

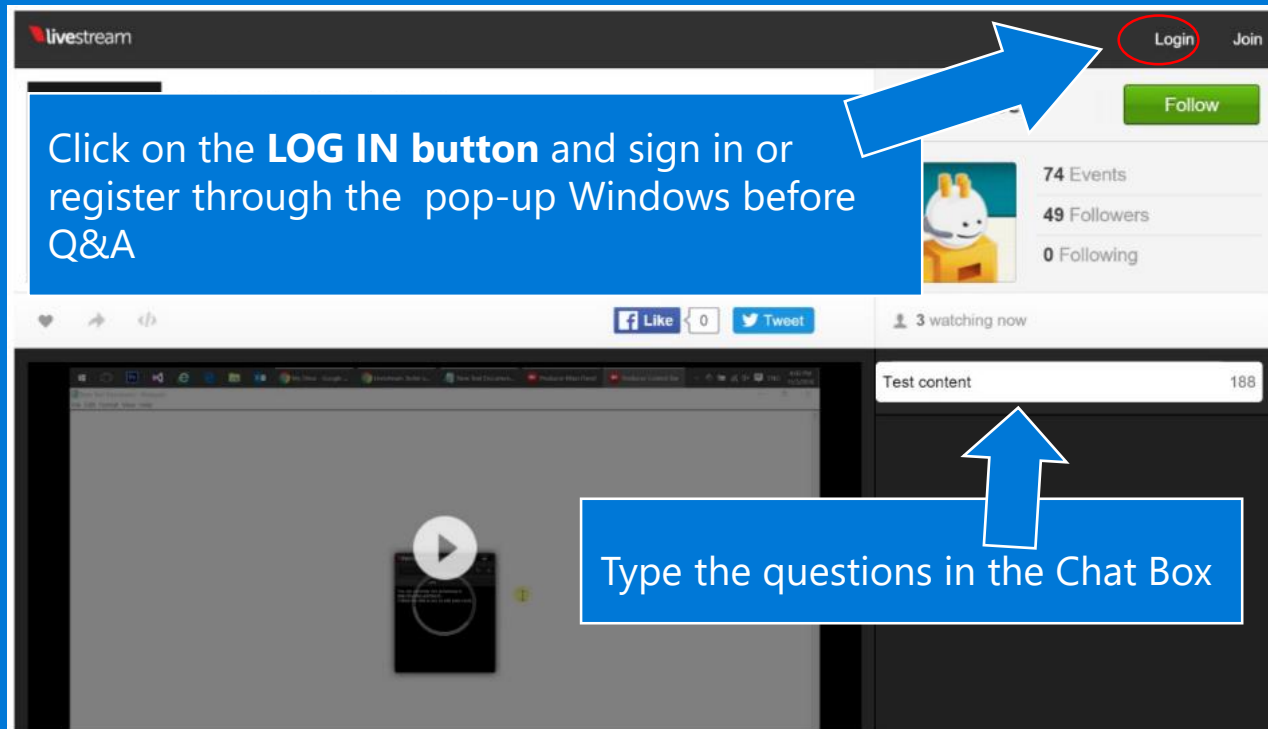
Session will be starting shortly



Windows 10 webinar series Q&A Guidance

1 Please Sign in to Livestream to access Q&A function

A technical team will be helping with your questions during the 1 hour webinar and for 30 minutes after.



2 To facilitate discussion, please use this format when posting questions: "<First Name initials><Last Name>_<number>: <question>"

Example:

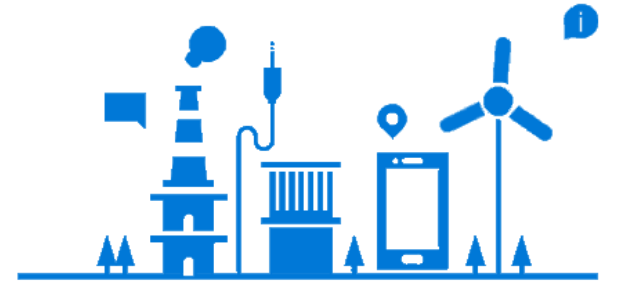
LJChiu_1: Who is Cortana?

QWang_1: Why is it Blue instead of Red?

LJChiu_2: Who is Contoso?

3 Questions may not be answered in the sequence by which it came in.

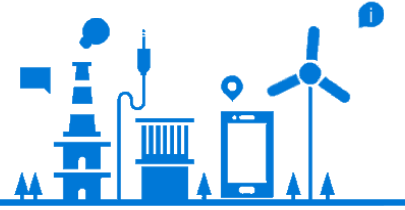
Preparing your environment and deploying Windows 10



