-date to to-date)



The screenshot shows the 'Create Step 1' dialog box in SAP. The 'User' field is set to 'SAPUSER'. Under 'Program values', three options are available: 'ABAP program', 'External command', and 'External program'. The 'ABAP program' section is active, with 'Name' set to 'RSBTCDEL', 'Variant' set to 'ZTEST', and 'Language' set to 'EN'. The 'External command' section has fields for 'Name', 'Parameters', 'Operating sys.', and 'Target server'. The 'External program' section has a 'Name' field. At the bottom, there are buttons for 'Check', 'Print specifications', and a close button. The status bar shows 'ys21 | OVR'.

→ Save

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The screenshot shows the SAP Step List Overview window. The title bar includes 'Step List Goto System Help'. The main area contains a table with the following data:

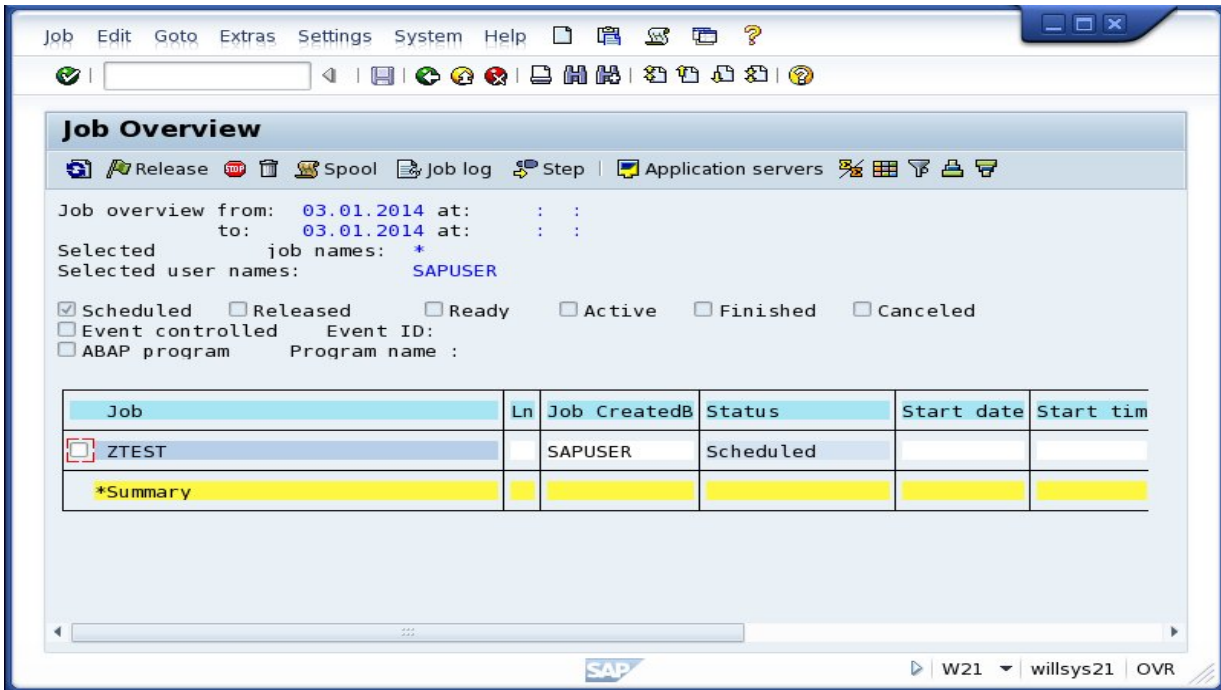
No.	Program name/command	Prog. type	Spool list	Parameters	User	Lang.
1	RSBTCDEL	ABAP		ZTEST	SAPUSER	EN

At the bottom right of the window, the status bar shows 'W21 willsys21 OVR'.


→ Save and back

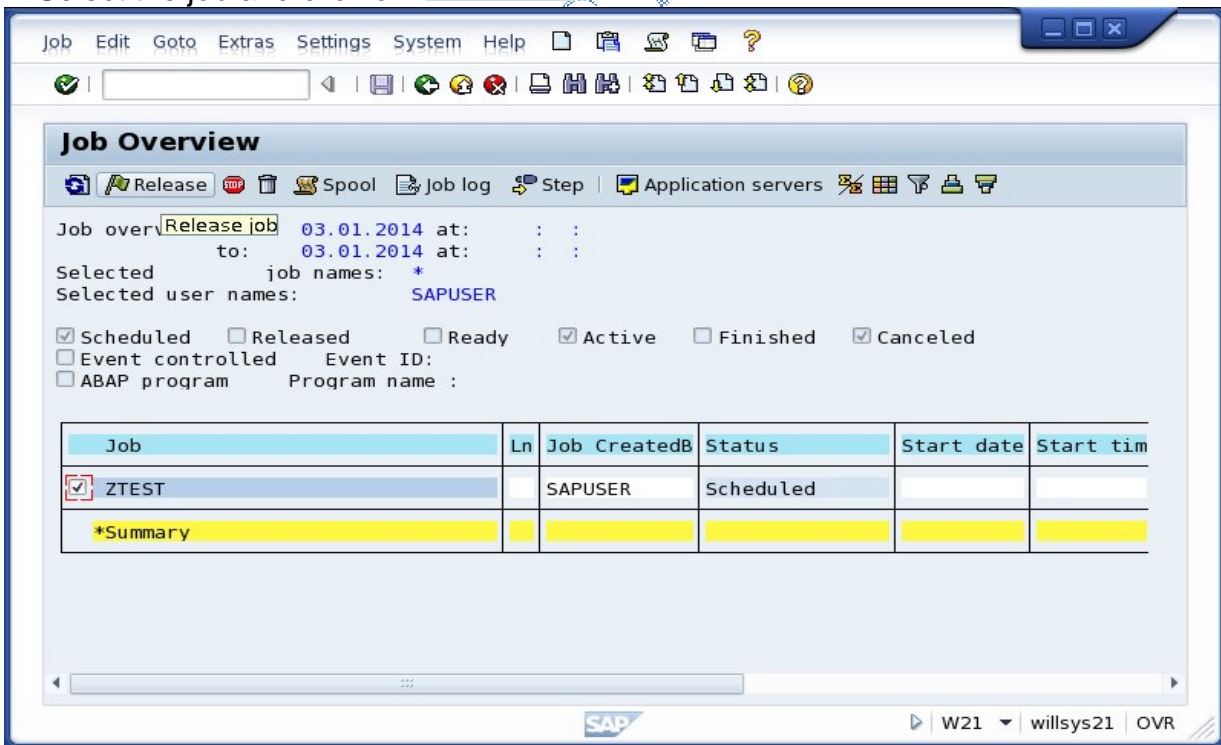
→ Click on job selection ( Job selection) or go to SM37 to monitor the job.

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→ Now job status is “scheduled”.

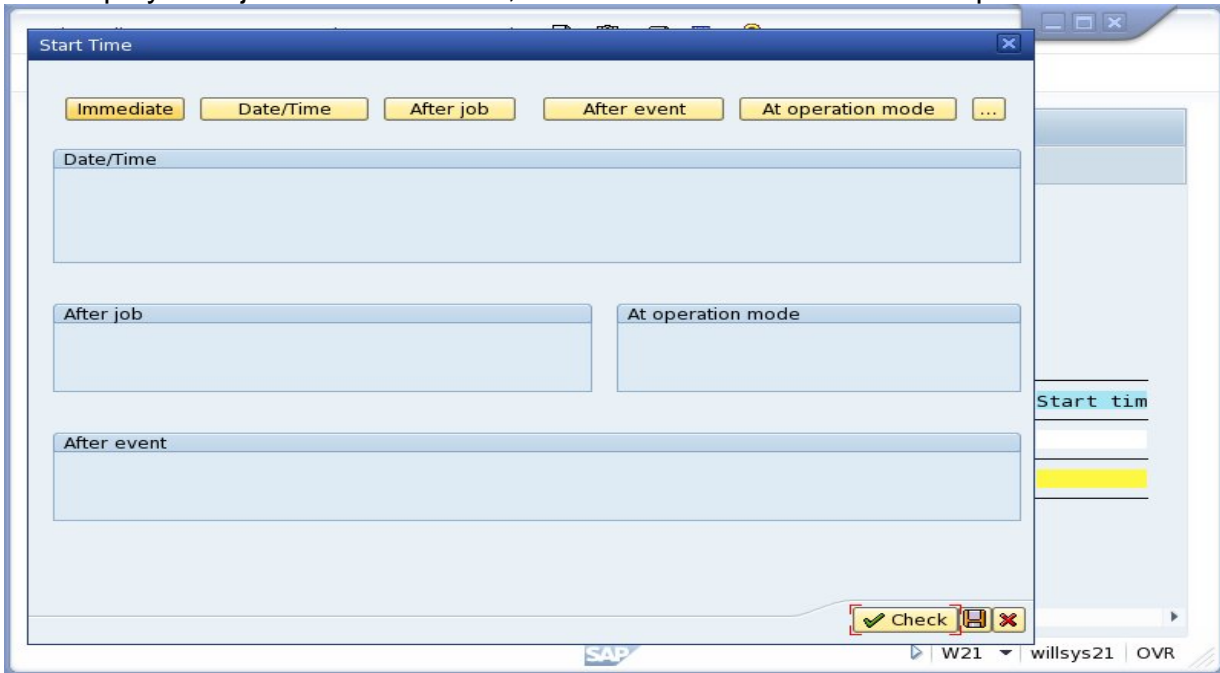
→ Select the job and click on  Release



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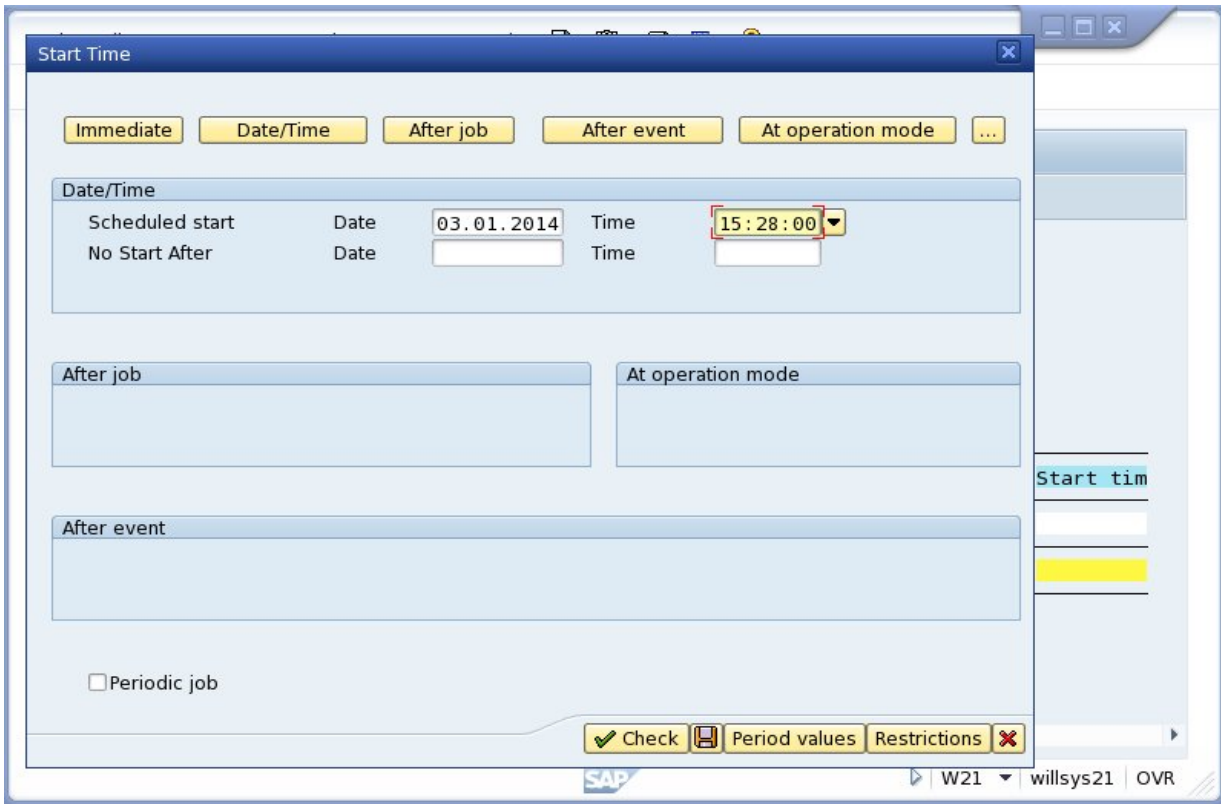
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→It displays the job start conditions, select one of them based on requirement.



→Click on Date/Time→provide execution date and time→save

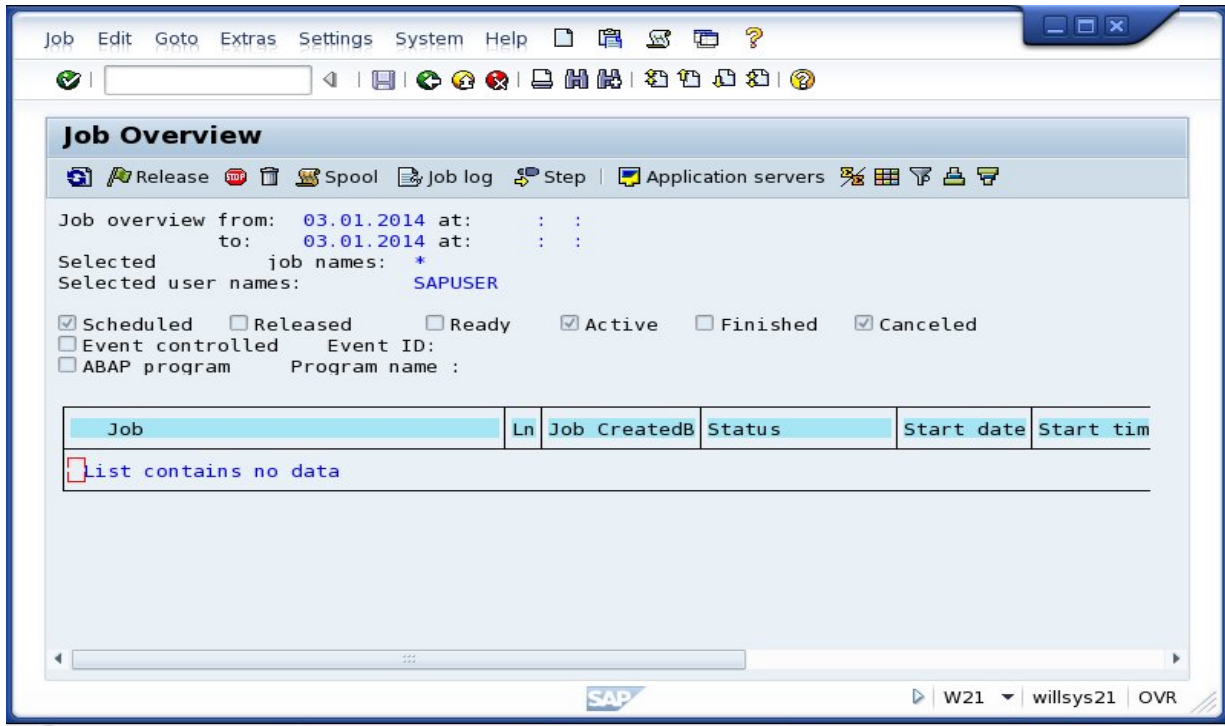
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The screenshot shows the 'Start Time' dialog box in SAP. It features several tabs: 'Immediate', 'Date/Time', 'After job', 'After event', and 'At operation mode'. The 'Date/Time' tab is active, showing 'Scheduled start' with a date of '03.01.2014' and a time of '15:28:00'. Below this, there are fields for 'No Start After' with empty date and time inputs. Further down, there are sections for 'After job', 'At operation mode', and 'After event', each with a large empty text area. At the bottom left, there is a checkbox for 'Periodic job' which is currently unchecked. At the bottom right, there are buttons for 'Check', 'Period values', 'Restrictions', and a close button. The SAP status bar at the bottom shows 'W21', 'willsys21', and 'OVR'.

