



Monitoring Windows Update Status in the Cloud-Native Environment

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Sponsors



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Role

Consultant/Trainer

Focus

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Agenda

- Different updates
- Update status
- Autopatch reports
- Intune Update reports
- Windows Update for Business reports
- Custom information



Updates? What kind of updates?



Feature Updates (1)

Windows 11, version 25H2
Successfully installed on 03/10/2025

Quality Updates (9)

2026-03 Security Update (KB5079473) (26200.8037)
Successfully installed on 17/03/2026

Driver Updates (8)

Microsoft Corporation System Hardware Update (200.0.46.0)
Successfully installed on 04/03/2026

2025-10 Cumulative Update for .NET Framework 3.5 and 4.8.1 for Windows 11, version 25H2 for arm64 (KB5066128)
Successfully installed on 21/10/2025

AI component updates (4)

2026-02 Phi Silica AI Component Update (KB5079254)
Successfully installed on 04/03/2026



Microsoft Edge for Business

[Learn more about Microsoft Edge for Business](#)



Updating Microsoft Edge (100%)

Version 146.0.3856.62 (Official build) (arm64)



Google Chrome



Nearly up to date! Relaunch Chrome to finish updating.

Version 146.0.7680.80 (Official Build) (arm64)

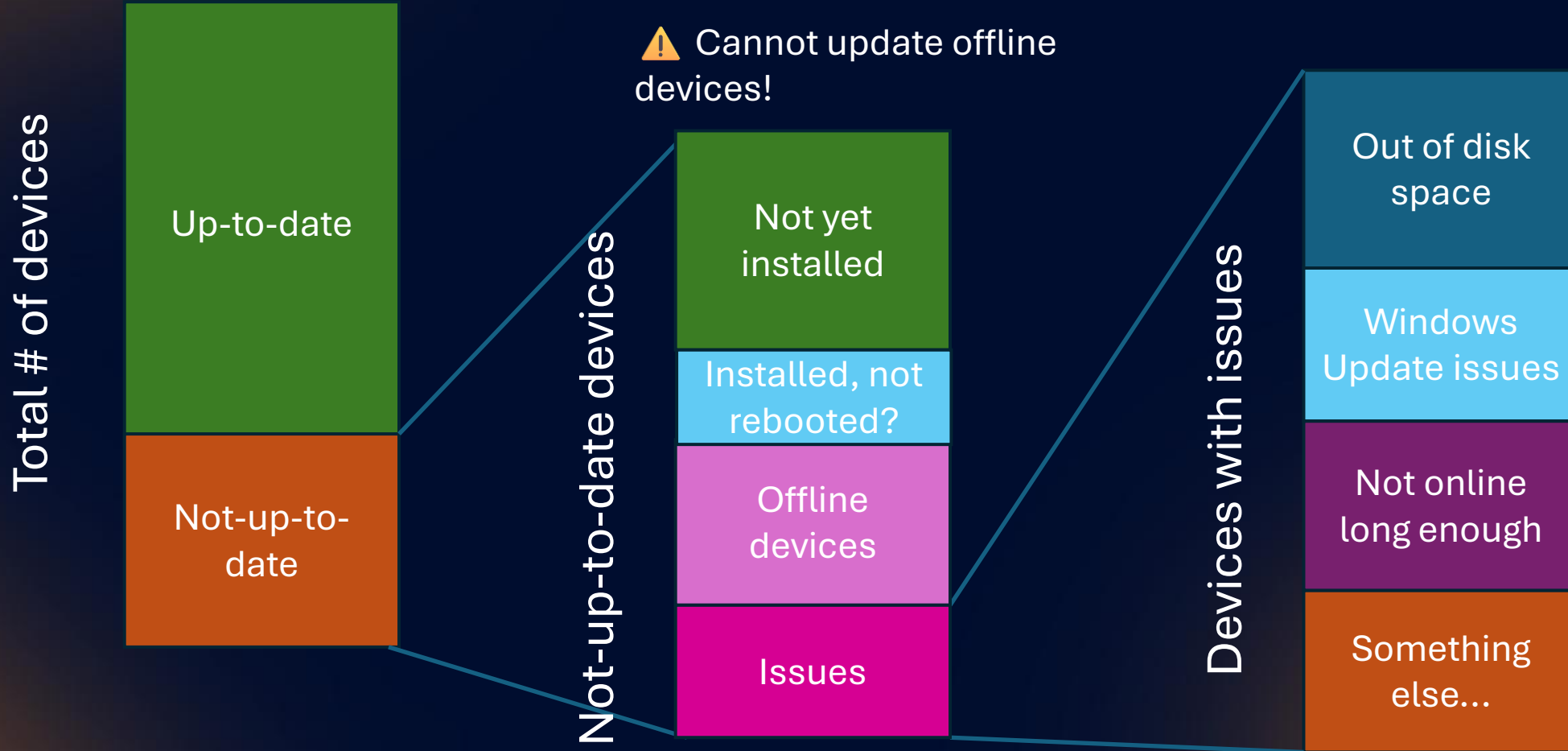


Update
Options ▾

Microsoft 365 and Office Updates

Updates are automatically downloaded and installed.