Mark O'Shea

MVP Windows and Devices for IT

Agenda



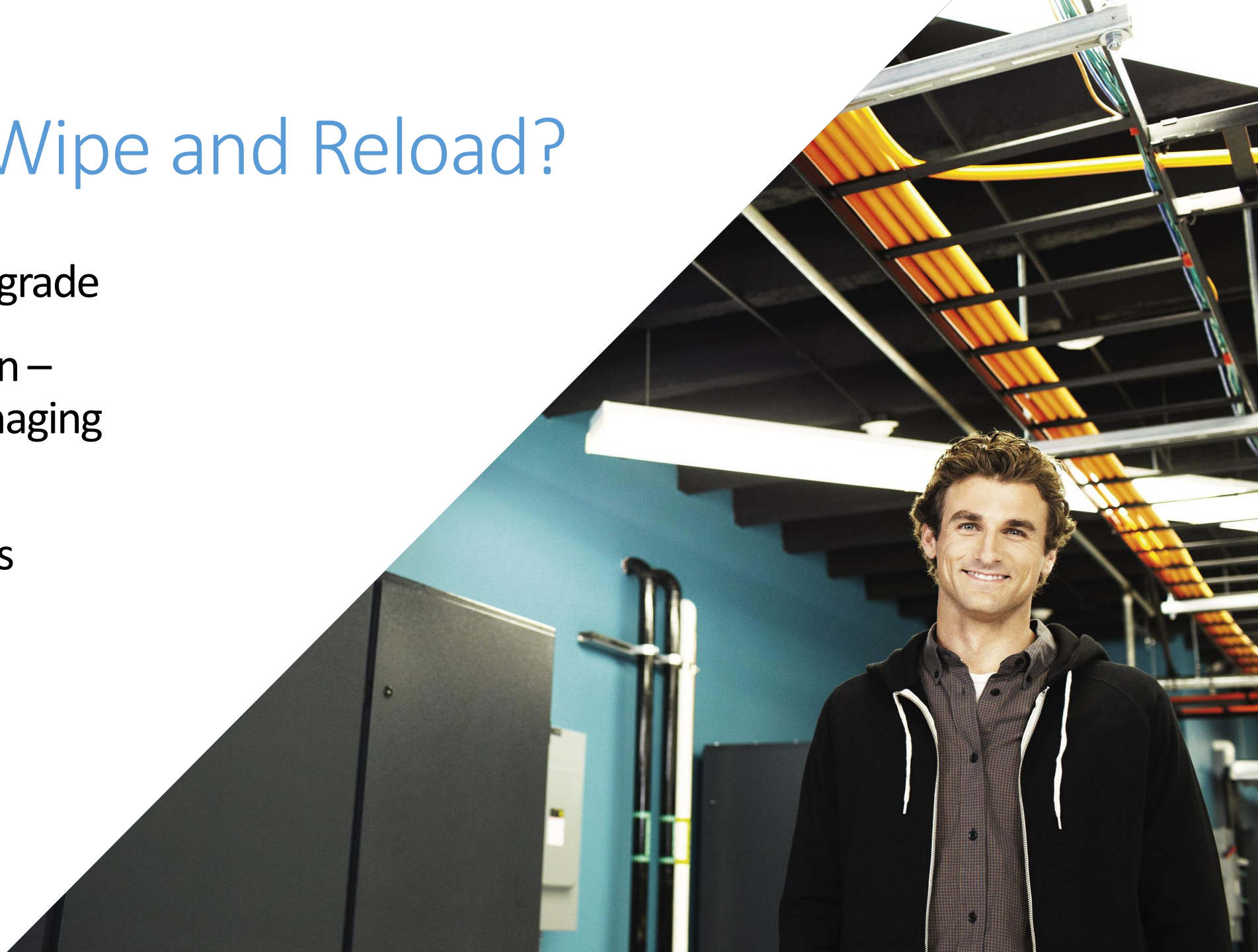
- In-place upgrade with System Center Configuration Manager
- Managing line of business apps with Microsoft Intune
- Provisioning packages using Windows Image Configuration Designer
- Resources

The End of Wipe and Reload?

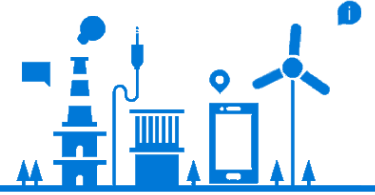
Managed in-place upgrade

Runtime configuration –
customize without imaging

Reduced validation
and deployment costs



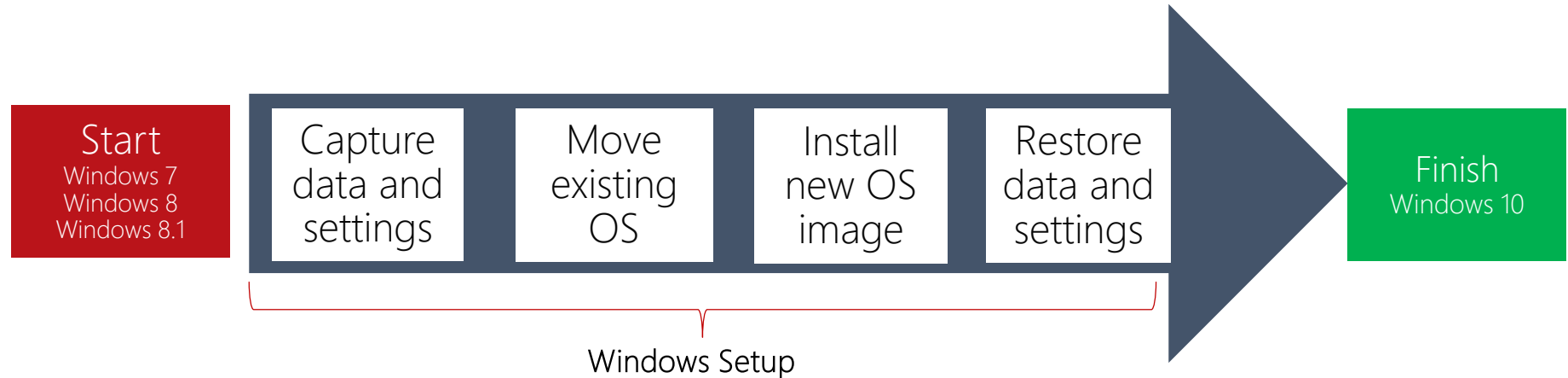
In-Place Upgrade Options and Process



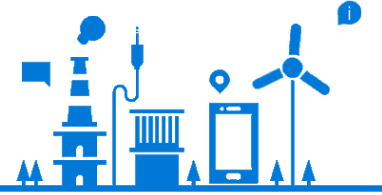
Preferred option
for Enterprises

- Supported with Windows 7, 8 & 8.1
- Consumers use Windows Update, but enterprises want more control
- Use System Center Configuration Manager or MDT for managing the process
- Uses the standard Windows 10 image
- Automatically preserves existing apps, settings, and drivers

