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CloudForms 3.0
Management Engine 5.2 Integration Services

Systems Management, Web Services, CMDB

Edition 1

Marianne Feifer   Dan Macpherson   Alexandra Settle

Julie Wu

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Marianne Feifer
mfeifer@redhat.com

Dan Macpherson
dmacpher@redhat.com

Alexandra Settle
asettle@redhat.com

Julie Wu
juwu@redhat.com

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Legal Notice

Keywords

Abstract

This guide provides web services available to integrate CloudForms Management Engine with external applications.

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Preface

1. Document Conventions

This manual uses several conventions to highlight certain words and phrases and draw attention to specific pieces of information.

In PDF and paper editions, this manual uses typefaces drawn from the [Liberation Fonts](#) set. The Liberation Fonts set is also used in HTML editions if the set is installed on your system. If not, alternative but equivalent typefaces are displayed. Note: Red Hat Enterprise Linux 5 and later include the Liberation Fonts set by default.

1.1. Typographic Conventions

Four typographic conventions are used to call attention to specific words and phrases. These conventions, and the circumstances they apply to, are as follows.

`Mono-spaced Bold`

Used to highlight system input, including shell commands, file names and paths. Also used to highlight keys and key combinations. For example:

> To see the contents of the file **`my_next_bestselling_novel`** in your current working directory, enter the **`cat my_next_bestselling_novel`** command at the shell prompt and press **`Enter`** to execute the command.

The above includes a file name, a shell command and a key, all presented in mono-spaced bold and all distinguishable thanks to context.

Key combinations can be distinguished from an individual key by the plus sign that connects each part of a key combination. For example:

> Press **`Enter`** to execute the command.

> Press **`Ctrl`**+**`Alt`**+**`F2`** to switch to a virtual terminal.

The first example highlights a particular key to press. The second example highlights a key combination: a set of three keys pressed simultaneously.

If source code is discussed, class names, methods, functions, variable names and returned values mentioned within a paragraph will be presented as above, in **`mono-spaced bold`**. For example:

> File-related classes include **`filesystem`** for file systems, **`file`** for files, and **`dir`** for directories. Each class has its own associated set of permissions.

Proportional Bold

This denotes words or phrases encountered on a system, including application names; dialog box text; labeled buttons; check-box and radio button labels; menu titles and sub-menu titles. For example:

> Choose **System** → **Preferences** → **Mouse** from the main menu bar to launch **Mouse Preferences**. In the **`Buttons`** tab, select the **`Left-handed mouse`** check box and click **Close** to switch the primary mouse button from the left to the right (making the mouse suitable for use in the left hand).

> To insert a special character into a **gedit** file, choose **Applications** → **Accessories** → **Character Map** from the main menu bar. Next, choose **Search** → **Find…** from the **Character Map** menu bar, type the name of the character in the **Search** field and click **Next**. The character you sought will be highlighted in the **`Character Table`**. Double-click this highlighted character to place it in the **`Text to copy`** field and then click the **Copy** button. Now switch back to your document and choose **Edit** → **Paste** from the **gedit** menu bar.

The above text includes application names; system-wide menu names and items; application-specific menu names; and buttons and text found within a GUI interface, all presented in proportional bold and all distinguishable by context.

_`Mono-spaced Bold Italic`_ or **_Proportional Bold Italic_**

Whether mono-spaced bold or proportional bold, the addition of italics indicates replaceable or variable text. Italics denotes text you do not input literally or displayed text that changes depending on circumstance. For example:

> To connect to a remote machine using ssh, type **`ssh`** **_`username@domain.name`_** at a shell prompt. If the remote machine is **`example.com`** and your username on that machine is john, type **`ssh john@example.com`**.

> The **`mount -o remount`** **_`file-system`_** command remounts the named file system. For example, to remount the **`/home`** file system, the command is **`mount -o remount /home`**.

> To see the version of a currently installed package, use the **`rpm -q`** **_`package`_** command. It will return a result as follows: **_`package-version-release`_**.

Note the words in bold italics above — username, domain.name, file-system, package, version and release. Each word is a placeholder, either for text you enter when issuing a command or for text displayed by the system.

Aside from standard usage for presenting the title of a work, italics denotes the first use of a new and important term. For example:

Publican is a *DocBook* publishing system.

1.2. Pull-quote Conventions

Terminal output and source code listings are set off visually from the surrounding text.

Output sent to a terminal is set in **mono-spaced roman** and presented thus:

```
books          Desktop    documentation  drafts  mss    photos   stuff  svn
books_tests  Desktop1   downloads              images  notes  scripts  svgs
```

Source-code listings are also set in **mono-spaced roman** but add syntax highlighting as follows:

```
package org.jboss.book.jca.ex1;

import javax.naming.InitialContext;

public class ExClient
{
   public static void main(String args[])
       throws Exception
   {
      InitialContext iniCtx = new InitialContext();
      Object         ref    = iniCtx.lookup("EchoBean");
      EchoHome       home   = (EchoHome) ref;
      Echo           echo   = home.create();

      System.out.println("Created Echo");

      System.out.println("Echo.echo('Hello') = " + echo.echo("Hello"));
   }
}
```

1.3. Notes and Warnings

Finally, we use three visual styles to draw attention to information that might otherwise be overlooked.

> **Note**
>
> Notes are tips, shortcuts or alternative approaches to the task at hand. Ignoring a note should have no negative consequences, but you might miss out on a trick that makes your life easier.

> **Important**
>
> Important boxes detail things that are easily missed: configuration changes that only apply to the current session, or services that need restarting before an update will apply. Ignoring a box labeled 'Important' will not cause data loss but may cause irritation and frustration.

> **Warning**
>
> Warnings should not be ignored. Ignoring warnings will most likely cause data loss.

2. Getting Help and Giving Feedback

2.1. Do You Need Help?

If you experience difficulty with a procedure described in this documentation, visit the Red Hat Customer Portal at http://access.redhat.com. Through the customer portal, you can:

- search or browse through a knowledgebase of technical support articles about Red Hat products.
- submit a support case to Red Hat Global Support Services (GSS).
- access other product documentation.

Red Hat also hosts a large number of electronic mailing lists for discussion of Red Hat software and technology. You can find a list of publicly available mailing lists at https://www.redhat.com/mailman/listinfo. Click on the name of any mailing list to subscribe to that list or to access the list archives.

2.2. We Need Feedback!

If you find a typographical error in this manual, or if you have thought of a way to make this manual better, we would love to hear from you!

Please submit a report in Bugzilla: http://bugzilla.redhat.com/ against the product **CloudForms Management Engine.**

When submitting a bug report, be sure to mention the manual's identifier: *Documentation*

If you have a suggestion for improving the documentation, try to be as specific as possible when describing it. If you have found an error, please include the section number and some of the surrounding text so we can find it easily.

Chapter 1. About Red Hat CloudForms

Red Hat CloudForms Management Engine delivers the insight, control, and automation enterprises need to address the challenges of managing virtual environments, which are far more complex than physical ones. This technology enables enterprises with existing virtual infrastructures to improve visibility and control, and those starting virtualization deployments to build and operate a well-managed virtual infrastructure.

Red Hat CloudForms 3.0 is comprised of a single component, the CloudForms Management Engine. It has the following feature sets:

- Insight: Discovery, Monitoring, Utilization, Performance, Reporting, Analytics, Chargeback, and Trending.
- Control: Security, Compliance, Alerting, and Policy-Based Resource and Configuration Enforcement.
- Automate: IT Process, Task and Event, Provisioning, and Workload Management and Orchestration.
- Integrate: Systems Management, Tools and Processes, Event Consoles, Configuration Management Database (CMDB), Role-based Administration (RBA), and Web Services.

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1.1. Architecture

The diagram below describes the capabilities of Red Hat CloudForms Management Engine. Its features are designed to work together to provide robust management and maintenance of your virtual infrastructure.
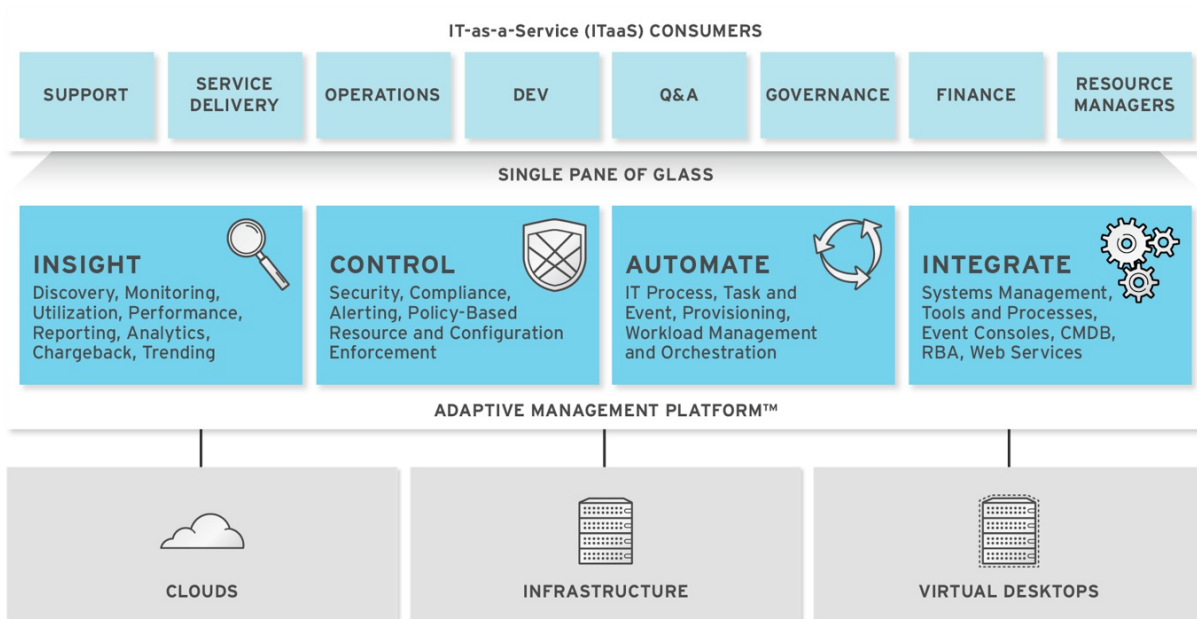
Figure 1.1. Features

The architecture comprises the following components:

- The CloudForms Management Engine Appliance (Appliance) which is supplied as a secure, high-performance, preconfigured virtual machine. It provides support for Secure Socket Layer (SSL) communications.
- The CloudForms Management Engine Server (Server) resides on the Appliance. It is the software layer that communicates between the SmartProxy and the Virtual Management Database. It includes support for Secure Socket Layer (SSL) communications.
- The Virtual Management Database (VMDB) resides either on the Appliance or another computer accessible to the Appliance. It is the definitive source of intelligence collected about your Virtual Infrastructure. It also holds status information regarding Appliance tasks.
- The CloudForms Management Engine Console (Console) is the Web interface used to view and control the Server and Appliance. It is consumed through Web 2.0 mash-ups and web services (WS Management) interfaces.

⯈ The SmartProxy can reside on the Appliance or on an ESX Server. If not embedded in the Server, the SmartProxy can be deployed from the Appliance. Each storage location must have a SmartProxy with visibility to it. The SmartProxy acts on behalf of the Appliance communicating with it over HTTPS (SSL) on standard port 443.

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1.2. Requirements

To use CloudForms Management Engine, the following requirements must be met:

⯈ One of the following Web Browsers:
  ▪ Mozilla Firefox for versions supported under Mozilla's Extended Support Release (ESR) [1]
  ▪ Internet Explorer 8 or higher
⯈ A monitor with minimum resolution of 1280x1024.
⯈ Adobe Flash Player 9 or above. At the time of publication, you can access it at http://www.adobe.com/products/flashplayer/.
⯈ The CloudForms Management Engine Appliance must already be installed and activated in your enterprise environment.
⯈ The SmartProxy must have visibility to the virtual machines and cloud instances that you want to control.
⯈ The resources that you want to control must have a SmartProxy associated with them.

> **Important**
>
> Due to browser limitations, Red Hat supports logging in to only one tab for each multi-tabbed browser. Console settings are saved for the active tab only. For the same reason, CloudForms Management Engine does not guarantee that the browser's **Back** button will produce the desired results. CloudForms Management Engine recommends using the breadcrumbs provided in the Console.

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1.3. Terminology

The following terms are used throughout this document. Review them before proceeding.

Account Role
A designation assigned to a user allowing or restricting a user to parts and functions of the CloudForms Management Engine console.

Action
An execution that is performed after a condition is evaluated.

Alert
CloudForms Management Engine alerts notify administrators and monitoring systems of critical configuration changes and threshold limits in the virtual environment. The notification can take the form of either an email or an SNMP trap.

Analysis Profile
A customized scan of hosts, virtual machines, or instances. You can collect information from categories, files, event logs, and registry entries.

Cloud
A pool of on-demand and highly available computing resources. The usage of these resources are scaled depending on the user requirements and metered for cost.

CloudForms Management Engine Appliance
A virtual machine on which the virtual management database (VMDB) and CloudForms Management Engine server reside.

CloudForms Management Engine Console
A web-based interface into the CloudForms Management Engine Appliance.

CloudForms Management Engine Role
A designation assigned to a CloudForms Management Engine server that defines what a CloudForms Management Engine server can do.

CloudForms Management Engine Server
The application that runs on the CloudForms Management Engine Appliance and communicates with the SmartProxy and the VMDB.

Cluster

Hosts that are grouped together to provide high availability and load balancing.

Condition

A test of criteria triggered by an event.

Discovery

Process run by the CloudForms Management Engine server which finds virtual machine and cloud providers.

Drift

The comparison of a virtual machine, instance, host, cluster to itself at different points in time.

Event

A trigger to check a condition.

Event Monitor

Software on the CloudForms Management Engine Appliance which monitors external providers for events and sends them to the CloudForms Management Engine server.

Host

A computer on which virtual machine monitor software is loaded.

Instance/Cloud Instance

A on-demand virtual machine based upon a predefined image and uses a scalable set of hardware resources such as CPU, memory, networking interfaces.

Managed/Registered VM

A virtual machine that is connected to a host and exists in the VMDB. Also, a template that is connected to a provider and exists in the VMDB. Note that templates cannot be connected to a host.

Managed/Unregistered VM

A virtual machine or template that resides on a repository or is no longer connected to a provider or host and exists in the VMDB. A virtual machine that was previously considered registered may become unregistered if the virtual machine was removed from provider inventory.

Provider

A computer on which software is loaded which manages multiple virtual machines that reside on multiple hosts.

Policy

A combination of an event, a condition, and an action used to manage a virtual machine.

Policy Profile

A set of policies.

Refresh

A process run by the CloudForms Management Engine server which checks for relationships of the provider or host to other resources, such as storage locations, repositories, virtual machines, or instances. It also checks the power states of those resources.

Resource

A host, provider, instance, virtual machine, repository, or datastore.

Resource Pool

A group of virtual machines across which CPU and memory resources are allocated.

Repository

A place on a datastore resource which contains virtual machines.

SmartProxy

The SmartProxy can be configured to reside on the CloudForms Management Engine Appliance or on an ESX server version. The SmartProxy can be deployed from the CloudForms Management Engine Appliance, and provides visibility to the VMFS storage. Each storage location must have a SmartProxy with visibility to it. The SmartProxy acts on behalf of the CloudForms Management Engine Appliance. If the SmartProxy is not embedded in the CloudForms Management Engine server, it communicates with the CloudForms Management Engine Appliance over HTTPS (SSL) on standard port 443.

SmartState Analysis

Process run by the SmartProxy which collects the details of a virtual machine or instance. Such details include accounts, drivers, network information, hardware, and security patches. This process is also run by the CloudForms Management Engine server on hosts and clusters. The data is stored in the VMDB.

SmartTags

Descriptors that allow you to create a customized, searchable index for the resources in your clouds and infrastructure.

Storage Location

A device, such as a VMware datastore, where digital information resides that is connected to a resource.

Tags

Descriptive terms defined by a CloudForms Management Engine user or the system used to categorize a resource.

Template

A template is a copy of a preconfigured virtual machine, designed to capture installed software and software configurations, as well as the hardware configuration, of the original virtual machine.

Unmanaged Virtual Machine

Files discovered on a datastore that do not have a virtual machine associated with them in the VMDB. These files may be registered to a provider that the CloudForms Management Engine server does not have configuration information on. Possible causes may be that the provider has not been discovered or that the provider has been discovered, but no security credentials have been provided.

Virtual Machine

A software implementation of a system that functions similar to a physical machine. Virtual machines utilize the hardware infrastructure of a physical host, or a set of physical hosts, to provide a scalable and on-demand method of system provisioning.

Virtual Management Database (VMDB)

Database used by the CloudForms Management Engine Appliance to store information about your resources, users, and anything else required to manage your virtual enterprise.

Virtual Thumbnail

An icon divided into smaller areas that summarize the properties of a resource.

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1.4. About this Guide

CloudForms Management Engine can be used as a web service provider with your web service client. You will need to interact with CloudForms Management Engine using the technology or language that your web service client expects. CloudForms Management Engine provides SOAP-based WebServices and uses Web Services to:

⮞ Communicate with the SmartProxy
⮞ Communicate between the CloudForms Management Engine Server and the CloudForms Management Engine Console
⮞ Provide external access to the CloudForms Management Engine Server

This guide Is divided into chapters by feature set, Insight, Control, and Automate.

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[1] http://www.mozilla.org/en-US/firefox/organizations/faq/

Chapter 2. Insight Web Services

This chapter describes web services used by CloudForms Management Engine Insight Feature Set.

At the end of this chapter, you will:

▷ Know what web service methods are available to Insight.

▷ Be familiar with the parameters that each method can take.

▷ See examples of the outputs for each method.

Web Services associated with Insight pertain to data collected from your Virtual Infrastructure. For each Web Service, we supply a brief description, input, output, the excerpt from the WSDL, and a sample output. The sample out may look different depending on the technology used by the Web Service client.

You can find a full copy of the WSDL file in the WSDL File Appendix.

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2.1. ClusterGetTags

ClusterGetTags retrieves the list of tags associated with a **Cluster** object. The returned **Tag** objects include properties for **category**, **category_display_name**, **tag_name**, **tag_display_name**, and **tag_path**. See the WSDL definition for the **Tag** object for the full property listing.
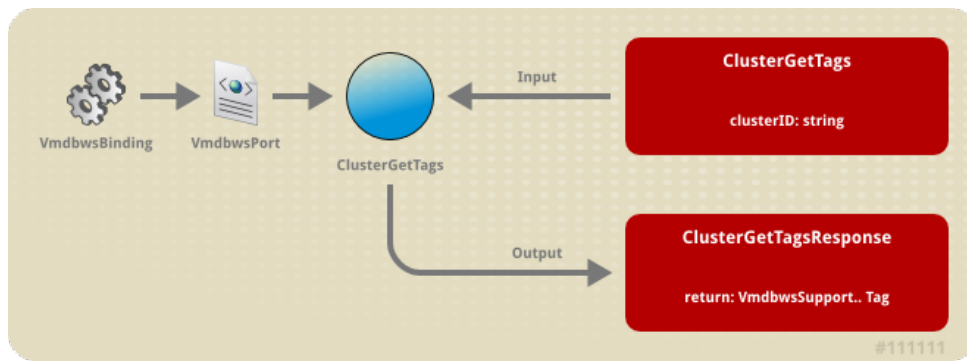
Syntax

▷ *Input:* **[{:clusterID => :string}]**

▷ *Output:* **[[VmdbwsSupport..TagArray]]**

Examples

The following examples demonstrate **ClusterGetTags** usage:

Example 2.1. ClusterGetTags WSDL

```
<message name="ClusterGetTags">
  <part name="clusterId" type="xsd:string"/>
</message>
<message name="ClusterGetTagsResponse">
  <part name="return" type="typens:VmdbwsSupport..TagArray"/>
</message>
...
<xsd:complexType name="VmdbwsSupport..Tag">
  <xsd:all>
    <xsd:element name="tag_display_name" type="xsd:string"/>
    <xsd:element name="display_name" type="xsd:string"/>
    <xsd:element name="tag_name" type="xsd:string"/>
    <xsd:element name="tag_path" type="xsd:string"/>
    <xsd:element name="category" type="xsd:string"/>
    <xsd:element name="category_display_name" type="xsd:string"/>
  </xsd:all>
</xsd:complexType>
```

Example 2.2. ClusterGetTags Output (Windows PowerShell)

```
display_name          : Location: Chicago
category              : location
category_display_name : Location
tag_display_name      : Chicago
tag_name              : chicago
tag_path              : /managed/location/chicago

display_name          : Environment: Production
category              : environment
category_display_name : Environment
tag_display_name      : Production
tag_name              : prod
tag_path              : /managed/environment/prod
```

Report a bug

2.2. DatastoreGetTags

DatastoreGetTags retrieves the list of tags associated with a **Datastore** object. The returned **Tag** objects include properties for **category**, **tag_name**, **tag_display_name** and **tag_path**. See the WSDL definition for the **Tag** object for the full property listing.
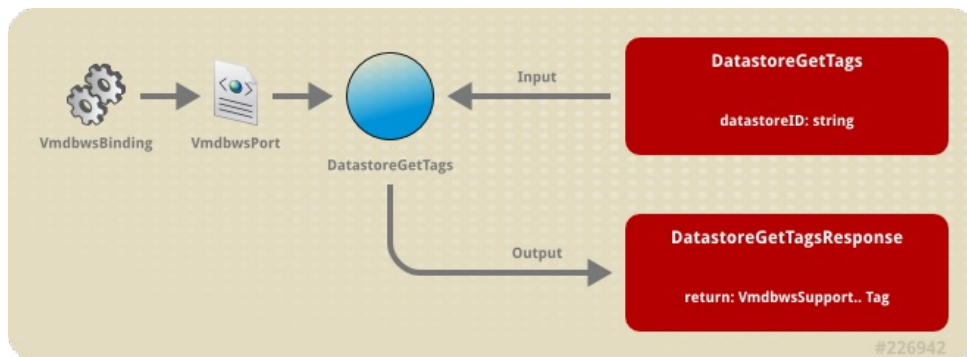
Syntax

» *Input:* **[{:datastoreId => :string}]**

» *Output:* **[[VmdbwsSupport..TagArray]]**

Examples

The following examples demonstrate **DatastoreGetTags** usage:

Example 2.3. DatastoreGetTags WSDL

```
<message name="DatastoreGetTags">
  <part name="datastoreId" type="xsd:string"/>
</message>
<message name="DatastoreGetTagsResponse">
  <part name="return" type="typens:VmdbwsSupport..TagArray"/>
</message>

    <xsd:complexType name="VmdbwsSupport..Tag">
      <xsd:all>
        <xsd:element name="tag_display_name" type="xsd:string"/>
        <xsd:element name="display_name" type="xsd:string"/>
        <xsd:element name="tag_name" type="xsd:string"/>
        <xsd:element name="tag_path" type="xsd:string"/>
        <xsd:element name="category" type="xsd:string"/>
        <xsd:element name="category_display_name" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.4. DatastoreGetTags Output (Windows PowerShell)

```
display_name          : Location: Chicago
category              : location
category_display_name : Location
tag_display_name      : Chicago
tag_name              : chicago
tag_path              : /managed/location/chicago

display_name          : Environment: Production
category              : environment
category_display_name : Environment
tag_display_name      : Production
tag_name              : prod
tag_path              : /managed/environment/prod
```

Report a bug

2.3. EMSGetTags

EMSGetTags retrieves the list of tags associated with a Management System (EMS) object. The returned **Tag** objects include properties for **category**, **tag_name**, **tag_display_name**, and **tag_path**. See the WSDL definition for the **Tag** object for the full property listing.
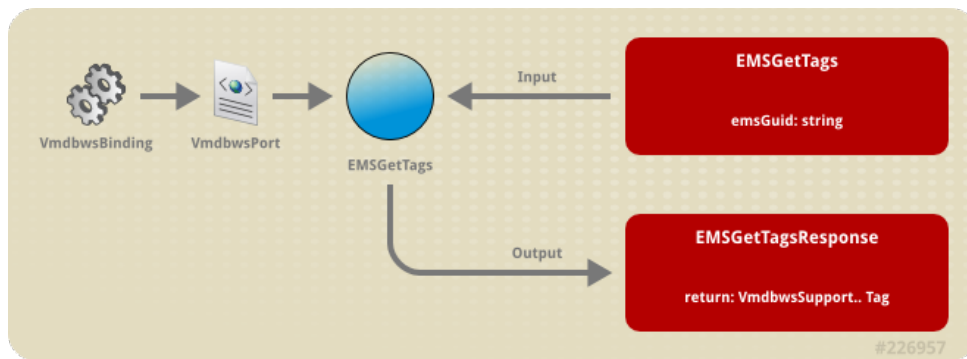
Syntax

› *Input:* **[{:emsGuid => :string}]**

› *Output:* **[[VmdbwsSupport..TagArray]]**

Examples

The following examples demonstrate **EMSGetTags** usage:

Example 2.5. EMSGetTags WSDL

```
<message name="EmsGetTags">
  <part name="emsGuid" type="xsd:string"/>
</message>
<message name="EmsGetTagsResponse">
  <part name="return" type="typens:VmdbwsSupport..TagArray"/>
</message>

    <xsd:complexType name="VmdbwsSupport..Tag">
      <xsd:all>
        <xsd:element name="tag_display_name" type="xsd:string"/>
        <xsd:element name="display_name" type="xsd:string"/>
        <xsd:element name="tag_name" type="xsd:string"/>
        <xsd:element name="tag_path" type="xsd:string"/>
        <xsd:element name="category" type="xsd:string"/>
        <xsd:element name="category_display_name" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.6. EMSGetTags Output (Windows PowerShell)

```
display_name          : Location: Chicago
category              : location
category_display_name : Location
tag_display_name      : Chicago
tag_name              : chicago
tag_path              : /managed/location/chicago

display_name          : Environment: Production
category              : environment
category_display_name : Environment
tag_display_name      : Production
tag_name              : prod
tag_path              : /managed/environment/prod
```

Report a bug

2.4. EVMDeleteVmByName

EVMDeleteVmbyName looks up a **VirtualMachine** by name and deletes it from the VMDB.

> **Note**
>
> This method will likely be changed or deleted in the future.
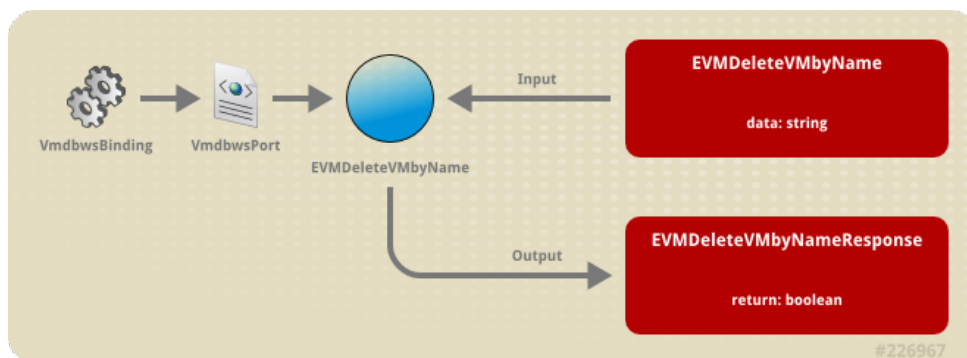
Syntax

- *Input:* Name of the Virtual Machine as a string.
- *Output:* Boolean value (**true** or **false**)

Examples

The following examples demonstrate **EVMDeleteVmByName** usage:

Example 2.7. EVMDeleteVmByName WSDL

```xml
<message name="EVMDeleteVmByName">
  <part name="vmName" type="xsd:string"/>
</message>
<message name="EVMDeleteVmByNameResponse">
  <part name="return" type="xsd:boolean"/>
</message>
```

Example 2.8. EVMDeleteVmByName (Java)

```
Calling EVMDeleteVmByName...
...Result:true
```

Report a bug

2.5. EVMClusterList

EVMClusterList retrieves all of the **id** and **name** values of the **Cluster** instances stored in the VMDB.
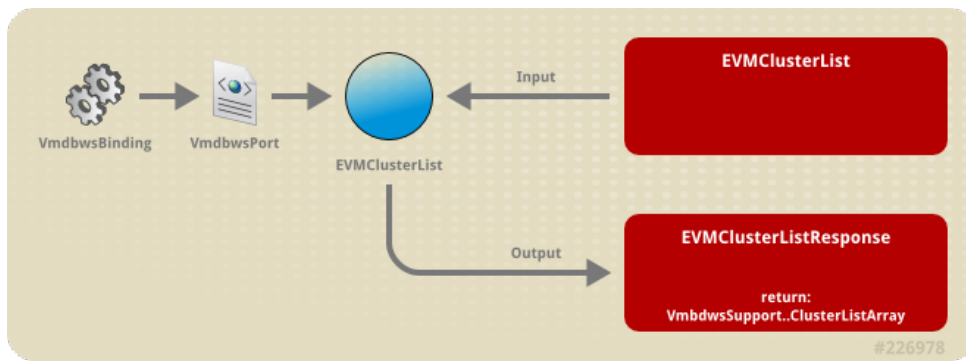
Syntax

- *Input:* none
- *Output:* **VMdbWs..ClusterListArray**. Each **VmdbwsSupport..ClusterList** object contains the guid and name of a host.

Examples

The following examples demonstrate **EVMClusterList** usage:

Example 2.9. EVMClusterList WSDL

```
<message name="EVMClusterList">
</message>
<message name="EVMClusterListResponse">
  <part name="return" type="typens:VmdbwsSupport..ClusterListArray"/>
</message>

    <xsd:complexType name="VmdbwsSupport..ClusterList">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.10. EVMClusterList Output (PowerShell)

```
Clusters:


id   : 1
name : Testing-Production Cluster

id   : 2
name : Development-Production Cluster


Resource Pools:

id                              name
--                              ----
10                              Citrix
9                               MiqCloud
8                               Production Test environment
7                               Testing
6                               Training
5                               VMware View VMs
1                               Default
```

Report a bug

2.6. EVMDatastoreList

EVMDatastoreList retrieves all of the **id** and **name** values of the **Datastore** instances stored in the VMDB.
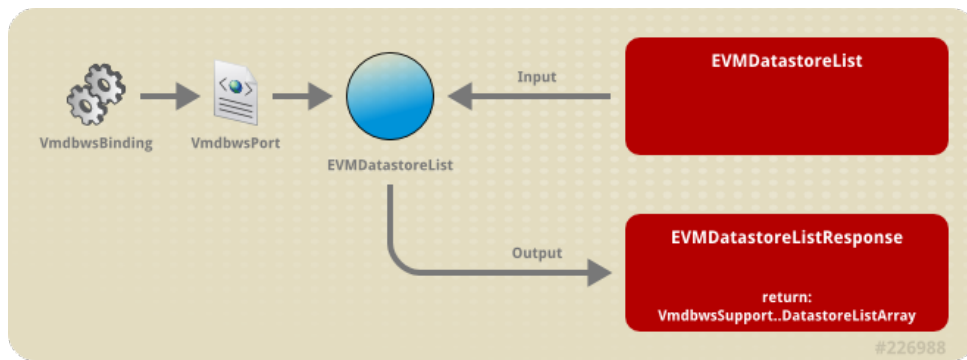
Syntax

- *Input:* none
- *Output:* **VMdbWs..DatastoreListArray**. Each **VmdbwsSupport..DatastoreList** object contains the **guid** and **name** of a Datastore.

Examples

The following examples demonstrate **EVMDatastoreList** usage:

Example 2.11. EVMDatastoreList WSDL

```
<message name="EVMDatastoreList" />
<message name="EVMDatastoreListResponse">
  <part name="return" type="typens: VmdbwsSupport..DatastoreListArray" />
</message>
...
    <xsd:complexType name="VmdbwsSupport..DatastoreList">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.12. EVMDatastoreList Output (PowerShell)

```
Datastores:

id                                        name
--                                        ----
8                                         StarM1-Test2
7                                         StarM1-TestProd
6                                         StarM1-Dev
5                                         StarM2-Test
4                                         StarM1-vCloud_Test
3                                         StarM1-Test
2                                         local-dev
1                                         Thecus-N7700
```

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2.7. EVMHostList

EVMHostList retrieves all of the **id** and **name** values of the **Host** instances stored in the VMDB.
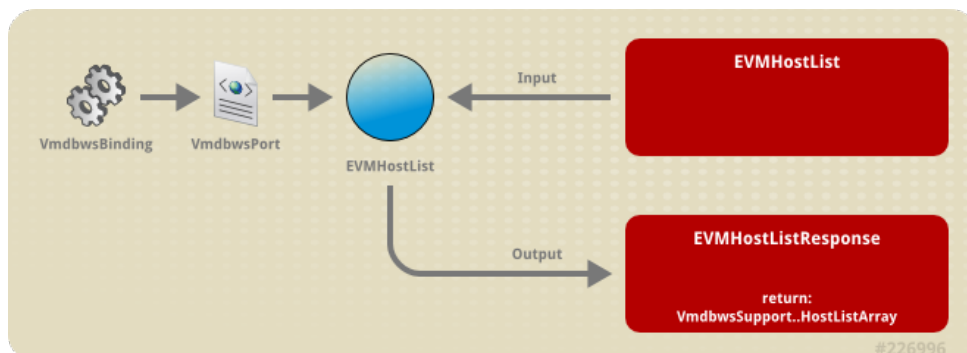
Syntax

» *Input:* none

» *Output:* **VMdbWs..HostListArray**. Each **VMdbWs..HostList** object contains the **guid** and **name** of a host.

