# Based on the size of the project I choose to use the PUSH method

# On DC install/update the following packages:

Install-PackageProvider *-Name* NuGet *-MinimumVersion* 2.8.5.201 *-Force*

Install-Module PowerShellGet *-Force*

A screen shot of a computer

Description automatically generated

# create data file that only contains the name of the Servers and the features that will be installed.

# see data.psd1

# Create the share

# the filename is configuration.ps1

# After that I am creating C:\Homework on the DC and copy the files (data.psd1 and configuration.ps1) there

# (it's easier to create the files via VSCode or other IDE)

A screenshot of a computer program

Description automatically generated

# Open powershell as administrator:

# win+r -> powershell -> Ctrl + Shift + Enter

# Run the following commands:

Install-Module -Name ComputerManagementDsc

cd C:\Homework

# Source the file configuration.ps1

. .\configuration.ps1

# Call it and add the additional data:

WebServer -ConfigurationData .\data.psd1

A screenshot of a computer

Description automatically generated

A computer screen with white text

Description automatically generated

PS C:\Homework> Start-DscConfiguration -Path .\WebServer\ -Wait -Verbose -Force VERBOSE: Perform operation 'Invoke CimMethod' with following parameters, ''methodName' = SendConfigurationApply,'className' = MSFT\_DSCLocalConfigurationManager,'namespaceName' = root/Microsoft/Windows/DesiredStateConfiguration'. VERBOSE: Perform operation 'Invoke CimMethod' with following parameters, ''methodName' = SendConfigurationApply,'className' = MSFT\_DSCLocalConfigurationManager,'namespaceName' = root/Microsoft/Windows/DesiredStateConfiguration'. VERBOSE: Perform operation 'Invoke CimMethod' with following parameters, ''methodName' = SendConfigurationApply,'className' = MSFT\_DSCLocalConfigurationManager,'namespaceName' = root/Microsoft/Windows/DesiredStateConfiguration'. VERBOSE: An LCM method call arrived from computer DC with user sid S-1-5-21-572650300-3851719927-2383853929-500. VERBOSE: [DC]: LCM: [ Start Set ] VERBOSE: An LCM method call arrived from computer DC with user sid S-1-5-21-572650300-3851719927-2383853929-500. VERBOSE: [SERVER1]: LCM: [ Start Set ] VERBOSE: An LCM method call arrived from computer DC with user sid S-1-5-21-572650300-3851719927-2383853929-500. VERBOSE: [SERVER2]: LCM: [ Start Set ] VERBOSE: [DC]: LCM: [ Start Resource ] [[File]CreateFolder] VERBOSE: [DC]: LCM: [ Start Test ] [[File]CreateFolder] VERBOSE: [DC]: [[File]CreateFolder] The destination object was found and no action is required. VERBOSE: [DC]: LCM: [ End Test ] [[File]CreateFolder] in 0.0320 seconds. VERBOSE: [DC]: LCM: [ Skip Set ] [[File]CreateFolder] VERBOSE: [DC]: LCM: [ End Resource ] [[File]CreateFolder] VERBOSE: [DC]: LCM: [ Start Resource ] [[SmbShare]CreateShare] VERBOSE: [DC]: LCM: [ Start Test ] [[SmbShare]CreateShare] VERBOSE: [DC]: [[SmbShare]CreateShare] Determining if the SMB share 'IndexShare' is in the desired state. VERBOSE: [DC]: [[SmbShare]CreateShare] Getting the current state of the SMB share 'IndexShare'. VERBOSE: [SERVER2]: LCM: [ Start Resource ] [[WindowsFeature]Web-Server] VERBOSE: [SERVER2]: LCM: [ Start Test ] [[WindowsFeature]Web-Server] VERBOSE: [DC]: [[SmbShare]CreateShare] The SMB share with the name 'IndexShare' exist. Evaluating the properties of the SMB share. VERBOSE: [SERVER1]: LCM: [ Start Resource ] [[WindowsFeature]Web-Server] VERBOSE: [SERVER1]: LCM: [ Start Test ] [[WindowsFeature]Web-Server] VERBOSE: [DC]: [[SmbShare]CreateShare] Comparing values in property 'ReadAccess'. (DRC0028) VERBOSE: [DC]: [[SmbShare]CreateShare] MATCH: Value [0] (type 'System.String') for property 'ReadAccess' does match. Current state is 'WSAA\SERVER1$' and desired state is 'WSAA\SERVER1$'. (DRC0025) VERBOSE: [DC]: [[SmbShare]CreateShare] MATCH: Value [1] (type 'System.String') for property 'ReadAccess' does match. Current state is 'WSAA\SERVER2$' and desired state is 'WSAA\SERVER2$'. (DRC0025) VERBOSE: [DC]: [[SmbShare]CreateShare] MATCH: Value (type 'System.String') for property 'Name' does match. Current state is 'IndexShare' and desired state is 'IndexShare'. (DRC0020) VERBOSE: [DC]: [[SmbShare]CreateShare] Comparing values in property 'FullAccess'. (DRC0028) VERBOSE: [DC]: [[SmbShare]CreateShare] MATCH: Value [0] (type 'System.String') for property 'FullAccess' does match. Current state is 'WSAA\Domain Admins' and desired state is 'WSAA\Domain Admins'. (DRC0025) VERBOSE: [DC]: [[SmbShare]CreateShare] MATCH: Value (type 'System.String') for property 'Path' does match. Current state is 'C:\HTMLShare' and desired state is 'C:\HTMLShare'. (DRC0020) VERBOSE: [DC]: [[SmbShare]CreateShare] MATCH: Value (type 'System.String') for property 'FolderEnumerationMode' does match. Current state is 'AccessBased' and desired state is 'AccessBased'. (DRC0020) VERBOSE: [DC]: [[SmbShare]CreateShare] MATCH: Value (type 'System.String') for property 'Ensure' does match. Current state is 'Present' and desired state is 'Present'. (DRC0020) VERBOSE: [DC]: LCM: [ End Test ] [[SmbShare]CreateShare] in 1.6630 seconds. VERBOSE: [DC]: LCM: [ Skip Set ] [[SmbShare]CreateShare] VERBOSE: [DC]: LCM: [ End Resource ] [[SmbShare]CreateShare] VERBOSE: [DC]: LCM: [ Start Resource ] [[File]IndexPage] VERBOSE: [DC]: LCM: [ Start Test ] [[File]IndexPage] VERBOSE: [DC]: [[File]IndexPage] The destination object was found and no action is required. VERBOSE: [DC]: LCM: [ End Test ] [[File]IndexPage] in 0.0110 seconds. VERBOSE: [DC]: LCM: [ Skip Set ] [[File]IndexPage] VERBOSE: [DC]: LCM: [ End Resource ] [[File]IndexPage] VERBOSE: [DC]: LCM: [ End Set ] VERBOSE: [DC]: LCM: [ End Set ] in 2.6670 seconds. VERBOSE: Operation 'Invoke CimMethod' complete. VERBOSE: [SERVER2]: [[WindowsFeature]Web-Server] The operation 'Get-WindowsFeature' started: Web-Server VERBOSE: [SERVER1]: [[WindowsFeature]Web-Server] The operation 'Get-WindowsFeature' started: Web-Server VERBOSE: [SERVER2]: [[WindowsFeature]Web-Server] The operation 'Get-WindowsFeature' succeeded: Web-Server VERBOSE: [SERVER2]: LCM: [ End Test ] [[WindowsFeature]Web-Server] in 1.4840 seconds. VERBOSE: [SERVER2]: LCM: [ Start Set ] [[WindowsFeature]Web-Server] VERBOSE: [SERVER2]: [[WindowsFeature]Web-Server] Installation started... VERBOSE: [SERVER1]: [[WindowsFeature]Web-Server] The operation 'Get-WindowsFeature' succeeded: Web-Server VERBOSE: [SERVER1]: LCM: [ End Test ] [[WindowsFeature]Web-Server] in 1.7500 seconds. VERBOSE: [SERVER1]: LCM: [ Start Set ] [[WindowsFeature]Web-Server] VERBOSE: [SERVER1]: [[WindowsFeature]Web-Server] Installation started... VERBOSE: [SERVER2]: [[WindowsFeature]Web-Server] Continue with installation? VERBOSE: [SERVER2]: [[WindowsFeature]Web-Server] Prerequisite processing started... VERBOSE: [SERVER1]: [[WindowsFeature]Web-Server] Continue with installation? VERBOSE: [SERVER1]: [[WindowsFeature]Web-Server] Prerequisite processing started... VERBOSE: [SERVER1]: [[WindowsFeature]Web-Server] Prerequisite processing succeeded. VERBOSE: [SERVER2]: [[WindowsFeature]Web-Server] Prerequisite processing succeeded. VERBOSE: [SERVER1]: [[WindowsFeature]Web-Server] Installation succeeded. VERBOSE: [SERVER1]: [[WindowsFeature]Web-Server] Successfully installed the feature Web-Server. VERBOSE: [SERVER1]: LCM: [ End Set ] [[WindowsFeature]Web-Server] in 55.2910 seconds. VERBOSE: [SERVER1]: LCM: [ End Resource ] [[WindowsFeature]Web-Server] VERBOSE: [SERVER1]: LCM: [ Start Resource ] [[WindowsFeature]Web-Mgmt-Tools] VERBOSE: [SERVER1]: LCM: [ Start Test ] [[WindowsFeature]Web-Mgmt-Tools] VERBOSE: [SERVER1]: [[WindowsFeature]Web-Mgmt-Tools] The operation 'Get-WindowsFeature' started: Web-Mgmt-Tools VERBOSE: [SERVER1]: [[WindowsFeature]Web-Mgmt-Tools] The operation 'Get-WindowsFeature' succeeded: Web-Mgmt-Tools VERBOSE: [SERVER1]: LCM: [ End Test ] [[WindowsFeature]Web-Mgmt-Tools] in 0.7970 seconds. VERBOSE: [SERVER1]: LCM: [ Start Set ] [[WindowsFeature]Web-Mgmt-Tools] VERBOSE: [SERVER1]: [[WindowsFeature]Web-Mgmt-Tools] Installation started... VERBOSE: [SERVER1]: [[WindowsFeature]Web-Mgmt-Tools] Continue with