Device Update Status

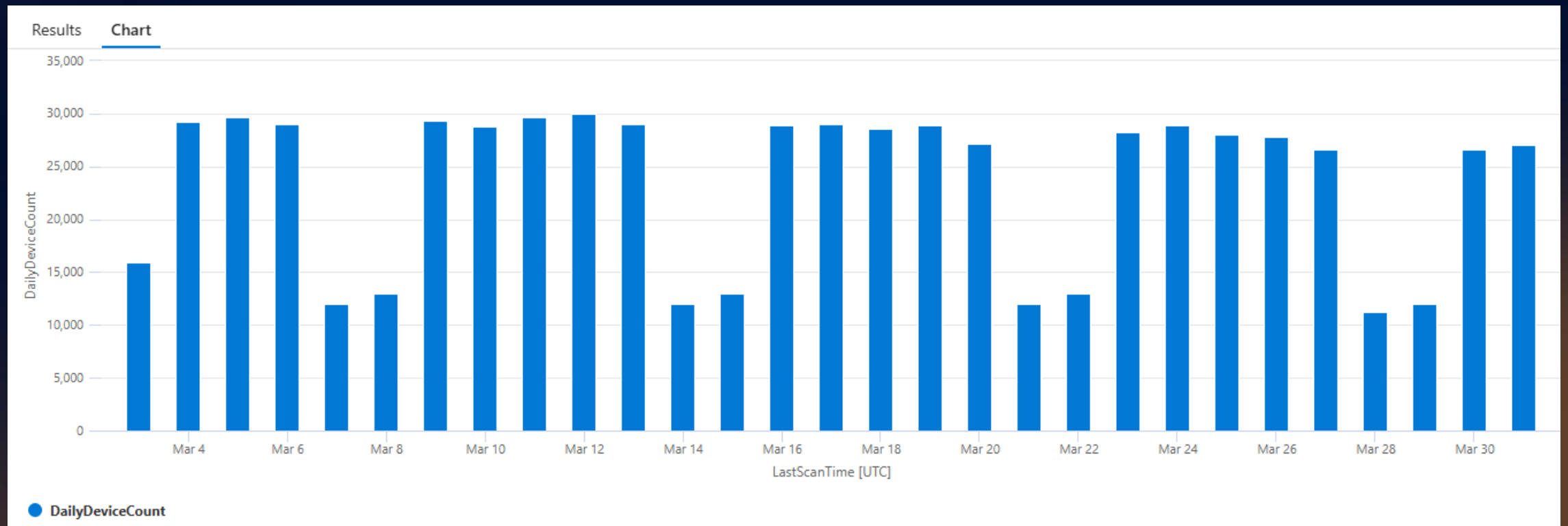


Monitoring device usage



How many devices have been online/day for the last x days?

How many devices have been online since the last patch Tuesday?



Update status/day



Do you need to know **WHEN** updates are installed?

Compliance %/day?