Examples

The following examples demonstrate **EVMHostList** usage:

Example 2.13. EVMHostList WSDL

```
<message name="EVMHostList">
</message>
<message name="EVMHostListResponse">
  <part name="return" type="typens:VmdbwsSupport..HostListArray"/>
</message>

    <xsd:complexType name="VmdbwsSupport..HostList">
      <xsd:all>
        <xsd:element name="guid" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.14. EVMHostList Output (Java)

```
Calling EVMHostList...
988be7ca-6c66-11dc-9322-005056b30b86, ESX21.Chicago.MIQ
98957452-6c66-11dc-9322-005056b30b86, ESX7.Mahwah.MIQ
9898d76e-6c66-11dc-9322-005056b30b86, ESX43.Seattle.MIQ
989a5580-6c66-11dc-9322-005056b30b86, ESX54.Dallas.MIQ
749b33e0-3a2d-11dc-8a0d-001641a27095, bhm65@redhat.com
024ba2a6-5d51-11dc-b10b-0017f2d3eb46, luke.redhat.com
02982fb8-5d51-11dc-b10b-0017f2d3eb46, esx1dev.redhat.com
02bb853a-5d51-11dc-b10b-0017f2d3eb46, yoda.redhat.com
```

Report a bug

2.8. EVMResourcePoolList

EVMResourcePoolList retrieves all of the **id** and **name** values of the **ResourcePool** instances stored in the VMDB.
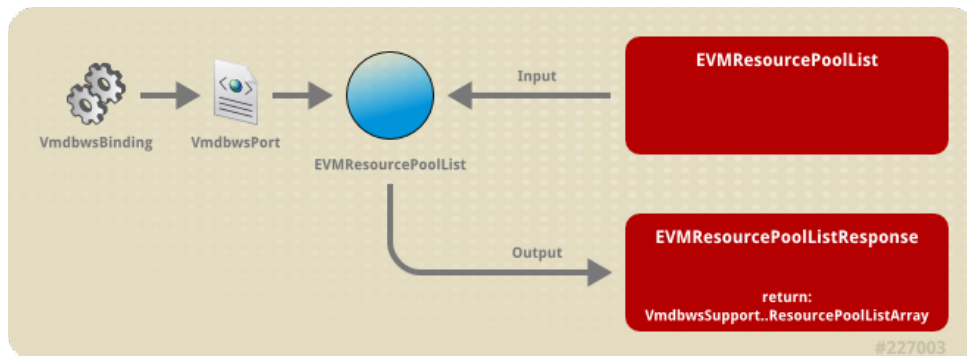
Syntax

» *Input:* none

» *Output:* **VMdbWs..ResourcePoolList**. Each **VMdbWs..ResourcePool** object contains the **guid** and **name** of a **ResourcePool**.

Examples

The following examples demonstrate **EVMResourcePoolList** usage:

Example 2.15. EVMResourcePoolList WSDL

```
<message name="EVMResourcePoolList">
</message>
<message name="EVMResourcePoolListResponse">
  <part name="return" type="typens:VmdbwsSupport..ResourcePoolListArray"/>
</message>

    <xsd:complexType name="VmdbwsSupport..ResourcePoolList">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Report a bug

2.9. EVMPing

Use **EVMPing** to verify CloudForms Management Engine Appliance is running and accepting web service requests. The requests sends data to the VMDB and a successful receipt of the data returns a **true** value.
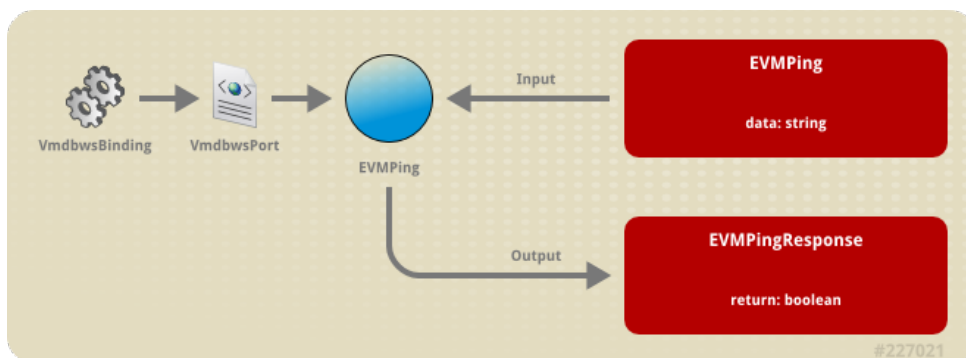
Syntax

- *Input:* string of data
- *Output:* Boolean (**true** or **false**)

Examples

The following examples demonstrate **EVMPing** usage:

Example 2.16. Title

```
<message name="EVMPing">
  <part name="data" type="xsd:string" />
</message>
<message name="EVMPingResponse">
  <part name="return" type="xsd:boolean" />
</message>
```

Example 2.17. EVMPing Output (Java)

```
Calling EVMPing...
...Result:true
```

Report a bug

2.10. EVMVmAccounts

EVMVmAccounts retrieves the list of **name** and **type** (either **user** or **group**) values of all accounts defined on a virtual machine instance in the VMDB.
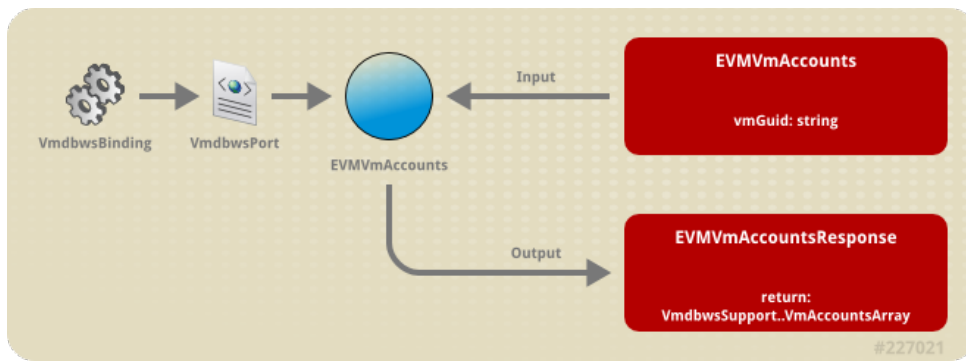
Syntax

» *Input:* The **guid** of a virtual machine existing in the VMDB.

» *Output:* **VMdbWs..VmAccountsArray**. Each **VmdbwsSupport..VmAccounts** object contains the **name** and **type** for an account on a virtual machine.

Examples

The following examples demonstrate **EVMVmAccounts** usage:

Example 2.18. EVMVmAccounts WSDL

```
<message name="EVMVmAccounts">
  <part name="vmGuid" type="xsd:string"/>
</message>
<message name="EVMVmAccountsResponse">
  <part name="return" type="typens:VmdbwsSupport..VmAccountsArray"/>
</message>
...
    <xsd:complexType name="VmdbwsSupport..VmAccounts">
      <xsd:all>
        <xsd:element name="type" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.19. EVMVmAccounts Output (Java)

```
Calling EVMVmAccounts for VM: spam-chicago...
Name: Administrator
Type: user

Name: ASPNET
Type: user

Name: Guest
Type: user

Name: IUSR_GFI
Type: user

Name: IWAM_GFI
Type: user

Name: SUPPORT_388945a0
Type: user

Name: Administrators
Type: group

Name: Backup Operators
Type: group

Name: Distributed COM Users
Type: group

Name: Guests
Type: group

Name: Network Configuration Operators
Type: group

Name: Performance Log Users
Type: group

Name: Performance Monitor Users
Type: group

Name: Power Users
Type: group

Name: Print Operators
Type: group

Name: Remote Desktop Users
Type: group

Name: Replicator
Type: group

Name: Users
Type: group

Name: HelpServicesGroup
Type: group
```

Report a bug

2.11. EVMVmList

EVMVmList retrieves the **id** and **name** values of the virtual machine instances stored in the VMDB. Pass the **hostGuid** argument as an asterisk (*****) to return a result set containing all virtual machine instances. Pass the **hostGuid** argument as an ID to return a result set containing only the virtual machine instances assigned to that host.
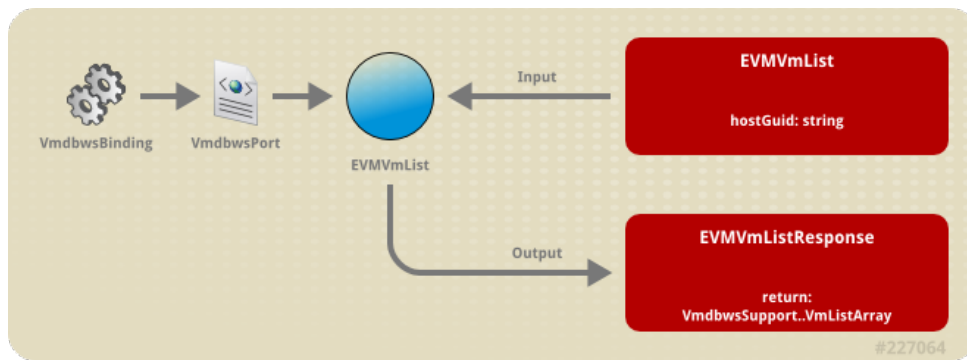
Syntax

» *Input:* An ID of a valid host existing in the VMDB or an asterisk (*****) for all instances.

» *Output:* **VMdbWs..VmListArray**. Each **VmdbwsSupport..VmList** object contains the **guid** and **name** of a virtual machine.

Examples

The following examples demonstrate **EVMVmList** usage:

Example 2.20. EVMVmList WSDL

```
<message name="EVMVmList">
  <part name="hostGuid" type="xsd:string" />
</message>
<message name="EVMVmListResponse">
  <part name="return" type="typens: VmdbwsSupport..VmListArray" />
</message>
...
<xsd:complexType name="VmdbwsSupport..VmList">
  <xsd:all>
    <xsd:element name="guid" type="xsd:string" />
    <xsd:element name="name" type="xsd:string" />
  </xsd:all>
</xsd:complexType>
```

Example 2.21. EVMVmList Output (Java)

```
Calling EVMVmList...
ac1de2e8-6c5c-11dc-9322-005056b30b86, spam-chicago
ac2fe146-6c5c-11dc-9322-005056b30b86, dhcp-chicago
ac311624-6c5c-11dc-9322-005056b30b86, ad.controller-chicago
ac32974c-6c5c-11dc-9322-005056b30b86, sql1-chicago
ac33d74c-6c5c-11dc-9322-005056b30b86, sql2-chicago
ac34e240-6c5c-11dc-9322-005056b30b86, vpn.rras-chicago
ac37a5c0-6c5c-11dc-9322-005056b30b86, web1-chicago
ac388ba2-6c5c-11dc-9322-005056b30b86, Antispam-Mahwah
ac397094-6c5c-11dc-9322-005056b30b86, dhcpSvr-Mahwah
ac3a5004-6c5c-11dc-9322-005056b30b86, Directory-Mahwah
ac3b2ea2-6c5c-11dc-9322-005056b30b86, Crmsqla-Mahwah
ac3c253c-6c5c-11dc-9322-005056b30b86, Crmsqlb- Mahwah
ac3cfffc-6c5c-11dc-9322-005056b30b86, RRAS-Mahwah
ac3dd58a-6c5c-11dc-9322-005056b30b86, WebSvr1-Mahwah
ac3ed624-6c5c-11dc-9322-005056b30b86, W2003 Template
ac3fae78-6c5c-11dc-9322-005056b30b86, GFIAntispam.ESX43-Seattle
ac40b53e-6c5c-11dc-9322-005056b30b86, dhcp.ESX43Svr-Seattle
ac41bcf4-6c5c-11dc-9322-005056b30b86, AD.ESX43-Seattle
ac429886-6c5c-11dc-9322-005056b30b86, VPN.ESX43-Seattle
ac43857a-6c5c-11dc-9322-005056b30b86, Web.ESX43-Seattle
ac448268-6c5c-11dc-9322-005056b30b86, Subversion.ESX43-Seattle
ac455bac-6c5c-11dc-9322-005056b30b86, Win2k3R2EE_EXCH_LCS
ac46453a-6c5c-11dc-9322-005056b30b86, WIN2K3R2EE_ISA
```

Report a bug

2.12. EVMVmSoftware

EVMVmSoftware retrieves the list of **name**, **vendor**, **description**, and **version** values of all software applications installed on a VM instance in the VMDB.
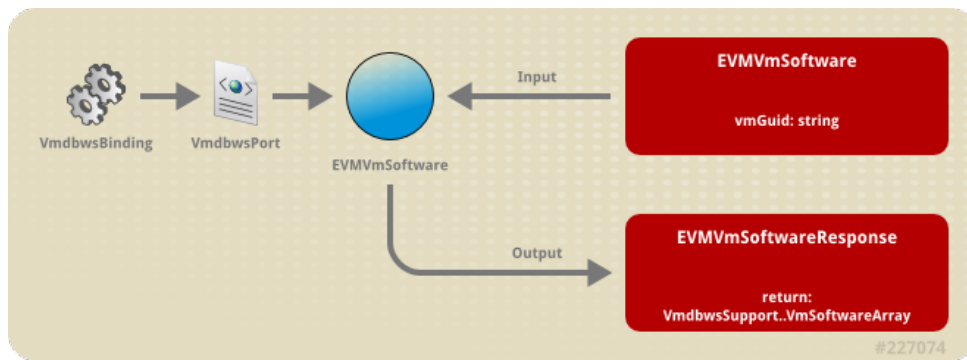
Syntax

» *Input:* The **guid** of a virtual machine existing in the VMDB.

» *Output:* **VmdbwsSupport..VmSoftwareArray**. Each **VmdbWs..VmSoftware** object contains the **name**, **vendor**, **description**, and **version** of a software instance.

Examples

The following examples demonstrate **EVMVmSoftware** usage:

Example 2.22. EVMVmSoftware WSDL

```
<message name="EVMVmSoftware">
  <part name="vmGuid" type="xsd:string" />
</message>
<message name="EVMVmSoftwareResponse">
  <part name="return" type="typens: VmdbwsSupport..VmSoftwareArray" />
</message>
...
    <xsd:complexType name="VmdbwsSupport..VmSoftware">
      <xsd:all>
        <xsd:element name="vendor" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="version" type="xsd:string"/>
        <xsd:element name="description" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.23. EVMVmSoftwareOutput (Java)

```
Calling EVMVmSoftware for VM: spam-chicago...
Name:        VMware Tools
Description: null
Vendor:      null
Version:     50397184

Name:        Acronis Universal Restore for Acronis True Image Enterprise Server
Description: null
Vendor:      null
Version:     151064146

Name:        Acronis True Image Enterprise Server
Description: null
Vendor:      null
Version:     151064146

Name:        Symantec Backup Exec Remote Agent for Windows Servers
Description: null
Vendor:      null
Version:     167843325

Name:        GFI MailEssentials
Description: null
Vendor:      null
Version:     201328598

Name:        MSXML 4.0 SP2 (KB927978)
Description: null
Vendor:      null
Version:     68429425

Name:        Adobe Reader 7.0.8
Description: null
Vendor:      null
Version:     117440520

Name:        GFI MailSecurity for Exchange/SMTP
Description: null
Vendor:      null
Version:     154278041

Name:        Adobe Reader 7.0
Description: Adobe Reader 7.0
Vendor:      Adobe Systems Incorporated
Version:     7.0.8.2006051600

Name:        Cluster Administrator
Description: Cluster Administrator
Vendor:      Microsoft Corporation
Version:     5.2.3790.1830
```

Report a bug

2.13. FindClusterById

FindClusterById uses an ID value to find a **Cluster** object.
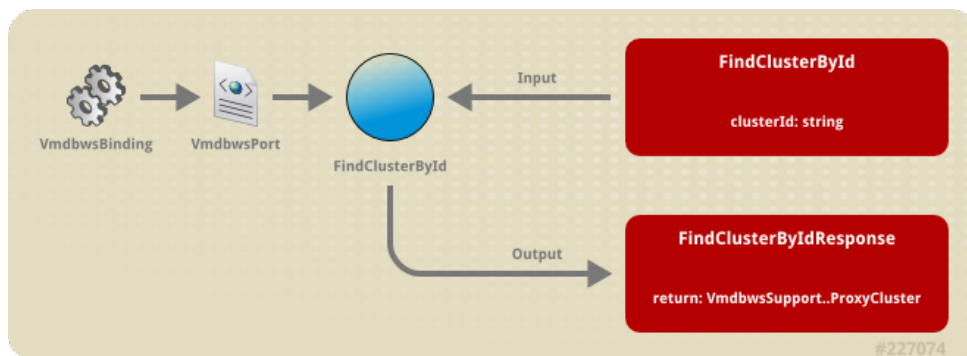
Syntax

- *Input:* **[{:ClusterId => [:string]}]**

▷ *Output:* **[[ProxyCluster]]**

Examples

The following examples demonstrate **FindClusterById** usage:

Example 2.24. FindClusterById WSDL

```
<message name="FindClusterById">
  <part name="clusterId" type="xsd:string"/>
</message>
<message name="FindClusterByIdResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyCluster"/>
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyCluster">
      <xsd:all>
        <xsd:element name="ext_management_system" type="typens:VmdbwsSupport..EmsList"/>
        <xsd:element name="hosts" type="typens:VmdbwsSupport..HostListArray"/>
        <xsd:element name="resource_pools" type="typens:VmdbwsSupport..ResourcePoolListArray"/>
        <xsd:element name="default_resource_pool" type="typens:VmdbwsSupport..ResourcePoolList"/>
        <xsd:element name="vms" type="typens:VmdbwsSupport..VmListArray"/>
        <xsd:element name="ws_attributes" type="typens:VmdbwsSupport..WSAttributesArray"/>
        <xsd:element name="Datastores" type="typens:VmdbwsSupport..DatastoreListArray"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.25. FindClusterbyId Output (Windows PowerShell)

```
Returned Attributes for this Cluster:


Name  : aggregate_cpu_speed
Value : 51048

Name  : aggregate_logical_cpus
Value : 24

Name  : aggregate_memory
Value : 172002

Name  : aggregate_physical_cpus
Value : 6

Name  : aggregate_vm_cpus
Value : 220

Name  : aggregate_vm_memory
Value : 480528

Name  : capacity_profile_1_available_host_memory
Value : 161777451008

Name  : capacity_profile_1_available_host_vcpu
Value : 24

Name  : capacity_profile_1_memory_commitment_ratio
Value : 1.2

Name  : capacity_profile_1_memory_maximum
Value :

Name  : capacity_profile_1_memory_method
Value : Average of Allocated Memory

Name  : capacity_profile_1_memory_minimum
Value :

Name  : capacity_profile_1_memory_per_vm
Value : 3936485376.0

Name  : capacity_profile_1_memory_per_vm_with_min_max
Value : 3936485376.0

Name  : capacity_profile_1_projected_vm_count_based_on_all
Value : 28

Name  : capacity_profile_1_projected_vm_count_based_on_memory
Value : 50

Name  : capacity_profile_1_projected_vm_count_based_on_vcpu
Value : 28

Name  : capacity_profile_1_remaining_host_memory
Value : -309737186918.4

Name  : capacity_profile_1_remaining_host_vcpu
Value : -172.0

Name  : capacity_profile_1_remaining_vm_count_based_on_all
Value : -100

Name  : capacity_profile_1_remaining_vm_count_based_on_memory
Value : -78

Name  : capacity_profile_1_remaining_vm_count_based_on_vcpu
Value : -100

Name  : capacity_profile_1_vcpu_commitment_ratio
Value : 2.0

Name  : capacity_profile_1_vcpu_maximum
Value :

Name  : capacity_profile_1_vcpu_method
Value : Average of Allocated vCPU

Name  : capacity_profile_1_vcpu_minimum
Value :

Name  : capacity_profile_1_vcpu_per_vm
```

```
Value : 1.71875

Name  : capacity_profile_1_vcpu_per_vm_with_min_max
Value : 1.71875

Name  : capacity_profile_2_available_host_memory
Value : 161777451008

Name  : capacity_profile_2_available_host_vcpu
Value : 45622

Name  : capacity_profile_2_memory_commitment_ratio
Value : 1.0

Name  : capacity_profile_2_memory_maximum
Value :

Name  : capacity_profile_2_memory_method
Value : High Normal Range of Allocated Memory

Name  : capacity_profile_2_memory_minimum
Value :

Name  : capacity_profile_2_memory_per_vm
Value : 1263886336.0

Name  : capacity_profile_2_memory_per_vm_with_min_max
Value : 1263886336.0

Name  : capacity_profile_2_projected_vm_count_based_on_all
Value : 128

Name  : capacity_profile_2_projected_vm_count_based_on_memory
Value : 128

Name  : capacity_profile_2_projected_vm_count_based_on_vcpu
Value : 128

Name  : capacity_profile_2_remaining_host_memory
Value : 0.0

Name  : capacity_profile_2_remaining_host_vcpu
Value : 0.0

Name  : capacity_profile_2_remaining_vm_count_based_on_all
Value : 0

Name  : capacity_profile_2_remaining_vm_count_based_on_memory
Value : 0

Name  : capacity_profile_2_remaining_vm_count_based_on_vcpu
Value : 0

Name  : capacity_profile_2_vcpu_commitment_ratio
Value : 1.0

Name  : capacity_profile_2_vcpu_maximum
Value :

Name  : capacity_profile_2_vcpu_method
Value : High Normal Range of Allocated vCPU

Name  : capacity_profile_2_vcpu_minimum
Value :

Name  : capacity_profile_2_vcpu_per_vm
Value : 356.421875

Name  : capacity_profile_2_vcpu_per_vm_with_min_max
Value : 356.421875

Name  : cpu_usagemhz_rate_average_avg_over_time_period
Value :

Name  : cpu_usagemhz_rate_average_high_over_time_period
Value :

Name  : cpu_usagemhz_rate_average_low_over_time_period
Value :

Name  : derived_memory_used_avg_over_time_period
Value :
```

```
Name   : derived_memory_used_high_over_time_period
Value :

Name   : derived_memory_used_low_over_time_period
Value :

Name   : first_drift_state_timestamp
Value :

Name   : last_drift_state_timestamp
Value :

Name   : last_scan_on
Value :

Name   : max_cpu_usage_rate_average_avg_over_time_period
Value :

Name   : max_cpu_usage_rate_average_avg_over_time_period_without_overhead
Value :

Name   : max_cpu_usage_rate_average_high_over_time_period
Value :

Name   : max_cpu_usage_rate_average_high_over_time_period_without_overhead
Value :

Name   : max_cpu_usage_rate_average_low_over_time_period
Value :

Name   : max_cpu_usage_rate_average_low_over_time_period_without_overhead
Value :

Name   : max_mem_usage_absolute_average_avg_over_time_period
Value :

Name   : max_mem_usage_absolute_average_avg_over_time_period_without_overhead
Value :

Name   : max_mem_usage_absolute_average_high_over_time_period
Value :

Name   : max_mem_usage_absolute_average_high_over_time_period_without_overhead
Value :

Name   : max_mem_usage_absolute_average_low_over_time_period
Value :

Name   : max_mem_usage_absolute_average_low_over_time_period_without_overhead
Value :

Name   : region_description
Value : Region 0

Name   : region_number
Value : 0

Name   : total_hosts
Value : 3

Name   : total_miq_templates
Value : 5

Name   : total_vms
Value : 128

Name   : v_cpu_vr_ratio
Value : 9.200000000000001

Name   : v_parent_datacenter
Value : Prod

Name   : v_qualified_desc
Value : Testing-Production Cluster in Prod

Name   : v_ram_vr_ratio
Value : 2.8000000000000003
```

Report a bug

2.14. FindClustersById

FindClustersById uses ID values to find multiple **Cluster** objects.
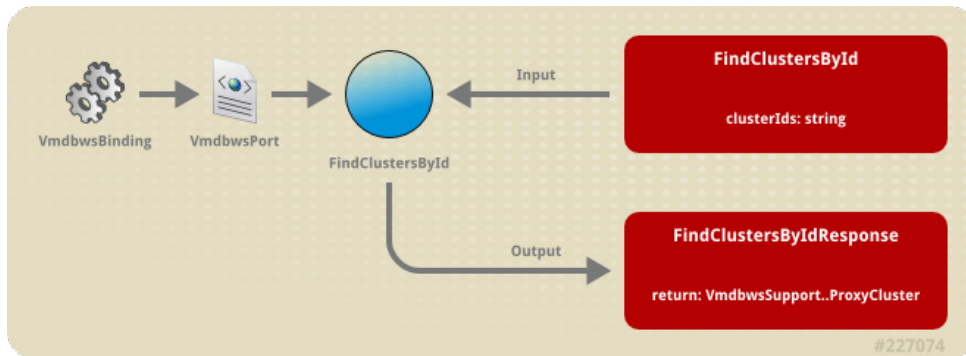
Syntax

- *Input:* **[{:ClusterIds => [:string]}]**
- *Output:* **[[ProxyCluster]]**

Examples

The following examples demonstrate **FindClustersById** usage:

Example 2.26. FindClustersByGuid WSDL

```
<message name="FindClustersById">
  <part name="ClusterIds" type="typens:StringArray"/>
</message>
<message name="FindClustersByIdResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyClusterArray"/>
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyCluster">
      <xsd:all>
        <xsd:element name="ext_management_system" type="typens:VmdbwsSupport..EmsList"/>
        <xsd:element name="hosts" type="typens:VmdbwsSupport..HostListArray"/>
        <xsd:element name="resource_pools" type="typens:VmdbwsSupport..ResourcePoolListArray"/>
        <xsd:element name="default_resource_pool" type="typens:VmdbwsSupport..ResourcePoolList"/>
        <xsd:element name="vms" type="typens:VmdbwsSupport..VmListArray"/>
        <xsd:element name="ws_attributes" type="typens:VmdbwsSupport..WSAttributesArray"/>
        <xsd:element name="datastores" type="typens:VmdbwsSupport..DatastoreListArray"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.27. FindClustersbyId Output (Windows PowerShell)

```
Returned Attributes for this Cluster:


Name  : aggregate_cpu_speed
Value : 51048

Name  : aggregate_logical_cpus
Value : 24

Name  : aggregate_memory
Value : 172002

Name  : aggregate_physical_cpus
Value : 6

Name  : aggregate_vm_cpus
Value : 220

Name  : aggregate_vm_memory
Value : 480528

Name  : capacity_profile_1_available_host_memory
Value : 161777451008

Name  : capacity_profile_1_available_host_vcpu
Value : 24

Name  : capacity_profile_1_memory_commitment_ratio
Value : 1.2

Name  : capacity_profile_1_memory_maximum
Value :

Name  : capacity_profile_1_memory_method
Value : Average of Allocated Memory

Name  : capacity_profile_1_memory_minimum
Value :

Name  : capacity_profile_1_memory_per_vm
Value : 3936485376.0

Name  : capacity_profile_1_memory_per_vm_with_min_max
Value : 3936485376.0

Name  : capacity_profile_1_projected_vm_count_based_on_all
Value : 28

Name  : capacity_profile_1_projected_vm_count_based_on_memory
Value : 50

Name  : capacity_profile_1_projected_vm_count_based_on_vcpu
Value : 28

Name  : capacity_profile_1_remaining_host_memory
Value : -309737186918.4

Name  : capacity_profile_1_remaining_host_vcpu
Value : -172.0

Name  : capacity_profile_1_remaining_vm_count_based_on_all
Value : -100

Name  : capacity_profile_1_remaining_vm_count_based_on_memory
Value : -78

Name  : capacity_profile_1_remaining_vm_count_based_on_vcpu
Value : -100

Name  : capacity_profile_1_vcpu_commitment_ratio
Value : 2.0

Name  : capacity_profile_1_vcpu_maximum
Value :

Name  : capacity_profile_1_vcpu_method
Value : Average of Allocated vCPU

Name  : capacity_profile_1_vcpu_minimum
Value :

Name  : capacity_profile_1_vcpu_per_vm
```

```
Value : 1.71875

Name  : capacity_profile_1_vcpu_per_vm_with_min_max
Value : 1.71875

Name  : capacity_profile_2_available_host_memory
Value : 161777451008

Name  : capacity_profile_2_available_host_vcpu
Value : 45622

Name  : capacity_profile_2_memory_commitment_ratio
Value : 1.0

Name  : capacity_profile_2_memory_maximum
Value :

Name  : capacity_profile_2_memory_method
Value : High Normal Range of Allocated Memory

Name  : capacity_profile_2_memory_minimum
Value :

Name  : capacity_profile_2_memory_per_vm
Value : 1263886336.0

Name  : capacity_profile_2_memory_per_vm_with_min_max
Value : 1263886336.0

Name  : capacity_profile_2_projected_vm_count_based_on_all
Value : 128

Name  : capacity_profile_2_projected_vm_count_based_on_memory
Value : 128

Name  : capacity_profile_2_projected_vm_count_based_on_vcpu
Value : 128

Name  : capacity_profile_2_remaining_host_memory
Value : 0.0

Name  : capacity_profile_2_remaining_host_vcpu
Value : 0.0

Name  : capacity_profile_2_remaining_vm_count_based_on_all
Value : 0

Name  : capacity_profile_2_remaining_vm_count_based_on_memory
Value : 0

Name  : capacity_profile_2_remaining_vm_count_based_on_vcpu
Value : 0

Name  : capacity_profile_2_vcpu_commitment_ratio
Value : 1.0

Name  : capacity_profile_2_vcpu_maximum
Value :

Name  : capacity_profile_2_vcpu_method
Value : High Normal Range of Allocated vCPU

Name  : capacity_profile_2_vcpu_minimum
Value :

Name  : capacity_profile_2_vcpu_per_vm
Value : 356.421875

Name  : capacity_profile_2_vcpu_per_vm_with_min_max
Value : 356.421875

Name  : cpu_usagemhz_rate_average_avg_over_time_period
Value :

Name  : cpu_usagemhz_rate_average_high_over_time_period
Value :

Name  : cpu_usagemhz_rate_average_low_over_time_period
Value :

Name  : derived_memory_used_avg_over_time_period
Value :
```

```
Name   : derived_memory_used_high_over_time_period
Value :

Name   : derived_memory_used_low_over_time_period
Value :

Name   : first_drift_state_timestamp
Value :

Name   : last_drift_state_timestamp
Value :

Name   : last_scan_on
Value :

Name   : max_cpu_usage_rate_average_avg_over_time_period
Value :

Name   : max_cpu_usage_rate_average_avg_over_time_period_without_overhead
Value :

Name   : max_cpu_usage_rate_average_high_over_time_period
Value :

Name   : max_cpu_usage_rate_average_high_over_time_period_without_overhead
Value :

Name   : max_cpu_usage_rate_average_low_over_time_period
Value :

Name   : max_cpu_usage_rate_average_low_over_time_period_without_overhead
Value :

Name   : max_mem_usage_absolute_average_avg_over_time_period
Value :

Name   : max_mem_usage_absolute_average_avg_over_time_period_without_overhead
Value :

Name   : max_mem_usage_absolute_average_high_over_time_period
Value :

Name   : max_mem_usage_absolute_average_high_over_time_period_without_overhead
Value :

Name   : max_mem_usage_absolute_average_low_over_time_period
Value :

Name   : max_mem_usage_absolute_average_low_over_time_period_without_overhead
Value :

Name   : region_description
Value : Region 0

Name   : region_number
Value : 0

Name   : total_hosts
Value : 3

Name   : total_miq_templates
Value : 5

Name   : total_vms
Value : 128

Name   : v_cpu_vr_ratio
Value : 9.200000000000001

Name   : v_parent_datacenter
Value : Prod

Name   : v_qualified_desc
Value : Testing-Production Cluster in Prod

Name   : v_ram_vr_ratio
Value : 2.8000000000000003
```

[Report a bug](#)

2.15. FindDatastoreById

FindDatastoreById uses an ID value to find a **Datastore** object.
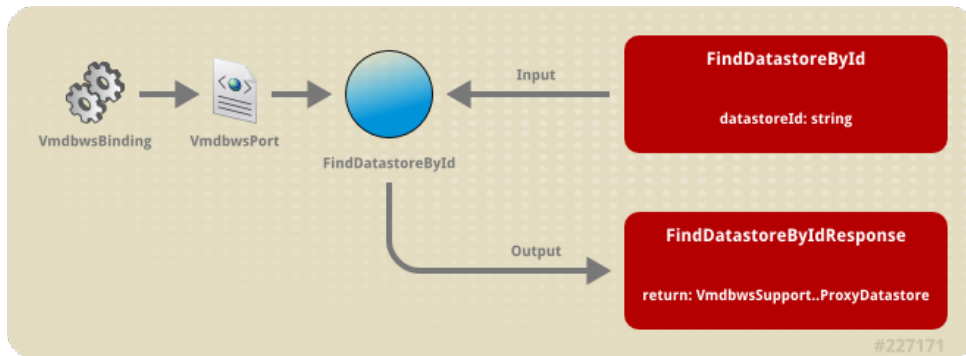
Syntax

» *Input:* **[{:DatastoreId => [:string]}]**

» *Output:* **[[ProxyDatastore]]**

Examples

The following examples demonstrate **FindDatastoreById** usage:

Example 2.28. FindDatastoreById WSDL

```
<message name="FindDatastoreById">
  <part name="datastoreId" type="xsd:string"/>
</message>
<message name="FindDatastoreByIdResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyDatastore"/>
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyDatastore">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="store_type" type="xsd:string"/>
        <xsd:element name="total_space" type="xsd:double"/>
        <xsd:element name="free_space" type="xsd:double"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="multiplehostaccess" type="xsd:double"/>
        <xsd:element name="location" type="xsd:string"/>
        <xsd:element name="last_scan_on" type="xsd:dateTime"/>
        <xsd:element name="uncommitted" type="xsd:double"/>
        <xsd:element name="last_perf_capture_on" type="xsd:dateTime"/>
        <xsd:element name="ems_ref_obj" type="xsd:string"/>
        <xsd:element name="directory_hierarchy_supported" type="xsd:boolean"/>
        <xsd:element name="thin_provisioning_supported" type="xsd:boolean"/>
        <xsd:element name="raw_disk_mappings_supported" type="xsd:boolean"/>
        <xsd:element name="master" type="xsd:boolean"/>
        <xsd:element name="ems_ref" type="xsd:string"/>
        <xsd:element name="vms" type="typens:VmdbwsSupport..VmListArray"/>
        <xsd:element name="all_vms" type="typens:VmdbwsSupport..VmListArray"/>
        <xsd:element name="hosts" type="typens:VmdbwsSupport..HostListArray"/>
        <xsd:element name="ws_attributes" type="typens:VmdbwsSupport..WSAttributesArray"/>
        <xsd:element name="ext_management_systems" type="typens:VmdbwsSupport..EmsListArray"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.29. FindDatastorebyId Output (Windows PowerShell)

```
Returned Attributes for this Datastore:


Name  : count_of_vmdk_disk_files
Value : 0

Name  : cpu_usagemhz_rate_average_avg_over_time_period
Value :

Name  : cpu_usagemhz_rate_average_high_over_time_period
Value :

Name  : cpu_usagemhz_rate_average_low_over_time_period
Value :

Name  : debris_size
Value : 0

Name  : derived_memory_used_avg_over_time_period
Value :

Name  : derived_memory_used_high_over_time_period
Value :

Name  : derived_memory_used_low_over_time_period
Value :

Name  : disk_size
Value : 0

Name  : max_cpu_usage_rate_average_avg_over_time_period
Value :

Name  : max_cpu_usage_rate_average_avg_over_time_period_without_overhead
Value :

Name  : max_cpu_usage_rate_average_high_over_time_period
Value :

Name  : max_cpu_usage_rate_average_high_over_time_period_without_overhead
Value :

Name  : max_cpu_usage_rate_average_low_over_time_period
Value :

Name  : max_cpu_usage_rate_average_low_over_time_period_without_overhead
Value :

Name  : max_mem_usage_absolute_average_avg_over_time_period
Value :

Name  : max_mem_usage_absolute_average_avg_over_time_period_without_overhead
Value :

Name  : max_mem_usage_absolute_average_high_over_time_period
Value :

Name  : max_mem_usage_absolute_average_high_over_time_period_without_overhead
Value :

Name  : max_mem_usage_absolute_average_low_over_time_period
Value :

Name  : max_mem_usage_absolute_average_low_over_time_period_without_overhead
Value :

Name  : region_description
Value : Region 0

Name  : region_number
Value : 0

Name  : snapshot_size
Value : 0

Name  : total_managed_registered_vms
Value : 0

Name  : total_managed_unregistered_vms
Value : 0

Name  : total_unmanaged_vms
```

```
Value : 0

Name  : v_debris_percent_of_used
Value : 0.0

Name  : v_disk_percent_of_used
Value : 0.0

Name  : v_free_space_percent_of_total
Value : 0.0

Name  : v_memory_percent_of_used
Value : 0.0

Name  : v_provisioned_percent_of_total
Value : 0.0

Name  : v_snapshot_percent_of_used
Value : 0.0

Name  : v_total_debris_size
Value : 0

Name  : v_total_hosts
Value : 1

Name  : v_total_memory_size
Value : 0

Name  : v_total_provisioned
Value : 0

Name  : v_total_snapshot_size
Value : 0

Name  : v_total_vm_misc_size
Value : 0

Name  : v_total_vms
Value : 0

Name  : v_used_space
Value : 0

Name  : v_used_space_percent_of_total
Value : 0.0

Name  : v_vm_misc_percent_of_used
Value : 0.0

Name  : vm_misc_size
Value : 0

Name  : vm_ram_size
Value : 0
```

Report a bug

2.16. FindDatastoresById

FindDatastoresById uses ID values to find multiple **Datastore** object.

Syntax

Chapter 2. Insight Web Services
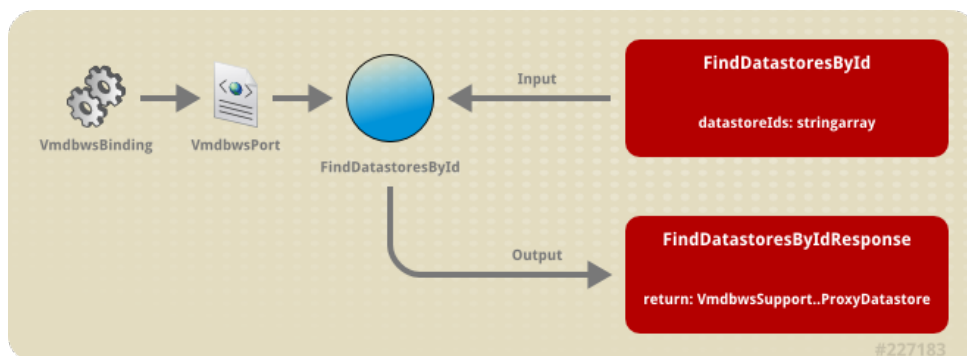
» *Input:* **[{:DatastoreIds => [:string]}]**

» *Output:* **[[ProxyDatastore]]**

Examples

The following examples demonstrate **FindDatastoresById** usage:

Example 2.30. FindDatastoresById WSDL

