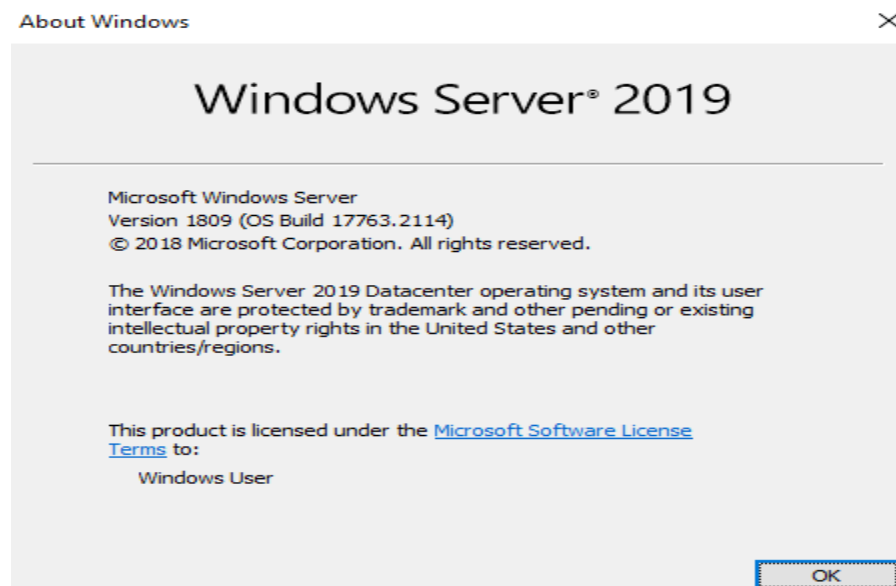
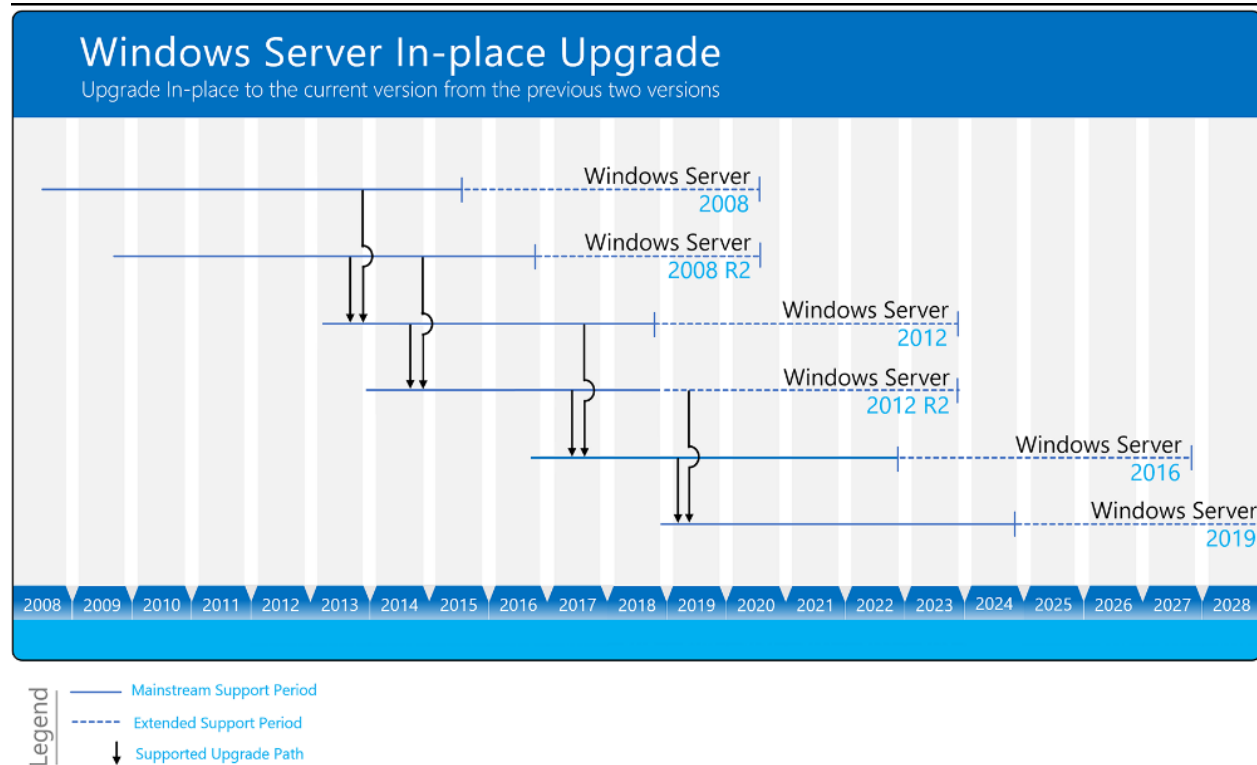


