

because now matters

### Migrating to Windows 11



#### Agenda

- Introduction
- System Requirements
- Compatibility Reporting
- Upgrade Options
- Troubleshooting
- Customizations
- New Features (24H2)



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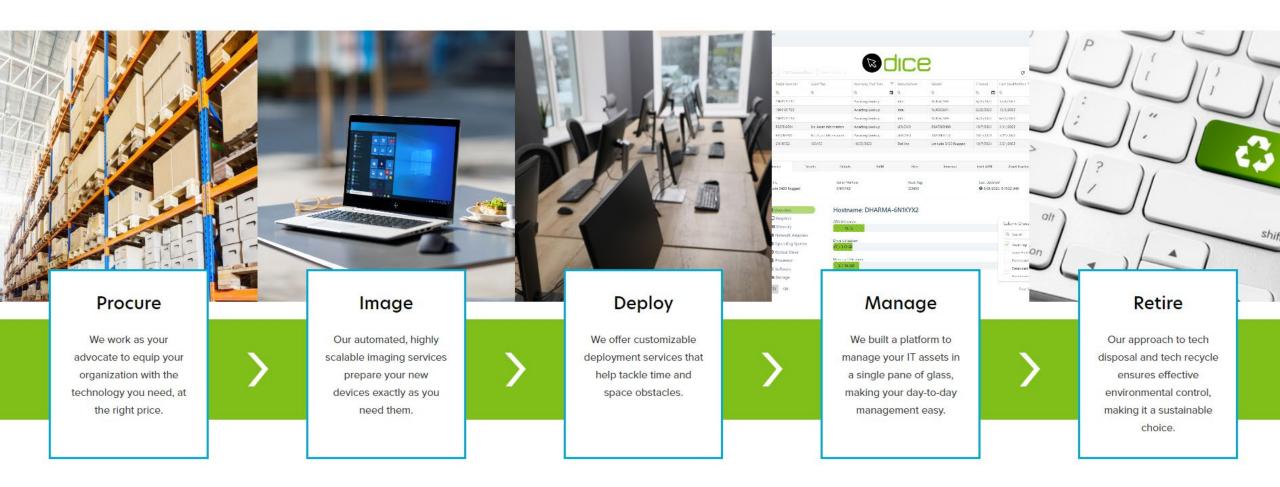
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- 14+ Years experience consulting
- Focus on securing and managing identities and devices
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With a blend of proprietary hardware, cloud device management software and partnerships with industry giants including Intel, HP, Dell, and Lenovo, Now Micro is uniquely positioned to help customers maximize investments in technology.







DICE helps customers manage product lifecycles through a single pane of glass.