```
<message name="FindDatastoresById">
  <part name="datastoreIds" type="typens:StringArray"/>
</message>
<message name="FindDatastoresByIdResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyDatastoreArray"/>
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyDatastore">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="store_type" type="xsd:string"/>
        <xsd:element name="total_space" type="xsd:double"/>
        <xsd:element name="free_space" type="xsd:double"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="multiplehostaccess" type="xsd:double"/>
        <xsd:element name="location" type="xsd:string"/>
        <xsd:element name="last_scan_on" type="xsd:dateTime"/>
        <xsd:element name="uncommitted" type="xsd:double"/>
        <xsd:element name="last_perf_capture_on" type="xsd:dateTime"/>
        <xsd:element name="ems_ref_obj" type="xsd:string"/>
        <xsd:element name="directory_hierarchy_supported" type="xsd:boolean"/>
        <xsd:element name="thin_provisioning_supported" type="xsd:boolean"/>
        <xsd:element name="raw_disk_mappings_supported" type="xsd:boolean"/>
        <xsd:element name="master" type="xsd:boolean"/>
        <xsd:element name="ems_ref" type="xsd:string"/>
        <xsd:element name="vms" type="typens:VmdbwsSupport..VmListArray"/>
        <xsd:element name="all_vms" type="typens:VmdbwsSupport..VmListArray"/>
        <xsd:element name="hosts" type="typens:VmdbwsSupport..HostListArray"/>
        <xsd:element name="ws_attributes" type="typens:VmdbwsSupport..WSAttributesArray"/>
        <xsd:element name="ext_management_systems" type="typens:VmdbwsSupport..EmsListArray"/>
      </xsd:all>
    </xsd:complexType>
```

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Example 2.31. FindDatastoresbyId Output (Windows PowerShell)

```
Returned Attributes for this Datastore:


Name  : count_of_vmdk_disk_files
Value : 0

Name  : cpu_usagemhz_rate_average_avg_over_time_period
Value :

Name  : cpu_usagemhz_rate_average_high_over_time_period
Value :

Name  : cpu_usagemhz_rate_average_low_over_time_period
Value :

Name  : debris_size
Value : 0

Name  : derived_memory_used_avg_over_time_period
Value :

Name  : derived_memory_used_high_over_time_period
Value :

Name  : derived_memory_used_low_over_time_period
Value :

Name  : disk_size
Value : 0

Name  : max_cpu_usage_rate_average_avg_over_time_period
Value :

Name  : max_cpu_usage_rate_average_avg_over_time_period_without_overhead
Value :

Name  : max_cpu_usage_rate_average_high_over_time_period
Value :

Name  : max_cpu_usage_rate_average_high_over_time_period_without_overhead
Value :

Name  : max_cpu_usage_rate_average_low_over_time_period
Value :

Name  : max_cpu_usage_rate_average_low_over_time_period_without_overhead
Value :

Name  : max_mem_usage_absolute_average_avg_over_time_period
Value :

Name  : max_mem_usage_absolute_average_avg_over_time_period_without_overhead
Value :

Name  : max_mem_usage_absolute_average_high_over_time_period
Value :

Name  : max_mem_usage_absolute_average_high_over_time_period_without_overhead
Value :

Name  : max_mem_usage_absolute_average_low_over_time_period
Value :

Name  : max_mem_usage_absolute_average_low_over_time_period_without_overhead
Value :

Name  : region_description
Value : Region 0

Name  : region_number
Value : 0

Name  : snapshot_size
Value : 0

Name  : total_managed_registered_vms
Value : 0

Name  : total_managed_unregistered_vms
Value : 0

Name  : total_unmanaged_vms
```

```
Value : 0

Name  : v_debris_percent_of_used
Value : 0.0

Name  : v_disk_percent_of_used
Value : 0.0

Name  : v_free_space_percent_of_total
Value : 0.0

Name  : v_memory_percent_of_used
Value : 0.0

Name  : v_provisioned_percent_of_total
Value : 0.0

Name  : v_snapshot_percent_of_used
Value : 0.0

Name  : v_total_debris_size
Value : 0

Name  : v_total_hosts
Value : 1

Name  : v_total_memory_size
Value : 0

Name  : v_total_provisioned
Value : 0

Name  : v_total_snapshot_size
Value : 0

Name  : v_total_vm_misc_size
Value : 0

Name  : v_total_vms
Value : 0

Name  : v_used_space
Value : 0

Name  : v_used_space_percent_of_total
Value : 0.0

Name  : v_vm_misc_percent_of_used
Value : 0.0

Name  : vm_misc_size
Value : 0

Name  : vm_ram_size
Value : 0
```

Report a bug

2.17. FindEmsByGuid

FindEmsByGuid uses a GUID value to find a management system object.
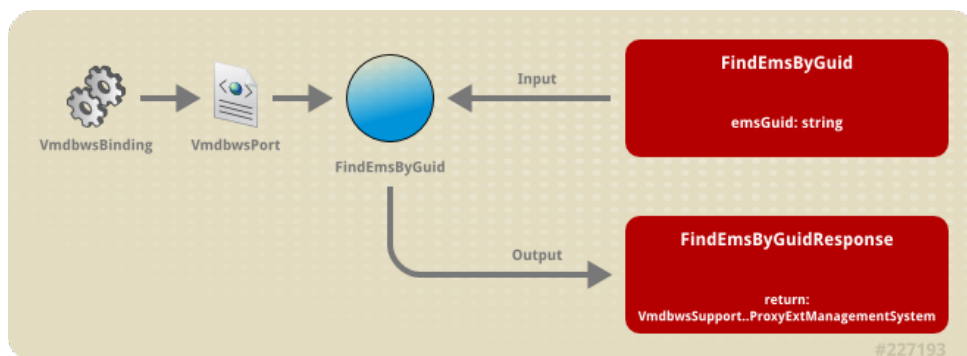
Syntax

▹ *Input:* **[{:emsGuid => :string}]**

▹ *Output:* **[[ProxyExtManagementSystem]]**

Examples

The following examples demonstrate **FindEmsByGuid** usage:

Example 2.32. FindEmsByGuid WSDL

```
<message name="FindEmsByGuid">
  <part name="emsGuid" type="xsd:string" />
</message>
<message name="FindEmsByGuidResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyExtManagementSystem" />
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyExtManagementSystem">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="emstype" type="xsd:string"/>
        <xsd:element name="port" type="xsd:string"/>
        <xsd:element name="hostname" type="xsd:string"/>
        <xsd:element name="ipaddress" type="xsd:string"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="guid" type="xsd:string"/>
        <xsd:element name="zone_id" type="xsd:string"/>
        <xsd:element name="type" type="xsd:string"/>
        <xsd:element name="api_version" type="xsd:string"/>
        <xsd:element name="uid_ems" type="xsd:string"/>
        <xsd:element name="hosts" type="typens:VmdbwsSupport..HostListArray"/>
        <xsd:element name="vms" type="typens:VmdbwsSupport..VmListArray"/>
        <xsd:element name="ws_attributes" type="typens:VmdbwsSupport..WSAttributesArray"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.33. FindEmsByGuid Output (Windows PowerShell)

```
Calling FindEmsByGuid...
Name                                    Value
----                                    -----
aggregate_memory                        48251
total_storages                          3
max_cpu_usage_rate_average_high_over_tim... 8.13731902166194
max_cpu_usage_rate_average_low_over_time... 3.2237920894491707
derived_memory_used_high_over_time_period 13172.316302780524
max_mem_usage_absolute_average_low_over_... 24.998298320564096
max_cpu_usage_rate_average_low_over_time... 3.073792089449171
total_vms_and_templates                 12
max_mem_usage_absolute_average_avg_over_... 27.504166666666677
max_mem_usage_absolute_average_high_over... 28.00003501276926
aggregate_vm_memory                     49152
authentication_status                   Valid
region_number                           0
derived_memory_used_avg_over_time_period 13090.820207175926
total_miq_templates                     2
total_hosts                             1
region_description                      Region 0
emstype_description                     Red Hat Enterprise Virtualization Manager
cpu_usagemhz_rate_average_high_over_time... 1859.4985639212157
aggregate_logical_cpus                  8
zone_name                               default
aggregate_vm_cpus                       15
max_cpu_usage_rate_average_avg_over_time... 5.530555555555555
max_mem_usage_absolute_average_avg_over_... 25.49416666666668
aggregate_physical_cpus                 1
derived_memory_used_low_over_time_period 13009.324111571328
max_mem_usage_absolute_average_low_over_... 27.008298320564094
max_cpu_usage_rate_average_avg_over_time... 5.680555555555555
cpu_usagemhz_rate_average_low_over_time_... 1256.3802808541543
cpu_usagemhz_rate_average_avg_over_time_... 1557.939422387685
total_vms                               10
max_mem_usage_absolute_average_high_over... 25.990035012769262
max_cpu_usage_rate_average_high_over_tim... 7.987319021661939
aggregate_cpu_speed                     19152

...
```

2.18. FindHostByGuid

FindHostByGuid uses a GUID value to find a host object.
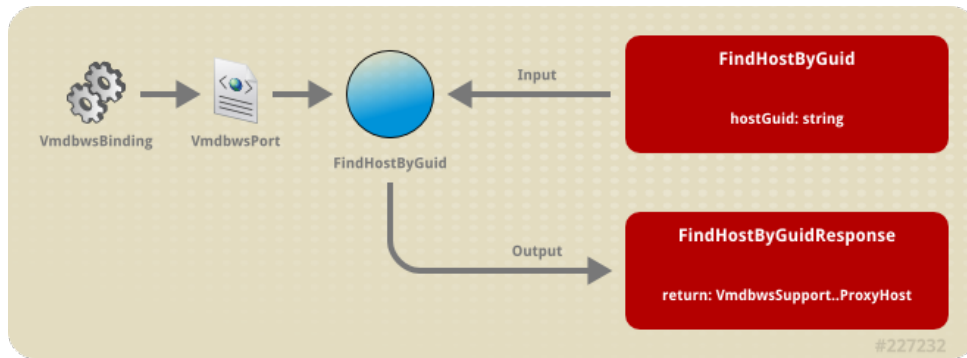
Syntax

- *Input:* **[{:hostGuid => [:string]}]**
- *Output:* **[[ProxyHost]]**

Examples

The following examples demonstrate **FindHostByGuid** usage:

Example 2.34. FindHostByGuid WSDL

```
<message name="FindHostByGuid">
  <part name="hostGuid" type="xsd:string" />
</message>
<message name="FindHostByGuidResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyHost" />
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyHost">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="hostname" type="xsd:string"/>
        <xsd:element name="ipaddress" type="xsd:string"/>
        <xsd:element name="vmm_vendor" type="xsd:string"/>
        <xsd:element name="vmm_version" type="xsd:string"/>
        <xsd:element name="vmm_product" type="xsd:string"/>
        <xsd:element name="vmm_buildnumber" type="xsd:string"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="guid" type="xsd:string"/>
        <xsd:element name="ems_id" type="xsd:string"/>
        <xsd:element name="user_assigned_os" type="xsd:string"/>
        <xsd:element name="power_state" type="xsd:string"/>
        <xsd:element name="smart" type="xsd:double"/>
        <xsd:element name="last_perf_capture_on" type="xsd:dateTime"/>
        <xsd:element name="uid_ems" type="xsd:string"/>
        <xsd:element name="connection_state" type="xsd:string"/>
        <xsd:element name="ssh_permit_root_login" type="xsd:string"/>
        <xsd:element name="ems_ref_obj" type="xsd:string"/>
        <xsd:element name="admin_disabled" type="xsd:boolean"/>
        <xsd:element name="service_tag" type="xsd:string"/>
        <xsd:element name="asset_tag" type="xsd:string"/>
        <xsd:element name="ipmi_address" type="xsd:string"/>
        <xsd:element name="mac_address" type="xsd:string"/>
        <xsd:element name="type" type="xsd:string"/>
        <xsd:element name="failover" type="xsd:boolean"/>
        <xsd:element name="ems_ref" type="xsd:string"/>
        <xsd:element name="vms" type="typens:VmdbwsSupport..VmListArray"/>
        <xsd:element name="ext_management_system" type="typens:VmdbwsSupport..EmsList"/>
        <xsd:element name="ws_attributes" type="typens:VmdbwsSupport..WSAttributesArray"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.35. FindHostByGuid Output (Windows PowerShell)

```
Calling FindHostByGuid...
Name                                           Value
----                                           -----
last_scan_on                                   2012-07-24 21:00:39 -0700
max_cpu_usage_rate_average_high_over_time_period  8.13731902166194
last_drift_state_timestamp                     2012-07-24 21:00:39 -0700
v_total_vms                                    2
enabled_tcp_outbound_ports
max_cpu_usage_rate_average_low_over_time_period  3.2237920894491707
derived_memory_used_high_over_time_period      13172.316302780524
platform                                       linux
max_mem_usage_absolute_average_low_over_time_pe... 24.998298320564096
max_cpu_usage_rate_average_low_over_time_period... 3.073792089449171
enabled_run_level_3_services                   abrt-ccpp|abrt-oops|abrtd|acpid|at...
max_cpu_usage_rate_average_high_over_time_perio... 7.987319021661939
ipmi_enabled                                   false
v_annotation
enabled_udp_outbound_ports
max_mem_usage_absolute_average_high_over_time_p... 28.00003501276926
last_compliance_timestamp
v_owning_datacenter                            Default
region_number                                  0
enabled_run_level_0_services
enabled_tcp_inbound_ports
all_enabled_ports
enabled_run_level_5_services                   abrt-ccpp|abrt-oops|abrtd|acpid|at...
service_names                                  abrt-ccpp|abrt-oops|abrtd|acpid|at...
os_image_name                                  linux_generic
cpu_usagemhz_rate_average_low_over_time_period  1256.3802808541543
enabled_run_level_1_services                   acpid|auditd|cgconfig|crond|cups|i...
region_description                             Region 0
enabled_udp_inbound_ports
v_total_miq_templates                          0
v_owning_cluster                               Pod1
v_owning_folder                                Datacenters
first_drift_state_timestamp                    2012-07-23 13:07:45 -0700
max_cpu_usage_rate_average_avg_over_time_period... 5.530555555555555
enabled_inbound_ports
max_mem_usage_absolute_average_avg_over_time_pe... 25.49416666666668
derived_memory_used_low_over_time_period       13009.324111571328
enabled_outbound_ports
max_mem_usage_absolute_average_low_over_time_pe... 27.008298320564094
max_cpu_usage_rate_average_avg_over_time_period  5.680555555555555
v_total_storages                               3
cpu_usagemhz_rate_average_avg_over_time_period  1557.939422387685
enabled_run_level_4_services                   acpid|atd|auditd|autofs|cgconfig|c...
max_mem_usage_absolute_average_avg_over_time_pe... 27.504166666666677
max_mem_usage_absolute_average_high_over_time_p... 25.990035012769262
derived_memory_used_avg_over_time_period       13090.820207175926
enabled_run_level_6_services
cpu_usagemhz_rate_average_high_over_time_period  1859.4985639212157
authentication_status                          Valid
enabled_run_level_2_services                   acpid|auditd|cgconfig|crond|cups|i...
last_compliance_status
```

Report a bug

2.19. FindHostsByGuid

FindHostsByGuid uses a GUID array to find multiple **Host** objects.
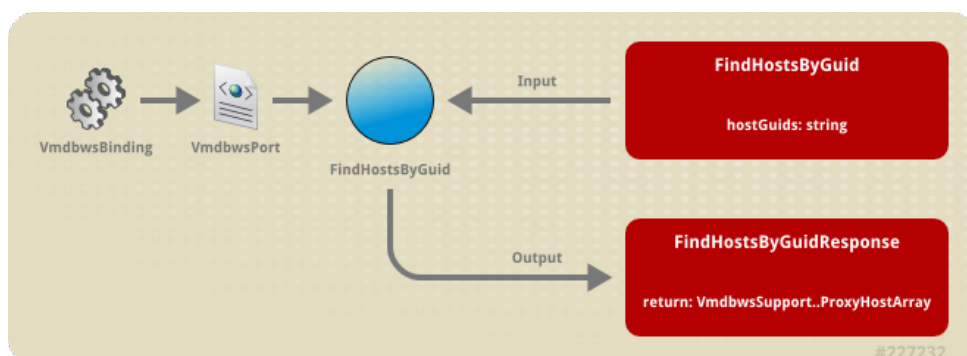
Syntax

▸ *Input:* **[{:hostGuids => [:stringarray]}]**

▸ *Output:* **[[ProxyHost]]**

Examples

The following examples demonstrate **FindHostsByGuid** usage:

Example 2.36. FindHostsByGuid WSDL

```
<message name="FindHostsByGuid">
  <part name="hostGuids" type="typens:StringArray" />
</message>
<message name="FindHostsByGuidResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyHostArray" />
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyHost">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="hostname" type="xsd:string"/>
        <xsd:element name="ipaddress" type="xsd:string"/>
        <xsd:element name="vmm_vendor" type="xsd:string"/>
        <xsd:element name="vmm_version" type="xsd:string"/>
        <xsd:element name="vmm_product" type="xsd:string"/>
        <xsd:element name="vmm_buildnumber" type="xsd:string"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="guid" type="xsd:string"/>
        <xsd:element name="ems_id" type="xsd:string"/>
        <xsd:element name="user_assigned_os" type="xsd:string"/>
        <xsd:element name="power_state" type="xsd:string"/>
        <xsd:element name="smart" type="xsd:double"/>
        <xsd:element name="last_perf_capture_on" type="xsd:dateTime"/>
        <xsd:element name="uid_ems" type="xsd:string"/>
        <xsd:element name="connection_state" type="xsd:string"/>
        <xsd:element name="ssh_permit_root_login" type="xsd:string"/>
        <xsd:element name="ems_ref_obj" type="xsd:string"/>
        <xsd:element name="admin_disabled" type="xsd:boolean"/>
        <xsd:element name="service_tag" type="xsd:string"/>
        <xsd:element name="asset_tag" type="xsd:string"/>
        <xsd:element name="ipmi_address" type="xsd:string"/>
        <xsd:element name="mac_address" type="xsd:string"/>
        <xsd:element name="type" type="xsd:string"/>
        <xsd:element name="failover" type="xsd:boolean"/>
        <xsd:element name="ems_ref" type="xsd:string"/>
        <xsd:element name="vms" type="typens:VmdbwsSupport..VmListArray"/>
        <xsd:element name="ext_management_system" type="typens:VmdbwsSupport..EmsList"/>
        <xsd:element name="ws_attributes" type="typens:VmdbwsSupport..WSAttributesArray"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.37. FindHostsByGuid Output (Windows PowerShell)

```
Calling FindHostByGuid...
Name                                                Value
----                                                -----
last_scan_on                                        2012-07-24 21:00:39 -0700
max_cpu_usage_rate_average_high_over_time_period    8.13731902166194
last_drift_state_timestamp                          2012-07-24 21:00:39 -0700
v_total_vms                                         2
enabled_tcp_outbound_ports
max_cpu_usage_rate_average_low_over_time_period     3.2237920894491707
derived_memory_used_high_over_time_period           13172.316302780524
platform                                            linux
max_mem_usage_absolute_average_low_over_time_period... 24.998298320564096
max_cpu_usage_rate_average_low_over_time_period_wit... 3.073792089449171
enabled_run_level_3_services                        abrt-ccpp|abrt-oops|abrtd|acp...
max_cpu_usage_rate_average_high_over_time_period_wi... 7.987319021661939
ipmi_enabled                                        false
v_annotation
enabled_udp_outbound_ports
max_mem_usage_absolute_average_high_over_time_period 28.00003501276926
last_compliance_timestamp
v_owning_datacenter                                 Default
region_number                                       0
enabled_run_level_0_services
enabled_tcp_inbound_ports
all_enabled_ports
enabled_run_level_5_services                        abrt-ccpp|abrt-oops|abrtd|acp...
service_names                                       abrt-ccpp|abrt-oops|abrtd|acp...
os_image_name                                       linux_generic
cpu_usagemhz_rate_average_low_over_time_period      1256.3802808541543
enabled_run_level_1_services                        acpid|auditd|cgconfig|crond|c...
region_description                                  Region 0
enabled_udp_inbound_ports
v_total_miq_templates                               0
v_owning_cluster                                    Pod1
v_owning_folder                                     Datacenters
first_drift_state_timestamp                         2012-07-23 13:07:45 -0700
max_cpu_usage_rate_average_avg_over_time_period_wit... 5.530555555555555
enabled_inbound_ports
max_mem_usage_absolute_average_avg_over_time_period... 25.49416666666668
derived_memory_used_low_over_time_period            13009.324111571328
enabled_outbound_ports
max_mem_usage_absolute_average_low_over_time_period  27.008298320564094
max_cpu_usage_rate_average_avg_over_time_period      5.680555555555555
v_total_storages                                    3
cpu_usagemhz_rate_average_avg_over_time_period       1557.939422387685
enabled_run_level_4_services                        acpid|atd|auditd|autofs|cgcon...
max_mem_usage_absolute_average_avg_over_time_period  27.504166666666677
max_mem_usage_absolute_average_high_over_time_perio... 25.990035012769262
derived_memory_used_avg_over_time_period            13090.820207175926
enabled_run_level_6_services
cpu_usagemhz_rate_average_high_over_time_period      1859.4985639212157
authentication_status                               Valid
enabled_run_level_2_services                        acpid|auditd|cgconfig|crond|c...
last_compliance_status
```

Report a bug

2.20. FindResourcePoolById

FindResourcePoolById uses an ID value to find a **ResourcePool**.
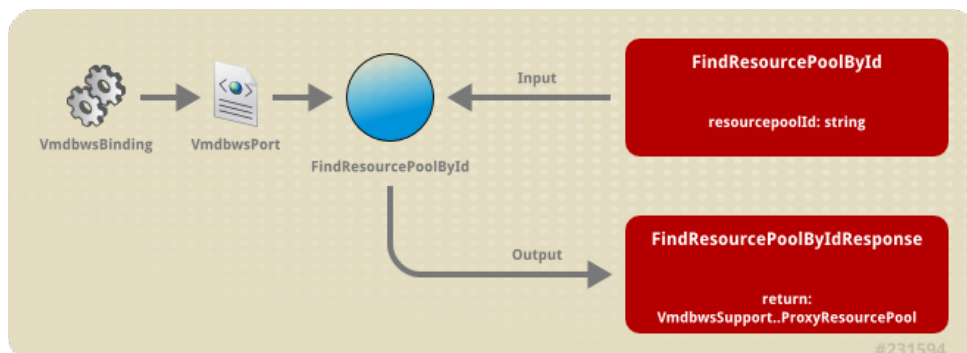
Syntax

▫ *Input:* **[{:ResourcePoolId => [:string]}]**

▫ *Output:* **[[ProxyResourcePool]]**

Examples

The following examples demonstrate **FindResourcePoolById** usage:

Example 2.38. FindResourcePoolById WSDL

```
<message name="FindResourcePoolById">
  <part name="resourcepoolId" type="xsd:string"/>
</message>
<message name="FindResourcePoolByIdResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyResourcePool"/>
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyResourcePool">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="ems_id" type="xsd:string"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="uid_ems" type="xsd:string"/>
        <xsd:element name="memory_reserve" type="xsd:double"/>
        <xsd:element name="memory_reserve_expand" type="xsd:boolean"/>
        <xsd:element name="memory_limit" type="xsd:double"/>
        <xsd:element name="memory_shares" type="xsd:double"/>
        <xsd:element name="memory_shares_level" type="xsd:string"/>
        <xsd:element name="cpu_reserve" type="xsd:double"/>
        <xsd:element name="cpu_reserve_expand" type="xsd:boolean"/>
        <xsd:element name="cpu_limit" type="xsd:double"/>
        <xsd:element name="cpu_shares" type="xsd:double"/>
        <xsd:element name="cpu_shares_level" type="xsd:string"/>
        <xsd:element name="is_default" type="xsd:boolean"/>
        <xsd:element name="ems_ref_obj" type="xsd:string"/>
        <xsd:element name="vapp" type="xsd:boolean"/>
        <xsd:element name="ems_ref" type="xsd:string"/>
        <xsd:element name="vms" type="typens:VmdbwsSupport..VmListArray"/>
        <xsd:element name="ext_management_system" type="typens:VmdbwsSupport..EmsList"/>
        <xsd:element name="ws_attributes" type="typens:VmdbwsSupport..WSAttributesArray"/>
        <xsd:element name="parent_cluster" type="typens:VmdbwsSupport..ClusterList"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.39. FindResourcePoolbyId Output (Windows PowerShell)

```
Returned Attributes for this ResourcePool:


Name  : aggregate_cpu_speed
Value : 51048

Name  : aggregate_logical_cpus
Value : 24

Name  : aggregate_memory
Value : 172002

Name  : aggregate_physical_cpus
Value : 6

Name  : aggregate_vm_cpus
Value : 215

Name  : aggregate_vm_memory
Value : 470800

Name  : region_description
Value : Region 0

Name  : region_number
Value : 0

Name  : v_direct_miq_templates
Value : 0

Name  : v_direct_vms
Value : 9

Name  : v_parent_cluster
Value : Testing-Production Cluster

Name  : v_parent_datacenter
Value : Prod

Name  : v_parent_folder
Value : Datacenters

Name  : v_parent_host
Value :

Name  : v_parent_resource_pool
Value :

Name  : v_total_miq_templates
Value : 0

Name  : v_total_vms
Value : 128
```

Report a bug

2.21. FindResourcePoolsById

FindResourcePoolsById uses ID values to find multiple **ResourcePool** objects.
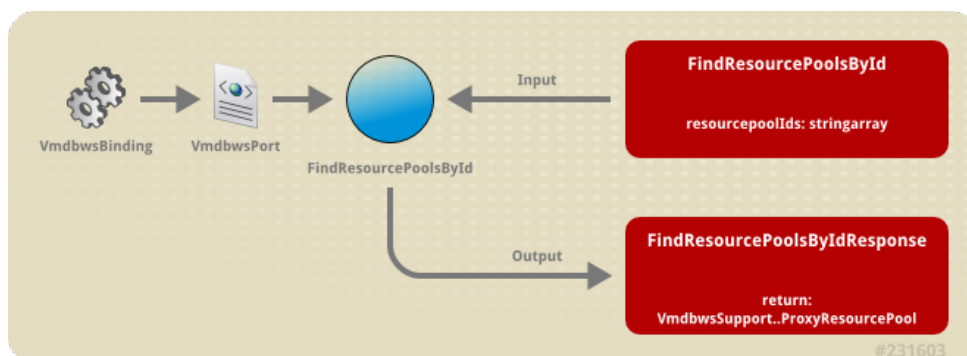
Syntax

› *Input:* **[{:ResourcePoolIds => [:string]}]**

› *Output:* **[[ProxyResourcePool]]**

Examples

The following examples demonstrate **FindResourcePoolsById** usage:

Example 2.40. FindResourcePoolByGuid WSDL

```
<message name="FindResourcePoolsById">
  <part name="resourcepoolIds" type="typens:StringArray"/>
</message>
<message name="FindResourcePoolsByIdResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyResourcePoolArray"/>
</message>

    <xsd:complexType name="VmdbwsSupport..ProxyResourcePool">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="ems_id" type="xsd:string"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="uid_ems" type="xsd:string"/>
        <xsd:element name="memory_reserve" type="xsd:double"/>
        <xsd:element name="memory_reserve_expand" type="xsd:boolean"/>
        <xsd:element name="memory_limit" type="xsd:double"/>
        <xsd:element name="memory_shares" type="xsd:double"/>
        <xsd:element name="memory_shares_level" type="xsd:string"/>
        <xsd:element name="cpu_reserve" type="xsd:double"/>
        <xsd:element name="cpu_reserve_expand" type="xsd:boolean"/>
        <xsd:element name="cpu_limit" type="xsd:double"/>
        <xsd:element name="cpu_shares" type="xsd:double"/>
        <xsd:element name="cpu_shares_level" type="xsd:string"/>
        <xsd:element name="is_default" type="xsd:boolean"/>
        <xsd:element name="ems_ref_obj" type="xsd:string"/>
        <xsd:element name="vapp" type="xsd:boolean"/>
        <xsd:element name="ems_ref" type="xsd:string"/>
        <xsd:element name="vms" type="typens:VmdbwsSupport..VmListArray"/>
        <xsd:element name="ext_management_system" type="typens:VmdbwsSupport..EmsList"/>
        <xsd:element name="ws_attributes" type="typens:VmdbwsSupport..WSAttributesArray"/>
        <xsd:element name="parent_cluster" type="typens:VmdbwsSupport..ClusterList"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.41. FindResourcePoolbyId Output (Windows PowerShell)

```
Returned Attributes for this ResourcePool:


Name  : aggregate_cpu_speed
Value : 51048

Name  : aggregate_logical_cpus
Value : 24

Name  : aggregate_memory
Value : 172002

Name  : aggregate_physical_cpus
Value : 6

Name  : aggregate_vm_cpus
Value : 215

Name  : aggregate_vm_memory
Value : 470800

Name  : region_description
Value : Region 0

Name  : region_number
Value : 0

Name  : v_direct_miq_templates
Value : 0

Name  : v_direct_vms
Value : 9

Name  : v_parent_cluster
Value : Testing-Production Cluster

Name  : v_parent_datacenter
Value : Prod

Name  : v_parent_folder
Value : Datacenters

Name  : v_parent_host
Value :

Name  : v_parent_resource_pool
Value :

Name  : v_total_miq_templates
Value : 0

Name  : v_total_vms
Value : 128
```

Report a bug

2.22. FindVmByGuid

FindVmByGuid uses a GUID value to find a VM object.
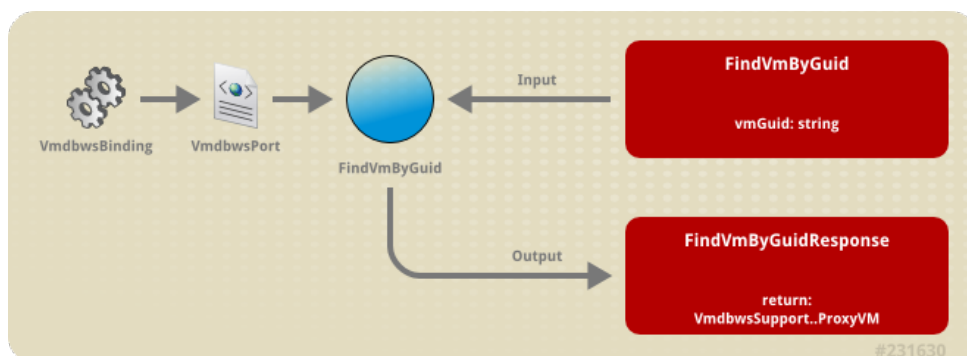
Syntax

» *Input:* **[{:vmGuid => :string}]**
» *Output:* **[[ProxyVm]]**

Examples

The following examples demonstrate **FindVmByGuid** usage:

» *Input:* **[{:vmGuid => :string}]**
» *Output:* **[[ProxyVm]]**

Examples

Example 2.42. FindVmByGuid WSDL

```xml
<message name="FindVmByGuid">
  <part name="vmGuid" type="xsd:string" />
</message>
<message name="FindVmByGuidResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyVm" />
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyVm">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="vendor" type="xsd:string"/>
        <xsd:element name="format" type="xsd:string"/>
        <xsd:element name="version" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="description" type="xsd:string"/>
        <xsd:element name="location" type="xsd:string"/>
        <xsd:element name="config_xml" type="xsd:string"/>
        <xsd:element name="autostart" type="xsd:string"/>
        <xsd:element name="host_id" type="xsd:string"/>
        <xsd:element name="last_sync_on" type="xsd:dateTime"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="storage_id" type="xsd:string"/>
        <xsd:element name="guid" type="xsd:string"/>
        <xsd:element name="ems_id" type="xsd:string"/>
        <xsd:element name="last_scan_on" type="xsd:dateTime"/>
        <xsd:element name="last_scan_attempt_on" type="xsd:dateTime"/>
        <xsd:element name="uid_ems" type="xsd:string"/>
        <xsd:element name="retires_on" type="xsd:date"/>
        <xsd:element name="retired" type="xsd:boolean"/>
        <xsd:element name="boot_time" type="xsd:dateTime"/>
        <xsd:element name="tools_status" type="xsd:string"/>
        <xsd:element name="standby_action" type="xsd:string"/>
        <xsd:element name="power_state" type="xsd:string"/>
        <xsd:element name="state_changed_on" type="xsd:dateTime"/>
        <xsd:element name="previous_state" type="xsd:string"/>
        <xsd:element name="connection_state" type="xsd:string"/>
        <xsd:element name="last_perf_capture_on" type="xsd:dateTime"/>
        <xsd:element name="blackbox_exists" type="xsd:boolean"/>
        <xsd:element name="blackbox_validated" type="xsd:boolean"/>
        <xsd:element name="registered" type="xsd:boolean"/>
        <xsd:element name="busy" type="xsd:boolean"/>
        <xsd:element name="smart" type="xsd:boolean"/>
        <xsd:element name="memory_reserve" type="xsd:double"/>
        <xsd:element name="memory_reserve_expand" type="xsd:boolean"/>
        <xsd:element name="memory_limit" type="xsd:double"/>
        <xsd:element name="memory_shares" type="xsd:double"/>
        <xsd:element name="memory_shares_level" type="xsd:string"/>
        <xsd:element name="cpu_reserve" type="xsd:double"/>
        <xsd:element name="cpu_reserve_expand" type="xsd:boolean"/>
        <xsd:element name="cpu_limit" type="xsd:double"/>
        <xsd:element name="cpu_shares" type="xsd:double"/>
        <xsd:element name="cpu_shares_level" type="xsd:string"/>
        <xsd:element name="cpu_affinity" type="xsd:string"/>
        <xsd:element name="ems_created_on" type="xsd:dateTime"/>
        <xsd:element name="template" type="xsd:boolean"/>
        <xsd:element name="evm_owner_id" type="xsd:string"/>
        <xsd:element name="ems_ref_obj" type="xsd:string"/>
        <xsd:element name="miq_group_id" type="xsd:string"/>
        <xsd:element name="vdi" type="xsd:boolean"/>
        <xsd:element name="linked_clone" type="xsd:boolean"/>
        <xsd:element name="fault_tolerance" type="xsd:boolean"/>
        <xsd:element name="type" type="xsd:string"/>
        <xsd:element name="ems_ref" type="xsd:string"/>
        <xsd:element name="ipaddresses" type="typens:StringArray"/>
        <xsd:element name="hostnames" type="typens:StringArray"/>
        <xsd:element name="custom_attributes" type="typens:VmdbwsSupport..ProxyCustomAttributeArray"/>
        <xsd:element name="host" type="typens:VmdbwsSupport..HostList"/>
        <xsd:element name="ext_management_system" type="typens:VmdbwsSupport..EmsList"/>
        <xsd:element name="ws_attributes" type="typens:VmdbwsSupport..WSAttributesArray"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.43. FindVmByGuid Output (Windows PowerShell)