In-Place Upgrade
Process



In-Place Upgrade Update vs Refresh



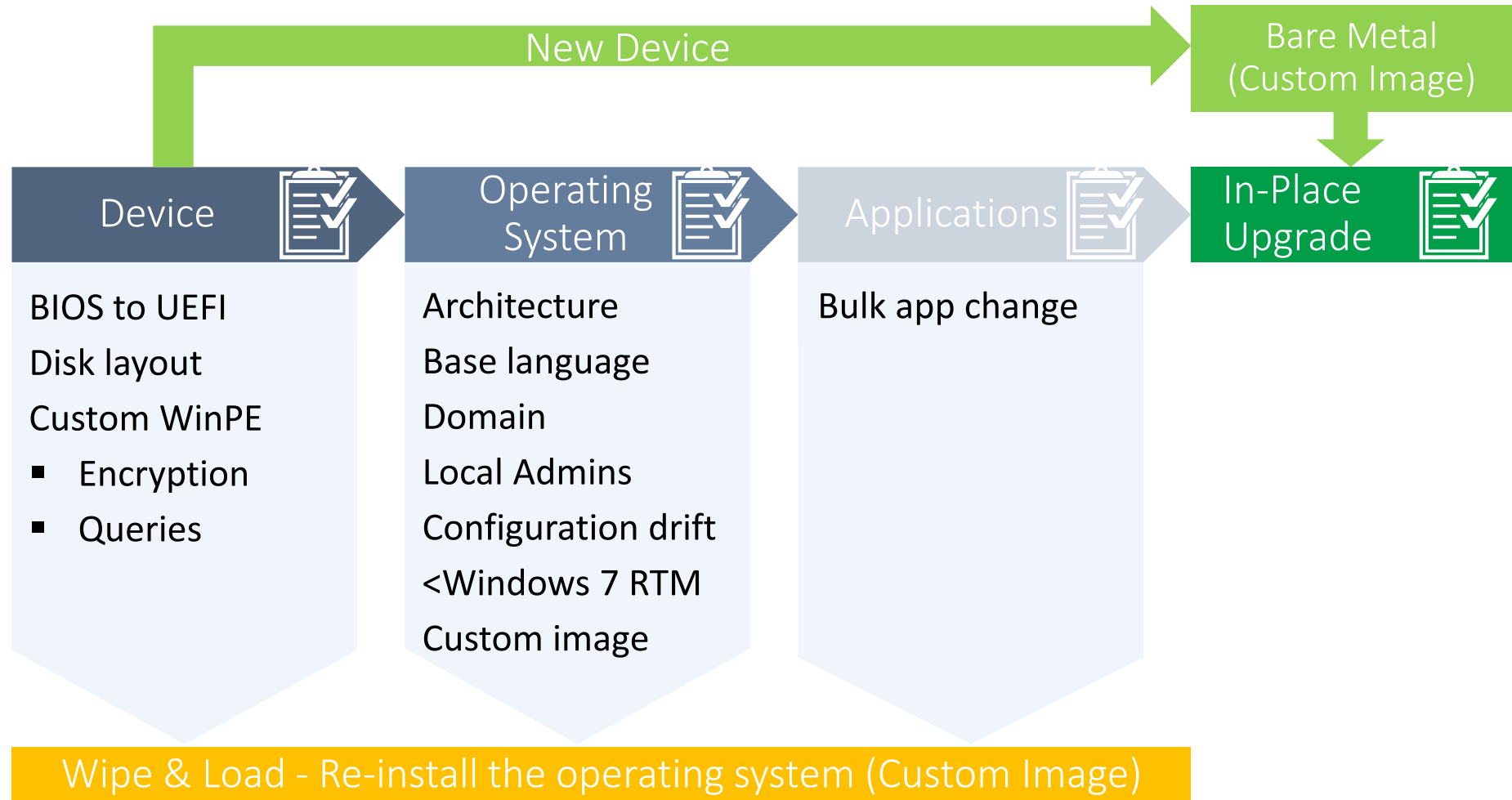
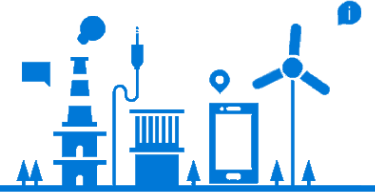
Why Upgrade?

- Reduce upfront testing and deployment preparation
- Compared to refresh, upgrade is...
 - Faster – 30 to 60 minutes, on average, to upgrade
 - Smaller – file size is just the default OS media, no applications
 - More robust – “bulletproof” rollback on failure to functional down-level system
- Zero ADK dependencies
- Use it to supplement existing deployment scenarios
 - Refresh, replace, and bare metal

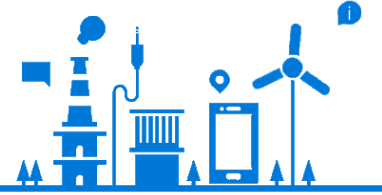
Considerations

- Compatibility with 3rd Party Disk Encryption tools (Bitlocker is supported)
Microsoft working with ISV's
- May not provide full application compatibility picture
Use new devices & provisioning to perform application compatibility
Wipe and load can also be used

