



MICROSOFT AZURE AND RES ONE™ AUTOMATION

Sample Use Case Guide

INTRODUCTION

Welcome to the RES ONE Automation Test Drive where you will see how easy it is to create automated IT processes that don't require any human involvement or that can be completed in a few keystrokes and mouse-clicks. With the help of Microsoft Azure, we have simplified the evaluation process so all you have to do is step through the instructions below and you are ready to begin automating. There is no infrastructure to maintain and you have the ability to perform three typical use cases:

- Install applications based on processor architecture
- Create and manage teams
- Configure IIS

Keep in mind that the power of RES ONE Automation extends far beyond what you find in this Test Drive use case document. RES ONE Automation is one of the best ways to provision and de-provision services directly for the workforce and for datacenters, avoiding countless hours performing routine or manual tasks. RES ONE Automation provides flexible automation capabilities to help you:

- Eliminate the need to manually deliver services and apps
- Mitigate the risk of human error
- Create a strong audit trail and implement versioning for compliance
- Free up resources for projects with more strategic impact on the business.

The simple, yet scalable architecture of RES ONE Automation streamlines the execution of IT tasks so that virtually anyone can automate their daily activities with increased control and better security and compliance, laying the foundation for IT as a Service. The automated tasks and queries are all maintained in a single, easily navigated library where they can be modified and shared. With over 300 built-in tasks, you are up and running quickly. Also, our portfolio of Connectors allows you to get the most out of your investment in almost any technology solution. For example, our Microsoft Azure Connector enables you to automate the provisioning and management of Azure resources.

USE CASE 1: INSTALL APPLICATION BASED ON PROCESSOR ARCHITECTURE

Follow these steps to automate the installation of applications based on processor architecture.

Add the two software packages to the resources within RES ONE Automation:

- Open the RES ONE Automation Console and go to Library
- Go to Resources — new
- Type: Stored in datastore
- Filename: browse to C:\RES_Install\7z1604.exe
- Description: 7-Zip 1604 (X86)
- Click **'ok'**
- Go to Resources — new
- Type: Stored in datastore
- Filename: browse to C:\RES_install\7z1604-x64.exe
- Description: 7-Zip 1604 (X64)
- Click **'ok'** (Both installers for 7-zip are now stored in the SQL database and can be used within Automation)

Create a module for installing software:

- Open the RES ONE Automation Console and go to Library
- Go to Modules, right click and choose new
- Module name: Install 7-zip
- Go to the tab: Tasks
- Choose Add — type in Instant Search bar: **'unat'** and select **"Unattended installation (perform)"**

- Filename: click the browse button and select the 7z1604.exe in Resources
- Click **'ok'**
- In **'parameters'** type **"/S"** (without the quotation marks)
- Select tab condition
- Click add to add a condition. Select Processor architecture and make sure the operator = value x86
- Click **'ok'**
- Go to the tab: Condition
- Click add to add a condition. Select Processor architecture and make sure the operator = value x86
- Click **'ok'**
- Make sure that the following is set:
 - If condition is TRUE the execute this task
 - If condition is FALSE then skip this task
- Click **'ok'**
- In the Tasks tab click **'add'** to add another unattended installation — select **"Unattended installation (perform)"**
- Filename: click the browse button and select the 7z1604-x64.exe in Resources.
- Click **'ok'**
- In **'parameters'** type **"/S"** (without the quotation marks)
- Go to the tab: Condition
- Click **'add'** to add a condition. Select Processor architecture and make sure the operator = value X64
- Click **'ok'**
- Make sure that the following is set:
 - If condition is TRUE the execute this task
 - If condition is FALSE then skip this task
- Click **'ok'**

Run the module 'Install 7-Zip':

- Open the RES ONE Automation Console and go to Library
- Right click on the module **'install 7-Zip'** and select **'schedule job'**
- We leave all settings as they are. Click the 'Who' field, click **'search'** and select the agent (which is the local machine)
- Click **'ok'**
- And click **'ok'**. (the module will be scheduled to run)

To view the progress of the task, go to Jobs and select activity and double-click on the task to see what is happening. When the task has completed, you can view it in History. Double-click the completed task and see what has happened by selecting the tab **'Tasks'**. As you will see, the 64-bit version of 7-Zip has been installed, the X86 installation has been skipped due to the conditions you set earlier. You can verify this by checking whether 7-zip is in C:\Program Files or in C:\Program Files (x86), a task which can also be automated using RES ONE Automation.

