



Serena Dimensions CM

Create, execute and schedule a Remote Job

1.1

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Introduction

Dimensions CM server has an inbuilt mechanism that allows a job to be run from a client either directly on the server itself or on a remote server/agent installation. It is also possible to schedule these jobs and use specific variables and in built logic using the inbuilt template system.

The following instructions provide a simple example of how to achieve this.

Step 1: Create a simple job template

In its simplest form a job is a script that can be run against the native Operating system of the node where the job is to be run.

- Create a file called **test.tplt** in **\$DM_ROOT/templates** on the CM server

On Windows:

```
del /f c:\temp\tpl.log  
echo Hallo > c:\temp\tpl.log
```

On Linux/UNIX:

```
rm -f /tmp/tpl.log  
echo Hallo > /tmp/tpl.log
```

Step 2: Test the job

- Login to DMCLI on the server as DMSYS or an equivalent administrative user and run the following command:

```
Dimensions>rexec /net=cmserver /template_id=test.tplt
```

Where: cmserver is the name of the CM server

- The following output should be generated by the command

```
Dimensions>rexec /net=stl-sup-sun2 /template_id=test.tplt
Passing the template for execution
cmd = /bin/sh "/tmp/tpl-1448881253-1-4692-1.sh" >/dev/null 2>/dev/null
Template processing complete and command submitted: user result code 0
Job R-16922510 SUCCEEDED - rc(0) errno(0)
Operation completed
```

- Verify the result by viewing the content of the file, this can be done from within the DMCLI prompt by running the following command

```
Dimensions> $ more c:\temp\tpl.log
```

On Linux/UNIX this would be

```
Dimensions> $ more /tmp/tpl.log
```

The file should simply contain the text: **Hallo**

Note: If login is made using a silent connection then the parameters /user and /password will need to be appended to the current command.

Step 3: Modify the job to include a template parameter

- Modify **test.tplt** in **\$DM_ROOT/templates** on the CM server with the following text highlighted in **yellow**.

On Windows:

```
del /f c:\temp\tpl.log
echo Hallo %NAME. at %DMHOUR.:%DMMINUTE. > c:\temp\tpl.log
```

On Linux/UNIX:

```
rm -f /tmp/tpl.log
echo Hallo %NAME. at %DMHOUR.:%DMMINUTE. > /tmp/tpl.log
```

Step 4: Test the job

- Login to DMCLI on the server as DMSYS or an equivalent administrative user and run the following command:

```
Dimensions>rexec /net=cmserver /template_id=test.tplt /param="NAME=World"
```

Where: cmserver is the name of the CM server

- The command should return a SUCCEEDED message e.g.

```
Job R-16922515 SUCCEEDED - rc(0) errno(0)
```

- Verify the result by viewing the content of the file, this can be done from within the DMCLI prompt by running the following command

```
Dimensions> $ more c:\temp\tpl.log
```

The file should simply contain the text: **Hallo World at HH:MM** where HH is the current hour and MM the current minute that the job was run.

Step 5: Create a schedule for the job

- Login using dmcli and create a new scheduled job, using the CSJ command

```
Dimensions>csj "Job1" /START_TIME="12-31-2015 15:15:00" /REPEAT="10 MINUTES"  
/JOB_DESC="Test sample template"
```

Note: Modify the value of START_TIME to reflect a time 5 minutes later than the current time.

- Activate the job, using the ESJ command:

```
Dimensions>esj "Job1" /JOB_STATUS=ACTIVE
```

- Relate the Job to the new schedule, using the RCSJ command:

```
Dimensions>rcsj "Job1" /CMD="rexec /NETWORK_NODE=cmserver /TEMPLATE_ID=test.tplt  
/param="NAME=World" /BATCH /USER=dmsys /PASSWORD=dmsys "
```

Note: Modify the value of /NETWORK_NODE to match the name of the CM server.

Step 6: View the list of scheduled jobs

- Use the LSJ command to view the list of jobs

```
Dimensions> lsj
```

- Will return output similar to the following:

```
Schedule Job Key: 8478512
  Name:      Job1
  Create time: 30-NOV-2015 15:09:22
  Start time: 30-NOV-2015 15:15:00
  Update time: 30-NOV-2015 15:09:34
  Repeat after: 10 MINUTES
  Status :    ACTIVE
  Description: Test sample template
  User:       DMSYS
Operation completed
```

- Wait 10 minutes then run the following command to check the job status

```
Dimensions> lsj Job1 /job_hist /commands
```

Will return something similar to:

```
Dimensions>LSJ "Job1" /JOB_HIST /COMMANDS
Schedule Job Key: 8478512
  Name:      Job1
  Create time: 30-NOV-2015 15:09:22
  Start time: 01-DEC-2015 10:25:00
  Update time: 01-DEC-2015 10:15:13
  Repeat after: 10 MINUTES
  Status :    ACTIVE
  Description: Test sample template
  User:       DMSYS
  Related commands: 1

      Sequence: 1
      Object   ID:
      Object   Type: UNIDENTIFIED
      Relation UID: 8478514
      Command  UID: 8478513
      Create   Time: 30-NOV-2015 15:10:11
      Command:  rexec /NETWORK_MODE=WIN-FCF6LL04NJ3 /TEMPLATE_ID
test.tplt /BATCH /USER=dmsys /PASSWORD=dmsys
      History: 115

      HIST UID: 8478516
      Status:   FINISHED
      Start time: 30-NOV-2015 15:15:17
      Finish Time: 30-NOV-2015 15:15:17
      User:     DMSYS
```

The output below can be broken down

- 1 – Name of the Scheduled Job
- 2 – The actual command that was run
- 3 – The history and status of the job being called, the history will be appended to each time the scheduler calls the job

Step 7: Deactivate the job

Optional: You may want to wait another 10 minutes and check the `tpl.log` file for a new timestamp within the output and another history entry when running the command: `lsj Job1 /job_hist`

- To deactivate the job simply run the following DMCLI command:

```
Dimensions>esj "Job1" /JOB_STATUS=INACTIVE
```

Further information

More detailed information on the commands run can be found in the Command Line Reference Guide

Further details on remote jobs and scheduling can be found in the System Administration Guide, chapter entitled *Executing Operations on Remote Nodes*

Both documents can be downloaded from http://help.serena.com/doc_center/doc_center.html#dcm