

Windows 8.1 Deployment

TechNet Event November 25th, 2013

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Deployment Challenges

Configuration Settings



Content Management



Compliance Standards



Configuration Standards



preserve User Settings and Files



Configuration Drift

The Managed Desktop Solution

Application life cycle

Hardware life cycle **Enterprise desktop stack**

User settings

Individual applications

Role-based applications

Enterprise applications

Security configuration

Hardware-based software and drivers

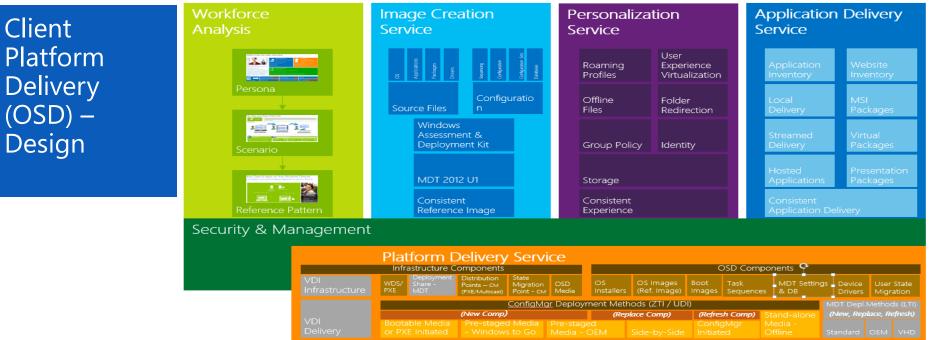
Operating system master image

image deployment User profile management

Security management

Image engineering

Client Solution Architecture



MSIT Easy Installer (MS Consulting Services) Content Details



NEW

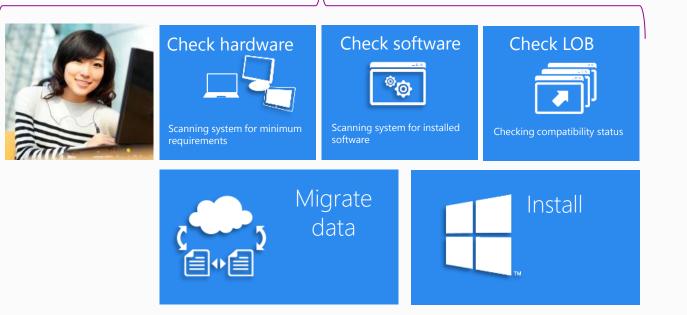
Self-Service Deployment Tool

Free for your deployment project

Must have infrastructure in place to use, which Jumpstart will enable

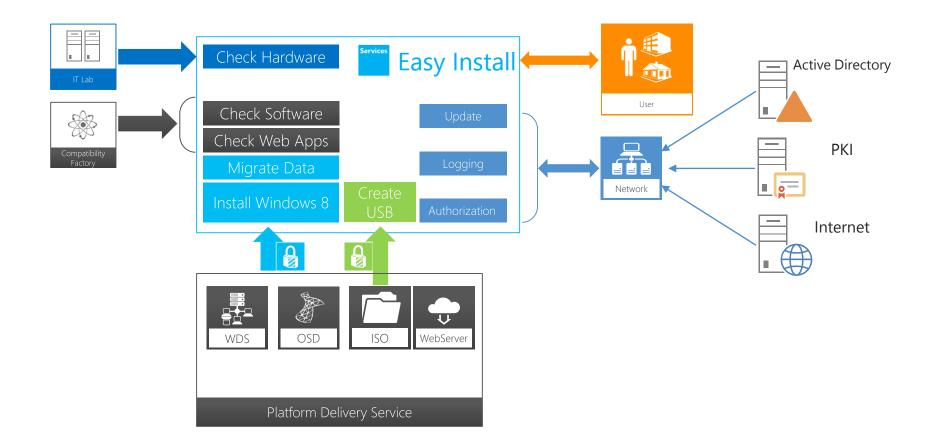
Easy Install provides a consistent experience for self service migration to Windows 7/8. The tool provides a simplified user interface (UI) leveraging deployment capability built on MDT 2013 and System Center 2012 R2 Configuration Manager.