In-Place Upgrade – not for everybody

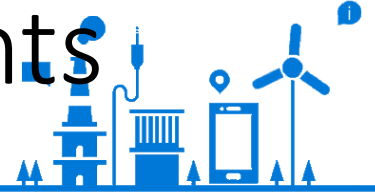


In-Place Upgrade - Deployment Options



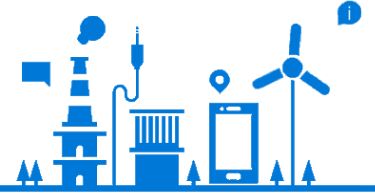
	Manual	Lite Touch	Zero Touch
Delivery	ISO / USB	Microsoft Deployment Toolkit	System Center Configuration Manager
Scenario	< 10 devices	< 250 devices	Enterprise
Interaction	High	Low	Nil

Windows 10 Setup Command Line Arguments



Setup Switch	Description
<code>/auto <upgrade; dataonly; clean></code>	Enables automatic install with migration choice
<code>/installdrivers <folder_path></code>	Install drivers from the specified location
<code>/installlangpacks <folder_path></code>	Install language packs from the specified location
<code>/unattend</code>	Enables unattended Windows Setup Mode
<code>/pkey <product key></code>	Instruct Windows to use a specified product key
<code>/postooobe <setupcomplete.cmd_path></code>	Instructs setup to use setupcomplete script from specified location

In-Place Upgrade - Zero Touch Process



Requirements














A Win 10 supported System Center 2012 Configuration Manager site is already installed and configured.

Configuration Manager clients are deployed and running at least Windows 7.

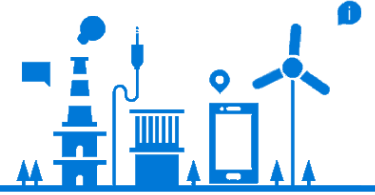
Windows 10 Media

Task Sequence Setup

Content pushed to distribution points

-  **Preparation**
 -  Check Readiness
 -  PreSetup
 -  Stage Content
-  **Upgrade the Operating System**
 -  Upgrade Windows
 -  Recover from Setup Failure
 -  Restart Computer
-  **Post-Processing**
 -  Install Software Updates
 -  Cleanup
-  **Rollback**
 -  Trigger Rollback Failure

In-Place Upgrade - Prepare



Plan for Content Distribution

Windows 10 Upgrade package size expected to be approximately 3.8GB

Plan for content delivery to large, medium and branch sites

Utilize content caching technologies where required

Plan Pilot Approach

Determine who will pilot In-Place Upgrade approach

Define success criteria

- Critical LoB and Web apps tested
- User Experience

Group Policy / management updates required

Disk Encryption Compatibility

Check disk encryption technology support (if required)

Understand 3rd party ISV plans to support In-Place Upgrade approach

Work with Microsoft to address blockers

Windows Server Compatibility

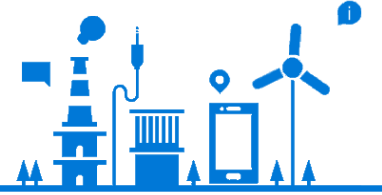
FULL SUPPORT FOR EXISTING VERSIONS

- Windows 10 works with all supported Windows Server versions, Active Directory schema and functional levels
- Windows Server Update Services (WSUS) will support updating Windows 10
- New Windows 10 Group Policy settings will need new ADMX files

THINGS TO CHECK

- Applying security templates via GPO? Don't use Windows 7 templates on later OS's
- Using WMI filters with OS version checks? Make sure they work as expected

Consider Your Deployment Approach



Running Windows 7?

Evaluate Windows 8.1 for touch scenarios today.
Upgrade to Internet Explorer 11 by January 2016. Plan for Windows 10 for all devices

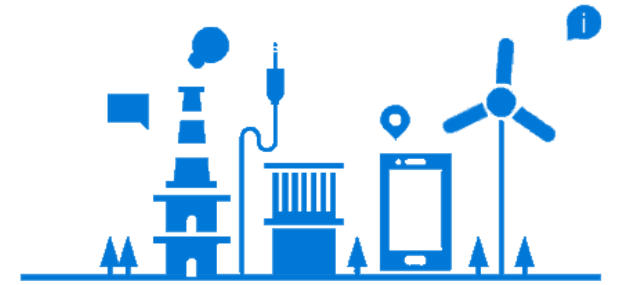
Running Windows 8?

Upgrade to Windows 8.1 by January 2016. Plan for Windows 10 for all devices.

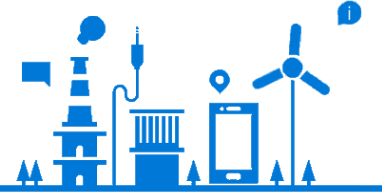
Evaluating, Deploying, or Running Windows 8.1?

Keep going!
Upgrade to Windows 10 when released across all devices

Upgrading to Windows 10 with System Center Configuration Manager



Demonstration



Primary Upgrade Phases



Shutting down...

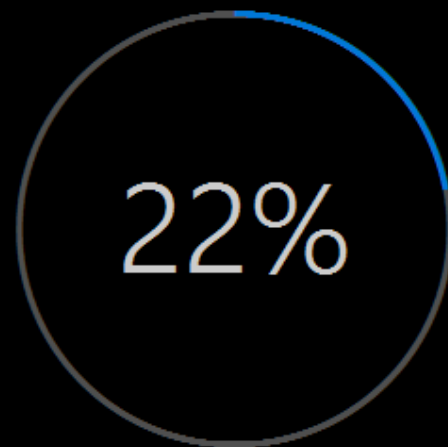
1 Down-level

2 WinRE



Upgrading Windows

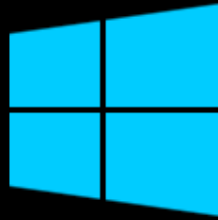
Your PC will restart several times. Sit back and relax.