Confirm that update rings are working as expected

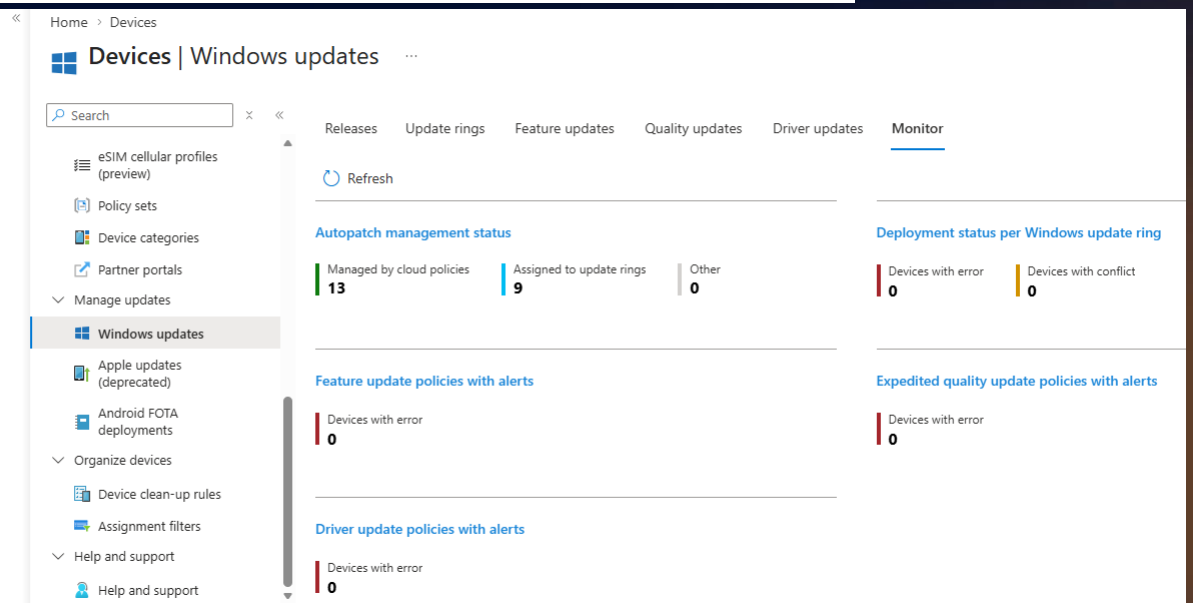
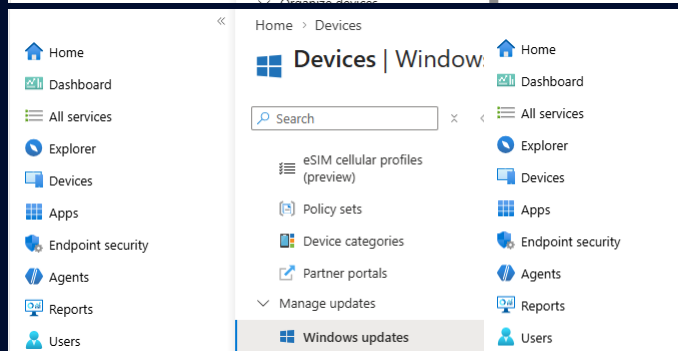
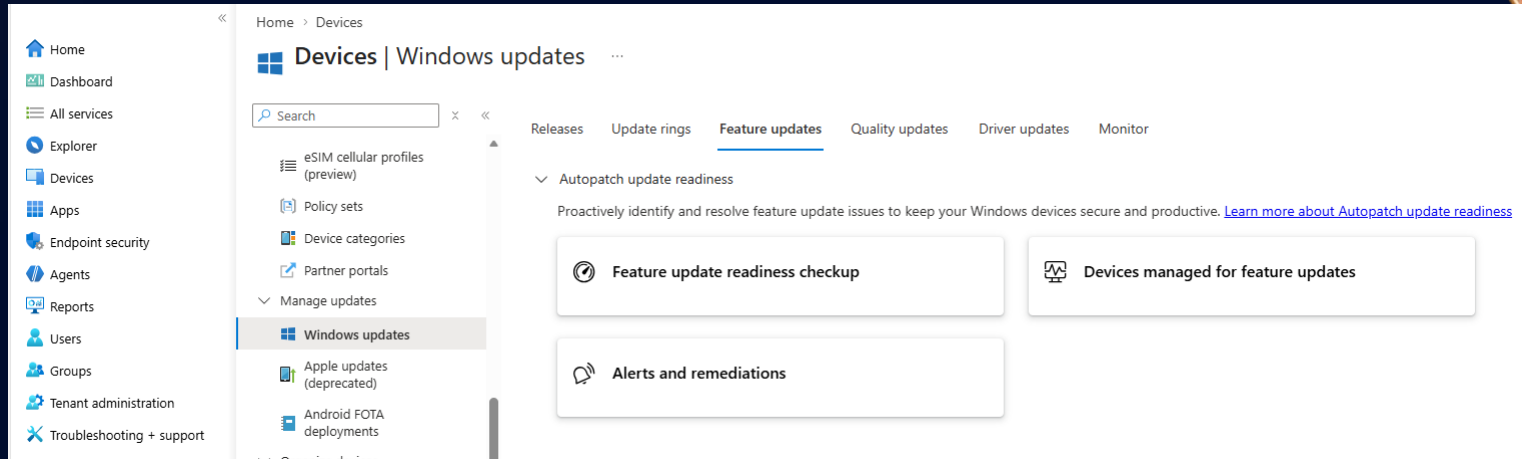
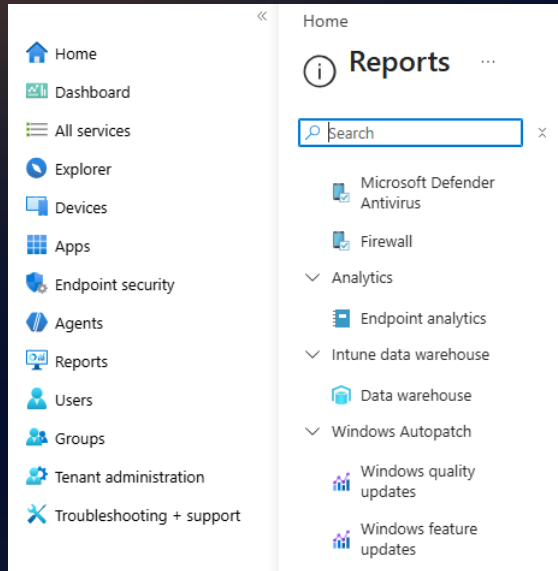


Builtin Reports

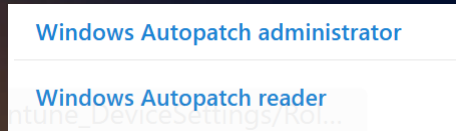
Autopatch reports

Multiple locations

Major improvements 03/2026!



Remember Autopatch Reader role



Windows Update Reports



The screenshot shows the Microsoft Endpoint Manager console. On the left is a navigation pane with categories like Home, Dashboard, All services, Explorer, Devices, Apps, Endpoint security, Agents, Reports, Users, Groups, Tenant administration, and Troubleshooting + support. The 'Reports' category is selected. The main area is titled 'Home > Reports' and 'Reports | Windows updates'. It has a search bar and two tabs: 'Summary' and 'Reports'. Under the 'Reports' tab, there are six report cards:

- Windows Feature Update Report**: Generate a report for Windows feature update status.
- Windows Update Distribution Report**: Shows the number of devices in each quality update version and those that need updates.
- Windows Expedited Update Report**: Generate a report for Windows quality update status.
- Windows Feature Update Device Readiness Report**: Select a target version of Windows and generate a report of device update readiness status.
- Windows Feature Update Compatibility Risks Report**: Select a target version of Windows and generate a report of app and driver compatibility risks.
- Windows Driver Update Report**: Generate a report for Windows driver update status.



Demo!

