NerdioCon 2025 PALM SPRINGS

Master the application management lifecycle with Nerdio Manager

Agenda

- What is UAM?
- Benefits of UAM
- Key Concepts
- Deployment Technologies
- NMM vs NME
- UAM Product Walkthroughs

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Senior Technical Trainer

Nerdio employee for over a year now

Owned my own MSP for 17 years

Successfully exited and sold MSP in 2022 to The20

Nerdio partner since 2018

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Go Live Engineer

Nerdio employee for over a year

Worked at MSP as Nerdio SME

Nerdio user 4+ years

Worked for MSPs and Fortune 500 companies

Unified Application Management

What is UAM?

Unified App Management

- Unified approach to application management
  - Streamline deployment, updates, removal of apps
- Has support for a variety of scenarios
- Uses existing technologies

Benefits of UAM

Security

- Quickly address application updates and vulnerabilities

Time

- Less manual management (physical and virtual devices)
- Policy based deployments

Tool Sprawl

- Cut down on the variety of application deployment tools.
    - Chocolatey
    - Scoop
    - Ninite
    - PDQ Deploy

Key Concepts

- Applications
- Targets
- Repositories
- Deployment Technologies

Applications

Where you want to install your applications

- Pooled AVD host Pools
- Personal AVD Desktops
  - User/Group
  - Specific Pools
- Servers
- Intune connected/enrolled
  - Users or User Groups
  - Device Groups

Applications

What do you need to deliver?

Variety of installation types

- MSI
- EXE
- ZIP (single file)
- MSIX / App attach (CIM, VHD)

Targets

Where you want to install your applications

- Pooled AVD host Pools
- Personal AVD Desktops
  - User/Group
  - Specific Pools
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Targets

Storage location for software packages

- Version control

Software publishers maintain the software

- In many cases for free
- Software is commonly digitally signed

Current availability

- Microsoft Store
- WinGet community
- Private / custom repo
- Google Play Store
- iOS Store

Deployment technologies

WinGet

- Azure connected (virtual) – native Azure tech called extensions
- Intune connected (physical) – Intune to push scripts for WinGet commands

SCCM (NME)

- Azure connected (virtual) – native Azure tech called extensions
- Intune connected (physical) – Intune to push scripts for WinGet commands

Shell apps

- Azure connected (virtual) – native Azure tech called extensions
- Intune connected (physical) – Intune to push customized script packages
  - can call WinGet commands if needed

MSIX / App attach (virtual only)

- Attaches the app package to the VM

Application deployment

One-time deployment:

- App testing
- One off install for a user

Use policies to automate:

- App installation on session hosts.
- App maintenance and updates.
- App versioning and control.

What is Winget?

- Microsoft Created Windows Package Manager
- Command line Utility introduced in Windows 10 1709
- Agentless – Already built into Windows 10/11
- Uses repositories: msstore, winget repo, custom repository
- Easy way to manage, upgrade, install and uninstall apps

What is SCCM?

- Microsoft System Center Configuration Manager
- Used for app installation and ongoing app management
- Package apps and deliver from a centralized location
- Detect if apps are installed and define when and how apps should be managed
- Define policies for both initial app deployment and ongoing maintenance windows

What are Shell apps?

- Enables the creation of complex scripted deployments through policies
- Can deploy multiple components via PowerShell
- Can use the detection script feature to send success and failure status
- In most cases, used in large deployments, or where WinGet is not practical
- Native PowerShell scripts – WinGet CAN be called as part of the installation

What is MSIX / App attach?