How to upgrade Windows Server 2019 to Windows Server 2022

In this post, I am going to cover in place upgrade of Server 2019 to Server 2022. This server is running Current Branch 2107 (Microsoft Endpoint Manager Configuration Manager - MEMCM). I have downloaded Server 2022 ISO which, I will mount and start the upgrade process.

<https://docs.microsoft.com/en-us/windows-server/get-started/install-upgrade-migrate>



Server Manager - Local Server

Dashboard
Local Server
All Servers
File and Storage Services
IIS
WDS
WSUS

PROPERTIES
For CB

Computer name	CB	Last installed updates	Today at 11:21 AM
Domain	RAMLAN.CA	Windows Update	Download updates only, using a managed updating service
		Last checked for updates	Today at 11:21 AM
Windows Defender Firewall	Domain: Off	Windows Defender Antivirus	Real-Time Protection: Off
Remote management	Enabled	Feedback & Diagnostics	Settings
Remote Desktop	Enabled	IE Enhanced Security Configuration	Off
NIC Teaming	Disabled	Time zone	(UTC-05:00) Eastern Time (US & Canada)
Ethernet	192.168.0.3	Product ID	00430-00000-00000-AA500 (activated)
Operating system version	Microsoft Windows Server 2019 Datacenter	Processors	Intel(R) Core(TM) i5-4300U CPU @ 1.90GHz
Hardware information	Dell Inc. Latitude E7440	Installed memory (RAM)	15.9 GB
		Total disk space	1862.42 GB

TASKS

PROPERTIES
For CB

Computer name	CB
Domain	RAMLAN.CA
Windows Defender Firewall	Domain: Off
Remote management	Enabled
Remote Desktop	Enabled
NIC Teaming	Disabled
Ethernet	192.168.0.3
Operating system version	Microsoft Windows Server 2019 Datacenter
Hardware information	Dell Inc. Latitude E7440

TASKS

Last installed updates	Today at 11:21 AM
Windows Update	Download updates only, using a managed updating service
Last checked for updates	Today at 11:21 AM
Windows Defender Antivirus	Real-Time Protection: Off
Feedback & Diagnostics	Settings
IE Enhanced Security Configuration	Off
Time zone	(UTC-05:00) Eastern Time (US & Canada)
Product ID	00430-00000-00000-AA500 (activated)
Processors	Intel(R) Core(TM) i5-4300U CPU @ 1.90GHz
Installed memory (RAM)	15.9 GB
Total disk space	1862.42 GB

ROLES AND SERVER GROUPS

Roles: 4 | Server groups: 1 | Servers total: 1

The screenshot shows the Windows Server Roles and Server Groups console. It displays five server groups, each with a list of roles and their status. The 'Local Server' and 'All Servers' groups are highlighted in red. The 'Local Server' group shows a red '2' next to 'Services', indicating a configuration issue. The timestamp for all groups is 11-Sep-2021 11:39 AM.

