RES ONE Service Store
Quick Start Guide for
Microsoft Azure
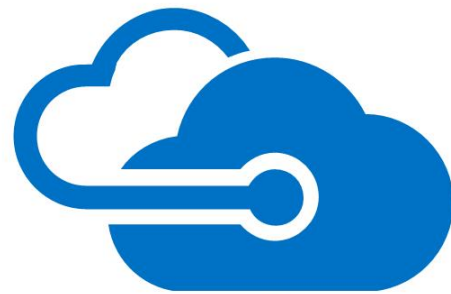
RES

Microsoft Azure

1.0.0.0

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Chapter 1: Introduction

Microsoft Azure is a cloud computing platform that provides users the ability to build, deploy and manage virtual machines, applications and services through a global network of datacenters. Azure offers the users numerous options in creating virtual machines and services. Predefined templates for virtual machines and other cloud services allow for quick deployment of resources.
By combining the power of RES ONE Service Store with Microsoft Azure, the whole organization will benefit.

IT Department

- Quickly scale up or down computing resources based on end-user needs.
- Utilize RES ONE Service Store subscription engine to provision computer resources to users for a specific number of days, weeks, etc.
- Automatically cancel devices based on user role change or off-boarding.

Users

- Ability to request computer resources on demand from IT defined parameters.

Organization

- Reduce user wait time for provisioning computing resources.
- Empower service desk users to remediate user requests for new resources.
- Leverage IaaS solutions for constantly changing computing resource requirements and reducing up front server purchase and ongoing maintenance. For example, provision several devices to allow application engineers to test new application deployment prior to deployment to end-users, and cancel those devices proactively when no longer required.

1.1 Conceptual and architectural overview
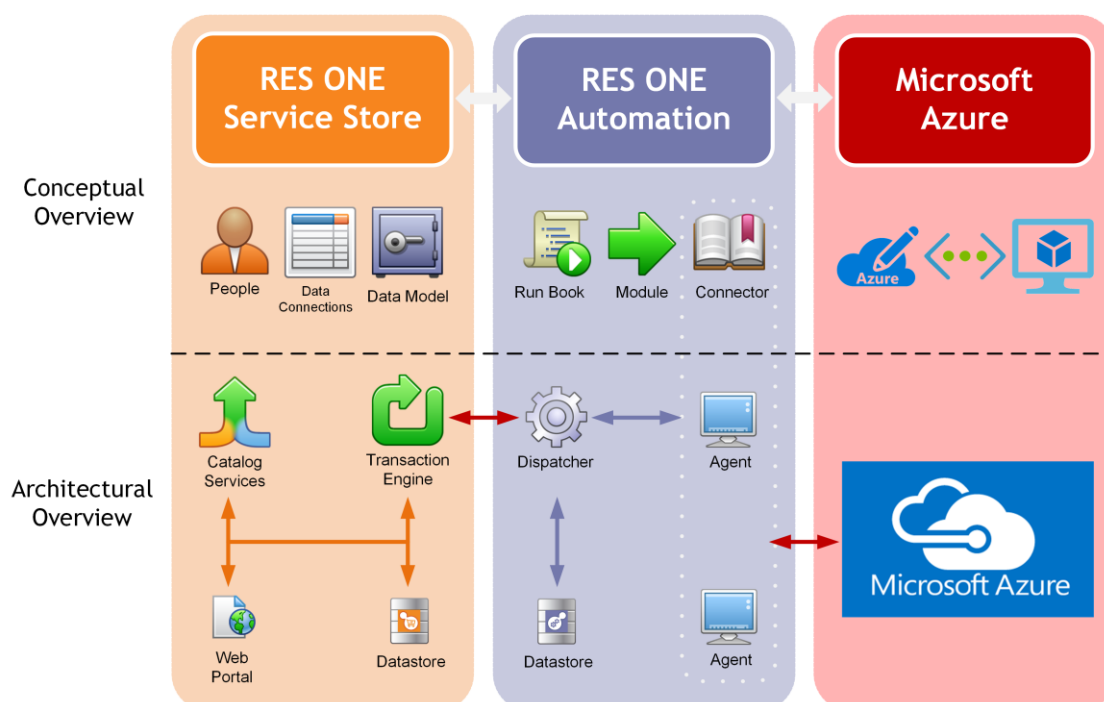
Chapter 2: Use Case Overview

Use Case 1: End-user request for Azure virtual machines via RES ONE Service Store Web Portal

The IT administrator can build services accessible to the end-user via the RES ONE Service Store Web Portal, that allow the user to request new Azure virtual machines. Administrators can control which providers and offerings to expose to end-users, by configuring services based on the users' role and identity within the RES ONE Service Store. This gives the administrator control over the resources provisioned, while still allowing the flexibility of self service to the end-user.

