Intune Driver & BIOS Control



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NORDIC - VIRTUAL SUMMIT - #NVSummit2021

In the beginning



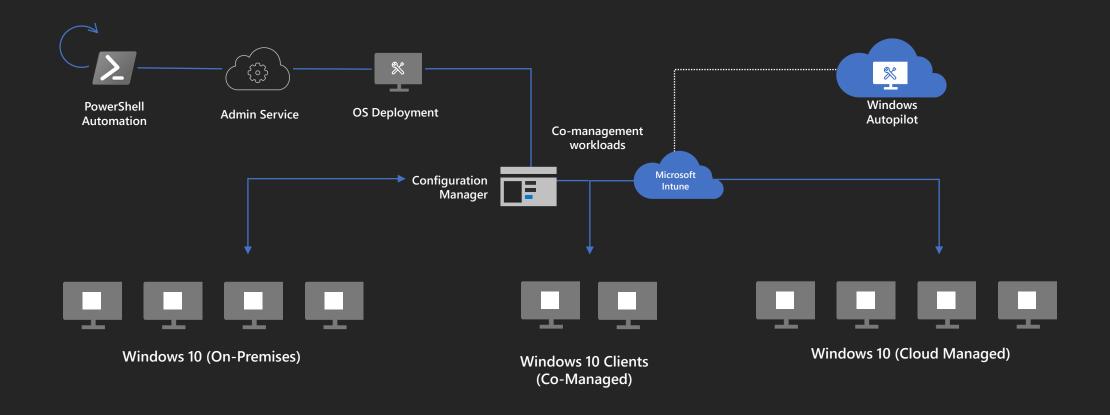
The Challenges of moving to "modern"

- Decades old processes are often hard to let go of
- Internal blockers from staff
- Comparing like for like and focusing on the missing components
- The "it won't work" approach

Let us understand the differences first, and work around them, and show you some cool stuff

Traditional Processes vs Modern Processes

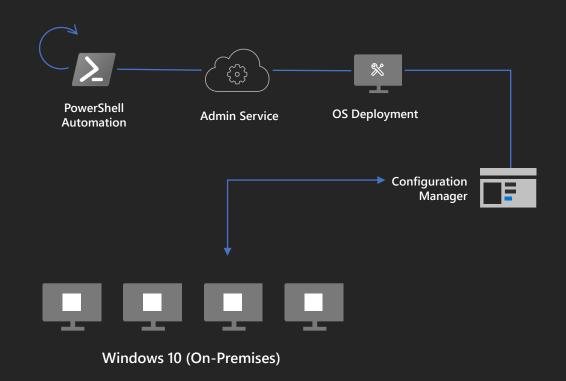




Traditional OSD (ConfigMgr) Overview



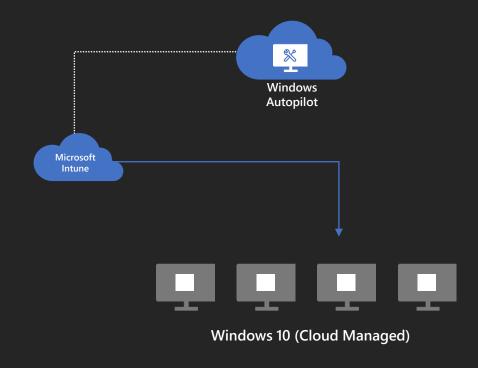
- OS Deployment
 - Traditional method
 - Admin Service
 - Custom Web Service
 - Custom Front Ends
 - PowerShell
- Post OS Maintenance
 - PowerShell
 - OEM Software