- Microsoft technology that allows you to attach an app package to the OS
- Adds independent management of the app and OS
- Requires a valid certificate (public authority, internal authority, self-signed)
- Two versions available (MSIX app attach & App attach V2)
- Packages are stored on an SMB file share / packages have to be uploaded

MSIX app attach vs App attach

MSIX app attach	App attach V2 (NME only)
Permissions are controlled by assignment to application groups; however, all desktop users see all MSIX app attach applications in the desktop application group	Permissions are applied per application per user, giving you greater control. Desktop users only see the app attach applications assigned to them
Applications might only run on one host pool. If you want it to run on another host pool, you must create another package	The same application package can be used across multiple host pools
Applications can only run on the host pool in which they're added	Applications can run on any session host running a Windows client operating system in the same Azure region as the application package
To update the application, you must delete and recreate the application with another version of the package. You should update the application in a maintenance window	Applications can be upgraded to a new application version with a new disk image without the need for a maintenance window
Users can't run two versions of the same application on the same session host	Users can run two versions of the same application concurrently on the same session host
Telemetry for usage and health is not available through Azure Log Analytics	Telemetry for usage and health is available through Azure Log Analytics

NMM vs NME

Nerdio Manager for MSP:

WinGet (built into Windows)

Shell Apps (customized scripts)

Intune (delivered via WinGet command run on endpoint)

MSIX App Attach (not supported for accounts that use Entra Domain Services)

Nerdio Manager for Enterprise:

WinGet (built into Windows)

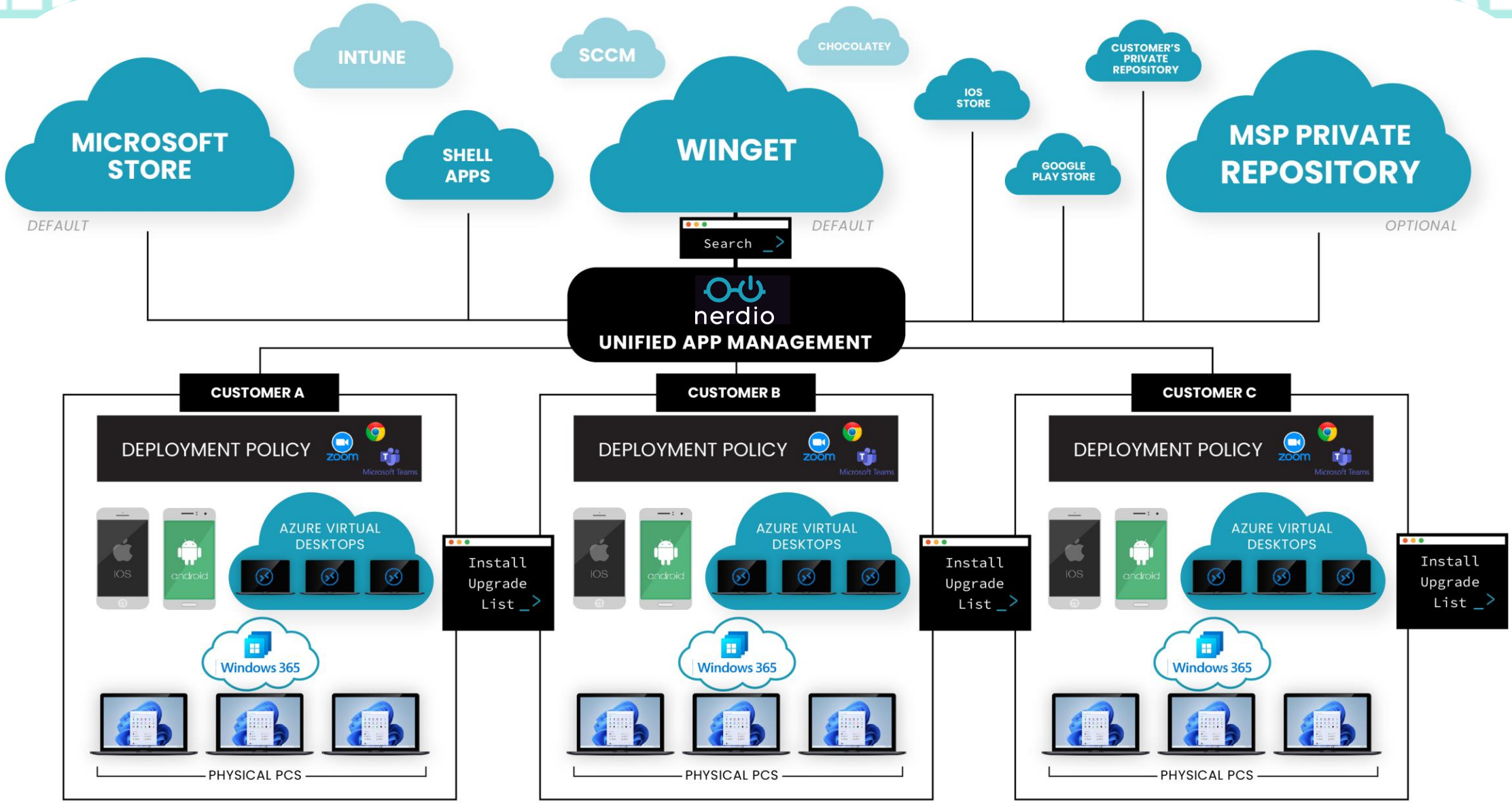
Shell Apps (customized scripts)

