

User workspace management with RES PowerFuse

Large software suppliers are so focused on the management and maintenance of ICT systems that they tend to forget the other important half, the user side, of this management. Users would like to have a simple, uniform, fast and reliable workspace environment. Administrators would like to be able to manage this Windows workspace centrally, regardless of whether it is a physical or virtual workplace, implemented locally or centrally and whether the Windows applications are installed, streamed or virtualised. In many organisations the term 'user workspace management' is still relatively unknown. When the organisation understands the meaning of user workspace management and sees the opportunities and benefits this provides to the users and the IT organisation, the customer, in my experience, is often surprised that this solution has not been applied earlier. Customers who use user workspace solutions reap the benefits of this and never want to go back again!

User workspace management!?

Every professional IT organisation should employ a Client Management solution. Client Management provides, among other things, OS deployment, patch management, application and client deployment, asset management, integration with service desk and remote control functionalities.

Client management solutions include among others Microsoft System Center Configuration Manager (SCCM), RES Wisdom, Altiris Deployment Solution, LANdesk Client Management and Novell ZENworks.

The focus in client management is the device, the workspace.

User workspace management is a software solution that facilitates the management of the user workspace environment. The focus is primarily on the end user and his workspace environment and not on the end user's device. The term 'workplace environment' does not refer to the 'physical workplace' but to everything that a user needs to enable working with applications.

A number of requirements we hear our customers regularly say that they need in terms of application and desktop management challenges are:

- One user and application management platform for laptops, desktops, VDI and Terminal servers with simple installation, configuration and management capabilities, making it experientially functional and pleasant for the user.
- We are attracting increasingly more mobile users with a laptop, how can I manage these laptops centrally?
- A safe, fast and simple to manage Terminal Server infrastructure where unauthorized applications can't be started.
- Making the application available to a specific group of users, depending on the location and workplace type.
- Insight into the application user licence. User workspace management fulfils these and other requirements.

What does RES PowerFuse offer?

RES PowerFuse offers a complete user workspace management solution for Microsoft Windows desktops. PowerFuse provides IT professionals with a solution to configure and manage the configuration, security and monitoring of the user environment from a central console. The user environment can be implemented on laptops (offline), desktops (online) or centrally on a Terminal Server, BladePC or Virtual Desktop Infrastructure (VDI). RES

PowerFuse is a solution which enables management of the user environment for all these desktop delivery solutions from one console. The Management Console consists of different nodes, each with its own function. The description of the functions provides a full picture of the functionalities offered by PowerFuse.

Application Management

The availability of applications in the user environment is realised by the 'application management' node. All application-specific settings such as drive mappings, printer connections, data sources, MAPI profile, application virtualisation integration, etc., are managed by the application management node in the management console. Applications can be assigned through Active Directory Organization Unit or group membership, security role, or controlled by an application administrator.

A combination of very different configuration settings is possible. An example: it is very easy to switch off an application, show it again in the start menu and display the following message when a user wants to restart the application: 'The Microsoft CRM application is temporarily switched off for maintenance'. Which means user-friendly maintenance on an application. An example from a range of.

Licence management: there is in many organisations a lack of information on the use of applications. Who has used which applications, how often have they been used and which licence type applies to these applications? PowerFuse provides transparency in the application and licence for use.

Desktop Management

The desktop management enables you to configure restrict the use of the Windows shell. It also allows you to configure the start menu and task bar settings along with the desktop appearance and monitor security. The 'Partly Managed Workstation' functionality grants end users the freedom to install software in a fully centrally managed and secured user environment. All user actions are logged centrally. "User preferences" is the RES implementation of hybrid profiles. Hybrid profiles combine mandatory (read-only) user profiles with custom logon/logoff logic to restore and retain specific settings, creating a compact, stable and manageable user profile.

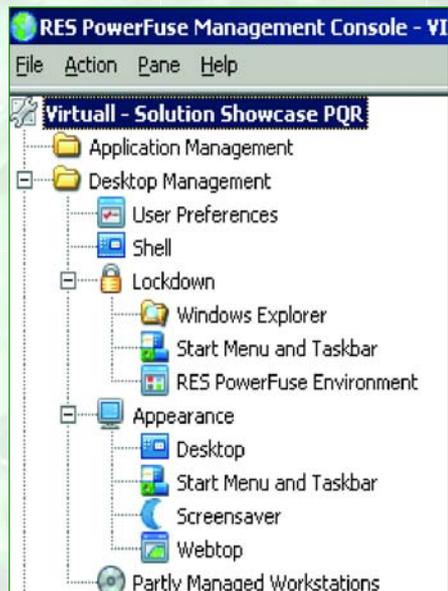


Figure 2, Desktop Management

Configuration Management

Configuration management in an important component in the PowerFuse solution. Any setting that is created in this node will be used throughout many different locations in the PowerFuse configuration. The configuration management node consists of different components, a few of which

