Installing XenDesktop using Desired State Configuration

The XenDesktop resource provider for Windows Desired State Configuration allows Citrix customers, Service Providers, and any compatible third party tool to create consistent and repeatable installation of XenDesktop roles.

Desired State Configuration is a base for an easily automated and repeatable deployment process that is consistent regardless of where XenDesktop sits (e.g. public, private, hybrid clouds).

The resource provider uses Desired State Configuration instead of a custom agent to support XenDesktop installation across multiple management platforms.

How it works

Desired State Configuration is an engine that can apply and enforce configurations of software packages through either a push or pull model.

The resource provider for XenDesktop can install any single XenDesktop role to a target machine. The XenDesktop resource provider supports presentation of the installation media by many methods including ZIP archive, ISO, or data disk; allowing great flexibility in machine deployment.

XenDesktop resource provider requirements

The use of the Desired State Configuration resource provider for XenDesktop depends on the following:

* Server 2012 R2 (or PowerShell v4 with Server 2012 or Server 2008 R2)
* XenDesktop media delivered to the target machine (zip, ISO, DVD, data disk, folder)
  + Only **XenDesktop 7.5 or later** is supported.
* XenDesktop resource provider
  + Must be in the PowerShell for auto-load such as: $env:ProgramFiles\WindowsPowerShell\Modules
  + This is required to both create and apply a configuration.

Usage and Examples

Enabling the XenDesktop resource provider

This can be accomplished through a number of different means. The following example demonstrates manually applying a configuration using a sample script.

Sample

A simple configuration that can be performed at the console of a machine is:

Configuration xdServerRole

{

Param (

[string]$XDRole,

[string]$XDMediaPath

)

Import-DscResource -Module CitrixXenDesktop

Node localhost

{

# set the LocalConfigurationManager properly

LocalConfigurationManager

{

RebootNodeIfNeeded = $true

}

# Install XenDesktop Role

Citrix\_XenDesktopRole xdRole

{

Ensure = "Present"

XenDesktopRole = $XDRole

XenDesktopMediaPath = $XDMediaPath

}

} # close of Node

} # close of configuration

# compile the configuration into a MOF format

xdServerRole -XDRole "License" -XDMediaPath "D:\"

# set the meta.mof to support DSC handling the rebooting

Set-DscLocalConfigurationManager -Path .\xdServerRole -ComputerName localhost -Verbose

# Run the configuration on localhost

Start-DscConfiguration -Path .\xdServerRole -ComputerName localhost -Force -Verbose -Wait

In this example the following parameters are defined as:

$XDRole = the XenDesktop Server role that will be installed. "Controller","StoreFront","License","Director","DesktopVDA","SessionVDA"

$XDMediaPath = the path to the XenDesktop media. This can be a mounted ISO, attached DVD (i.e. "D:\"), an unzipped archive ( "C:\unzippath\media" ) or other source.

Additionally

There are a number of useful tools and references that have been created by Microsoft in support of the Desired State Configuration feature.

If problems are encountered the diagnostics module and its Trace-xDscOperation and Get-xDscOperation commands are highly useful in identifying most issues and errors. <http://blogs.msdn.com/b/powershell/archive/2014/02/11/dsc-diagnostics-module-analyze-dsc-logs-instantly-now.aspx>