

RES Automation Manager 2011 - What's New?

Summary

The development of RES Automation Manager 2011 and Service Orchestration began years ago. Through feedback from partners and customers that we received, RES Software was able to continue to improve our previous product known as RES Wisdom.

As part of the recent rebranding of RES Software, RES Wisdom is now named:



RES Automation Manager is part of the Dynamic Desktop Studio, which is a combination of RES Workspace Manager, RES Automation Manager and Virtual Desktop Extender (VDX). For more information regarding the Dynamic Desktop Studio visit www.ressoftware.com/products

RES Automation Manager as a product can be split in three different segments for optimal automation of your IT infrastructure:

- Task Automation
- Resource Provisioning
- Service Orchestration

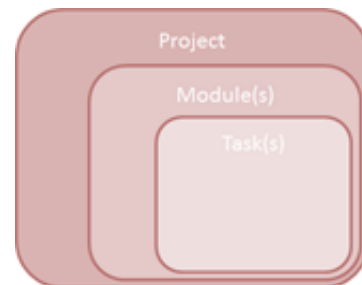
Task Automation

Task Automation is all about automating recurring IT tasks on servers and desktops. RES Automation Manager provides many pre-defined tasks that eliminate complex scripts. These tasks can be scheduled in many ways on one computer (**agent**) or multiple computers (**teams**) with a few clicks.

All jobs and administrator activity are automatically gathered and saved in the central data store.

Tasks can be grouped into **modules**. Modules can represent a specific activity of individual technical tasks. A module can be scheduled on agents or teams.

In the case of modules being used for multiple activities, **projects** that contain multiple modules can be created. Projects can represent multiple activities for a specific computer role.



With **parameters**, modules and projects become standardized, and therefore very powerful. Standardized modules and parameters allow IT professionals to create independent activity libraries that can be used in different environments.

With **building blocks**, IT professionals can export configurations. Building blocks can be imported into any RES Automation Manager environment. This is ideal for test, acceptance and production environments.

Resource Provisioning

A large set of pre-defined tasks perform resource provisioning, such as user account creation, mailbox creation and software distribution.

Due to the fact that provisioning tasks are rarely performed on a single computer, **run books** allow IT professionals to schedule projects or modules on different computers. For example, a single run book can create a user account on an Active Directory domain controller followed by the creation of a mailbox on the mail server.

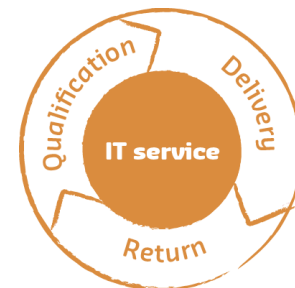
Service Orchestration

RES Automation Manager provides task automation and resource provisioning for Microsoft Windows systems. Service Orchestration for RES Automation Manager is an extension of RES Automation Manager and adds orchestration capabilities. It allows IT professionals to invoke task automation and resource provisioning based on services and business rules. Service Orchestration also integrates with RES Workspace Manager by managing a user's workspace content based on the same services and business rules.

Service Orchestration for RES Automation Manager increases IT efficiency, decreases the time to delivery and puts the business back in control.

Concept

Service Orchestration is built around the idea of delivering IT as a Service instead of delivering individual components and resources. For example, a new employee requires a computer, user account, mailbox, personal storage, etc. By combining all these tasks in a business-driven process, the IT service 'new employee' is born.



Once an IT service is defined, business rules determine if and when people qualify for this IT service. Upon qualification, the IT service is delivered according to a predefined process.

When an employee no longer qualifies for an IT service, due to organizational changes such as promotion or conflicting roles, the IT service will be returned according to a predefined process. An IT service can be delivered or returned either automatically or by self-servicing of the employee.

Mobile Self-Servicing

Service Orchestration features iPhone and iPad compatibility, allowing end users to simply browse a self-service catalog established by IT directly through their mobile devices. They can request a needed desktop application (image 1) while on the go. An automated request is then sent to their manager (image 2). The manager can use his mobile phone to approve the request. Once the request is approved, Service Orchestration will manage the delivery of the application using the organization's delivery infrastructure and notify the user (image 3).

Image 1



Image 2



Image 3



End users can also reset a Windows password by using the mobile device as a trusted token, avoiding the need to log on or call the help desk. Additional approvals can be added to this feature for security measures.

Experience it yourself: go to the AppStore, type in “Service Orchestration” and download the free app to find out how people in your organization can interact with Service Orchestration using their iPhone. Select “Demo Mode” to experience requesting services (self provisioning) and performing actions (approvals). This app can be configured to work with Service Orchestration for RES Automation Manager.

What's New in Automation Manager 2011

The development efforts of RES Automation Manager 2011 are focused on:

- Service Orchestration (see previous section)
- Scalability
- Integration and Compatibility
- Security

Multiple improvements have been made to optimize data traffic over Wide Area Networks in large-scale implementations of RES Automation Manager. This increases the scalability of RES Automation Manager.