→ Now job is released

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The screenshot shows the SAP Job Overview window. The title bar includes 'Job Edit Goto Extras Settings System Help'. The main area is titled 'Job Overview' and contains the following information:

- Job overview from: 03.01.2014 at: : :
- to: 03.01.2014 at: : :
- Selected job names: *
- Selected user names: SAPUSER
- Filters: Scheduled, Released, Ready, Active, Finished, Canceled
- Event controlled Event ID:
- ABAP program Program name :

Below the filters is a table with the following columns: Job, Ln, Job CreatedB, Status, Start date, Start tim. The table content is:

Job	Ln	Job CreatedB	Status	Start date	Start tim
List contains no data					

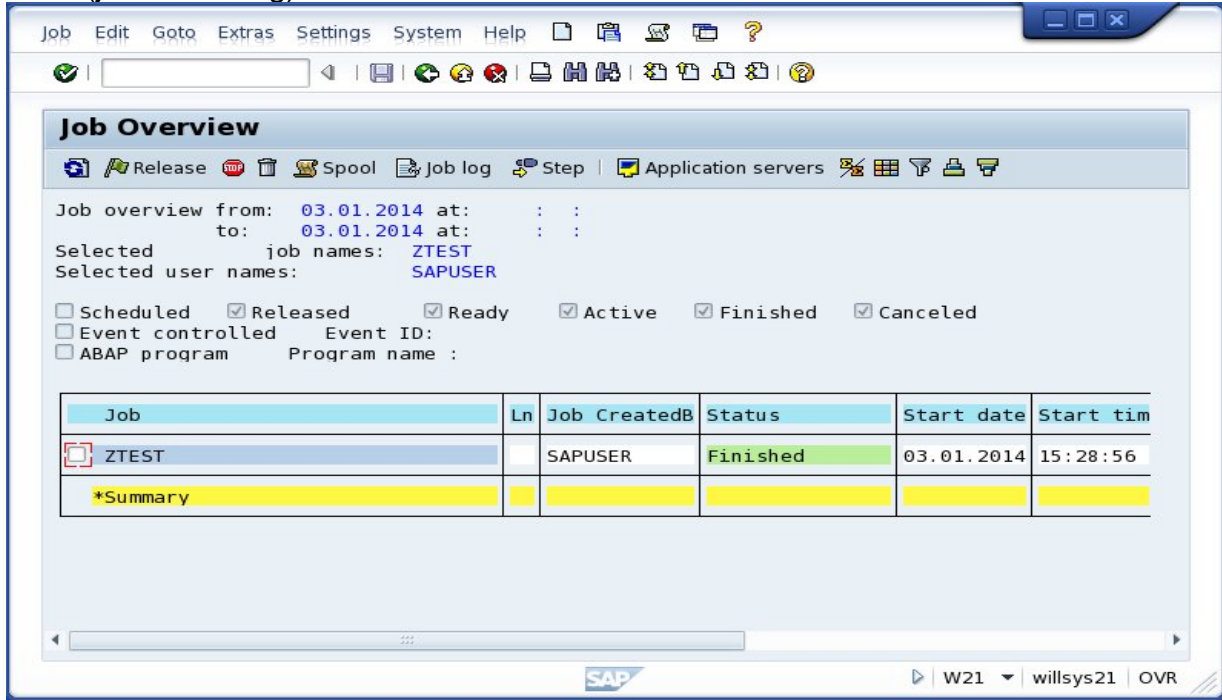
The SAP logo is visible at the bottom center of the window, and the status bar shows 'W21 willsys21 OVR'.

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→When the specified execution time occurs it goes to **ready** state and then picked up by the scheduler based on the available free BTC process. →Then it goes to **active** state (job is running).



The screenshot shows the SAP Job Overview window. The job 'ZTEST' is listed with a status of 'Finished'. The start date is 03.01.2014 and the start time is 15:28:56. The user is SAPUSER. The window also shows various filters and options for job management.

Job	Ln	Job CreatedB	Status	Start date	Start tim
ZTEST		SAPUSER	Finished	03.01.2014	15:28:56
*Summary					

→Job is finished.

Q. Why the jobs are in “**Ready**” state for longer time?

→During upgrade/while applying support packages the BTC jobs are paused/stopped by a program “**BTCTRS1**”, which can be resumed by a program “**BTCTRS2**” (The SAP system runs these program by default whenever it is required , there is no manual intervention).

→The parameter `rdisp/btctime` is set to '0' or to a higher value.

→The number of background work processes are not sufficient to handle these jobs (increase the processes using parameter `rdisp/wp_no_btc`) or temporarily schedule operation modes.

→Check for overlapping jobs and reschedule them to some other convenient time whenever the processes are free (if it is permitted).

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→Resource (CPU/Memory) bottlenecks on the server where the existing processes are consuming more time to release the process.

→Define emergency mode to change the dialog processes to background mode if dialog work processes are free.

Q. why the jobs are in “**Active**” status for longer time?

→The system is congested and waiting for the configured memory (each process can consumed up to 512MB as extended memory).

→There may be a CPU bottleneck on the system (ST06).

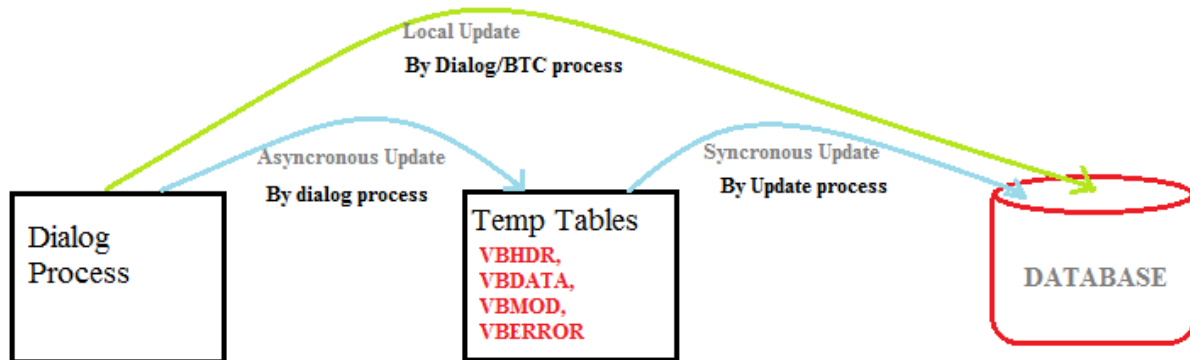
→The report is executed for the first time and the number of records in the database are huge (select, insert, modify) (expensive SQL statement).

→The program is waiting for response time from external system/gateway. The source system or the target system resource bottle neck (No process to handle the request at target system).

→The job is bound to run for hours so no RCA (Route Cause Analysis), these active processes are displayed in SM50 in stopped status (CPIC/sleep).

Update Work Process:

It is used to update the database permanent tables from temp tables.



Local Update:

The process of updating the database by a dialog/BTC process directly is referred as local update.

Asynchronous Update:

The process of updating the transactional dialog steps by a dialog process in the temporary tables until a final commit or rollback.

Synchronous Update:

The process of updating the database permanent tables by an update process, by reading the data from temporary tables which are updated by dialog.

Process Flow:

- The user request is submitted to the dispatcher.
- The dialog process handles the user request.
- When dialog process identifies the update/insert/modify then it communicate with enqueue server to obtain a lock on the record, so that no user should update (however others can display the existing records. The locks are displayed in **SM12**.

- The dialog process updates all the dialog steps of a transaction in temporary tables.

VBHDR: Update Header

VBDAT: Update Data

VBMOD: Update Modules

VBERROR: Update errors

And once it is committed then handover the task to update process which can be displayed in **SM13**.

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- The update process updates the database permanent tables based on update modules (VBMOD). Update modules specify the modularity to update one or more tables based on functionality.
- Update records are displayed in SM13 when the records are committed by dialog process then the records are displayed in SM13 with status “**initial**”.
- If the update is running the “update” then its status is “**run**”.
- If the update is thrown into error then the status is “**error**”.
- If the updates are restarted after an update deactivation/activation the updates are updated with status “**auto**”.
- If the updates are restarted by a dialog process(user) in SM13(repeat update) then the status is “**auto(dia)**”.

Types of update work processes:

V1 Update: It is used to handle the time critical updates . There should be at least one V1 update defined per system these are configured by using parameter **rdisp/wp_no_vb = 1**

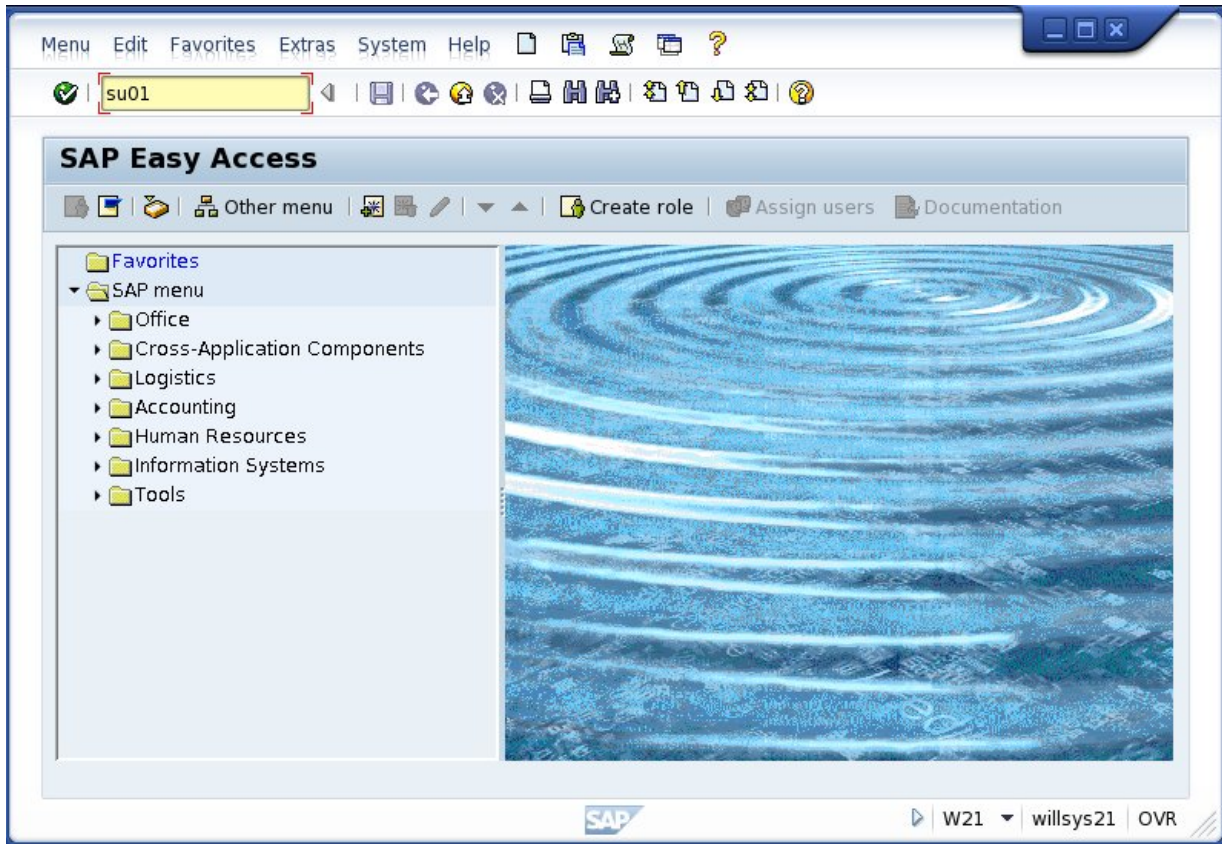
V2 Update: It is used to handle the non time critical updates. If V2 is not defined then V1 handles the V2 requests based on criticality. These are configured by using parameter **rdisp/wp_no_vb2 = 1**

V3 Update: It is used to update the massive updates (BW updates), currently reserved by SAP.