Builtin reports

- Windows Autopatch
- Windows quality updates
- Windows feature updates

Windows quality update status - last refreshed 04/14/2026, 04:54:57 PM

Time range: Last 30 days

by percentage by device count

Date	Up to date	Not up to date	In progress	Not ready
03/14	2	6	0	0
03/16	2	4	0	0
03/18	5	3	0	0
03/20	7	2	0	0
03/22	7	2	0	0
03/24	7	2	0	0
03/26	7	2	0	0
03/28	7	2	0	0
03/30	7	2	0	0
04/01	7	2	0	0
04/03	7	2	0	0
04/05	7	2	0	0
04/07	7	2	0	0
04/09	7	2	0	0
04/11	7	2	0	0
04/13	7	2	0	0

Device count: 9 | Up to date: 7 | Not up to date: 2 | In progress: 0 | Not ready: 0

Windows quality update status

- Explorer (preview)
- Device management
 - Device attestation status (preview)
 - Device compliance
 - Device configuration
 - Group policy analytics
 - Windows updates**
 - Cloud attached devices (preview)

Windows Feature Update Report

Generate a report for Windows feature update status.

Windows Update Distribution Report

Shows the number of devices in each quality update version and those that need updates.

Windows Expedited Update Report

Generate a report for Windows quality update status.

Windows Feature Update Device Readiness Report

Select a target version of Windows and generate a report of device update readiness status.

Windows Feature Update Compatibility Risks Report

Select a target version of Windows and generate a report of app and driver compatibility risks.

Windows Driver Update Report

Generate a report for Windows driver update status.

Windows quality update device version



Windows quality version

2026-03 B

Windows feature version

Windows 11, 25H2

Update status criteria

Devices need update

Managed by

All

Last check-in start date

Mon Mar 23 2026

Clear

Last check-in end date

Select a date...

Clear

Generate again

Cancel

Report generated 04/22/2026, 12:54 PM

Export Columns

0 items

Search

Device name ↑↓ Intune Device ID Entra Device ID Primary UPN ↑↓ OS version ↑↓ Windows fe... ↑↓ Windows q... ↑↓ Managed by ↑↓ Last check-in ↑↓



No items found
No items found

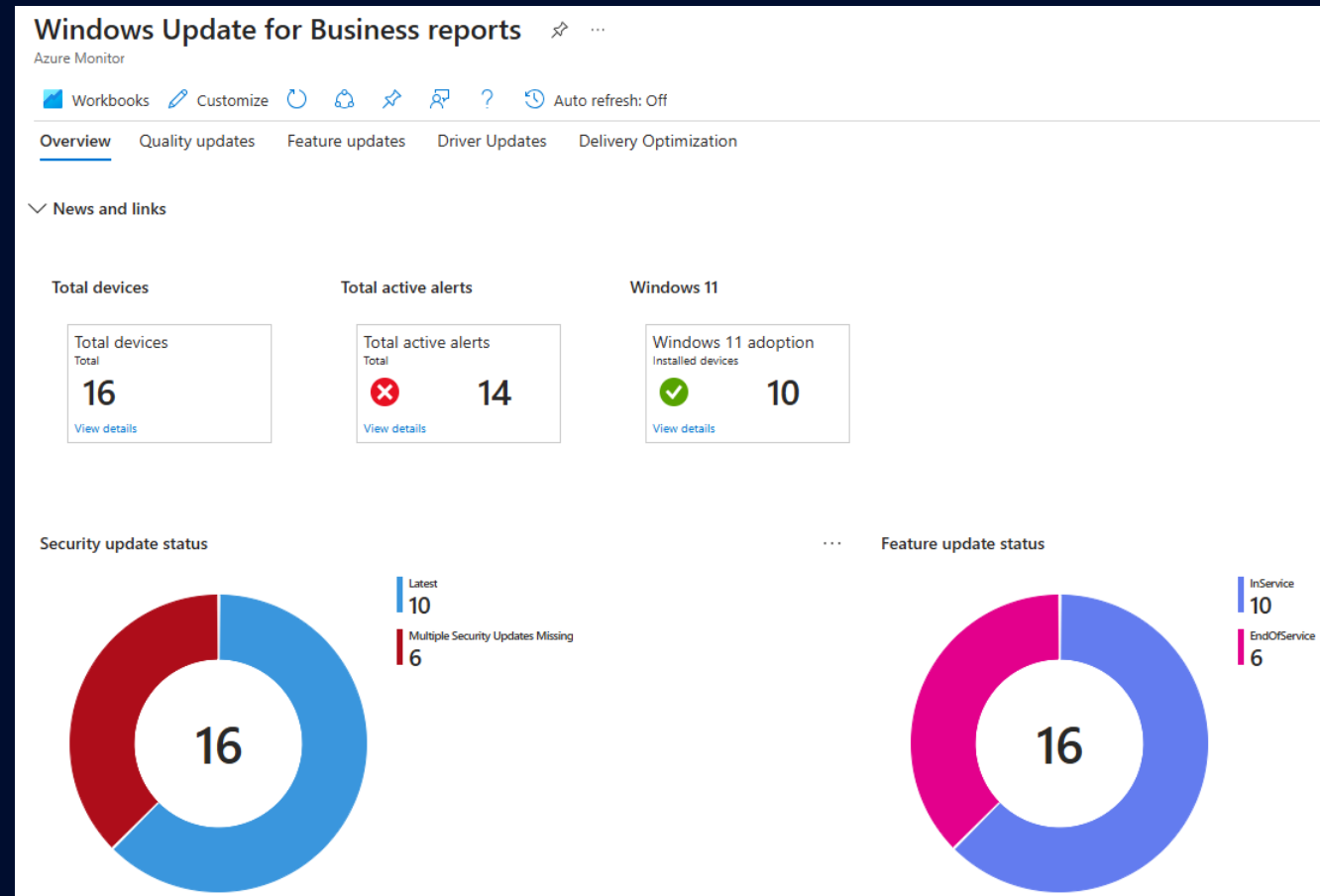


Additional reports

Windows Update for Business (WUfB) Reports



- <https://aka.ms/wufbreports>
- Requires Log Analytics workspaces
- Lot of interesting data
- Future?