Server Group	Roles	Status
File and Storage Services	Manageability, Events, Services, Performance, BPA results	1
IIS	Manageability, Events, Services, Performance, BPA results	1
WDS	Manageability, Events, Services, Performance	1
WSUS	Manageability, Events, Services, Performance, BPA results	1
Local Server	Manageability, Events, Services, Performance, BPA results	1
All Servers	Manageability, Events, Services, Performance, BPA results	1

The screenshot shows a Windows File Explorer window with the path: WD1 (\\\DC) (Z:) > Trekstor Backup Jul 2017 > Softwares > Operating Systems > 2022. The search bar contains '2022'. The table below lists the files and folders in the current directory.

Name	Date modified	Type	Size
digi.JPG	27-Aug-2021 6:53 ...	JPG File	22 KB
SW DVD9 Win Server STD CORE 2022 64Bit English DC STD MLF X22-74290.iso	27-Aug-2021 7:41 ...	Disc Image File	5,420,564 KB

The screenshot shows a Windows File Explorer window for the DVD Drive (E:) SSS_X64FREV_EN-US_DV9. The 'Manage' tab is active. The table below lists the files and folders on the drive.

Name	Date modified	Type	Size
boot	06-Aug-2021 9:16 ...	File folder	
efi	06-Aug-2021 9:16 ...	File folder	
sources	06-Aug-2021 9:16 ...	File folder	
support	06-Aug-2021 9:16 ...	File folder	
autorun.inf	06-Aug-2021 9:13 ...	Setup Information	1 KB
bootmgr	06-Aug-2021 9:13 ...	File	426 KB
bootmgr.efi	06-Aug-2021 9:13 ...	EFI File	1,933 KB
setup.exe	06-Aug-2021 9:13 ...	Application	93 KB

Windows Server Setup

Get updates, drivers and optional features

These updates will help the installation go smoothly, and can include important fixes, updated device drivers, and additional files which are not on the installation media. If you don't install these updates now, your PC might not function properly after the installation, and you might need to reinstall some optional features and languages.

- Download updates, drivers and optional features (recommended)
- Not right now

I want to help make the installation better
[Privacy statement](#)

Microsoft Support Legal

Back

Next

Select Image

Please select the image you want to install.

Operating System:	Language:
Windows Server 2022 Standard	en-US
Windows Server 2022 Standard (Desktop Experience)	en-US
Windows Server 2022 Datacenter	en-US
Windows Server 2022 Datacenter (Desktop Experience)	en-US

This option installs the full Windows graphical environment, consuming extra drive space. It can be useful if you want to use the Windows desktop or have an app that requires it.

Applicable notices and license terms

Please read this so you know what you're agreeing to.


Your use of this software is subject to the terms and conditions of the license agreement by which you acquired this software. If you are a volume license customer, use of this software is subject to your volume license agreement. You may not use this software if you have not validly acquired a license for the software from Microsoft or its licensed distributors.

EULAID:Sept2018_V_en-us

Choose what to keep

- Keep files, settings, and apps
- Nothing


For more information on upgrading Windows Server, visit: <https://aka.ms/windowsserverupgrade>


 Microsoft Support Legal

Back Next

Getting updates

This may take a few minutes.

 Checking for updates: 9%

 Microsoft Support Legal

Back Next

Getting updates

This may take a few minutes.

⋮ Checking for updates: 99%

Ready to install

You won't be able to use your PC during installation. Save and close your files before you begin.

To recap, you've chosen to:

- ✓ Install Windows Server 2022 Datacenter (Desktop Experience)
- ✓ Keep files, settings, and apps

[Change what to keep](#)

Installing Windows Server

Your PC will restart several times. This might take a while.

1% complete

Cancel

Installing Windows Server

Your PC will restart several times. This might take a while.

