

# Six myths of Windows RT revealed!

There has been a lot of (mis)information being circulated about capabilities of Windows® RT, the new Microsoft operating system for ARM tablets. This discussion should dispel a number of those myths and will highlight the robust capabilities of this new and exciting operating system powering the next generation of Dell tablets.



## Myth # 1 – Windows RT is not manageable

Although Windows RT is not as openly manageable as a Windows 8 Pro or Windows 8 Enterprise PC, IT Administrators will still be able to remotely manage many aspects of a Windows RT device.

### SCCM and InTune

Microsoft System Center Configuration Manager (SCCM) and Microsoft's SaaS product, InTune, are widely adopted systems management solutions.

Utilizing Exchange Active Sync extensions, Windows RT will have built-in hooks so that it is manageable by SCCM and InTune. For example, using Exchange Server, SCCM and InTune, the IT admin is able to configure a set of policies including:

- Allow convenience logon
- Maximum failed password attempts

- Maximum inactivity time lock
- Minimum device password complex characters
- Minimum password length
- Password enabled
- Password expiration
- Password history

It also has the ability to query and report back:

- Drive encryption status
- Auto update status
- Antivirus status
- Anti-spyware status

This is just a start. In the future, there are many opportunities for Microsoft to open up additional management capabilities beyond these critical ones listed. As Windows RT becomes more mature, we expect Microsoft to continue expanding the list.

## Myth #2 – Windows RT is not secure

Out of the box, Windows RT devices are loaded with a number of built-in security features that will appeal to a broad set of customers with varying levels of security enforcement policies.

### Secure Boot

Secure Boot effectively locks down Windows RT devices by preventing it from loading (or booting for that matter) non-Windows operating systems. This effectively stops users from loading rogue or pirated copies of OS onto Windows RT devices. This maintains the integrity of the operating system so that it can always be trusted.

This same system also helps enforce that all applications be digitally signed using a trusted certificate before being installed on the device. It ensures authenticity (knowing where the app came from) and integrity (verifying the app hasn't been tampered with since its publication) for each application on a Windows RT device, preventing installation of unauthorized applications.

### Windows Defender

Although the Secure Boot system will prevent the majority of unauthorized applications from being installed, the next line of defense will be built-in Windows Defender, protecting the system against spyware and unwanted software. Windows Defender will continuously monitor and help remove malicious and potentially unwanted programs from the device.

### Full device encryption

Protecting data on the system is important for a number of reasons and encrypting the data on the device is the most widely accepted method of securing private information. Windows

RT devices come with full volume data encryption, which is based on their own bitlocker technology (although will not be branded BitLocker by Microsoft). This ensures that any sensitive data on the device will be inaccessible in the event the device is lost or stolen. The recovery key is stored on the user's SkyDrive account for easy access if needed.

### Remote wipe of company sensitive data

In the event that a Windows RT device is lost or stolen, the user or IT administrator with the proper credentials has the ability to remotely wipe EAS managed data (like email, contacts, and calendar events) on the device, even though the data is encrypted (just to be safe!). If the applications were installed through the Enterprise Application Store, IT admins will also be able to disable access to these line of business (LoB) apps (see Myth #4 below).

### Multi-factor authentication

Windows RT supports many forms of secure login, including picture password, typed password, biometric (fingerprint) and smartcards (PIV, GIDS) utilizing firmware trusted platform module (TPM), depending on the hardware configuration. Through the InTune management console, IT admins can also force policies such as strong password, password expiration, inactivity time lock, etc.

Separate user profiles are also supported which isolates and protects user's data from being accessed by other users logged into the device at the same time. Although separate local user profiles are possible, only one Enterprise Application Store credential is supported (i.e. authentication via AD).

### Firmware Trusted Platform Module

TPMs are devices that securely store cryptographic keys, such as password and login credentials (typed and smartcard based) and encryption keys. Windows RT supports a firmware based TPM so that user's passwords and credentials remain secure and protected.