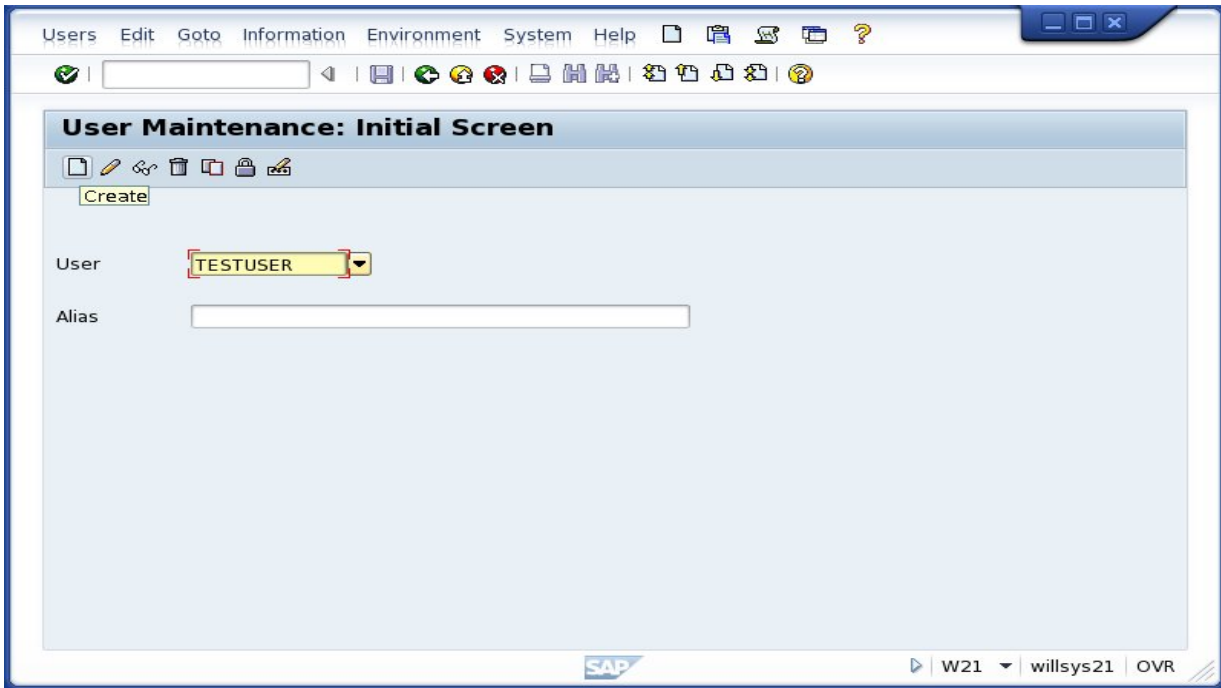
***In principle configure one update process for every 5 dialog work processes.**

Example: create a user in SU01 (it updates the user master tables in Database)

→Execute SU01

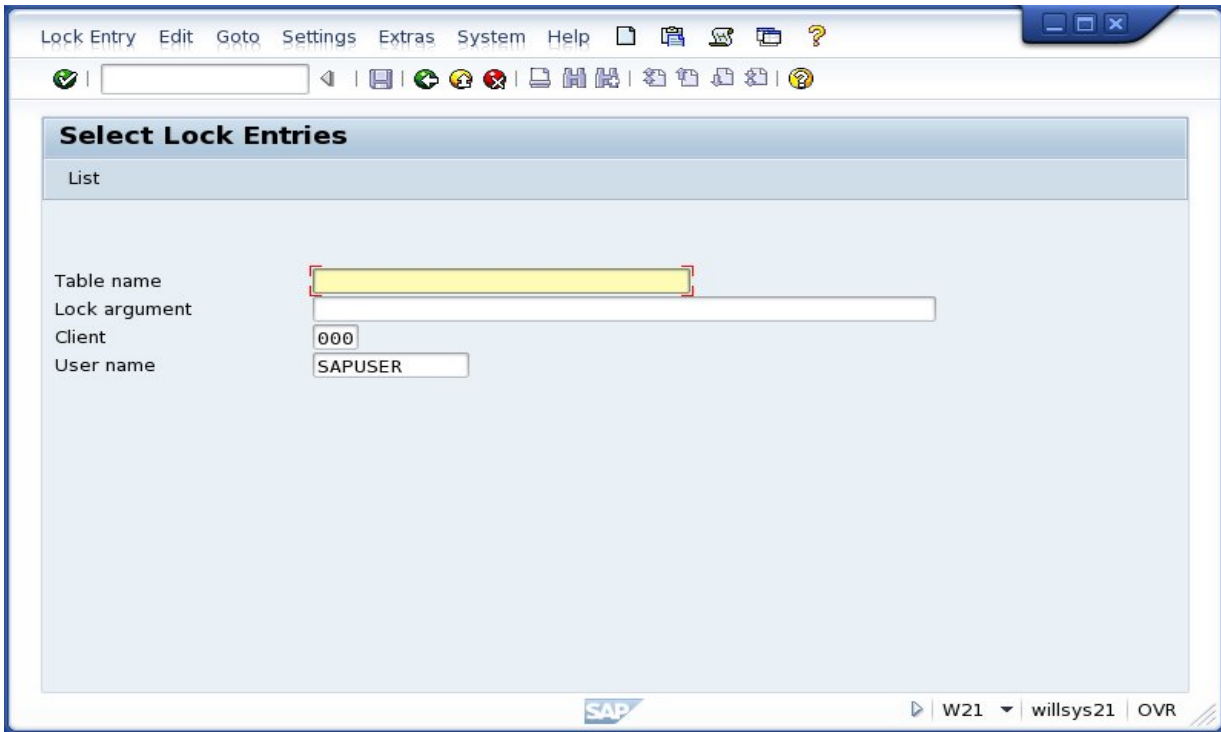


→Provide username and click on **create**



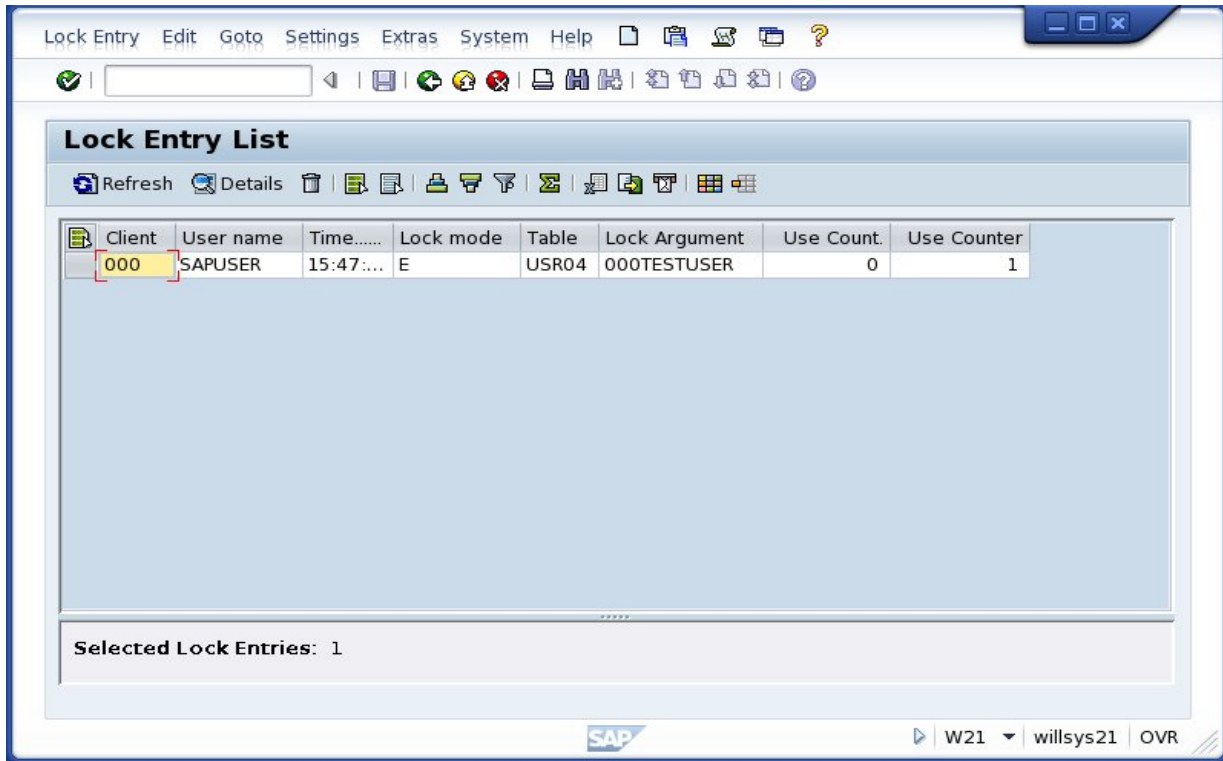
→Execute Sm12

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→dialog process communicates with enqueue and obtain a lock on the record.

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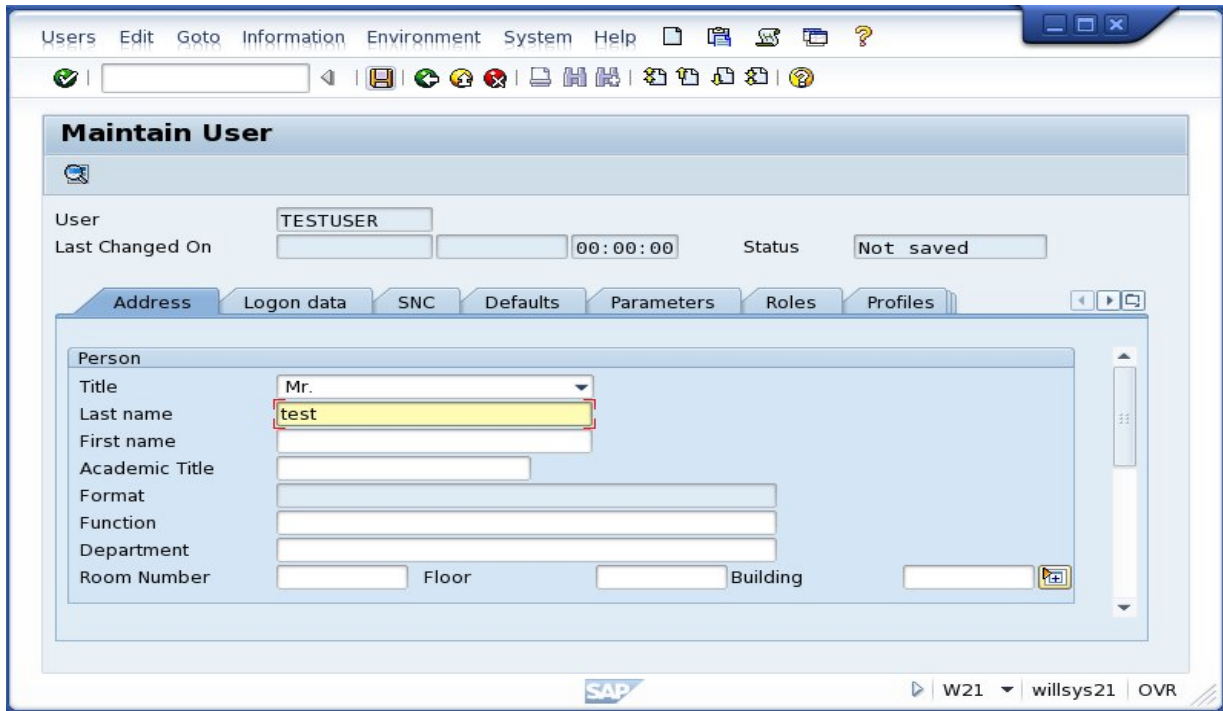
The screenshot shows the SAP Lock Entry List interface. At the top, there is a menu bar with options: Lock Entry, Edit, Goto, Settings, Extras, System, and Help. Below the menu is a toolbar with various icons. The main area is titled "Lock Entry List" and contains a table with the following data:

Client	User name	Time.....	Lock mode	Table	Lock Argument	Use Count.	Use Counter
000	SAPUSER	15:47:...	E	USR04	000TESTUSER	0	1

Below the table, it says "Selected Lock Entries: 1". At the bottom right of the window, there is a status bar with "SAP", "W21", "willsys21", and "OVR".