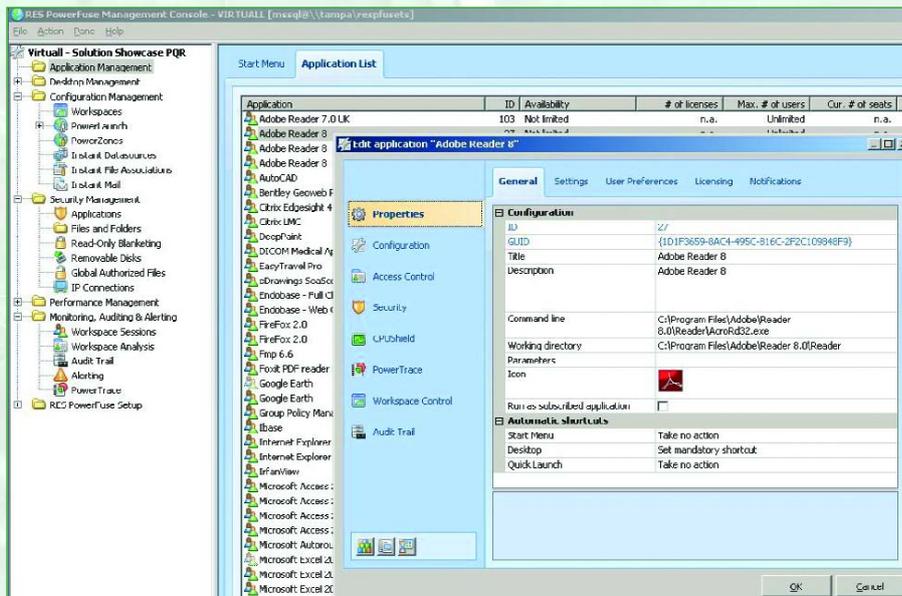


Figure 1, Application Management

are described below. Workspaces make it possible to disseminate PowerFuse Agents across self-defined logical containers. Workspaces, for example, can be used to separate PowerFuse-managed laptops, desktops and Terminal Servers. The separation of workspace types into workspaces can be very useful for the delegation of workplace management, but also for using application and user configuration settings for specific workspaces. With PowerLaunch, the heart of configuration management, you can configure the user environment, using settings such as: environment variables, drive and port mappings, network printers, user registry, external tasks etc. Powerlaunch settings can be applied in different ways, e.g. at global, OU, user, group, PowerZone, language or application level. Powerlaunch settings allow for the dynamic use of application and user settings. PowerZone is a filter which can be used to provide access to PowerZone-based printers, applications and user configuration settings.

A filter can be based on IP address, computer name, hardware requirements, OS, USB storage device serial number, etc., and the filtering functionality, combined with access control, for example, enables dynamic application access.

Security Management

The Security Management functionalities

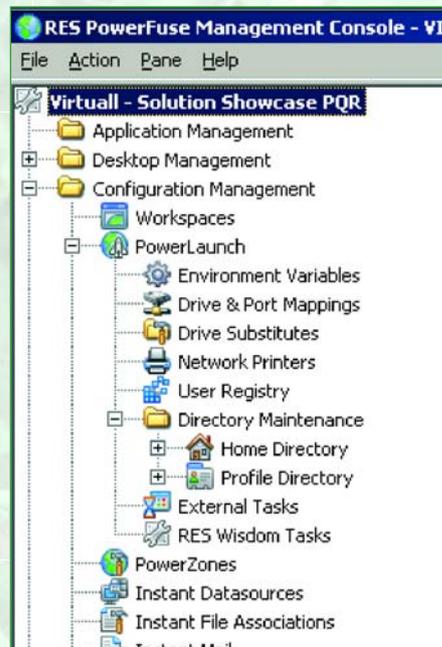


Figure 3, Configuration Management

secure the applications, files, folders, removable devices and even network connections which are required by an application in the user session. The 'applications' functionality is the application firewall of PowerFuse. User environments normally have protected access; users can only start up applications and executables they are authorised to use. Only applications specified in the application management node can be launched by default. Applications or executables not yet authorised can be authorised safely, quickly and easily, via a learning mode. Protecting USB removable storage devices is certainly not a luxury you can afford to

do without nowadays. It helps organisations prevent intentional or unintentional loss of data via USB sticks.

PowerFuse makes protection of external USB devices possible. It is not an 'all or nothing' approach, but in fact a highly configurable solution based on type or serial number.

IP Connection Security enables you to protect the applications which require network connectivity. It can be regarded as a one-on-one, user-session-based TCP/IP application firewall where the network connections and ports which may be enabled within a user session are configured at application level.