SCCM (System Center Configuration Manager)

App Attach v2 (not supported for accounts that use Entra Domain Services)

Intune (delivered via WinGet command run on endpoint)

Intune (import Intune Apps to be ”controlled by UAM vs Intune policies)


INTUNE
SCCM
CHOCOLATEY
IOS STORE
CUSTOMER'S PRIVATE REPOSITORY
MICROSOFT STORE
SHELL APPS
WINGET
GOOGLE PLAY STORE
MSP PRIVATE REPOSITORY
DEFAULT
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Search _>
nerdio
UNIFIED APP MANAGEMENT
CUSTOMER A
CUSTOMER B
CUSTOMER C
DEPLOYMENT POLICY
zoom
Microsoft Teams
AZURE VIRTUAL DESKTOPS
Install Upgrade List _>
Windows 365
PHYSICAL PCS

AVD - Adoption & Management Framework

Foundations

Desktop Image
- OS Selection
- VM config

Scripted Actions
- VM Customizations
- Updates

Unified App Management
- App installs / updates
- Policy-driven automation

RDP Profile Settings
- User experience settings
- Session security settings

FSLogix Profile Settings
- Profile management
- Profile portability

Host Pool Provisioning

Create Host Pool

Configure / Enable Auto-scale

Session Host Provisioning

Done!
Nerdio Deploys Hosts

Scripted Actions

Library of PowerShell scripts

Can be run in either Azure or AVD Virtual Machines

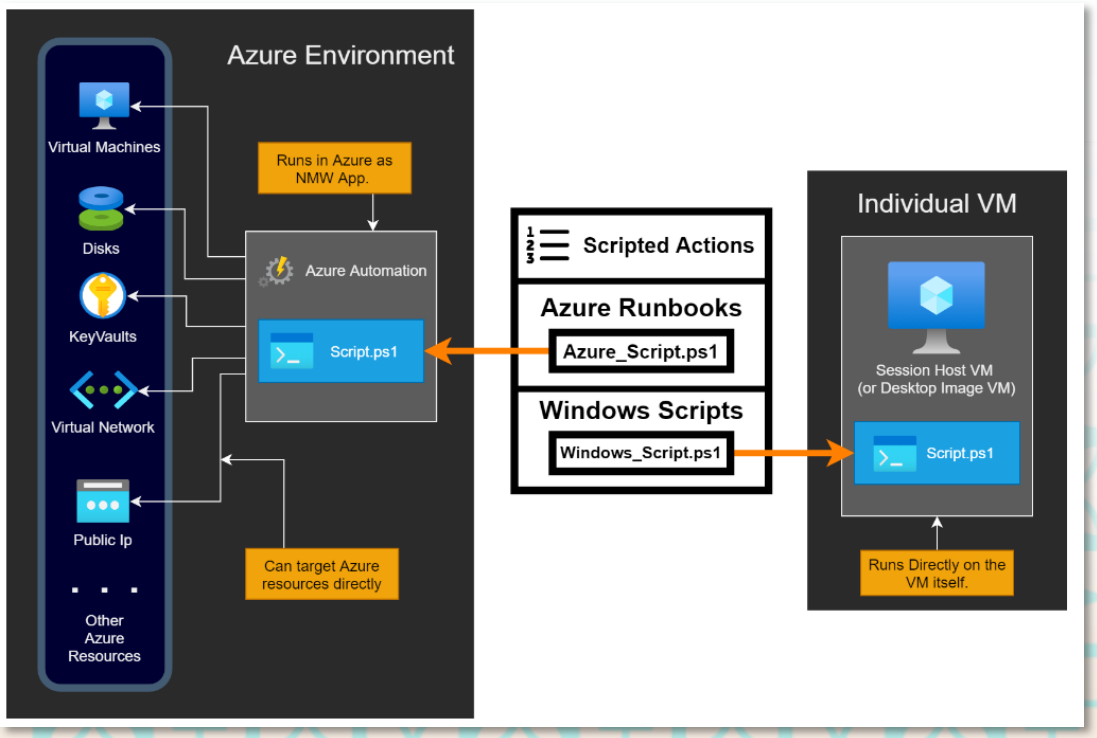
Can be grouped into Scripted Actions Groups

