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**SnapshotPSS powershell script**

**Test report**

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# Report content

This report aims to provide a summary of the functionality tests executed during the development phase of the SnapshotPSS script and powershell module.

# Functionality tests

This chapter lists the different functionality tests executed and their results.

## Restore VM with mandatory script parameters

* + 1. Test

Start the script for a VM restore through the command line parameters. Only enter the mandatory parameters.

* + 1. Command example

./Start-DoradoCDPRestore -DoradoStorage '192.168.0.1' -vCenter '192.168.0.2' -VMName 'CentOS\_TEST\_02' -RecoverHost 'ESX\_NTE'

* + 1. Result

User is prompted for credentials.

VM is correctly restored in the origin VM folder. It’s not started and its network adapters are disconnected.

All the different objects are created with a timestamped suffix.

* + 1. Known issues

RecoverHost is a case sensitive value, as the Dorado Rest API itself is case sensitive.

RecoverHost should match a Dorado Host, and an ESXi host should be declared in the vCenter from either the RecoverHost name or its IP address.

## Restore VM with optional script parameters

* + 1. Test

Start the script for a VM restore through the command line parameters. Set most of the optional parameters for restores.

* + 1. Command example

./Start-DoradoCDPRestore -DoradoStorage '192.168.0.1' -vCenter '192.168.0.2' -VMName 'CentOS\_TEST\_02' -RecoverHost 'ESX\_NTE' -HyperCDPDuplicateName 'test\_LUN\_HUAWEI' -RestoredVMName 'test\_restore\_HUAWEI' -RestoredVMFolderName 'TEST' -StartRestoredVM -KeepRestoredVMNetwork

* + 1. Result

User is prompted for credentials.

VM is correctly restored in the specified folder with its new name.

Restore VM is started with its network adapters in their original state.

The HyperCDP duplicate is named after the specified parameter.

## Restore VM with configuration XML file

* + 1. Test

Start the script for a VM restore through the command line parameter and specify an XML configuration file.

* + 1. Command example

.\Start-DoradoCDPRestore.ps1 -ConfigFilePath 'C:\myPath\HUAWEI\restore\_config.xml'

Configuration file example :

<Configuration>

    <DoradoStorage>192.168.0.1</DoradoStorage>

    <vCenter>192.168.0.2</vCenter

    <VMName>CentOS\_TEST\_02</VMName>

    <RecoverHost>ESX\_NTE</RecoverHost>

</Configuration>

* + 1. Result

VM is correctly restored in the origin VM folder. It’s not started and its network adapters are disconnected.

All the different objects are created with a timestamped suffix.

## Start script without any parameter

* + 1. Test

Start the script without any parameter.

* + 1. Command example

.\Start-DoradoCDPRestore.ps1

* + 1. Result

User is prompted for the mandatory parameters and the script is started for a Restore.

Once every mandatory parameter is set by the user through the command line, the script correctly resumes and does the restore.

* + 1. Known issues

Once prompted, user should set the values without trying to enclose them between single quotation marks or double quotation marks.

## Start script to Cleanup a restored VM

* + 1. Test

Start the script in Cleanup mode, to remove a restored VM and all its associated storage objects.

* + 1. Command example

./Start-DoradoCDPRestore -DoradoStorage '192.168.0.1' -vCenter '192.168.0.2' -VMName 'test\_restore\_HUAWEI' -RecoverHost 'ESX\_NTE' -Mode Cleanup

* + 1. Result

User is prompted for credentials and is asked for confirmation to shut down the VM (if its currently PoweredOn) and once more to remove the VM.

All the associated objects (VMWare temporary datastore, snapshot mapping, snapshot and LUN) are deleted.

## Start script to Cleanup a restored VM that was moved through vMotion

* + 1. Test

Start the script in Cleanup mode to remove the storage objects of a previous restore without removing the current VM that was moved through storage vMotion to another production datastore.

* + 1. Command example

./Start-DoradoCDPRestore -DoradoStorage '192.168.0.1' -vCenter '192.168.0.2' -VMName 'test\_restore\_HUAWEI' -RecoverHost 'ESX\_NTE' -Mode Cleanup -iSStoragevMotionVM -DatastoreName 'snap-00b7f05c-DS\_LUN\_TEST\_02'

* + 1. Result

Datastore Name should be set to be able to clean all temporary storage objects without removing the VM itself.

All the associated objects (VMWare temporary datastore, snapshot mapping, snapshot and LUN) are deleted.

## Cleanup a restored VM from the script prompt

* + 1. Test

Start the script for a VM restore through the command line parameters.

Once the VM is restored, press “yes” to the prompt "Do you want to cleanup the restored VM ?".

* + 1. Command example

./Start-DoradoCDPRestore -DoradoStorage '192.168.0.1' -vCenter '192.168.0.2' -VMName 'CentOS\_TEST\_02' -RecoverHost 'ESX\_NTE'

* + 1. Result

User is prompted to confirm if the VM was moved through storage vMotion or not, as well as to set the Datastore Name if it was moved.

User is then prompted to confirm the VM shut down and removal and the storage objects used for the restore are deleted.

## Restore another VM or Cleanup another VM after a successful script run

* + 1. Test

Start the script for a VM restore or cleanup through the command line parameters (or through a configuration file).

Once the VM is restored or the cleanup is done, press “Restore” or “Cleanup” to the prompt "Do you want to restore another VM / cleanup another VM or stop the script ?".

* + 1. Command example

./Start-DoradoCDPRestore -DoradoStorage '192.168.0.1' -vCenter '192.168.0.2' -VMName 'CentOS\_TEST\_02' -RecoverHost 'ESX\_NTE'

* + 1. Result

Depending on the mode selected by the user, he is prompted for each mandatory value needed for this mode.

He’ll also be asked if he wants to set each optional value.

User will be able to restore or cleanup new VMs until he selects “Stop” at this last prompt.

## Start script without any Log parameters configured

* + 1. Test

Start the script for a VM restore or cleanup through the command line parameters (or through a configuration file) without setting the LogPath and LogName variables.

* + 1. Command example

./Start-DoradoCDPRestore -DoradoStorage '192.168.0.1' -vCenter '192.168.0.2' -VMName 'CentOS\_TEST\_02' -RecoverHost 'ESX\_NTE'

* + 1. Result

Logs will be automatically created in a ‘Logs’ folder in the same directory as the script.

Each log will be prefixed with a timestamp and be named after the script file.

## Try to restore a VM without any HyperCDP objects

* + 1. Test

Start the script for a VM restore on a VM that doesn’t have any HyperCDP objects.

* + 1. Command example

./Start-DoradoCDPRestore -DoradoStorage '192.168.0.1' -vCenter '192.168.0.2' -VMName 'CentOS\_TEST\_02' -RecoverHost 'ESX\_NTE'

* + 1. Result

Script will fail because of an empty HyperCDP objects list.

## Computer is missing a module

* + 1. Test

Start the script for a VM restore on a VM, but one of the modules is missing (be it PowerCLI or Huawei.Dorado).

* + 1. Command example

./Start-DoradoCDPRestore -DoradoStorage '192.168.0.1' -vCenter '192.168.0.2' -VMName 'CentOS\_TEST\_02' -RecoverHost 'ESX\_NTE'

* + 1. Result

Script will fail before doing anything on the import-module command.

Nothing will be logged as the log functions are defined after the modules are imported.

Every error encountered inside the script will stop its execution.