



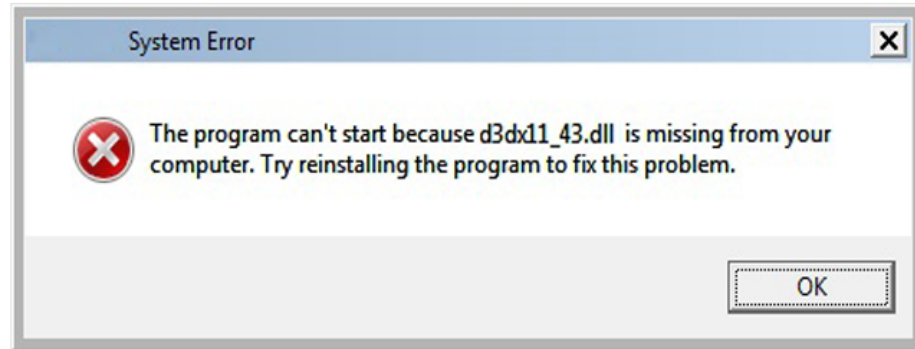
Windows 10 & AppDNA

Laurent Strauss, Citrix Systems Engineer



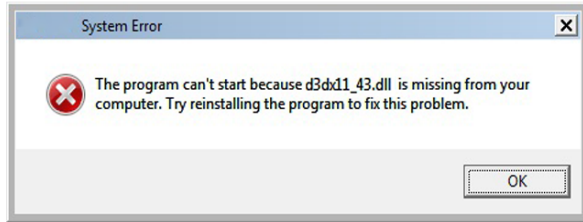
App Compatibility

- Long and thorough analysis
- UAT one by one
- Install... test... install... test

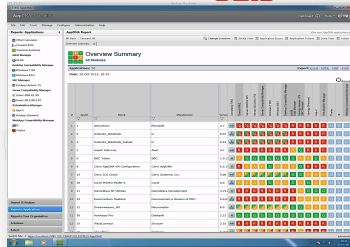


Migrations can impact applications

Moving Applications to Windows 10



AppDNA (7.6.5)