Custom reports: Multi Device Query



Properties

Search

- AppleAutoSetupAdminAc...
- AppleDeviceStates
- AppleUpdateSettings
- Battery
- BiosInfo
- Bluetooth
- Cellular
- Cpu
- Device
- DeviceStorage
- DiskDrive
- EncryptableVolume
- LogicalDrive
- MemoryInfo

Run Cancel

```

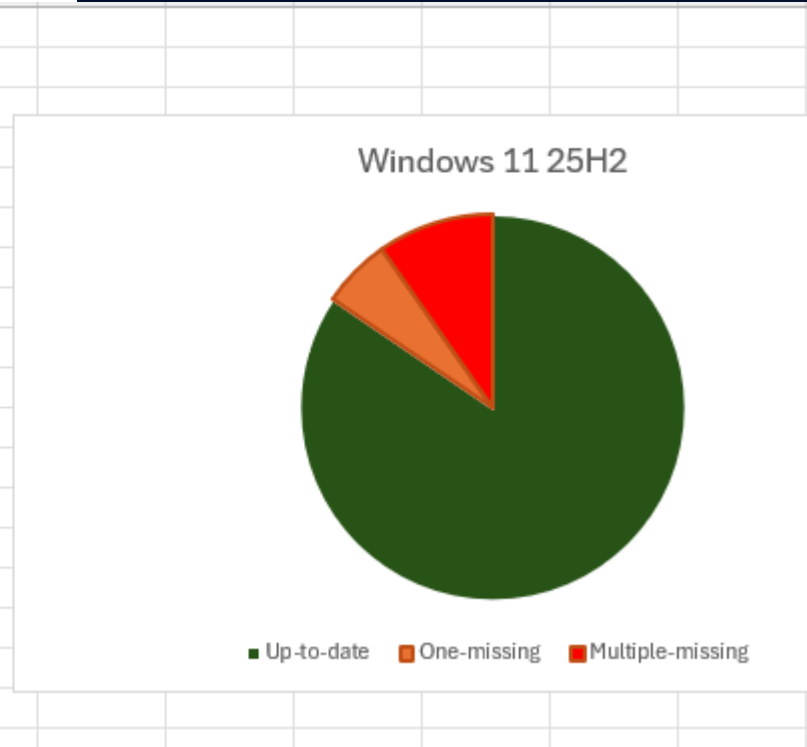
1 Device
2 | where Platform == 'WINDOWS' and ManagementAgent.endswith("MDM") and LastSeenDateTime > datetime(2026-03-19)
3 | project DeviceName, OsVersion
4 | summarize Count=count() by OsVersion
5 | order by OsVersion desc
    
```

Get started Results

Export Columns

OsVersion	Count
10.0.26200.8037	761
10.0.26200.7985	8472
10.0.26200.7984	1824
10.0.26200.7982	273
10.0.26200.7979	267
10.0.26200.7840	383
10.0.26200.7781	412
10.0.26200.7634	100
10.0.26200.7623	48
10.0.26200.7462	75
10.0.26200.7392	199
10.0.26200.7171	799
10.0.26200.7093	39
10.0.26200.7092	7
10.0.26200.6899	31
10.0.26200.6584	35

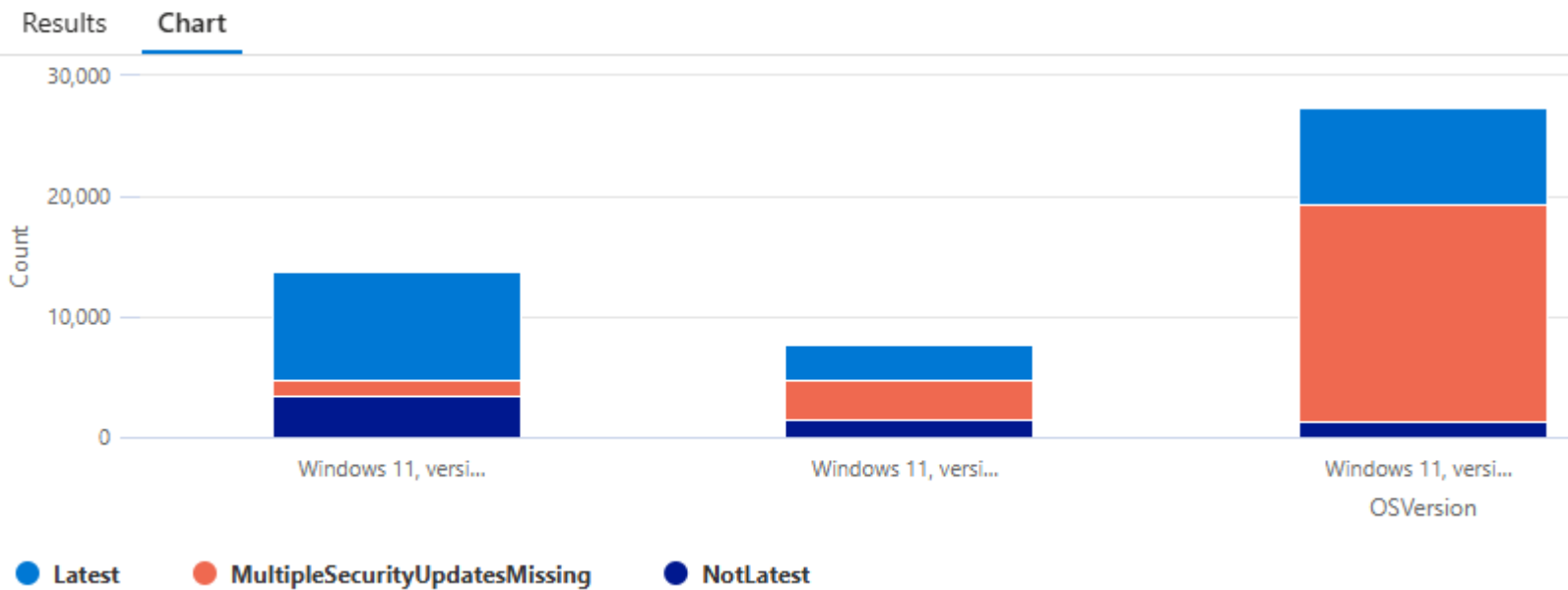
OsVersion	Count	April 7, 2026
Windows 11 25H2		
10.0.26200.8037	761	
10.0.26200.7985	8472	
10.0.26200.7984	1824	
10.0.26200.7982	273	Windows 11 25H2
10.0.26200.7979	267	Up-to-date 11597
10.0.26200.7840	383	One-missing 795
10.0.26200.7781	412	Multiple-missing 1333
10.0.26200.7634	100	
10.0.26200.7623	48	
10.0.26200.7462	75	
10.0.26200.7392	199	
10.0.26200.7171	799	
10.0.26200.7093	39	
10.0.26200.7092	7	
10.0.26200.6899	31	
10.0.26200.6584	35	



