## WINDOWS SERVER 2019

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### **INSTALLATION**

- ► Core only is 8GB in side
- ► Desktop experience is "usual" windows size
- ► Core Fits nicely onto a USB stick (Hyper-V only)
- ► Works with 2012-R2 WDS (needs a new boot loader)

#### **NEW FEATURES!!**

- ► Migration of clusters between domains
- Kubernetes
- Defender Access Control Policies
- WinRM Enhancements
- ► Storage Replica in standard edition
- ► Storage migration wizard
- Cluster Sets
- ► Windows subsystem for Linux

## LICENSING

- ► Same as 2016
- ► Per core licensing with a server requiring a minimum of 16 cores
- ► Two VM's on a standard licence/Unlimited on DC
- ► Unlimited containers
- ► Two versions? Standard and datacentre?

## **DEPLOYMENT**

- ▶ Uses WIM files same as 2012 and 2016
- ➤ Will work in a 2012, 2012 R2 or a 2016 WDS server, the boot file needs to be updated
- ► Existing unattend files should also work

## WINRM/PS REMOTING

- ↑ These credentials are stored for this session only.
- ① The WinRM client cannot process the request. Default authentication may be used with an IP address under the following conditions: the transport is HTTPS or the destination is in the TrustedHosts list, and explicit credentials are provided. Use winrm.cmd to configure TrustedHosts. Note that computers in the TrustedHosts list might not be authenticated. For more information on how to set TrustedHosts run the following command: winrm help config.

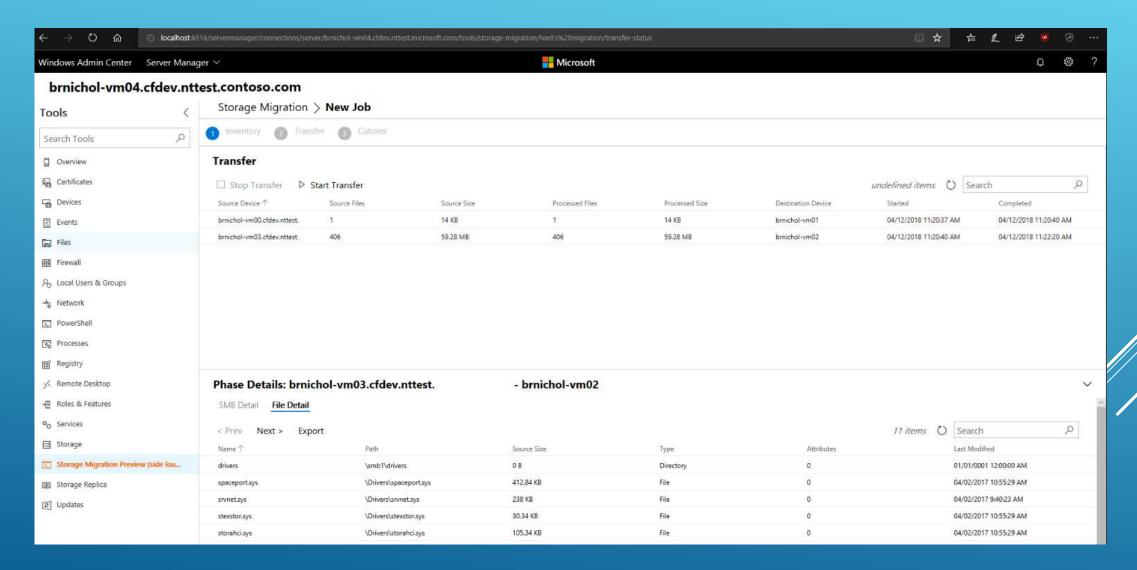
- Doesn't seem to like IP Address
- Make sure your DNS is clean
- Ensure WINRM ports are open
- Use WINRM troubleshooting to test