90'000 Machines successfully migrated within Microsoft

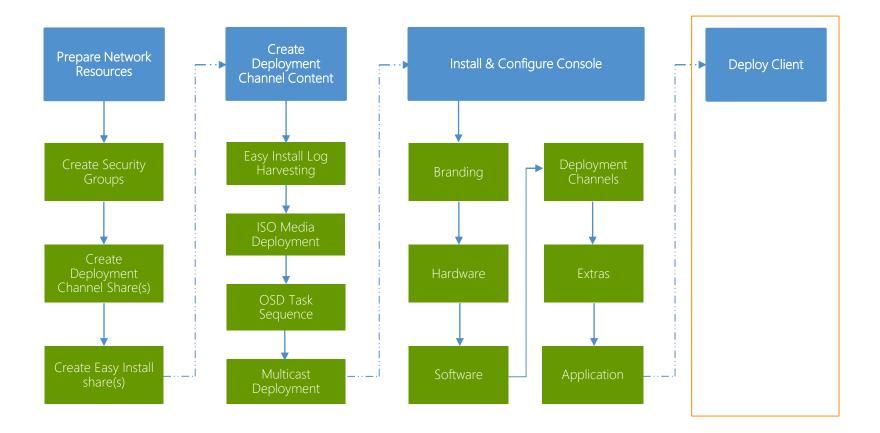


Easy Install Architecture & Integration

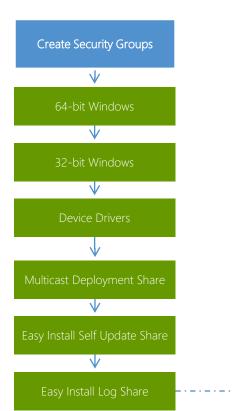


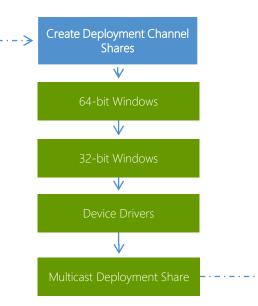


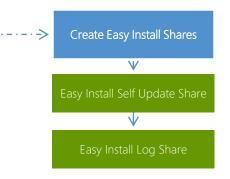
Implementation Process



Prepare Network Resources







Windows 8.1 Deployment Strategy

Choosing the right Deployment Strategy for your Company
 Lite Touch Installation (LTI)
 Zero Touch Installation (ZTI)
 User-Driven Installation (UDI) based on SCCM 2012 R2
 "Clean Install" vs. OS UpGrade
 "Clean Install" vs. Migration of User Settings and Data

Application Compatibility Toolkit (ACT)
 Microsoft Assessment and Planning (MAP) Toolkit



Windows 8.1 Deployment Tools

User State Migration Tool (USMT)
 Windows Assessment and Deployment Kit (ADK)
 Windows Assessment Toolkit
 Windows Performance Toolkit (WPT)

Deployment and Imaging Tools
 Windows Deployment Services (WDS)
 Microsoft Deployment Toolkit 2013 (MDT)
 System Center 2012 R2 Configuration Manager (SCCM)
 Internet Explorer Administrator Kit (IEAK)



Windows 8.1 Deployment Tools

Windows Assessment and Deployment Kit (ADK)
 Replaces the Windows Automated Installation Kit (WAIK)

Includes the following Tools:

- Windows Assessment Toolkit
- □ Windows Performance Toolkit (WPT)
- □ Windows Pre-Installation Environment (Windows PE) 5.0
- □ Windows System Image Manager (Windows SIM)
- □ User State Migration Tool (USMT)
- Deployment Image Servicing and Management (DISM)
- □ Application Compatibility Toolkit (ACT)
- Volume Activation Management Tool



Deployment and Imaging





Windows Pre-Installation Environment [2] (WinPE)

Minimal operating system

Based on Windows 8.1

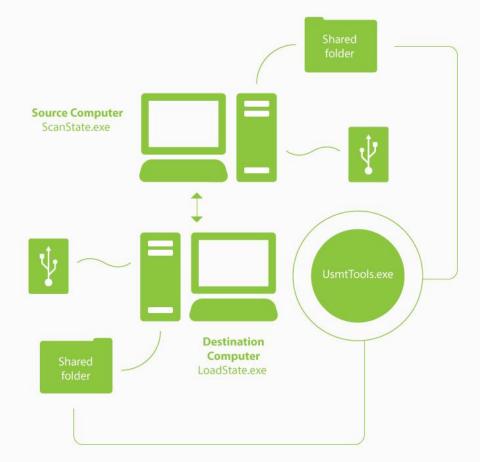


Assist in deployment

Used by MDT and Configuration Manager

User State Migration Tool (USMT)

