BROADBAND TESTING

Rimo3 ACTIV Report

A Broadband-Testing Report
By Steve Broadhead, Founder & Director, BB-T

First published October 2018 (V1.0)

Published by Broadband-Testing

E-mail : info@broadband-testing.co.uk
Internet : HTTP://www.broadband-testing.co.uk

TABLE OF CONTENTS

BROADBAND-TESTING

Broadband-Testing is Europe's foremost independent network testing body and consultancy organisation for all technologies, software and services, from endpoint to cloud and DC.

Broadband-Testing provides a range of specialist IT, networking and development services to vendors and end-user organisations throughout Europe, SEAP and the United States.

Broadband-Testing is an associate of the following:

Broadband-Testing Laboratories are available to vendors and end-users for fully independent testing of networking, communications and security hardware and software.

Broadband-Testing Laboratories operates an **Approvals** scheme which enables products to be short-listed for purchase by end-users, based on their successful approval.

Output from the labs, including detailed research reports, articles and white papers on the latest network-related technologies, are made available free of charge on our web site at HTTP://www.broadband-testing.co.uk

Broadband-Testing Consultancy Services offers a range of network consultancy services including network design, strategy planning, Internet connectivity and product development assistance.

EXECUTIVE SUMMARY

- The Windows 10 era has seen a change of policy from Microsoft, with the OS now provided as Windows as a Service (WaaS). This has several significant impacts upon ongoing ownership of an estate of Windows-based endpoints.
- As part of this process, Microsoft will now release two features updates a year, though a recent Microsoft missive advises that these updates might be subject to delay, causing even more potential complications. It means, every time there's an update, there are potential application compatibility/compliance issues and this is ongoing. For existing Windows-based enterprises, there is no "sit back and wait" option as, by January 2020, Windows 7 will no longer be supported, other than by purchasing extended support at expected prohibitive costs and with no indefinite support guarantees. So, realistically Windows 10/WaaS has to be adopted if a company is to remain with Microsoft.
- The manual approach to application compatibility/compliance testing is extremely laborious and very expensive, in terms of both manpower and time. Given that this is not a one-off project, but an ongoing requirement now, realistically there has to be a cost-effective, timely alternative to the manual option.
- With its ACTIV technology, Rimo3 is providing that very alternative. ACTIV connects to a company's Microsoft SCCM (System Center Configuration Manager) servers or any distribution point and automatically finds and identifies all packages in use within the company. This should result in a realistic maximum hit rate in an SCCM-based environment. It then carries out a complete install, launch and test of each application to check for compliance and compatibility. Thereafter it monitors the distribution servers to indicate any package updates and potential retesting requirements. It also automatically differentiates between different versions of the same application, so is always aware of which version is in use.
- ACTIV claims to also identify 99% of all compatibility issues before deployment or migration of a new release within a WaaS environment. The product is language and geo-site independent, so can be used to manage installations globally. In our hands-on assessment we saw examples of applications being successfully passed and also flagged up as having compatibility problems – see examples in report section.
- Overall, Rimo3 suggests that ACTIV reduces manual testing costs by over 50% and manual testing effort by 90%; we believe those to be conservative estimates. Moreover, in many cases we believe a company simply cannot realistically manage its product portfolio without the kind of assistance something like ACTIV provides, whether a large-scale enterprise, or any form of service provider and all stops in between. Putting together a team to carry out manual application compatibility testing, then maintaining and managing that team is anything but trivial, regardless of the associated costs.

APPLICATION MIGRATION IN A WINDOWS WORLD – ANYTHING BUT TRIVIAL

Migrating applications - especially a combination of ISV-sourced and in-house developed – between different Windows platforms, or indeed different browsers, has never been anything but a challenge.

However, generally companies have had some leeway in terms of when they chose to make a move (or not). But the Windows 10 era has ushered in a new Microsoft OS policy, with Windows as a Service (WaaS). As part of the licensing agreement, planned updates – theoretically two a year – are compulsory. Moreover, Windows 7 is no longer supported as of January 2020, so what choice do Windows user bases have? This has several, significant impacts upon ongoing ownership of an estate of Windows-based endpoints.