Copying files 76%

Installing features and drivers

Configuring settings



- 1 Down-level
- 2 WinRE
- 3 1st boot
- 4 2nd boot to New OS

Upgrading Windows

Your PC will restart several times. Sit back and relax.

99%

Getting ready

Copying files

Installing features and drivers

Configuring settings 96%

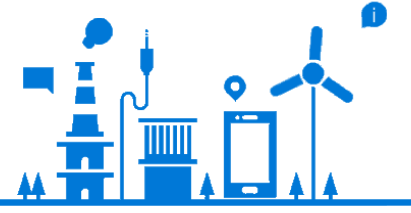




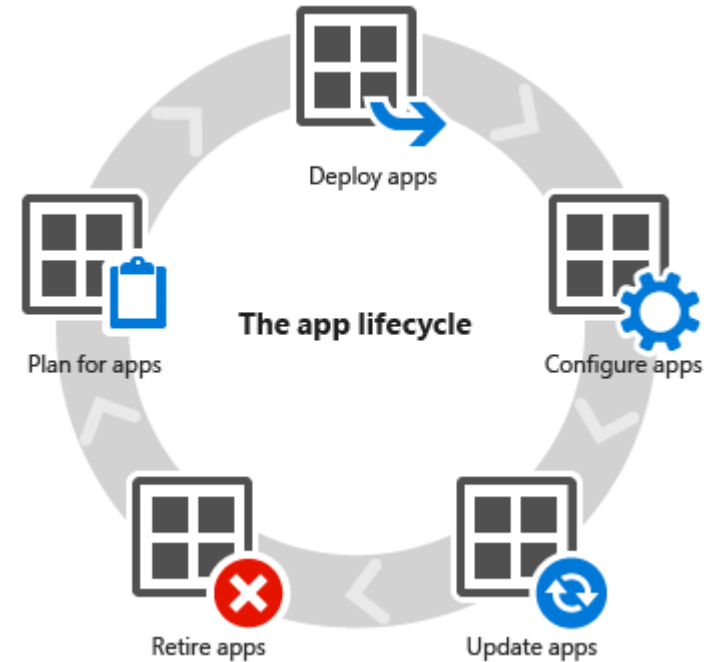
UPGRADE

 →

Managing line of business apps with Microsoft Intune

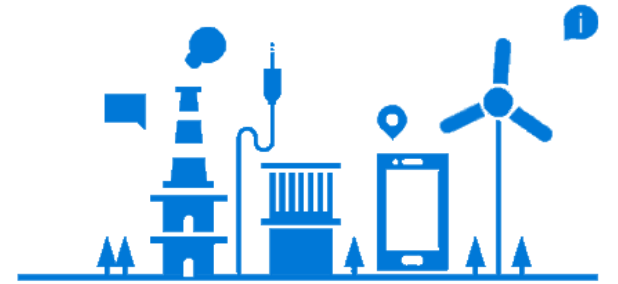


- Microsoft Intune can be used to deliver apps to Windows 10 via agentless MDM capabilities or an installed agent
- Can be used to sideload appx, deep link to Windows Store apps, as well as deploy Win 32 apps via .msi and .exe setup options and provide links
- Apps can be pushed to users, or can be selected by users from the Intune Company Portal.

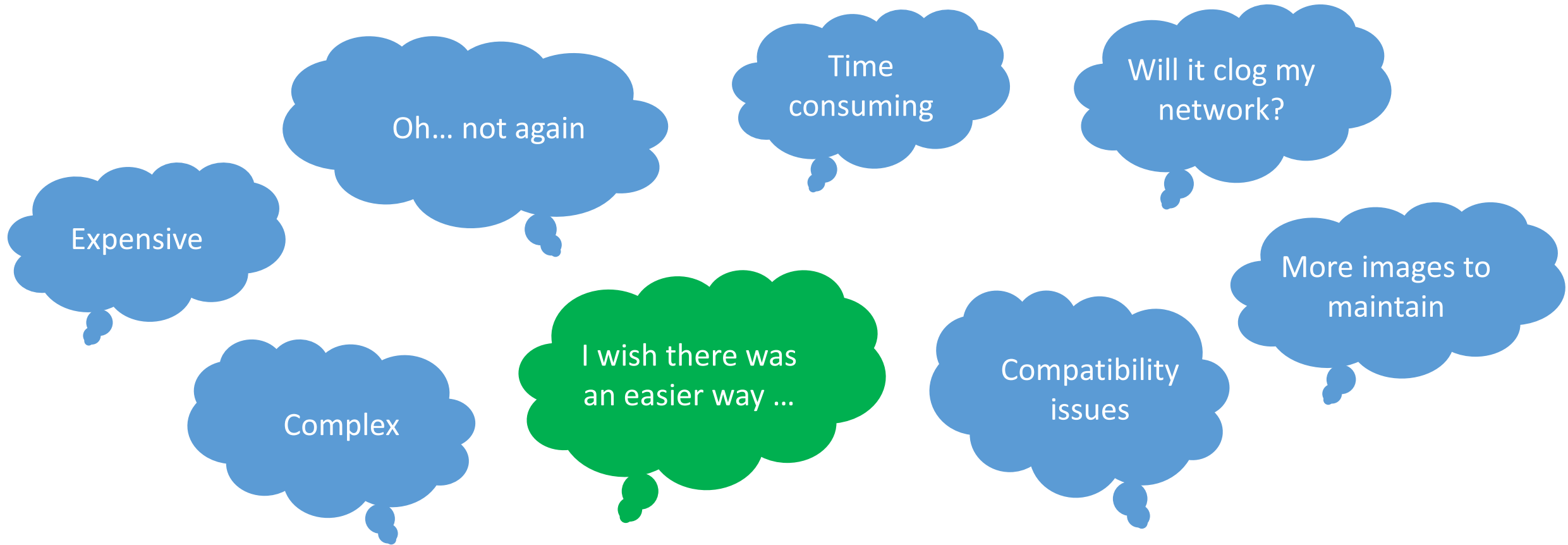
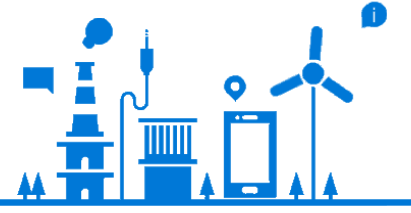