```
Calling FindVmByGuid...
Name                                                 Value
----                                                 -----
disk_4_disk_type
conservative_vcpus_recommended_change                -1
recommended_vcpus                                    1
max_cpu_usage_rate_average_high_over_time_period     44.02290026709669
parent_blue_folder_3_name
aggressive_mem_recommended_change_pct                68.9
disk_6_disk_type
conservative_recommended_vcpus                       3
disk_4_size_on_disk
disks_aligned                                        False
paravirtualization
mem_cpu                                              6144
v_owning_cluster                                     Pod1
vmsafe_agent_address
moderate_mem_recommended_change_pct                  44.8
disk_1_size_on_disk
num_hard_disks                                       5
disk_5_partitions_aligned                            False
aggressive_vcpus_recommended_change_pct              50.0
evm_owner_email
moderate_recommended_mem                             3392
disk_7_mode
evm_owner_name
vdi_user_home_path
v_total_snapshots                                    1
last_compliance_status
vmsafe_immutable_vm
vdi_connection_session_type
cpu_usagemhz_rate_average_avg_over_time_period       651.6342140812435
orphaned                                             false
disk_size                                            0
disk_7_partitions_aligned
used_storage_by_state                                6442450944
vdi_user_name
disk_3_size
max_cpu_usage_rate_average_low_over_time_perio...    5.529877510681107
owned_by_current_user                                false
disk_8_size
vdi_endpoint_mac_address
recommended_mem                                      1912
aggressive_vcpus_recommended_change                  1
region_description                                   Region 0
disk_5_size_on_disk
evm_owner_userid
vdi_user_appdata
disk_9_size_on_disk
v_snapshot_newest_total_size
max_cpu_usage_rate_average_max_over_time_period      100.0
moderate_vcpus_recommended_change_pct                50.0
v_snapshot_newest_description                        _ActiveImage_PRDv5EVM002_Tue Jun 19 17:13:11 EDT 2012
moderate_mem_recommended_change                      2752
disk_6_size
allocated_disk_storage                               0
last_drift_state_timestamp                           2012-07-24 20:12:32 -0700
region_number                                        0
disk_1_mode
disk_7_disk_type
disk_5_used_percent_of_provisioned                   0.0
aggressive_recommended_mem                           1912
disk_8_mode
v_pct_free_disk_space
disk_6_partitions_aligned
aggressive_mem_recommended_change                    4232
disk_9_size
disk_7_size_on_disk
max_cpu_usage_rate_average_avg_over_time_period      24.776388888888896
disk_9_disk_type
disk_1_partitions_aligned                            True
num_cpu                                              2
disk_7_used_percent_of_provisioned
derived_memory_used_max_over_time_period             3234.03377777778
vmsafe_fail_open
disk_3_disk_type
moderate_vcpus_recommended_change                    1
owned_by_current_ldap_group                          false
derived_memory_used_low_over_time_period             232.8316855769765
disk_2_disk_type
disk_2_partitions_aligned                            True
vdi_connection_dns_name
```

```
disk_5_size
disk_8_used_percent_of_provisioned
max_mem_usage_absolute_average_high_over_time_...   55.178755912966935
disk_4_size
v_host_vmm_product                                  RHEV-H
parent_blue_folder_7_name
disk_9_used_percent_of_provisioned
disk_1_used_percent_of_provisioned                  0.0
vdi_connection_session_name
conservative_mem_recommended_change_pct             4.9
v_owning_folder                                     Datacenters
disk_8_disk_type
thin_provisioned                                    false
overallocated_vcpus_pct                             50.0
uncommitted_storage                                 0
disk_8_size_on_disk
debris_size                                         0
num_disks                                           5
conservative_vcpus_recommended_change_pct           -50.0
vm_misc_size                                        0
max_mem_usage_absolute_average_avg_over_time_p...   31.084722222222226
max_mem_usage_absolute_average_avg_over_time_p...   31.084722222222226
vdi_user_dns_domain
v_datastore_path                                    MTCRHDS001/17830c59-6ae4-420f-af5c-f6898c6c5b27.ovf
vdi_endpoint_type
vdi_user_home_share
os_image_name                                       linux_centos
moderate_recommended_vcpus                          1
parent_blue_folder_1_name                           Default
has_rdm_disk                                        false
vdi_available                                       false
disk_6_used_percent_of_provisioned
used_disk_storage                                   0
vdi_connection_logon_server
ipaddresses                                         10.10.1.211
parent_blue_folder_4_name
derived_memory_used_high_over_time_period           2522.6954255341334
conservative_recommended_mem                        5840
disk_9_mode
storage_name                                        MTCRHDS001
v_owning_folder_path                                Datacenters
is_evm_appliance                                    false
max_cpu_usage_rate_average_high_over_time_peri...   44.02290026709669
vdi_connection_name
v_snapshot_newest_name                              Active Image
ems_cluster_name                                    Pod1
v_snapshot_newest_timestamp                         2012-06-19 14:04:47 -0700
disk_2_size_on_disk
max_mem_usage_absolute_average_max_over_time_p...   95.0
vmsafe_timeout_ms
disk_2_mode
v_snapshot_oldest_description                       _ActiveImage_PRDv5EVM002_Tue Jun 19 17:13:11 EDT 2012
first_drift_state_timestamp                         2012-07-24 20:12:32 -0700
vm_ram_size                                         0
max_mem_usage_absolute_average_high_over_time_...   55.178755912966935
vdi_endpoint_name
vmsafe_enable
parent_blue_folder_2_name
parent_blue_folder_5_name
disk_3_mode
disk_1_disk_type
disconnected                                        false
vdi_user_logon_time
v_pct_used_disk_space
disk_4_mode
v_owning_datacenter                                 Default
disk_1_size
disk_9_partitions_aligned
hostnames
disk_4_partitions_aligned                           True
disk_6_size_on_disk
cpu_usagemhz_rate_average_low_over_time_period      366.26730508150735
max_mem_usage_absolute_average_low_over_time_p...   6.99068853147752
disk_8_partitions_aligned
parent_blue_folder_6_name
snapshot_size                                       0
disk_5_disk_type
disk_2_used_percent_of_provisioned                  0.0
parent_blue_folder_9_name
platform                                            linux
provisioned_storage                                 6442450944
disk_3_used_percent_of_provisioned                  0.0
```

```
vdi_connection_remote_ip_address
disk_3_size_on_disk
max_cpu_usage_rate_average_avg_over_time_perio... 24.776388888888896
cpu_usagemhz_rate_average_high_over_time_period  937.0011230809796
derived_memory_used_avg_over_time_period         1377.7635555555548
last_compliance_timestamp
disk_6_mode
vdi_user_domain
v_snapshot_oldest_name                           Active Image
has_active_vdi_session                           false
host_name                                        mtcrhel62001.miq.net
v_owning_blue_folder_path                        Datacenters/Default/vm
conservative_mem_recommended_change              304
v_owning_resource_pool                           Default for Cluster Pod1
v_snapshot_oldest_timestamp                      2012-06-19 14:04:47 -0700
disk_7_size
owning_ldap_group
v_annotation                                     Production V5 EVM appliance (iSCSI scanning)
cpu_usagemhz_rate_average_max_over_time_period   1053.93493333333
max_cpu_usage_rate_average_low_over_time_period  5.529877510681107
v_is_a_template                                  False
max_mem_usage_absolute_average_low_over_time_p... 6.99068853147752
disk_5_mode
vdi_connection_url
parent_blue_folder_8_name
aggressive_recommended_vcpus                     1
v_snapshot_oldest_total_size
disk_4_used_percent_of_provisioned               0.0
archived                                         false
vdi_user_home_drive
disk_2_size
mac_addresses                                    00:1a:4a:0a:01:00
vmsafe_agent_port
v_owning_blue_folder                             vm
vdi_endpoint_ip_address
disk_3_partitions_aligned                        True
used_storage                                     6442450944
overallocated_mem_pct                            68.9
```

Report a bug

2.23. FindVmsByGuid

FindVmsByGuid finds VM objects by GUID.
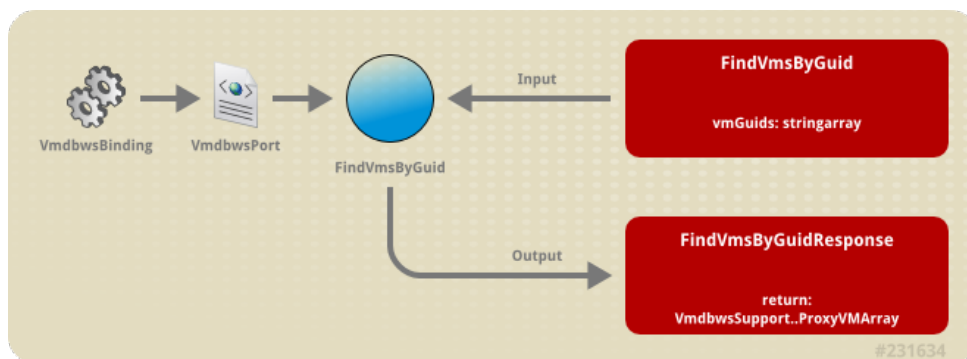
Syntax

- *Input:* **[{:vmGuids => :string}]**
- *Output:* **[[ProxyVm]]**

Examples

The following examples demonstrate **FindVmsByGuid** usage:

Example 2.44. FindVmsByGuid WSDL

```
<message name="FindVmsByGuid">
  <part name="vmGuids" type="typens:StringArray" />
</message>
<message name="FindVmsByGuidResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyVmArray" />
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyVm">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="vendor" type="xsd:string"/>
        <xsd:element name="format" type="xsd:string"/>
        <xsd:element name="version" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="description" type="xsd:string"/>
        <xsd:element name="location" type="xsd:string"/>
        <xsd:element name="config_xml" type="xsd:string"/>
        <xsd:element name="autostart" type="xsd:string"/>
        <xsd:element name="host_id" type="xsd:string"/>
        <xsd:element name="last_sync_on" type="xsd:dateTime"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="storage_id" type="xsd:string"/>
        <xsd:element name="guid" type="xsd:string"/>
        <xsd:element name="ems_id" type="xsd:string"/>
        <xsd:element name="last_scan_on" type="xsd:dateTime"/>
        <xsd:element name="last_scan_attempt_on" type="xsd:dateTime"/>
        <xsd:element name="uid_ems" type="xsd:string"/>
        <xsd:element name="retires_on" type="xsd:date"/>
        <xsd:element name="retired" type="xsd:boolean"/>
        <xsd:element name="boot_time" type="xsd:dateTime"/>
        <xsd:element name="tools_status" type="xsd:string"/>
        <xsd:element name="standby_action" type="xsd:string"/>
        <xsd:element name="power_state" type="xsd:string"/>
        <xsd:element name="state_changed_on" type="xsd:dateTime"/>
        <xsd:element name="previous_state" type="xsd:string"/>
        <xsd:element name="connection_state" type="xsd:string"/>
        <xsd:element name="last_perf_capture_on" type="xsd:dateTime"/>
        <xsd:element name="blackbox_exists" type="xsd:boolean"/>
        <xsd:element name="blackbox_validated" type="xsd:boolean"/>
        <xsd:element name="registered" type="xsd:boolean"/>
        <xsd:element name="busy" type="xsd:boolean"/>
        <xsd:element name="smart" type="xsd:boolean"/>
        <xsd:element name="memory_reserve" type="xsd:double"/>
        <xsd:element name="memory_reserve_expand" type="xsd:boolean"/>
        <xsd:element name="memory_limit" type="xsd:double"/>
        <xsd:element name="memory_shares" type="xsd:double"/>
        <xsd:element name="memory_shares_level" type="xsd:string"/>
        <xsd:element name="cpu_reserve" type="xsd:double"/>
        <xsd:element name="cpu_reserve_expand" type="xsd:boolean"/>
        <xsd:element name="cpu_limit" type="xsd:double"/>
        <xsd:element name="cpu_shares" type="xsd:double"/>
        <xsd:element name="cpu_shares_level" type="xsd:string"/>
        <xsd:element name="cpu_affinity" type="xsd:string"/>
        <xsd:element name="ems_created_on" type="xsd:dateTime"/>
        <xsd:element name="template" type="xsd:boolean"/>
        <xsd:element name="evm_owner_id" type="xsd:string"/>
        <xsd:element name="ems_ref_obj" type="xsd:string"/>
        <xsd:element name="miq_group_id" type="xsd:string"/>
        <xsd:element name="vdi" type="xsd:boolean"/>
        <xsd:element name="linked_clone" type="xsd:boolean"/>
        <xsd:element name="fault_tolerance" type="xsd:boolean"/>
        <xsd:element name="type" type="xsd:string"/>
        <xsd:element name="ems_ref" type="xsd:string"/>
        <xsd:element name="ipaddresses" type="typens:StringArray"/>
        <xsd:element name="hostnames" type="typens:StringArray"/>
        <xsd:element name="custom_attributes" type="typens:VmdbwsSupport..ProxyCustomAttributeArray"/>
        <xsd:element name="host" type="typens:VmdbwsSupport..HostList"/>
        <xsd:element name="ext_management_system" type="typens:VmdbwsSupport..EmsList"/>
        <xsd:element name="ws_attributes" type="typens:VmdbwsSupport..WSAttributesArray"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.45. FindVmsByGuid Output (Windows PowerShell)

```
Calling FindVmsByGuid...
Name                                              Value
----                                              -----
disk_4_disk_type
conservative_vcpus_recommended_change             -1
recommended_vcpus                                 1
max_cpu_usage_rate_average_high_over_time_period  44.02290026709669
parent_blue_folder_3_name
aggressive_mem_recommended_change_pct             68.9
disk_6_disk_type
conservative_recommended_vcpus                    3
disk_4_size_on_disk
disks_aligned                                     False
paravirtualization
mem_cpu                                           6144
v_owning_cluster                                  Pod1
vmsafe_agent_address
moderate_mem_recommended_change_pct               44.8
disk_1_size_on_disk
num_hard_disks                                    5
disk_5_partitions_aligned                         False
aggressive_vcpus_recommended_change_pct           50.0
evm_owner_email
moderate_recommended_mem                          3392
disk_7_mode
evm_owner_name
vdi_user_home_path
v_total_snapshots                                 1
last_compliance_status
vmsafe_immutable_vm
vdi_connection_session_type
cpu_usagemhz_rate_average_avg_over_time_period    651.6342140812435
orphaned                                          false
disk_size                                         0
disk_7_partitions_aligned
used_storage_by_state                             6442450944
vdi_user_name
disk_3_size
max_cpu_usage_rate_average_low_over_time_perio... 5.529877510681107
owned_by_current_user                             false
disk_8_size
vdi_endpoint_mac_address
recommended_mem                                   1912
aggressive_vcpus_recommended_change               1
region_description                                Region 0
disk_5_size_on_disk
evm_owner_userid
vdi_user_appdata
disk_9_size_on_disk
v_snapshot_newest_total_size
max_cpu_usage_rate_average_max_over_time_period   100.0
moderate_vcpus_recommended_change_pct             50.0
v_snapshot_newest_description                     _ActiveImage_PRDv5EVM002_Tue Jun 19 17:13:11 EDT 2012
moderate_mem_recommended_change                   2752
disk_6_size
allocated_disk_storage                            0
last_drift_state_timestamp                        2012-07-24 20:12:32 -0700
region_number                                     0
disk_1_mode
disk_7_disk_type
disk_5_used_percent_of_provisioned                0.0
aggressive_recommended_mem                        1912
disk_8_mode
v_pct_free_disk_space
disk_6_partitions_aligned
aggressive_mem_recommended_change                 4232
disk_9_size
disk_7_size_on_disk
max_cpu_usage_rate_average_avg_over_time_period   24.776388888888896
disk_9_disk_type
disk_1_partitions_aligned                         True
num_cpu                                           2
disk_7_used_percent_of_provisioned
derived_memory_used_max_over_time_period          3234.03377777778
vmsafe_fail_open
disk_3_disk_type
moderate_vcpus_recommended_change                 1
owned_by_current_ldap_group                       false
derived_memory_used_low_over_time_period          232.8316855769765
disk_2_disk_type
disk_2_partitions_aligned                         True
vdi_connection_dns_name
```

```
disk_5_size
disk_8_used_percent_of_provisioned
max_mem_usage_absolute_average_high_over_time_...  55.178755912966935
disk_4_size
v_host_vmm_product                                 RHEV-H
parent_blue_folder_7_name
disk_9_used_percent_of_provisioned
disk_1_used_percent_of_provisioned                 0.0
vdi_connection_session_name
conservative_mem_recommended_change_pct            4.9
v_owning_folder                                    Datacenters
disk_8_disk_type
thin_provisioned                                   false
overallocated_vcpus_pct                            50.0
uncommitted_storage                                0
disk_8_size_on_disk
debris_size                                        0
num_disks                                          5
conservative_vcpus_recommended_change_pct          -50.0
vm_misc_size                                       0
max_mem_usage_absolute_average_avg_over_time_p...  31.084722222222226
max_mem_usage_absolute_average_avg_over_time_p...  31.084722222222226
vdi_user_dns_domain
v_datastore_path                                   MTCRHDS001/17830c59-6ae4-420f-af5c-f6898c6c5b27.ovf
vdi_endpoint_type
vdi_user_home_share
os_image_name                                      linux_centos
moderate_recommended_vcpus                         1
parent_blue_folder_1_name                          Default
has_rdm_disk                                       false
vdi_available                                      false
disk_6_used_percent_of_provisioned
used_disk_storage                                  0
vdi_connection_logon_server
ipaddresses                                        10.10.1.211
parent_blue_folder_4_name
derived_memory_used_high_over_time_period          2522.6954255341334
conservative_recommended_mem                       5840
disk_9_mode
storage_name                                       MTCRHDS001
v_owning_folder_path                               Datacenters
is_evm_appliance                                   false
max_cpu_usage_rate_average_high_over_time_peri...  44.02290026709669
vdi_connection_name
v_snapshot_newest_name                             Active Image
ems_cluster_name                                   Pod1
v_snapshot_newest_timestamp                        2012-06-19 14:04:47 -0700
disk_2_size_on_disk
max_mem_usage_absolute_average_max_over_time_p...  95.0
vmsafe_timeout_ms
disk_2_mode
v_snapshot_oldest_description                      _ActiveImage_PRDv5EVM002_Tue Jun 19 17:13:11 EDT 2012
first_drift_state_timestamp                        2012-07-24 20:12:32 -0700
vm_ram_size                                        0
max_mem_usage_absolute_average_high_over_time_...  55.178755912966935
vdi_endpoint_name
vmsafe_enable
parent_blue_folder_2_name
parent_blue_folder_5_name
disk_3_mode
disk_1_disk_type
disconnected                                        false
vdi_user_logon_time
v_pct_used_disk_space
disk_4_mode
v_owning_datacenter                                Default
disk_1_size
disk_9_partitions_aligned
hostnames
disk_4_partitions_aligned                          True
disk_6_size_on_disk
cpu_usagemhz_rate_average_low_over_time_period     366.26730508150735
max_mem_usage_absolute_average_low_over_time_p...  6.99068853147752
disk_8_partitions_aligned
parent_blue_folder_6_name
snapshot_size                                      0
disk_5_disk_type
disk_2_used_percent_of_provisioned                 0.0
parent_blue_folder_9_name
platform                                           linux
provisioned_storage                                6442450944
disk_3_used_percent_of_provisioned                 0.0
```

```
vdi_connection_remote_ip_address
disk_3_size_on_disk
max_cpu_usage_rate_average_avg_over_time_perio... 24.776388888888896
cpu_usagemhz_rate_average_high_over_time_perio... 937.0011230809796
derived_memory_used_avg_over_time_period          1377.7635555555548
last_compliance_timestamp
disk_6_mode
vdi_user_domain
v_snapshot_oldest_name                            Active Image
has_active_vdi_session                            false
host_name                                         mtcrhel62001.miq.net
v_owning_blue_folder_path                         Datacenters/Default/vm
conservative_mem_recommended_change               304
v_owning_resource_pool                            Default for Cluster Pod1
v_snapshot_oldest_timestamp                       2012-06-19 14:04:47 -0700
disk_7_size
owning_ldap_group
v_annotation                                      Production V5 EVM appliance (iSCSI scanning)
cpu_usagemhz_rate_average_max_over_time_period    1053.93493333333
max_cpu_usage_rate_average_low_over_time_period   5.529877510681107
v_is_a_template                                   False
max_mem_usage_absolute_average_low_over_time_p... 6.99068853147752
disk_5_mode
vdi_connection_url
parent_blue_folder_8_name
aggressive_recommended_vcpus                      1
v_snapshot_oldest_total_size
disk_4_used_percent_of_provisioned                0.0
archived                                          false
vdi_user_home_drive
disk_2_size
mac_addresses                                     00:1a:4a:0a:01:00
vmsafe_agent_port
v_owning_blue_folder                              vm
vdi_endpoint_ip_address
disk_3_partitions_aligned                         True
used_storage                                      6442450944
overallocated_mem_pct
```

Report a bug

2.24. GetClusterList

GetClusterList returns all clusters as list objects.
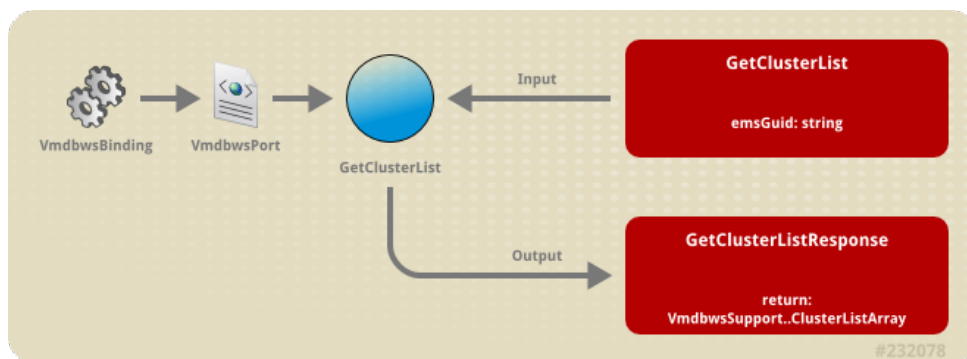
Syntax

- *Input:* **[{:emsGuid => :string}]**
- *Output:* **ClusterList** as an array. List object contains **name** and **ID** properties.

Examples

The following examples demonstrate **GetClusterList** usage:

Example 2.46. GetClusterList WSDL

```
<message name="GetClusterList">
  <part name="emsGuid" type="xsd:string"/>
</message>
<message name="GetClusterListResponse">
  <part name="return" type="typens:VmdbwsSupport..ClusterListArray"/>
</message>

    <xsd:complexType name="VmdbwsSupport..ClusterList">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.47. GetClusterList Output (Windows PowerShell)

```
Clusters:


id   : 1
name : Testing-Production Cluster

id   : 2
name : Development-Production Cluster
```

Report a bug

2.25. GetClustersByList

GetClustersByList returns an array of cluster objects. The input is usually the object returned from the **GetClusterList** method or from the **Cluster** property of a **ProxyExtManagementSystem** object.
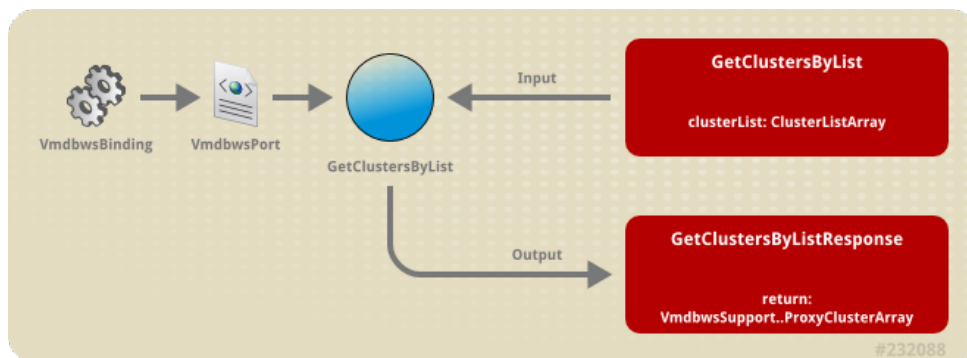
Syntax

» *Input:* **[{:ClusterList => [ClusterList]}]**

» *Output:* **ProxyCluster** as an array.

Examples

The following examples demonstrate **GetClustersByList** usage:

Example 2.48. GetClustersByList WSDL

```
<message name="GetClustersByList">
  <part name="ClusterList" type="typens:VmdbwsSupport..ClusterListArray"/>
</message>
<message name="GetClustersByListResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyClusterArray"/>
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyCluster">
      <xsd:all>
        <xsd:element name="ext_management_system" type="typens:VmdbwsSupport..EmsList"/>
        <xsd:element name="hosts" type="typens:VmdbwsSupport..HostListArray"/>
        <xsd:element name="resource_pools" type="typens:VmdbwsSupport..ResourcePoolListArray"/>
        <xsd:element name="default_resource_pool" type="typens:VmdbwsSupport..ResourcePoolList"/>
        <xsd:element name="vms" type="typens:VmdbwsSupport..VmListArray"/>
        <xsd:element name="ws_attributes" type="typens:VmdbwsSupport..WSAttributesArray"/>
        <xsd:element name="storages" type="typens:VmdbwsSupport..StorageListArray"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.49. GetClustersByList Output (Windows PowerShell)

```
Returned Attributes for this Cluster:

Name  : aggregate_cpu_speed
Value : 51048

Name  : aggregate_logical_cpus
Value : 24

Name  : aggregate_memory
Value : 172002

Name  : aggregate_physical_cpus
Value : 6

Name  : aggregate_vm_cpus
Value : 220

Name  : aggregate_vm_memory
Value : 480528

Name  : capacity_profile_1_available_host_memory
Value : 161777451008

Name  : capacity_profile_1_available_host_vcpu
Value : 24

Name  : capacity_profile_1_memory_commitment_ratio
Value : 1.2

Name  : capacity_profile_1_memory_maximum
Value :

Name  : capacity_profile_1_memory_method
Value : Average of Allocated Memory

Name  : capacity_profile_1_memory_minimum
Value :

Name  : capacity_profile_1_memory_per_vm
Value : 3936485376.0

Name  : capacity_profile_1_memory_per_vm_with_min_max
Value : 3936485376.0

Name  : capacity_profile_1_projected_vm_count_based_on_all
Value : 28

Name  : capacity_profile_1_projected_vm_count_based_on_memory
Value : 50

Name  : capacity_profile_1_projected_vm_count_based_on_vcpu
Value : 28

Name  : capacity_profile_1_remaining_host_memory
Value : -309737186918.4

Name  : capacity_profile_1_remaining_host_vcpu
Value : -172.0

Name  : capacity_profile_1_remaining_vm_count_based_on_all
Value : -100

Name  : capacity_profile_1_remaining_vm_count_based_on_memory
Value : -78

Name  : capacity_profile_1_remaining_vm_count_based_on_vcpu
Value : -100

Name  : capacity_profile_1_vcpu_commitment_ratio
Value : 2.0

Name  : capacity_profile_1_vcpu_maximum
Value :

Name  : capacity_profile_1_vcpu_method
Value : Average of Allocated vCPU

Name  : capacity_profile_1_vcpu_minimum
Value :

Name  : capacity_profile_1_vcpu_per_vm
Value : 1.71875
```

```
Name  : capacity_profile_1_vcpu_per_vm_with_min_max
Value : 1.71875

Name  : capacity_profile_2_available_host_memory
Value : 161777451008

Name  : capacity_profile_2_available_host_vcpu
Value : 45622

Name  : capacity_profile_2_memory_commitment_ratio
Value : 1.0

Name  : capacity_profile_2_memory_maximum
Value :

Name  : capacity_profile_2_memory_method
Value : High Normal Range of Allocated Memory

Name  : capacity_profile_2_memory_minimum
Value :

Name  : capacity_profile_2_memory_per_vm
Value : 1263886336.0

Name  : capacity_profile_2_memory_per_vm_with_min_max
Value : 1263886336.0

Name  : capacity_profile_2_projected_vm_count_based_on_all
Value : 128

Name  : capacity_profile_2_projected_vm_count_based_on_memory
Value : 128

Name  : capacity_profile_2_projected_vm_count_based_on_vcpu
Value : 128

Name  : capacity_profile_2_remaining_host_memory
Value : 0.0

Name  : capacity_profile_2_remaining_host_vcpu
Value : 0.0

Name  : capacity_profile_2_remaining_vm_count_based_on_all
Value : 0

Name  : capacity_profile_2_remaining_vm_count_based_on_memory
Value : 0

Name  : capacity_profile_2_remaining_vm_count_based_on_vcpu
Value : 0

Name  : capacity_profile_2_vcpu_commitment_ratio
Value : 1.0

Name  : capacity_profile_2_vcpu_maximum
Value :

Name  : capacity_profile_2_vcpu_method
Value : High Normal Range of Allocated vCPU

Name  : capacity_profile_2_vcpu_minimum
Value :

Name  : capacity_profile_2_vcpu_per_vm
Value : 356.421875

Name  : capacity_profile_2_vcpu_per_vm_with_min_max
Value : 356.421875

Name  : cpu_usagemhz_rate_average_avg_over_time_period
Value :

Name  : cpu_usagemhz_rate_average_high_over_time_period
Value :

Name  : cpu_usagemhz_rate_average_low_over_time_period
Value :

Name  : derived_memory_used_avg_over_time_period
Value :
```

```
Name   : derived_memory_used_high_over_time_period
Value  :

Name   : derived_memory_used_low_over_time_period
Value  :

Name   : first_drift_state_timestamp
Value  :

Name   : last_drift_state_timestamp
Value  :

Name   : last_scan_on
Value  :

Name   : max_cpu_usage_rate_average_avg_over_time_period
Value  :

Name   : max_cpu_usage_rate_average_avg_over_time_period_without_overhead
Value  :

Name   : max_cpu_usage_rate_average_high_over_time_period
Value  :

Name   : max_cpu_usage_rate_average_high_over_time_period_without_overhead
Value  :

Name   : max_cpu_usage_rate_average_low_over_time_period
Value  :

Name   : max_cpu_usage_rate_average_low_over_time_period_without_overhead
Value  :

Name   : max_mem_usage_absolute_average_avg_over_time_period
Value  :

Name   : max_mem_usage_absolute_average_avg_over_time_period_without_overhead
Value  :

Name   : max_mem_usage_absolute_average_high_over_time_period
Value  :

Name   : max_mem_usage_absolute_average_high_over_time_period_without_overhead
Value  :

Name   : max_mem_usage_absolute_average_low_over_time_period
Value  :

Name   : max_mem_usage_absolute_average_low_over_time_period_without_overhead
Value  :

Name   : region_description
Value  : Region 0

Name   : region_number
Value  : 0

Name   : total_hosts
Value  : 3

Name   : total_miq_templates
Value  : 5

Name   : total_vms
Value  : 128

Name   : v_cpu_vr_ratio
Value  : 9.200000000000001

Name   : v_parent_datacenter
Value  : Prod

Name   : v_qualified_desc
Value  : Testing-Production Cluster in Prod

Name   : v_ram_vr_ratio
Value  : 2.8000000000000003
```

[Report a bug](#)

2.26. GetClustersByTag

GetClustersByTag returns an array of cluster objects based on tag assignment. The input is a tag string.
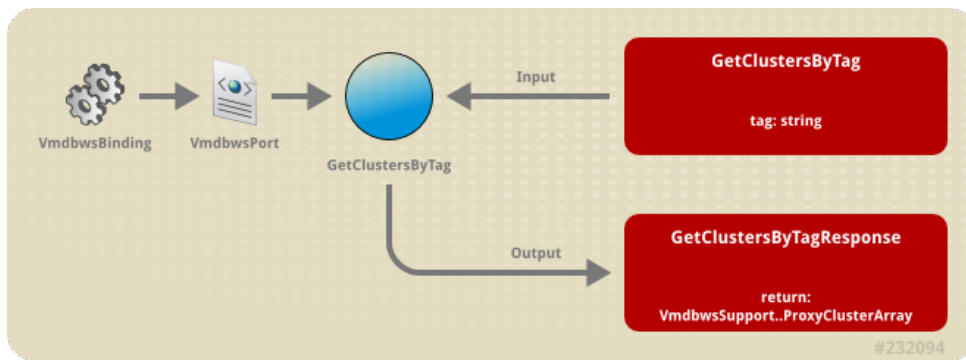
Syntax

- *Input:* **[{:tag => :string}]**
- *Output:* **ProxyCluster** as an array.