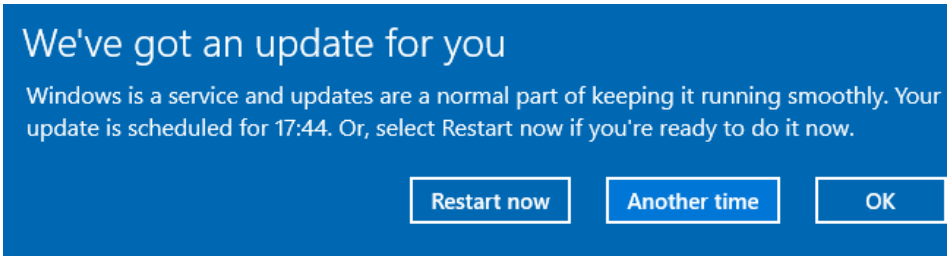

Figure 1 – WaaS Auto Updates

It means, every time there's an update, there are potential application compatibility/compliance issues and this – of course - is ongoing. There is no planned Windows "11", just a continuous rollout of version "10" by any other name. The manual approach to application compatibility/compliance testing is extremely laborious and very expensive, in terms of both manpower and time. It is also given to significant human error, creating more time issues and costs. Errors extend the compatibility test program and then you run the risk of version updates before even the first round of testing is complete – a vicious circle, in other words.

Given that this is not a one-off project, but an ongoing requirement now, realistically there has to be a cost-effective, timely alternative to the manual option, if Windows ownership is going to be extended. And moving to a completely different platform for the whole user base, or even part thereof, is all but impossible for many companies with so much invested already in the Microsoft platform. With its ACTIV technology, Rimo3, the focus of this report, believes it has the answer. Here we examine what it has to offer.

RIMO3 ACTIV – OVERVIEW

Rimo3's ACTIV - https://rimo3.com/ - is designed to take the guesswork and uncertainty out of application compliance testing, with the added bonus of massively reducing the time required for the process. It automatically identifies and tests all applications in a customer's estate (though this is fully customisable), creating a pseudo-working environment that models user activity as accurately as possible.

It does this by combining automation and RPA (Robotic Process Automation) technology, starting by automatically identifying, discovering, installing and testing all applications in the estate, with no requirement for user intervention. The aim is to allow IT to focus on the remediation of applications that are proven by ACTIV to be incompatible. Rimo3 claims cost savings in excess of 50% and this may well be a very conservative figure. Moreover, it is an enabler for moving the application estate to Windows 10/WaaS, as it avoids the "suck it and see" approach, which is potentially painfully expensive and disruptive to business.

Rimo3 believes customers can typically save 95% of their application testing time through the use of ACTIV. It is aimed at resolving large scale application migrations, effectively managing the project workflows, end to end, even including an uninstall.

The process can be monitored and managed from start to completion, meaning that applications can be prioritised or de-prioritised during these workflows, based on the results being generated. In this way it enables a migration to be completely flexible and pro-active. Importantly, everything can be viewed from a single interface, so any information feed such as accessing application records, tracking upgrade projects or viewing version numbers on an estate-wide basis, is available from a single console.