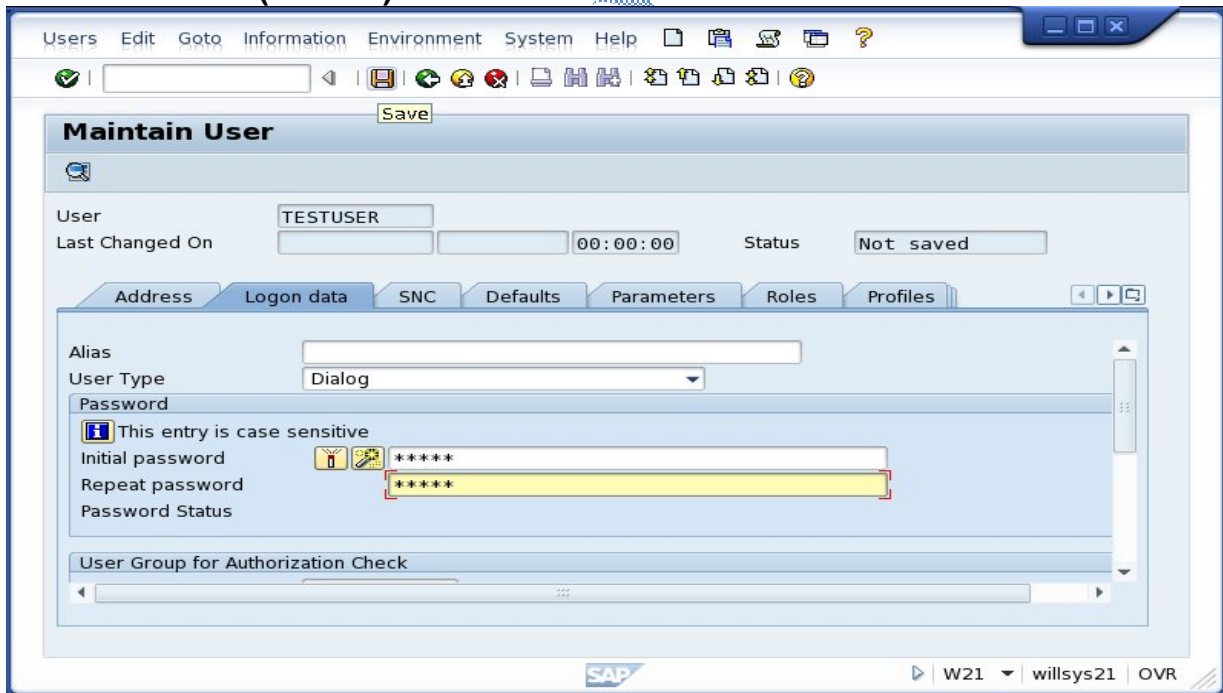
→in SU01 enter the mandatory details

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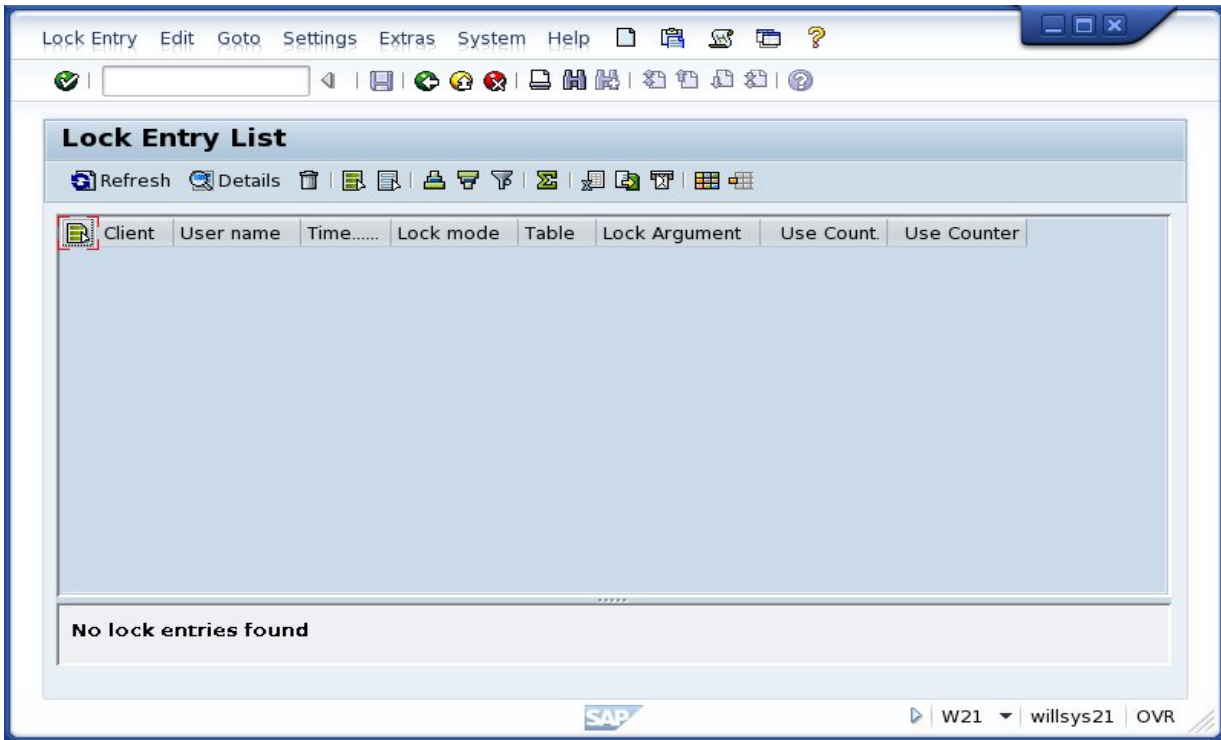
The screenshot shows the 'Maintain User' dialog box in SAP, with the 'Person' tab selected. The 'User' field contains 'TESTUSER' and the 'Status' is 'Not saved'. The 'Person' section includes fields for Title (Mr.), Last name (test), First name, Academic Title, Format, Function, Department, Room Number, Floor, and Building. A red box highlights the 'Last name' field.

→Click on SAVE(commit)

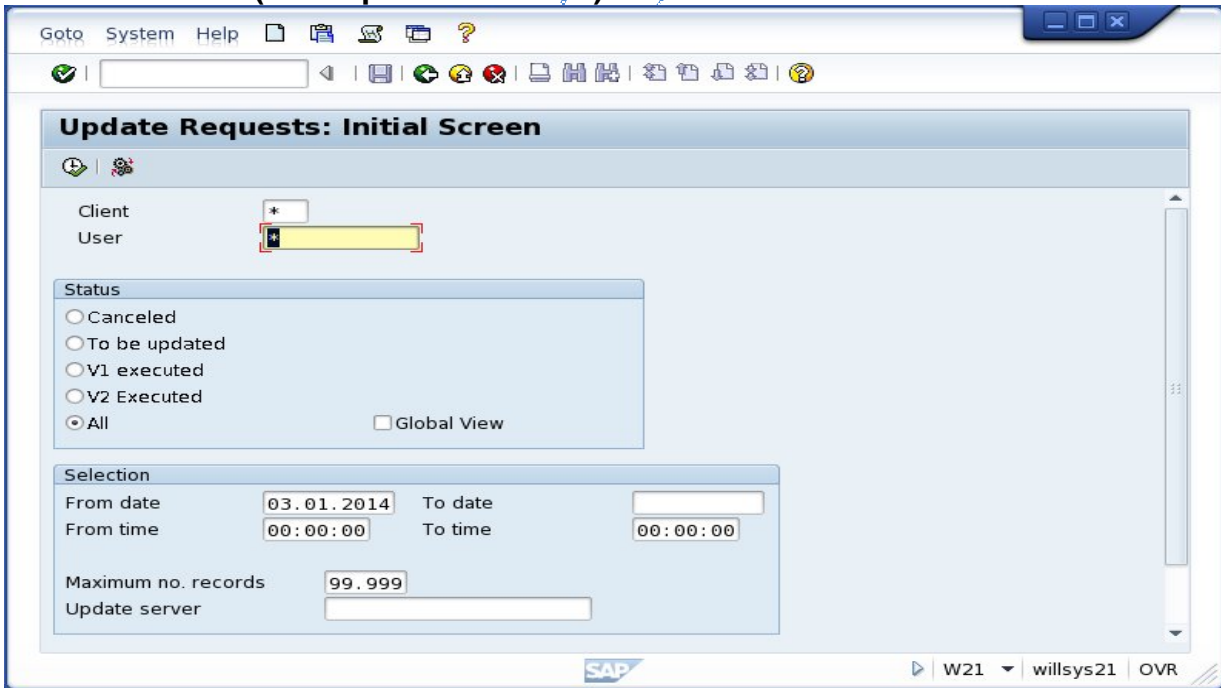


The screenshot shows the 'Maintain User' dialog box in SAP, with the 'Logon data' tab selected. A 'Save' button is visible at the top. The 'User' field contains 'TESTUSER' and the 'Status' is 'Not saved'. The 'Logon data' section includes fields for Alias, User Type (Dialog), Password (Initial password, Repeat password), and Password Status. A red box highlights the 'Repeat password' field.

→Check SM12, lock is released because data is committed.



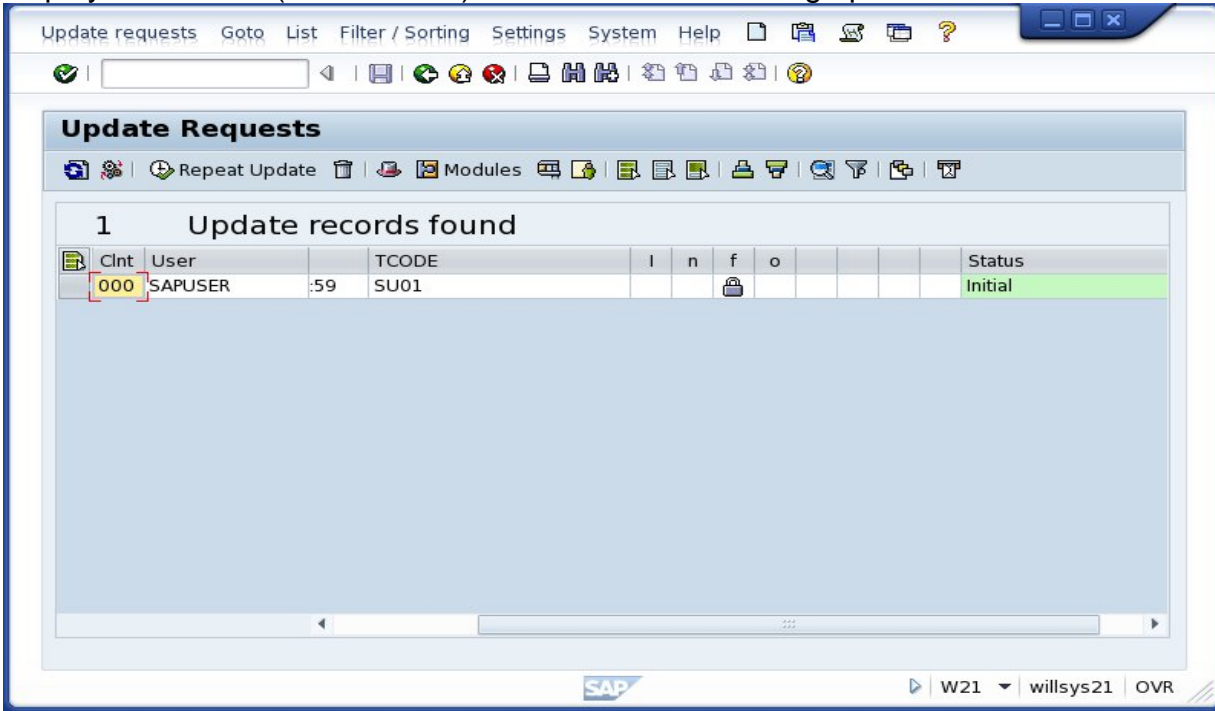
→Execute SM13 (SAP Update overview)



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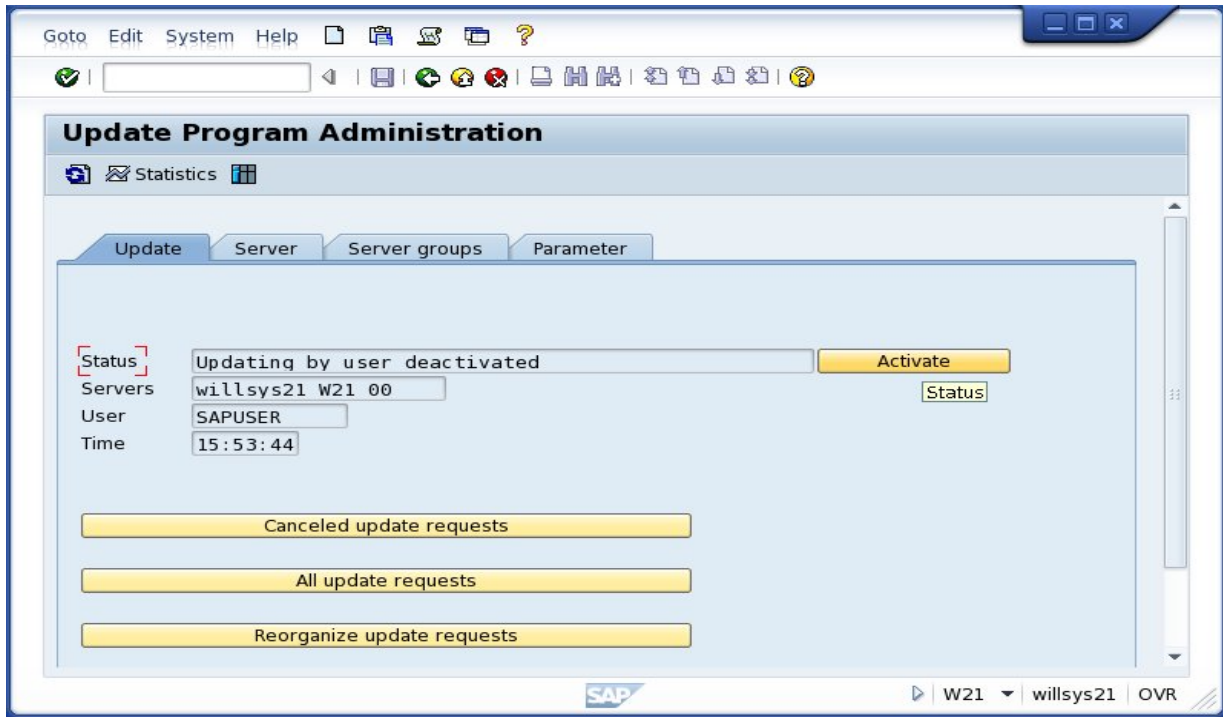
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→ Once it is committed then handover the task to update process which can be displayed in **SM13**.(status: initial) .Here we are monitoring update status.

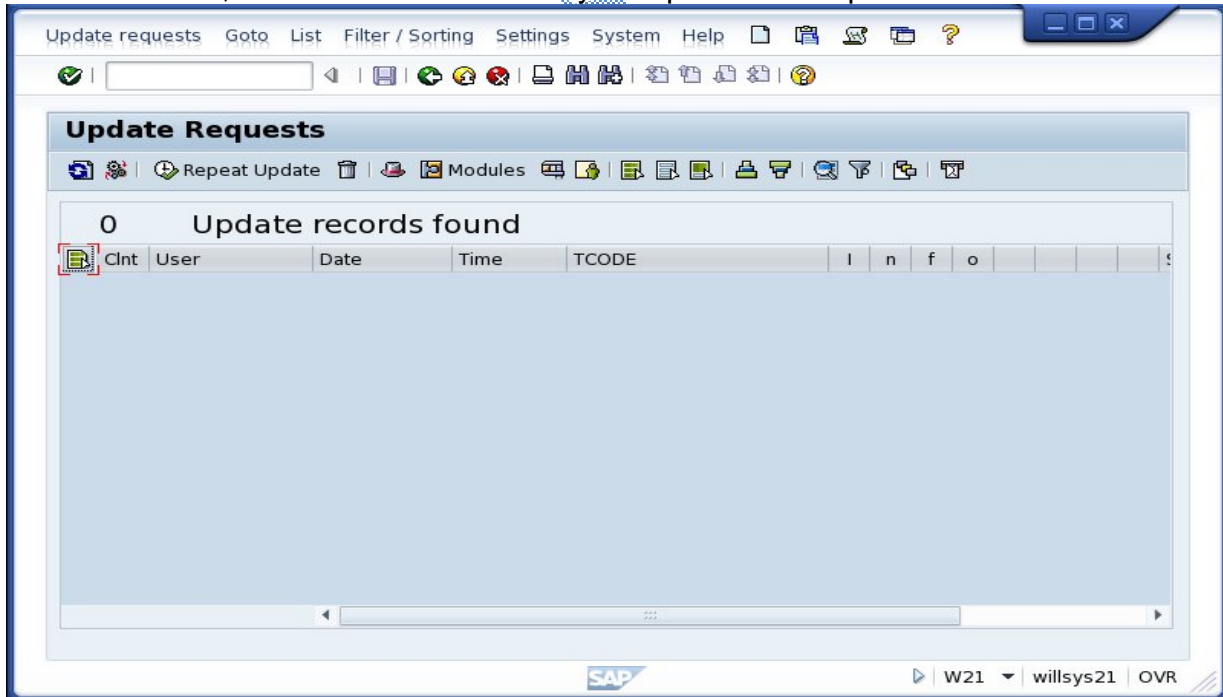


→Check SM14(Update administration) , status is active.

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→ Check **SM13**, no record found means your update is completed.