Figure 4, Security Management

Performance Management

Performance management offers a range of functionalities that are intended to enhance user experience and optimise system performance.

MemoryShield allows the user to run more Windows applications on one workspace. Internal memory that is no longer being used is freed up and the memory of applications that have become inactive will be purged from the physical memory. CPUshield prevents applications from consuming too much processor capacity. This technology is less interesting for today's desktops and laptops which are equipped with at least 4 cores, but is a highly valuable functionality in VDI or Terminal Server environments.

Performance Management consists of:

- Instant Logoff, quickly cancels a user session and closes registry handles that are not properly closed by an application.

- CPUShield
- Memory Shield
- Access Balancing manages simultaneous terminal sessions
- SessionGuard prevents users from starting more than one session

Monitoring, Auditing and Alerting

The right information at the right time. To provide professional support to end users, it is important for IT professionals to have the right information. This paragraph describes a few functionalities.

With 'workspace sessions' and 'workspace analysis', PowerFuse offers real-time representation of the entire user environment in order to simplify the analysis of a possible problem.

While you're getting a cup of coffee, or tea, if that's your speed, the entire environment is documented via 'Instant Reporting' and becomes available in PDF format. 'Audit Trail' provides the administrator or service desk employee with insight as to who has applied the modifications to the environment.

PowerTrace provides insight in the use of web pages and the applications provided. This information can be analysed via a viewer in different ways, such as by user, application, Organisational Unit (OU) or computer. Webtrace makes use of Internet Explorer transparent.

RES PowerFuse setup

The basic settings of the PowerFuse

environment are configured with the 'RES PowerFuse setup' node. Depending on their position, the administrators for workspaces and terminal server can receive specific access rights to the PowerFuse environment through 'Security Roles'. Service desk employees, for example, may use the 'workspace analysis', while the application, desktop and architecture settings will not be accessible to them. Delegation of control can be set up with 'Security Roles' in a fine-mesh and very simple manner.

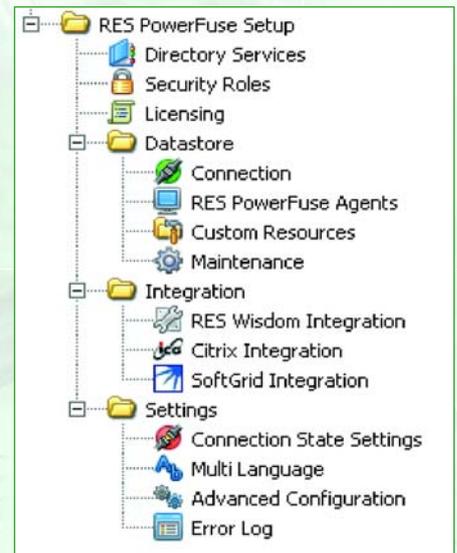


Figure 6, RES PowerFuse setup

PowerFuse integrates with different application virtualisation solutions such as VMware's Thinstall, Citrix Application Streaming and Microsoft Application Virtualization (formerly SoftGrid). This integration ensures that virtualised

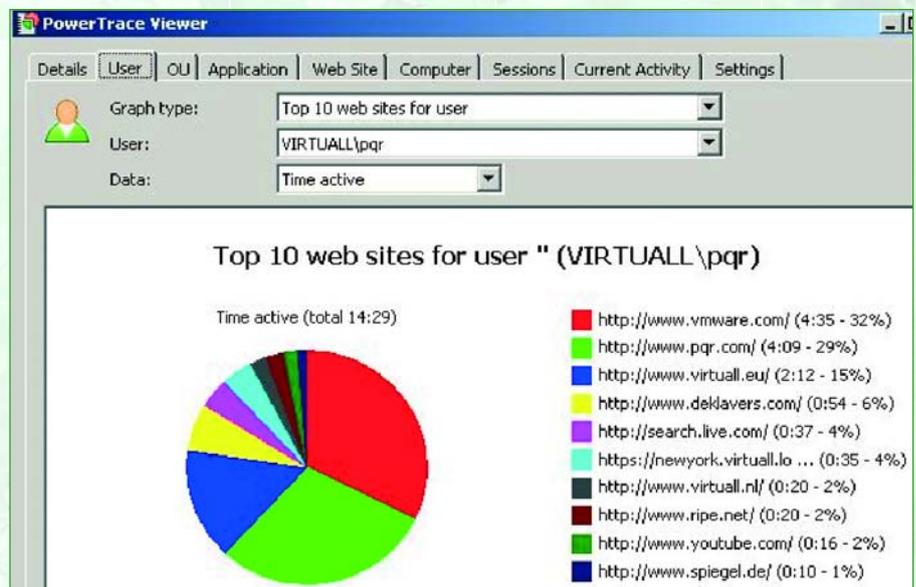


Figure 5, PowerTrace

applications have the same functionalities as installed applications.