- Migrate user profiles and files
- Required by MDT and Configuration Manager
- Command-line tools:
 - ScanState.exe
 - LoadState.exe
 - UsmtUtils.exe



Volume Activation Management Tool





Windows Performance Toolkit (WPT)





Windows Assessment Toolkit



- Assess existing Windows
 operating system
- Assess performance, reliability, and functionality
- Recommend improvements







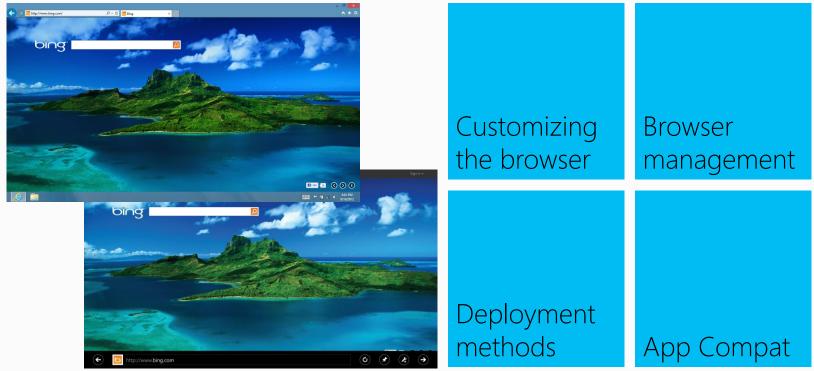
Windows Assessment Services



- Test framework for running assessments
- Used in lab environments
- Measure performance, reliability, and functionality



Internet Explorer 11 Administration



Common Browser Customizations

Title bar, branding, graphics	Connection settings	Security settings	Add-on components	Preset web pages and links
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Deployment scenarios

Existing computers running Windows

- Use Windows Update or existing electronic software distribution systems like Configuration Manager, Windows Server Update Services, or Windows Intune
- Internet Explorer 11 supports command-line and IEAK options for silent installation

As part of a Windows deployment

- Update Windows images to include Internet Explorer 11
- Add to the MDT deployment share
- Included in Windows 8.1

Group Policy settings in Internet Explorer 11

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Default browser

Notify users if Internet Explorer is not the default web browser

~1500

Group Policy settings total for support of all versions of Internet Explorer

Adobe Flash

Turn off Flash in Internet Explorer and prevent applications from using Internet Explorer technology to instantiate Flash objects

New Group Policy settings for Internet Explorer 11

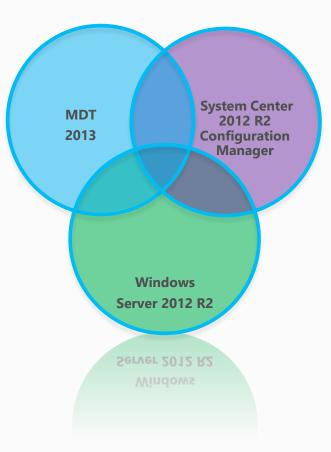
Group Policy Settings in Internet Explorer 11

Compatibility view Group Policy

Policy	Description
Include updated website lists from Microsoft	This policy controls the website compatibility lists that Microsoft provides. The updated website lists are available on Windows Update.
Turn off Compatibility View , Turn off Compatibility View button	This policy setting controls the Compatibility View feature, which allows users to fix website display problems that they may encounter while browsing
Turn on Internet Explorer 7 Standards mode	This policy setting allows users to turn on Internet Explorer 7 Standards mode. Compatibility View determines how Internet Explorer identifies itself to a web server and determines whether content is rendered in Internet Explorer 7 Standards mode or the Standards mode available in the latest version of Internet Explorer.
Turn on Internet Explorer Standards mode for local intranet	This policy setting controls how Internet Explorer displays local intranet content. <i>Intranet content</i> is defined as any web page that belongs to the local intranet security zone.
Use Policy List of Internet Explorer 7 sites	This policy setting allows you to add specific sites that must be viewed in Internet Explorer 7 Compatibility View.
Use Policy List of Quirks Mode sites	Compatibility View determines how Internet Explorer identifies itself to a web server and determines whether content is rendered in Quirks Mode or the Standards mode available in the latest version of Internet Explorer.