installation? VERBOSE: [SERVER1]: [[WindowsFeature]Web-Mgmt-Tools] Prerequisite processing started... VERBOSE: [SERVER2]: [[WindowsFeature]Web-Server] Installation succeeded. VERBOSE: [SERVER2]: [[WindowsFeature]Web-Server] Successfully installed the feature Web-Server. VERBOSE: [SERVER2]: LCM: [ End Set ] [[WindowsFeature]Web-Server] in 57.5470 seconds. VERBOSE: [SERVER2]: LCM: [ End Resource ] [[WindowsFeature]Web-Server] VERBOSE: [SERVER2]: LCM: [ Start Resource ] [[WindowsFeature]Web-Mgmt-Tools] VERBOSE: [SERVER2]: LCM: [ Start Test ] [[WindowsFeature]Web-Mgmt-Tools] VERBOSE: [SERVER2]: [[WindowsFeature]Web-Mgmt-Tools] The operation 'Get-WindowsFeature' started: Web-Mgmt-Tools VERBOSE: [SERVER2]: [[WindowsFeature]Web-Mgmt-Tools] The operation 'Get-WindowsFeature' succeeded: Web-Mgmt-Tools VERBOSE: [SERVER2]: LCM: [ End Test ] [[WindowsFeature]Web-Mgmt-Tools] in 1.1570 seconds. VERBOSE: [SERVER2]: LCM: [ Start Set ] [[WindowsFeature]Web-Mgmt-Tools] VERBOSE: [SERVER2]: [[WindowsFeature]Web-Mgmt-Tools] Installation started... VERBOSE: [SERVER2]: [[WindowsFeature]Web-Mgmt-Tools] Continue with installation? VERBOSE: [SERVER2]: [[WindowsFeature]Web-Mgmt-Tools] Prerequisite processing started... VERBOSE: [SERVER1]: [[WindowsFeature]Web-Mgmt-Tools] Prerequisite processing succeeded. VERBOSE: [SERVER2]: [[WindowsFeature]Web-Mgmt-Tools] Prerequisite processing succeeded. VERBOSE: [SERVER1]: [[WindowsFeature]Web-Mgmt-Tools] Installation succeeded. VERBOSE: [SERVER1]: [[WindowsFeature]Web-Mgmt-Tools] Successfully installed the feature Web-Mgmt-Tools. VERBOSE: [SERVER1]: LCM: [ End Set ] [[WindowsFeature]Web-Mgmt-Tools] in 31.4060 seconds. VERBOSE: [SERVER1]: LCM: [ End Resource ] [[WindowsFeature]Web-Mgmt-Tools] VERBOSE: [SERVER1]: LCM: [ Start Resource ] [[File]CopyIndexToServer\_$($Node.NodeName)] VERBOSE: [SERVER1]: LCM: [ Start Test ] [[File]CopyIndexToServer\_$($Node.NodeName)] VERBOSE: [SERVER1]: [[File]CopyIndexToServer\_$($Node.NodeName)] The system cannot find the file specified. VERBOSE: [SERVER1]: [[File]CopyIndexToServer\_$($Node.NodeName)] The related file/directory is: C:\inetpub\wwwroot\index.html. VERBOSE: [SERVER1]: [[File]CopyIndexToServer\_$($Node.NodeName)] Building file list from cache. VERBOSE: [SERVER1]: LCM: [ End Test ] [[File]CopyIndexToServer\_$($Node.NodeName)] in 0.1560 seconds. VERBOSE: [SERVER1]: LCM: [ Start Set ] [[File]CopyIndexToServer\_$($Node.NodeName)] VERBOSE: [SERVER1]: [[File]CopyIndexToServer\_$($Node.NodeName)] The system cannot find the file specified. VERBOSE: [SERVER1]: [[File]CopyIndexToServer\_$($Node.NodeName)] The related file/directory is: C:\inetpub\wwwroot\index.html. VERBOSE: [SERVER1]: [[File]CopyIndexToServer\_$($Node.NodeName)] Building file list from cache. VERBOSE: [SERVER1]: [[File]CopyIndexToServer\_$($Node.NodeName)] Copying file \\DC\IndexShare\index.html to C:\inetpub\wwwroot\index.html. VERBOSE: [SERVER1]: LCM: [ End Set ] [[File]CopyIndexToServer\_$($Node.NodeName)] in 0.0470 seconds. VERBOSE: [SERVER1]: LCM: [ End Resource ] [[File]CopyIndexToServer\_$($Node.NodeName)] VERBOSE: [SERVER1]: LCM: [ End Set ] VERBOSE: [SERVER1]: LCM: [ End Set ] in 91.7540 seconds. VERBOSE: Operation 'Invoke CimMethod' complete. VERBOSE: [SERVER2]: [[WindowsFeature]Web-Mgmt-Tools] Installation succeeded. VERBOSE: [SERVER2]: [[WindowsFeature]Web-Mgmt-Tools] Successfully installed the feature Web-Mgmt-Tools. VERBOSE: [SERVER2]: LCM: [ End Set ] [[WindowsFeature]Web-Mgmt-Tools] in 31.1790 seconds. VERBOSE: [SERVER2]: LCM: [ End Resource ] [[WindowsFeature]Web-Mgmt-Tools] VERBOSE: [SERVER2]: LCM: [ Start Resource ] [[File]CopyIndexToServer\_$($Node.NodeName)] VERBOSE: [SERVER2]: LCM: [ Start Test ] [[File]CopyIndexToServer\_$($Node.NodeName)] VERBOSE: [SERVER2]: [[File]CopyIndexToServer\_$($Node.NodeName)] The system cannot find the file specified. VERBOSE: [SERVER2]: [[File]CopyIndexToServer\_$($Node.NodeName)] The related file/directory is: C:\inetpub\wwwroot\index.html. VERBOSE: [SERVER2]: [[File]CopyIndexToServer\_$($Node.NodeName)] Building file list from

