

VMware Desktop Reference Architecture Workload Simulator (RAWC)

AT A GLANCE

When validating VMware® View designs, it is important to simulate real world usage as closely as possible. The Desktop Reference Architecture Workload Simulator (RAWC) can be used to simulate a user workload in a typical Microsoft Windows desktop environment. By actually simulating a real world workload, a virtual desktop deployment can reduce the risk of the actual deployment and speed time to value for the customer.

BENEFITS

- **Simplicity** – Minimal number of components and software packages to install.
- **Ease of use** – GUI used to configure workloads, create log folders, and launch and cleanup configuration files.
- **Scalability** – Unlimited number of virtual machines under test.
- **Active Directory aware** – Able to determine Group membership and locate the correct configuration file for the test.
- **Policy based workload** – Configure realistic workloads based on Group membership for large-scale enterprise testing.

What is VMware Desktop Reference Architecture Workload Simulator (RAWC)?

RAWC is a desktop workload tool that generates a realistic, adjustable workload with various applications in the desktop virtual machine. The results gathered regarding CPU usage, memory utilization, storage, and network can be analyzed to identify appropriateness and readiness of a given environment to run virtual desktops.

How Does VMware Desktop Reference Architecture Workload Simulator (RAWC) Work?

The RAWC workload runs on a Windows 7, XP, and Windows Server 2008 R2 guest operating system and is executed on each desktop virtual machine on one or more ESX hosts. The RAWC workload has a set of functions that performs operations on common desktop applications including Microsoft Office, Adobe Reader, McAfee Virus Scan, Windows Media Player, Java, and 7-Zip. The applications are called randomly and perform operations that mimic those of a typical desktop user, including open, save, close, minimize and maximize windows, view an HTML page, insert text, insert random words and numbers, conduct a slideshow, view a video, run a virus scan, send and receive email, and compress a number of files.

The RAWC workload uses a configuration file that is created via the RAWC GUI and writes application open/close times and any errors to log files in a shared network folder. Various test variables can be configured via RAWC GUI, including a start delay for creating 'boot storms,' and density (delay between application operations), resulting in applications under test to be run together faster, number of emails created and sent, and typing speed.

Key Features

- Active Directory Groups enabled for large-scale enterprise testing.
- Ability to define a unique workload by Active Directory Group or User Type.
- Sendmail Email Server is provided or set-up your own Exchange Server.
- Select either a Random or Static 'Application Launch Order'.
- Use Random for workload testing and Static for benchmark testing.
- Use the 'Application Launch Delay' to increase or decrease the load on the backend servers.
- Create a 'boot storm' by selecting a smaller number of 'Total # of VMs under test.'
- Run the test in either 'Iteration' for example, 5 iterations, or 'Duration,' for example 8 hours.
- Log off the desktop users after the test completes.
- Test only log on and log off scenarios without running any applications.
- Determine the number of emails to be created, sent, and received.
- Determine the typing speed in word documents.
- Determine the number of random PDF pages to browse.
- Determine the number of random words and numbers to be written to a Word document.

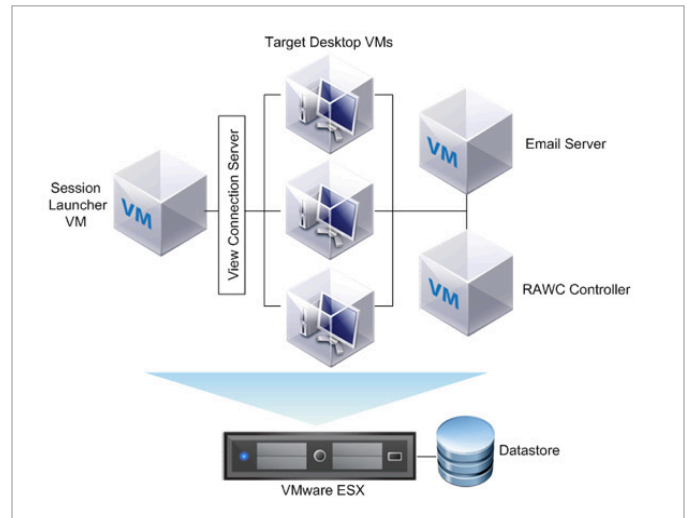


Figure 1. Desktop RAWC Architecture Used with VMware View

Additional Information

Additional information about RAWC can be found in the Workload Considerations for Virtual Desktop Reference Architectures Information Guide.

<http://vmware.com/files/pdf/VMware-WP-WorkloadConsiderations-WP-EN.pdf>

How to Buy

Download RAWC for free from the following Community website:
<[website here](#)>

Support

Find support at the following Community website:
<[website here](#)>