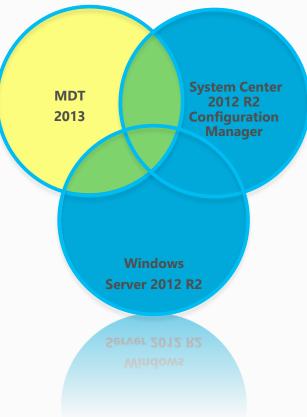
Deployment Approach

- Configuration Manager SCCM 2012 R2
- Microsoft Deployment Toolkit MDT 2013
 - Windows ADK
 - Windows PE 5.0
 - USMT
- Windows Server 2012 R2:
 - Windows Deployment Services with multicast
 - Microsoft BranchCache improvements



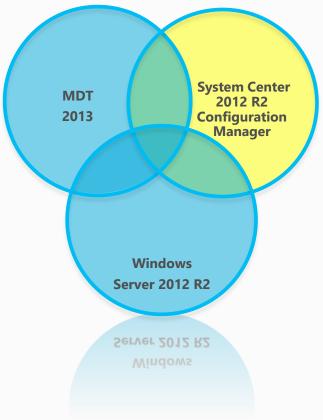
Deployment Approach: LTI

- Lite Touch Installation (LTI)
- Only requires MDT 2013(free download)
- Contains tools and best practice guidance for deployment
- Used for image engineering and image deployment processes
- Includes the MDT database (MDT DB) for role, location, computer, and hardwarebased configurations
- Does <u>not</u> provide life cycle for desktop components after deployment



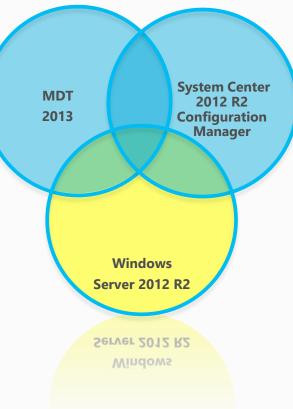
Deployment approach: OSD

- Full bare metal Operating System Deployment (OSD) for Windows 8.1 and Windows Server 2012 R2.
- Requires Microsoft System Center 2012 R2 Configuration Manager infrastructure.
- Used for image deployment process
- Provides application, hardware, and security life cycle after deployment
- Provides full Application Lifecycle
 Management



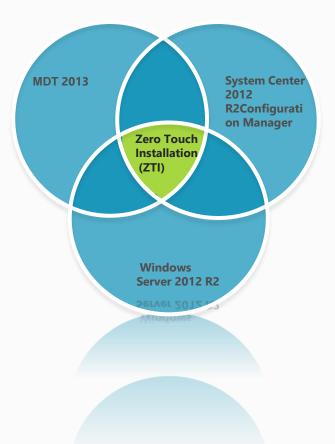
Deployment approach: Windows Deployment Services

- Windows Deployment Services (PXE)
- Requires Windows Deployment Services Role installed on the server
- Can be used for image deployment
- Does not provide life cycle for desktop components after deployment
- Does not include MDT DB for role, location, computer, or hardware-based configurations



Deployment approach: ZTI

- > Zero Touch Installation (ZTI)
- Combines the MDT DB, OSD, and Windows Deployment Services into a fully automated deployment solution
- Requires MDT 2013 integrated with a Configuration Manager infrastructure
- Can be used for image deployment
- Provides application, hardware, and security life cycle after deployment
- Includes the MDT DB for role, location, computer, and hardware-based configurations



Windows Deployment

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Modern Application Delivery & Installation

Modern App Deployment Strategy

Two ways to install touch-centric Windows 8 Modern Apps

The Public Windows Store

Certified by Microsoft **Available 7x24h**, provided by the MS **Public Cloud Service Installed and updated by end users** ISV built business apps

IT Direct Distribution

Certified by the corporation Installed and updated via IT supplied processes Custom Line of Business (LoB) Apps