|      |                   |    |              | tanagement/                                     |                      |                 |              |                      |            | ~                      | • | -   | - | - |  |
|------|-------------------|----|--------------|---|----------------------|-----------------|--------------|----------------------|------------|------------------------|---|-----|---|---|--|
| 0    | dice              | r. | A Device Man | nagement  |                      |                 |              |                      |            |                        |   |     |   |   |  |
|      |                   |    |              |   |                      |                 |              |                      |            |                        |   |     |   |   |  |
| v    | Filter Menu       |    |              |   |                      | Device          | Manage       | ment                 |            |                        |   |     |   |   |  |
| *    | Home              |    | A44.0        | olumn Edit Selected                             |                      |                 |              |                      |            | 0                      |   | D   |   |   |  |
|      | Device Management |    | AUG C        |   |                      |                 |              |                      |            | تفاتف                  |   | -   |   |   |  |
|      | Asset Management  |    |              | Serial Number                                   | Asset Tag<br>Q       |                 | Manufacturer | Model<br>Q           | Created    | Last Modification Time |   | Pro |   |   |  |
|      |                   |    |              | · 1901121717                                    | ~                    | Awaiting Lookup | Intel        | NUC6CAYH             | 6/20/2023  | 12/5/2023              | U |     |   |   |  |
| 000  | Configurator      |    |              | <ul><li>1901121717</li><li>1901121720</li></ul> |                      | Awaiting Lookup | Intel        | NUC6CAYH             | 6/20/2023  | 12/5/2023              |   |     |   |   |  |
|      | Orders            |    |              | + 1901121718                                    |                      | Awaiting Lookup | Intel        | NUCECAYH             | 6/20/2023  | 6/30/2023              |   |     |   |   |  |
|      | Ticket Management |    |              | R90FH2QN  | No Asset Information | Awaiting Lookup | LENOVO       | 20A7503400           | 10/7/2021  | 3/11/2023              |   |     |   |   |  |
|      |                   |    |              | <ul> <li>R9026YAW</li> </ul>                    | No Asset Information | Awaiting Lookup | LENOVO       | 20A70037US           | 10/7/2021  | 3/11/2023              |   |     |   |   |  |
| Ei F | Requests          |    |              | * 6N1KYX2                                       | 123456               | 10/30/2023      | Dell Inc.    | Latitude 5420 Rugged | 10/7/2021  | 3/21/2023              | 3 | res |   |   |  |
|      | Organization      |    |              |   |                      |                 |              |                      |            |                        |   |     |   |   |  |
|      | Documents         |    |              |   |                      |                 |              |                      |            |                        |   |     |   |   |  |
|      |                   |    |              | Device  | Tickets Detail       | s KVM           | Files        | Terminal             | Intel AMT  | Asset Tracking         |   |     |   |   |  |
| ? 1  | Help              |    |              | Dell Inc.                                       | Serial No            | mber            | Asset Tag    |                      | Last Updat | ed                     |   |     |   |   |  |
|      |                   |    |              | Latitude 5420 Rugged                            | 6N1KYX               | 2               | 123456       |                      | O 3/21/20. | 23, 8:19:52 AM         |   |     |   |   |  |
|      |                   |    |              |   |                      |                 |              |                      |            |                        |   |     |   |   |  |
|      |                   |    |              | B Overview                                      | Hostn                | ame: DHARMA     | -6N1KYX2     |                      |            |                        |   |     |   |   |  |
|      |                   |    |              | Graphics  | CPU Utiliza          |                 |              |                      |            |                        |   |     |   |   |  |
|      |                   |    |              | Memory  | 15                   |                 |              |                      |            |                        |   |     |   |   |  |
|      |                   |    |              | A Network Adapt                                 |                      |                 |              |                      |            |                        |   |     |   |   |  |
|      |                   |    |              | Coperating System                               | em 47 / 512 1        |                 |              |                      |            |                        |   |     |   |   |  |
|      |                   |    |              | Optical Drive                                   |                      |                 |              |                      |            |                        |   |     |   |   |  |
|      |                   |    |              | Processor                                       | Memory U<br>2/16     |                 |              |                      |            |                        |   |     |   |   |  |
|      |                   |    |              | Software Software                               |                      |                 |              |                      |            |                        |   |     |   |   |  |
|      |                   | _  |              | Storage   |                      |                 |              |                      |            |                        |   |     |   |   |  |

#### Example capabilities:

- Streamlined check-in and check-out processes for users
- Device lifecycle reports to quickly slice data for purchasing decisions
- Device location tracking
- Real-time data on devices
- Device and warranty information
- Interactive device management
- Intel vPro AMT out of band management



#### Why Upgrade to Windows 11?

- Windows 10 End of Servicing October 14<sup>th</sup>, 2025
- Improved security tools and features
- Compatibility with latest applications and hardware
- Improved Co-pilot integration
- Improved user experience (tabbed explorer, window snap, virtual desktops)

#### Windows 11 System Requirements

- Processor
- TPM 2.0
- UEFI and Secure Boot

List of Windows 11 System Requirements List of Supported Processors

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### Windows 11 Compatibility Reporting

- Configuration Manager
  - Windows 11 Upgrade Readiness Dashboard
  - Queries
- Intune / Azure
  - Reports
  - Endpoint Analytics
  - Windows Update for Business Report
- Registry