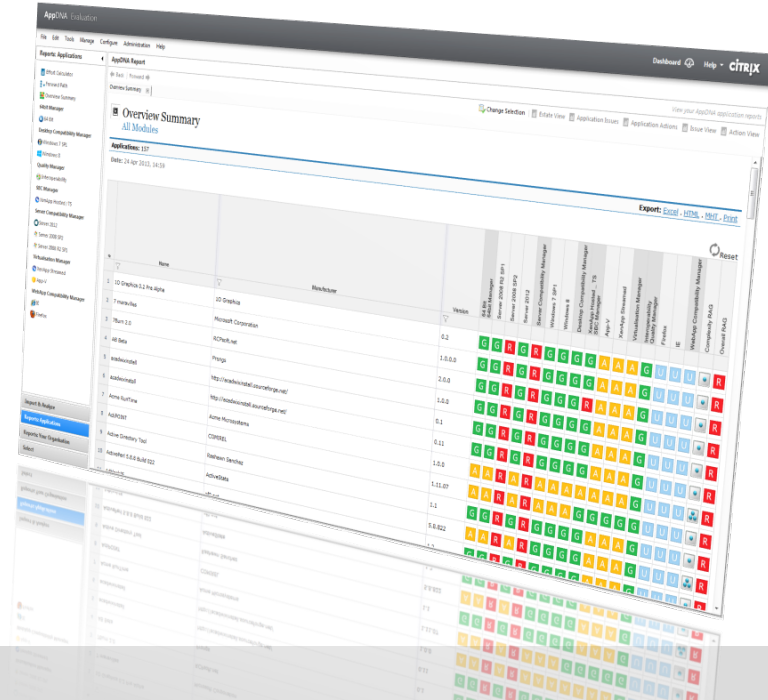


AppDNA for Windows 10 migrations

Automatisiertes App-LifeCycle-Management mit AppDNA

Tägliche Entlastung in der Applikations-Bereitstellung

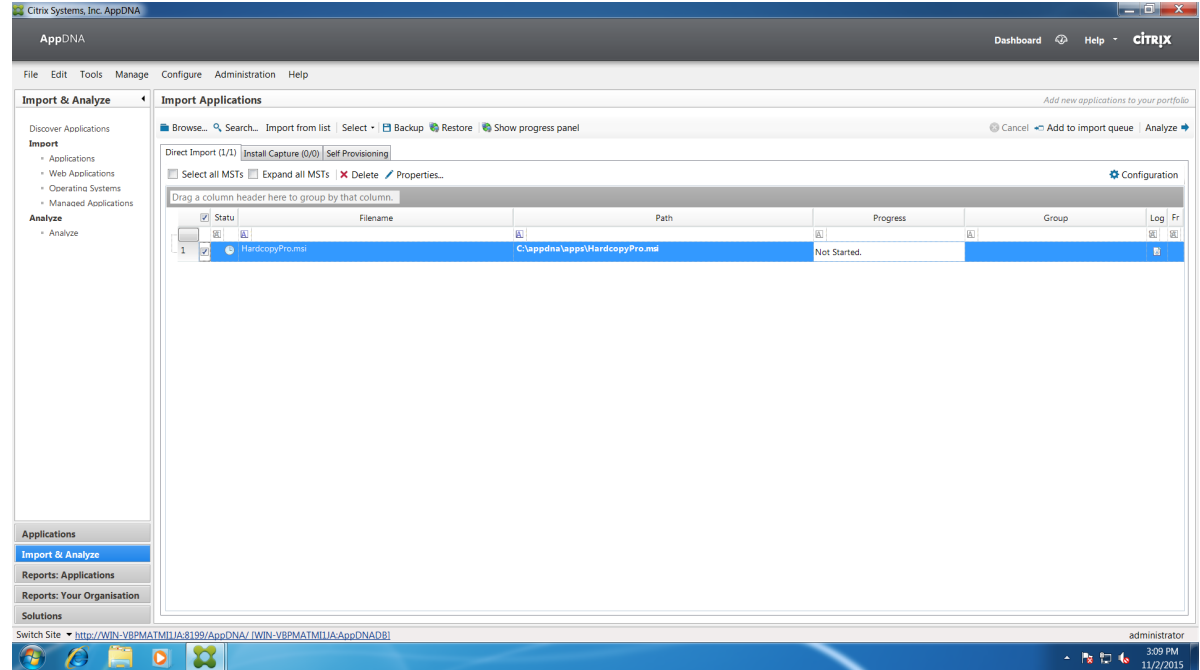
- schnelle Analyse der Software Pakete und Rollout-Methoden
 - Kompatibilitätsprüfung unter SW-Paketen und OS-Zielplattformen und Virtualisierung.
 - Patch Management und Service Packs
 - Reduzierter Aufwand für Freigabe-Prozess (QS)
- Geringeres Betriebs-Risiko
 - „1st Time packaging Success-Rate“
 - Manuell ca. 60-65% / AppDNA= 98%
 - bei WEB-Apps ...Reduktion von Sicherheitslücken und „Scripting-issues“ und mehr