Deploying Apps using Microsoft Intune

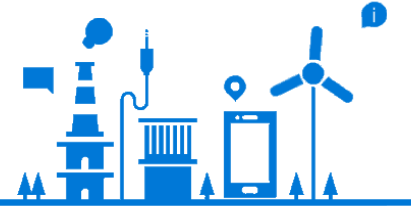
Demonstration



What comes to mind when you think about deploying new devices?

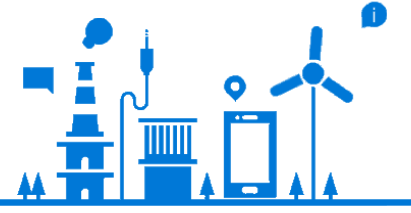


Runtime Provisioning to the Rescue!



- Configure new off-the-shelf devices without re-imaging
- Works on both Mobile and Desktop
- Network connectivity not required
- Simple enough to be used by employees
- Compatible with existing solutions

How it works



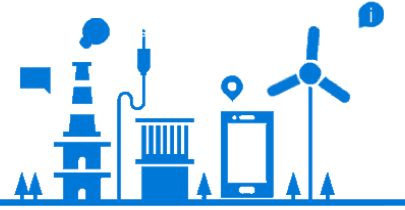
Windows Imaging and Configuration Designer creates a Provisioning Package


A package is a bundle of settings, profiles and file assets



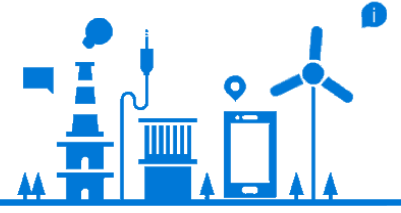
Asset binaries can be included in the package or referenced by URL

Applying a package



- **New device / First Run Experience** – 5 taps on  button
 - Removable media (SD/USB) on Desktop and Mobile
 - NFC (Mobile only)
- **During runtime**
 - Click on .PPKG file (from email, local storage, media, URL)
 - USB tether (Mobile only)
- **Embedded in the image**

Provisioning during Runtime



Located under
Settings > Accounts > Provisioning



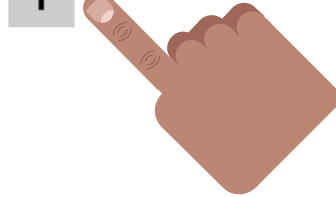
Provisioning



Provisioning packages help set up your device for work or school.



Add a package



Add a package

Add from

Removable Media



Select a package



wallpaper.ppkg



9DigitPIN.ppkg

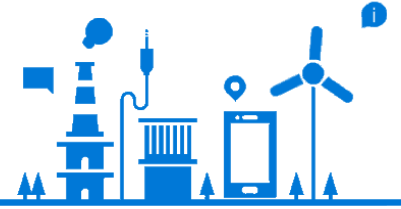


AllowAddProvisioningPackage0....




AllowCamera0.ppkg

Manage Packages




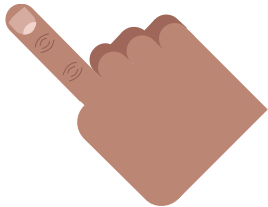
Provisioning

Provisioning packages help set up your device for work or school.

 Add a package

 9DigitPIN

 BulkEnrollment



BulkEnrollment

Package Details

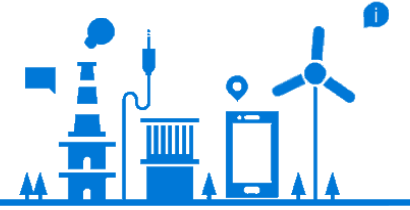
Name: BulkEnrollment
Author: admin
Package ID: {81b1ce78-717e-471e-a04a-e330b36afef3}
Version: 1.0

This package affects

Add or change applications
Add Certificates
Lock down the user interface
Affect security configuration

- Only user-installed packages are listed
- User can view details or delete a package
- Deleting a package removes settings, profiles and apps it contains

What can be Provisioned



Initial Setup

Edition Upgrade

Certificates

Connectivity Profiles

Management Enrollment

Universal Windows Apps

Win32 Applications
Scripts

Enterprise Policies

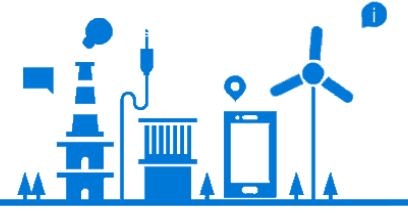
Offline content

Browser Settings

Start Menu
Customization

Assigned Access

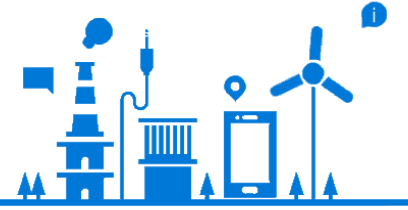
What can be Provisioned



Edition Upgrade

- Specify the license key for edition upgrade
- No need for re-imaging!