Examples

The following examples demonstrate **GetClustersByTag** usage:

Example 2.50. GetClustersByTag WSDL

```
<message name="GetClustersByTag">
  <part name="tag" type="xsd:string"/>
</message>
<message name="GetClustersByTagResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyClusterArray"/>
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyCluster">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="ems_id" type="xsd:string"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="uid_ems" type="xsd:string"/>
        <xsd:element name="ha_enabled" type="xsd:boolean"/>
        <xsd:element name="ha_admit_control" type="xsd:boolean"/>
        <xsd:element name="ha_max_failures" type="xsd:double"/>
        <xsd:element name="drs_enabled" type="xsd:boolean"/>
        <xsd:element name="drs_automation_level" type="xsd:string"/>
        <xsd:element name="drs_migration_threshold" type="xsd:double"/>
        <xsd:element name="last_perf_capture_on" type="xsd:dateTime"/>
        <xsd:element name="ems_ref_obj" type="xsd:string"/>
        <xsd:element name="effective_cpu" type="xsd:double"/>
        <xsd:element name="effective_memory" type="xsd:double"/>
        <xsd:element name="ems_ref" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.51. GetClustersByTag Output (Windows PowerShell)

```
Returned Attributes for this Cluster:


Name  : aggregate_cpu_speed
Value : 51048

Name  : aggregate_logical_cpus
Value : 24

Name  : aggregate_memory
Value : 172002

Name  : aggregate_physical_cpus
Value : 6

Name  : aggregate_vm_cpus
Value : 220

Name  : aggregate_vm_memory
Value : 480528

Name  : capacity_profile_1_available_host_memory
Value : 161777451008

Name  : capacity_profile_1_available_host_vcpu
Value : 24

Name  : capacity_profile_1_memory_commitment_ratio
Value : 1.2

Name  : capacity_profile_1_memory_maximum
Value :

Name  : capacity_profile_1_memory_method
Value : Average of Allocated Memory

Name  : capacity_profile_1_memory_minimum
Value :

Name  : capacity_profile_1_memory_per_vm
Value : 3936485376.0

Name  : capacity_profile_1_memory_per_vm_with_min_max
Value : 3936485376.0

Name  : capacity_profile_1_projected_vm_count_based_on_all
Value : 28

Name  : capacity_profile_1_projected_vm_count_based_on_memory
Value : 50

Name  : capacity_profile_1_projected_vm_count_based_on_vcpu
Value : 28

Name  : capacity_profile_1_remaining_host_memory
Value : -309737186918.4

Name  : capacity_profile_1_remaining_host_vcpu
Value : -172.0

Name  : capacity_profile_1_remaining_vm_count_based_on_all
Value : -100

Name  : capacity_profile_1_remaining_vm_count_based_on_memory
Value : -78

Name  : capacity_profile_1_remaining_vm_count_based_on_vcpu
Value : -100

Name  : capacity_profile_1_vcpu_commitment_ratio
Value : 2.0

Name  : capacity_profile_1_vcpu_maximum
Value :

Name  : capacity_profile_1_vcpu_method
Value : Average of Allocated vCPU

Name  : capacity_profile_1_vcpu_minimum
Value :

Name  : capacity_profile_1_vcpu_per_vm
```

```
Value : 1.71875

Name  : capacity_profile_1_vcpu_per_vm_with_min_max
Value : 1.71875

Name  : capacity_profile_2_available_host_memory
Value : 161777451008

Name  : capacity_profile_2_available_host_vcpu
Value : 45622

Name  : capacity_profile_2_memory_commitment_ratio
Value : 1.0

Name  : capacity_profile_2_memory_maximum
Value :

Name  : capacity_profile_2_memory_method
Value : High Normal Range of Allocated Memory

Name  : capacity_profile_2_memory_minimum
Value :

Name  : capacity_profile_2_memory_per_vm
Value : 1263886336.0

Name  : capacity_profile_2_memory_per_vm_with_min_max
Value : 1263886336.0

Name  : capacity_profile_2_projected_vm_count_based_on_all
Value : 128

Name  : capacity_profile_2_projected_vm_count_based_on_memory
Value : 128

Name  : capacity_profile_2_projected_vm_count_based_on_vcpu
Value : 128

Name  : capacity_profile_2_remaining_host_memory
Value : 0.0

Name  : capacity_profile_2_remaining_host_vcpu
Value : 0.0

Name  : capacity_profile_2_remaining_vm_count_based_on_all
Value : 0

Name  : capacity_profile_2_remaining_vm_count_based_on_memory
Value : 0

Name  : capacity_profile_2_remaining_vm_count_based_on_vcpu
Value : 0

Name  : capacity_profile_2_vcpu_commitment_ratio
Value : 1.0

Name  : capacity_profile_2_vcpu_maximum
Value :

Name  : capacity_profile_2_vcpu_method
Value : High Normal Range of Allocated vCPU

Name  : capacity_profile_2_vcpu_minimum
Value :

Name  : capacity_profile_2_vcpu_per_vm
Value : 356.421875

Name  : capacity_profile_2_vcpu_per_vm_with_min_max
Value : 356.421875

Name  : cpu_usagemhz_rate_average_avg_over_time_period
Value :

Name  : cpu_usagemhz_rate_average_high_over_time_period
Value :

Name  : cpu_usagemhz_rate_average_low_over_time_period
Value :

Name  : derived_memory_used_avg_over_time_period
Value :
```

```
Name  : derived_memory_used_high_over_time_period
Value :

Name  : derived_memory_used_low_over_time_period
Value :

Name  : first_drift_state_timestamp
Value :

Name  : last_drift_state_timestamp
Value :

Name  : last_scan_on
Value :

Name  : max_cpu_usage_rate_average_avg_over_time_period
Value :

Name  : max_cpu_usage_rate_average_avg_over_time_period_without_overhead
Value :

Name  : max_cpu_usage_rate_average_high_over_time_period
Value :

Name  : max_cpu_usage_rate_average_high_over_time_period_without_overhead
Value :

Name  : max_cpu_usage_rate_average_low_over_time_period
Value :

Name  : max_cpu_usage_rate_average_low_over_time_period_without_overhead
Value :

Name  : max_mem_usage_absolute_average_avg_over_time_period
Value :

Name  : max_mem_usage_absolute_average_avg_over_time_period_without_overhead
Value :

Name  : max_mem_usage_absolute_average_high_over_time_period
Value :

Name  : max_mem_usage_absolute_average_high_over_time_period_without_overhead
Value :

Name  : max_mem_usage_absolute_average_low_over_time_period
Value :

Name  : max_mem_usage_absolute_average_low_over_time_period_without_overhead
Value :

Name  : region_description
Value : Region 0

Name  : region_number
Value : 0

Name  : total_hosts
Value : 3

Name  : total_miq_templates
Value : 5

Name  : total_vms
Value : 128

Name  : v_cpu_vr_ratio
Value : 9.200000000000001

Name  : v_parent_datacenter
Value : Prod

Name  : v_qualified_desc
Value : Testing-Production Cluster in Prod

Name  : v_ram_vr_ratio
Value : 2.8000000000000003
```

[Report a bug](#)

2.27. GetDatastoreList

GetDatastoreList returns all datastores for a management system as list objects.
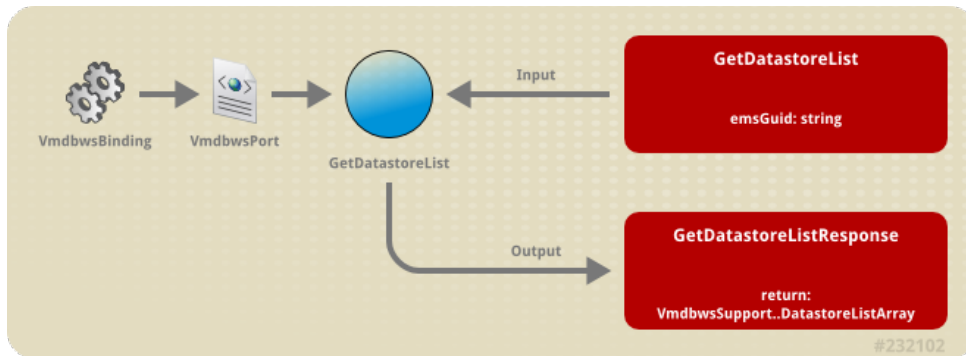
Syntax

- *Input:* **[{:emsGuid => :string}]**
- *Output:* **DatastoreList** as an array. List object contains **name** and **ID** properties.

Examples

The following examples demonstrate **GetDatastoreList** usage:

Example 2.52. GetDatastoreList WSDL

```
<message name="GetDatastoreList">
  <part name="emsGuid" type="xsd:string"/>
</message>
<message name="GetDatastoreListResponse">
  <part name="return" type="typens:VmdbwsSupport..DatastoreListArray"/>
</message>

    <xsd:complexType name="VmdbwsSupport..DatastoreList">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.53. GetDatastoreList Output (Windows PowerShell)

```
Datastores:

id                                              name
--                                              ----
8                                               StarM1-Test2
7                                               StarM1-TestProd
6                                               StarM1-Dev
5                                               StarM2-Test
4                                               StarM1-vCloud_Test
3                                               StarM1-Test
2                                               local-dev
1                                               Thecus-N7700
```

Report a bug

2.28. GetDatastoresByList

GetDatastoresByList returns an array of datastore objects. The input is usually the object returned from the **GetDatastoreList** method or from the **datastore** property of a **ProxyExtManagementSystem** object.

Syntax

» *Input:* **[{:datastoreList => [DatastoreListarray]}]**

» *Output:* **ProxyDatastore** as an array.

Examples

The following examples demonstrate **GetDatastoresByList** usage:

Example 2.54. GetDatastoresByList WSDL

```
<message name="GetDatastoresByList">
  <part name="datastoreList" type="typens:VmdbwsSupport..DatastoreListArray"/>
</message>
<message name="GetDatastoresByListResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyDatastoreArray"/>
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyDatastore">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="store_type" type="xsd:string"/>
        <xsd:element name="total_space" type="xsd:double"/>
        <xsd:element name="free_space" type="xsd:double"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="multiplehostaccess" type="xsd:double"/>
        <xsd:element name="location" type="xsd:string"/>
        <xsd:element name="last_scan_on" type="xsd:dateTime"/>
        <xsd:element name="uncommitted" type="xsd:double"/>
        <xsd:element name="last_perf_capture_on" type="xsd:dateTime"/>
        <xsd:element name="ems_ref_obj" type="xsd:string"/>
        <xsd:element name="directory_hierarchy_supported" type="xsd:boolean"/>
        <xsd:element name="thin_provisioning_supported" type="xsd:boolean"/>
        <xsd:element name="raw_disk_mappings_supported" type="xsd:boolean"/>
        <xsd:element name="master" type="xsd:boolean"/>
        <xsd:element name="ems_ref" type="xsd:string"/>
        <xsd:element name="vms" type="typens:VmdbwsSupport..VmListArray"/>
        <xsd:element name="all_vms" type="typens:VmdbwsSupport..VmListArray"/>
        <xsd:element name="hosts" type="typens:VmdbwsSupport..HostListArray"/>
        <xsd:element name="ws_attributes" type="typens:VmdbwsSupport..WSAttributesArray"/>
        <xsd:element name="ext_management_systems" type="typens:VmdbwsSupport..EmsListArray"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.55. GetDatastoresByList Output (Windows PowerShell)

```
Returned Attributes for this Datastore:


Name  : count_of_vmdk_disk_files
Value : 0

Name  : cpu_usagemhz_rate_average_avg_over_time_period
Value :

Name  : cpu_usagemhz_rate_average_high_over_time_period
Value :

Name  : cpu_usagemhz_rate_average_low_over_time_period
Value :

Name  : debris_size
Value : 0

Name  : derived_memory_used_avg_over_time_period
Value :

Name  : derived_memory_used_high_over_time_period
Value :

Name  : derived_memory_used_low_over_time_period
Value :

Name  : disk_size
Value : 0

Name  : max_cpu_usage_rate_average_avg_over_time_period
Value :

Name  : max_cpu_usage_rate_average_avg_over_time_period_without_overhead
Value :

Name  : max_cpu_usage_rate_average_high_over_time_period
Value :

Name  : max_cpu_usage_rate_average_high_over_time_period_without_overhead
Value :

Name  : max_cpu_usage_rate_average_low_over_time_period
Value :

Name  : max_cpu_usage_rate_average_low_over_time_period_without_overhead
Value :

Name  : max_mem_usage_absolute_average_avg_over_time_period
Value :

Name  : max_mem_usage_absolute_average_avg_over_time_period_without_overhead
Value :

Name  : max_mem_usage_absolute_average_high_over_time_period
Value :

Name  : max_mem_usage_absolute_average_high_over_time_period_without_overhead
Value :

Name  : max_mem_usage_absolute_average_low_over_time_period
Value :

Name  : max_mem_usage_absolute_average_low_over_time_period_without_overhead
Value :

Name  : region_description
Value : Region 0

Name  : region_number
Value : 0

Name  : snapshot_size
Value : 0

Name  : total_managed_registered_vms
Value : 0

Name  : total_managed_unregistered_vms
Value : 0

Name  : total_unmanaged_vms
```

```
Value : 0

Name  : v_debris_percent_of_used
Value : 0.0

Name  : v_disk_percent_of_used
Value : 0.0

Name  : v_free_space_percent_of_total
Value : 0.0

Name  : v_memory_percent_of_used
Value : 0.0

Name  : v_provisioned_percent_of_total
Value : 0.0

Name  : v_snapshot_percent_of_used
Value : 0.0

Name  : v_total_debris_size
Value : 0

Name  : v_total_hosts
Value : 1

Name  : v_total_memory_size
Value : 0

Name  : v_total_provisioned
Value : 0

Name  : v_total_snapshot_size
Value : 0

Name  : v_total_vm_misc_size
Value : 0

Name  : v_total_vms
Value : 0

Name  : v_used_space
Value : 0

Name  : v_used_space_percent_of_total
Value : 0.0

Name  : v_vm_misc_percent_of_used
Value : 0.0

Name  : vm_misc_size
Value : 0

Name  : vm_ram_size
Value : 0
```

Report a bug

2.29. GetDatastoresByTag

GetDatastoresByTag returns an array of datastore objects. The input is a tag string.
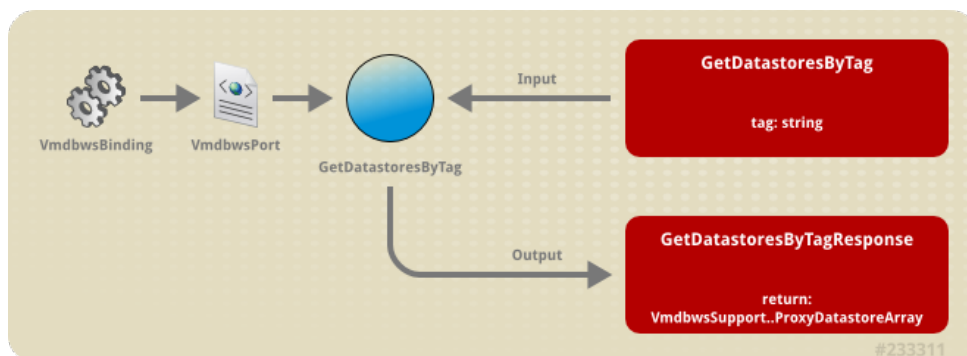
Syntax

» *Input:* **[{:tag => :string]}**

» *Output:* **ProxyDatastore** as an array.

Examples

The following examples demonstrate **GetDatastoresByTag** usage:

Example 2.56. GetDatastoresByList WSDL

```
<message name="GetDatastoresByTag">
  <part name="tag" type="xsd:string"/>
</message>
<message name="GetStoragesByTagResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyDatastoreArray"/>
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyDatastore">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="store_type" type="xsd:string"/>
        <xsd:element name="total_space" type="xsd:double"/>
        <xsd:element name="free_space" type="xsd:double"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="multiplehostaccess" type="xsd:double"/>
        <xsd:element name="location" type="xsd:string"/>
        <xsd:element name="last_scan_on" type="xsd:dateTime"/>
        <xsd:element name="uncommitted" type="xsd:double"/>
        <xsd:element name="last_perf_capture_on" type="xsd:dateTime"/>
        <xsd:element name="ems_ref_obj" type="xsd:string"/>
        <xsd:element name="directory_hierarchy_supported" type="xsd:boolean"/>
        <xsd:element name="thin_provisioning_supported" type="xsd:boolean"/>
        <xsd:element name="raw_disk_mappings_supported" type="xsd:boolean"/>
        <xsd:element name="master" type="xsd:boolean"/>
        <xsd:element name="ems_ref" type="xsd:string"/>
        <xsd:element name="vms" type="typens:VmdbwsSupport..VmListArray"/>
        <xsd:element name="all_vms" type="typens:VmdbwsSupport..VmListArray"/>
        <xsd:element name="hosts" type="typens:VmdbwsSupport..HostListArray"/>
        <xsd:element name="ws_attributes" type="typens:VmdbwsSupport..WSAttributesArray"/>
        <xsd:element name="ext_management_systems" type="typens:VmdbwsSupport..EmsListArray"/>
      </xsd:all>
    </xsd:complexType>
```
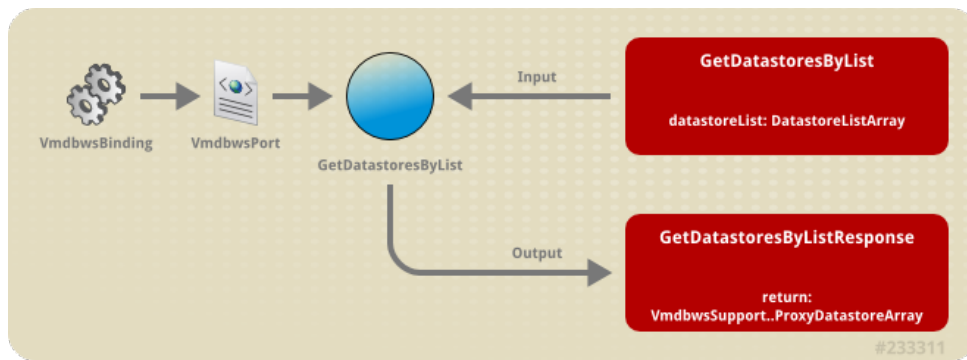
Example 2.57. GetDatastoresByList Output (Windows PowerShell)

```
Returned Attributes for this Datastore:


Name  : count_of_vmdk_disk_files
Value : 0

Name  : cpu_usagemhz_rate_average_avg_over_time_period
Value :

Name  : cpu_usagemhz_rate_average_high_over_time_period
Value :

Name  : cpu_usagemhz_rate_average_low_over_time_period
Value :

Name  : debris_size
Value : 0

Name  : derived_memory_used_avg_over_time_period
Value :

Name  : derived_memory_used_high_over_time_period
Value :

Name  : derived_memory_used_low_over_time_period
Value :

Name  : disk_size
Value : 0

Name  : max_cpu_usage_rate_average_avg_over_time_period
Value :

Name  : max_cpu_usage_rate_average_avg_over_time_period_without_overhead
Value :

Name  : max_cpu_usage_rate_average_high_over_time_period
Value :

Name  : max_cpu_usage_rate_average_high_over_time_period_without_overhead
Value :

Name  : max_cpu_usage_rate_average_low_over_time_period
Value :

Name  : max_cpu_usage_rate_average_low_over_time_period_without_overhead
Value :

Name  : max_mem_usage_absolute_average_avg_over_time_period
Value :

Name  : max_mem_usage_absolute_average_avg_over_time_period_without_overhead
Value :

Name  : max_mem_usage_absolute_average_high_over_time_period
Value :

Name  : max_mem_usage_absolute_average_high_over_time_period_without_overhead
Value :

Name  : max_mem_usage_absolute_average_low_over_time_period
Value :

Name  : max_mem_usage_absolute_average_low_over_time_period_without_overhead
Value :

Name  : region_description
Value : Region 0

Name  : region_number
Value : 0

Name  : snapshot_size
Value : 0

Name  : total_managed_registered_vms
Value : 0

Name  : total_managed_unregistered_vms
Value : 0

Name  : total_unmanaged_vms
```

```
Value : 0

Name  : v_debris_percent_of_used
Value : 0.0

Name  : v_disk_percent_of_used
Value : 0.0

Name  : v_free_space_percent_of_total
Value : 0.0

Name  : v_memory_percent_of_used
Value : 0.0

Name  : v_provisioned_percent_of_total
Value : 0.0

Name  : v_snapshot_percent_of_used
Value : 0.0

Name  : v_total_debris_size
Value : 0

Name  : v_total_hosts
Value : 1

Name  : v_total_memory_size
Value : 0

Name  : v_total_provisioned
Value : 0

Name  : v_total_snapshot_size
Value : 0

Name  : v_total_vm_misc_size
Value : 0

Name  : v_total_vms
Value : 0

Name  : v_used_space
Value : 0

Name  : v_used_space_percent_of_total
Value : 0.0

Name  : v_vm_misc_percent_of_used
Value : 0.0

Name  : vm_misc_size
Value : 0

Name  : vm_ram_size
Value : 0
```

Report a bug

2.30. GetEmsByList

GetEmsByList returns an array of management system objects. The **emsList** input is usually the object returned from the **GetEmsList** method. The **ProxyExtManagementSystem** object contains numerous properties listed in the WSDL file contents.
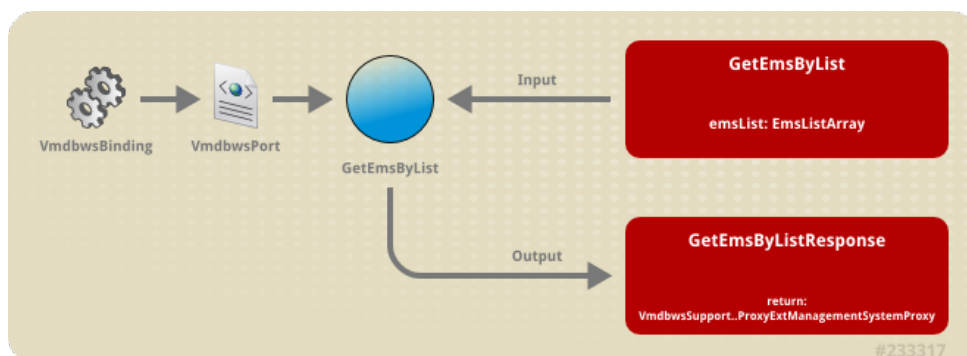
Syntax

- *Input:* **[{:emsList => [EmsList]}]**. The object returned by the **GetEmsList** method.
- *Output:* **ProxyExtManagementSystem** as an array.

Examples

The following examples demonstrate **GetEmsByList** usage:

Example 2.58. GetEmsByList WSDL

```
<message name="GetEmsByList">
  <part name="emsList" type="typens:VmdbwsSupport..EmsListArray" />
</message>
<message name="GetEmsByListResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyExtManagementSystemArray" />
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyExtManagementSystem">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="emstype" type="xsd:string"/>
        <xsd:element name="port" type="xsd:string"/>
        <xsd:element name="hostname" type="xsd:string"/>
        <xsd:element name="ipaddress" type="xsd:string"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="guid" type="xsd:string"/>
        <xsd:element name="zone_id" type="xsd:string"/>
        <xsd:element name="type" type="xsd:string"/>
        <xsd:element name="api_version" type="xsd:string"/>
        <xsd:element name="uid_ems" type="xsd:string"/>
        <xsd:element name="hosts" type="typens:VmdbwsSupport..HostListArray"/>
        <xsd:element name="vms" type="typens:VmdbwsSupport..VmListArray"/>
        <xsd:element name="ws_attributes" type="typens:VmdbwsSupport..WSAttributesArray"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.59. GetEmsByList Output (Windows PowerShell)

```
Calling GetEmsByList...
Name                                              Value
----                                              -----
aggregate_memory                                  48251
total_storages                                    3
max_cpu_usage_rate_average_high_over_time_period  8.13731902166194
max_cpu_usage_rate_average_low_over_time_period   3.2237920894491707
derived_memory_used_high_over_time_period         13172.316302780524
max_mem_usage_absolute_average_low_over_time_p... 24.998298320564096
max_cpu_usage_rate_average_low_over_time_perio... 3.073792089449171
total_vms_and_templates                           12
max_mem_usage_absolute_average_avg_over_time_p... 27.504166666666677
max_mem_usage_absolute_average_high_over_time_... 28.00003501276926
aggregate_vm_memory                               49152
authentication_status                             Valid
region_number                                     0
derived_memory_used_avg_over_time_period          13090.820207175926
total_miq_templates                               2
total_hosts                                       1
region_description                                Region 0
emstype_description                               Red Hat Enterprise Virtualization Manager
cpu_usagemhz_rate_average_high_over_time_period   1859.4985639212157
aggregate_logical_cpus                            8
zone_name                                         default
aggregate_vm_cpus                                 15
max_cpu_usage_rate_average_avg_over_time_perio... 5.530555555555555
max_mem_usage_absolute_average_avg_over_time_p... 25.49416666666668
aggregate_physical_cpus                           1
derived_memory_used_low_over_time_period          13009.324111571328
max_mem_usage_absolute_average_low_over_time_p... 27.008298320564094
max_cpu_usage_rate_average_avg_over_time_period   5.680555555555555
cpu_usagemhz_rate_average_low_over_time_period    1256.3802808541543
cpu_usagemhz_rate_average_avg_over_time_period    1557.939422387685
total_vms                                         10
max_mem_usage_absolute_average_high_over_time_... 25.990035012769262
max_cpu_usage_rate_average_high_over_time_peri... 7.987319021661939
aggregate_cpu_speed                               19152
```

2.31. GetEmsList

GetEmsList returns all management systems as list objects.

Syntax

- *Input:* none
- *Output:* **EmsList** as an array. List object contains **name** and **guid** properties.

Examples

The following examples demonstrate **GetEmsList** usage:

Example 2.60. GetEmsList WSDL

```
<message name="GetEmsList">
</message>
<message name="GetEmsListResponse">
  <part name="return" type="typens:VmdbwsSupport..EmsListArray"/>
</message>
...
    <xsd:complexType name="VmdbwsSupport..EmsList">
      <xsd:all>
        <xsd:element name="guid" type="xsd:string" />
        <xsd:element name="name" type="xsd:string" />
      </xsd:all>
    </xsd:complexType>
```

Example 2.61. GetEmsList Output (Windows PowerShell)

```
Calling GetEmsList...
guid                                  name
----                                  ----
86fbd29c-d32c-11df-a9a6-000c29f67b01  254.42
d87e2170-fc07-11df-905f-000c29fb2535  252.6
```

2.32. GetHostsByList

GetHostsByList returns an array of host objects. The **hostList** input is usually the object returned from the **GetHostList** method or from the **hosts** property of a **ProxyExtManagementSystem** object.
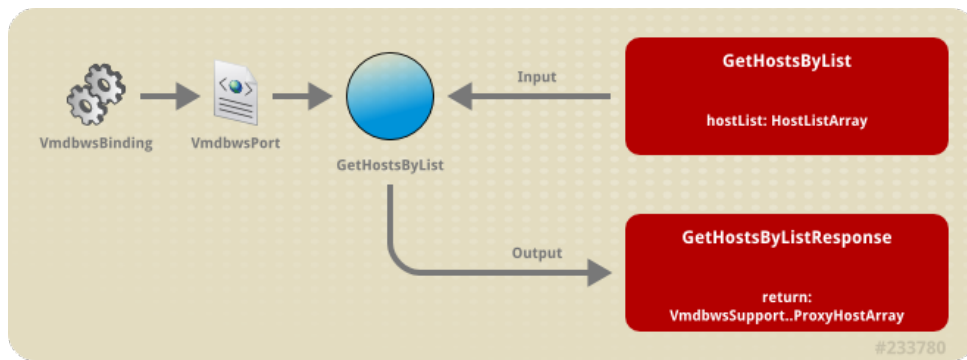
Syntax

- *Input:* `[{:hostList => [HostList]}]`. The object returned by the `GetHostList` method or from the `hosts` property of a `ProxyExtManagementSystem` object.
- *Output:* `ProxyHost` as an array.

Examples

The following examples demonstrate `GetHostsByList` usage:

Example 2.62. GetHostsByList WSDL

```
<message name="GetHostsByList">
  <part name="hostList" type="typens:VmdbwsSupport..HostListArray" />
</message>
<message name="GetHostsByListResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyHostArray" />
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyHost">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="hostname" type="xsd:string"/>
        <xsd:element name="ipaddress" type="xsd:string"/>
        <xsd:element name="vmm_vendor" type="xsd:string"/>
        <xsd:element name="vmm_version" type="xsd:string"/>
        <xsd:element name="vmm_product" type="xsd:string"/>
        <xsd:element name="vmm_buildnumber" type="xsd:string"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="guid" type="xsd:string"/>
        <xsd:element name="ems_id" type="xsd:string"/>
        <xsd:element name="user_assigned_os" type="xsd:string"/>
        <xsd:element name="power_state" type="xsd:string"/>
        <xsd:element name="smart" type="xsd:double"/>
        <xsd:element name="last_perf_capture_on" type="xsd:dateTime"/>
        <xsd:element name="uid_ems" type="xsd:string"/>
        <xsd:element name="connection_state" type="xsd:string"/>
        <xsd:element name="ssh_permit_root_login" type="xsd:string"/>
        <xsd:element name="ems_ref_obj" type="xsd:string"/>
        <xsd:element name="admin_disabled" type="xsd:boolean"/>
        <xsd:element name="service_tag" type="xsd:string"/>
        <xsd:element name="asset_tag" type="xsd:string"/>
        <xsd:element name="ipmi_address" type="xsd:string"/>
        <xsd:element name="mac_address" type="xsd:string"/>
        <xsd:element name="type" type="xsd:string"/>
        <xsd:element name="failover" type="xsd:boolean"/>
        <xsd:element name="ems_ref" type="xsd:string"/>
        <xsd:element name="vms" type="typens:VmdbwsSupport..VmListArray"/>
        <xsd:element name="ext_management_system" type="typens:VmdbwsSupport..EmsList"/>
        <xsd:element name="ws_attributes" type="typens:VmdbwsSupport..WSAttributesArray"/>
      </xsd:all>
    </xsd:complexType>
```
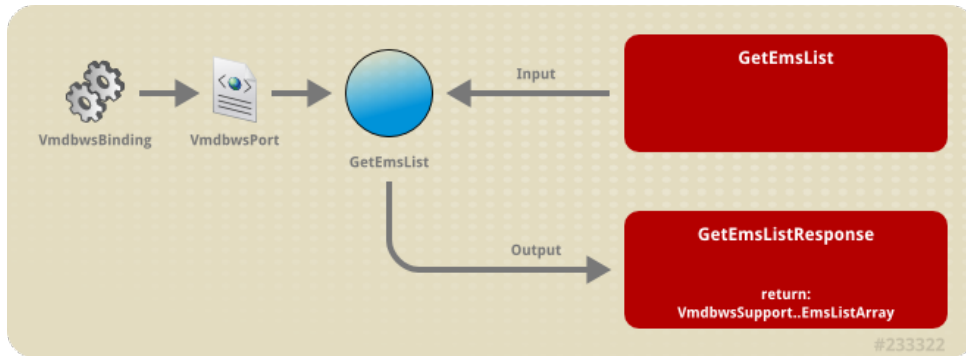
Example 2.63. GetHostsByList Output (Windows PowerShell)

```
Calling GetHostsbyList...
Name                                       Value
----                                       -----
last_scan_on                               2012-07-24 21:00:39 -0700
max_cpu_usage_rate_average_high_over_time_period  8.13731902166194
last_drift_state_timestamp                 2012-07-24 21:00:39 -0700
v_total_vms                                2
enabled_tcp_outbound_ports
max_cpu_usage_rate_average_low_over_time_period  3.2237920894491707
derived_memory_used_high_over_time_period  13172.316302780524
platform                                   linux
max_mem_usage_absolute_average_low_over_time_p...  24.998298320564096
max_cpu_usage_rate_average_low_over_time_perio...  3.073792089449171
enabled_run_level_3_services               abrt-ccpp|abrt-oops|abrtd|acp...
max_cpu_usage_rate_average_high_over_time_peri...  7.987319021661939
ipmi_enabled                               false
v_annotation
enabled_udp_outbound_ports
max_mem_usage_absolute_average_high_over_time_...  28.00003501276926
last_compliance_timestamp
v_owning_datacenter                        Default
region_number                              0
enabled_run_level_0_services
enabled_tcp_inbound_ports
all_enabled_ports
enabled_run_level_5_services               abrt-ccpp|abrt-oops|abrtd|acp...
service_names                              abrt-ccpp|abrt-oops|abrtd|acp...
os_image_name                              linux_generic
cpu_usagemhz_rate_average_low_over_time_period  1256.3802808541543
enabled_run_level_1_services               acpid|auditd|cgconfig|crond|c...
region_description                         Region 0
enabled_udp_inbound_ports
v_total_miq_templates                      0
v_owning_cluster                           Pod1
v_owning_folder                            Datacenters
first_drift_state_timestamp                2012-07-23 13:07:45 -0700
max_cpu_usage_rate_average_avg_over_time_perio...  5.530555555555555
enabled_inbound_ports
max_mem_usage_absolute_average_avg_over_time_p...  25.49416666666668
derived_memory_used_low_over_time_period   13009.324111571328
enabled_outbound_ports
max_mem_usage_absolute_average_low_over_time_p...  27.008298320564094
max_cpu_usage_rate_average_avg_over_time_period  5.680555555555555
v_total_storages                           3
cpu_usagemhz_rate_average_avg_over_time_period  1557.939422387685
enabled_run_level_4_services               acpid|atd|auditd|autofs|cgcon...
max_mem_usage_absolute_average_avg_over_time_p...  27.504166666666677
max_mem_usage_absolute_average_high_over_time_...  25.990035012769262
derived_memory_used_avg_over_time_period   13090.820207175926
enabled_run_level_6_services
cpu_usagemhz_rate_average_high_over_time_period  1859.4985639212157
authentication_status                      Valid
enabled_run_level_2_services               acpid|auditd|cgconfig|crond|c...
last_compliance_status
```

Report a bug

2.33. GetHostList

GetHostList returns the host list objects for the given management system GUID. Use an asterisk ("*****") as the **emsGuid** to return all hosts.
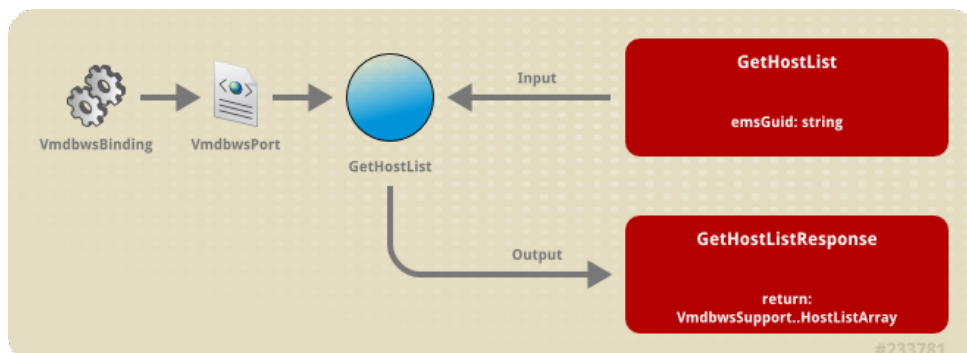
Syntax

» *Input:* `[{:emsGuid => :string}]`
» *Output:* `VmdbwsSupport..HostList`

Examples

The following examples demonstrate `GetHostList` usage:

Example 2.64. GetHostList () WSDL

```
<message name="GetHostList">
  <part name="emsGuid" type="xsd:string" />
</message>
<message name="GetHostListResponse">
  <part name="return" type="typens:VmdbwsSupport..HostListArray" />
</message>
...
    <xsd:complexType name="VmdbwsSupport..HostList">
      <xsd:all>
        <xsd:element name="guid" type="xsd:string" />
        <xsd:element name="name" type="xsd:string" />
      </xsd:all>
    </xsd:complexType>
```

Example 2.65. GetHostList Output (Windows PowerShell)

```
Calling GetHostList...
guid                                name
----                                ----
d2b0be78-d32c-11df-954a-000c29f67b01    VI4ESX12.galaxy.local
d124eaac-d32c-11df-954a-000c29f67b01    vi4esx11.galaxy.local
```

Report a bug

2.34. GetResourcePoolList

`GetResourcePoolList` returns all resource pools as list objects for a specific management system.
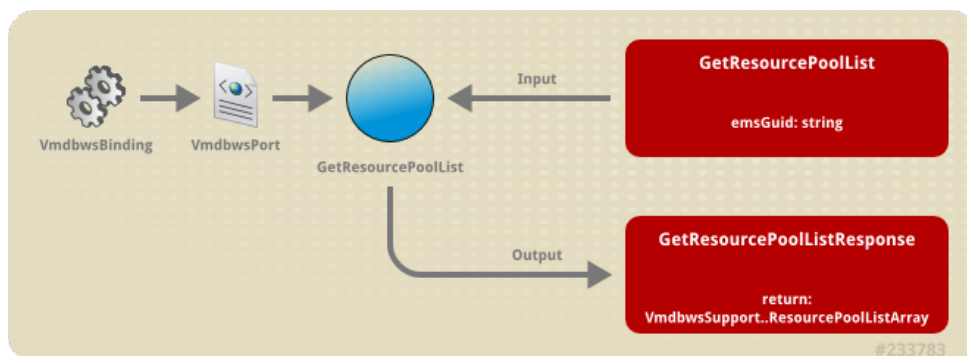
Syntax

» *Input:* `[{:emsGuid => :string}]`
» *Output:* `ResourcePoolList` as an array. List object contains **name** and **id** properties.