81% complete

Cancel

Installing Windows Server

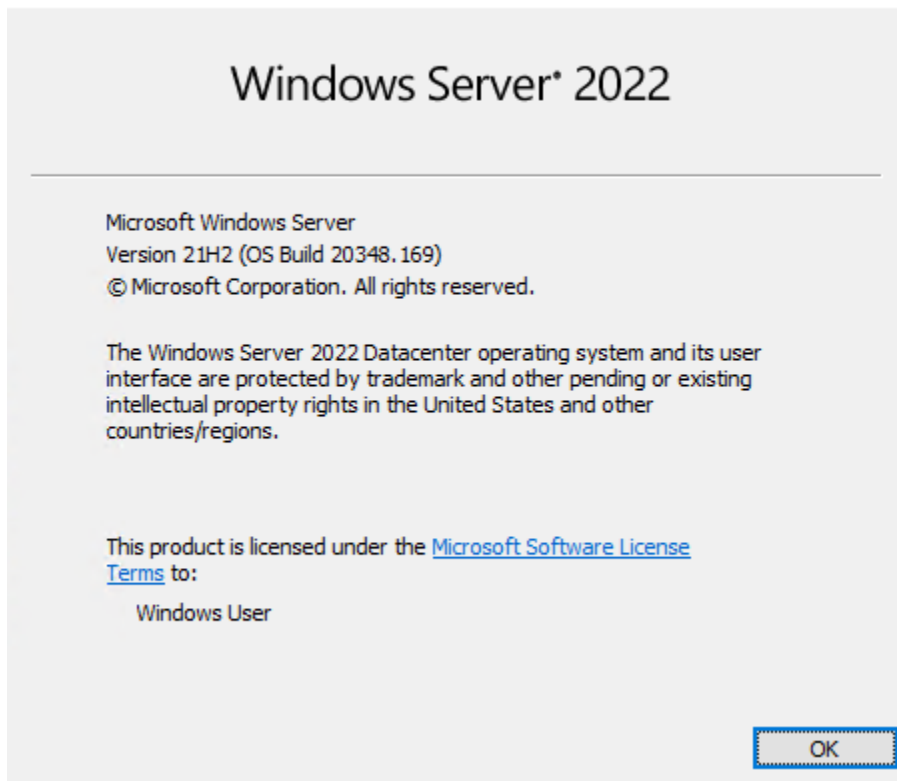
Your PC will restart several times. This might take a while.

Your PC will restart in a few moments

Cancel

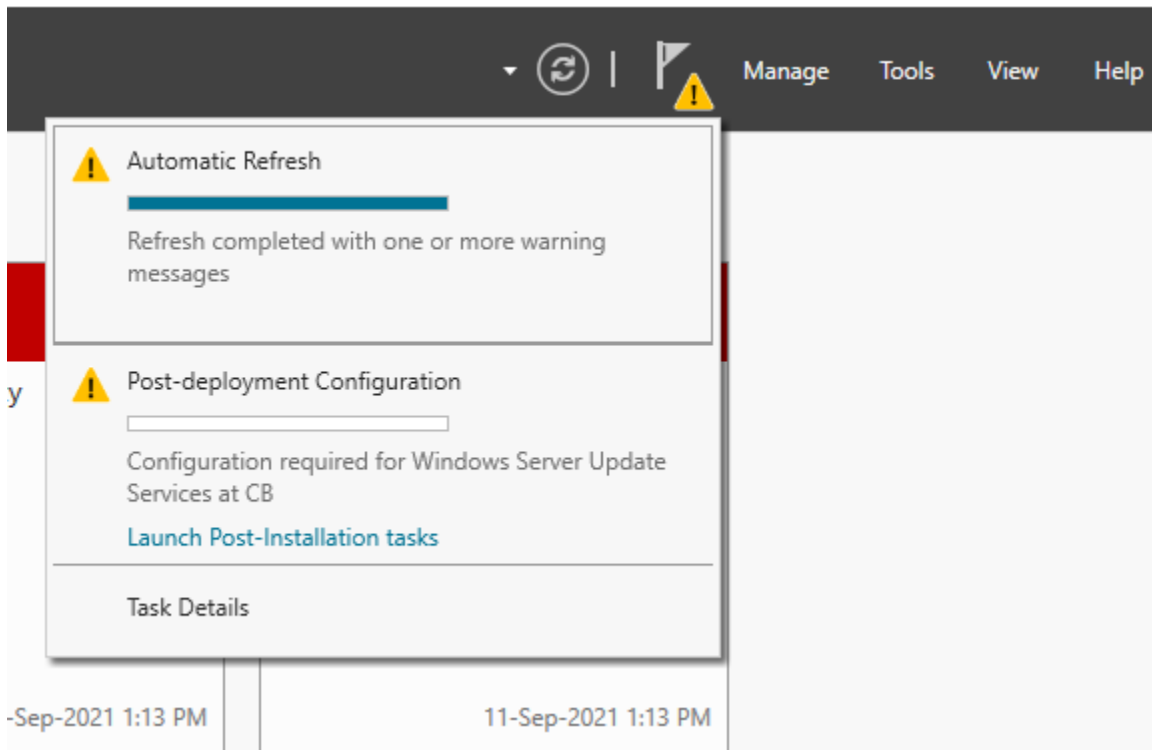
Working on updates 89%
Don't turn off your PC. This will take a while.