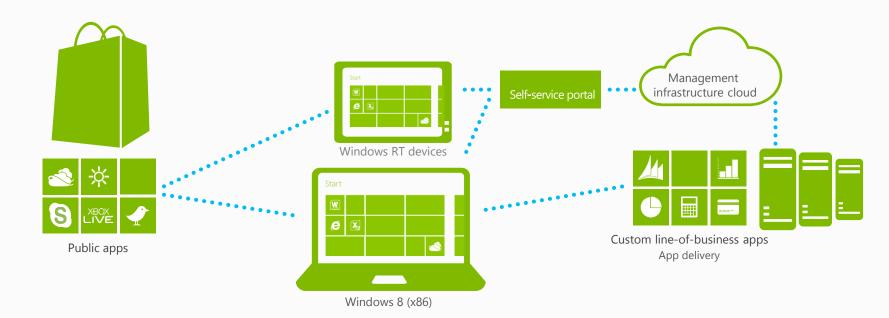
Enterprise Sideloading

The process of installing Windows 8 Apps directly to a device without going through the Windows Store

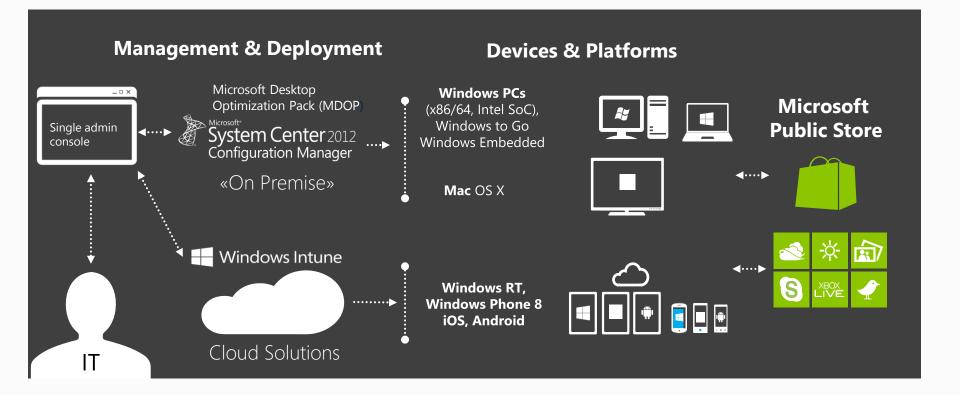
Delivering Windows 8.1 Modern Apps

Download from Windows Store

Sideload from your infrastructure



Simplifying Management Across Platforms



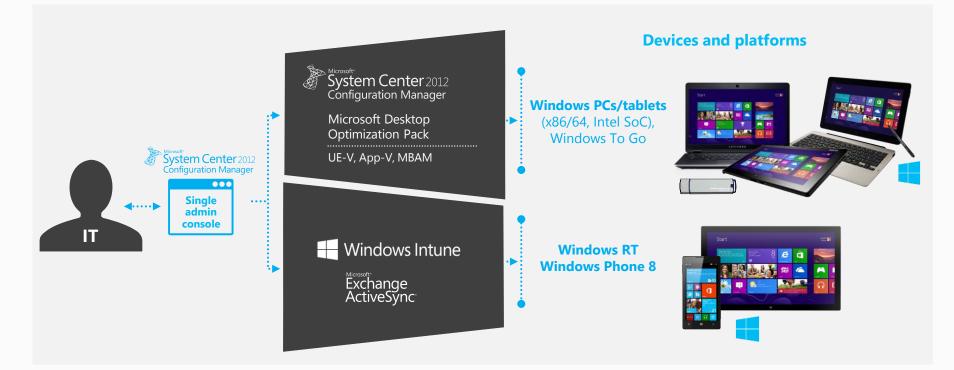


Company Portal Announcement (October 18th 2013)

Version	Platforms	Download Center URL
Windows Intune Company Portal	Windows 8, Windows RT, Windows 8.1 and Windows RT 8.1	http://www.microsoft.com/en- us/download/details.aspx?id=40794
Windows Intune Company Portal for Windows Phone 8	Windows Phone 8	http://www.microsoft.com/en- us/download/details.aspx?id=36060
System Center Configuration Manager (SCCM) Company Portal	Windows 8 and Windows 8.1 (x86/x64 only)	http://www.microsoft.com/en- us/download/details.aspx?id=40795
Note: This is the first public release of the "On-Prem" Company Portal		