Update Reorganization:

These are used to housekeep the temporary tables (VB* tables).

- Run the report **RSM13002** to delete the old update requests in transaction **SA38** during off-peak hours (in dialog mode).
- Set the parameter **rdisp/vbreorg = 1** this parameter specifies whether incomplete (Error) update requests should be deleted as an update server is started. As these incomplete update requests can never be executed and only occupy space in the database. You should delete them from time to time by executing report "RSM13002".
- Specify the parameter **rdisp/vbdelete = 30/50** days after which update requests are deleted irrespective of status.

Update Administration:

It is used to monitor the status of update mechanism, check as part of the monitoring and update the checklist.

When update is deactivated it will write the error logs into **SM21** and **ST22**.

Analyze the error log with high priority (critical) and resolve the issue.

The user requests are handled by dialog process and handover the updates to update processes. If the updates are slow/deactivated/issue with database then all the updates hangs subsequently. The entire system hangs and hour glass situation arises.

- Check **SM66**, **SM21**, and **ST22** for any critical errors in the system.
- Check the reasons for the update stuck and resolve the error.
- If V2 processes are not configured then V1 processes handles the tasks of V2.
- Set the parameter **rdisp/vbmail = 1** to notify the layer where updates are failed.

NOTE: Do not deactivate the update process manually in **SM14** under any circumstances in PRD system.

Enque Process:

It is used to enqueue/dequeue (lock/unlock) the objects during an update. By default one enqueue process per system is installed along with message server.

It is possible to configure more than one enqueue process in a massive update system.

- Enqueue processes are configured by using **rdisp/wp_no_enq =1**.
- Ensure that enqueue processes are configured on the central instance to share the enqueue table.
- Enqueue locks are stored in enqueue table which is configured by parameter **enque/table_size=4MB** to 100MB. *It is 200MB in newer versions based on Netweaver version 720.

- Enque table resides in the main memory of the instance where enqueue processes are configured. Generally enqueue processes are configured on the central instance (to communicate with message server through dispatcher).

NOTE: In Netweaver 730 systems both message and enqueue are installed together in separate instance (ASCS: ABAP SAP CENTRAL SERVICE INSTANCE)

Enqueue process flow:

- User submits the request for an update.
- The request is received by dispatcher and keeps it in wait queue.
- Based on freely available dialog process , the dispatcher allocates a process to user request.
- When dialog identifies update then it communicates with enqueue process to obtain lock on the record , so that no other user modifies it and has only a display access. These locks are displayed in SM12.
- If the update request is made through an application server(dialog instance) , the dialog process communicates with message server, and message server in turn communicates with enqueue process to obtain lock on behalf of the dialog process. Message server obtains lock from enqueue process and provides to dialog process.
- Generally the enqueue time on the central instance is 1ms to 5ms. If more instances(dialog) are configured then the enqueue time can go up to 100ms.(if it goes beyond then switch on the enqueue trace (ST01/S05) for root cause analysis).
- Whenever a dialog process schedules a time consuming batch update to run in the background then enqueue lock may held for longer hours.

Enqueue monitoring:

- The locks are monitored in SM12.
- The locks which are held for more than 12 hours are documented in checklist and escalated to next level.
- As part of monitoring the locks held by dialog process should not be more than one hour, but the locks held by BTC process during batch processing can consume more than one hour or even days.
- It is possible to delete the locks from transaction SM12. But it is not recommended, instead the users(user sessions) can be logged off from SM04 which automatically releases the lock.
- GUI timed out, Network disconnections could not unlock the objects which has to be handled manually.
- Lock deletion/user logoff are traced/logged in SM21.

Message Server:

It is the first process to be started based on hostname, port , customer hardware key, executable path(msg_server.exe) .

Its main purpose is to load balance the system when more than one dialog instances are configured. It is also used to handle the lock requests that are initiated from dialog instance.

There will be only one message server in the entire system. It is monitored in transaction **SMMS**. It is also monitored using **MSMON** or using **SAPMMC**.

Gateway Process:

It is used to communicate between SAP and SAP , SAP and non SAP systems, between SAP application processes of different instances.

- It is also a server or service which is not displayed in SM50. There will be one gateway by default for each instance.

Additional gateways can be installed based on requirement using sapinst tool. In order to communicate with SAP ABAP systems (BW, SRM, CRM, SCM and SOLMAN) the gateway service is mandatory.

It listens on port 3300 and secured gateway on 4800.

The TCP/IP connections for third party tools have to register in the SAP gateway to communicate with SAP ABAP systems.

Gateway server/process is monitored in transaction **SMGW**.

→Execute **SMGW** →Go to **logged on clients** →(The existing connections are Displayed)

- Name of the gateway host and gateway service are required while defining RFC connections or for any third party interfaces to communicate with ABAP systems.

*There are no parameters for increasing message and gateway server/processes.

Gateway Parameters:

There are some parameters to optimize the gateway connections.

- **gw/max_conn** is set to 500(the maximum number of simultaneous connections which can work on that specific instance)
- **gw/keepalive = 300sec** timer to check inactive connections when there is no data transfer.
- **gw/timeout=10000ms**(10sec) time out parameter to connect to gateway(60sec)

- **gwmon** is a executable used to monitor the gateway and gateway connections at OS level.

SPOOL Process:

It is the only process that is used to output the documents (printer/fax/email). Spool processes are defined by using parameter **rdisp/wp_no_spo**.

- There should be at least one spool work process for the entire system. It is possible to configure as many spool processes as possible depending upon the available resources.
- Dialog process or Background process generates the spool requests.
- The spool requests are converted by spool process into output (printer specific) requests based on access method.
- User generates the spool requests either by using dialog or background process which are stored in TemSe (Temporary sequential objects).
- TemSe is defined by parameter **rspo/store_location='G'** or 'db'.
'G' means global directory in usr/sap/SID/sys/global.
'db' means TST01 and TST03 tables in the database.

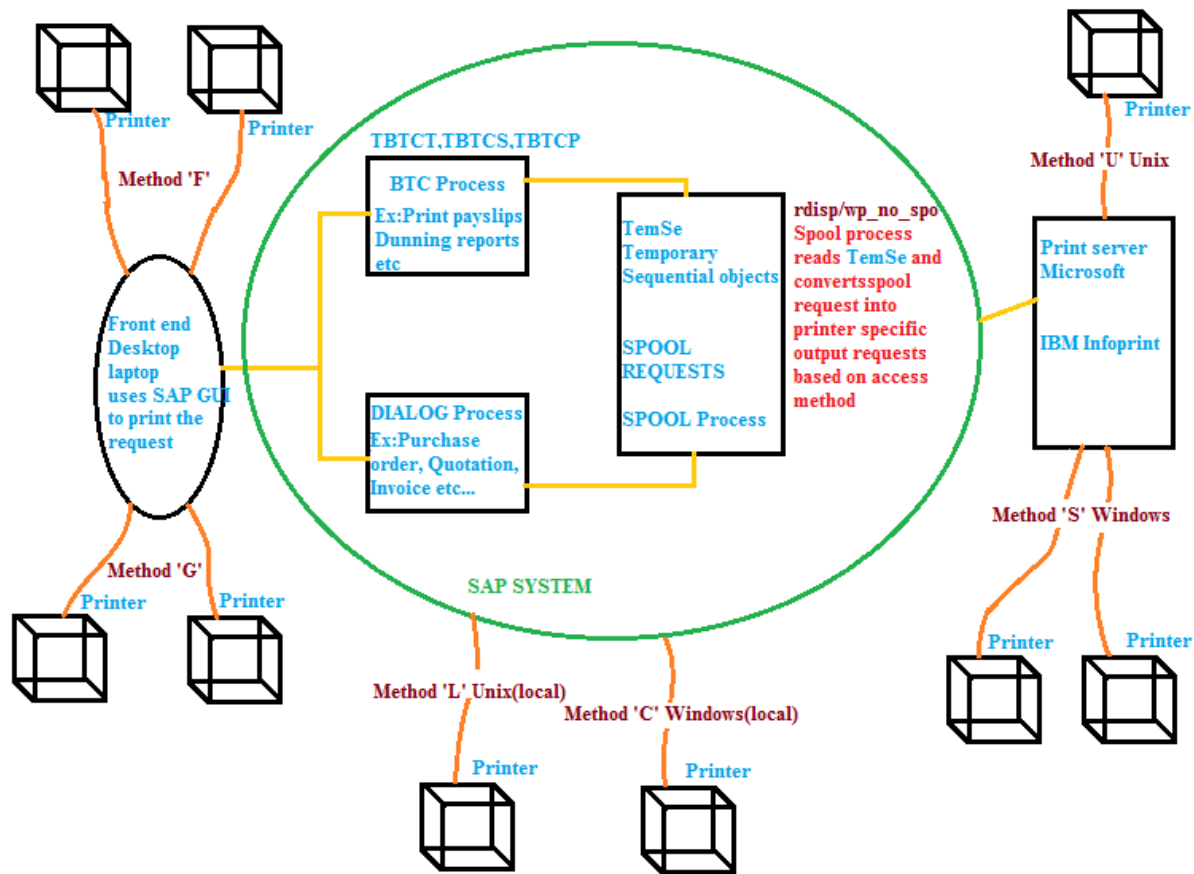
Access Method: Specifies how the spool work process transfers data to the host spool system for this printer.

Remote(S,U),Local(L,C),Frontend(F,G). 'G' method is used when more than one printer is configured to the desktop. It is a front end control to select the printer.

Specify the printer name and host name where printer is configured, for remote access methods specify the name of the remote host where formatting is done.

***SP01:** Used to monitor spool requests (all) by administrator.

***SP02:** Used to monitor the users own spool requests (specific to user).

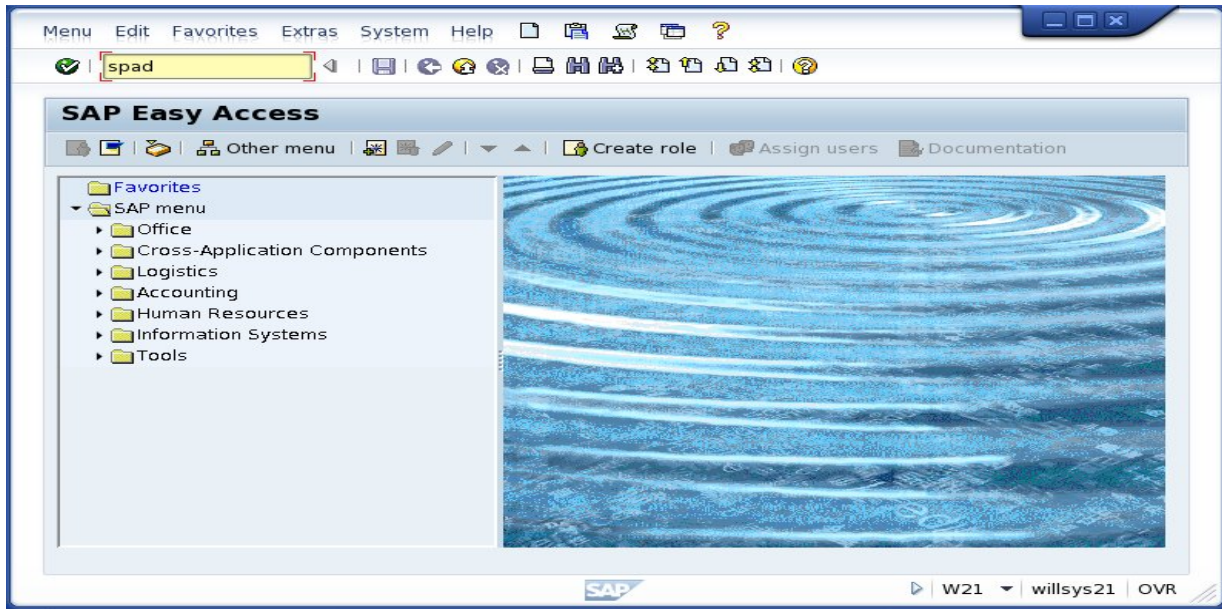


Defining printer (output device) in SAP System:

Note: Before purchasing a printer (barcode, label, cheque or any interface printer) ensure that they are supporting by SAP.

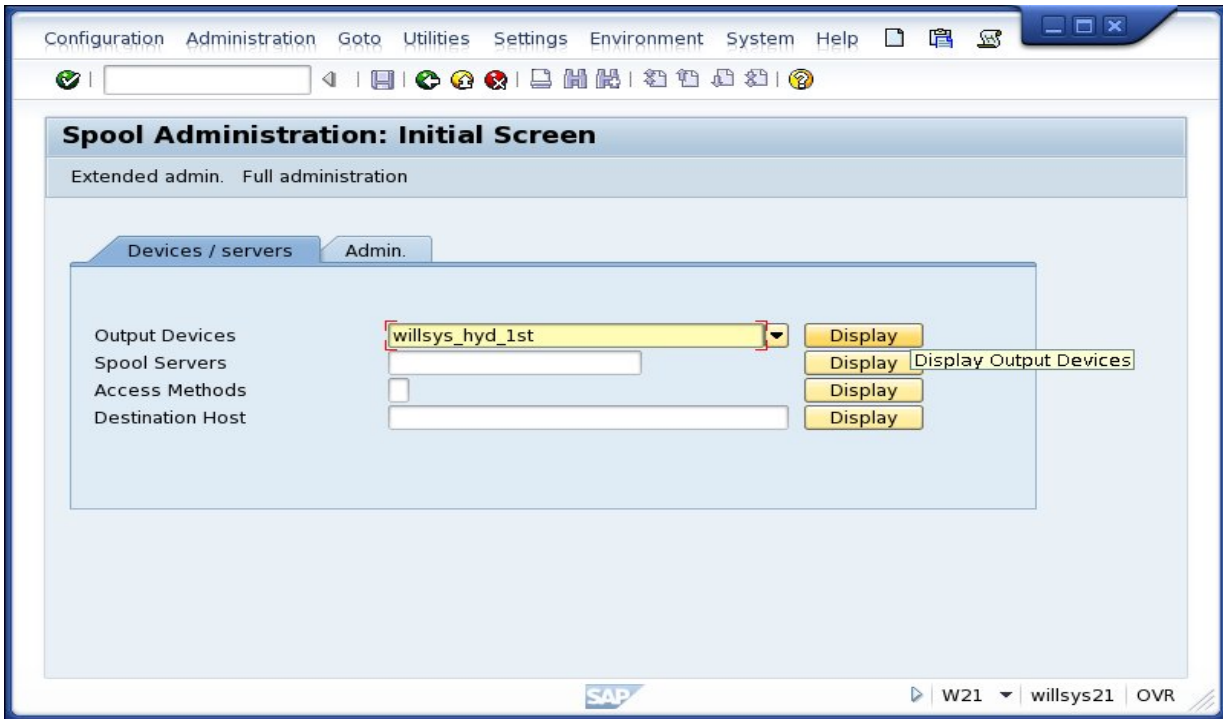
Read NOTE: **1100779** which specify the certified devices and vendors (printers). If the printer is from a “gold” printer the device types (drivers) are provided by default or through a support package or through market place. If the printer is from a “silver” printer the device types (drivers) are provided by vendor.