Any PowerShell script you have can be made into a scripted action

Two types

Azure Runbooks

Windows scripts



UAM Product Walkthroughs

Connecting repositories

Connect to the WinGet repository

When enabled, the WinGet community repository is linked by default

Nerdio Manager allows you to connect a private WinGet repository

- NMM – Settings > Integrations > UAM > Link (existing) or Add (create new)
- NME – Settings > Nerdio environment > UAM > Link (existing) or Add (create new)

Other repos like Microsoft Store and iOSStore are enabled/linked by default

Google Play would need to be added manually and used through Intune

Let's take a look!

Connecting repositories

Connect to a Shell Apps repository

Before you can begin adding Shell Apps, you need to create or link a repository

Nerdio Manager allows you to create a new or link a current

- NMM – Settings > Integrations > UAM > Add - choose Shell Apps, enter info
- NMM – Settings > Integrations > UAM > Link – choose Shell Apps, enter info

Linking can be at the MSP or Account level

- NME – Settings > Nerdio Environment > UAM > Add - choose Shell Apps, enter info
- NME – Settings > Nerdio Environment > UAM > Link – choose Shell Apps, enter info

Let's take a look!

Packaging apps - Winget

Choose app that you want to deploy

NMM > Applications > Unified catalog > search for app (can favorite)

NME > Applications > Unified catalog > search for app (can favorite)

Let's take a look!

Deploying apps – Winget

After choosing your app

Deploy manually

NMM > Applications > Unified catalog > click ASSIGN

- Once assigned to account, then can deploy
- NMM > Account > Applications > Unified catalog > DEPLOY

NME > Applications > Unified catalog > click DEPLOY

Deploy through policy

NMM > Account > Applications > Deployment policies > ADD

NME > Applications > Deployment policies > ADD

Let's take a look!

Packaging apps – Shell app

Add new or import

NMM > Applications > Shell apps > Add (add new or from Nerdio library)