Determine Application Compatibility

With AppDNA

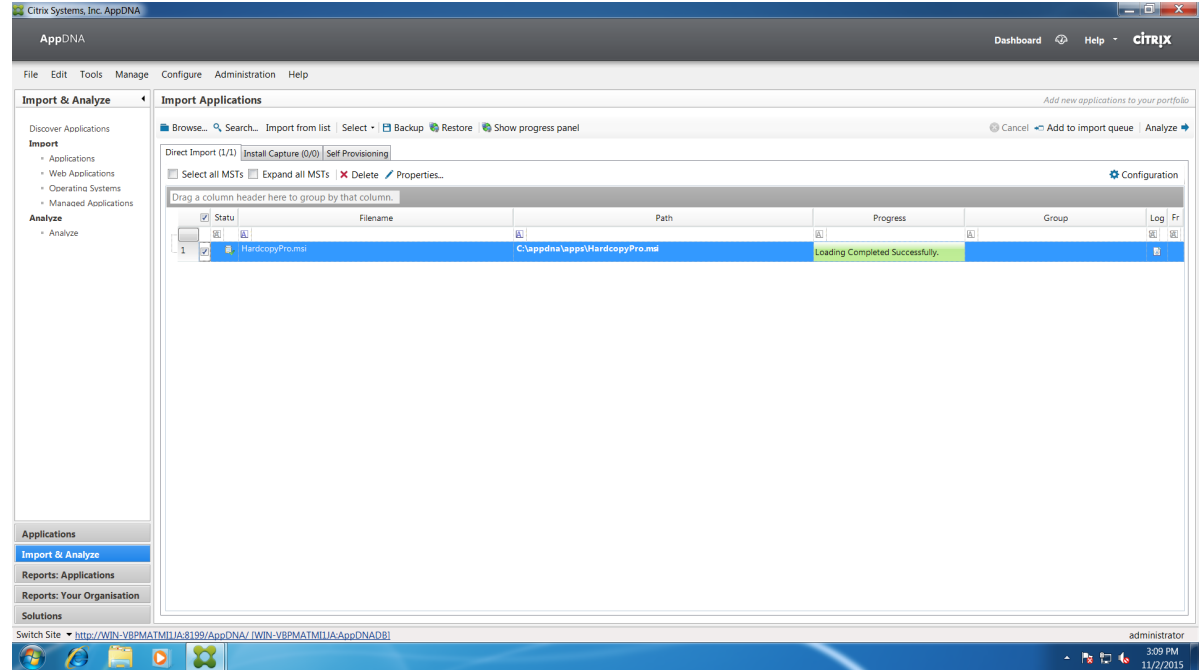
- Step 1: Gather your apps



Determine Application Compatibility

With AppDNA

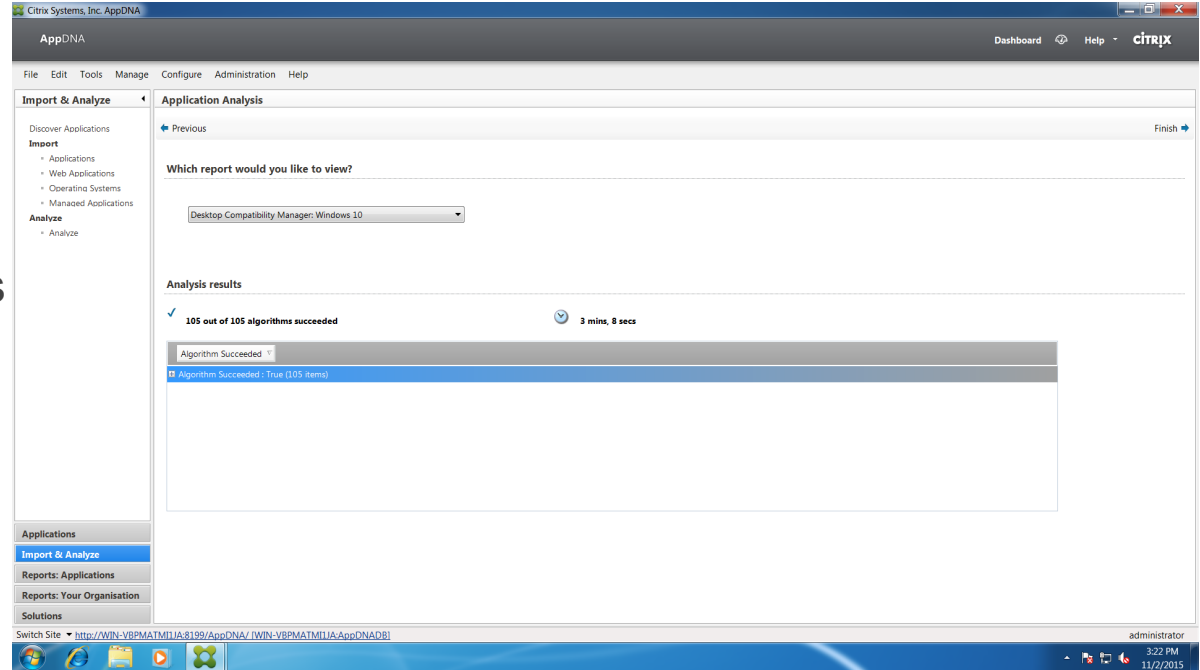
- Step 1: Gather your apps
- Step 2: Import your apps



Determine Application Compatibility

With AppDNA

- Step 1: Gather your apps
- Step 2: Import your apps
- Step 3: Analyze your apps



Determine Application Compatibility

With AppDNA

- Step 1: Gather your apps
- Step 2: Import your apps
- Step 3: Analyze your apps
- Step 4: Remediate your apps