→Execute SPAD



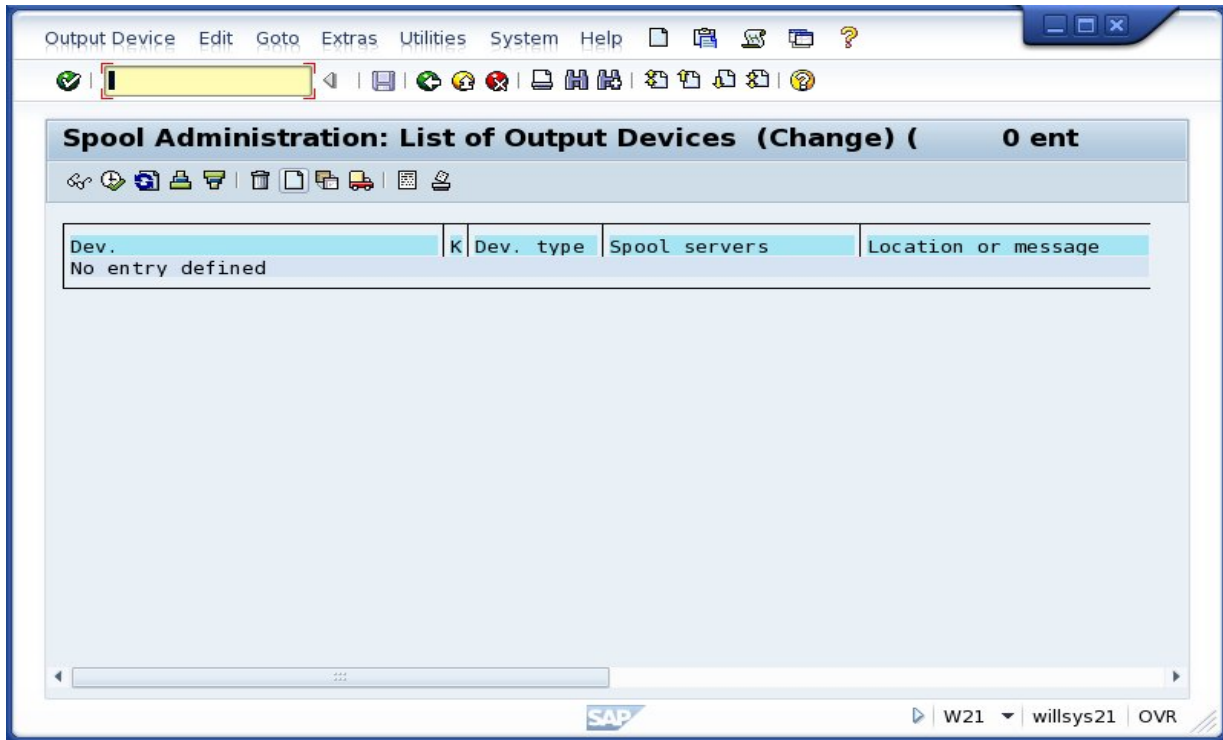
→Specify the unique name to identify the printer in the landscape→Output Devices→click on display

WILLSYS INFOSYSTEMS



→click on change→click on create

WILLSYS INFOSYSTEMS



→ **Select Device type:** The device types are provided by SAP by default. The device types can be downloaded and imported into the sap system from the market place. (If there are no predefined device types then select SWIN or SAPWIN (default drivers for windows)).

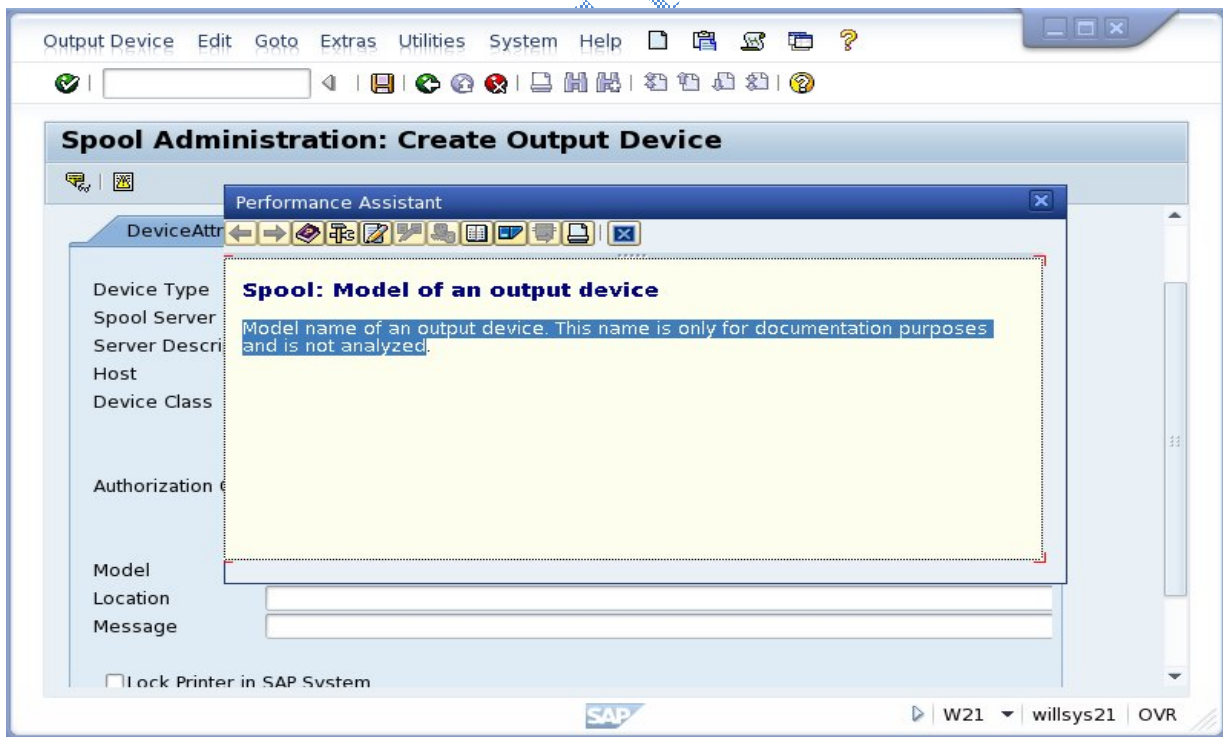
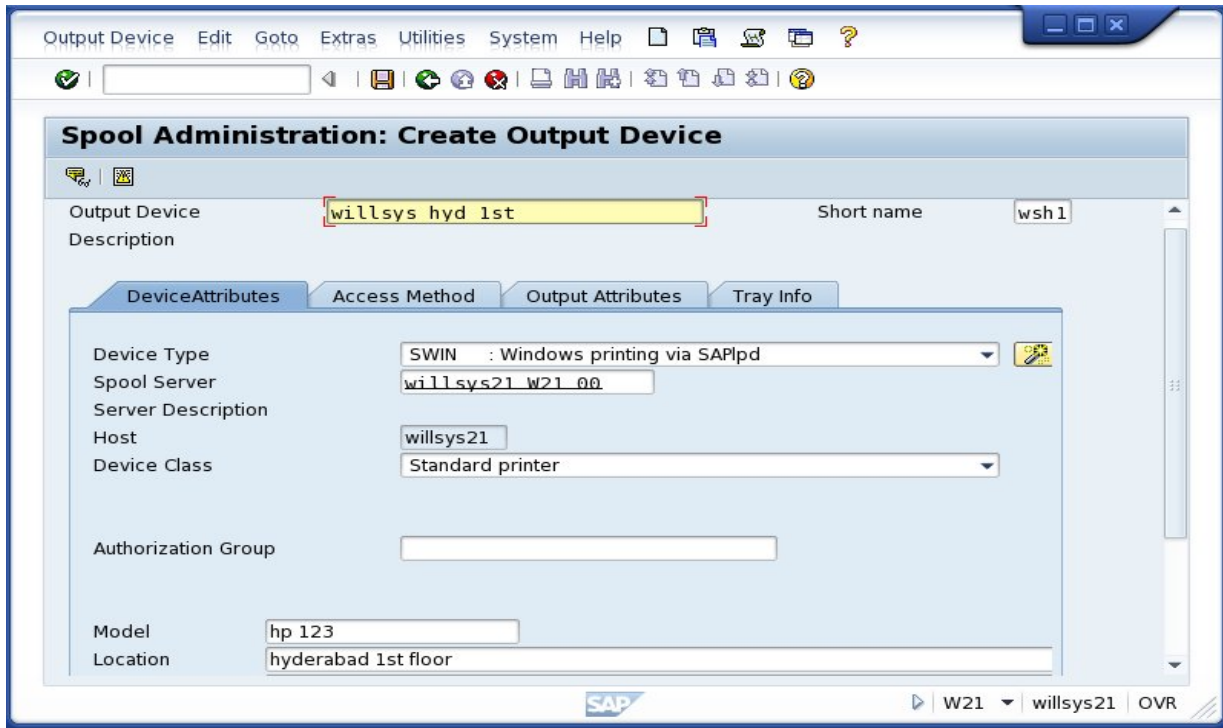
Device types are provided by printer vendors, if they are not available then write to SAP or the printer vendor based on printer level (gold/silver).

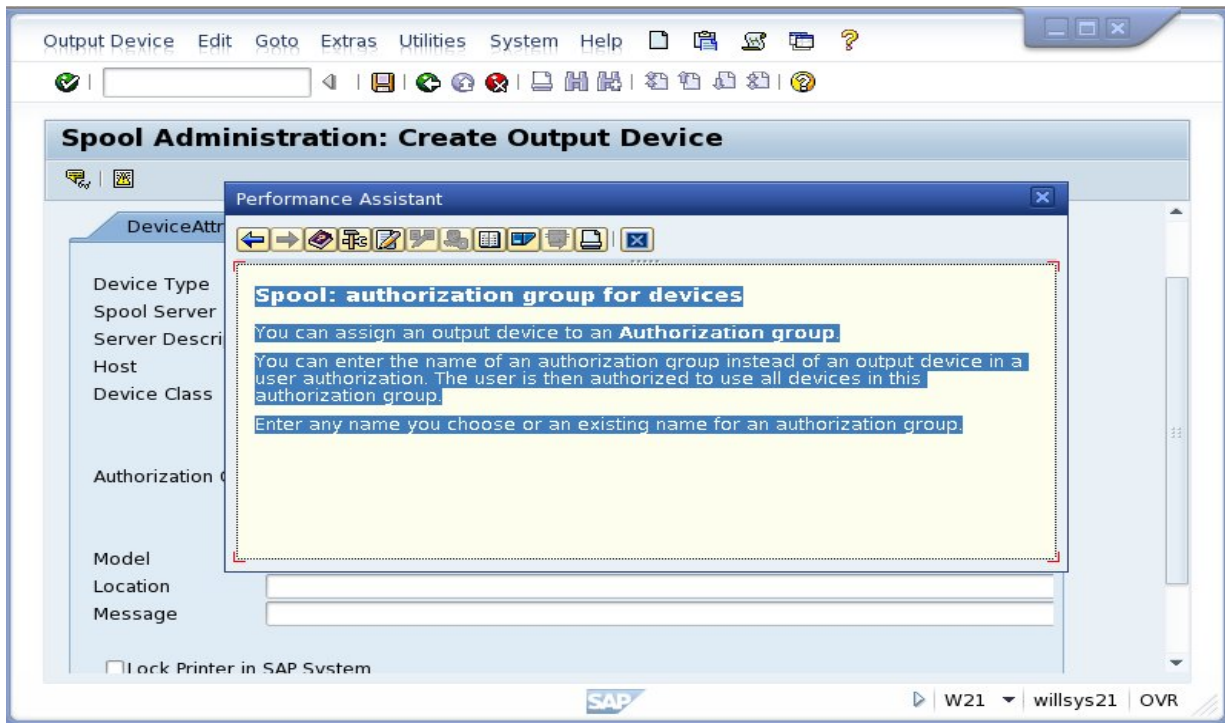
SPOOL SERVER: Specify the name of the spool server there are two types of spool servers.

→ Provide all the details like HOST, Device class, Authorization group, model, location etc.

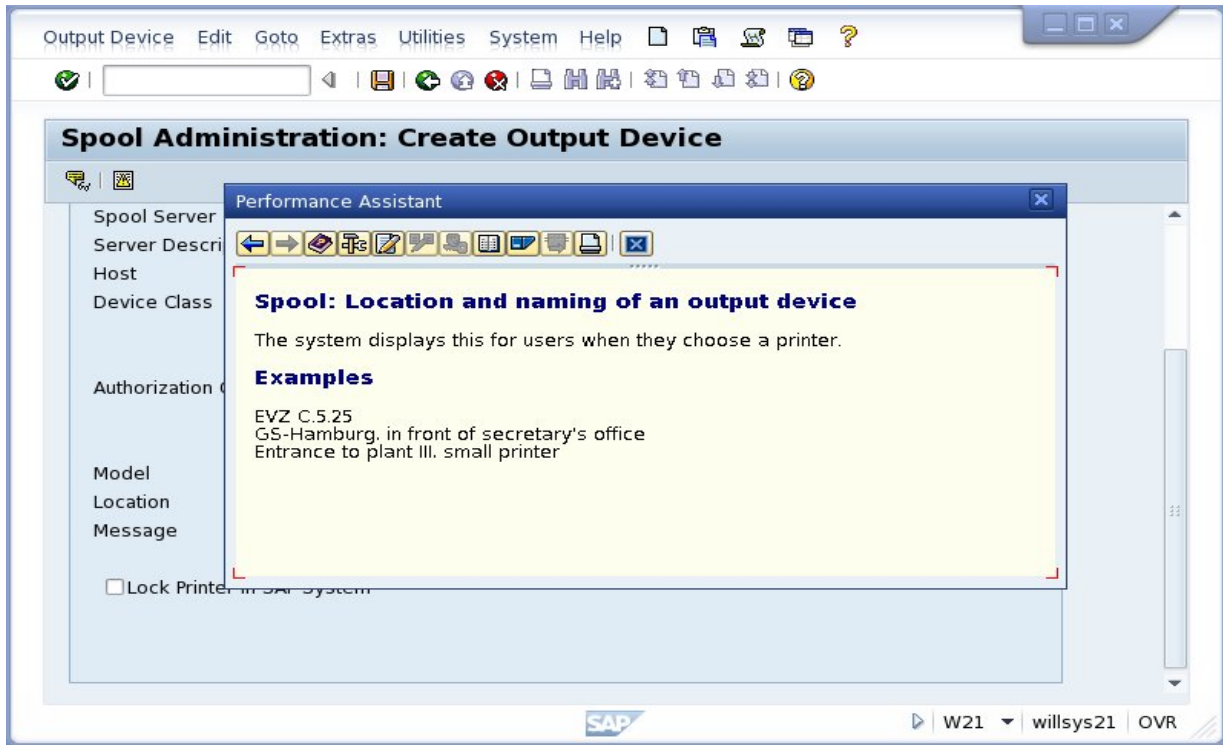
*Specify authorization group (S_SPO_DEV) to provide access to this printer (printer authorization can be restricted)

*Model, Location and message are only for information/documentation.