# Windows 11 Compatibility Reporting Demo

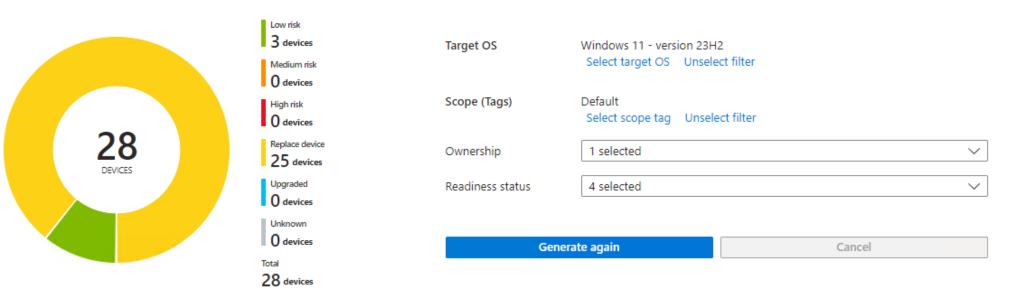


|               | In progress<br>4 devices<br>Success<br>50 devices | Feature update policy    | Windows 11 23H2<br>Select a feature update profile Unselect filter |              |  |
|---------------|---|--------------------------|--|--------------|--|
|               | Error<br>O devices                                | Update aggregated status | All  | V            |  |
| 54<br>DEVICES | Rollback initiated or compl<br>O devices          | Ownership                | 1 selected   | $\checkmark$ |  |
|               | Cancelled<br>O devices                            |                          |  |              |  |
|               | On hold<br>O devices                              | Gener                    | ate again  | Cancel       |  |
|               | Total<br>54 devices                               |                          |  |              |  |

#### 

#### Showing 1 to 50 of 54 records

| Devices $\uparrow_{\downarrow}$ | Last Event Time $\uparrow_\downarrow$ | Update State | Update Substate   | Update Aggregated State | Alert Type     | Target Version ↑↓        |
|---------------------------------|---------------------------------------|--------------|-------------------|-------------------------|----------------|--------------------------|
|                                 | 8/11/2024, 8:42:51 PM                 | Pending      | Scheduled         | In progress             | Not applicable | Windows 11, version 23H2 |
|                                 | 6/6/2024, 8:52:45 AM                  | Installed    | Update installed  | Success                 | Not applicable | Windows 11, version 23H2 |
|                                 | 6/10/2024, 4:38:36 PM                 | Installed    | Update installed  | Success                 | Not applicable | Windows 11, version 23H2 |
|                                 | 6/7/2024, 4:11:59 PM                  | Installed    | Update installed  | Success                 | Not applicable | Windows 11, version 23H2 |
|                                 | 6/12/2024, 5:26:07 PM                 | Installed    | Update installed  | Success                 | Not applicable | Windows 11, version 23H2 |
|                                 |                                       |              | © 2024 Now Micro. | All rights reserved.    |                | 9/18/2024   11           |



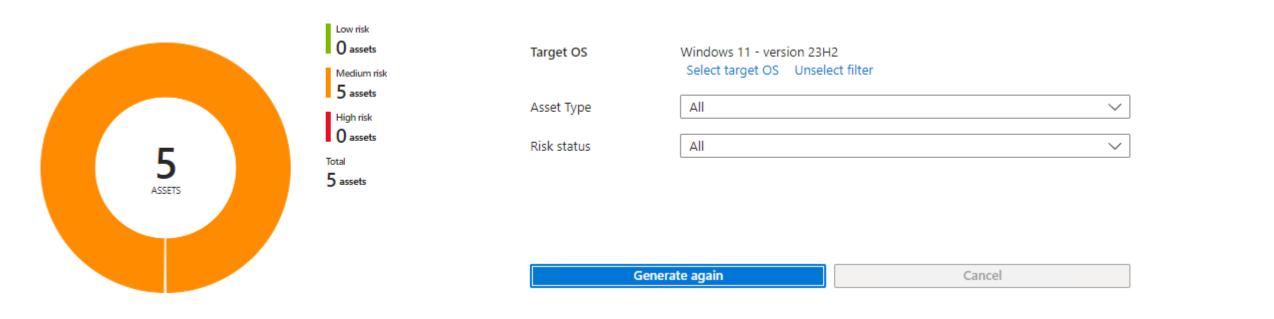
₽ Search by device name, Intune device ID or Microsoft Entra device ID