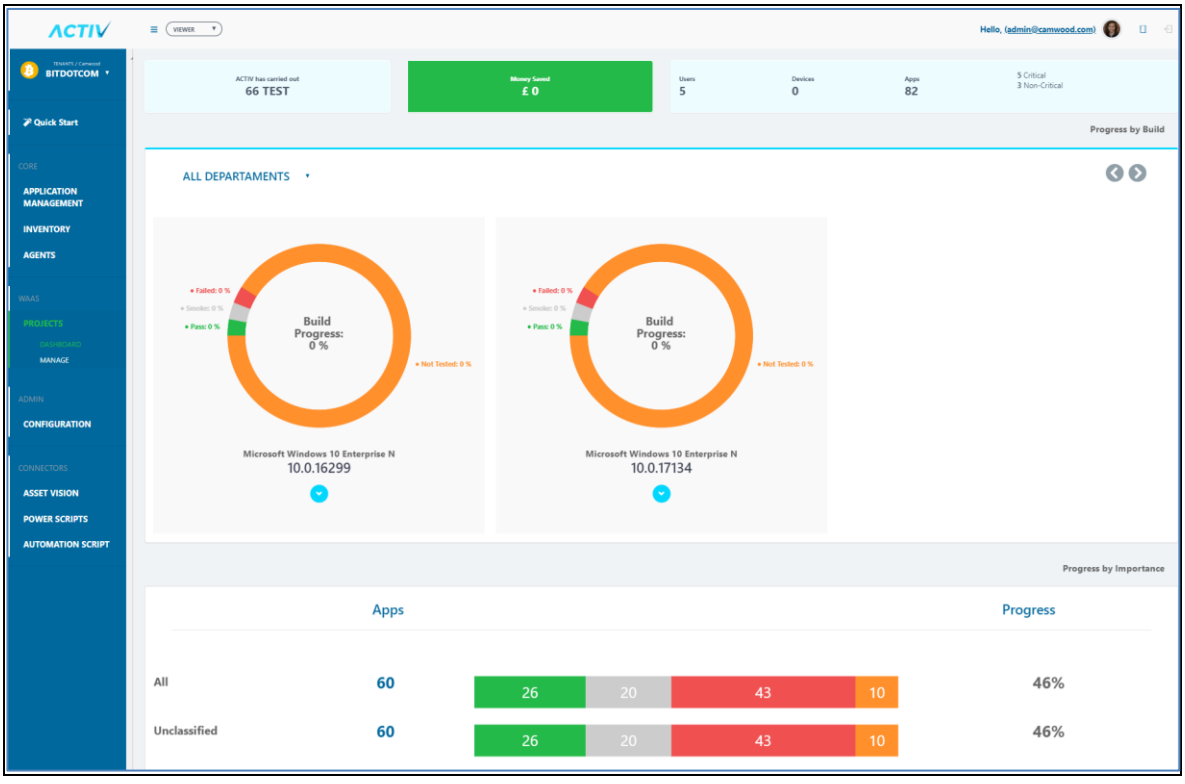

Figure 2 – The ACTIV Dashboard

ACTIV – HANDS ON

ACTIV is SaaS-based, so can be driven from anywhere, via a real-time dashboard (single pane of glass view with real-time project updates and role-based views, including secure API access to 3rd party integration, within that single pane view).

Walking through the basic ACTIV process, here are the key elements:

- Acquisition: ACTIV acquires applications from any source/SCCM for auto-acquisition and discovers all application inter-dependencies.
- Auto smoke test: this is a 1-click, fully automated procedure, consisting of an application launch and load. Importantly, the smoke testing also tests an uninstall, often an application failure point.
- UAT: This is a fully automated execution of a test case, based on defined UAT scripts.
- Business Process Testing (BPT): This is based around a bespoke test case creation and automated execution that mimics a customer business process. The key element here is in maximising reliability by ensuring multiple applications do not interact negatively with each other.
- Instant visual diagnosis: here we have complete visibility at an application's point of failure, with real time logs and snapshot screenshots.