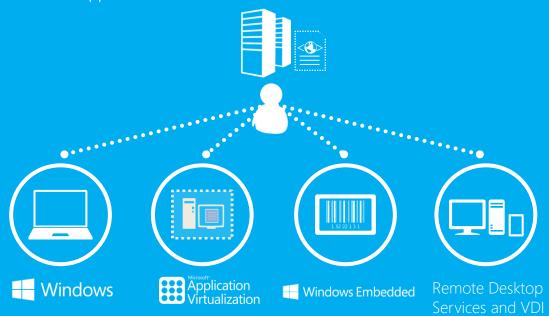


Unified Device Management Windows, System Center, and Windows Intune



Designing a User-Centric Delivery

- Deliver best user experience on each device
- Define an app once



Delivery evaluation criteria

- User
- Device type
- Network connection

User-device relationships

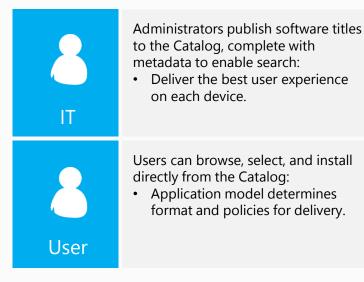
Primary devices:

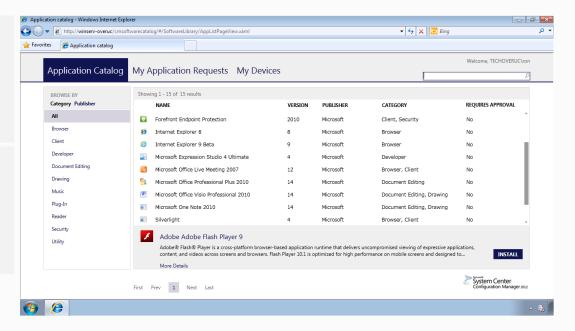
- MSI
- Microsoft Application Virtualization (App-V)
- Windows 8.1 apps
- Windows 8.1 apps in the Windows Store Nonprimary devices:
- VDI
- Remote Desktop

User-Centric Application Delivery New Application Model in SCCM 2012 R2

	General information	
Application	Administrator properties	Keep your apps organized and managed
"package"	End-user metadata 🛛 🤤	The "friendly" information for your users (appears in Catalog)
	Deployment type	
App-V	Detection method	Is app installed?
АррХ	Install command	Command line and options
••• Windows Installer	Requirement rules	Can/cannot install app
XAP, CAB, SIS, IPA, APK	Dependencies	Apps that must be present
	Supersedence	Application version control

Application Catalog in SCCM 2012 R2 End-User Self-Service





SCCM 2012 R2 Components

- User collections
- User deployments
- Intelligent deployment types
- Application Catalog
- Primary device settings and rules
- User policies

SCCM User Collections

- Target specific users or groups of users
- Function same way as device collections
- Populated through Active Directory User and Group Discovery

Assets and Compliance	< User Co	ellections 107 items				
4 👺 Overview	Search				X Search Add Cri	teria 🔻
💄 Users	lcon	Name	Limiting Collection	Member Count	Members Visible on Site	Re
nterices	\$	_Windows Intune Users	All Users	105	105	0
💰 User Collections	٠	All User Groups	All Users and User	70	70	0
Device Collections	\$	All Users	All Users and User	214	214	0
🅾 User State Migration	\$	All Users and User Groups		284	284	0
Asset Intelligence	\$	BenSmith User Collection	All Users	1	1	0
📜 Software Metering	1	Intune Test Users	All Users	3	3	0
Compliance Settings	\$	IntuneDemoUser001 User Collection	_Windows Intune U	1	1	0
Endpoint Protection	\$	IntuneDemoUser002 User Collection	_Windows Intune U	1	1	0
	\$	IntuneDemoUser003 User Collection	_Windows Intune U	1	1	0
	d.	IntuneDemoUser004 User Collection	Windows Intune U	1	1	0 *
	٠					•
	Intur	ne Test Users				~
	Sumn	nary				
	Nar					
		date Time: 3/14/2013 4:26 PM mber Count: 3				
		mbers Visible on Site: 3				
		erenced Collections: 0 nment:				

SCCM User Deployments

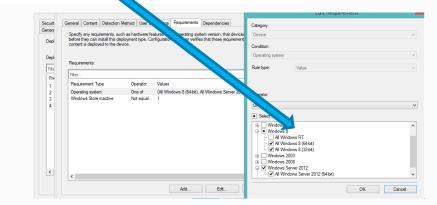
- Function similar to standard device deployments
- A *user deployment* is a deployment to a user collection; it is not a different type of deployment
- Must deploy to a user collection for user-centric delivery