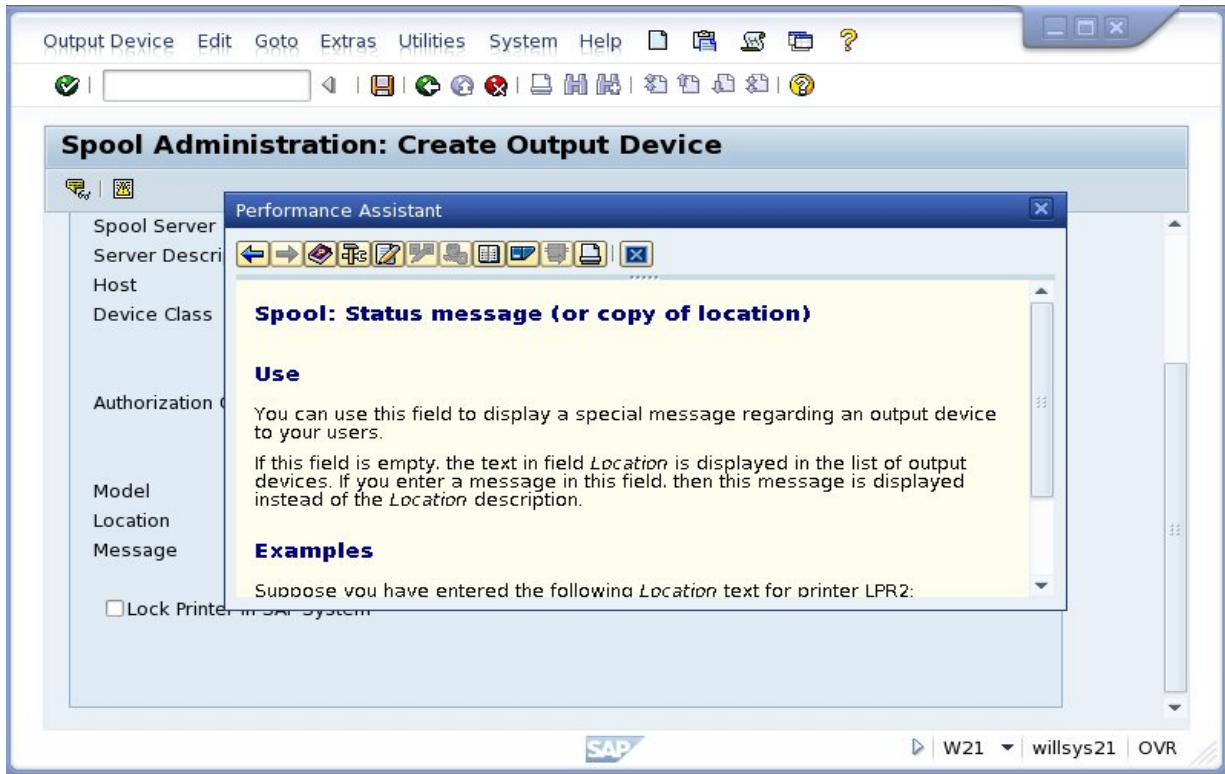




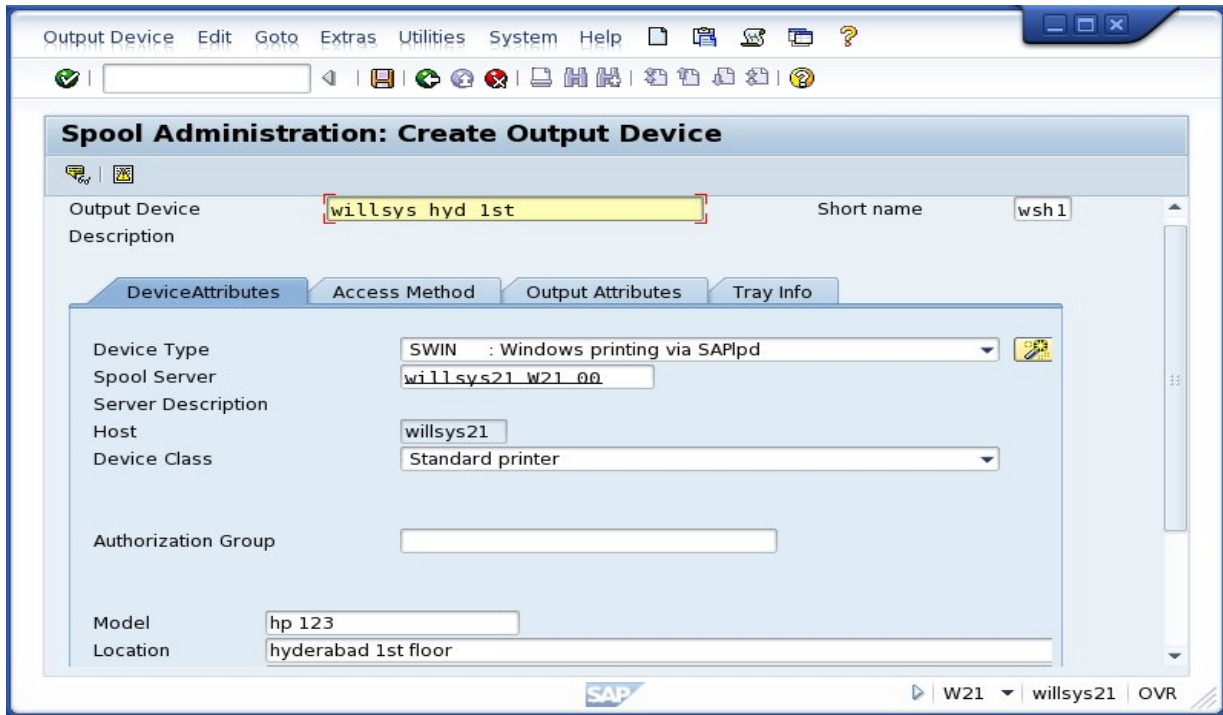
WILLSYS INFOSYSTEMS



WILLSYS INFOSYSTEMS



WILLSYS INFOS



→SAVE

→Select Access Method Tab.

Access Method: Specifies how the spool work process transfers data to the host spool system for this printer.

Remote(S,U),Local(L,C),Frontend(F,G). 'G' method is used when more than one printer is configured to the desktop. It is a front end control to select the printer.

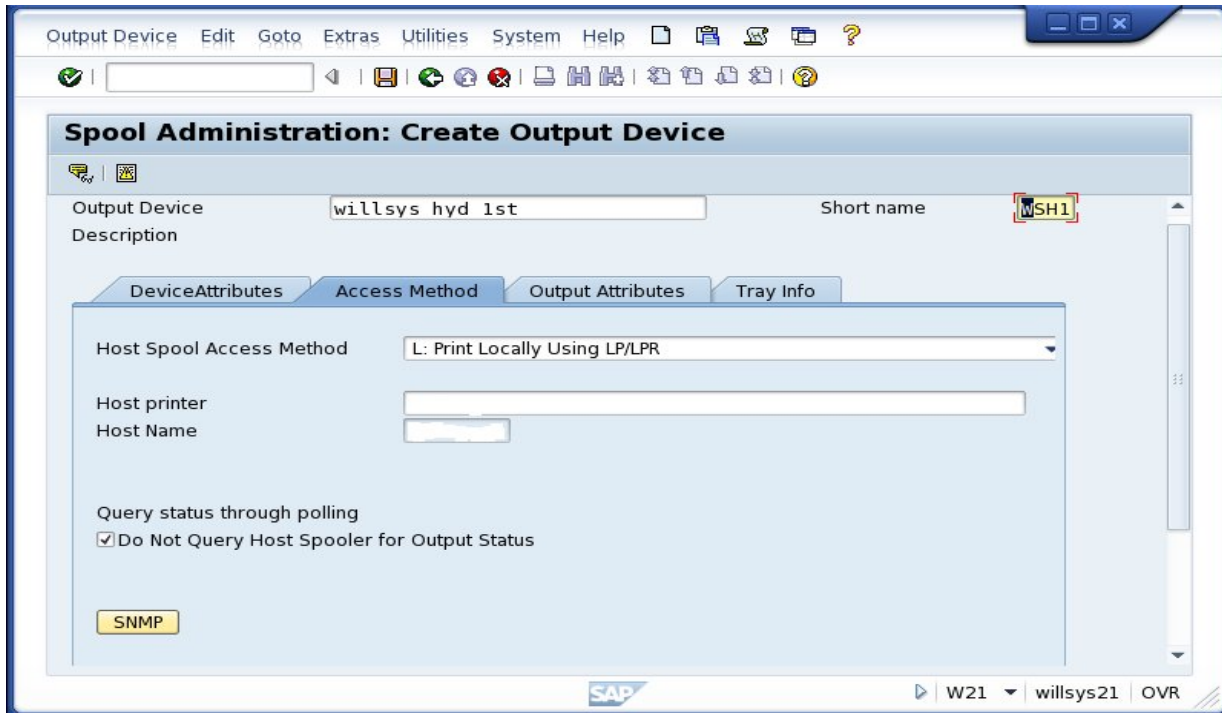
Specify the printer name and host name where printer is configured, for remote access methods specify the name of the remote host where formatting is done.

→Provide Host printer (Printer's hostname)

→Select Checkbox (Do not query for output status)

The spool process sends request to the printer and waits for approximately 60 seconds to get the status for every 60 seconds.(if it is printing then updates are completed , if it is error then update it as "cancelled" or "error").

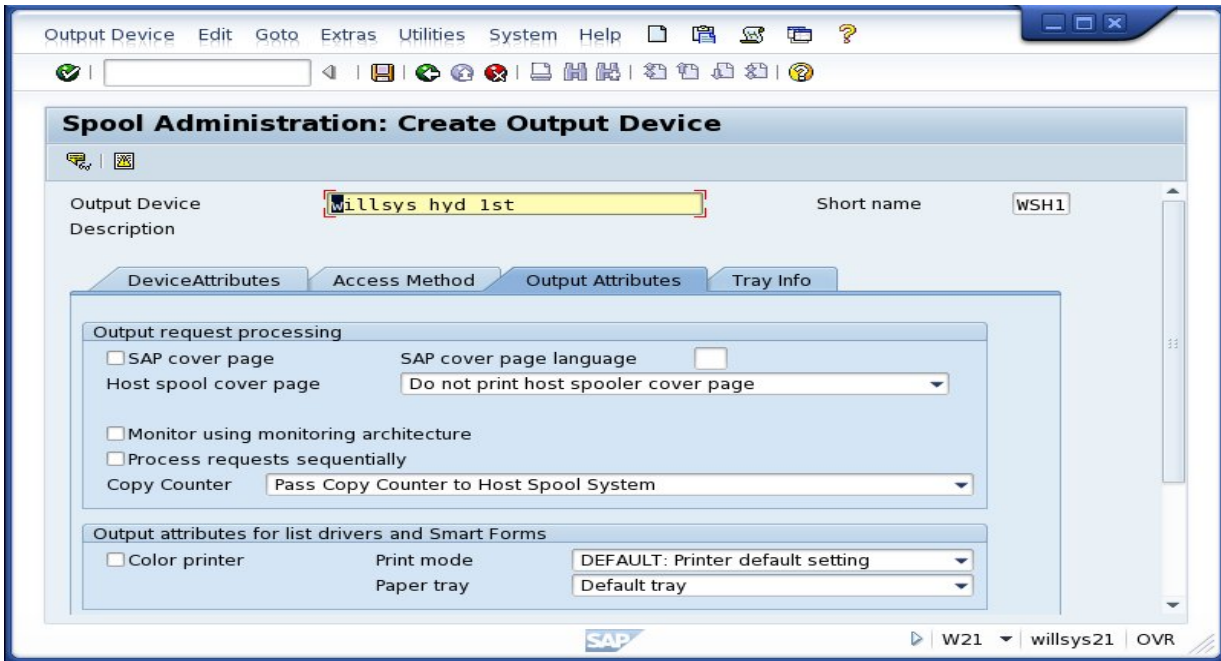
If this checkbox is not selected then the spool process goes to the host spooler/printer to get the status for every 60 seconds until the print requests are completed or failed.(To optimize the system deselect this option).