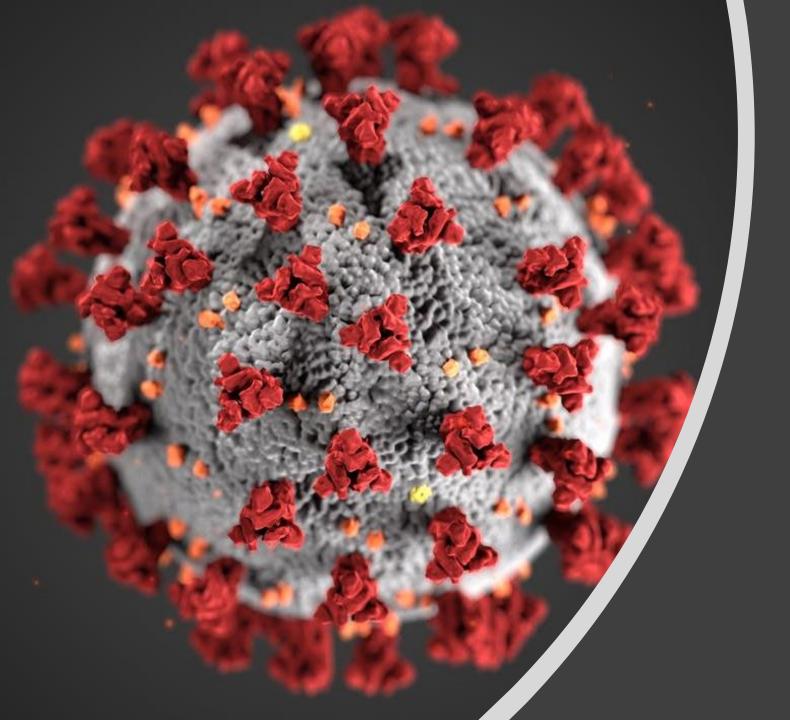


Intune Management Overview



- Windows Autopilot
 - Win32 Apps
 - PowerShell
- Post Deployment
 - How to control driver and firmware updates post provisioning?
 - OEM software solutions?







(Then this happened (As if we need reminding)

The Challenge We Face Today



- Organisations have had to make big shifts in the way they manage devices
 - Home workers are now the norm
 - The desire to use Intune managed devices has seen massive growth due to this
- IT departments which to maintain the status quo
 - Provide the business with like for like functionality
 - Automate as much as possible
 - Port existing automation processes as much as possible

Give me all the laptops

The challenge of supporting multiple vendors

- Due to the pandemic, a single vendor choice is something we no longer have the luxury of
- The traditional OS deployment model is being evaluated
- Can Windows Autopilot serve the needs of the organisation?

"Make IT happen" – no excuses!











OEM Solutions for Intune devices



Most OEM's provide solutions, not all are equal....



Built in support for driver and firmware updates through WUfB



Lenovo System Update





HP Solutions for Intune devices



HP Client Management Script Library
How to do things the right way

- Install the CMSL from the PowerShell Gallery
 - Install-Module –Name HPCMSL*

The NuGet Package Provider needs to be updated The PowerShellGet module needs to be updated

 Automate driver and BIOS updates via PowerShell This sounds a bit more familiar





Demo

Install and Maintain the HP CMSL Module (Proactive Remediations)

Building an OEM scripted solution



- Upgrade the HP BIOS
 - Get-HPBIOSUpdates
 - List all available updates
 - Get-HPBIOSUpdates –Flash
 - Update system to the latest BIOS release
- Install all SoftPaqs
 - Get-SoftPaqList | Get-SoftPaq –Action Install
 - Download, extract, and install the latest drivers

Easy right!?..

```
Administrator: Windows PowerShell
1.03.02 2020-11-04 S73 01030200.bin
PS C:\WINDOWS\system32> Get-HPBIOSUpdates
1.03.02 2020-11-04 573 01030200.bin
1.01.07 2020-08-24 573 01010700.bin
1.01.06 2020-06-30 573 01010600.bin
1.01.05 2020-05-24 573 01010500.bin
PS C:\WINDOWS\system32> Get-WmiObject -Class win32 computersystem
Domain
                    : WORKGROUP
Manufacturer
                    : HP ZBook Firefly 14 G7 Mobile Workstation
                    : CLOUDWAY-MD003
PrimaryOwnerName
                    : HP Inc.
TotalPhysicalMemory: 34122080256
PS C:\WINDOWS\system32> Get-WmiObject -Class win32_bios
SMBIOSBIOSVersion: S73 Ver. 01.01.07
Manufacturer
                  : S73 Ver. 01.01.07
SerialNumber
                  : 5CG0295PRT
Version
                  : HPOOEM - 0
```



Demo

Running the CMSL





Proceed with Caution

HP Windows Update Voodoo



- Support for firmware updates through the normal update process
- Leverages a mechanism built into the Unified Extensible Firmware Interface (UEFI) standard called UEFI Capsule
- Worried? Need to disable this?