## Myth #3 – Setting up Windows RT to work in an enterprise environment is difficult

Windows RT comes with a number of built-in, out-of-the-box tools that allow the device to easily connect the user to their enterprise environment and download LoB applications. So even though Windows RT does not directly support features like Domain Join, it is exceptionally "enterprise ready".

### VPN

Virtual Private Networking (VPN) creates a secure, reliable tunnel directly through a company's firewall that allows users to access corporate data and email. Windows RT has a built-in VPN that is compliant with the majority of advanced VPN systems in the marketplace today.

- Inbox VPN client included for Microsoft, Cisco, CheckPoint, and Juniper servers
- VPN protocols supported: L2TP, PPTP, SSTP, Ipsec (IKEv2)
- Multiple ways of configuration (client UX, scripts, or management infrastructure)
- Encryption protocols: WEP, WPA, WPA2, WPA-Enterprise, WPA2-Enterprise, 802.1X
- Certificate-based authentication

Using the built-in management agent, Windows RT allows automatic configuration of VPN profiles for the user, so that Windows RT devices easily connect to a corporate network requiring little user action.



## VDI support

For companies using Virtual Desktop Infrastructure (VDI), Windows RT allows the user to connect directly to their full Windows desktop and access legacy applications using the built-in VDI receiver application. This allows for:

- Full VDI experience
- Rich experience everywhere (RemoteFX, USB redirection, multi-touch remoting)
- Best value for VDI (Fairshare)
- Efficient management

So even though legacy native apps written purely in native WIN32 code cannot execute directly on Windows RT devices, these apps may still be accessible to the user through a connected VDI session. Plus, all the advantages of VDI such as session mobility, security and IT image management will be available to the Windows RT user through the built-in VDI receiver.

## Myth #4 – It's difficult to install line of business (LoB) apps on Windows RT

Enterprise customers have many options available to distribute LoB applications to their employees (or students). One way is through the Windows Store or through the Dell Shop (store within a store) application. Although this method is a convenient way to discover and download most popular off-the-shelf apps, it requires the user to log on using their personal Microsoft Live ID, which may not be appropriate for companies or school systems that have developed or negotiated separate volume license agreements for their LoB applications.

## Enterprise Application Store

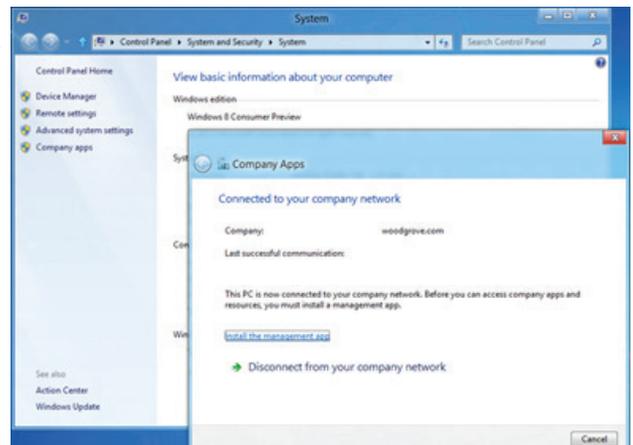
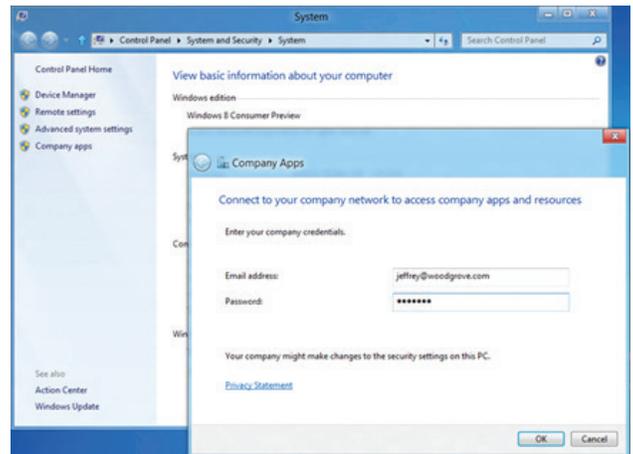
So by using the built-in Windows RT Management Agent and Enterprise Application Store, a curated set of company approved LoB apps can be easily discovered, downloaded and installed directly to the device. Microsoft allows the user to browse and discover these types of LoB apps that have been made available to them by the IT admin:

- Internally developed Windows RT apps that are not published in the Windows Store
- Apps produced by independent software vendors that are licensed to the organization for internal distribution
- Web links that launch websites and web-based apps directly in the browser
- Links to app listings in the Windows Store. This is a convenient way for IT to make users aware of useful business apps that are publicly available.

Discovering and downloading LoB applications on Windows RT devices is quite simple. The Windows RT Management Agent and Enterprise Application Store allows the user to simply enter their corporate email address and password and the device will automatically present a set of LoB available for the user to download and install.

This same system also allows the IT Administrator to populate, manage and audit which applications are available to each user. This is accomplished by simply adding the user's credentials to the Active Directory (AD) service in the SCCM or InTune console.

By specifying which AD domain a particular user is a member of, IT admins can offer different applications to different sets of users. For example, they can offer expense management, contact management and sales tracking applications to their road warriors and offer quality control, inventory management and logistics applications to team members on the factory floor.



The Windows RT Management Agent also performs daily maintenance tasks, updates downloaded applications and checks for new apps available to the user. It will also report back which apps are installed on which machine for inventory and software license audits.

The result is a system in which enterprise customers can populate a set of curated LoB applications they want their users to discover, download and use. Refer to the following blog for more information about managing LoB apps using the Enterprise Application Store.

Ref: Managing "BYO" PCs in the enterprise (including WOA)  
<http://blogs.msdn.com/b/b8/archive/2012/04/19/managing-quot-byo-quot-pcs-in-the-enterprise-including-woa.aspx>

The new Windows RT interface is the largest technology shift in the PC industry since Microsoft moved away from DOS.

### Myth #5 – Windows RT is not good for BYOD users

The consumerization of IT trend in the marketplace is driving companies to adopt Bring Your Own Device (BYOD) policies. These companies have been trending away from fully managing devices to more monitoring and maintaining access controls to their applications, data and services, while leaving the user's personal applications and private data alone.

Today, Windows RT is a perfect complement to the BYOD trend, primarily because it has the consumer features end users desire and the enterprise enablers corporate customers require. Its main focus is security, manageability, productivity and application access, *when and where appropriate* to the company or user. If the company or end user (if in a BYOD environment) chooses to disconnect from the control and compliance of the enterprise, the IT admin simply initiates a disconnection of the device which will:

- Remove the activation key that allowed the agent to install LoB apps. Once removed, any WinRT apps that were installed via the SSP and management client are deactivated.
- Remove any certificates that the agent has provisioned.
- Cease enforcement of the settings policies that the management infrastructure applied.
- Report successful deactivation to the management infrastructure if the admin initiated the process.
- Remove the agent configuration, including the scheduled maintenance task. Once completed, the agent remains dormant unless the user reconnects it to the management infrastructure.

This process will not touch the personally loaded applications the user purchased or downloaded through the marketplace, but will effectively remove all corporate assets off of the employee-owned device.

Ref: Managing "BYO" PCs in the enterprise (including WOA)  
<http://blogs.msdn.com/b/b8/archive/2012/04/19/managing-quot-byo-quot-pcs-in-the-enterprise-including-woa.aspx>

### Myth #6: Windows RT is not like having a "full" Windows OS

The new Windows RT is a purpose-built operating system designed specifically to be used on ARM-based mobile and tablet devices. Its design intent was to leverage the many advantages of Windows 8, but it's optimized for an ARM-based processor.