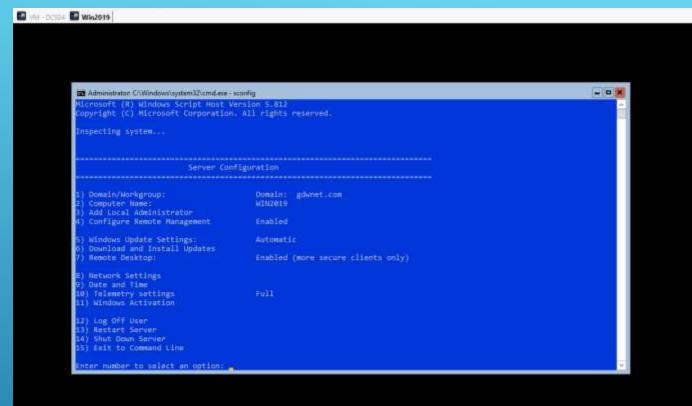


# WINDOWS ADMIN CENTRE

- Windows Admin is formally Project
  Honolulu
- UK date formats coming in June!
- Supports Tags
- LAPS makes it easier

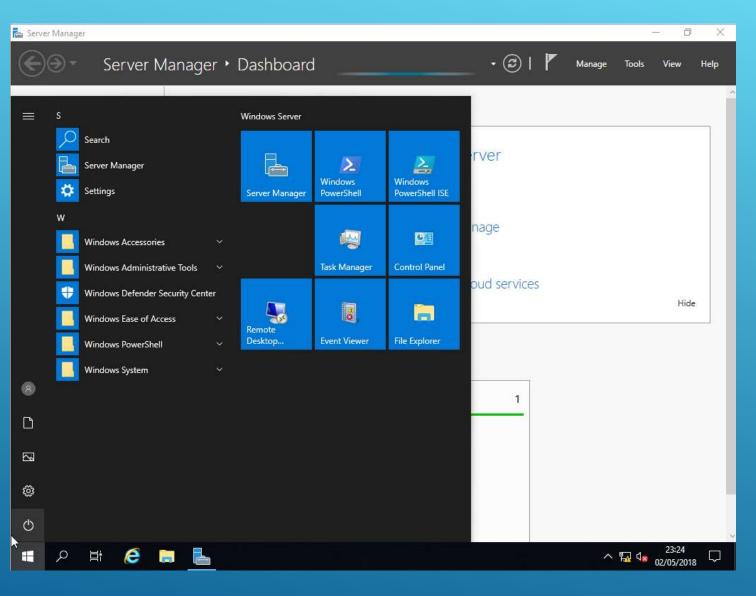
#### STORAGE MIGRATION WIZARD





## **CORE INSTALL**

- Emphasis is on remote management
- Windows Admin Centre
- RSAT
- WINRM/Powershell
- Sconfig still works!



## **GUI INSTALL**

- Introduced in April 24<sup>th</sup> release
- Build 17650
- Much like Windows 2016
- GUI is really for legacy apps

### **ACTIVE DIRECTORY**

- Blockchain auth(?)
- Does not support FRS for SYSVOL so you must use DFSMIG to migrate to DFS-R
- Still on 2003?

"For customers who need additional time to evaluate moving their DFL & FFL from 2003, the 2003 DFL and FFL will continue to be supported with Windows 10 and Windows Server 2016 provided all domain controllers in the domain and forest are either on Windows Server 2008, 2012 or 2016."

## **HYPER-V**

- Improvements to shielded VM's Linux will be supported
- Encrypted replication improvements
- Encrypted network segments at the vswitch level

## **MICROSERVICES**

- 2019 has a Kubernetes deployable feature
- Container support has been improved since 2016
- Windows sub system for linux means windows AND linux containers on the same host
- Smaller windows containers from 10GB to 2GB
- Containers still use Hyper-V architecture for container networking
- It's still early days for Kubernets so \*\*\*watch this space\*\*\*

## **DEFENDER ATP**

- Cloud behaviour analytics
- More than just AV
- Policy driven via Powershell

## Links:

Windows Admin Centre -> <a href="https://docs.microsoft.com/en-us/windows-server/manage/windows-admin-center/deploy/install">https://docs.microsoft.com/en-us/windows-server/manage/windows-admin-center/deploy/install</a>

WinRM quick guide -> https://blogs.technet.microsoft.com/askperf/2010/09/24/an-introduction-to-winrm-basics/

Thanks!

Any questions?