Set-HPBIOSSettingValue -Name "Native OS Firmware Update Service" -Value "Disable"

h10032.www1.hp.com/ctg/Manual/c06696094





Control Is Good



Driver and BIOS / Firmware updates can have undesired results

- Administrative Control / Phased Upgrades
 - Providing a controlled method for testing upgrades is key to many organisations
 - It verifies stability prior to mass deployment
 - Consistent experience as we have today with Configuration Manager



Driver Automation Tool V7 (Coming Soon)



Enhancements

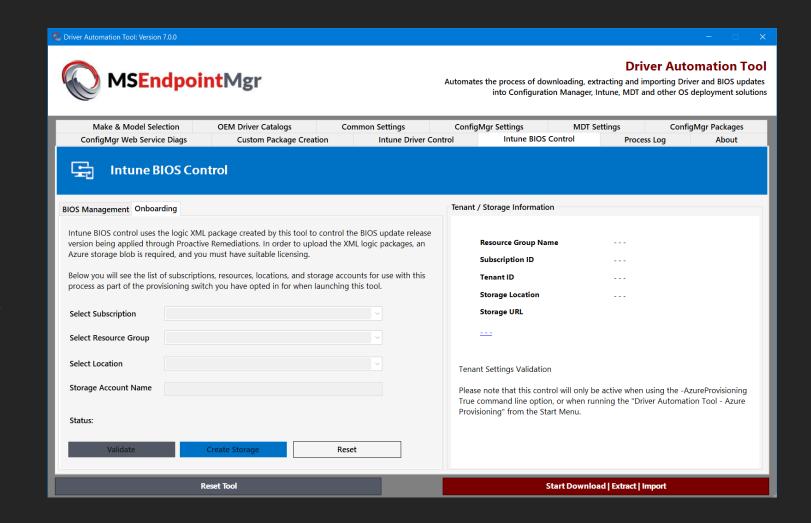
Windows 10 20H2 Support

New Features

- Intune XML control support
- Azure storage blob creation (Provisioning mode)
- Azure storage blob uploads (XML & packages)
- Automatic updating

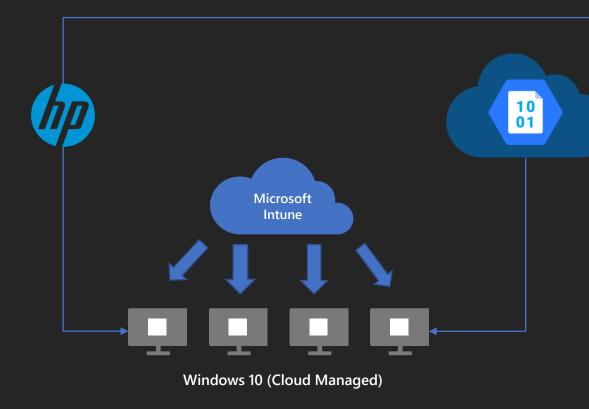
In Progress

Win32 driver packages



Intune Driver & BIOS Control Workflow





- 1. Driver Automation Tool launched, and selections made
- 2. HP Cabinet downloaded and XML extracted
- 3. XML created from selected models
- 4. XML uploaded to Azure blob (Azure storage blob created if required via provisioning mode)
- 5. Proactive Remediation PowerShell checks XML in Azure, and uses version information to update targeted systems
- 6. Updates are downloaded and installed via CMSL from HP

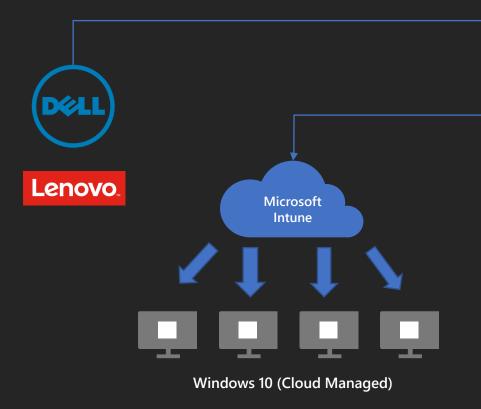


Demo

The new total control method

In Progress.. Dell & Lenovo Support





- Driver Automation Tool launched, and selections made
- 2. OEM sources queried
- Win32 packages created with WIM compression and PowerShell injection script
- 4. Package uploaded to Azure
- 5. Win32 application(s) containing updated drivers / firmware targeted at devices
- 6. Win32 package downloaded and installed

Thank you!



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