cache.

VERBOSE: [SERVER2]: LCM: [ End Test ] [[File]CopyIndexToServer\_$($Node.NodeName)] in 0.1720 seconds.

VERBOSE: [SERVER2]: LCM: [ Start Set ] [[File]CopyIndexToServer\_$($Node.NodeName)]

VERBOSE: [SERVER2]: [[File]CopyIndexToServer\_$($Node.NodeName)] The system cannot find the

file specified.

VERBOSE: [SERVER2]: [[File]CopyIndexToServer\_$($Node.NodeName)] The related file/directory

is: C:\inetpub\wwwroot\index.html.

VERBOSE: [SERVER2]: [[File]CopyIndexToServer\_$($Node.NodeName)] Building file list from

cache.

VERBOSE: [SERVER2]: [[File]CopyIndexToServer\_$($Node.NodeName)] Copying file

\\DC\IndexShare\index.html to C:\inetpub\wwwroot\index.html.

VERBOSE: [SERVER2]: LCM: [ End Set ] [[File]CopyIndexToServer\_$($Node.NodeName)] in 0.0620 seconds.

VERBOSE: [SERVER2]: LCM: [ End Resource ] [[File]CopyIndexToServer\_$($Node.NodeName)]

VERBOSE: [SERVER2]: LCM: [ End Set ]

VERBOSE: [SERVER2]: LCM: [ End Set ] in 93.9650 seconds.

VERBOSE: Operation 'Invoke CimMethod' complete.

VERBOSE: Time taken for configuration job to complete is 94.462 seconds

PS C:\Homework>

# To test <http://SERVER1> or <http://SERVER2>

A screenshot of a computer

Description automatically generated

**A screenshot of a computer

Description automatically generated**