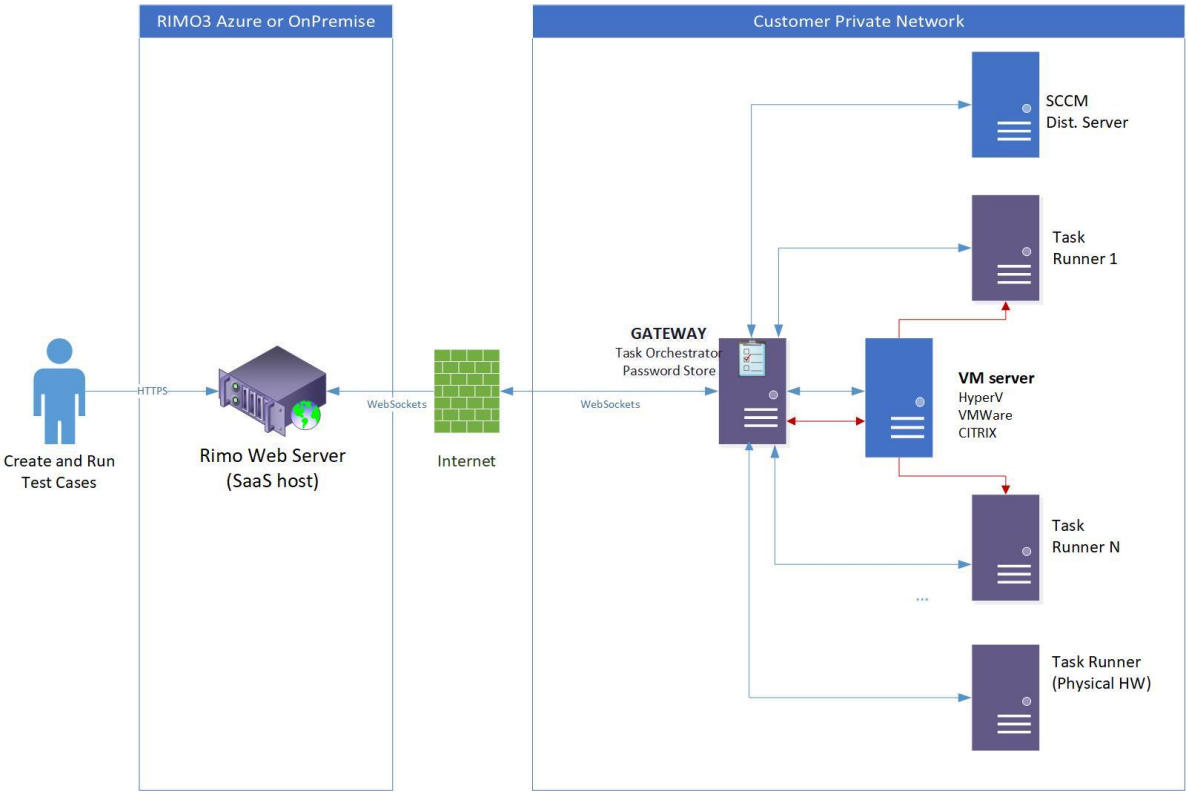

Figure 3 – The ACTIV Architecture

Initial deployment of ACTIV involves the creation of the Task Runner and Gateway elements of the architecture – see graphic above. The time required is customer specific (there are internal procedures for creating and assigned VM's that must be observed and are different for each organisation), but setup thereafter is less than a day. The Gateway software is downloaded from the host, and the Task Runner is a pre-configured system image. From a user perspective, as we've indicated, ACTIV is SaaS-based, so there is no OnPrem setup at the endpoints. For the report, we ran through a series of processes, testing multiple applications, some with positive outcomes, some with negative, as you'd find in most environments. Running through the process, hands-on, first ACTIV connects to the SCCM server (our application distribution point, in this case) automatically finding and identifying all the packages on the server. Note: ACTIV supports MSI, multiple virtualisation platforms, including AppV, VMware and Citrix, and custom installation scripts. It then automatically analyses each package, identifying the applications it installs and how and where they are installed.

ACTIV will test any or all applications within your estate, or a specific sub-group (such as a business unit, a department, or all applications used by a specific user group) - by installing and launching the application, to provide you with a quick and effective indication. Such tests are carried out on any version or configuration of Windows you choose - and can be a virtual device, or a physical device, allowing you to verify compatibility not only with the OS version, but your private builds, devices and device drivers. ACTIV will also check that the uninstall action of each package is working properly. It also allows you to create unique automation scripts that will mimic the way users interact with groups of applications: For instance, an HR department may use an HR management system but also financial accounting software to deal with issues such as payroll. An automation can install all the necessary applications on the same device (again, virtual or physical) and carry out actions that are typical of what HR employees will do every day. ACTIV can also load macro files and connect to 3rd party systems such as SharePoint and independent databases to manage interaction between two or more applications.