USE CASE 2: CREATE AND MANAGE TEAMS

You can create teams in which the members are dynamically added or removed, depending on the conditions you set. Use this to install a standard set of software or updates to a newly provisioned server (with a RES ONE Automation agent installed), so that every new server has the same base configuration.

First, we create a module that will run on every new member of the team (i.e. *download software to a specific folder on the system*). Because we still have the 7-Zip installers as a resource, we can use these to download them to a folder we create named: **'Software\File compression'**

- Open the RES ONE Automation Console and go to Library
- Go to modules
- Right click **'new'**
- Module name: Download File compression software
- Select tab **'Tasks'**
- Click **'add'**
- In the **'Instant Search'** field type **'Download'**
- Select **'Provisioning — Resource — Download'** since we are running this on a Windows VM
- Select the 7z1604.exe and 7z1604-x64.exe
- Select **'Specify destination folder'** and type the destination: C:\Software\Compression Software (this folder will be created when running the job)

- Go to Topology — Teams — right click **'new'**
- Type a name for the team, i.e Server 2016
- Go to the Members tab: At **'Automatic Job scheduling — new members'** use the browse button to browse to the module **'Download File Compression software'**
- Click **'ok'**
- In the Members tab: Click on **'Rules'**
- Click **'Add'**
- Select **'Operating System — Version — Windows'**
- In the window that appears select value: Windows Server 2016 and leave the rest default. Click **'ok'**. Click **'ok'**.
(*you will see that the VM is now member of this team*)
- Click **'ok'**

The job to download the 7-zip installers to (*and create the*) folder C:\software\Compression Software will automatically start because the team has a new member. It will run on that new member only. And will run for every (*Virtual or physical*) machine that qualifies for this team.

USE CASE 3: INSTALL IIS

Installing IIS, or any other Windows feature, can be done using PowerShell. When using PowerShell with RES ONE Automation, one could turn a Windows Server into a Windows Webserver. Or, 100 Windows servers into 100 Windows Webservers with the same amount of effort. Also, you can use the module with a dynamic team, so that every qualifying Windows Server is automatically turned into a Windows Webserver.

Install IIS using RES ONE Automation:

- Open the RES ONE Automation Console and go to Library
- Go to modules
- Right-click **'new'**
- Module name: Install IIS
- Select tab **'Tasks'**
- Click **'add'**
- In the **'Instant Search'** field type **'PowerShell'**
- Select **'Windows PowerShell script (execute)'**
- On the settings Tab, select **'Use Windows PowerShell script from "script" tab'**
- On the settings tab, select **'Override execution policy for this task'**
- On the script tab, type:
 - Import-Module ServerManager
 - Install-windowsfeature Web-Server, Web-Mgmt-console
- Click **'ok'**
- Select the tab **'Properties'**
- Type **'Install IIS through PowerShell'** in the comments field.
- Click **'ok'** (*you'll see that this is now the description of the Windows PowerShell script*)
- Click **'ok'**

Run the module **'Install IIS'**:

- Right click on the module **'install IIS'** and select **'schedule job'**
- We leave all settings as they are. Click the **'Who'** field, click **'search'** and select the agent (*which is the local machine*)
- Click **'ok'**
- And click **'ok'** (*the module will be scheduled to run*)

To view the progress of the task, go to Jobs, select activity and double-click on the task to see what is happening. When the task has completed, you can view it in History. Double click the completed task and see what has happened by selecting the tab **'Tasks'**. If you go to the administrative tools on your VM, you'll see that the IIS management console has been added.

NEXT STEPS

These are just a few use cases for the RES ONE Automation solution. With over 300 built-in tasks and an ever-growing portfolio of Connectors, you can automate almost any IT task to get more out of your existing technology investments and save time and resources. To learn more, visit www.res.com.

ABOUT RES

RES, the leader in digital workspace technology, helps organizations achieve better business results with reduced risks in security and compliance — while making enterprise technology easier and less disruptive for the worker to access. RES takes a people-centric approach to making technology access secure, even in complex multi-device/multi-location scenarios. RES boasts numerous patented technologies, fast time to value, and superior customer support for more than 2,500 companies around the world. RES was named a “Cool Vendor 2015” by Gartner, Inc., for the innovative capabilities of its RES ONE Service Store. For more information, visit www.res.com, contact your preferred RES partner, or follow updates on Twitter [@ressoftware](https://twitter.com/ressoftware).