Your PC will restart several times.



The server restarted 4 times and the upgrade was successful. The process was easy, fast and smooth. Appreciate all the hard work put in by Microsoft and Server team.

On the server manager, I was saw this message. When, I tried to complete post configuration it failed and I had to run below command.



tmp442E.tmp - Notepad



File Edit Format View Help


```
2021-09-11 19:24:52 Postinstall started
2021-09-11 19:24:52 Detected role services: Api, Database, UI, Services
2021-09-11 19:24:52 Start: LoadSettingsFromXml
2021-09-11 19:24:52 Start: GetConfigValue with filename=UpdateServices-Services.xml item=ContentLocal
2021-09-11 19:24:52 Value is true
2021-09-11 19:24:52 End: GetConfigValue
2021-09-11 19:24:52 Start: GetConfigValue with filename=UpdateServices-Services.xml item=ContentDirectory
2021-09-11 19:24:52 Value is C:\Update
2021-09-11 19:24:52 End: GetConfigValue
2021-09-11 19:24:52 Content directory is C:\Update
2021-09-11 19:24:52 Start: GetConfigValue with filename=UpdateServices-DB.xml item=InstanceName
2021-09-11 19:24:52 Config file did not contain a value "InstanceName"
2021-09-11 19:24:52 Microsoft.UpdateServices.Administration.CommandException: A required configuration value was not found in the system. This is usually
caused by installing WSUS through PowerShell and not specifying a configuration
file. Review the article Managing WSUS Using PowerShell at TechNet Library
(http://go.microsoft.com/fwlink/?LinkId=235499) for more information on the
recommended steps to perform WSUS installation using PowerShell.
    at Microsoft.UpdateServices.Administration.PostInstall.GetConfigValue(String filename, String item)
    at Microsoft.UpdateServices.Administration.PostInstall.LoadSettingsFromXml()
    at Microsoft.UpdateServices.Administration.PostInstall.Execute(String[] arguments)
Fatal Error: A required configuration value was not found in the system. This is usually
caused by installing WSUS through PowerShell and not specifying a configuration
file. Review the article Managing WSUS Using PowerShell at TechNet Library
(http://go.microsoft.com/fwlink/?LinkId=235499) for more information on the
recommended steps to perform WSUS installation using PowerShell.
```

Task Details

Task Details and Notifications

All Tasks | 2 total

Status	Task Name	Stage	Message	Action
	Post-deployment Configuration	Failed	Configuration failed for Windows Server Update Services at CB	Launch Post-
	Refresh	Complete	Refresh completed with one or more warning messages	