Search		🗙 🔎 Search 🧍			
lcon	Name		Deployment Types	Deployments	Status
	Bubbles		1	1	Active
	Business Intelligence Demo		1	1	Active
	Company App		1	1	Active
	Dynamics		2	1	Active
	Evernote		4	1	Active
	Expenses		1	1	Active
	Insurance Agent Demo		1	1	Active
	Lync 2010		4	1	Active
	Marble Maze		1	5	Active
	MyExpenses		1	1	Active
1	0		2	+	A
Everi	note				
lcon	Collection	Deployment Start Time	Purpose	Compliance %	

Mixed Deployment Types

- Each app has Multiple Deployments
- Example: App-V, .msi, .appx
- Deployments are Platform Specific
- Example: 32Bit (x86), 64Bit (x64)
- Enable users to get the same app, from the same portal, on any device

Search	h				×	Searce	h Add C
lcon	Name		Deployment	Types Dep	loyments	Status	
	Bubbles		1	1		Active	
	Compan	/ App	1	5		Active	
	Dynamic	s CRM	1	2		Active	
	Evernote		4	5		Active	
	Expenses		1	4		Active	
	Faceboo	k (M34)	1	1		Active	
	Flashligh	t-X	1	2		Active	
	Marble N	faze	1	5		Active	
	Microsof	t Lvnc 2010 for iPad	1	2		Active	
Ever	note						
lcon	Priority	Name	Dependencies T	echnology			Supersec
	1	Application Name - Windows Phone app pac	No d	deep link for Windows Phone Store			No
	2	Evernote for Android	No d	deep link for Google Play			No
	3	evernote - App Package for iOS from App St	No d	deep link for Ap	ple App Store		No
	4	Evernote.Evernote - Windows app package 🎪	No 1	Windows Store I	ink		No



Application Catalog in SCCM 2012 R2

Web service and website point

Navigate

http://<Server>/CMApplicationCatalog

Automatically determines all applications available to the user

Search	1						\times	Search	Add Cri	iteria
lcon	Name	Site Code	Count of roles	Туре						
<u>.</u>	\\ConfigManager.conto	CTO	9	Primar						
R.	\\manage.microsoft.com	СТО	2	Site sys						
con	System Roles Role Name		Role Description	1						
con	A	service point	Role Description A site system ro		s as an Appl	ication Catalo	ig web ser	vice point		
con P	Role Name			ole that serve			2			
con P	Role Name Application Catalog web s		A site system ro	ole that serve ole that serve	s as an Appl	ication Catalo	g website	point		
con	Role Name Application Catalog web s Application Catalog websi		A site system ro A site system ro	ole that serve ole that serve viring a Conf	s as an Appl guration Ma	ication Catalo nager service	g website to be inst	point alled.	o clients.	
con D D D D D D D D D	Role Name Application Catalog web s Application Catalog websi Component server		A site system ro A site system ro Any server requ	ole that serve ole that serve uiring a Confi n Manager se	s as an Appl guration Ma rver role tha	ication Catalo nager service t stages packa	iq website to be inst ages for d	point alled. listribution to		na
con D D D D D D D D D	Role Name Application Catalog web s Application Catalog websi Component server Distribution point		A site system ro A site system ro Any server requ A Configuration	ole that serve ole that serve uiring a Confi n Manager se ole that replie	s as an Appl guration Ma rver role tha to Configu	ication Catalo nager service t stages packa iration Manag	ig website to be inst ages for d ger client r	point alled. istribution to equests and	accepts mar	
con	Role Name Application Catalog webs Application Catalog webs Component server Distribution point Management point		A site system ro A site system ro Any server requ A Configuration A site system ro	ole that serve ole that serve uiring a Confi n Manager se ole that replie ole that runs	s as an Appl guration Ma rver role tha es to Configu Microsoft SC	ication Catalo nager service t stages packa iration Manag QL Server and	to be inst ages for d ger client r hosts the	point alled. listribution to equests and Configuratio	accepts mar on Manager s	sit
Site :	Role Name Application Catalog web si Application Catalog websi Component server Distribution point Management point Site database server		A site system ro A site system ro Any server requ A Configuration A site system ro A site system ro	ole that serve ole that serve uiring a Conf n Manager se ole that repli- ole that runs ystem role th	s as an Appl guration Ma river role tha to Configu Microsoft SC at hosts the	ication Catalo nager service t stages packa iration Manag QL Server and Configuration	ng website to be inst ages for d ger client r hosts the Manager	point alled. istribution to equests and Configuration r component	accepts mar on Manager s ts and service	sit es.