AppDNA Report

Windows 10 - Application Remediation

Hardcopy Pro
Windows 10 Remediation Issues

Switch to: Action report

AppID	Application	Manufacturer	Version	Package Type
16	Hardcopy Pro	Desksoft	2.21.0.0	Packaged

Image (from): Default Image for Windows 7 32-bit Image (to): Default Image for Windows 10

Analyzed Date: 11/2/2015 3:13:00 PM

Module	Report	Group	Algorithm	Standard	Results	Total
Desktop Compatibility Manager	Windows 10	Deprecated components	WIN10_VER_001	G	2	
Desktop Compatibility Manager	Windows 10	Best practice violations	WIN10_BP_002	G	2	
Desktop Compatibility Manager	Windows 10	Best practice violations	WIN10_BP_001	G	1	

Module	Report	Group	Standard	Algorithm
Windows 10	WIN10_VER_001 - Deprecated GetVersionEx API	Deprecated components		

GetVersionEx may be altered or unavailable for releases after Windows 8.1. The value returned by the GetVersionEx function now depends on how the application is manifested. Most existing applications that use this API function should continue to work; however, some features or expected behavior that use this API function may not work. More information: [https://msdn.microsoft.com/en-us/library/windows/desktop/7245f11c\(vw.95\).aspx](https://msdn.microsoft.com/en-us/library/windows/desktop/7245f11c(vw.95).aspx)

Remediation

Test the application thoroughly to determine whether it is affected by this change. If it is affected, consider redeveloping the application to use the VerSetConditionMask API (see [https://msdn.microsoft.com/en-us/library/windows/desktop/6a424972\(vw.95\).aspx](https://msdn.microsoft.com/en-us/library/windows/desktop/6a424972(vw.95).aspx) for more information). Also, you may manifest the application by targeting Windows 10 (see [https://msdn.microsoft.com/en-us/library/windows/desktop/6a424972\(vw.95\).aspx](https://msdn.microsoft.com/en-us/library/windows/desktop/6a424972(vw.95).aspx) for more information).

Group: Deprecated components

The algorithms in this group detect applications that are dependent on features that have been removed from Windows 10 or that behave differently on Windows 10 compared to earlier versions of Windows.

#	Filename	target_path	version_number	function_name
1	HardCopy.dll	ProgramFilesFolder\HardCopy Pro\HardCopy.dll	0.0.0.0	GetVersionExA

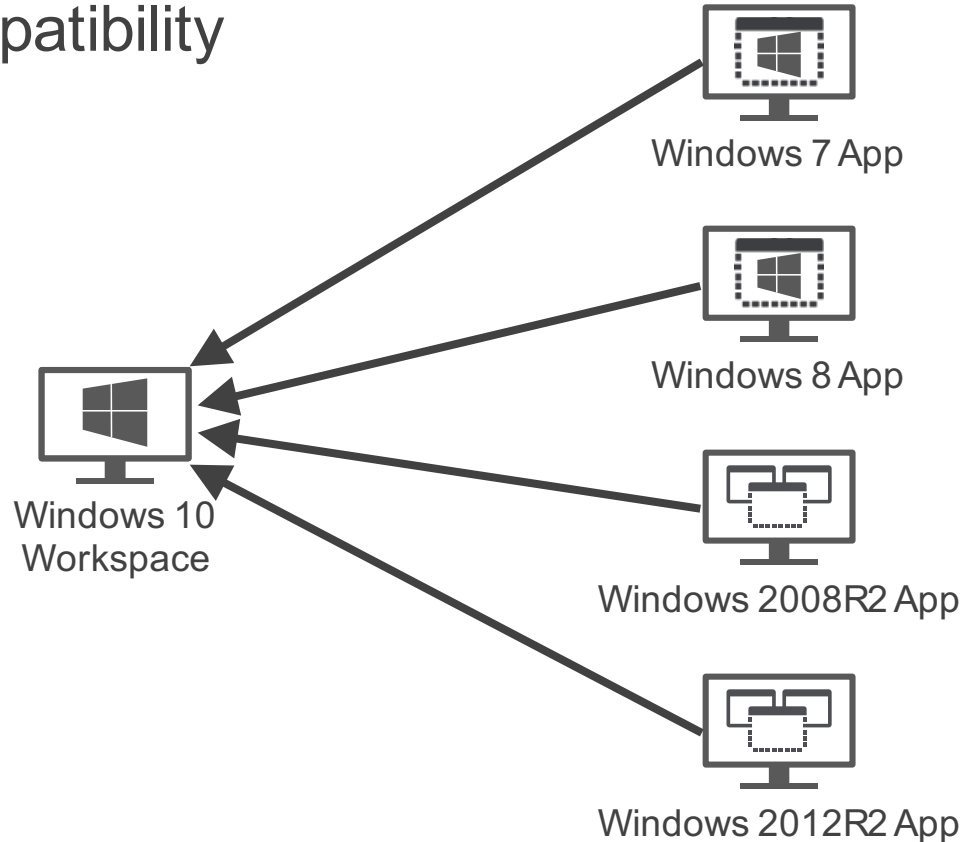
Site Site: <http://WIN-VPMATMIIJA:8199/AppDNA/!WIN-VPMATMIIJA:AppDNA08>