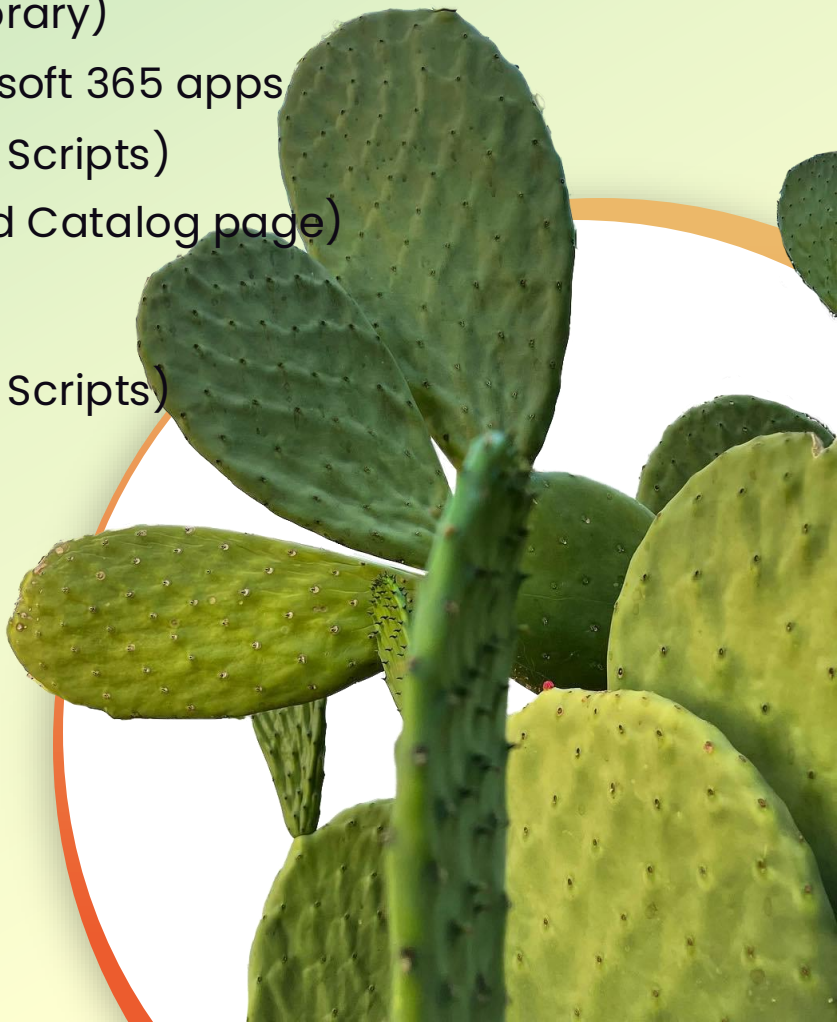
- Nerdio library currently consists of Quickbooks and Microsoft 365 apps
- Fill out details (Name, Publisher, Versions, Detection rules, Scripts)
- You can set the Shell app to be public (will show in Unified Catalog page)

NME > Applications > Shell apps > Add new

- Fill out details (Name, Publisher, Versions, Detection rules, Scripts)

Thank you to *flowdevs* for the Quickbooks scripts!

Let's take a look!



Deploying apps – Shell app

Choose the Shell app from the Unified Catalog

Deploy manually –

NMM > Applications > Unified catalog > click ASSIGN

- Once assigned to account, then can deploy
- NMM > Account > Applications > Unified catalog > DEPLOY

NME > Applications > Unified catalog > click DEPLOY

Deploy through policy –

NMM > Account > Applications > Deployment policies > ADD

NME > Applications > Deployment policies > ADD

Let's take a look!

Packaging apps – scripted action

Create a new script or use pre-canned scripted action

NMM – created at the MSP/Global level and assigned to account

NME – created under Scripted Actions blade (no assignment)

Scripted Actions > Windows Scripts > create new or select existing

- Choose execution mode (uses Azure Custom Script extension):

  Combined (can be combined safely with others)
  Individual (stand-alone for an action on its own)
  Individual with restart (stand-alone with reboot)

Let's take a look!

Deploying apps – Scripted action

Assign Scripted actions or script groups

NMM:

Desktop images – power on, set as image

Host pools – VM creation, VM start, VM stop, VM remove

Hosts – run script manually or on a schedule

Intune devices – run script manually

Servers – run script manually or on a schedule

NME:

Desktop images – set as image, run manually or on a schedule

Host pools – VM creation, VM start, VM stop, VM remove

Hosts – run script manually or on a schedule

Let's take a look!

Ask me anything

Chris Plouffe

Senior Technical Trainer