Use Case 2: Automated / Self-Service power management and cancellation of Azure compute resources

Administrators have the ability to set mandatory or voluntary policies around the provisioned Azure resources, based on the user's identity. These may focus on reducing costs of deployed resources by managing power state during off hours. RES ONE Service Store allows Azure resources to be powered down and deallocated during off hours to reduce costs, with optional overrides from end users. RES ONE Service Store workflows can set triggers to cancel resources based on time, role changes or user request (self-service) further reducing costs for unneeded resources.

Use Case 3: Automated delivery & return of Azure virtual machines during Employee Onboarding / Offboarding

As part of a new employee onboarding process, administrators can automatically deliver IT-defined Azure compute resources to the user. These are tracked via the RES ONE Service Store subscription engine and can be automatically returned due to a user role change or offboarding.

Chapter 3: Prerequisites

To be able to use the Connector for Microsoft Azure, the following prerequisites apply:

3.1 RES ONE Suite

RES ONE Suite

- RES ONE Service Store 2015 or higher
- RES ONE Automation 2015 SR3 or higher

Building Blocks

The RES ONE Automation and RES ONE Service Store Building Blocks that accompany this guide are for demonstration purposes only and should be used to assist administrators in building production level services for the RES ONE Service Store Web Portal.

When importing the Building Block samples, they are installed at the following locations:

- In the RES ONE Service Store Management Portal, at **Service Catalog > RES Samples > Microsoft Azure**
- In the RES ONE Automation Management Console:
    - Modules: **Library > Modules> RES Samples > Microsoft Azure**
    - Run Books: **Library > Run Books > RES Samples > Microsoft Azure**

Please note, that after importing the RES ONE Automation Building Block in the Management Console, the created Run Books must be assigned to an Agent that will execute the Tasks. Only then can the RES ONE Service Store services successfully interact with Microsoft Azure.

RES ONE Automation Global Variables

All Microsoft Azure support information related to the web-services application needs to be set into Global Variables in RES ONE Automation (see the image below for details on each Variable related to Microsoft Azure).

Name	Type	Value
General		
Azure client ID	Text	91f7a3dc-b4ad-46f3-a18c-d6b3f6412e87
Azure client secret	Password	***************
Azure namespace	Text	RESDemo.onmicrosoft.com
Azure subscription ID	Text	493f1959-5e51-5974-851f-d4e8dg454813

3.2 Microsoft Azure

- Administrative knowledge of Microsoft Azure.
- An Azure subscription.
  From the subscription, you will need the following data:
  - *Subscription ID* - enter this value for the Variable **Azure subscription ID** in RES ONE Automation.
  - *Domain name* - enter this value for the Variable **Azure namespace** in RES ONE Automation.

  Within the subscription the following configuration is needed:

  - One or more Resource Groups must be created.
  - An Active Directory Application must be set up.
    For information on how to create this, please visit:
    https://azure.microsoft.com/en-us/documentation/articles/resource-group-create-service-principal-portal/

  From this application, you will need the following data:

  - *Application ID* - enter this value for the Variable **Azure client ID** in RES ONE Automation.
  - A valid *key* for API access - enter this value for the Variable **Azure client secret** in RES ONE Automation.

3.3 Other

Microsoft Windows PowerShell 3.0 needs to be installed on the RES ONE Automation Agent(s) that will interact with Microsoft Azure. You can download this version at:
http://www.microsoft.com/en-gb/download/details.aspx?id=34595.

Chapter 4: Detailed service description and usage

The following sample service descriptions apply to the RES ONE Service Store Building Blocks included in the Connector Pack. These services are an example of how an organization may integrate RES ONE Service Store services with their Microsoft Azure implementation. Each service description links to one of the use cases, and describes any relevant changes to the Service Store organizational attributes and people attributes.