Status	Notification	Time Stamp
	Configuration failed. A log file was created at C:\Users\Administrator.RAMLAN\AppData\Local\Temp\tmp442E.tmp	2021-09-11 7:24:53 PM

```
Administrator: Windows PowerShell
PS C:\Program Files\Update Services> dir

Directory: C:\Program Files\Update Services

Mode                LastWriteTime         Length Name
----                -
d-----          11-Sep-2021 12:36 PM             AdministrationSnapin
d-----          11-Sep-2021 12:36 PM             Api
d-----          11-Sep-2021 12:36 PM             Common
d-----          11-Sep-2021 12:36 PM             Database
d-----          11-Sep-2021 12:36 PM             Inventory
d-----          11-Sep-2021 12:55 PM             LogFiles
d-----          11-Sep-2021 12:36 PM             NativeStrings
d-----          11-Sep-2021 12:36 PM             Schema
d-----          11-Sep-2021 12:36 PM             SelfUpdate
d-----          11-Sep-2021 12:36 PM             Services
d-----          11-Sep-2021 12:55 PM             Setup
d-----          11-Sep-2021 12:55 PM             Tools
d-----          11-Sep-2021 12:36 PM             UpdateServicesPackages
d-----          11-Sep-2021 12:36 PM             WebServices
d-----          11-Sep-2021 12:36 PM             WsusContent

PS C:\Program Files\Update Services> cd tools
PS C:\Program Files\Update Services\tools> .\wsusutil.exe postinstall content_dir=C:\UPDATE sql_instance_name=CB
Log file is located at C:\Users\Administrator.RAMLAN\AppData\Local\Temp\WSUS_PostInstall_20210911T233055.log
Post install is starting
Post install has successfully completed
PS C:\Program Files\Update Services\tools>
```

Name	Date modified	Type	Size
2	11-Sep-2021 7:21 PM	File folder	
Low	11-Sep-2021 1:12 PM	File folder	
SSMS	11-Sep-2021 2:01 PM	File folder	
vs.mcj-1209684039	11-Sep-2021 2:01 PM	File folder	
VSRemoteControl	11-Sep-2021 1:13 PM	File folder	
WPF	11-Sep-2021 7:12 PM	File folder	
RAMLAN+ Administrator.bmp	11-Sep-2021 7:20 PM	BMP File	49 KB
dd_updateconfiguration_20210911192240...	11-Sep-2021 7:23 PM	LOG File	1 KB
WSUS_PostInstall_20210911T183452.log	11-Sep-2021 2:34 PM	LOG File	2 KB
WSUS_PostInstall_20210911T232452.log	11-Sep-2021 7:24 PM	LOG File	2 KB
WSUS_PostInstall_20210911T233055.log	11-Sep-2021 7:32 PM	LOG File	53 KB
tmp2EA9.tmp	11-Sep-2021 2:34 PM	TMP File	2 KB
tmp442E.tmp	11-Sep-2021 7:24 PM	TMP File	2 KB
tmp43B4.xml	11-Sep-2021 2:25 PM	XML Document	0 KB

Configuration Manager Trace Log Tool - [C:\Users\Administrator.RAMLAN\AppData\Local\Temp\WSUS_PostInstall_20210911T233055.log]

File Tools Window Help

Log Text

```

2021-09-11 19:32:23 Importing Applications.xml...
2021-09-11 19:32:23 Importing Exchange.xml...
2021-09-11 19:32:23 Importing Office.xml...
2021-09-11 19:32:23 Importing SQL.xml...
2021-09-11 19:32:23 Importing Exchange2000Server.xml...
2021-09-11 19:32:23 Importing ExchangeServer2003.xml...
2021-09-11 19:32:23 Importing OfficeXP.xml...
2021-09-11 19:32:23 Importing Office2003.xml...
2021-09-11 19:32:23 Importing SQLServer.xml...
2021-09-11 19:32:23 Importing WindowsXP64BitEditionVersion2003.xml...
2021-09-11 19:32:23 Importing DefinitionUpdateSusXml.xml...
2021-09-11 19:32:23 Importing ClientServicingApiDetectoid.xml...
2021-09-11 19:32:23 Importing default detectoids succeeded.
2021-09-11 19:32:27 Populating Auto-Approval Rules.
2021-09-11 19:32:29 Populating Auto-Approval Rules Succeeded.
2021-09-11 19:32:29 StartServer completed successfully.
2021-09-11 19:32:29 Marking PostInstall done for UpdateServices-Services in the registry...
2021-09-11 19:32:29 Mark initialization done in database...
2021-09-11 19:32:29 End: Run
2021-09-11 19:32:29 Postinstall completed