Examples

The following examples demonstrate `GetResourcePoolList` usage:

Example 2.66. GetResourcePoolList WSDL

```
<message name="GetResourcePoolList">
  <part name="emsGuid" type="xsd:string"/>
</message>
<message name="GetResourcePoolListResponse">
  <part name="return" type="typens:VmdbwsSupport..ResourcePoolListArray"/>
</message>

    <xsd:complexType name="VmdbwsSupport..ResourcePoolList">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.67. GetResourcePoolList Output (Windows PowerShell)

```
Resource Pools:

id                                      name
--                                      ----
10                                      Citrix
9                                       MiqCloud
8                                       Production Test environment
7                                       Testing
6                                       Training
5                                       VMware View VM's
1                                       Default
```

Report a bug

2.35. GetResourcePoolsByList

GetResourcePoolsByList returns an array of **ResourcePool** objects. The input is usually the object returned from the **GetResourcePoolList** method or from the **ResourcePool** property of a **ProxyExtManagementSystem** object.
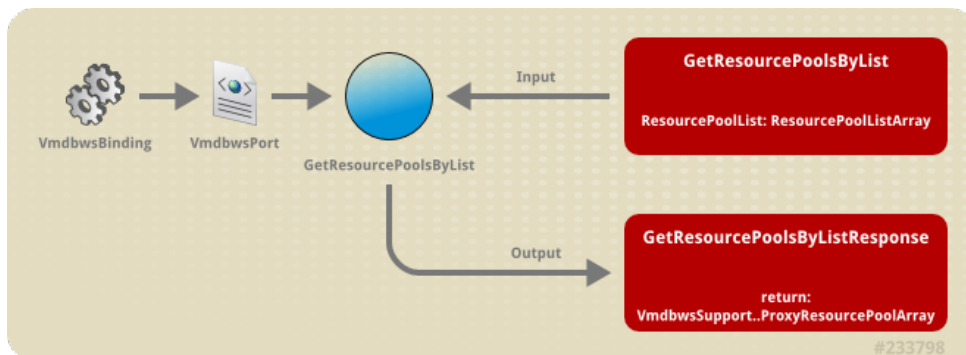
Syntax

- *Input:* **[{:ResourcePoolList => [ResourcePoolList]}]**
- *Output:* **ProxyResourcePool** as an array.

Examples

The following examples demonstrate **GetResourcePoolsByList** usage:

Example 2.68. GetResourcePoolsByList WSDL

```
<message name="GetResourcePoolsByList">
  <part name="resourcepoolList" type="typens:VmdbwsSupport..ResourcePoolListArray"/>
</message>
<message name="GetResourcePoolsByListResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyResourcePoolArray"/>
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyResourcePool">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="ems_id" type="xsd:string"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="uid_ems" type="xsd:string"/>
        <xsd:element name="memory_reserve" type="xsd:double"/>
        <xsd:element name="memory_reserve_expand" type="xsd:boolean"/>
        <xsd:element name="memory_limit" type="xsd:double"/>
        <xsd:element name="memory_shares" type="xsd:double"/>
        <xsd:element name="memory_shares_level" type="xsd:string"/>
        <xsd:element name="cpu_reserve" type="xsd:double"/>
        <xsd:element name="cpu_reserve_expand" type="xsd:boolean"/>
        <xsd:element name="cpu_limit" type="xsd:double"/>
        <xsd:element name="cpu_shares" type="xsd:double"/>
        <xsd:element name="cpu_shares_level" type="xsd:string"/>
        <xsd:element name="is_default" type="xsd:boolean"/>
        <xsd:element name="ems_ref_obj" type="xsd:string"/>
        <xsd:element name="vapp" type="xsd:boolean"/>
        <xsd:element name="ems_ref" type="xsd:string"/>
        <xsd:element name="vms" type="typens:VmdbwsSupport..VmListArray"/>
        <xsd:element name="ext_management_system" type="typens:VmdbwsSupport..EmsList"/>
        <xsd:element name="ws_attributes" type="typens:VmdbwsSupport..WSAttributesArray"/>
        <xsd:element name="parent_cluster" type="typens:VmdbwsSupport..ClusterList"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.69. GetResourcePoolsByList Output (Windows PowerShell)

```
Returned Attributes for this Resource Pool:


Name  : aggregate_cpu_speed
Value : 51048

Name  : aggregate_logical_cpus
Value : 24

Name  : aggregate_memory
Value : 172002

Name  : aggregate_physical_cpus
Value : 6

Name  : aggregate_vm_cpus
Value : 215

Name  : aggregate_vm_memory
Value : 470800

Name  : region_description
Value : Region 0

Name  : region_number
Value : 0

Name  : v_direct_miq_templates
Value : 0

Name  : v_direct_vms
Value : 9

Name  : v_parent_cluster
Value : Testing-Production Cluster

Name  : v_parent_datacenter
Value : Prod

Name  : v_parent_folder
Value : Datacenters

Name  : v_parent_host
Value :

Name  : v_parent_resource_pool
Value :

Name  : v_total_miq_templates
Value : 0

Name  : v_total_vms
Value : 128
```

Report a bug

2.36. GetResourcePoolsByTag

GetResourcePoolsByTag returns an array of **ResourcePool** objects. The input is a tag string.
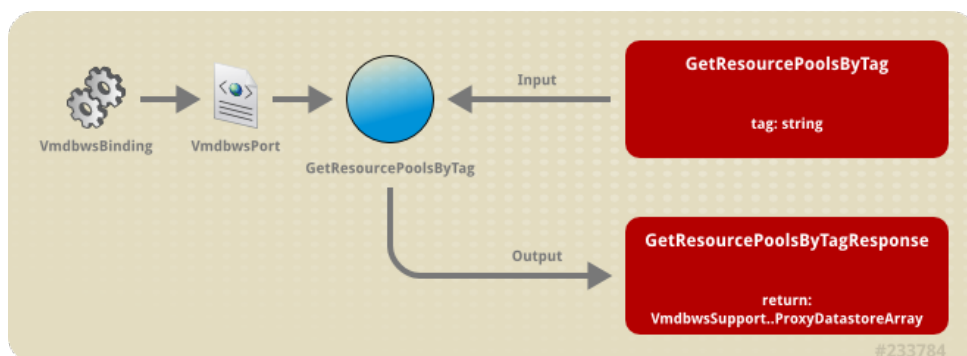
Syntax

- *Input:* **[{:tag => :string}]**
- *Output:* **ProxyResourcePool** as an array.

Examples

The following examples demonstrate **GetResourcePoolsByTag** usage:

Example 2.70. GetResourcePoolsByTag WSDL

```
<message name="GetResourcePoolsByTag">
  <part name="tag" type="xsd:string"/>
</message>
<message name="GetResourcePoolsByTagResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyResourcePoolArray"/>
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyResourcePool">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="ems_id" type="xsd:string"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="uid_ems" type="xsd:string"/>
        <xsd:element name="memory_reserve" type="xsd:double"/>
        <xsd:element name="memory_reserve_expand" type="xsd:boolean"/>
        <xsd:element name="memory_limit" type="xsd:double"/>
        <xsd:element name="memory_shares" type="xsd:double"/>
        <xsd:element name="memory_shares_level" type="xsd:string"/>
        <xsd:element name="cpu_reserve" type="xsd:double"/>
        <xsd:element name="cpu_reserve_expand" type="xsd:boolean"/>
        <xsd:element name="cpu_limit" type="xsd:double"/>
        <xsd:element name="cpu_shares" type="xsd:double"/>
        <xsd:element name="cpu_shares_level" type="xsd:string"/>
        <xsd:element name="is_default" type="xsd:boolean"/>
        <xsd:element name="ems_ref_obj" type="xsd:string"/>
        <xsd:element name="vapp" type="xsd:boolean"/>
        <xsd:element name="ems_ref" type="xsd:string"/>
        <xsd:element name="vms" type="typens:VmdbwsSupport..VmListArray"/>
        <xsd:element name="ext_management_system" type="typens:VmdbwsSupport..EmsList"/>
        <xsd:element name="ws_attributes" type="typens:VmdbwsSupport..WSAttributesArray"/>
        <xsd:element name="parent_cluster" type="typens:VmdbwsSupport..ClusterList"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.71. GetResourcePoolsByTag Output (Windows PowerShell)

```
Returned Attributes for this Resource Pool:


Name  : aggregate_cpu_speed
Value : 51048

Name  : aggregate_logical_cpus
Value : 24

Name  : aggregate_memory
Value : 172002

Name  : aggregate_physical_cpus
Value : 6

Name  : aggregate_vm_cpus
Value : 215

Name  : aggregate_vm_memory
Value : 470800

Name  : region_description
Value : Region 0

Name  : region_number
Value : 0

Name  : v_direct_miq_templates
Value : 0

Name  : v_direct_vms
Value : 9

Name  : v_parent_cluster
Value : Testing-Production Cluster

Name  : v_parent_datacenter
Value : Prod

Name  : v_parent_folder
Value : Datacenters

Name  : v_parent_host
Value :

Name  : v_parent_resource_pool
Value :

Name  : v_total_miq_templates
Value : 0

Name  : v_total_vms
Value : 128
```

Report a bug

2.37. GetTemplatesByTag

GetTemplatesByTag returns an array of virtual machine objects based on tag assignment. The input is a tag string.
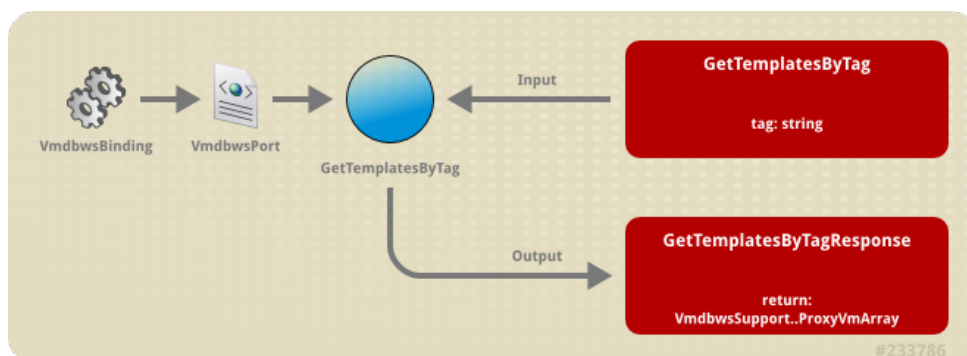
Syntax

- *Input:* `[{:tag => :string}]`
- *Output:* `ProxyVm` as an array

Examples

The following examples demonstrate `GetTemplatesByTag` usage:

- *Input:* `[{:tag => :string}]`
- *Output:* `ProxyVm` as an array

Examples

Example 2.72. GetTemplatesByTag WSDL

```
<message name="GetTemplatesByTag">
  <part name="tag" type="xsd:string"/>
</message>
<message name="GetTemplatesByTagResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyVmArray"/>
</message>

    <xsd:complexType name="VmdbwsSupport..ProxyVm">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="vendor" type="xsd:string"/>
        <xsd:element name="format" type="xsd:string"/>
        <xsd:element name="version" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="description" type="xsd:string"/>
        <xsd:element name="location" type="xsd:string"/>
        <xsd:element name="config_xml" type="xsd:string"/>
        <xsd:element name="autostart" type="xsd:string"/>
        <xsd:element name="host_id" type="xsd:string"/>
        <xsd:element name="last_sync_on" type="xsd:dateTime"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="storage_id" type="xsd:string"/>
        <xsd:element name="guid" type="xsd:string"/>
        <xsd:element name="ems_id" type="xsd:string"/>
        <xsd:element name="last_scan_on" type="xsd:dateTime"/>
        <xsd:element name="last_scan_attempt_on" type="xsd:dateTime"/>
        <xsd:element name="uid_ems" type="xsd:string"/>
        <xsd:element name="retires_on" type="xsd:date"/>
        <xsd:element name="retired" type="xsd:boolean"/>
        <xsd:element name="boot_time" type="xsd:dateTime"/>
        <xsd:element name="tools_status" type="xsd:string"/>
        <xsd:element name="standby_action" type="xsd:string"/>
        <xsd:element name="power_state" type="xsd:string"/>
        <xsd:element name="state_changed_on" type="xsd:dateTime"/>
        <xsd:element name="previous_state" type="xsd:string"/>
        <xsd:element name="connection_state" type="xsd:string"/>
        <xsd:element name="last_perf_capture_on" type="xsd:dateTime"/>
        <xsd:element name="blackbox_exists" type="xsd:boolean"/>
        <xsd:element name="blackbox_validated" type="xsd:boolean"/>
        <xsd:element name="registered" type="xsd:boolean"/>
        <xsd:element name="busy" type="xsd:boolean"/>
        <xsd:element name="smart" type="xsd:boolean"/>
        <xsd:element name="memory_reserve" type="xsd:double"/>
        <xsd:element name="memory_reserve_expand" type="xsd:boolean"/>
        <xsd:element name="memory_limit" type="xsd:double"/>
        <xsd:element name="memory_shares" type="xsd:double"/>
        <xsd:element name="memory_shares_level" type="xsd:string"/>
        <xsd:element name="cpu_reserve" type="xsd:double"/>
        <xsd:element name="cpu_reserve_expand" type="xsd:boolean"/>
        <xsd:element name="cpu_limit" type="xsd:double"/>
        <xsd:element name="cpu_shares" type="xsd:double"/>
        <xsd:element name="cpu_shares_level" type="xsd:string"/>
        <xsd:element name="cpu_affinity" type="xsd:string"/>
        <xsd:element name="ems_created_on" type="xsd:dateTime"/>
        <xsd:element name="template" type="xsd:boolean"/>
        <xsd:element name="evm_owner_id" type="xsd:string"/>
        <xsd:element name="ems_ref_obj" type="xsd:string"/>
        <xsd:element name="miq_group_id" type="xsd:string"/>
        <xsd:element name="vdi" type="xsd:boolean"/>
        <xsd:element name="linked_clone" type="xsd:boolean"/>
        <xsd:element name="fault_tolerance" type="xsd:boolean"/>
        <xsd:element name="type" type="xsd:string"/>
        <xsd:element name="ems_ref" type="xsd:string"/>
        <xsd:element name="ems_cluster_id" type="xsd:string"/>
        <xsd:element name="retirement_warn" type="xsd:double"/>
        <xsd:element name="retirement_last_warn" type="xsd:dateTime"/>
        <xsd:element name="ipaddresses" type="typens:StringArray"/>
        <xsd:element name="hostnames" type="typens:StringArray"/>
        <xsd:element name="custom_attributes" type="typens:VmdbwsSupport..ProxyCustomAttributeArray"/>
        <xsd:element name="host" type="typens:VmdbwsSupport..HostList"/>
        <xsd:element name="ext_management_system" type="typens:VmdbwsSupport..EmsList"/>
        <xsd:element name="parent_cluster" type="typens:VmdbwsSupport..ClusterList"/>
        <xsd:element name="datastores" type="typens:VmdbwsSupport..DatastoreListArray"/>
        <xsd:element name="ws_attributes" type="typens:VmdbwsSupport..WSAttributesArray"/>
        <xsd:element name="hardware" type="typens:VmdbwsSupport..ProxyHardware"/>
        <xsd:element name="parent_resource_pool" type="typens:VmdbwsSupport..ResourcePoolList"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.73. GetTemplatesbyTag Output (Windows PowerShell)

```
Name                                                    Value
----                                                    -----
disk_4_disk_type
conservative_vcpus_recommended_change                   -1
recommended_vcpus                                       1
max_cpu_usage_rate_average_high_over_time_period        44.02290026709669
parent_blue_folder_3_name
aggressive_mem_recommended_change_pct                   68.9
disk_6_disk_type
conservative_recommended_vcpus                          3
disk_4_size_on_disk
disks_aligned                                           False
paravirtualization
mem_cpu                                                 6144
v_owning_cluster                                        Pod1
vmsafe_agent_address
moderate_mem_recommended_change_pct                     44.8
disk_1_size_on_disk
num_hard_disks                                          5
disk_5_partitions_aligned                               False
aggressive_vcpus_recommended_change_pct                 50.0
evm_owner_email
moderate_recommended_mem                                3392
disk_7_mode
evm_owner_name
vdi_user_home_path
v_total_snapshots                                       1
last_compliance_status
vmsafe_immutable_vm
vdi_connection_session_type
cpu_usagemhz_rate_average_avg_over_time_period          651.6342140812435
orphaned                                                false
disk_size                                               0
disk_7_partitions_aligned
used_storage_by_state                                   6442450944
vdi_user_name
disk_3_size
max_cpu_usage_rate_average_low_over_time_period_without_ov...  5.529877510681107
owned_by_current_user                                   false
disk_8_size
vdi_endpoint_mac_address
recommended_mem                                         1912
aggressive_vcpus_recommended_change                     1
region_description                                      Region 0
disk_5_size_on_disk
evm_owner_userid
vdi_user_appdata
disk_9_size_on_disk
v_snapshot_newest_total_size
max_cpu_usage_rate_average_max_over_time_period         100.0
moderate_vcpus_recommended_change_pct                   50.0
v_snapshot_newest_description                           _ActiveImage_PRDv5EVM002_Tue Jun 19
17:13:11 EDT 2012
moderate_mem_recommended_change                         2752
disk_6_size
allocated_disk_storage                                  0
last_drift_state_timestamp                              2012-07-24 20:12:32 -0700
region_number                                           0
disk_1_mode
disk_7_disk_type
disk_5_used_percent_of_provisioned                      0.0
aggressive_recommended_mem                              1912
disk_8_mode
v_pct_free_disk_space
disk_6_partitions_aligned
aggressive_mem_recommended_change                       4232
disk_9_size
disk_7_size_on_disk
max_cpu_usage_rate_average_avg_over_time_period         24.776388888888896
disk_9_disk_type
disk_1_partitions_aligned                               True
num_cpu                                                 2
disk_7_used_percent_of_provisioned
derived_memory_used_max_over_time_period                3234.03377777778
vmsafe_fail_open
disk_3_disk_type
moderate_vcpus_recommended_change                       1
owned_by_current_ldap_group                             false
derived_memory_used_low_over_time_period                232.8316855769765
disk_2_disk_type
disk_2_partitions_aligned                               True
vdi_connection_dns_name
```

```
disk_5_size
disk_8_used_percent_of_provisioned
max_mem_usage_absolute_average_high_over_time_period_witho...  55.178755912966935
disk_4_size
v_host_vmm_product                                            RHEV-H
parent_blue_folder_7_name
disk_9_used_percent_of_provisioned
disk_1_used_percent_of_provisioned                            0.0
vdi_connection_session_name
conservative_mem_recommended_change_pct                       4.9
v_owning_folder                                               Datacenters
disk_8_disk_type
thin_provisioned                                              false
overallocated_vcpus_pct                                       50.0
uncommitted_storage                                           0
disk_8_size_on_disk
debris_size                                                   0
num_disks                                                     5
conservative_vcpus_recommended_change_pct                     -50.0
vm_misc_size                                                  0
max_mem_usage_absolute_average_avg_over_time_period_withou...  31.084722222222226
max_mem_usage_absolute_average_avg_over_time_period           31.084722222222226
vdi_user_dns_domain
v_datastore_path                                              MTCRHDS001/17830c59-6ae4-420f-af5c-
f6898c6c5b27.ovf
vdi_endpoint_type
vdi_user_home_share
os_image_name                                                 linux_centos
moderate_recommended_vcpus                                    1
parent_blue_folder_1_name                                     Default
has_rdm_disk                                                  false
vdi_available                                                 false
disk_6_used_percent_of_provisioned
used_disk_storage                                             0
vdi_connection_logon_server
ipaddresses                                                   10.10.1.211
parent_blue_folder_4_name
derived_memory_used_high_over_time_period                     2522.6954255341334
conservative_recommended_mem                                  5840
disk_9_mode
storage_name                                                  MTCRHDS001
v_owning_folder_path                                          Datacenters
is_evm_appliance                                              false
max_cpu_usage_rate_average_high_over_time_period_without_o...  44.02290026709669
vdi_connection_name
v_snapshot_newest_name                                        Active Image
ems_cluster_name                                              Pod1
v_snapshot_newest_timestamp                                   2012-06-19 14:04:47 -0700
disk_2_size_on_disk
max_mem_usage_absolute_average_max_over_time_period           95.0
vmsafe_timeout_ms
disk_2_mode
v_snapshot_oldest_description                                 _ActiveImage_PRDv5EVM002_Tue Jun 19
17:13:11 EDT 2012
first_drift_state_timestamp                                   2012-07-24 20:12:32 -0700
vm_ram_size                                                   0
max_mem_usage_absolute_average_high_over_time_period          55.178755912966935
vdi_endpoint_name
vmsafe_enable
parent_blue_folder_2_name
parent_blue_folder_5_name
disk_3_mode
disk_1_disk_type
disconnected                                                  false
vdi_user_logon_time
v_pct_used_disk_space
disk_4_mode
v_owning_datacenter                                           Default
disk_1_size
disk_9_partitions_aligned
hostnames
disk_4_partitions_aligned                                     True
disk_6_size_on_disk
cpu_usagemhz_rate_average_low_over_time_period                366.26730508150735
max_mem_usage_absolute_average_low_over_time_period_withou...  6.99068853147752
disk_8_partitions_aligned
parent_blue_folder_6_name
snapshot_size                                                 0
disk_5_disk_type
disk_2_used_percent_of_provisioned                            0.0
parent_blue_folder_9_name
platform                                                      linux
```

```
       provisioned_storage                                    6442450944
       disk_3_used_percent_of_provisioned                     0.0
       vdi_connection_remote_ip_address
       disk_3_size_on_disk
       max_cpu_usage_rate_average_avg_over_time_period_without_ov... 24.776388888888896
       cpu_usagemhz_rate_average_high_over_time_period         937.0011230809796
       derived_memory_used_avg_over_time_period                1377.7635555555548
       last_compliance_timestamp
       disk_6_mode
       vdi_user_domain
       v_snapshot_oldest_name                                  Active Image
       has_active_vdi_session                                  false
       host_name                                               mtcrhel62001.miq.net
       v_owning_blue_folder_path                               Datacenters/Default/vm
       conservative_mem_recommended_change                     304
       v_owning_resource_pool                                  Default for Cluster Pod1
       v_snapshot_oldest_timestamp                             2012-06-19 14:04:47 -0700
       disk_7_size
       owning_ldap_group
       v_annotation                                            Production V5 EVM appliance (iSCSI
       scanning)
       cpu_usagemhz_rate_average_max_over_time_period          1053.93493333333
       max_cpu_usage_rate_average_low_over_time_period         5.529877510681107
       v_is_a_template                                         False
       max_mem_usage_absolute_average_low_over_time_period     6.99068853147752
       disk_5_mode
       vdi_connection_url
       parent_blue_folder_8_name
       aggressive_recommended_vcpus                            1
       v_snapshot_oldest_total_size
       disk_4_used_percent_of_provisioned                      0.0
       archived                                                false
       vdi_user_home_drive
       disk_2_size
       mac_addresses                                           00:1a:4a:0a:01:00
       vmsafe_agent_port
       v_owning_blue_folder                                    vm
       vdi_endpoint_ip_address
       disk_3_partitions_aligned                               True
       used_storage                                            6442450944
       overallocated_mem_pct                                   68.9
       Connecting to EVM integrate web-services at https://192.168.253.42/vmdbws/wsdl
       Successfully connected to EVM integrate web-services
       1. VM: TinyVM - GUID: 2e1b5a54-4480-11e2-a836-005056910000
       2. VM: rhel63server - GUID: 95d1550a-449d-11e2-9ae3-005056910000
       done
```

Report a bug

2.38. GetVmList

GetVmList returns the virtual machine list object for the given host GUID. Use an asterisk ("*****") as the **hostGuid** to return all virtual machines.
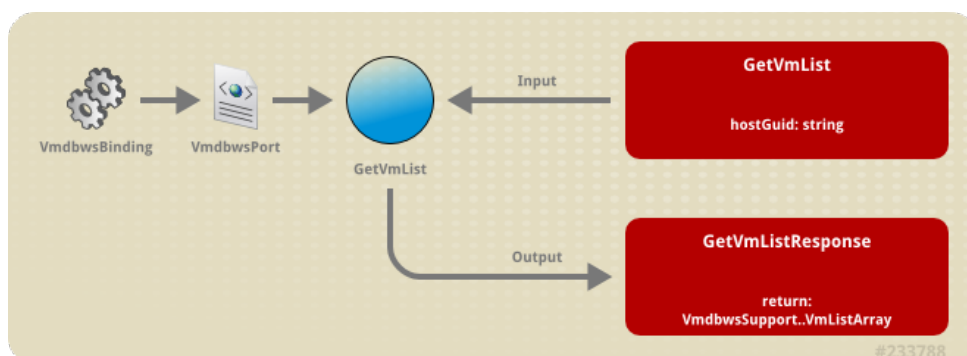
Syntax

- *Input:* **[{:hostGuid => :string}]**
- *Output:* **VmdbwsSupport..VmList**

Examples

The following examples demonstrate **GetVmList** usage:

Example 2.74. GetVmList WSDL

```
<message name="GetVmList">
  <part name="hostGuid" type="xsd:string" />
</message>
<message name="GetVmListResponse">
  <part name="return" type="typens:VmdbwsSupport..VmListArray" />
</message>
...
    <xsd:complexType name="VmdbwsSupport..VmList">-
      <xsd:all>
        <xsd:element name="guid" type="xsd:string" />
        <xsd:element name="name" type="xsd:string" />
      </xsd:all>
    </xsd:complexType>
```

Example 2.75. GetVmList Output (Windows PowerShell)

```
Calling GetVmList...
guid                                  name
----                                  ----
cfe05fb2-016e-11e0-8bd5-000c29fb2535  Ubuntu Desktop 10.04 RC
d2fdc6a8-016e-11e0-8bd5-000c29fb2535  Windows Server 2003 Enterprise x64
f693ba30-fc07-11df-ab2c-000c29fb2535  Win2008TemplateX64
```

Report a bug

2.39. GetVmsByList

GetVmsByList returns an array of virtual machine objects. The **vmList** input is usually the object returned from the **GetVmList** method or from the **VMs** property of either a **ProxyExtManagementSystem** or **ProxyHost** object. The **ProxyVm** object contains numerous properties listed in the WSDL file contents.

Syntax

- *Input:* **[{:vmList => [VmList]}]**. The **vmList** input is usually the object returned by the **GetVmList** method or from the **vms** property of either a **ProxyExtManagementSystem** or **ProxyHost** object.
- *Output:* **ProxyVm** as an array

Examples

The following examples demonstrate **GetVmsByList** usage:

Example 2.76. GetVmsByList WSDL

```
<message name="GetVmsByList">
  <part name="vmList" type="typens:VmdbwsSupport..VmListArray" />
</message>
<message name="GetVmsByListResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyVmArray" />
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyVm">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="vendor" type="xsd:string"/>
        <xsd:element name="format" type="xsd:string"/>
        <xsd:element name="version" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="description" type="xsd:string"/>
        <xsd:element name="location" type="xsd:string"/>
        <xsd:element name="config_xml" type="xsd:string"/>
        <xsd:element name="autostart" type="xsd:string"/>
        <xsd:element name="host_id" type="xsd:string"/>
        <xsd:element name="last_sync_on" type="xsd:dateTime"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="storage_id" type="xsd:string"/>
        <xsd:element name="guid" type="xsd:string"/>
        <xsd:element name="ems_id" type="xsd:string"/>
        <xsd:element name="last_scan_on" type="xsd:dateTime"/>
        <xsd:element name="last_scan_attempt_on" type="xsd:dateTime"/>
        <xsd:element name="uid_ems" type="xsd:string"/>
        <xsd:element name="retires_on" type="xsd:date"/>
        <xsd:element name="retired" type="xsd:boolean"/>
        <xsd:element name="boot_time" type="xsd:dateTime"/>
        <xsd:element name="tools_status" type="xsd:string"/>
        <xsd:element name="standby_action" type="xsd:string"/>
        <xsd:element name="power_state" type="xsd:string"/>
        <xsd:element name="state_changed_on" type="xsd:dateTime"/>
        <xsd:element name="previous_state" type="xsd:string"/>
        <xsd:element name="connection_state" type="xsd:string"/>
        <xsd:element name="last_perf_capture_on" type="xsd:dateTime"/>
        <xsd:element name="blackbox_exists" type="xsd:boolean"/>
        <xsd:element name="blackbox_validated" type="xsd:boolean"/>
        <xsd:element name="registered" type="xsd:boolean"/>
        <xsd:element name="busy" type="xsd:boolean"/>
        <xsd:element name="smart" type="xsd:boolean"/>
        <xsd:element name="memory_reserve" type="xsd:double"/>
        <xsd:element name="memory_reserve_expand" type="xsd:boolean"/>
        <xsd:element name="memory_limit" type="xsd:double"/>
        <xsd:element name="memory_shares" type="xsd:double"/>
        <xsd:element name="memory_shares_level" type="xsd:string"/>
        <xsd:element name="cpu_reserve" type="xsd:double"/>
        <xsd:element name="cpu_reserve_expand" type="xsd:boolean"/>
        <xsd:element name="cpu_limit" type="xsd:double"/>
        <xsd:element name="cpu_shares" type="xsd:double"/>
        <xsd:element name="cpu_shares_level" type="xsd:string"/>
        <xsd:element name="cpu_affinity" type="xsd:string"/>
        <xsd:element name="ems_created_on" type="xsd:dateTime"/>
        <xsd:element name="template" type="xsd:boolean"/>
        <xsd:element name="evm_owner_id" type="xsd:string"/>
        <xsd:element name="ems_ref_obj" type="xsd:string"/>
        <xsd:element name="miq_group_id" type="xsd:string"/>
        <xsd:element name="vdi" type="xsd:boolean"/>
        <xsd:element name="linked_clone" type="xsd:boolean"/>
        <xsd:element name="fault_tolerance" type="xsd:boolean"/>
        <xsd:element name="type" type="xsd:string"/>
        <xsd:element name="ems_ref" type="xsd:string"/>
        <xsd:element name="ipaddresses" type="typens:StringArray"/>
        <xsd:element name="hostnames" type="typens:StringArray"/>
        <xsd:element name="custom_attributes" type="typens:VmdbwsSupport..ProxyCustomAttributeArray"/>
        <xsd:element name="host" type="typens:VmdbwsSupport..HostList"/>
        <xsd:element name="ext_management_system" type="typens:VmdbwsSupport..EmsList"/>
        <xsd:element name="ws_attributes" type="typens:VmdbwsSupport..WSAttributesArray"/>
      </xsd:all>
    </xsd:complexType>
```

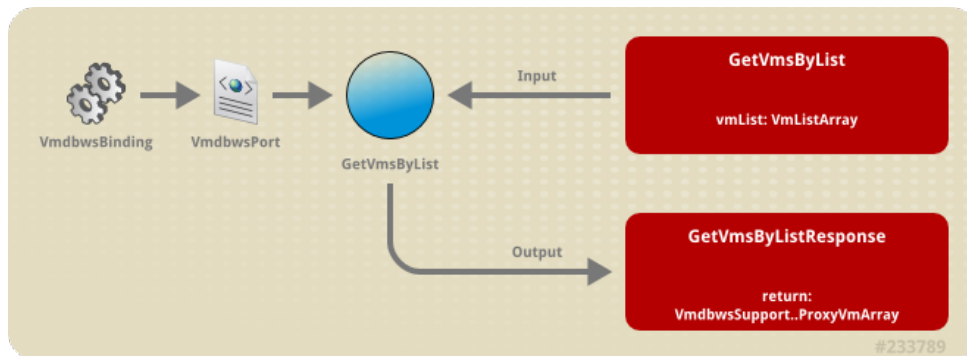**Example 2.77. GetVmsByList Output (Windows PowerShell)**

```
Calling GetVmsByList...
Name                                                       Value
----                                                       -----
disk_4_disk_type
conservative_vcpus_recommended_change                      -1
recommended_vcpus                                          1
max_cpu_usage_rate_average_high_over_time_period           44.02290026709669
parent_blue_folder_3_name
aggressive_mem_recommended_change_pct                      68.9
disk_6_disk_type
conservative_recommended_vcpus                             3
disk_4_size_on_disk
disks_aligned                                              False
paravirtualization
mem_cpu                                                    6144
v_owning_cluster                                           Pod1
vmsafe_agent_address
moderate_mem_recommended_change_pct                        44.8
disk_1_size_on_disk
num_hard_disks                                             5
disk_5_partitions_aligned                                  False
aggressive_vcpus_recommended_change_pct                    50.0
evm_owner_email
moderate_recommended_mem                                   3392
disk_7_mode
evm_owner_name
vdi_user_home_path
v_total_snapshots                                          1
last_compliance_status
vmsafe_immutable_vm
vdi_connection_session_type
cpu_usagemhz_rate_average_avg_over_time_period             651.6342140812435
orphaned                                                   false
disk_size                                                  0
disk_7_partitions_aligned
used_storage_by_state                                      6442450944
vdi_user_name
disk_3_size
max_cpu_usage_rate_average_low_over_time_period_without_ov... 5.529877510681107
owned_by_current_user                                      false
disk_8_size
vdi_endpoint_mac_address
recommended_mem                                            1912
aggressive_vcpus_recommended_change                        1
region_description                                         Region 0
disk_5_size_on_disk
evm_owner_userid
vdi_user_appdata
disk_9_size_on_disk
v_snapshot_newest_total_size
max_cpu_usage_rate_average_max_over_time_period            100.0
moderate_vcpus_recommended_change_pct                      50.0
v_snapshot_newest_description                              _ActiveImage_PRDv5EVM002_Tue Jun 19
17:13:11 EDT 2012
moderate_mem_recommended_change                            2752
disk_6_size
allocated_disk_storage                                     0
last_drift_state_timestamp                                 2012-07-24 20:12:32 -0700
region_number                                              0
disk_1_mode
disk_7_disk_type
disk_5_used_percent_of_provisioned                         0.0
aggressive_recommended_mem                                 1912
disk_8_mode
v_pct_free_disk_space
disk_6_partitions_aligned
aggressive_mem_recommended_change                          4232
disk_9_size
disk_7_size_on_disk
max_cpu_usage_rate_average_avg_over_time_period            24.776388888888896
disk_9_disk_type
disk_1_partitions_aligned                                  True
num_cpu                                                    2
disk_7_used_percent_of_provisioned
derived_memory_used_max_over_time_period                   3234.03377777778
vmsafe_fail_open
disk_3_disk_type
moderate_vcpus_recommended_change                          1
owned_by_current_ldap_group                                false
derived_memory_used_low_over_time_period                   232.8316855769765
disk_2_disk_type
disk_2_partitions_aligned                                  True
```

```
vdi_connection_dns_name
disk_5_size
disk_8_used_percent_of_provisioned
max_mem_usage_absolute_average_high_over_time_period_witho... 55.178755912966935
disk_4_size
v_host_vmm_product                                           RHEV-H
parent_blue_folder_7_name
disk_9_used_percent_of_provisioned
disk_1_used_percent_of_provisioned                           0.0
vdi_connection_session_name
conservative_mem_recommended_change_pct                      4.9
v_owning_folder                                              Datacenters
disk_8_disk_type
thin_provisioned                                             false
overallocated_vcpus_pct                                      50.0
uncommitted_storage                                          0
disk_8_size_on_disk
debris_size                                                  0
num_disks                                                    5
conservative_vcpus_recommended_change_pct                    -50.0
vm_misc_size                                                 0
max_mem_usage_absolute_average_avg_over_time_period_withou... 31.084722222222226
max_mem_usage_absolute_average_avg_over_time_period          31.084722222222226
vdi_user_dns_domain
v_datastore_path                                             MTCRHDS001/17830c59-6ae4-420f-af5c-
f6898c6c5b27.ovf
vdi_endpoint_type
vdi_user_home_share
os_image_name                                                linux_centos
moderate_recommended_vcpus                                   1
parent_blue_folder_1_name                                    Default
has_rdm_disk                                                 false
vdi_available                                                false
disk_6_used_percent_of_provisioned
used_disk_storage                                            0
vdi_connection_logon_server
ipaddresses                                                  10.10.1.211
parent_blue_folder_4_name
derived_memory_used_high_over_time_period                    2522.6954255341334
conservative_recommended_mem                                 5840
disk_9_mode
storage_name                                                 MTCRHDS001
v_owning_folder_path                                         Datacenters
is_evm_appliance                                             false
max_cpu_usage_rate_average_high_over_time_period_without_o... 44.02290026709669
vdi_connection_name
v_snapshot_newest_name                                       Active Image
ems_cluster_name                                             Pod1
v_snapshot_newest_timestamp                                  2012-06-19 14:04:47 -0700
disk_2_size_on_disk
max_mem_usage_absolute_average_max_over_time_period          95.0
vmsafe_timeout_ms
disk_2_mode
v_snapshot_oldest_description                                _ActiveImage_PRDv5EVM002_Tue Jun 19
17:13:11 EDT 2012
first_drift_state_timestamp                                  2012-07-24 20:12:32 -0700
vm_ram_size                                                  0
max_mem_usage_absolute_average_high_over_time_period         55.178755912966935
vdi_endpoint_name
vmsafe_enable
parent_blue_folder_2_name
parent_blue_folder_5_name
disk_3_mode
disk_1_disk_type
disconnected                                                 false
vdi_user_logon_time
v_pct_used_disk_space
disk_4_mode
v_owning_datacenter                                          Default
disk_1_size
disk_9_partitions_aligned
hostnames
disk_4_partitions_aligned                                    True
disk_6_size_on_disk
cpu_usagemhz_rate_average_low_over_time_period               366.26730508150735
max_mem_usage_absolute_average_low_over_time_period_withou... 6.99068853147752
disk_8_partitions_aligned
parent_blue_folder_6_name
snapshot_size                                                0
disk_5_disk_type
disk_2_used_percent_of_provisioned                           0.0
parent_blue_folder_9_name
```

```
platform                                              linux
provisioned_storage                                   6442450944
disk_3_used_percent_of_provisioned                    0.0
vdi_connection_remote_ip_address
disk_3_size_on_disk
max_cpu_usage_rate_average_avg_over_time_period_without_ov... 24.776388888888896
cpu_usagemhz_rate_average_high_over_time_period       937.0011230809796
derived_memory_used_avg_over_time_period              1377.7635555555548
last_compliance_timestamp
disk_6_mode
vdi_user_domain
v_snapshot_oldest_name                                Active Image
has_active_vdi_session                                false
host_name                                             mtcrhel62001.miq.net
v_owning_blue_folder_path                             Datacenters/Default/vm
conservative_mem_recommended_change                   304
v_owning_resource_pool                                Default for Cluster Pod1
v_snapshot_oldest_timestamp                           2012-06-19 14:04:47 -0700
disk_7_size
owning_ldap_group
v_annotation                                          Production V5 EVM appliance (iSCSI
scanning)
cpu_usagemhz_rate_average_max_over_time_period        1053.93493333333
max_cpu_usage_rate_average_low_over_time_period       5.529877510681107
v_is_a_template                                       False
max_mem_usage_absolute_average_low_over_time_period   6.99068853147752
disk_5_mode
vdi_connection_url
parent_blue_folder_8_name
aggressive_recommended_vcpus                          1
v_snapshot_oldest_total_size
disk_4_used_percent_of_provisioned                    0.0
archived                                              false
vdi_user_home_drive
disk_2_size
mac_addresses                                         00:1a:4a:0a:01:00
vmsafe_agent_port
v_owning_blue_folder                                  vm
vdi_endpoint_ip_address
disk_3_partitions_aligned                             True
used_storage                                          6442450944
overallocated_mem_pct                                 68.9
```