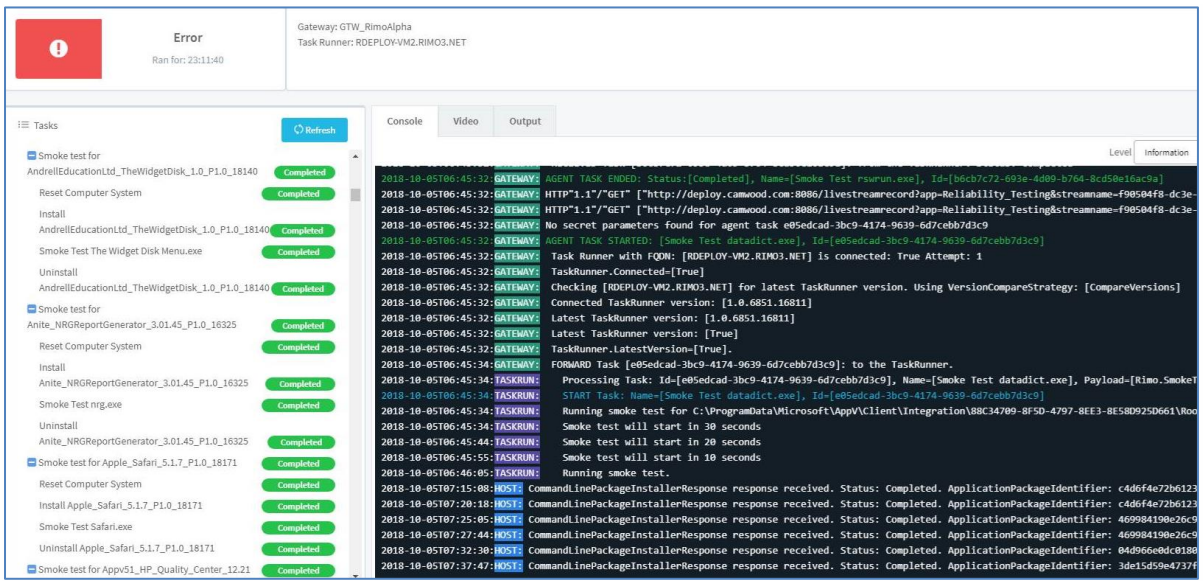

Figure 4 – Running Test Sequence

While the whole process is automated, being real-time, you can monitor proceedings directly at any point, as highlighted in the sequence screenshot below. Simply by clicking

the "video" button, a user can observe the test desktop in real-time. Whenever a failure is encountered, detail insights are provided, including detailed logs, screen captures at the point of failure, live or recorded video of the desktop activity, or a PDF of all events that have taken place in this test.

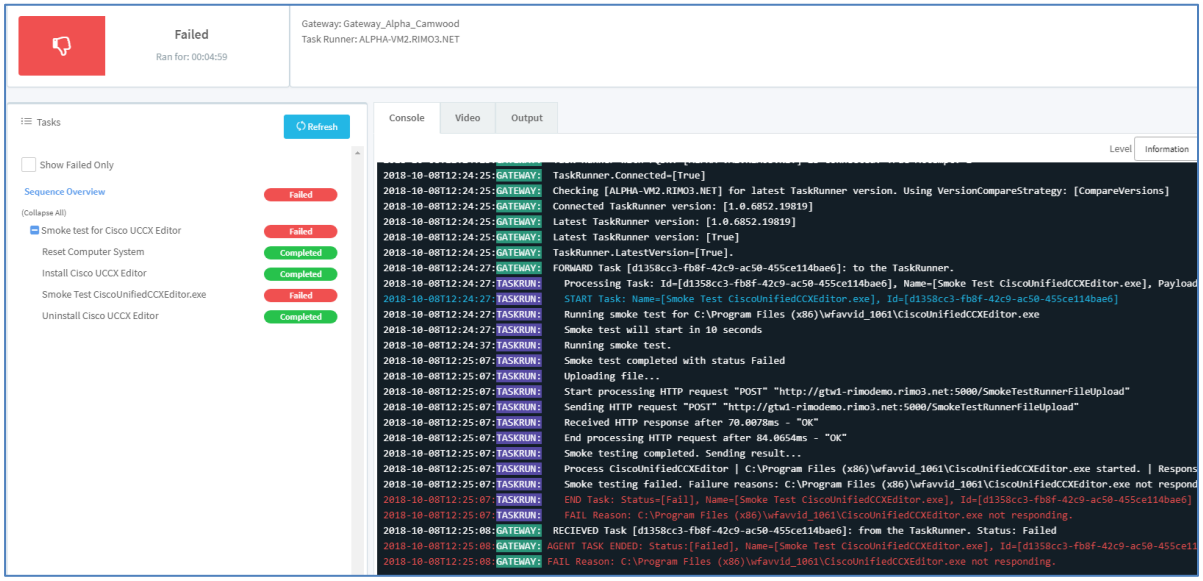

Figure 5 – Encountering A Failure

Colour coding is used to indicate status – red for severe issues, such as application failures, logically. In this case we encountered an application test failure – the application failed to respond. At this point we were able to generate a screen capture of the application failing:

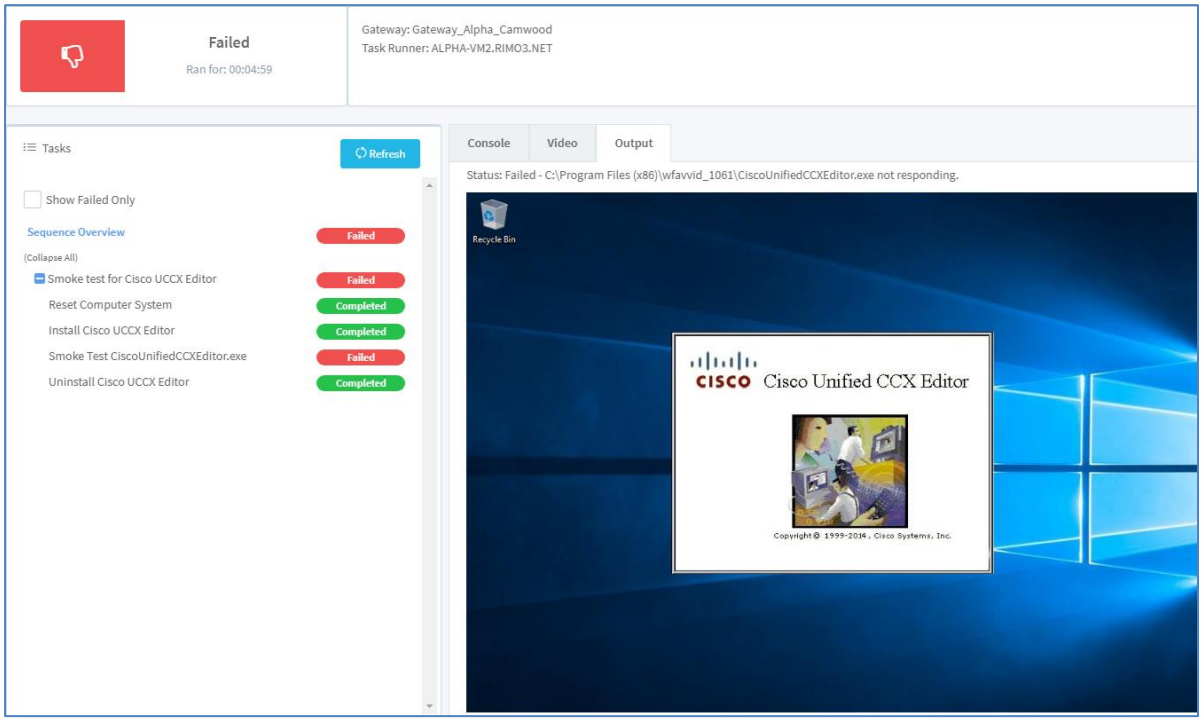

Figure 6 – Screen Capture Of Application Failure

In this instance, a Cisco application (Unified CCX Editor) failed and was found to be incompatible with the specific Windows 10 test configuration as tested.

Note, progress monitoring is completely customisable, and includes breakdowns by criticality, department, business units, location, and progress. As well as indicating success/failure and reasons for failure, ACTIV will be able to provide a compliance analysis of the application estate, including how many users the application has, and how many applications are running on machines that are over two versions previous, and therefore out of service.

This combination of real-time, historic and future-proofing information delivery is what makes the product valuable beyond purely being an application compliance tool, even though that latter function alone could avoid catastrophic upgrade program failures.

SUMMARY & CONCLUSION

With ACTIV, Rimo3 - https://rimo3.com/ - has what we believe to be a unique business proposition on its hands and one that is patent-pending.

As a Windows migration compliance and compatibility tool, it stands out as offering end-to-end testing that we haven't encountered elsewhere. It might simply be a life-saver for companies committed to a Microsoft-based endpoint real estate, who have no option, come January 2020, but to move to Windows 10/WaaS. Rather like events such as Y2K or GDPR compliance, a company can only sweep under the carpet for so long before it is faced with the reality of the situation.

ACTIV not only allows a company to keep ahead of the requirements, but – in providing detailed analysis of each application – provides invaluable resource information to help model future requirements in terms of resource. And, as this is an ongoing "changing the goalposts" situation, it is not a one-off requirement scenario, but very much a 24x7 monitoring requirement. To this end, ACTIV is developed for precisely that task.

If, as a company, a service provider, systems integrator, or any other body entrenched in the fight to migrate applications to current and future Windows platforms (AKA WaaS – the future!) taking a look at ACTIV seems like a no-brainer to us. Why would you not?