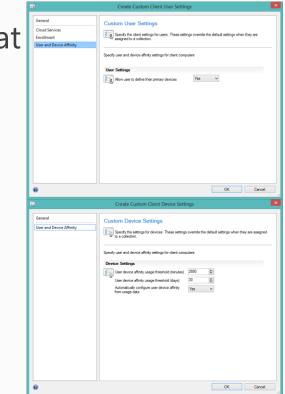
Primary Device Settings and Rules

- Act as a deployment modifier:
 - Common scenario is MSI versus App-V
 - A condition, similar to an operating system type
- User can have multiple primary devices
- Can be manually assigned or automatically determined

CLIENT1		o mocare			Edit Primary Users
General Information		Client Activity		Related Objects	Specify the primary users of this device. Configuration Manager can be configured to deploy content to a user based on their primary computer or device. Type a search_string to search ALL users:
				Primary User	ben Users matching ben':
Name: Client Type:	CLIENT1 Computer	Policy Request:	11/28/2012 2:27 PM	Primary User	User Name Last Login Number of Logins There are no items to show in this view.
Client Check Result: Remediation:	No Results	Heartbeat DDR:	11/28/2012 4:30 AM		
Active Directory Site: Last Logon:	ConfigManSite 11/19/2012	Hardware Scan: Software Scan:			Add Bemove
Last Logon:	10:10:44 AM	Management Point:	ConfigManager		Primary Users: User Name Affinity Type
		······	.contoso.com		CONTOSO\BenSmith Administrator Defined
		Status Message: Days Since Last			
		Communication:	112		OK Canoel

User and Device Policies in SCCM 2012 R2

- Set of user- or device-specific polices that can be deployed to a collection of users
- Includes:
 - Ability to use cloud distribution
 - Rules for primary device assignment
 - Device enrollment
- Device policies can be used to control automatic assignment of primary user
- User policies permit user to self-assign





 How to Deploy Windows 8.1 and Windows Server 2012 R2?
 System Center Configuration Manager 2012 R2 Fully supports Operating System Deployment (OSD) and Software Distribution

- System Center Configuration Manager 2012 SP1 + CU3
 Supports Operating System Deployment and Software Distribution
 But you have to create your boot image using the ADK for Windows 8.1
- System Center Configuration Manager 2007 SP2 / SP3
 Supports SCCM Client Capabilities for Software Distribution and Inventory.
 There is no plan to add operating systems deployment (OSD) capabilities





 How to Deploy Windows 8.1 and Windows Server 2012 R2?
 The Microsoft Deployment Toolkit (MDT) 2013 can be used to create Master Images for Deployment

- Description of Update Rollup 3 for System Center 2012 (CU3) http://support.microsoft.com/kb/2756127/en-us

 Support Questions about Windows 8.1 and Windows Server 2012 R2 for System Center Configuration Manager
 http://blogs.technet.com/b/configmgrteam/archive/2013/09/16/support-questionsabout-win-8.1-and-winsvr-2012-r2-for-configmgr-and-endpoint-protection.aspx





Things to think about (Windows 8.1 Projects)

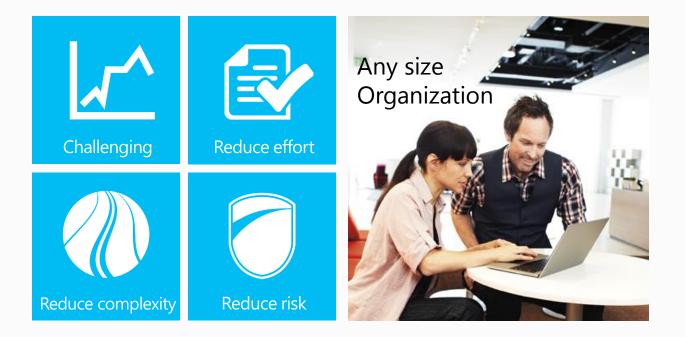
- KMS UpDate is needed for proper Activation of Windows 8.1 and Windows Server 2012 R2

http://support.microsoft.com/kb/2885698

 Deployment Guys: Many Resources, Scripts, Tips, Tricks and Tools http://blogs.technet.com/b/deploymentguys



Deployment Summary





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