Report a bug

2.40. GetVmsByTag

GetVmsByTag returns an array of virtual machine objects based on tag assignment. The input is a tag string.
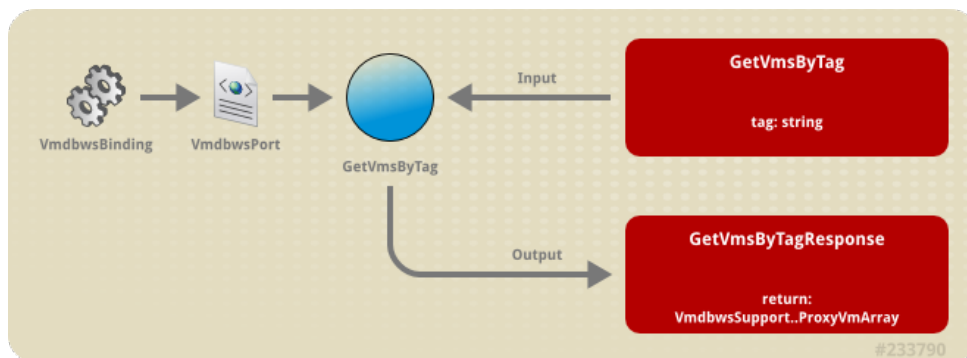
Syntax

▸ *Input:* **[{:tag => :string}]**

▸ *Output:* **ProxyVm** as an array

Examples

The following examples demonstrate **GetVmsByTag** usage:

Example 2.78. GetVmsByTag WSDL

```
<message name="GetVmsByTag">
  <part name="tag" type="xsd:string"/>
</message>
<message name="GetVmsByTagResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyVmArray"/>
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyVm">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="vendor" type="xsd:string"/>
        <xsd:element name="format" type="xsd:string"/>
        <xsd:element name="version" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="description" type="xsd:string"/>
        <xsd:element name="location" type="xsd:string"/>
        <xsd:element name="config_xml" type="xsd:string"/>
        <xsd:element name="autostart" type="xsd:string"/>
        <xsd:element name="host_id" type="xsd:string"/>
        <xsd:element name="last_sync_on" type="xsd:dateTime"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="storage_id" type="xsd:string"/>
        <xsd:element name="guid" type="xsd:string"/>
        <xsd:element name="ems_id" type="xsd:string"/>
        <xsd:element name="last_scan_on" type="xsd:dateTime"/>
        <xsd:element name="last_scan_attempt_on" type="xsd:dateTime"/>
        <xsd:element name="uid_ems" type="xsd:string"/>
        <xsd:element name="retires_on" type="xsd:date"/>
        <xsd:element name="retired" type="xsd:boolean"/>
        <xsd:element name="boot_time" type="xsd:dateTime"/>
        <xsd:element name="tools_status" type="xsd:string"/>
        <xsd:element name="standby_action" type="xsd:string"/>
        <xsd:element name="power_state" type="xsd:string"/>
        <xsd:element name="state_changed_on" type="xsd:dateTime"/>
        <xsd:element name="previous_state" type="xsd:string"/>
        <xsd:element name="connection_state" type="xsd:string"/>
        <xsd:element name="last_perf_capture_on" type="xsd:dateTime"/>
        <xsd:element name="blackbox_exists" type="xsd:boolean"/>
        <xsd:element name="blackbox_validated" type="xsd:boolean"/>
        <xsd:element name="registered" type="xsd:boolean"/>
        <xsd:element name="busy" type="xsd:boolean"/>
        <xsd:element name="smart" type="xsd:boolean"/>
        <xsd:element name="memory_reserve" type="xsd:double"/>
        <xsd:element name="memory_reserve_expand" type="xsd:boolean"/>
        <xsd:element name="memory_limit" type="xsd:double"/>
        <xsd:element name="memory_shares" type="xsd:double"/>
        <xsd:element name="memory_shares_level" type="xsd:string"/>
        <xsd:element name="cpu_reserve" type="xsd:double"/>
        <xsd:element name="cpu_reserve_expand" type="xsd:boolean"/>
        <xsd:element name="cpu_limit" type="xsd:double"/>
        <xsd:element name="cpu_shares" type="xsd:double"/>
        <xsd:element name="cpu_shares_level" type="xsd:string"/>
        <xsd:element name="cpu_affinity" type="xsd:string"/>
        <xsd:element name="ems_created_on" type="xsd:dateTime"/>
        <xsd:element name="template" type="xsd:boolean"/>
        <xsd:element name="evm_owner_id" type="xsd:string"/>
        <xsd:element name="ems_ref_obj" type="xsd:string"/>
        <xsd:element name="miq_group_id" type="xsd:string"/>
        <xsd:element name="vdi" type="xsd:boolean"/>
        <xsd:element name="linked_clone" type="xsd:boolean"/>
        <xsd:element name="fault_tolerance" type="xsd:boolean"/>
        <xsd:element name="type" type="xsd:string"/>
        <xsd:element name="ems_ref" type="xsd:string"/>
        <xsd:element name="ipaddresses" type="typens:StringArray"/>
        <xsd:element name="hostnames" type="typens:StringArray"/>
        <xsd:element name="custom_attributes" type="typens:VmdbwsSupport..ProxyCustomAttributeArray"/>
        <xsd:element name="host" type="typens:VmdbwsSupport..HostList"/>
        <xsd:element name="ext_management_system" type="typens:VmdbwsSupport..EmsList"/>
        <xsd:element name="ws_attributes" type="typens:VmdbwsSupport..WSAttributesArray"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.79. GetVmsByTag Output (Windows PowerShell)

```
Name                                                       Value
----                                                       -----
disk_4_disk_type
conservative_vcpus_recommended_change                      -1
recommended_vcpus                                          1
max_cpu_usage_rate_average_high_over_time_period           44.02290026709669
parent_blue_folder_3_name
aggressive_mem_recommended_change_pct                      68.9
disk_6_disk_type
conservative_recommended_vcpus                             3
disk_4_size_on_disk
disks_aligned                                              False
paravirtualization
mem_cpu                                                    6144
v_owning_cluster                                           Pod1
vmsafe_agent_address
moderate_mem_recommended_change_pct                        44.8
disk_1_size_on_disk
num_hard_disks                                             5
disk_5_partitions_aligned                                  False
aggressive_vcpus_recommended_change_pct                    50.0
evm_owner_email
moderate_recommended_mem                                   3392
disk_7_mode
evm_owner_name
vdi_user_home_path
v_total_snapshots                                          1
last_compliance_status
vmsafe_immutable_vm
vdi_connection_session_type
cpu_usagemhz_rate_average_avg_over_time_period             651.6342140812435
orphaned                                                   false
disk_size                                                  0
disk_7_partitions_aligned
used_storage_by_state                                      6442450944
vdi_user_name
disk_3_size
max_cpu_usage_rate_average_low_over_time_period_without_ov... 5.529877510681107
owned_by_current_user                                      false
disk_8_size
vdi_endpoint_mac_address
recommended_mem                                            1912
aggressive_vcpus_recommended_change                        1
region_description                                         Region 0
disk_5_size_on_disk
evm_owner_userid
vdi_user_appdata
disk_9_size_on_disk
v_snapshot_newest_total_size
max_cpu_usage_rate_average_max_over_time_period            100.0
moderate_vcpus_recommended_change_pct                      50.0
v_snapshot_newest_description                              _ActiveImage_PRDv5EVM002_Tue Jun 19
17:13:11 EDT 2012
moderate_mem_recommended_change                            2752
disk_6_size
allocated_disk_storage                                     0
last_drift_state_timestamp                                 2012-07-24 20:12:32 -0700
region_number                                              0
disk_1_mode
disk_7_disk_type
disk_5_used_percent_of_provisioned                         0.0
aggressive_recommended_mem                                 1912
disk_8_mode
v_pct_free_disk_space
disk_6_partitions_aligned
aggressive_mem_recommended_change                          4232
disk_9_size
disk_7_size_on_disk
max_cpu_usage_rate_average_avg_over_time_period            24.776388888888896
disk_9_disk_type
disk_1_partitions_aligned                                  True
num_cpu                                                    2
disk_7_used_percent_of_provisioned
derived_memory_used_max_over_time_period                   3234.03377777778
vmsafe_fail_open
disk_3_disk_type
moderate_vcpus_recommended_change                          1
owned_by_current_ldap_group                                false
derived_memory_used_low_over_time_period                   232.8316855769765
disk_2_disk_type
disk_2_partitions_aligned                                  True
vdi_connection_dns_name
```

```
disk_5_size
disk_8_used_percent_of_provisioned
max_mem_usage_absolute_average_high_over_time_period_witho...  55.178755912966935
disk_4_size
v_host_vmm_product                                            RHEV-H
parent_blue_folder_7_name
disk_9_used_percent_of_provisioned
disk_1_used_percent_of_provisioned                            0.0
vdi_connection_session_name
conservative_mem_recommended_change_pct                       4.9
v_owning_folder                                               Datacenters
disk_8_disk_type
thin_provisioned                                              false
overallocated_vcpus_pct                                       50.0
uncommitted_storage                                           0
disk_8_size_on_disk
debris_size                                                   0
num_disks                                                     5
conservative_vcpus_recommended_change_pct                     -50.0
vm_misc_size                                                  0
max_mem_usage_absolute_average_avg_over_time_period_withou...  31.084722222222226
max_mem_usage_absolute_average_avg_over_time_period           31.084722222222226
vdi_user_dns_domain
v_datastore_path                                              MTCRHDS001/17830c59-6ae4-420f-af5c-
f6898c6c5b27.ovf
vdi_endpoint_type
vdi_user_home_share
os_image_name                                                 linux_centos
moderate_recommended_vcpus                                    1
parent_blue_folder_1_name                                     Default
has_rdm_disk                                                  false
vdi_available                                                 false
disk_6_used_percent_of_provisioned
used_disk_storage                                             0
vdi_connection_logon_server
ipaddresses                                                   10.10.1.211
parent_blue_folder_4_name
derived_memory_used_high_over_time_period                     2522.6954255341334
conservative_recommended_mem                                  5840
disk_9_mode
storage_name                                                  MTCRHDS001
v_owning_folder_path                                          Datacenters
is_evm_appliance                                              false
max_cpu_usage_rate_average_high_over_time_period_without_o...  44.02290026709669
vdi_connection_name
v_snapshot_newest_name                                        Active Image
ems_cluster_name                                              Pod1
v_snapshot_newest_timestamp                                   2012-06-19 14:04:47 -0700
disk_2_size_on_disk
max_mem_usage_absolute_average_max_over_time_period           95.0
vmsafe_timeout_ms
disk_2_mode
v_snapshot_oldest_description                                 _ActiveImage_PRDv5EVM002_Tue Jun 19
17:13:11 EDT 2012
first_drift_state_timestamp                                   2012-07-24 20:12:32 -0700
vm_ram_size                                                   0
max_mem_usage_absolute_average_high_over_time_period          55.178755912966935
vdi_endpoint_name
vmsafe_enable
parent_blue_folder_2_name
parent_blue_folder_5_name
disk_3_mode
disk_1_disk_type
disconnected                                                  false
vdi_user_logon_time
v_pct_used_disk_space
disk_4_mode
v_owning_datacenter                                           Default
disk_1_size
disk_9_partitions_aligned
hostnames
disk_4_partitions_aligned                                     True
disk_6_size_on_disk
cpu_usagemhz_rate_average_low_over_time_period                366.26730508150735
max_mem_usage_absolute_average_low_over_time_period_withou...  6.99068853147752
disk_8_partitions_aligned
parent_blue_folder_6_name
snapshot_size                                                 0
disk_5_disk_type
disk_2_used_percent_of_provisioned                            0.0
parent_blue_folder_9_name
platform                                                      linux
```

```
provisioned_storage                                      6442450944
disk_3_used_percent_of_provisioned                       0.0
vdi_connection_remote_ip_address
disk_3_size_on_disk
max_cpu_usage_rate_average_avg_over_time_period_without_ov... 24.776388888888896
cpu_usagemhz_rate_average_high_over_time_period          937.0011230809796
derived_memory_used_avg_over_time_period                 1377.7635555555548
last_compliance_timestamp
disk_6_mode
vdi_user_domain
v_snapshot_oldest_name                                   Active Image
has_active_vdi_session                                   false
host_name                                                mtcrhel62001.miq.net
v_owning_blue_folder_path                                Datacenters/Default/vm
conservative_mem_recommended_change                      304
v_owning_resource_pool                                   Default for Cluster Pod1
v_snapshot_oldest_timestamp                              2012-06-19 14:04:47 -0700
disk_7_size
owning_ldap_group
v_annotation                                             Production V5 EVM appliance (iSCSI
scanning)
cpu_usagemhz_rate_average_max_over_time_period           1053.93493333333
max_cpu_usage_rate_average_low_over_time_period          5.529877510681107
v_is_a_template                                          False
max_mem_usage_absolute_average_low_over_time_period      6.99068853147752
disk_5_mode
vdi_connection_url
parent_blue_folder_8_name
aggressive_recommended_vcpus                             1
v_snapshot_oldest_total_size
disk_4_used_percent_of_provisioned                       0.0
archived                                                 false
vdi_user_home_drive
disk_2_size
mac_addresses                                            00:1a:4a:0a:01:00
vmsafe_agent_port
v_owning_blue_folder                                     vm
vdi_endpoint_ip_address
disk_3_partitions_aligned                                True
used_storage                                             6442450944
overallocated_mem_pct                                    68.9
```

[Report a bug](#)

2.41. HostGetTags

HostGetTags retrieves the list of tags associated with a host. The returned tag objects include properties for **category**, **tag_name**, **tag_display_name**, and **tag_path**. See the WSDL definition for the **Tag** object for the full property listing.
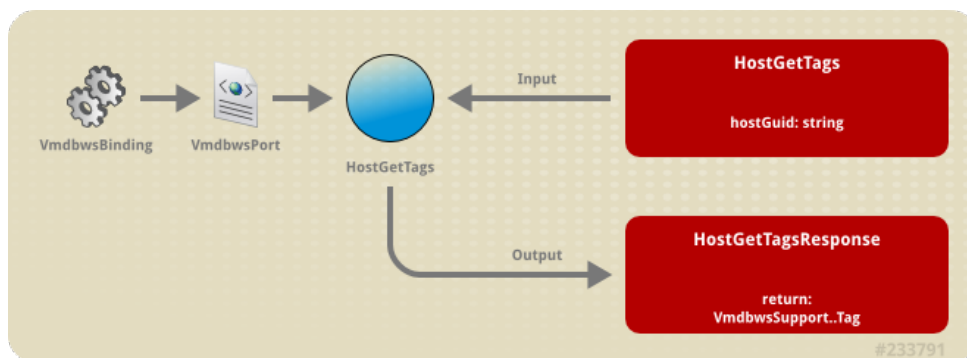
Syntax

- *Input:* **[{:hostGuid => :string}]**
- *Output:* **[[Tag]]**

Examples

The following examples demonstrate **HostGetTags** usage:

Example 2.80. HostGetTags WSDL

```
<message name="HostGetTags">
  <part name="hostGuid" type="xsd:string" />
</message>
<message name="HostGetTagsResponse">
  <part name="return" type="typens:VmdbwsSupport..TagArray" />
</message>
...
    <xsd:complexType name="VmdbwsSupport..Tag">
      <xsd:all>
        <xsd:element name="tag_display_name" type="xsd:string"/>
        <xsd:element name="display_name" type="xsd:string"/>
        <xsd:element name="tag_name" type="xsd:string"/>
        <xsd:element name="tag_path" type="xsd:string"/>
        <xsd:element name="category" type="xsd:string"/>
        <xsd:element name="category_display_name" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.81. HostGetTags Output (Windows PowerShell)

```
Calling HostGetTags...
display_name          : Location: Chicago
category              : location
category_display_name : Location
tag_display_name      : Chicago
tag_name              : chicago
tag_path              : /managed/location/chicago

display_name          : Environment: Production
category              : environment
category_display_name : Environment
tag_display_name      : Production
tag_name              : prod
tag_path              : /managed/environment/prod
```

Report a bug

2.42. ResourcePoolGetTags

ResourcePoolGetTags retrieves the list of tags associated with a resource pool. The returned tag objects include properties for **category**, **tag_name**, **tag_display_name**, and **tag_path**. See the WSDL definition for the **Tag** object for the full property listing.
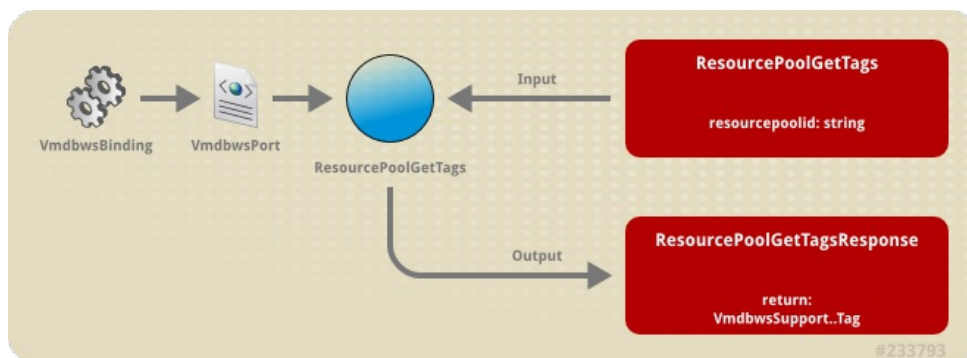
Syntax

- *Input:* **[{:resourcepoolID => :string}]**
- *Output:* **[[VmdbwsSupport..TagArray]]**

Examples

The following examples demonstrate **ResourcePoolGetTags** usage:

Example 2.82. ResourcePoolGetTags WSDL

```
<message name="ResourcePoolGetTags">
  <part name="resourcepoolId" type="xsd:string"/>
</message>
<message name="ResourcePoolGetTagsResponse">
  <part name="return" type="typens:VmdbwsSupport..TagArray"/>
</message>
...
    <xsd:complexType name="VmdbwsSupport..Tag">
      <xsd:all>
        <xsd:element name="tag_display_name" type="xsd:string"/>
        <xsd:element name="display_name" type="xsd:string"/>
        <xsd:element name="tag_name" type="xsd:string"/>
        <xsd:element name="tag_path" type="xsd:string"/>
        <xsd:element name="category" type="xsd:string"/>
        <xsd:element name="category_display_name" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 2.83. ResourcePoolGetTags Output (Windows PowerShell)

```
display_name          : Location: Chicago
category              : location
category_display_name : Location
tag_display_name      : Chicago
tag_name              : chicago
tag_path              : /managed/location/chicago

display_name          : Environment: Production
category              : environment
category_display_name : Environment
tag_display_name      : Production
tag_name              : prod
tag_path              : /managed/environment/prod
```

Report a bug

2.43. VmGetTags

VmGetTags retrieves the list of tags associated with a virtual machine. The returned tag objects include properties for **category**, **tag_name**, **tag_display_name**, and **tag_path**. See the WSDL definition for the **Tag** object for the full property listing.

Syntax

- *Input:* **[{:vmGuid => :string}]**
- *Output:* **[[Tag]]**

Examples

The following examples demonstrate **VmGetTags** usage:

Example 2.84. VmGetTags WSDL

```
<message name="VmGetTags">
  <part name="vmGuid" type="xsd:string" />
</message>
<message name="VmGetTagsResponse">
  <part name="return" type="typens:VmdbwsSupport..TagArray" />
</message>
...
    <xsd:complexType name="VmdbwsSupport..Tag">
      <xsd:all>
        <xsd:element name="tag_display_name" type="xsd:string"/>
        <xsd:element name="display_name" type="xsd:string"/>
        <xsd:element name="tag_name" type="xsd:string"/>
        <xsd:element name="tag_path" type="xsd:string"/>
        <xsd:element name="category" type="xsd:string"/>
        <xsd:element name="category_display_name" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```
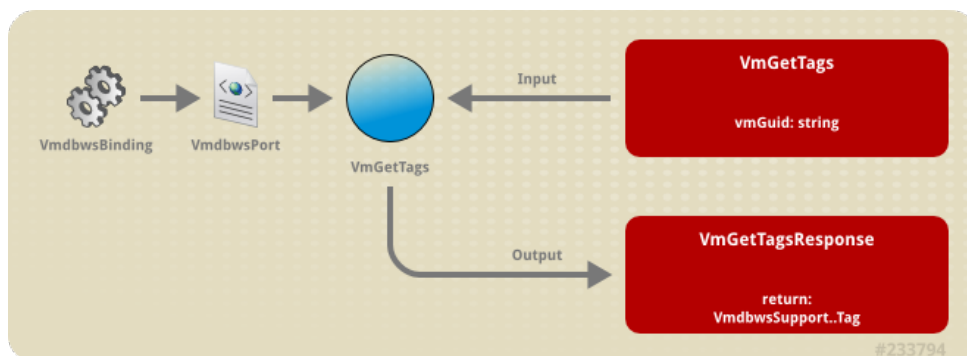
Example 2.85. VmGetTags Output (Windows PowerShell)

```
Calling VmGetTags...
display_name          : Cost Center: Cost Center 002
category              : cc
category_display_name : Cost Center
tag_display_name      : Cost Center 002
tag_name              : 002
tag_path              : /managed/cc/002

display_name          : Parent Folder Path (VMs & Templates): Datacenters/VI4/vm
category              : folder_path_blue
category_display_name : Parent Folder Path (VMs & Templates)
tag_display_name      : Datacenters/VI4/vm
tag_name              : datacenters:vi4:vm
tag_path              : /managed/folder_path_blue/datacenters:vi4:vm
```

Report a bug

Chapter 3. Control Web Services

This chapter describes web services associated with the Control Feature Set.

At the end of this chapter, you will:

▹ Know what web service methods are available to Control.

▹ Be familiar with the parameters that each method can take.

▹ See examples of the outputs for each method.

Web Services associated with Control pertain to enforcing and assigning policy data in your Virtual Infrastructure. For each Web service, we supply a brief description, input, output, the excerpt from the WSDL, and a sample output.

You can find a full copy of the WSDL file in the WSDL File Appendix.

Report a bug

3.1. ClusterSetTag

ClusterSetTag applies a tag to a cluster. It identifies the tag through a tag **category** and **name**.
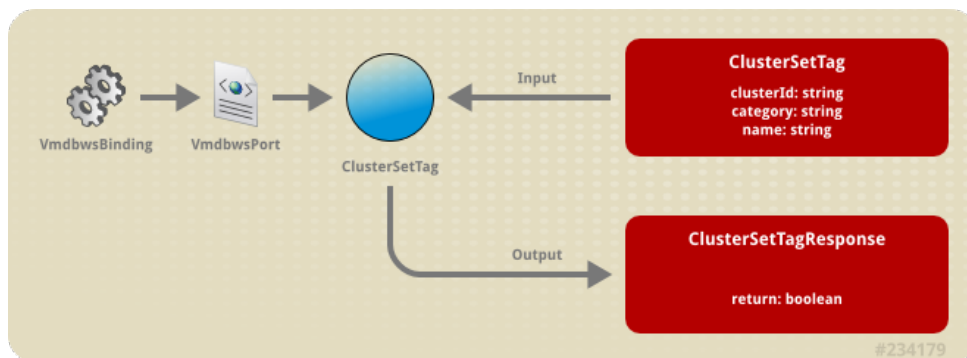
Syntax

▹ *Input:*

```
[{:clusterId => :string},
 {:category=>:string},
 {:name=>:string}]
```

▹ *Output:*

```
[:boolean]
```

Examples

The following examples demonstrate **ClusterSetTag** usage:

Example 3.1. ClusterSetTag WSDL

```
<message name="ClusterSetTag">
  <part name="clusterId" type="xsd:string"/>
  <part name="category" type="xsd:string"/>
  <part name="name" type="xsd:string"/>
</message>
<message name="ClusterSetTagResponse">
  <part name="return" type="xsd:boolean"/>
</message>
```

Example 3.2. ClusterSetTag Output (Windows PowerShell)

```
...Result:true
```

Report a bug

3.2. DatastoreSetTag

DatastoreSetTag applies a tag to a datastore. It identifies the tag through a tag **category** and **name**.

> ◢ *Input:*

```
[{:datastoreId => :string},
 {:category=>:string},
 {:name=>:string}]
```

> ◢ *Output:*

```
[:boolean]
```

DatastoreSetTag WSDL

```
<message name="DatastoreSetTag">
  <part name="datastoreId" type="xsd:string"/>
  <part name="category" type="xsd:string"/>
  <part name="name" type="xsd:string"/>
</message>
<message name="DatastoreSetTagResponse">
  <part name="return" type="xsd:boolean"/>
</message>
```

DatastoreSetTag Output (Windows PowerShell)

```
...Result:true
```

Report a bug

3.3. EMSSetTag

EMSSetTag applies a tag to a management system. It identifies the tag through a tag **category** and **name**.
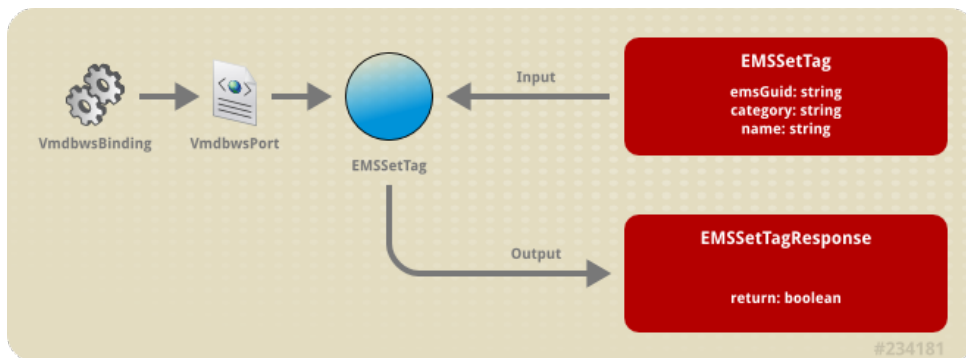
Syntax

> ◢ *Input:*

```
[{:emsGuid => :string},
 {:category=>:string},
 {:name=>:string}]
```

> ◢ *Output:*

```
[:boolean]
```

Examples

The following examples demonstrate **EMSSetTag** usage:

Example 3.3. EMSSetTag WSDL

```
<message name="EmsSetTag">
  <part name="emsGuid" type="xsd:string"/>
  <part name="category" type="xsd:string"/>
  <part name="name" type="xsd:string"/>
</message>
<message name="EmsSetTagResponse">
  <part name="return" type="xsd:boolean"/>
</message>
```
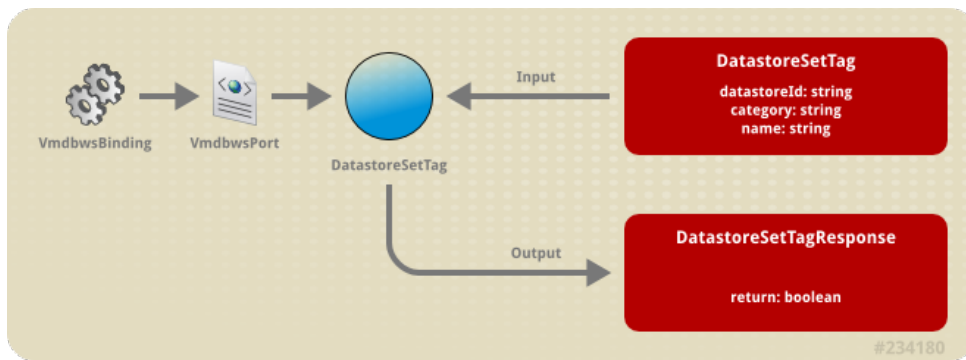
Example 3.4. EMSSetTag Output (Windows PowerShell)

```
...Result:true
```

Report a bug

3.4. EVMActionList

EVMActionList returns the list of policy action IDs and names defined for a given policy. If **policyId** is an asterisk ("*****"), **all**, or **none**, the method returns all actions.
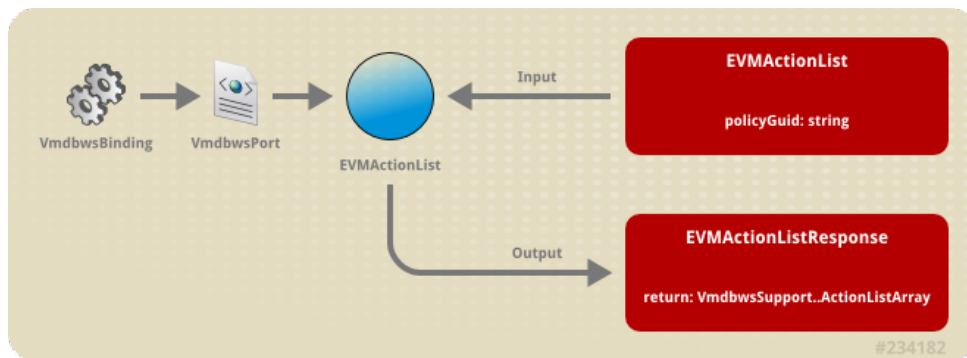
Syntax

» *Input:* The ID of a policy. If the ID is an asterisk ("*****"), **all**, or **none**, the output includes all actions.

» *Output:* **VmdbwsSupport..ActionListArray**. Each **VmdbwsSupport..ActionList** contains the **name** and **guid** of the action for the specified **policyId**.