Custom reports: WUfB Reports



```
22 | JCClient
23 | where LastCensusScanTime > datetime(2026-03-19)
24 | summarize arg_max(LastCensusScanTime, *) by AzureADDeviceId
25 | distinct AzureADDeviceId, DeviceName, OSSecurityUpdateStatus, OSVersion
26 | summarize Count=count() by OSVersion, OSSecurityUpdateStatus
27 | order by OSVersion desc, Count
28 | render columnchart
```



Programmatic ways to get CU/FU status



Registry Editor

File Edit View Favorites Help

Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion

Name	Type	Data
CurrentBuild	REG_SZ	26200
CurrentBuildNumber	REG_SZ	26200
CurrentMajorVersionN...	REG_DWORD	0x0000000a (10)
CurrentMinorVersionN...	REG_DWORD	0x00000000 (0)
CurrentType	REG_SZ	Multiprocessor Free
UBR	REG_DWORD	0x00001f65 (8037)

About Windows



Microsoft Windows
Version 25H2 (OS Build 26200.8037)
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Demo!

Different ways to check CU installation status

The screenshot shows the Azure Monitor interface. On the left, the 'Properties' pane is open, displaying a search bar and a list of device properties including AppleAutoSetupAdminAc..., AppleDeviceStates, AppleUpdateSettings, Battery, BiosInfo, Bluetooth, Cellular, Cpu, Device, DeviceStorage, DiskDrive, EncryptableVolume, LogicalDrive, and MemoryInfo.

The main area displays a KQL query in a 'Run' window:

```
1 device
2 where Platform == 'WINDOWS' and ManagementAgent endswith "MDM" and LastSeenDateTime > datetime(2026-03-19)
3 project DeviceName, OsVersion
4 summarize Count=count() by OsVersion
5 order by OsVersion desc
```

Below the query, the 'Windows Update for Business reports' dashboard is visible. It includes a navigation bar with 'Overview', 'Quality updates', 'Feature updates', 'Driver Updates', and 'Delivery Optimization'. The 'Overview' tab is active, showing a 'News and links' section with a list of OS versions (all 10.0.262). Below this, there are three summary cards:

- Total devices:** 16 (Total)
- Total active alerts:** 14 (Total)
- Windows 11 adoption:** 10 (Installed devices)

At the bottom, there are two donut charts. The left chart, 'Security update status', shows 10 'Latest' updates (blue) and 6 'Multiple Security Updates Missing' (red), totaling 16. The right chart, 'Feature update status', shows 10 'InService' updates (blue) and 6 'EndOfService' updates (pink), totaling 16.



Application updates

Application versions

- "Classic" app inventory
- New app inventory coming
- Edge/Chrome Management Service
- Microsoft Defender for Endpoint



```
7
8 DeviceTvmSoftwareInventory
9 | where OSPlatform !startswith "windowsServer"
10 | where SoftwareName startswith "edge_chromium"
11 | summarize Count=count() by SoftwareVersion
12 | order by SoftwareVersion desc
```

Getting started **Results** Query history

Export Show empty columns 5 items Search

Filters: Add filter

<input type="checkbox"/>	SoftwareVersion	Count
<input type="checkbox"/>	> 148.0.3956.0	1
<input type="checkbox"/>	> 146.0.3856.97	2
<input type="checkbox"/>	> 146.0.3856.84	1
<input type="checkbox"/>	> 146.0.3856.109	11
<input type="checkbox"/>	> 145.0.3800.70	1

Microsoft 365 Apps versions

- Microsoft 365 Apps admin center
 - [Microsoft 365 Apps admin center](#)
- Intune: App inventory
- Microsoft Defender for Endpoints (MDE)



