All-in with Azure AD, Intune, and Office 365

Notes and Slides: billdeitrick.com/citn2019



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Your Environments



Our Environment

Church

- PCs, Macs, Chromebooks, and iPads
- ~65 employees
- PC-dominated, moving to mix of above
- Traditional AD environment (with AADConnect); moving to Azure AD/Intune only

School

- PCs, Chromebooks, and iPads
- ~65 employees, ~400 students
- Employees all use PCs, students use Chromebooks (one-to-one for high school) and iPads
- Fully transitioned into an Azure AD-driven environment



Why Azure AD and Intune?

- Best fit for ministry needs within licensing and cost constraints
- Better Windows device management: NO MORE IMAGING!! 🎉
- Identity Consolidation
- Device-agnostic, user-driven, available-from-anywhere experience
- Forward-looking solution



M365: Two Minute Overview

- Office 365 ProPlus
- Office 365 E1, E3, E5
- Enterprise Mobility Plus Security (EMS) E3, E5
- Windows Enterprise E3, E5
- Microsoft 365 (M365) E3, E5
- Our Licensing Strategy
 - Users with org-owned Windows devices: M365 E3
 - Users without org-owned Windows devices: ProPlus, O365 E1, and EM+S
 - Users with no org-owned devices: O365 E1 and EM+S



"Azure AD is not Cloud AD"

- Goodbye NTLM, LDAP, Group Policy, and RADIUS; hello web services
- Azure AD manages applications
- Flat user structure; no more OUs or forests
- Can't customize the directory schema



Groups

- Two types of groups: Security and O365
- Three membership types: Assigned, Dynamic User, Dynamic Device
- Group-based licensing
 - Sec-[GROUP TYPE]-[GROUP NAME]



Connecting devices

- Azure AD Registered
- Azure AD Joined
 - Down-Level Logon Name: AzureAD\FirstLast
- Hybrid Azure AD Joined



Enterprise applications

- Administrative control of SSO with third-party apps
 - Hundreds of applications in the gallery
 - SaaS vendors and/or Microsoft will typically have documentation
- Azure AD as IDP for G Suite
 - Google "Cloud Identity Free" licenses
 - Web App Login: "Sign in with Google"
 - $\circ~$ Chrome Sync with Azure AD logins
 - \circ Azure AD logins on Chromebooks \clubsuit



Conditional Access

- Configure security controls to apply in specific scenarios
- Based on a variety of "signals", such as:
 - Group membership
 - IP Geolocation
 - Device (managed or not)
 - Application being accessed
 - Risk detection (depending on license)





- Security group nesting is...unpredictable
- Password changes on AAD-joined devices are...jarring



Intune

- Device configuration profiles
 - Assigned to devices or groups of devices (not OUs), not hierarchical like GPO
 - Administrative Templates
 - Custom Profiles/OMA-URI
 - Specify custom OMA-URI and values
 - Ingest Custom ADMX

🕐 Refresh

All products Search to filter items 						×
Setting Name	\uparrow_{\downarrow}	State	\uparrow_{\downarrow}	Setting ty ᡝ	Path	
Prevent users from redirecting their Windows known folders to their	Enabled		Device	\OneDrive		
Prevent users from syncing personal OneDrive accounts		Enabled		User	\OneDrive	14/22

Patching: No WSUS? No problem!

• Delivery Optimization

🕂 Create 🔲 Columns 🍸 Filter 🕐 Refresh 🚽 Export

• Softare Update Policy: Update Rings

Search by name											
Name	\uparrow_{\downarrow}	Feature Deferr \uparrow_{\downarrow}	Quality Deferral \uparrow_{\downarrow}	Feature	\uparrow_{\downarrow}	Quality	\uparrow_{\downarrow}	Servicing chan \uparrow_{\downarrow}	Assigned	\uparrow_{\downarrow}	
Fast Ring		60	7	Running		Running		SAC (Targeted)	Yes		•••
Standard Ring		120	28	Running		Running		SAC (Targeted)	Yes		•••



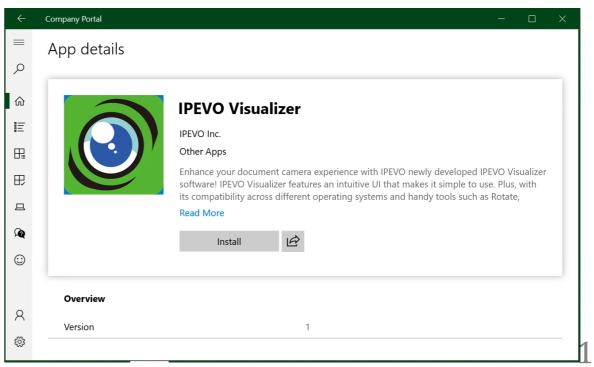
PowerShell Scripts

- Intune Management Extension deploys scripts and installs Win32 apps
- PowerShell Scripts can be run user or machine-scoped
- DO NOT put sensitive data into PowerShell scripts you push with Intune



App Deployment

- Types of apps that can be deployed on Windows:
 - Microsoft Store apps
 - Line of business apps (well-behaved MSI)
 - Windows app (Win32)
- Company Portal app







- App install error codes for Win32, MSI are often...unhelpful
- Built-in cloud-based printer deployment solution is...nonexistent

 Needed third party product (Printix)
- Wi-Fi policies will report an error if pushed to a device without a Wi-Fi adapter, which we find...annoying
- Reporting intervals are...really slow 🕸



Getting Devices "Business Ready"

- Azure AD/Intune Integration
- Primary choice: User or IT-driven?
 - Self-enrollment methods
 - BYOD
 - Azure AD Join
 - Autopilot
 - Administrator-based enrollment methods
 - Hybrid Azure AD Join
 - Bulk enrollment
- Our process: Bulk enrollment, Fresh Start reset



Random Tasty Tidbits

- A? BitLocker: Key escrow to Azure AD, Intune policy for automatic encryption
- 🛃 Azure AD Sign-in logs
- 😂 Azure Cloud Shell
- *P* Intune: Compliance policies
- 🗍 Mobile App Management



Conclusion: Is this the right fit?

- What are your dependencies on traditional AD? Can they be eliminated?
 - LDAP, RADIUS, traditional Windows Auth
- Our goals:
 - Best fit for ministry needs within licensing and cost constraints
 - Better Windows device management: NO MORE IMAGING!!
 - SSO for SaaS apps
 - Mobile Application Management (MAM)
 - Device-agnostic, user-driven, available-from-anywhere experience
 - Most future proof solution





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