```

Date/Time:	Component:
2021-09-11 19:32:29	Postinstall completed

Microsoft Endpoint Configuration Manager (Connected to TOR, Toronto Headquarters Site - CB.RAMLAN.CA)

Home Search

Expand All Collapse All Configure View Settings Print

Site Hierarchy View

Monitoring Overview Site Hierarchy

Monitoring

- Overview
- Alerts
- Queries
- Reporting
- Site Hierarchy
- System Status
- Site Status

TOR

Icon	Status	Site System	Site System Role	Storage Object	Total	Site Code
✓	OK	\\CB.RAMLAN.CA	Asset Intelligence synch...	\\CB.RAMLAN.CA\C\$\Program Fil...	930.9 GB	TOR
✓	OK	\\CB.RAMLAN.CA	Data Warehouse service...	\\CB.RAMLAN.CA\C\$\Program Fil...	930.9 GB	TOR
✓	OK	\\CB.RAMLAN.CA	Component server	\\CB.RAMLAN.CA\C\$\Program Fil...	930.9 GB	TOR
✓	OK	\\CB.RAMLAN.CA	Distribution point	\\CB.RAMLAN.CA\C\$	930.9 GB	TOR
✓	OK	\\CB.RAMLAN.CA	Distribution point	\\CB.RAMLAN.CA\D\$	931.5 GB	TOR
✓	OK	\\CB.RAMLAN.CA	Service connection point	\\CB.RAMLAN.CA\C\$\Program Fil...	930.9 GB	TOR
✓	OK	\\CB.RAMLAN.CA	Endpoint Protection point	\\CB.RAMLAN.CA\C\$\Program Fil...	930.9 GB	TOR
✓	OK	\\CB.RAMLAN.CA	Fallback status point	\\CB.RAMLAN.CA\C\$\Program Fil...	930.9 GB	TOR
✓	OK	\\CB.RAMLAN.CA	Management point	\\CB.RAMLAN.CA\C\$\Program Fil...	930.9 GB	TOR
✓	OK	\\CB.RAMLAN.CA	Site server	\\CB.RAMLAN.CA\C\$\Program Fil...	930.9 GB	TOR
✓	OK	\\CB.RAMLAN.CA	Software update point	\\CB.RAMLAN.CA\C\$\Program Fil...	930.9 GB	TOR
✓	OK	\\CB.RAMLAN.CA	Site database server	CM_TOR Database	5 GB	TOR
✓	OK	\\CB.RAMLAN.CA	Site database server	CM_TOR Transaction Log	1.9 GB	TOR
✓	OK	\\CB.RAMLAN.CA	Reporting services point	\\CB.RAMLAN.CA\C\$\Program Fil...	930.9 GB	TOR

To be on the safe side, I disabled Branch Cache – Does not work well with Server 2022 – That is the view from the community.

```

Administrator: Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\Administrator.RAMLAN> Netsh br set service mode=disabled
Disabling firewall rule group BranchCache - Content Retrieval (Uses HTTP)... Succeeded
Setting Service Mode... Succeeded
Setting Service Start Type to Disabled... Succeeded
Stopping Service... Succeeded

Warning: The Windows Firewall is Currently Disabled.

PS C:\Users\Administrator.RAMLAN>

```

Thanks

Ram Lan
11th Sep 2021