Programmatic ways to get M365 Apps version

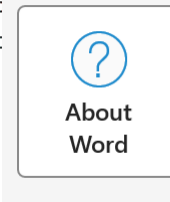


Registry Editor

File Edit View Favorites Help

Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Office\ClickToRun\Configuration

Name	Type	Data
(Default)	REG_SZ	(value not set)
AudienceData	REG_SZ	Production::MEC
AudienceId	REG_SZ	55336b82-a18d-4dd6-b5ff...
CDNBaseUrl	REG_SZ	http://officecdn.microsoft.c...
ClientCulture	REG_SZ	en-us
ClientFolder	REG_SZ	C:\Program Files\Common...
ClientVersionToReport	REG_SZ	16.0.19725.20170
ClientXnoneHash	REG_SZ	
ClientXnoneVersion	REG_SZ	16.0.19725.20170
InstallationPath	REG_SZ	C:\Program Files\Microsoft Office
InstallID	REG_SZ	24C5D50D-8B51-484C-8975-99A7DFA
O365ProPlusRetail.Excl...	REG_SZ	bing,groove,infopath,lync,sharepointde
O365ProPlusRetail.Me...	REG_SZ	CDN



About Word

Learn more about Word, Support, Product ID, and Copyright information.

Version 2602 (Build 19725.20170 Click-to-Run)

Monthly Enterprise Channel

Programmatic ways to get .NET Framework updates



```
PS C:\> get-hotfix
```

Source	Description	HotFixID	InstalledBy	InstalledOn
SANTAPC116	Update	KB5066128	NT AUTHORITY\SYSTEM	10/21/2025 12:00:00 AM
SANTAPC116	Update	KB5054156	NT AUTHORITY\SYSTEM	10/3/2025 12:00:00 AM
SANTAPC116	Security Update	KB5079473	NT AUTHORITY\SYSTEM	3/17/2026 12:00:00 AM
SANTAPC116	Security Update	KB5077869	NT AUTHORITY\SYSTEM	2/19/2026 12:00:00 AM
SANTAPC116	Security Update	KB5083532	NT AUTHORITY\SYSTEM	3/17/2026 12:00:00 AM

2025-10 Cumulative Update for .NET Framework 3.5 and 4.8.1 for Windows 11, version 25H2 for arm64 (KB5066128)
Successfully installed on 21/10/2025

2025-09 Cumulative Update for .NET Framework 3.5 and 4.8.1 for Windows 11, version 25H2 for arm64 (KB5066128)
Successfully installed on 03/10/2025

Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\NET Framework Setup\NDP\v4\Client

Name	Type	Data
(Default)	REG_SZ	(value not set)
CBS	REG_DWORD	0x00000001 (1)
Install	REG_DWORD	0x00000001 (1)
InstallPath	REG_SZ	C:\Windows\Microsoft.NET
Release	REG_DWORD	0x00082405 (533509)
Servicing	REG_DWORD	0x00000000 (0)
TargetVersion	REG_SZ	4.0.0
Version	REG_SZ	4.8.09221



Update issues

Update related issues (Autopatch)



Microsoft Intune admin center

Home > Devices | Windows updates

Autopatch Alerts

Critical 22 | Warning 2 | Informational 0

Refresh | Export | Columns

Search

Affected Update Type: Device, Quality, Feature | Add filters

Alert Name	Severity	Category	Affected Update Type
Multiple security updates missing	Critical	Device	Device
Hotpatch - Baseline missing to Hotpatch	Warning		
Repair devices	Critical		
Hotpatch - VBS not running	Critical		
Update files not found	Critical		
Update Download Failed	Critical		
Installation failed due to access denied	Critical		
Update installation canceled	Critical		
Windows version past end of service	Critical		
Update download canceled	Critical		
Restart issue during update installation	Critical		
Installation failed due to locked file	Critical		
Update installation failed	Critical		
Windows Update issue detected	Critical		
Insufficient disk space for update	Critical		
OS out of support: upgrade or get Extended Security Updates	Critical		
Windows component corruption detected	Warning		

No Graph access to the data 😞

Dashboard > Devices | Windows updates

Autopatch management status

Changes you make to devices will take up to 8 hours to be reflected here.

Last synced: 08/04/2026, 13:50:24

This view shows all Intune devices and provides management status by Windows Autopatch through cloud policies and update rings. Learn more at [Autopatch management status](#)

Managed for quality updates: 0 | Managed for feature updates: 13 | Managed for driver updates: 13 | Assigned to update rings: 9 | Other: 0 | Total number of devices: 40

Refresh | Export | Columns

Search

Alerts: Automatic update policy misconfigured, Auto... , +53 | Add filters

Device name	Assigned to update r...	Update status	OS Version	Update types enrolled in cloud polic...	Hotpatch enabled	Last Check-in	Alerts
SANTAPC031	No	Not up to date	10.0.19045.6332	Driver Feature	No	08/04/2026, 7:09:19	Resolve update source conflict - Dual scan disabled + 3 more View alert detail
SANTAPC169	No	Not up to date	10.0.19045.6332	Driver Feature	No	08/04/2026, 6:39:47	Resolve update source conflict - Driver updates + 2 more View alert detail
SANTAPC116	Yes	Up to date	10.0.26200.8037	Driver Feature	Yes	07/04/2026, 18:22:19	Hotpatch - Baseline missing to Hotpatch View alert detail
AION-LAPTOP	Yes	Up to date	10.0.26100.8037	Driver Feature	No	07/04/2026, 22:22:29	Secure Boot - Certificate update required View alert detail