administrator 3:27 PM 11/2/2015

Determine Application Compatibility

With AppDNA

- Step 1: Gather your apps
- Step 2: Import your apps
- Step 3: Analyze your apps
- Step 4: Remediate your apps
- Step 5: Design



XenDesktop Rollout



XenDesktop Adoption Report

XD7 Adding New Apps

Applications: 31

Export: [Excel](#) . [HTML](#) . [MHT](#) . [Print](#)

Date: 10 Oct 2013, 21:05

Applications that can run in a XenDesktop 7 environment on Windows Server 2012 R2 64-bit (Default Image for Windows Server 2012 R2)



#	AppID	Application	Manufacturer	Version	Current Platform	Server Hosted	Deployment Model
1	3	Amper & Sand and costs	Amper & Sand and costs	1.0.0	Site 1	G	Server Hosted on Windows Server 2012 R2 64-bit - Default Image for Windows Server 2012 R2
2	13	Citrix ICA Client	Citrix Systems, Inc.	9.00	Site 1	G	Server Hosted on Windows Server 2012 R2 64-bit - Default Image for Windows Server 2012 R2
3	36	Hardcopy Pro	Desksoft	2.21	Site 1	G	Server Hosted on Windows Server 2012 R2 64-bit - Default Image for Windows Server 2012 R2

Page 1 of 1 Records per page: 100 Displaying items: 1 - 3 of 3

Applications that require mediation to run in a XenDesktop 7 environment on Windows Server 2012 R2 64-bit (Default Image for Windows Server 2012 R2)







#	AppID	Application	Manufacturer	Version	Current Platform	Server Hosted Before	Server Hosted After	Deployment Model
1	7	avast! Antivirus	Alwil	4.7	Site 1	R	G	Remediations: Server Hosted on Windows Server 2012 R2 64-bit - Default Image for Windows Server 2012 R2
2	9	Citrix AppDNA VM Config	Citrix AppDNA	6.2.1212.30	Site 1	A	A	Remediations: Server Hosted on Windows Server 2012 R2 64-bit - Default Image for Windows Server 2012 R2
3	10	Corel PHOTO-PAINT 6	Corel	6.0	Site 1	A	G	Remediations: Server Hosted on Windows Server 2012 R2 64-bit - Default Image for Windows Server 2012 R2

XenDesktop Upgrade

- Stack Konfiguration

Trial XD7 Upgrade

 Report  Analyze  Edit...  Delete

Let's see how many apps are compatible

Current platform(s)

Site 1 Presentation Server 4.0 Windows Server 2003 Applications: 7	Site 2 XenApp 6.0 Windows Server 2008 R2 6... Applications: 9
--	---

+ Add platform...

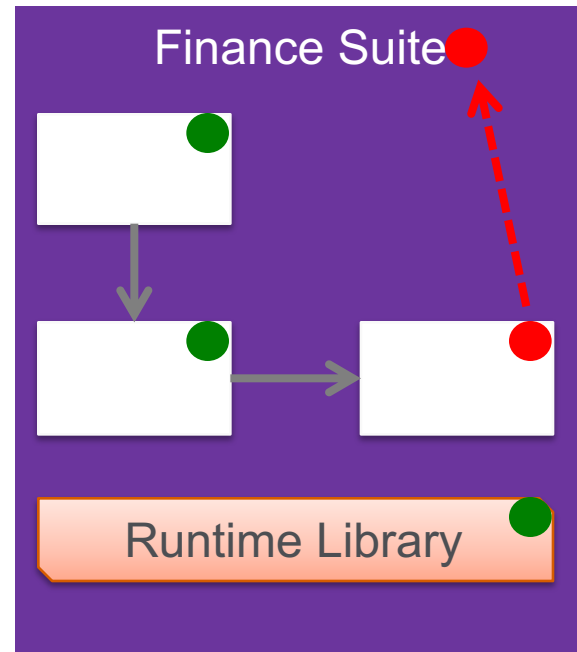
Target platform(s)