| Showing 1 to 28 of 28 records     |                                      |                               |                                    |  |                                    |                                    |                                       | < Previous                         |
|-----------------------------------|--------------------------------------|-------------------------------|------------------------------------|--|------------------------------------|------------------------------------|---------------------------------------|------------------------------------|
| Device Name $\uparrow \downarrow$ | Manufacturer $\uparrow_{\downarrow}$ | Model ↑↓                      | OS Version $\uparrow_{\downarrow}$ | Readiness status $\uparrow_{\downarrow}$ | Sys req issues                     | App issues $\uparrow_{\downarrow}$ | Driver issues $\uparrow_{\downarrow}$ | Other issues $\uparrow_\downarrow$ |
|                                   | LENOVO                               | 30DGS08E00                    | 10.0.19044.4894                    | Low risk                                 |                                    | 0                                  | 0                                     | 0                                  |
|                                   | Now Micro                            | NUC5i3RYH                     | 10.0.19045.4894                    | Replace device                           | Processor family, TPM              | 0                                  | 0                                     | 1                                  |
|                                   | HP                                   | HP Elite Slice G2 with MS SRS | 10.0.19045.4780                    | Replace device                           | Processor family                   | 0                                  | 0                                     | 1                                  |
|                                   | Microsoft Corporation                | Surface Laptop                | 10.0.19045.4780                    | Replace device                           | Processor family                   | 0                                  | 1                                     | 0                                  |
|                                   | LENOVO                               | 10B4S07S00                    | 10.0.19045.4894                    | Replace device                           | Processor family, TPM, Secure boot | 0                                  | 0                                     | 0                                  |
|                                   |                                      |                               |                                    |  |                                    |                                    |                                       |                                    |

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Search by asset name or asset vendor