Update related issues (WUfB reports)



```

86 // Update alerts
87 UCUpdateAlert
88 | where AlertStatus == 'Active'
89 | distinct AzureADDeviceId, AlertStatus, UpdateCategory, Description
90 | summarize Count=count() by Description, UpdateCategory
91 | order by Count desc
92

```

Results Chart

Description

- > This device has a corrupted Windows component
- > Device is not sufficiently active enough to install updates being offered to it by the Deployment Service
- > An attempt was made to access a downloaded update that has already been removed.
- > A generic failure was encountered.
- > The download failed because the local user was denied authorization to download the content.
- > The specified path cannot be found.
- > This device has a corrupted Windows component
- > An application is likely interfering with Windows Update.
- > The installation was unexpectedly canceled.
- > Access denied.
- > Access denied.
- > Invalid data was encountered.
- > The download was cancelled for an unspecified reason.
- > The installation was unexpectedly canceled.

```

93 // Update alerts
94 UCUpdateAlert
95 | where AlertStatus == 'Active' and Description contains "full"
96 | distinct DeviceName, AzureADDeviceId, AlertStatus, UpdateCategory, Description
97 | order by DeviceName asc

```

Results Chart

DeviceName	AzureADDeviceId	AlertStatus	UpdateCategory	Description
>	93ae8e6a-c64b-47df-9785-7c8...	Active	DriverUpdate	An operation could not be completed because the disk is full.
>	fa3c297c-01d2-4005-9b3c-e4a...	Active	WindowsQualityUpdate	Couldn't complete the installation because the Windows partition is full.
>	820df52b-47ed-458b-8b43-15...	Active	WindowsQualityUpdate	Couldn't complete the installation because the Windows partition is full.
>	99cf06c9-24d8-4626-bc0f-315...	Active	WindowsQualityUpdate	Couldn't complete the installation because the Windows partition is full.
>	871f66d4-186f-4f6e-99dc-6b11...	Active	WindowsQualityUpdate	Couldn't complete the installation because the Windows partition is full.
>	61a58c21-8e5e-49dd-b6e8-fd0...	Active	WindowsQualityUpdate	An operation could not be completed because the disk is full.
>	713a3579-9e6a-4eb7-b5e4-1e...	Active	WindowsQualityUpdate	An operation could not be completed because the disk is full.
>	2de722d7-77b8-420c-9f12-322...	Active	WindowsQualityUpdate	Couldn't complete the installation because the Windows partition is full.
>	1e773742-8a9c-468b-93ba-f4f...	Active	WindowsQualityUpdate	Couldn't complete the installation because the Windows partition is full.
>	5ed9426e-986c-4491-aa48-628...	Active	WindowsQualityUpdate	Couldn't complete the installation because the Windows partition is full.
>	8c8da65e-32b1-42e2-b9c4-95c...	Active	WindowsQualityUpdate	Couldn't complete the installation because the Windows partition is full.
>	65d759b2-36ce-445d-9a49-82...	Active	WindowsQualityUpdate	Couldn't complete the installation because the Windows partition is full.
>	4f62e56a-05b5-4191-a248-66e...	Active	WindowsQualityUpdate	An operation could not be completed because the disk is full.



Demo!

Update issues

Dashboard > Devices | Windows updates

Autopatch management status

Changes you make to devices will take up to 8 hours to be reflected here.

Last synced: 08/04/2026, 13:50:24

This view shows all Intune devices and provides management status by Windows Autopatch through cloud policies and update rings. Learn more at [Autopatch management status](#)

Managed for quality update... 0 | Managed for feature update... 13 | Managed for driver updates 86 // Update alerts | Assigned to update rings | Other | Total number of devices

UCUpdateAlert

```

87 UCUpdateAlert
88 | where AlertStatus == 'Active'
89 | distinct AzureADDeviceId, AlertStatus, UpdateCategory, Description
90 | summarize Count=count() by Description, UpdateCategory
91 | order by Count desc
92

```

Device name	Assigned	Description	UpdateCategory
SANTAPC031	No	This device has a corrupted Windows component	WindowsQualityUpdate
SANTAPC169	No	Device is not sufficiently active enough to install updates being offered to it by the Deployment Service	WindowsFeatureUpdate
SANTAPC116	Yes	An attempt was made to access a downloaded update that has already been removed.	DriverUpdate
AINON-LAPTOP	Yes	A generic failure was encountered.	DriverUpdate
		The download failed because the local user was denied authorization to download the content.	WindowsFeatureUpdate
		The specified path cannot be found.	DriverUpdate
		This device has a corrupted Windows component	WindowsFeatureUpdate
		An application is likely interfering with Windows Update.	WindowsQualityUpdate
		The installation was unexpectedly canceled.	WindowsQualityUpdate
		Access denied.	WindowsQualityUpdate
		Access denied.	WindowsFeatureUpdate
		Invalid data was encountered.	WindowsQualityUpdate
		The download was cancelled for an unspecified reason.	WindowsQualityUpdate
		The installation was unexpectedly canceled.	WindowsFeatureUpdate

Summary



- Update related reporting has improved significantly
 - New reports → huge step forward
 - Especially CU/Feature update related reports
- Remember other update types
 - Browsers
 - M365 Apps
- Custom reporting still an issue
 - WUfB Reports provide additional value
 - KQL enabled datasets are useful

Please rate this session on
Sched.com



We would love to hear what
you liked and how we could
improve!

Thanks!