

2.3 Job Control

As part of prototyping, a job control system is set up on the Control Server. This prototyping work is to evaluate the possible solutions. Solutions from the following sources may be available:

1. SysGem
2. Nagios Reactor (including Core)
3. UC4

In addition, the following options in the job control must be considered:

- SP-Migration must be regulated
- regardless of the operating system (SLES, RH)

The Job Control data is based on data from the CMDB database, resulting in the creation of necessary job queues. The selection of the required data is primarily through the filter OS_Masterplan, in addition to other filters from the existing fields (eg APPL_ID , OS_TYPE ...) that are used.

2.3.1 First Job Queue

The first job queue contains the server names of all applications with Masterplan 1.

Masterplan 1 is dependent on the environment (Integration, Acceptance and Production):

- Integration : P - MP - 1T and P - MP - 1T 0
- Acceptance: P - MP - 1a and P - MP -1a 0
- Production: P - MP - 2p 0

Now additional options can also be selected:

- Using the OS_TYPE and OS_Subversion option SP-Migration
- Using the OS_Patchlevels option Patchinglevel (security only or default)
- Job Queue Monitoring: any, all, or a particular system (OR, AND, EQUAL)

Example: Production

SRV_HOSTNAME	OS_TYPE	OS_SUB VERSION	OS_ PATCHLEVEL	OS_ MASTERPLAN	APPL_ID
wxpdb11	Linux-SLES 11	3	2015-Q2	P-MP-1p-0	E-DEC:BS00550
wxpdb13	RedHat	6.5	2015-Q2	P-MP-1p	E-DEC:BS00550
wxpdb12	Linux-SLES 11	3	2015-Q2	P-MP-1p-1	E-DEC:BS00550
vmedecore10p15	Linux-SLES 11	3	2015-Q2	P-MP-2p-0	E-DEC:BS00550
vmedecore10p16	Linux-SLES 12	0	2015-Q2	P-MP-2p-1	E-DEC:BS00550
vmedecflow10p01	Linux-SLES 10	4	2015-Q2	P-MP-2p-0	E-DEC:BS00550

Option 1 : All SLES11SP3 - > SP-Migration to SP4

Option 2 : All SLES10SP4 - > Security only

Option 3 : Job Queue Monitoring : any system

Now, the Job Queue created can be shared and executed at a desired start time .

The Job Queue Monitoring option controls the release of the following job queues :

- Any system (or) : As soon as a system of the executed job queue per application becomes available again , the subsequent job queue starts
- All systems (and) : Only when all the systems of the Job Queue exported per application will be available again , starts the subsequent job Queue
- a particular system (=) : Once the dedicated system of the exported job Queue per application becomes available again , the subsequent Jobqueue begins

Upon reaching the start time, the systems are triggered in parallel on the Job Queue. Based on the options selected the patch script is run on each system.

Example:

```
# screen -S pmgr -d -m -h 1000 /admin/bin/pmgr.sh [options] [OS_Masterplan]
```

2.3.2 Second and Subsequent Job Queues

The second and subsequent job queues containing the names of all server applications with the Masterplan 2 (2-4) . Masterplan 2 (2-4) depends on the environment (Integration, Acceptance and Production):

- Integration: P - MP - 1T - 1
- Acceptance: P - MP - 1a - 1
- Production: P - MP - 2p 1 (3 : P - MP - 1P - 0 , P - MP - 1p ; 4 : P - MP - 1p - 1)

Now additional options can be selected:

- Using the OS_TYPE and OS_Subversion option SP-Migration
- Based on the OS_Patchlevels the Patchinglevel (security only or default) option
- job Queue monitoring : any (OR) , all (and) or a particular system (=)

Example: Production

SRV_HOSTNAME	OS_TYPE	OS_SUB_VERSION	OS_PATCHLEVEL	OS_MASTERPLAN	APPL_ID
wxpdb11	Linux-SLES 11	3	2015-Q2	P-MP-1p-0	E-DEC:BS00550
wxpdb13	RedHat	6.5	2015-Q2	P-MP-1p	E-DEC:BS00550
wxpdb12	Linux-SLES 11	3	2015-Q2	P-MP-1p-1	E-DEC:BS00550
vmedeccore10p15	Linux-SLES 11	3	2015-Q2	P-MP-2p-0	E-DEC:BS00550
vmedeccore10p16	Linux-SLES 12	0	2015-Q2	P-MP-2p-1	E-DEC:BS00550
vmedecflow10p01	Linux-SLES 10	4	2015-Q2	P-MP-2p-0	E-DEC:BS00550

Option 1 : All SLES11SP3 - > SP-Migration to SP4

Option 2 : All SLES10SP4 - > Security only

Option 3 : Job Queue Monitoring : All systems

Now, the Job Queue created can be shared and implemented with the desired latency. This waiting period refers to the first or previous job queue once it has been completed successfully.

If the previous Job Queue (per application) can not be successfully completed, then the following job queues per application are stopped or canceled. This error handling is controlled by the Job Queue monitoring.