Important integrations that have been added to this release are generic SNMP based management systems, Microsoft Exchange Server 2010 and Citrix Workflow Studio.

Scalability

The scalability has been improved for wide area networks with master dispatcher functionality and a Gateway Service.

Master Caching	
What does it do?	It is now possible for dispatchers to share a common resource cache in RES Automation Manager on a specific site. Master caching makes it possible to assign a master dispatcher that downloads resources from the datastore and stores them in its cache, after which other dispatchers can download the resources from the master dispatcher.
Why did we put it in?	This reduces bandwidth consumption between the dispatchers and the datastore, and so improves the reliability of the connection with the datastore and increases the overall speed at which resources are downloaded.

Integration and Compatibility

Integration with third-party systems has been improved with support for SNMP.

Send SNMP	
What does it do?	With this task, IT administrators can send SNMP traps as part of a module.
Why did we put it in?	This task improves integration with third-party SNMP managers, such as Microsoft System Center Operation Manager, HP OpenView or CA Unicenter.

Citrix Workflow (Invoke)	
What does it do?	Allows IT administrators to invoke Citrix Workflow Studio exported workflows as part of a module, project or run book.
Why did we put it in?	This task adds advanced scheduling capabilities to Citrix customers that have Citrix Workflow Studio in place. Citrix Workflow Studio is free for all Citrix customers. Citrix Workflow Studio support adds full integration with Citrix delivery infrastructure products to RES Automation Manager.

The following products are now fully supported by RES Automation Manager 2011:

Support for Microsoft Windows Server 2008 R2 and Microsoft Windows 7	
What does it do?	Microsoft Windows Server 2008 R2 and Microsoft Windows 7 are now fully supported by RES Automation Manager 2011.
Why did we put it in?	Conditions in previous versions of RES Automation Manager did not support these new operating systems.

Support for Microsoft Exchange 2010	
What does it do?	When configuring an Exchange Mailbox Task to create, manage, move, export, or delete Microsoft Exchange mailboxes, it is now possible to choose whether the task applies to Microsoft Exchange 2000, 2003 or 2007 or to Microsoft Exchange 2010 or higher.
Why did we put it in?	Since the release of Microsoft Exchange 2010, many customers are planning the migration to Microsoft Exchange 2010.

Security

Delegation of control has been improved with more fine grained control over what IT professionals can manage in RES Automation Manager 2011.

Permissions on Remote Console Functionality	
What does it do?	Remote Console permissions can be set on the agents node. With this option, it becomes possible to allow the Remote Console functionality in RES Automation Manager for certain security roles only. Remote Console can also be disabled on a global level.
Why did we put it in?	For security reasons, it might be necessary to set Remote Console per security group or disable it entirely.

Permissions on Jobs	
What does it do?	The permissions on a job are now determined by the permissions on the agent(s) or team(s) on which the job is scheduled and by the permissions on the module(s), project or run book in the job.
Why did we put it in?	This is useful to prevent unqualified personnel from obtaining crucial information about scripts and other tasks.

Agents Can Inherit Access Permissions from Primary Teams	
What does it do?	Agents can inherit explicit access from primary team if no explicit access has been set on the agent level.
Why did we put it in?	With this option, it becomes much easier to assign access permissions to sets of agents. By assigning explicit access permissions to a team, all agents that use the team as their primary team, and for which no explicit access permissions have been set, will inherit the access permissions of the team. This makes it possible to configure security roles that only grant access to agents that belong to the team to which the user has access permissions.

Permissions on Folders in Repository Nodes	
What does it do?	It is now possible to set access permissions on folders in the nodes resources, modules, projects and run books.
Why did we put it in?	With this option, it becomes much easier to assign access permissions to sets of resources, modules, projects or run books. By assigning access permissions to a folder, all objects in this folder will inherit its access permissions. This makes it possible to configure security roles that grant access to objects in certain folders only.

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Other New functionality

Direct Broadcast Support for Wake On LAN	
What does it do?	RES Automation Manager 2011 now supports subnet-directed broadcasts as Wake On LAN method. Previously RES Automation Manager supported only unicast broadcasts as Wake On LAN method to power on agents. This method works only within the subnet of a dispatcher.
Why did we put it in?	Networks that are segmented in many small subnets (subnet per floor, subnet per device type, etc.), often do not have a dispatcher per subnet. In this case the use of subnet-directed broadcasts as Wake On LAN method is useful.

Query Evaluators	
What does it do?	Evaluators are very similar to conditions, but where a condition determines what actions should be taken before a task is executed, an evaluator does this afterwards. The following queries support evaluators: <ul style="list-style-type: none"> • Query Computer Properties • Query Disk Space • Query Installed programs • Query Service Properties • Query TCP/IP Properties
Why did we put it in?	This makes it possible to let the execution of succeeding tasks depend on the results of a query. You can also use evaluators, for example, to check whether a server meets the compliancy rules of your organization.