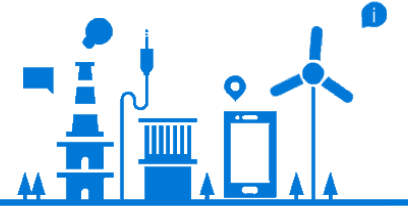
What can be Provisioned



Initial Setup

- Computer name can be set to PREFIX + RANDOM or SERIAL
- Launch an application after FRX finishes
- Hide First Run Experience (“FRX”)
- Local accounts with specified usernames, passwords, groups

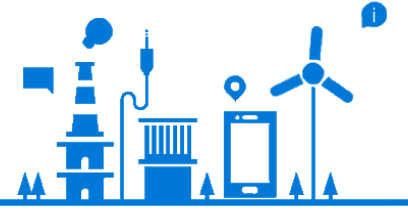
What can be Provisioned



Management Enrollment

- MDM enrollment with username & password or certificate
- Domain join
- Azure Active Directory join

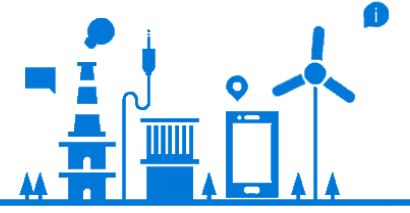
What can be Provisioned



Universal Windows Apps

- Line of Business applications signed with company certificate
- Store applications with Business licenses
- Package can remove pre-installed applications

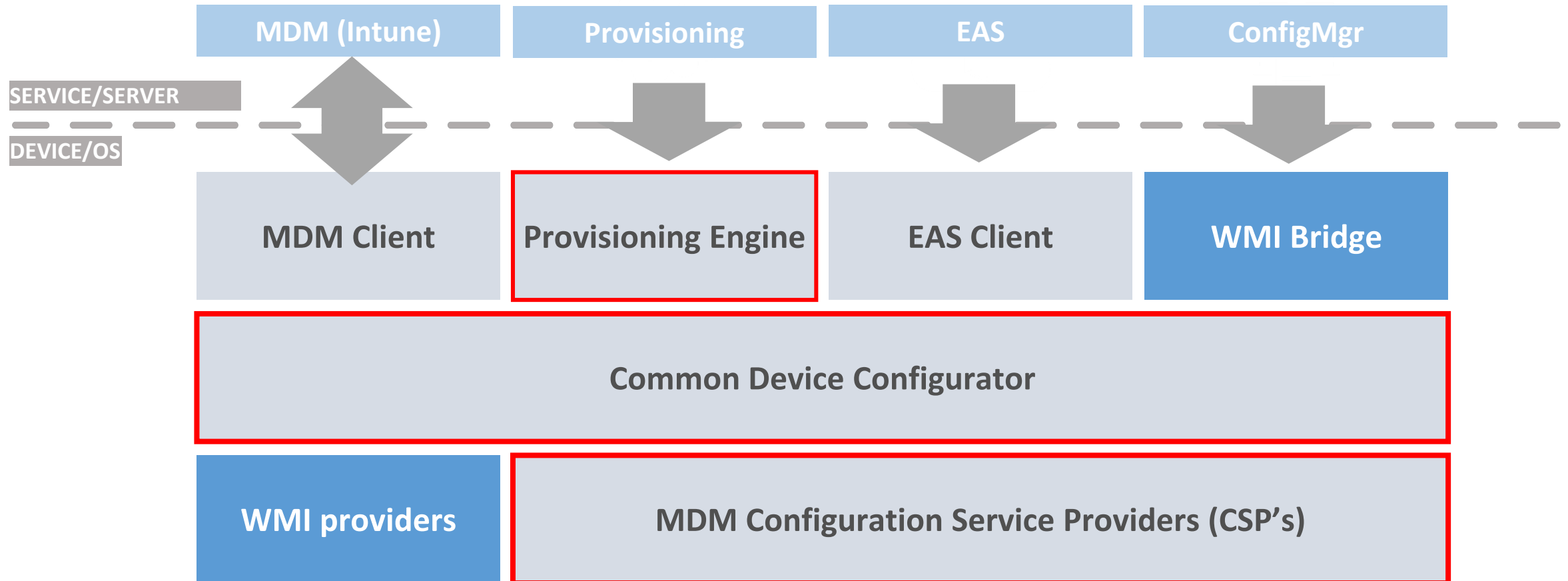
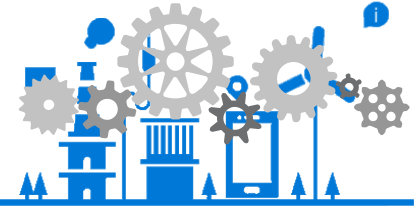
What can be Provisioned



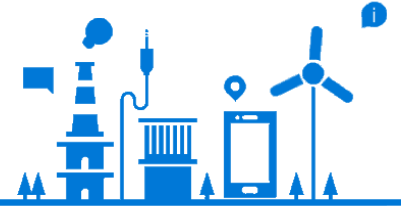
Win32 Applications Scripts

- Deploy an MSI package
- Run a script to execute headless setup
- PowerShell scripts

Under the Hood



Security - Encryption



- Packages can be encrypted to protect sensitive content to prevent “123456” and “pas\$\$word”
- Encryption password is generated automatically

Enter security information of provisioning package:

☒ Enable package encryption

Encryption password: yzLbQ4A4bbgQgvTw

☐ Enable package signing

Selected certificate:

Select...