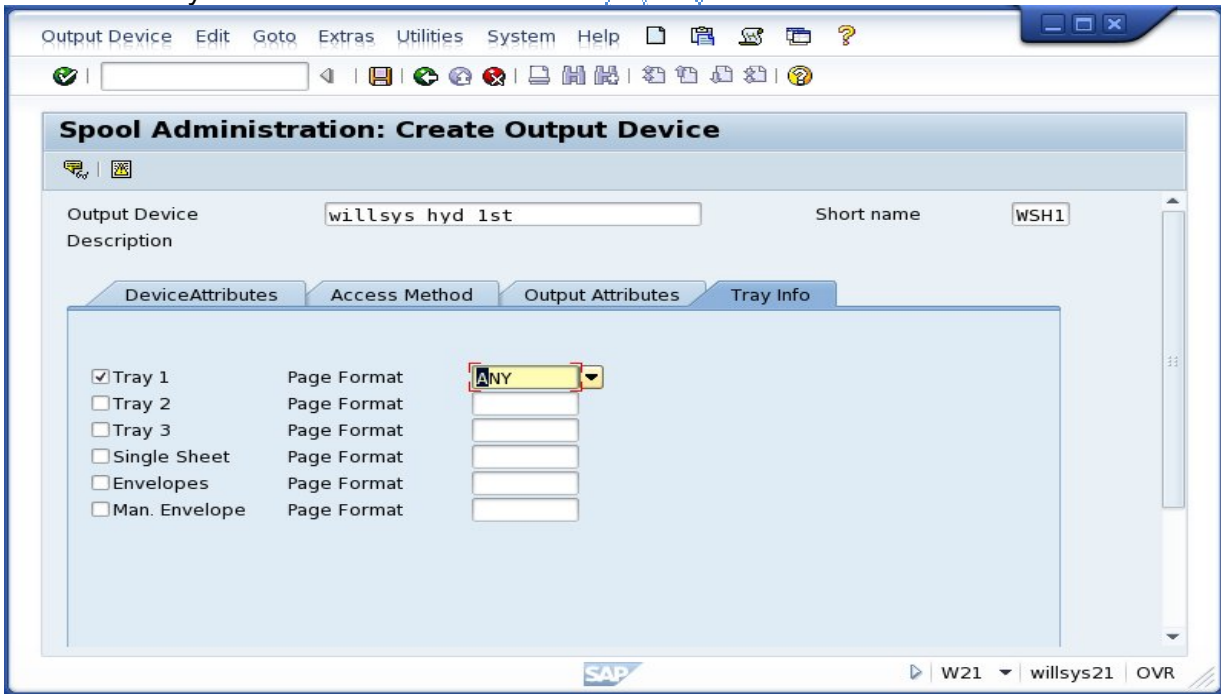
→SAVE

→**Select Output attributes tab:**

Specify the cover page print. If the sequence is mandatory while printing ,then select the option **“process requests sequentially”**.

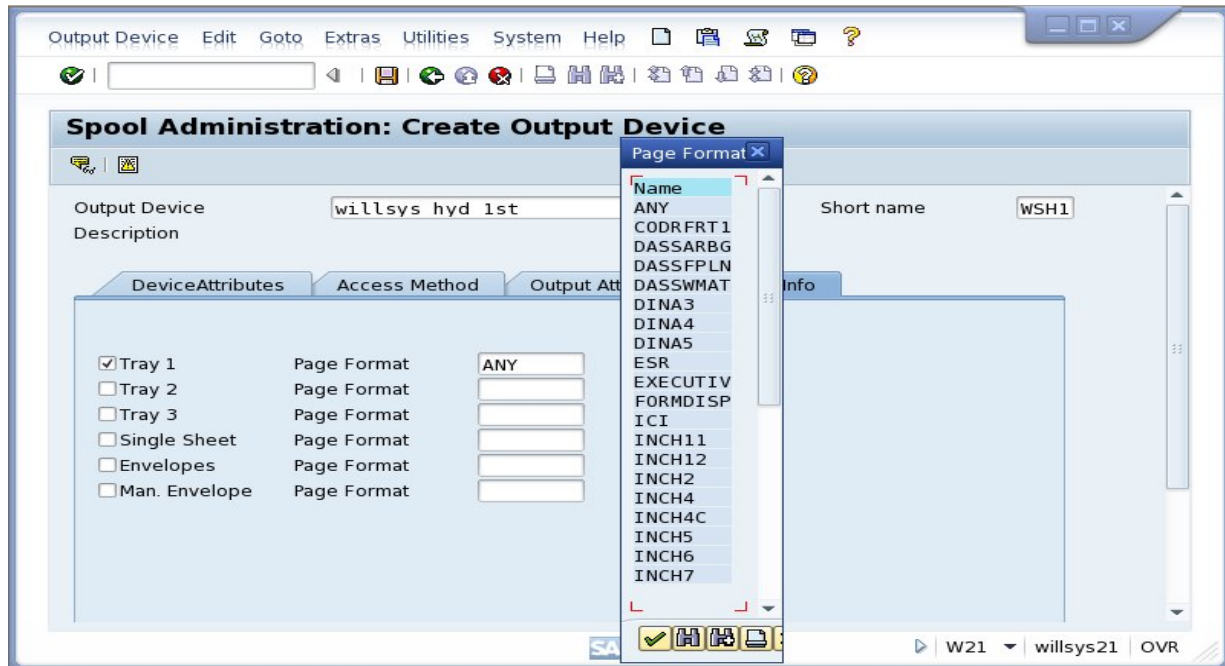


→select "Tray Info" tab



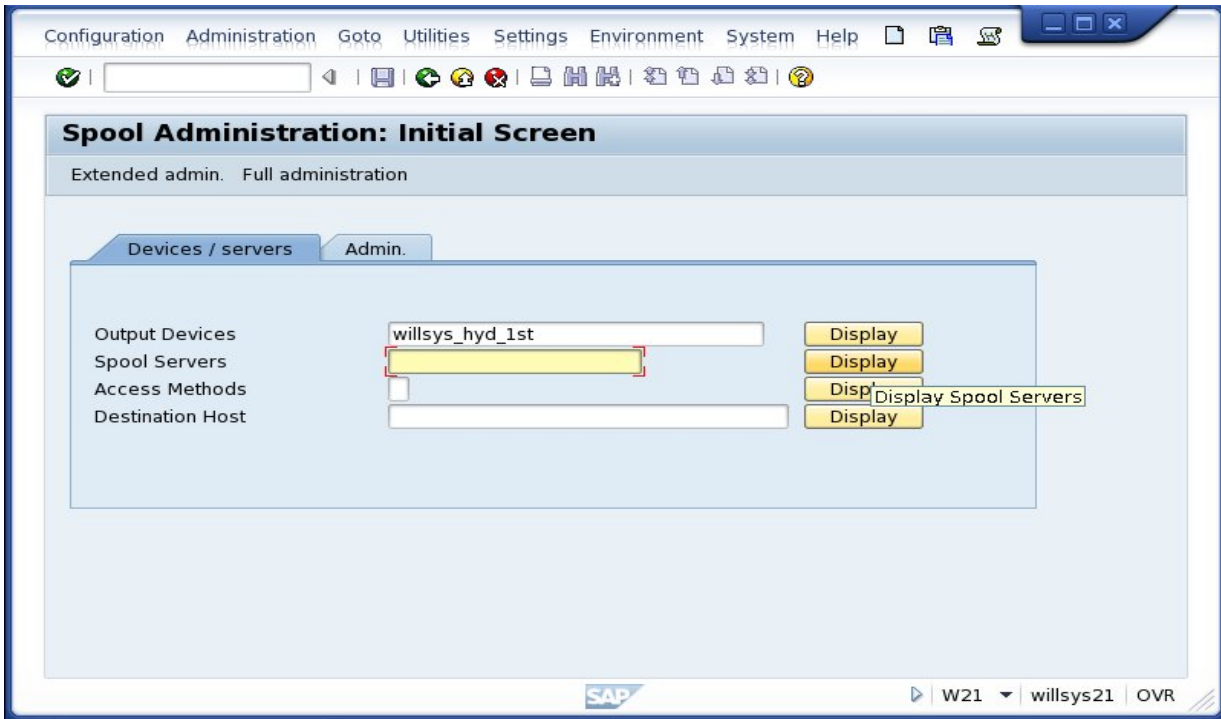
→Specify the tray information: (print to tray 1,2,3 etc) and page format.

→ Save the output device.

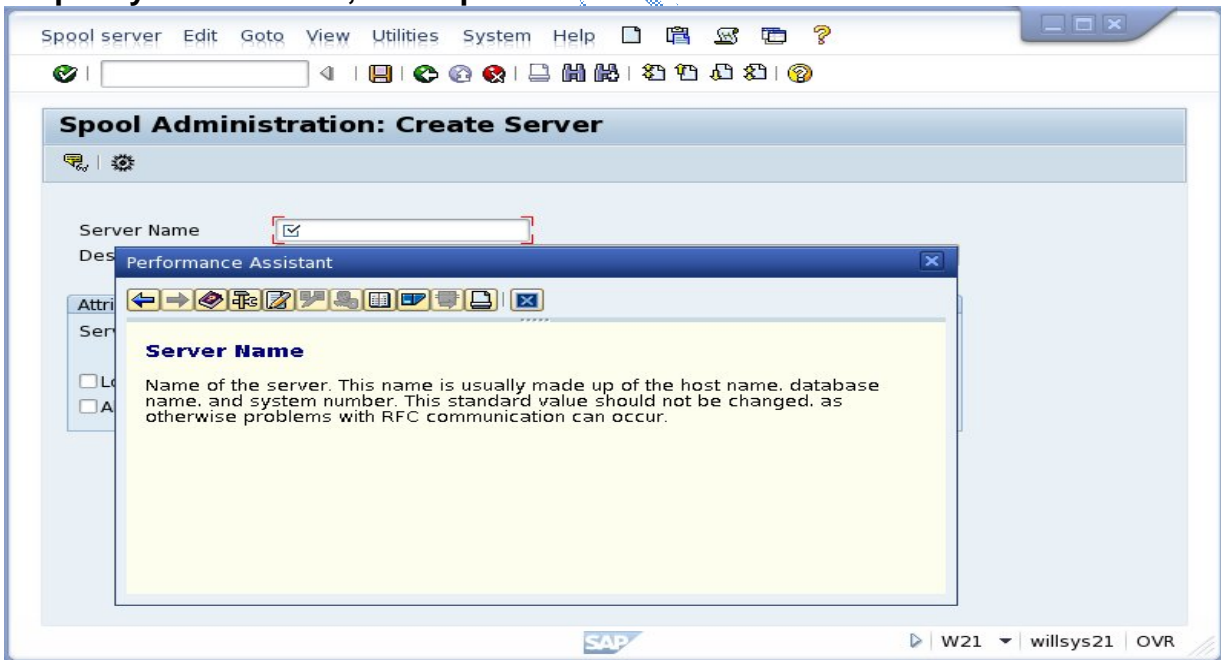


→ come back to SPAD home screen → select spool servers → click on Display

WILLSYS INFOSYS



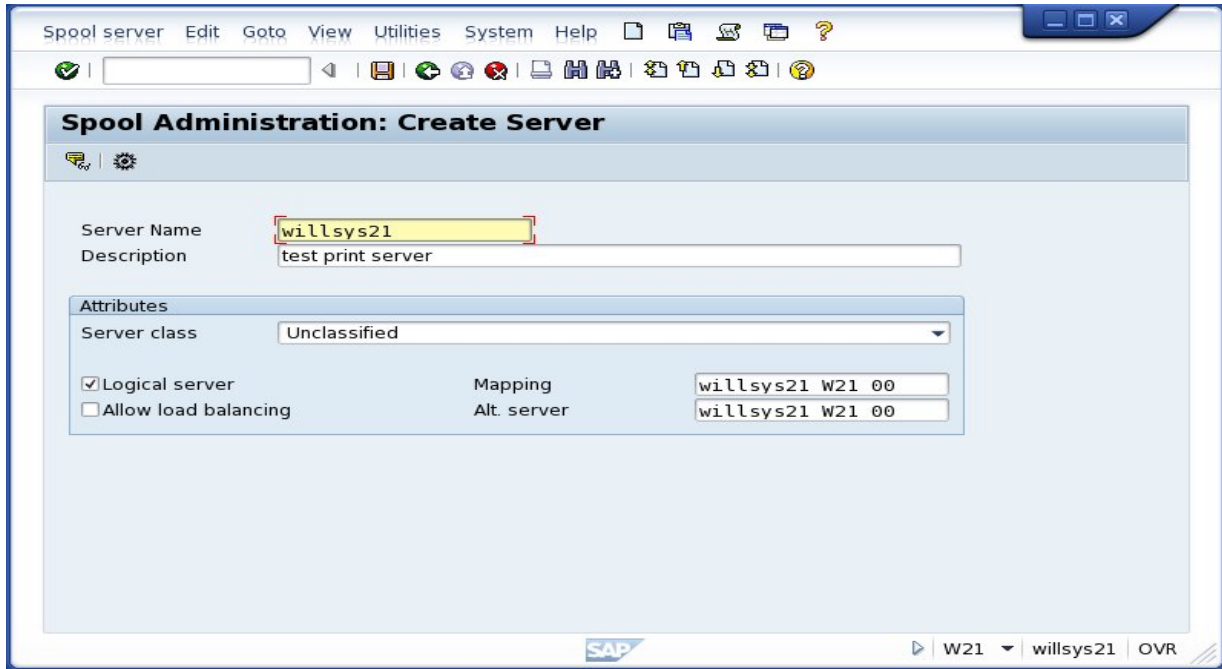
→specify Server name, description server class



→check Logical server and provide mapping and alternative server.

REAL SPOOL SERVER: The server (instance) with at least one spool process.

LOGICAL SPOOL SERVER: The server assigned to a real spool server or to any mapping server. It is used for spool load balancing.



Spool Management:

The spool requests can be printed to any other alternate printer, change the priority of printing forward to any other users (Transaction: Where transaction **SBWP** is used to display the forwarded spool request) change the number of copies and priority etc in **SP01**.

“Problem” indicates a minor error such as an incomplete character set. The output request printed, but the output probably contains errors.

- Check whether correct character set is selected.
- Check whether printer supports the character set.
- Check whether proper device type is available to print in the language.

“Error” indicates a server error. Such as network error. The request have not printed and remain in the spool system until they are deleted or until they reach their expiration date and or deleted during reorganization.

- Check the printer status.
- Check the print server status.
- Check the logistics such as printer, page, paper jam, toner, power off etc...(Out of SAP)

Settings for output device in SU01:

- Set default printer for user.
- Output the request immediately.
- Delete the request after output(Spool process deletes the request after output which is time consuming, so sap recommends to schedule “**RSPO1041**” to delete the spool requests periodically in the background mode, however sensitive requests can be deleted using this option).

Spool reorganization:

- Schedule **RSPO1041/RSPO0041** to delete the old spool requests from **TemSe**.
- Run the spool consistency on daily basis using **RSPO0043/RSPO1043**.

Note: If the above jobs are not scheduled the **TemSe** grows in gigabytes as a result, the tapes may not accommodate the growth, and backup fails.

It is also best practice to archive the spool requests or move to any other device.

TemSe administration:

Execute transaction **SP12** to display the memory/space using the client, user etc...

- It is used to display the growth of spool requires on daily basis.
- Spool requests are sensitive because the output can be displayed using **SP01**. The requests follow the mechanism “**WORM**” (Write Once Read More), print as many times as possible until it is deleted by reorganization job. Sensitive requests are scheduled to delete after print.

Related Content:

<http://service.sap.com>

<http://support.sap.com>

www.help.sap.com

www.sdn.sap.com/irj/sdn/index.

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