### The "Windows Experience" Interface (formally known as the Metro UI)

The new Windows RT interface is the largest technology shift in the PC industry since Microsoft moved away from DOS. But most legacy x86 software was UI designed for keyboard and mouse interaction and therefore, customers would have to redesign the software for optimal finger touch experience to be used on a tablet.

Windows RT apps are, by default, designed specifically for finger touch using the new WinRT "Windows Experience" interface. This new interface allows developers to design lightweight apps that are optimized to connected run or cloud-based apps written in HTML5 instead of heavy C++ native applications. And since Windows RT can ONLY run WinRT apps, any application that is written for a Windows RT device can be easily ported to run on a full Windows 8 PC or in cases, execute on either with no changes required.

### VDI

As explained earlier, there is yet another alternative to running x86 software on the tablet itself. When intermittent access to legacy x86 software is required on a tablet, consider VDI and a Dell keyboard dock that comes with a touchpad.



## Windows 8 feature comparison

Below is a line-by-line comparison of Windows RT versus the other versions of Windows 8. As you can see, Windows RT stacks up pretty well.

Feature name	Windows 8	Windows 8 Pro	Windows RT
Upgrades from Windows 7 Starter, Home Basic, Home Premium	X	X	
Upgrades from Windows 7 Professional, Ultimate		X	
Start screen, Semantic Zoom, Live Tiles	X	X	X
Windows Store	X	X	X
Apps (Mail, Calendar, People, Messaging, Photos, SkyDrive, Reader, Music, Video)	X	X	X
Microsoft Office (Word, Excel, PowerPoint, OneNote)			X
Internet Explorer 10	X	X	X
Device encryption			X
Connected standby	X	X	X
Microsoft account	X	X	X
Desktop	X	X	X
Installation of x86/64 and desktop software	X	X	
Updated Windows Explorer	X	X	X
Windows Defender	X	X	X
SmartScreen	X	X	X
Windows Update	X	X	X
Enhanced Task Manager	X	X	X
Switch languages on the fly (Language Packs)	X	X	X
Better multiple monitor support	X	X	X
Storage spaces	X	X	
Windows Media Player	X	X	
Exchange ActiveSync	X	X	X
File history	X	X	X
ISO / VHD mount	X	X	X
Mobile broadband features	X	X	X
Picture password	X	X	X
Play To	X	X	X
Remote Desktop (client)	X	X	X
Reset and refresh your PC	X	X	X
Snap	X	X	X



## Windows 8 feature comparison continued

Feature name	Windows 8	Windows 8 Pro	Windows RT
Touch and Thumb keyboard	X	X	X
Trusted boot	X	X	X
VPN client	X	X	X
BitLocker and BitLocker To Go		X	
Boot from VHD		X	
Client Hyper-V		X	
Domain Join		X	
Encrypting File System		X	
Group Policy		X	
Remote Desktop (host)		X	

Ref: Announcing the Windows 8 Editions  
<http://windowsteamblog.com/windows/b/bloggingwindows/archive/2012/04/16/announcing-the-windows-8-editions.aspx>

### Summary

The new Windows RT powering Dell tablets will allow users to work smarter by allowing easy, secure access to company applications and services while enabling rich content creation and consumption with built-in Microsoft Office Suite — even in a BYOD environment.

Key security features include built-in secure boot, encryption, multi-factor authentication and the industry acclaimed built-in anti-spyware application, Windows Defender. Windows RT is manageable by the widely adopted Microsoft SCCM and for those companies who opt for a full SaaS systems management solution, Microsoft Intune. It is proven to be enterprise ready with out-of-the-box support for VPN, VDI and a system to discover, download and install a curated set of LoB applications. It is easy to use, thanks to the new WinRT touch-optimized UI and its built-in features compare well to the full version of Windows 8.

Windows RT is primed and ready to take on the tablet market by storm by giving your customer the power to do more. Is it right for your customer?

For more information about Dell's new Windows RT powered tablets, please contact:

xxx xxxxxx  
 Dell Inc.  
 (xxx)- xxx -xxxx

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