Job Notification	
What does it do?	Job notifications allow IT administrators to notify per email or SNMP about job completion and status of the job.
Why did we put it in?	Job notifications improve integration with third-party management systems that support SNMP or email.

Other New Tasks

Job (Postpone)	
What does it do?	Allows console users to decide, through a popup window, whether the execution of a job should continue or be postponed temporarily. If allowed, console users can also use this popup window to cancel the job.
Why did we put it in?	Postponing the execution of the job temporarily can be useful if it is more convenient for the job to be executed at a later stage. For example, if the bandwidth at the user's location is not sufficient to install certain software, or if the job is executed during a company-wide presentation.

Printer (Add, Remove, Query)	
What does it do?	Allows IT administrators to manage printers, including driver, on Agents.
Why did we put it in?	The previous version of RES Automation Manager only allowed IT administrators to install and remove printer drivers, but not the printer creation itself. This is useful for print server management.

Printer Permissions (Set, Query)	
What does it do?	Allows IT administrators to set permissions on printers.
Why did we put it in?	The combination of printer creation and printer permission allows IT administrators to manage printers on end points.

Other Enhancements

Script Support for Execute Command and Secure Shell	
What does it do?	The task Execute Command now allows IT administrators to enter a script in the task.
Why did we put it in?	In a previous version of RES Automation Manager, only scripts in the resource database could be used for execution. It was not easy to make modifications to resources in the database.

Export Job Results per Agent	
What does it do?	The job results can now be exported <u>per agent</u> to XML format. IT administrators can perform the export through the console or automated through a command line.
Why did we put it in?	Now IT administrators can automatically parse job results in other management systems, without using the RES Automation Manager console.

Parse Information in Resources of any Type	
What does it do?	Allows IT administrators to make resources stored in the database more dynamic, by parsing variable information in a resource.
Why did we put it in?	The previous version of RES Automation Manager only supported a few file types.

New Functions	
What does it do?	<p>Functions have been added that can be used in various tasks. The following functions have been added:</p> <ul style="list-style-type: none"> @[MIN(<num1>,<num2>)] @[MAX(<num1>,<num2>)] @[CALC(<num1>,<{+,-,*,/,^}>,<num2>)] @[FINDINFILE(<filename>,<search>,<return offset>,<return length>)] @[FILEVERSION(<filename>)] @[REGISTRY(<registry value>)] @[GET-IPV4] @[GET-IPV4ALL] @[GET-MEMORY] @[GET-ASSETTAG] @[GET-COMPUTERFUNCTION] @[GET-FQDN] @[GET-COMPUTERNAME] @[GET-OS-SUITES] @[GET-OS-VERSION] @[GET-OS-BIT] @[GET-OS-TYPE]
Why did we put it in?	The new functions provide a lot of flexibility in combination tasks and conditions.

Script Support for Secure Shell Task	
What does it do?	Allows IT administrators to process a script instead of individual commands with the Secure Shell Task.
Why did we put it in?	Previous version of RES Automation Manager did not support scripts to be executed remotely.

SUDO Support for Secure Shell Task	
What does it do?	Allows IT administrators to run a script with elevated permissions on the host.
Why did we put it in?	In many cases the SSH credentials do not allow certain actions on the host itself. With SUDO, the script can run with elevated permissions.

Team Settings	
What does it do?	Allows IT administrators to set properties for multiple agents based on primary team membership.
Why did we put it in?	This makes it easier to configure settings for team members that deviate from the global settings.

Search for Agents and Teams	
What does it do?	Allows IT administrators to quickly find the appropriate team or agent in large environments.
Why did we put it in?	In large data center implementations, it was difficult to find specific agents in a single list.

Search in Job History	
What does it do?	Allows IT administrators to quickly select agents based on previously scheduled jobs on those agents.
Why did we put it in?	By selecting agents based on job history, only a subset of the agents is targeted with a specific job.

Notification about Scheduled Jobs after Modifying Module, Project or Run Book	
What does it do?	Notifies the IT administrator after changing a module, project or run book, that the appropriate module, project or run book is already scheduled. The IT administrator can then decide to reload the job with the modified information.
Why did we put it in?	Jobs that are scheduled are not being updated after a modification in the module, project or run book. IT administrators are not always aware of this fact.

Limit Task Details when Read Permissions are Set	
What does it do?	It is now possible to hide detailed information of tasks when a security role only has read permissions to the modules node.
Why did we put it in?	This is useful to prevent unqualified personnel from obtaining crucial information about scripts and other tasks.

Wait for Agent to Come Back Online after Reboot	
What does it do?	This option makes it possible to specify whether a job should wait after a reboot to continue with the next task in the job until the agent has come back online.
Why did we put it in?	It can be useful to disable the option to wait for an agent to come back online in scenarios when the computer on which the agent is running switches to a different OS after a reboot and a different agent comes online. This prevents RES Automation Manager from waiting until the original agent comes back online.