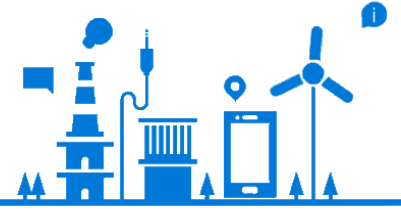
Enter the package password

You need a password to add BYOD.ppkg. If you don't know it, talk to your support person.

Ok

Cancel

Security – Digital Signing



- Security warning is shown when installing a package
- Packages can be digitally signed
- Signed packages are installed without security warning
- You can set a policy to accept only signed packages

Is this package from
a source you trust?

Only add this package (Mobile.ppkg) if you
know who it came from.

Adding it will:

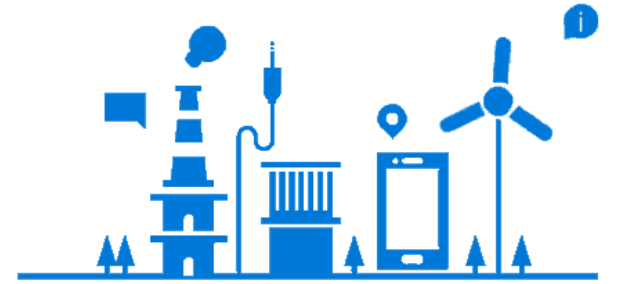
Change device customization
Add or change applications
Add or remove certificates
Lock down the user interface
Affect security configuration

Yes, add it

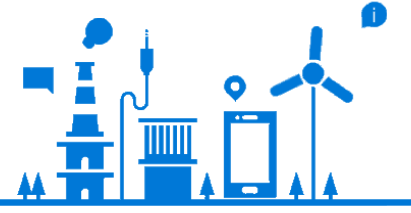
Cancel

Windows Imaging And Configuration Designer

Demonstration



Resources



- www.intunedin.net
 - Windows 10 and Enterprise Mobility Suite information, including Microsoft Intune
- TechNet Evaluation Center
 - Windows 10 Deployment and Management Lab Kit
 - <https://www.microsoft.com/en-us/evalcenter/evaluate-windows-10-enterprise>
- Windows 10 for IT Pros
 - <https://technet.microsoft.com/en-us/windows/dn798751.aspx>



Windows 10 webinar series

Thank you! Visit aka.ms/win10webinars to sign up for the up coming sessions in this series.

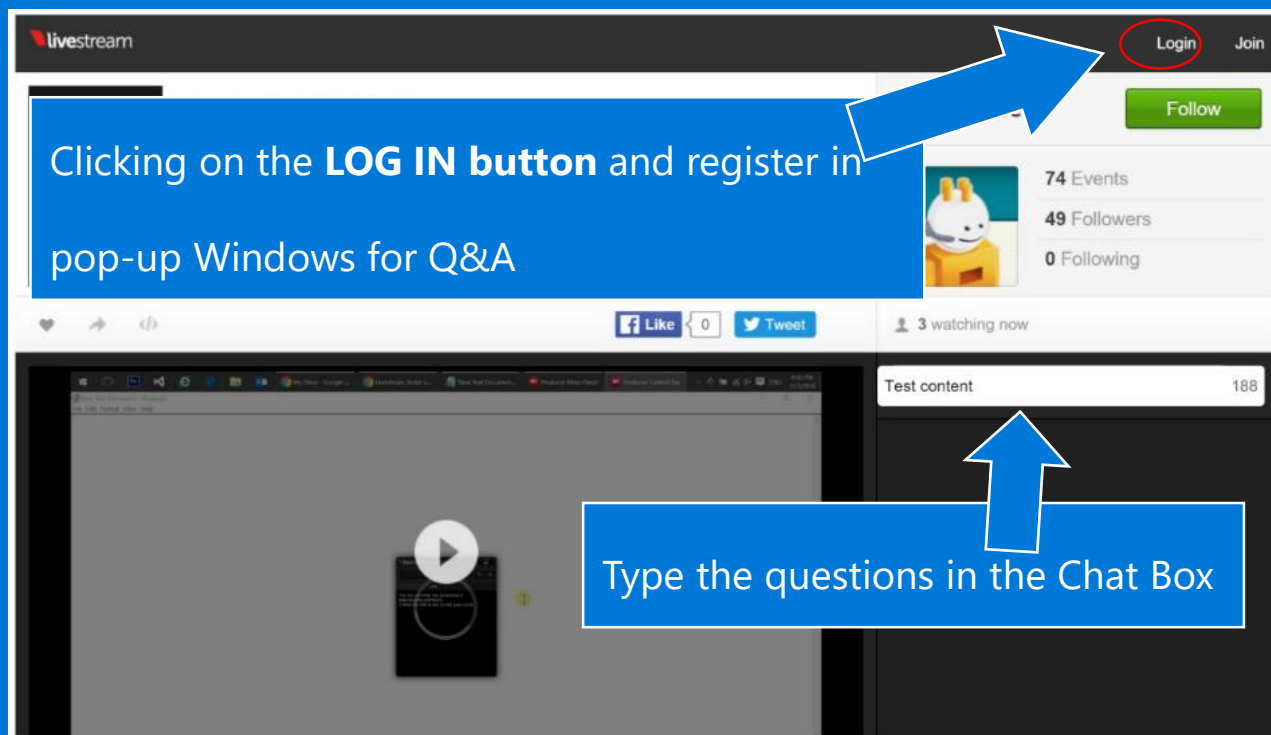
Hope to see you at the same time next Thursday.



Windows 10 webinar series

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