**Windows Server 2012 RS (70-410) Administer Active Directory**

Objectives:

* Install Domain Controllers
* Create and Manage AD Users and Computers
* Create and Manage AD Groups and Organizational Units

Better to configure GC with DS.

Active Directory Domains

* company.pri is contiguous and non-contiguous names can be created like taco.pri

Active Directory Forests

* Forest trust is joining single forests with others
* Sub-domains can have access to the other forest.

Active Directory Sites

* Often overlooked
* Location of high connectivity based network
* Defined by subnet
* Look at replication and cost for low bandwidth locations

Active Directory Domain Controllers

* Host of Active Directory
* AD Database
* 2 domain controllers are needed for one domain. Depends on needs though

Active Directory Global Catalog Servers

* Subset of the database
* Installed mostly everywhere
* Installed on a DC
* Needed to login to clients
* Best practice to configure DC with GC’s

Active Directory Organizational Units

* Consumption by IT only
* Need to ensure computer and users are in the same location
* Only 1 of each can consist in one location at a time

Active Directory FSMO(Flexible Single Master Operation Roles) Roles

* Schema Master
  + 1 role per forest on the root DC
* Domain Naming Master
* PDC Emulator
  + Password changes
  + Time keeper
  + Placed on higher end hardware
  + Occurs on a secondary machine that handles these roles
  + Must be online all the times
* RID Master
  + SID = RID + ID
  + Placed on forest root PDC
* Infrastructure Master
  + Created for each application partition and forest wide
  + Single domain forest = on any DC
  + Multi domain forest = not on a DC that is not a GC

Install-windowsFeature –Name ad-domain-services –IncludeManagementTools

Powershell Script

#

# Windows PowerShell script for AD DS Deployment

#

Import-Module ADDSDeployment

Install-ADDSForest `

-CreateDnsDelegation:$false `

-DatabasePath "C:\Windows\NTDS" `

-DomainMode "Win2012R2" `

-DomainName "company.pri" `

-DomainNetbiosName "COMPANY" `

-ForestMode "Win2012R2" `

-InstallDns:$true `

-LogPath "C:\Windows\NTDS" `

-NoRebootOnCompletion:$false `

-SysvolPath "C:\Windows\SYSVOL" `

-Force:$true

Remove a domain controller from a server:

* Uninstall-ADDSDomainController to remove AD roles.
* Taking snapshots of a remote AD DC – ntdsutil.
  + Activate instance ntds
  + Ifm – sub menu
    - Create full c:\users\gshields\desktop\ifm
* Ifm media can be included to join a DC from this media option

Install Active Directory Domain ServiceS:

* Install-ADDSDomainController –DomainName company.pri – Credential (Get-Credential company\administrator)

Upgrading a domain controller:

* Get Healthy
* Extend the Schema
  + Adprep command
  + forestPrep command
  + domainPrep
  + domainPrep /gpPrep
  + rodcPrep
* Upgrade DC’s to New OS
* Relocate FSMO Roles if Necessary
* Raise Domain/Forest Functional Level
  + In the AD Domains and Trust window
  + Can’t go back once you raise the functional level

Resolve DNS SRV Record Registration:

* It is important to make sure the SRV records are correct.
* Ipconfig –registerdns can be used to register all the IP’s per machine to make sure SRV records are recorded correctly.
* Netlogon.dns is the list of records for the server if DNS is done manually.

Configure a GC Services:

* You can look at the properties to turn on GC on or not.

Deploy AD Iaas in Azure