XenDesktop 7 Upgrade target XenDesktop 7 Windows Server 2012 64-bit
--



Dependency Mapping

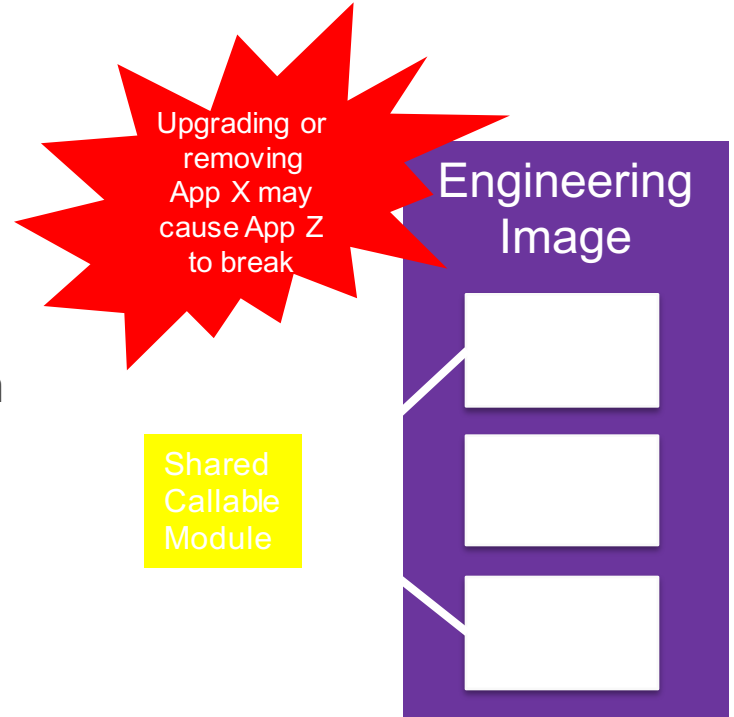
- Really important for App-V and images to include all dependent modules
- AppDNA will support:
 - Manually identifying dependencies
 - Suggest likely dependencies
 - Include analysis of runtime libraries
- Compatibility information will now 'bubble up' to the top
 - Top level will now be 'Red' if any dependent item is 'Red'



Interoperability Testing

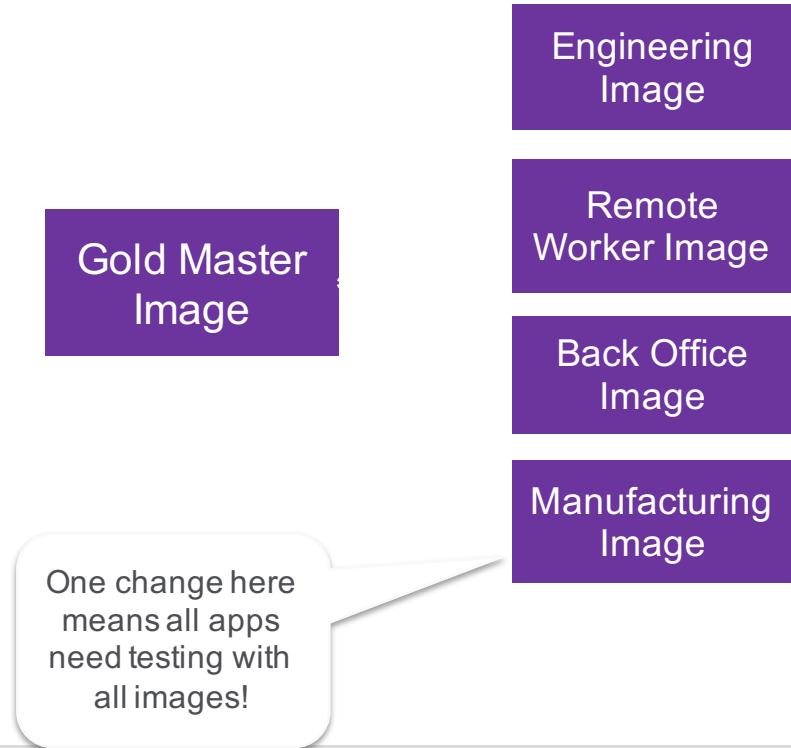
- Useful in planning groupings of MSI applications with images
 - Detects issues that can cause apps to break other apps during upgrade, uninstall, or repair
- Any Windows installer (MSI) conflict between apps in same image can be serious
- Manual testing is traditional method