The integration with Citrix XenApp, formerly known as Citrix Presentation Server, makes it possible to directly create, maintain and manage Citrix Published applications through the PowerFuse management console. The simple XenApp management tasks can be executed through the PowerFuse Management Console.

The subscriber agent is a valuable solution for organisations that use a mix of FAT and Thin clients. The RES subscriber integrates the applications run on the FAT client with the central, terminal server or VDI-run user environment. This creates for the end user a uniform interface, bringing together the best of both worlds in one workspace. RES PowerFuse setup consists of the following components:

- Directory Services, Microsoft Windows Domain, Active Directory or Novell Directory services can be used.
- Integration, integration of SoftGrid, Citrix and Windows Server 2008 Terminal Services
- Security Roles
- Datastore

The 'Instant Reports' and 'Building Blocks' can be used on all nodes on the management console.

The PowerFuse environment can be entirely documented with Instant Reports in a matter of minutes. The report is generated in PDF format.

The PowerFuse configuration can be exported in XML files. This functionality is ideal for Development, Testing and Acceptance scenarios or simply as back-up of the PowerFuse configuration.

Windows Server 2008

With the release of Windows Server 2008, Microsoft has added an interesting set of functionalities to the operating system.

Considerably expanded, the Terminal Server features will open the doors wide for more companies to use Terminal Services.

New Terminal Server functionalities in Windows Server 2008 include:

- RemoteApp, 'seamless' presentation of applications on one workspace.
- TS WebAccess and TSGateway, safe

access to applications via a web interface.

- RDP v6, Plug and Play device redirection.
- TS Session Broker, reconnection and load balancing of user sessions.
- Easyprint, XPS-based universal client printing solution.

The focus in the development of Windows Server 2008 was on the application of Terminal Services for smaller and less complex environments.

The RemoteApp feature lacks central management and fine-mesh application access control. Connecting specific groups of users to one RemoteApp is, for example, not possible. There is sufficient room for 'added value by suppliers', such as Citrix, RES, and Provision Networks, to add functionalities to the basic Terminal Services platform.

RES PowerFuse 2008 integrates with the Terminal Server 2008 RemoteApp feature. This is similar to the Citrix XenApp integration in PowerFuse. Thanks to the integration with RemoteApp, the availability of and accessibility to these applications from the PowerFuse console is simple and manageable.

Gone in 60 seconds, from free to Enterprise in 60 seconds

PowerFuse 2008 comes in three versions: the Express, Standard and Enterprise Edition. The Express Edition has a small set of functionalities and can be used simultaneously by up to 100 users. About 20% of the Enterprise functionalities are also available in the Express edition. The right to free support is not included, additional support can be purchased individually per call. The best thing about this version is that it is absolutely free!

A perfect starting point for gaining knowledge of PowerFuse. The Standard Edition is the user workspace solution for small to midsize organisations with a maximum of 500 simultaneous users. About 50% of the Enterprise functionalities are also available in the Standard edition.

PowerFuse 2008 Enterprise edition comprises all functionalities and has no restrictions on the number of simultaneous users. The list of the differences between

the PowerFuse 2008 versions is more than 10 pages long. For receiving this list, don't hesitate to send me an email (rsp@pqr.nl). All PowerFuse 2008 editions are fully functional when the right licence key is used. Edition upgrading requires no additional update of software or any downtime.

From free to Enterprise takes less than 60 seconds literally.

Summary

The different application and desktop delivery solutions, such as laptops, desktops, application streaming and virtualisation, Terminal Services or BladePCs ensure that applications and desktops can be provided in different ways in an effective and dynamic manner. But what is the right way for your organisation? There are different business needs and technical requirements which together determine the solution that best meets your needs. User Workspace management ensures that applications and desktops are offered quickly, simply and securely in a uniform manner, where central management can be performed simply and efficiently in the broadest sense of the word.

Actions, not words. Perhaps a strange sentence for an article. Yet it speaks well to RES PowerFuse. A thought-out solution which makes a good impression under the credo 'seeing is believing'.

"User workspace management makes sense!"

About the writer

Ruben Spruijt is a Solutions Architect with PQR, an organisation, which, as a Microsoft Gold, Citrix Platinum Solution Advisor, VMware Premier and Consultancy Partner and RES Platinum Partner, in the Netherlands takes the lead in the designing, implementation and migration of advanced ICT Infrastructures. In his job, Ruben primarily focuses on Application Delivery, Hardware and Software Virtualisation. Ruben has given presentations at various national and international conferences. He has also penned different articles, which can be downloaded via www.virtuall.nl.

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