#### Showing 1 to 5 of 5 records

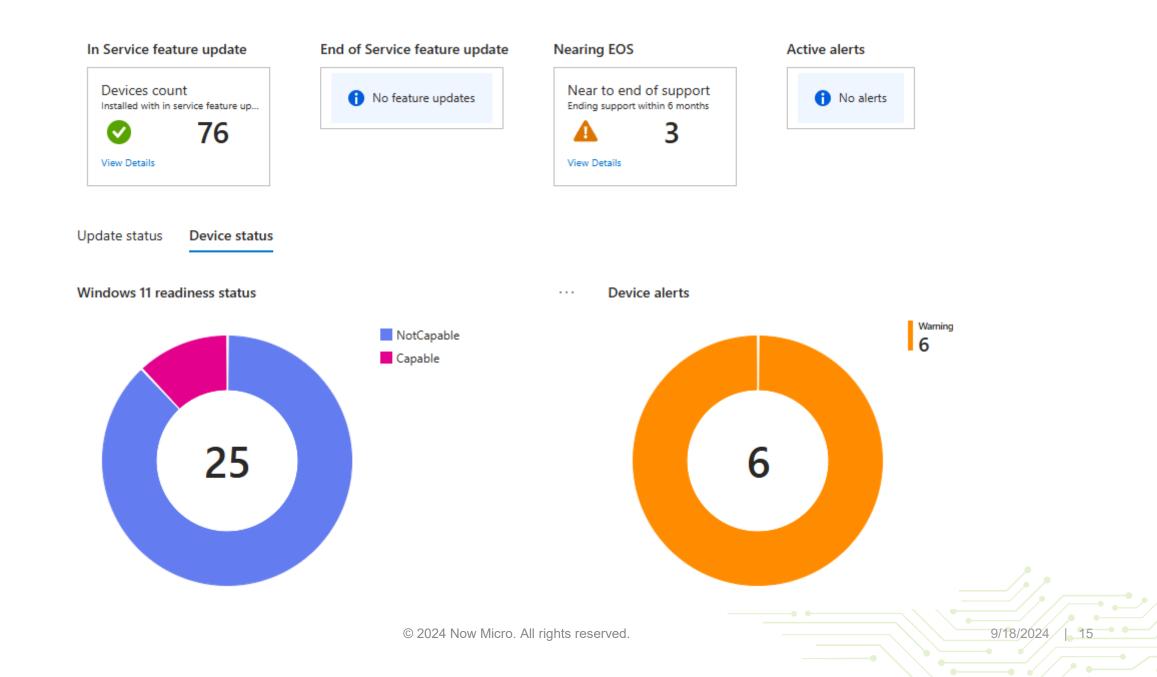
| Asset type ↑↓ | Asset name ↑↓                             | Asset vendor $\uparrow_{\downarrow}$ | Asset version $\uparrow_\downarrow$ | Affected devices $~\uparrow\downarrow~$ | Risk status ↑↓ | Issue                                 |
|---------------|---|--------------------------------------|-------------------------------------|---|----------------|---------------------------------------|
| Other         | IR Camera Driver Legacy Components        | REALTEK                              |                                     | 2                                       | Medium risk    | Application is removed during upgrade |
| Other         | Intel Bluetooth                           | Intel                                |                                     | 6                                       | Medium risk    | Application is removed during upgrade |
| Other         | Logitech Download Assistant - LogiLDA.DLL | Logitech                             |                                     | 1                                       | Medium risk    | Application is removed during upgrade |
| Driver        | Realtek DMFT - IR (usbvideo.sys)          | Realtek                              | 10.0.15063.20005                    | 1                                       | Medium risk    | Driver will not migrate to new OS     |

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| Device name $\uparrow \downarrow$ | Manufacturer $\uparrow \downarrow$ | Model ↑↓               | OS version $\uparrow\downarrow$ | Windows 11 $\uparrow \downarrow$ | Windows 11 readiness reason      |
|-----------------------------------|------------------------------------|------------------------|---------------------------------|----------------------------------|----------------------------------|
|                                   | LENOVO                             | 30DGS08E00             | 10.0.19044.4894                 | Capable                          |                                  |
|                                   | Dell Inc.                          | Precision 5570         | 10.0.22631.4037                 | Upgraded                         |                                  |
|                                   | Now Micro                          | NUC5i3RYH              | 10.0.19045.4894                 | Not capable                      | TPM, CPU family                  |
|                                   | HP                                 | HP Elite Slice G2 with | 10.0.19045.4780                 | Not capable                      | CPU family                       |
|                                   | Microsoft Corporation              | Surface Laptop         | 10.0.19045.4780                 | Not capable                      | CPU family                       |
|                                   | Dell Inc.                          | Latitude 5430          | 10.0.22631.4037                 | Upgraded                         |                                  |
|                                   | LENOVO                             | 10B4S07S00             | 10.0.19045.4894                 | Not capable                      | TPM, System firmware, CPU family |

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### Microsoft Compatibility Appraiser

- Task Scheduler
  - Microsoft > Windows > Application Experience
  - Microsoft Compatibility Appraiser
- Registry
  - HKLM\Software\Microsoft\Windows NT\CurrentVersion\AppCompatFlags\TargetVersionUpgradeExperi enceIndicators

### **Options for Incompatible Devices**

- Resolve compatibility issues if possible
  - Enable or upgrade TPM
  - Disable legacy boot support and enable Secure Boot
  - Add additional RAM or a bigger hard drive
- Purchase new hardware
  - Now Micro is partnered with Dell, HP, Lenovo, and More

### Options for Incompatible Devices Cont.

- Extended Security Updates (ESU) Program
  - Annual subscription fee for up to 3 additional years of updates
  - <u>Microsoft Documentation</u>
- Windows 10 Long-Term Servicing Channel (LTSC)
  - Updates available until late 2020s
  - Typically not installed on standard end-user devices
  - Lacking features compared to the GA versions of Windows
  - <u>Microsoft Documentation</u>

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### Options for Incompatible Devices Cont.