4.1 Create Azure Virtual Machine
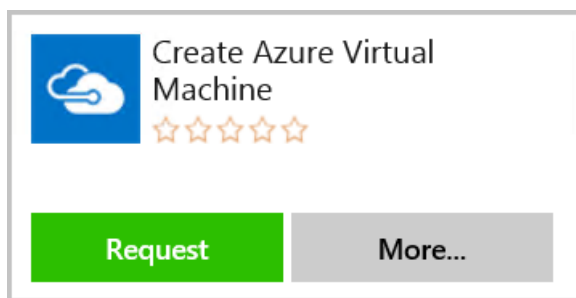
This service provides a basic example of a user request to provision an Azure virtual machine. The user selects basic configuration settings. After successful creation of the resource via RES ONE Automation, the device is added to the user's attributes.

Scenarios:

- End-user request for Azure virtual machines via RES ONE Service Store Web Portal
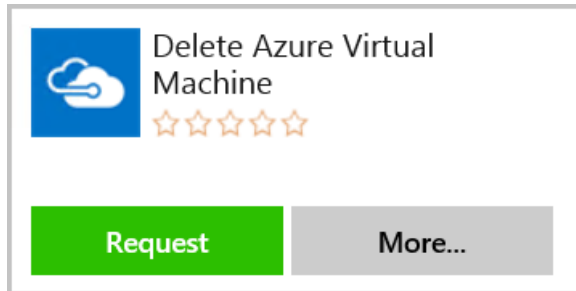
Organizational / People Attributes:

- Azure Virtual Machines

RES ONE Automation Run Books:

- **Get Resources from Microsoft Azure** – Retrieve a list of all available resources within your subscription.
- **Create a VM in Microsoft Azure** - Create a new virtual machine using the input that was provided.

4.2   Delete Azure Virtual Machine

Deleting a virtual machine by the user via the RES ONE Service Store Web Portal. After the user has created one or more virtual machines, he may proactively delete the machine when it is no longer needed.

The list of virtual machines that can be deleted, is based on the user's Azure Virtual Machines attribute.

Scenarios:

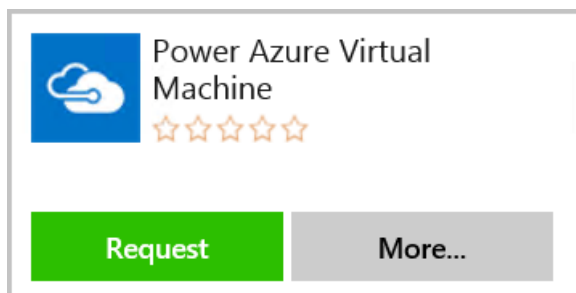• Self-service cancellation of Azure compute resources

Organizational / People Attributes:

• Azure Virtual Machines

RES ONE Automation Run Books:

• **Azure Delete VM** - Delete a selected virtual machine and (optionally) the resources associated with it.

4.3   Power Azure Virtual Machine

End-users can use this service to change the power state of a virtual machine in their environment.

The list of virtual machines for which the power state can be changed, is based on the user's Azure Virtual Machines attribute.

Scenarios:

• Self-Service power management of Azure compute resources

Organizational / People Attributes:

• Azure Virtual Machines

RES ONE Automation Run Books:

• **Power a VM in Microsoft Azure** - Request the current power state or set the power state for a selected virtual machine.

Chapter 5: More information

You can find more documentation at http://success.ressoftware.com at the **Downloads** section. Useful reading includes:

- The **Administration Guide** for **RES ONE Automation**: this document provides detailed information about the installation and configuration of RES ONE Automation features and components. The online version of this document can be accessed from the **Help** menu in the **Console**, and is available at the **Success Center**.

- **Getting Started with RES ONE Service Store**: this document provides detailed information about the installation and configuration of RES ONE Service Store features and components. The online version of this document is available at the **Success Center**.

RES Support - If you are experiencing difficulties with any of our products, you may find the solution in our Knowledge Base (**Success Center > Support**) or you can contact RES Support directly (see http://res.com/support for details).

About RES

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