Module	Report	Group	Standard	Export	Algorithm
Interoperability	Interop Demo Check	CR	R		CRCC_051 - Keypaths Manifestation Each component within an MSI should have a keypath : is used to ascertain whether the component should be error by one application when it is still required by anot Remediation If a keypath resource is shared by multiple application: component from being removed when required by anot



Build Assessment

- One change to an image means all apps on that image need to be retested
- Often only the golden master image gets tested – no time for the others
- NEW: AppDNA will check whether apps in the other images will be affected differently (compared to Gold)



GPO Settings

- GPO settings now detected
 - When incorporated in a custom OS image – not from Active Directory
 - 23 GPO's can affect apps, out of >5000 possible
 - Examples:
 - No 16-bit apps
 - Firewall exception creation
 - New device installation
 - New app installation (.msi's only)
 - Prohibit patching
 - Lock-down
 - Access to control panel
 - Disable and hide all items on desktop
 - Restrict internet communication
 - Startup behavior
 - Access to command prompt
 - Non-admins applying updates

Other Features

- .Net DNA added
 - System calls, etc. can now be detected inside .Net code
- 64-bit
 - 64-bit testing is no longer standalone – detected and turned on/off automatically
 - 64-bit OS accuracy improved (64-bit registry settings now included)
 - 64-bit OS images now ship with AppDNA
- WorxWeb compatibility analysis
 - Analyze IE web apps for compatibility with WorxWeb browser
- Performance optimization
 - Estate Views will now be constructed only when requested
 - Analysis runs faster due to separation of Interop
- Platform Support
 - MS SQL Server 2014 (Standard and Express Editions) is supported

- Windows 10 FAQ

- <http://www.microsoft.com/de-de/windows/windows-10-faq>

- Licensing - Windows 10-Factsheet

- http://cdn.ws.citrix.com/wp-content/uploads/2015/07/screenshot-33.png?_ga=1.59005928.477747496.1422276443

- Windows 10 Webinar Serie for Partners

- <https://msevents.microsoft.com/cui/EventDetail.aspx?culture=de-DE&EventID=1032623375&IO=HBQrwxBOetf0EM4pK35xuv>

- Windows 10 from MPC 2015 - *More personal computing - the modern desktop*

- <https://mspartner.microsoft.com/en/us/Video/Search?keywords=2015VK713>

- Windows 10 webinar - Preparing Your Enterprise for Windows 10 as a Service

- <http://www.microsoftvirtualacademy.com/liveevents/preparing-your-enterprise-for-windows-10-as-a-service?MC=Windows&MC=WinServer&MC=DevOps&MC=EntMobile&MC=DOS>

- Short blog from Nabeel Youakim an Unprecedented Moment in IT History
 - <http://blogs.citrix.com/2015/07/13/an-unprecedented-moment-in-it-history/>
- Citrix Pressrelease – Windows 10
 - <https://www.citrix.com/news/announcements/jul-2015/citrix-accelerates-windows-10-adoption-and-simplifies-migrations.html>
- Three \ **Citrix** / Steps to Windows 10
 - <http://blogs.citrix.com/2015/07/14/three-steps-to-windows-10/>
- Citrix Receiver for Windows 10
 - <http://blogs.citrix.com/2015/07/08/receiver-for-windows-4-3-enables-windows-10-and-framehawk/>
- Citrix VDA for Win10 – Win10 as Virtual Desktop
 - [XenDesktop Virtual Delivery Agent Technical Preview for Windows 10](#)
- App DNA - migrate apps to Windows 10
 - <http://blogs.citrix.com/2015/07/14/moving-apps-to-windows-10-appdna-can-help/>



Work better. Live better.