- Install Windows 11 in an unsupported configuration
  - Not recommended
  - Not guaranteed to receive updates in the future
  - Some features may not work
  - Possible system instability
  - <u>Microsoft Documentation</u>

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#### Windows 11 Upgrade Methods

- Configuration Manager
  - Windows Update
  - Task Sequence
- Windows Update for Business
  - Intune Settings
  - Group Policy Settings
- Manual Upgrade

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# Windows 11 Upgrade Demo



### Windows 11 Upgrade Troubleshooting

- Intune and Azure Reports
- SetupDiag Diagnostic tool used to parse upgrade log files
  - SetupDiag Documentation
- Log Files and Error Codes
  - List of Windows upgrade log files
  - List of common Windows upgrade error codes
- Technical details on the upgrade process can be found here
  - Windows upgrade troubleshooting information

# Investigate Windows 11 Upgrade Errors Demo



#### Windows 11 Customization

- Start Menu layout
- Taskbar layout
- Shortcut and feature availability
  - Co-pilot
  - Recall
  - Widgets

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#### Start Menu Customization

- Preference (Default, user can change)
  - Configure the Start menu, then copy the "Start.bin" file
  - AppData\Local\Packages\Microsoft.Windows.StartMenuExperienceHost\_cw5n1 h2txyewy\LocalState\start.bin
  - Copy the "Start.bin" file to the default user profile
- Policy (Forced, user cannot change)
  - Export-StartLayout -Path "C:\StartLayout.json"
  - ./Device/Vendor/MSFT/Policy/Config/Start/ConfigureStartPins
- <u>Customize the Start layout | Microsoft Learn</u>

#### **Taskbar Customization**

- Preference (Default, user can change)
  - Configure a "LayoutModification.xml" file
  - Copy the "LayoutModification.xml" file to the default user profile
- Policy (Forced, user cannot change)
  - Configure a "LayoutModification.xml" file
  - ./Device/Vendor/MSFT/Policy/Config/Start/StartLayout/Configure start layout
  - Computer Configuration > Administrative Templates > Start Menu and Taskbar
- <u>Configure the Windows taskbar | Microsoft Learn</u>

#### Shortcuts and Features

- Widgets
  - ./Device/Vendor/MSFT/Policy/Config/NewsAndInterests/AllowNewsAndInterests
  - Computer Configuration > Policies > Administrative Templates > Windows Components > Widgets > Allow Widgets
- Co-pilot
  - ./User/Vendor/MSFT/Policy/Config/WindowsAI/TurnOffWindowsCopilot
  - User Configuration > Administrative Templates > Windows Components > Windows Copilot > Turn off Windows Copilot
- Recall
  - ./User/Vendor/MSFT/Policy/Config/WindowsAI/DisableAIDataAnalysis
  - User Configuration > Administrative Templates > Windows Components > Windows AI > Turn off saving snapshots for Windows

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# Windows 11 Customization Demo



#### New Features in Windows 11

- Updated UI elements
  - Start Menu and Taskbar
  - Context Menus
- File Explorer now supports tabs
- Improved Window snap and snap groups
- Improved Settings application

#### Windows 11 24H2

- Available as an optional update on September 24<sup>th</sup> and generally available on October 8<sup>th</sup>
- New Features
  - Improved Co-pilot integration
  - Native support for .zip, .7z, and .tar files
  - Sudo for Windows

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# Thank you! Questions or comments?