Examples

The following examples demonstrate **EVMActionList** usage:

Example 3.5. EVMActionList(<policyId>) WSDL

```
<message name="EVMActionList">
  <part name="policyGuid" type="xsd:string"/>
</message>
<message name="EVMActionListResponse">
  <part name="return" type="typens:VmdbwsSupport..ActionListArray"/>
</message>
...
    <xsd:complexType name="VmdbwsSupport..ActionList">
      <xsd:all>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="guid" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 3.6. EVMActionList Output (Java)

```
Calling EVMActionList...
fe9c664a-83ca-11dc-8bac-0017f2d3eb46, audit
fe9cdcf6-83ca-11dc-8bac-0017f2d3eb46, log
fe9d4c40-83ca-11dc-8bac-0017f2d3eb46, email
fe9dc2ce-83ca-11dc-8bac-0017f2d3eb46, snmp
fe9e2f48-83ca-11dc-8bac-0017f2d3eb46, sms
fe9e9cb2-83ca-11dc-8bac-0017f2d3eb46, quarantine
fe9f08d2-83ca-11dc-8bac-0017f2d3eb46, remediate
fe9f7786-83ca-11dc-8bac-0017f2d3eb46, tag
fe9fe950-83ca-11dc-8bac-0017f2d3eb46, script
fea06c68-83ca-11dc-8bac-0017f2d3eb46, prevent
fd81ad16-938c-11dc-84a1-0017f2d3eb46, email_on_failure

Calling EVMActionList for policy: env_prod, [189df1e8-83cc-11dc-912b-0017f2d3eb46]
fd81ad16-938c-11dc-84a1-0017f2d3eb46, email_on_failure
fea06c68-83ca-11dc-8bac-0017f2d3eb46, prevent
```

Report a bug

3.5. EVMAddLifecycleEvent

EVMAddLifecycleEvent (**event**, **status**, **message**, **guid**, **location**, **created_by**) adds a lifecycle event record for a virtual machine and records the **event**, **status**, **message**, and **created_by** values in the **lifecycle_events** table in the VMDB. The method looks up a virtual machine either by GUID or fully-qualified path to the configuration file. (For VMware, a fully-qualified path would be similar to **[datastore-1] test3/test3.vmx**)
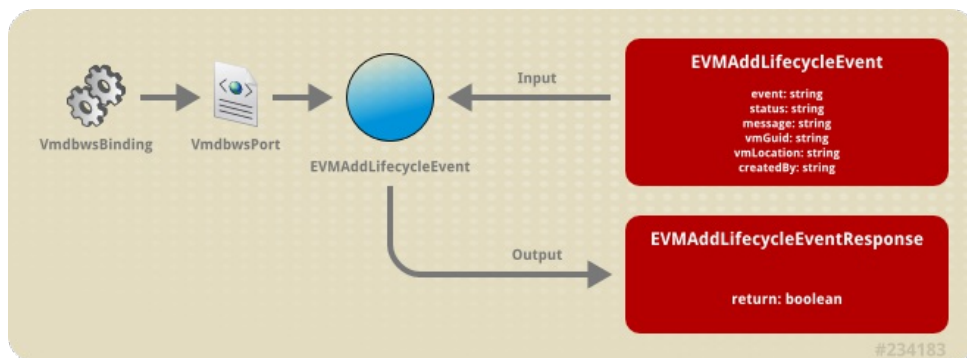
Syntax

> *Input:*

```
[{:event => :string},
 {:status => :string},
 {:message => :string},
 {:vmGuid => :string},
 {:vmLocation => :string},
 {:createdBy => :string}]
```

> *Output:*

```
true
```

Examples

The following examples demonstrate **EVMAddLifecycleEvent** usage:

Example 3.7. EVMAddLifecycleEvent WSDL

```
<message name="EVMAddLifecycleEvent">
  <part name="event" type="xsd:string"/>
  <part name="status" type="xsd:string"/>
  <part name="message" type="xsd:string"/>
  <part name="vmGuid" type="xsd:string"/>
  <part name="vmLocation" type="xsd:string"/>
  <part name="createdBy" type="xsd:string"/>
</message>
<message name="EVMAddLifecycleEventResponse">
  <part name="return" type="xsd:boolean"/>
</message>
```

Example 3.8. EVMAddLifecycleEventResponse (Java)

```
Calling EVMAddLifecycleEventResponse...
...Result:true
```

Report a bug

3.6. EVMAssignPolicy

EVMAssignPolicy assigns a policy (**policyId**) to a host (**hostId**).
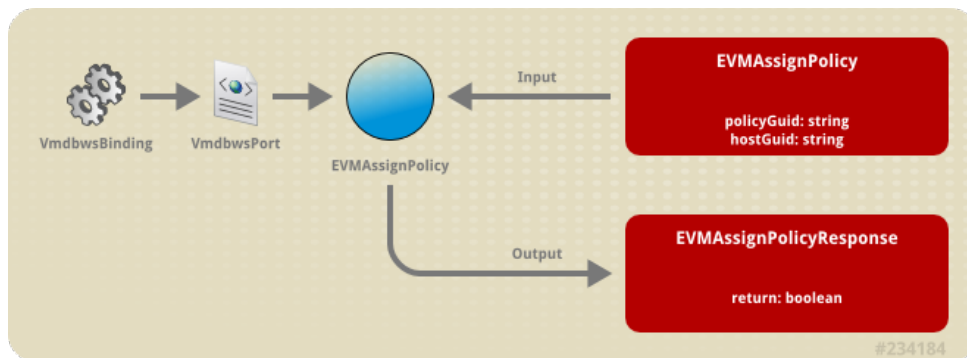
Syntax

- Input: The ID of a host existing in the VMDB and the ID of a policy instance assigned to that host.
- Output: Boolean in the form of **true** or **false**.

Examples

The following examples demonstrate **EVMAssignPolicy** usage:

Example 3.9. EVMAssignPolicy WSDL

```
<message name="EVMAssignPolicy">
  <part name="policyGuid" type="xsd:string" />
  <part name="hostGuid" type="xsd:string" />
</message>
<message name="EVMAssignPolicyResponse">
  <part name="return" type="xsd:boolean" />
</message>
```

Example 3.10. EVMAssignPolicy Output (Java)

```
Calling EVMAssignPolicy Policy: env_prod, Host: AcmeVista
Result: true
Calling EVMAssignPolicy Policy: env_prod_vm_host, Host: AcmeVista
Result: true
Calling EVMAssignPolicy Policy: hardware_cpus, Host: AcmeVista
Result: true
```

Report a bug

3.7. EVMConditionList

EVMConditionList returns the list of policy condition IDs and names defined for a given policy. If **policyId** is an asterisk ("*****"), **all** or **none**, the method returns all conditions.
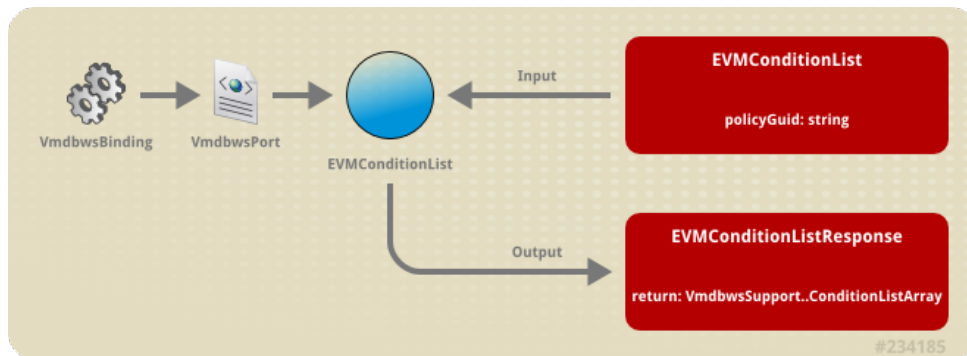
Syntax

▹ *Input:* The ID of a policy. If **policyId** is an asterisk ("*****"), **all** or **none**, the output includes all conditions.
▹ *Output:* **VmdbwsSupport..ConditionListArray**. Each **VmdbwsSupport..ConditionList** contains the **name** and **guid** of the condition for the specified **policyId**.

Examples

The following examples demonstrate **EVMConditionList** usage:

Example 3.11. EVMConditionList WSDL

```
<message name="EVMConditionList">
  <part name="policyGuid" type="xsd:string" />
</message>
<message name="EVMConditionListResponse">
  <part name="return" type="typens:VmdbwsSupport..ConditionListArray" />
</message>
...
    <xsd:complexType name="VmdbwsSupport..ConditionList">
      <xsd:all>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="guid" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 3.12. EVMConditionList Output (Java)

```
Calling EVMConditionList...
fe92d7c4-83ca-11dc-8bac-0017f2d3eb46, env_prod
fe936f9a-83ca-11dc-8bac-0017f2d3eb46, env_prod_vm_host
fe94145e-83ca-11dc-8bac-0017f2d3eb46, hardware_cpus
fe94aa18-83ca-11dc-8bac-0017f2d3eb46, os_winxp_sp2
fe953622-83ca-11dc-8bac-0017f2d3eb46, security_accounts
fe95bc00-83ca-11dc-8bac-0017f2d3eb46, security_administrators
fe965b56-83ca-11dc-8bac-0017f2d3eb46, security_av_service
fe96eed6-83ca-11dc-8bac-0017f2d3eb46, security_services
fe978cec-83ca-11dc-8bac-0017f2d3eb46, service_level_gold
fe981478-83ca-11dc-8bac-0017f2d3eb46, service_level_platinum
fe989664-83ca-11dc-8bac-0017f2d3eb46, service_level_silver
fe991bca-83ca-11dc-8bac-0017f2d3eb46, software_KB911567
fe99a004-83ca-11dc-8bac-0017f2d3eb46, test_syntax_1
fe9a2966-83ca-11dc-8bac-0017f2d3eb46, enforce
fe9ab8f4-83ca-11dc-8bac-0017f2d3eb46, linux_only
fe9b37de-83ca-11dc-8bac-0017f2d3eb46, win_only
fe9bbef2-83ca-11dc-8bac-0017f2d3eb46, account_limit
a23c1ed2-83ec-11dc-b8d0-0017f2d3eb46, test_xml_syntax

Calling EVMConditionList for policy: env_prod, [189df1e8-83cc-11dc-912b-0017f2d3eb46]
fe92d7c4-83ca-11dc-8bac-0017f2d3eb46, env_prod
```

Report a bug

3.8. EVMEventList

EVMEventList returns the list of policy event IDs and names defined for a given policy. If **policyId** is an asterisk ("*****"), **all**, or **none**, the method returns all events.

Syntax

- *Input:* The ID of a policy. If **policyId** is an asterisk ("*****"), **all**, or **none**, the output includes all conditions.
- *Output:* **VmdbwsSupport..EventListArray**. Each **VmdbwsSupport..EventList** contains the list of conditions for the **policyid**.

Examples

The following examples demonstrate **EVMEventList** usage:

Example 3.13. EVMEventList WSDL

```
<message name="EVMEventList">
  <part name="policyGuid" type="xsd:string" />
</message>
<message name="EVMEventListResponse">
  <part name="return" type="typens:VmdbwsSupport..EventListArray" />
</message>
...
    <xsd:complexType name="VmdbwsSupport..EventList">
      <xsd:all>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="guid" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```
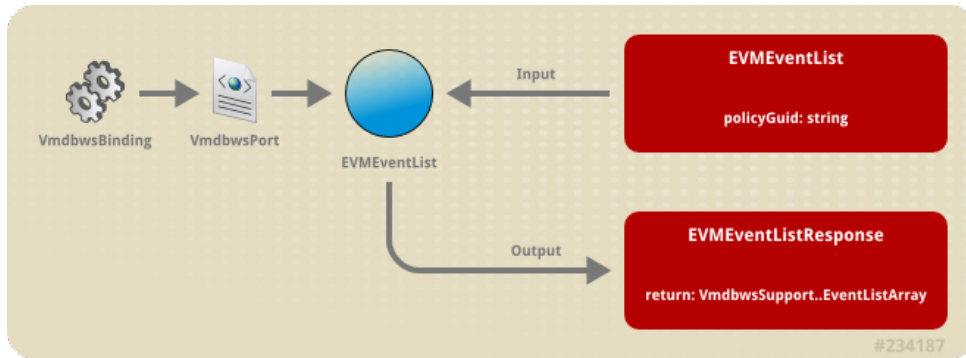
Example 3.14. EVMEventList Output (Java)

```
Calling EVMEventList...
fe8aadec-83ca-11dc-8bac-0017f2d3eb46, vm_start
fe8b2b64-83ca-11dc-8bac-0017f2d3eb46, vm_shutdown
fe8b9932-83ca-11dc-8bac-0017f2d3eb46, vm_pause
fe8c1470-83ca-11dc-8bac-0017f2d3eb46, vm_resume
fe8c873e-83ca-11dc-8bac-0017f2d3eb46, vm_migrate
fe8cedbe-83ca-11dc-8bac-0017f2d3eb46, vm_relocate
fe8d53f8-83ca-11dc-8bac-0017f2d3eb46, vm_reset
fe8dbd02-83ca-11dc-8bac-0017f2d3eb46, vm_suspend
fe8e29fe-83ca-11dc-8bac-0017f2d3eb46, vm_poweroff
fe8ea6a4-83ca-11dc-8bac-0017f2d3eb46, vm_create
fe8f23cc-83ca-11dc-8bac-0017f2d3eb46, vm_delete
fe8f9b72-83ca-11dc-8bac-0017f2d3eb46, vm_clone
fe900f62-83ca-11dc-8bac-0017f2d3eb46, vm_deploy
fe90844c-83ca-11dc-8bac-0017f2d3eb46, vm_template
fe90f9e0-83ca-11dc-8bac-0017f2d3eb46, vm_snapshot
fe9172b2-83ca-11dc-8bac-0017f2d3eb46, vm_discover

Calling EVMEventList for policy: env_prod, [189df1e8-83cc-11dc-912b-0017f2d3eb46]
fe8aadec-83ca-11dc-8bac-0017f2d3eb46, vm_start
```

Report a bug

3.9. EVMGetPolicy

EVMGetPolicy returns all the attributes of a policy.
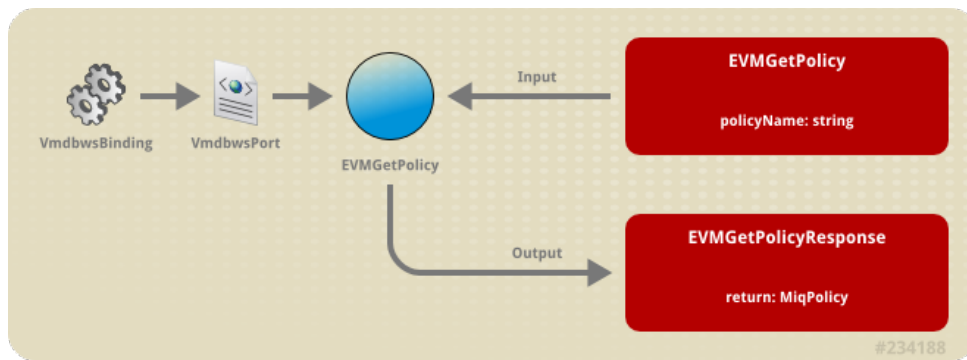
Syntax

- *Input:* The **name** attribute of a policy.
- *Output:* The policy is returned with other attributes of the policy.

Examples

The following examples demonstrate **EVMGetPolicy** usage:

Example 3.15. EVMGetPolicy WSDL

```
<message name="EVMGetPolicy">
  <part name="policyName" type="xsd:string" />
</message>
<message name="EVMGetPolicyResponse">
  <part name="return" type="typens:MiqPolicy" />
</message>
...
    <xsd:complexType name="MiqPolicy">
      <xsd:all>
        <xsd:element name="id" type="xsd:int"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="description" type="xsd:string"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="expression" type="xsd:string"/>
        <xsd:element name="towhat" type="xsd:string"/>
        <xsd:element name="guid" type="xsd:string"/>
        <xsd:element name="created_by" type="xsd:string"/>
        <xsd:element name="updated_by" type="xsd:string"/>
        <xsd:element name="notes" type="xsd:string"/>
        <xsd:element name="active" type="xsd:boolean"/>
        <xsd:element name="mode" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 3.16. EVMGetPolicy Output (Java)

```
Calling EVMGetPolicy for policy: env_prod
Name:        env_prod
Description: VM Tagged as Production
Expression:  null
To what:     null
Created on:
java.util.GregorianCalendar[time=1193407352000,areFieldsSet=true,areAllFieldsSet=true,lenient=true,zone=s
un.util.calendar.ZoneInfo[id="GMT",offset=0,dstSavings=0,useDaylight=false,transitions=0,lastRule=null],f
irstDayOfWeek=1,minimalDaysInFirstWeek=1,ERA=1,YEAR=2007,MONTH=9,WEEK_OF_YEAR=43,WEEK_OF_MONTH=4,DAY_OF_M
ONTH=26,DAY_OF_YEAR=299,DAY_OF_WEEK=6,DAY_OF_WEEK_IN_MONTH=4,AM_PM=1,HOUR=2,HOUR_OF_DAY=14,MINUTE=2,SECON
D=32,MILLISECOND=0,ZONE_OFFSET=0,DST_OFFSET=0]
```

Report a bug

3.10. EVMPolicyList

EVMPolicyList retrieves the list of policy names and descriptions for either a specific host or all hosts.

Syntax

- *Input:* The GUID of the host. If the **hostGuid** is asterisk ("*"), **all**, or **none**, the output includes all conditions.
- *Output:* **VmdbwsSupport..PolicyListArray**. Each **VmdbwsSupport..PolicyList** object contains the name and description of a policy.

Examples

The following examples demonstrate **EVMPolicyList** usage:

Example 3.17. VMPolicyList WSDL

```
<message name="EVMPolicyList">
  <part name="hostGuid" type="xsd:string" />
</message>
<message name="EVMPolicyListResponse">
  <part name="return" type="typens:VmdbwsSupport..PolicyListArray" />
</message>
...
    <xsd:complexType name="VmdbwsSupport..PolicyList">
      <xsd:all>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="guid" type="xsd:string"/>
        <xsd:element name="description" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```
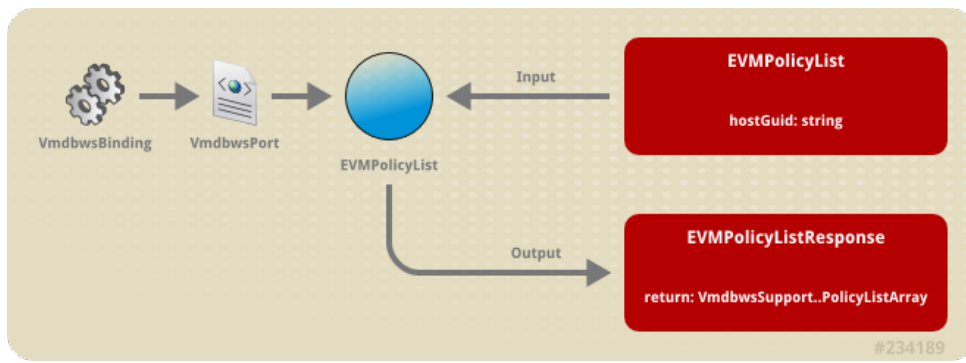
Example 3.18. EVMPolicyList Output (Java)

```
Calling EVMPolicyList...
Guid:        189df1e8-83cc-11dc-912b-0017f2d3eb46
Name:        env_prod
Description: VM Tagged as Production

Guid:        18a0132e-83cc-11dc-912b-0017f2d3eb46
Name:        env_prod_vm_host
Description: VM Tagged as Production running on Host Tagged as Production

Guid:        18a1d2d6-83cc-11dc-912b-0017f2d3eb46
Name:        hardware_cpus
Description: CPUs setting is more than 1

Guid:        18a3af34-83cc-11dc-912b-0017f2d3eb46
Name:        os_winxp_sp2
Description: Microsoft Windows Server 2003 SP1 or better

Guid:        18a5c440-83cc-11dc-912b-0017f2d3eb46
Name:        security_accounts
Description: Administrators and Guest accounts only

Guid:        18a7bdf4-83cc-11dc-912b-0017f2d3eb46
Name:        security_administrators
Description: 'Administrator' account does not exist

Guid:        18a9e93a-83cc-11dc-912b-0017f2d3eb46
Name:        security_av_service
Description: Anti-virus service is running

Guid:        18abea96-83cc-11dc-912b-0017f2d3eb46
Name:        security_services
Description: Fast User Switching Compatibility service exists

Guid:        18adbe66-83cc-11dc-912b-0017f2d3eb46
Name:        service_level_gold
Description: CPUs setting is 1 and memory is 1024 or less

Guid:        18afd066-83cc-11dc-912b-0017f2d3eb46
Name:        service_level_platinum
Description: CPUs setting is more than 2 and memory is 2048 or less

Guid:        18b20908-83cc-11dc-912b-0017f2d3eb46
Name:        service_level_silver
Description: CPUs setting is more than 1 or memory 1024 or less

Guid:        18b41194-83cc-11dc-912b-0017f2d3eb46
Name:        software_KB911567
Description: Patch KB911567 is installed

Guid:        18b630be-83cc-11dc-912b-0017f2d3eb46
Name:        test_syntax_1
Description: Test syntax

Guid:        18b823a6-83cc-11dc-912b-0017f2d3eb46
Name:        enforce
Description: Environment Policy : VM can only start if it's in production running on a host in production

Guid:        18ba291c-83cc-11dc-912b-0017f2d3eb46
Name:        linux_only
Description: Linux VM

Guid:        18bc1830-83cc-11dc-912b-0017f2d3eb46
Name:        win_only
Description: Windows VM

Guid:        18c7ada8-83cc-11dc-912b-0017f2d3eb46
Name:        account_limit
Description: VM Limited to 5 users
```

Report a bug

3.11. EVMVmEventByProperty

EVMVmEventByProperty adds a virtual machine event where a specified **property** and **value** identifies the virtual machine. Currently the only honored property value is **ipaddress**.
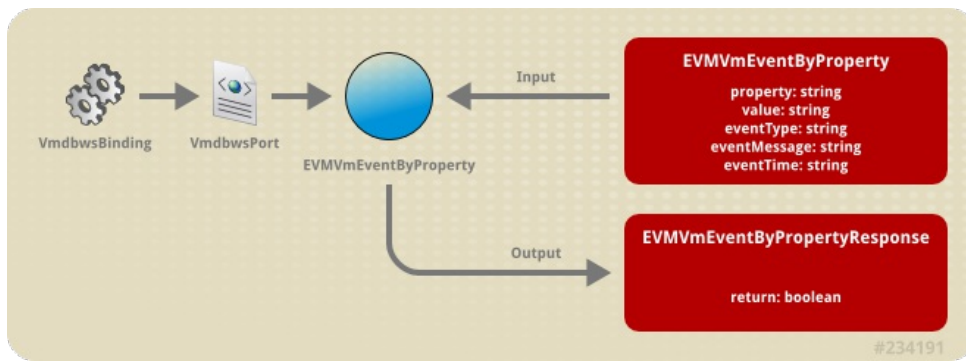
Syntax

▷ *Input:*

```
[{:property => :string},
 {:value => :string},
 {:eventType => :string},
 {:eventMessage => :string},
 {:eventTime => :string}]
```

▷ *Output:*

```
[:boolean]
```

Examples

The following examples demonstrate **EVMVmEventByProperty** usage:

Example 3.19. EVMVmEventByProperty WSDL

```
<message name="EVMVmEventByProperty">
  <part name="property" type="xsd:string" />
  <part name="value" type="xsd:string" />
  <part name="eventType" type="xsd:string" />
  <part name="eventMessage" type="xsd:string" />
  <part name="eventTime" type="xsd:string" />
</message>
<message name="EVMVmEventByPropertyResponse">
  <part name="return" type="xsd:boolean" />
</message>
```

Example 3.20. EVMVmEventByProperty Output (Windows PowerShell)

```
...Result:true
```

Report a bug

3.12. EVMVmScanByProperty

EVMVmScanByProperty adds a virtual machine scan job to the queue where a specified **property** and **value** identifies the virtual machine. Currently the only honored property value is **ipaddress**.
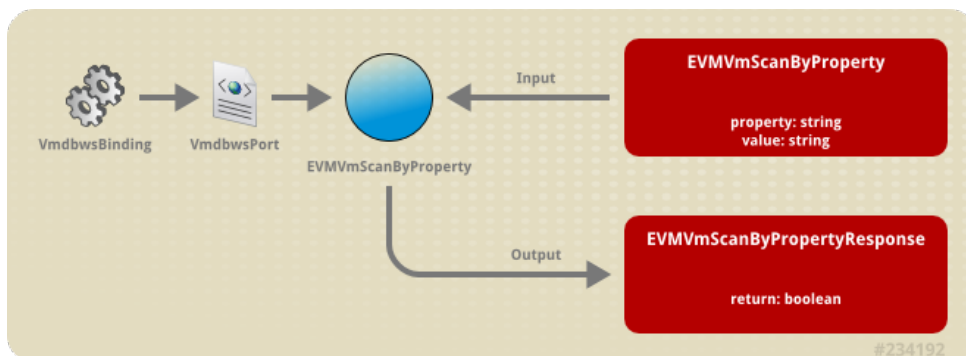
Syntax

▸ *Input:*

```
[{:property => :string},
 {:value => :string}]
```

▸ *Output:*

```
[:boolean]
```

Examples

The following examples demonstrate **EVMVmScanByProperty** usage:

Example 3.21. EVMVmScanByProperty WSDL

```
<message name="EVMVmScanByProperty">
  <part name="property" type="xsd:string" />
  <part name="value" type="xsd:string" />
</message>
<message name="EVMVmScanByPropertyResponse">
  <part name="return" type="xsd:boolean" />
</message>
```

Example 3.22. EVMVmScanByProperty Output (Windows PowerShell)

```
...Result:true
```

Report a bug

3.13. EVMSmartStart

EVMSmartStart invokes the SmartStart of a virtual machine identified by **vmId**. SmartStart enforces all policies containing the **vm_start** event assigned to the virtual machine and its host.
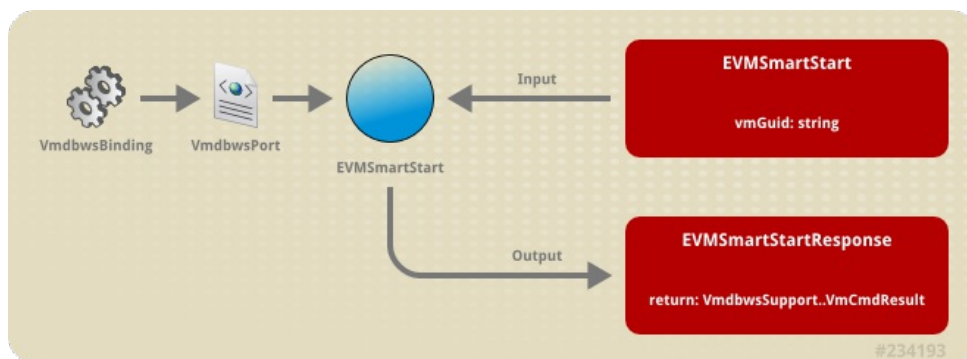
Syntax

▸ *Input:* The GUID of a VM.

▸ *Output:* **VmdbwsSupport..VmCmdResult**. Each **VmdbwsSupport..VmCmdResult** contains the result of the SmartStart and the reason for the result.

Examples

The following examples demonstrate **EVMSmartStart** usage:

Example 3.23. EVMSmartStart WSDL

```
<message name="EVMSmartStart">
  <part name="vmGuid" type="xsd:string" />
</message>
<message name="EVMSmartStartResponse">
  <part name="return" type="typens:VmdbwsSupport..VmCmdResult" />
</message>
...
    <xsd:complexType name="VmdbwsSupport..VmCmdResult">
      <xsd:all>
        <xsd:element name="result" type="xsd:string"/>
        <xsd:element name="reason" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 3.24. EVMSmartStart Output (Java)

```
Calling EVMSmartStart for VM: Red Hat Exchange
Result: true
Reason: VM [Red Hat Exchange] starting
```

Report a bug

3.14. EVMSmartStop

EVMSmartStop invokes the SmartStop of a virtual machine identified by `vmId`. SmartStop enforces all policies containing the `vm_stop` event assigned to the virtual machine and its host.
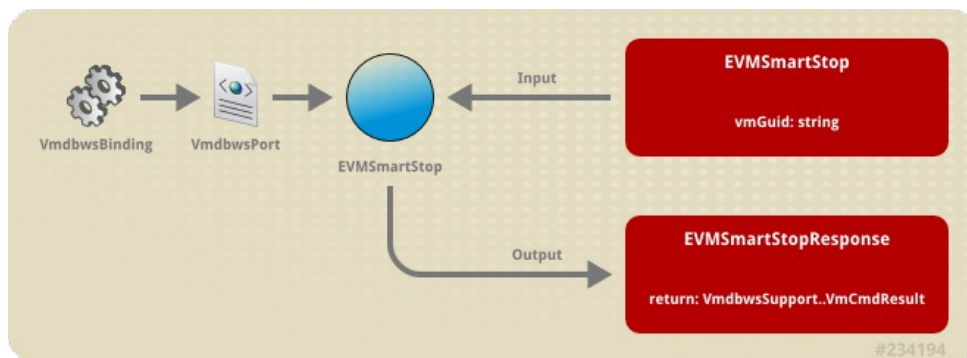
Syntax

- *Input:* The GUID of a VM.
- *Output:* `VmdbwsSupport..VmCmdResult`. Each `VmdbwsSupport..VmCmdResult` contains the result of the SmartStop and the reason for the result.

Examples

The following examples demonstrate `EVMSmartStop` usage:

Example 3.25. EVMSmartStop WSDL

```
<message name="EVMSmartStop">
  <part name="vmGuid" type="xsd:string" />
</message>
<message name="EVMSmartStopResponse">
  <part name="return" type="typens:VmdbwsSupport..VmCmdResult" />
</message>
...
    <xsd:complexType name="VmdbwsSupport..VmCmdResult">
      <xsd:all>
        <xsd:element name="result" type="xsd:string"/>
        <xsd:element name="reason" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 3.26. EVMSmartStop Output (Java)

```
Calling EVMSmartStop for VM: Red Hat Exchange
Result: false
Reason: VM [Red Hat Exchange] is already powered off
```

Report a bug

3.15. EVMSmartSuspend

EVMSmartSuspend invokes the SmartSuspend of a virtual machine identified by **vmId**. SmartSuspend enforces all policies containing the **vm_suspend** event assigned to the virtual machine and its host.
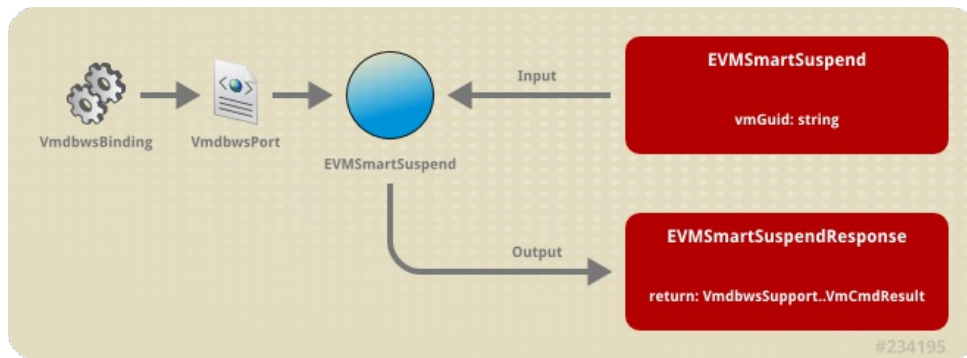
Syntax

» *Input:* The GUID of a VM.

» *Output:* **VmdbwsSupport..VmCmdResult**. Each **VmdbwsSupport..VmCmdResult** contains the result of the SmartSuspend and the reason for the result.

Examples

The following examples demonstrate **EVMSmartSuspend** usage:

Example 3.27. EVMSmartSuspend WSDL

```
<message name="EVMSmartSuspend">
  <part name="vmGuid" type="xsd:string"/>
</message>
<message name="EVMSmartSuspendResponse">
  <part name="return" type="typens:VmdbwsSupport..VmCmdResult"/>
</message>
...
    <xsd:complexType name="VmdbwsSupport..VmCmdResult">
      <xsd:all>
        <xsd:element name="result" type="xsd:string"/>
        <xsd:element name="reason" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 3.28. EVMSmartSuspend Output (Java)

```
Calling EVMSmartSuspend for VM: Red Hat Exchange
Result: false
Reason: VM [Red Hat Exchange] is already suspended or powered off
```

Report a bug

3.16. EVMUnassignPolicy

EVMUnassignPolicy removes a policy (identified by **policyId**) from a host (identified by **hostId**).
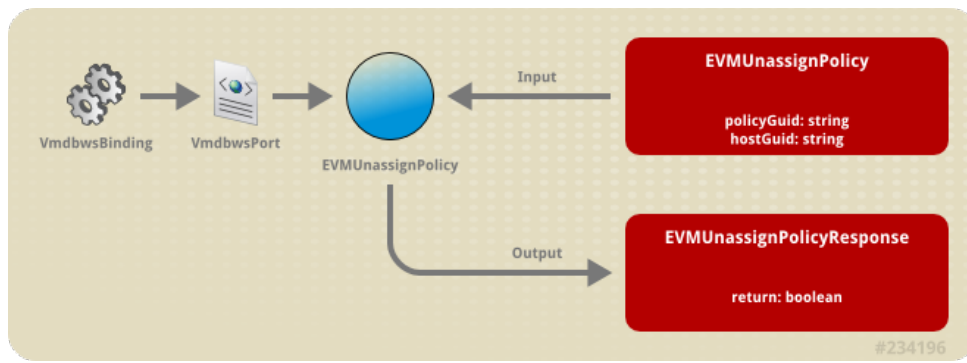
Syntax

- *Input:* The GUID of a host existing in the VMDB and the GUID of a policy instance assigned to that host.
- *Output:* Boolean in the form of **true** or **false**.

Examples

The following examples demonstrate **EVMUnassignPolicy** usage:

Example 3.29. EVMUnassignPolicy WSDL

```
<message name="EVMUnassignPolicy">
  <part name="policyGuid" type="xsd:string" />
  <part name="hostGuid" type="xsd:string" />
</message>
<message name="EVMUnassignPolicyResponse">
  <part name="return" type="xsd:boolean" />
</message>
```

Example 3.30. EVMUnassignPolicy Output

```
Calling EVMUnassignPolicy Policy: env_prod, Host: AcmeVista
Result: true
Calling EVMUnassignPolicy Policy: env_prod_vm_host, Host: AcmeVista
Result: true
Calling EVMUnassignPolicy Policy: hardware_cpus, Host: AcmeVista
Result: true
```

Report a bug

3.17. EVMVmRsop

EVMVmRsop performs a resultant set of policy resolution based on a virtual machines ID and an array of policies provided as inputs. Each policy provided in the array is resolved in the context of the virtual machine representing the ID provided. A value of **true** is returned if all policies pass. Otherwise, a value of **false** is returned.
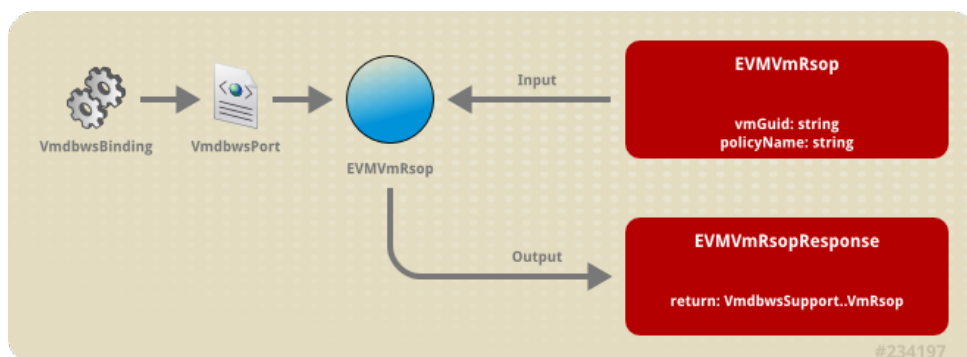
Syntax

- *Input:* The GUID of a virtual machine existing and the name of a policy in the VMDB.
- *Output:* **VmdbwsSupport..VmRsop**. Each **VmdbwsSupport..VmRsop** object contains the result and the reason for a policy result.

Examples

The following examples demonstrate **EVMVmRsop** usage:

Example 3.31. EVMVmRsop WSDL

```
<message name="EVMVmRsop">
  <part name="vmGuid" type="xsd:string" />
  <part name="policyName" type="xsd:string" />
</message>
<message name="EVMVmRsopResponse">
  <part name="return" type="typens:VmdbwsSupport..VmRsop" />
</message>
...
    <xsd:complexType name="VmdbwsSupport..VmRsop">
      <xsd:all>
        <xsd:element name="result" type="xsd:string"/>
        <xsd:element name="reason" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 3.32. EVMVmRsop Output (Java)

```
Calling EVMVmRsop for VM: spam-chicago, Policy: service_level_gold...
Result: false
Reason: Service Level [Gold] Hardware Policy: VM must not start if CPUs setting is more than 1 and memory
is more than 1024
```

Report a bug

3.18. HostSetTag

HostSetTag applies a tag to a host. It identifies the tag through a tag **category** and **name**.
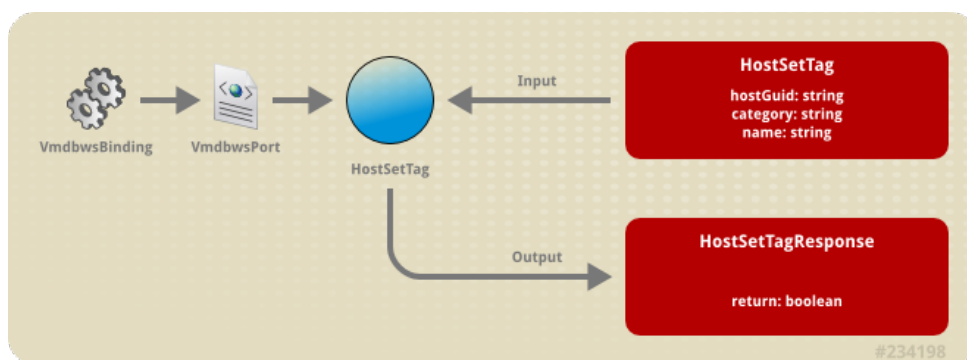
Syntax

▹ *Input:*

```
[{:hostGuid => :string},
 {:category => :string},
 {:name => :string}]
```

▹ *Output:*

```
[:boolean]
```

Examples

The following examples demonstrate **HostSetTag** usage:

Example 3.33. HostSetTag WSDL

```
<message name="HostSetTag">
  <part name="hostGuid" type="xsd:string" />
  <part name="category" type="xsd:string" />
  <part name="name" type="xsd:string" />
</message>
<message name="HostSetTagResponse">
  <part name="return" type="xsd:boolean" />
</message>
```

Example 3.34. HostSetTag Output (Windows PowerShell)

```
...Result:true
```

Report a bug

3.19. ResourcePoolSetTag

ResourcePoolSetTag applies a tag to a resource pool. It identifies the tag through a tag **category** and **name**.
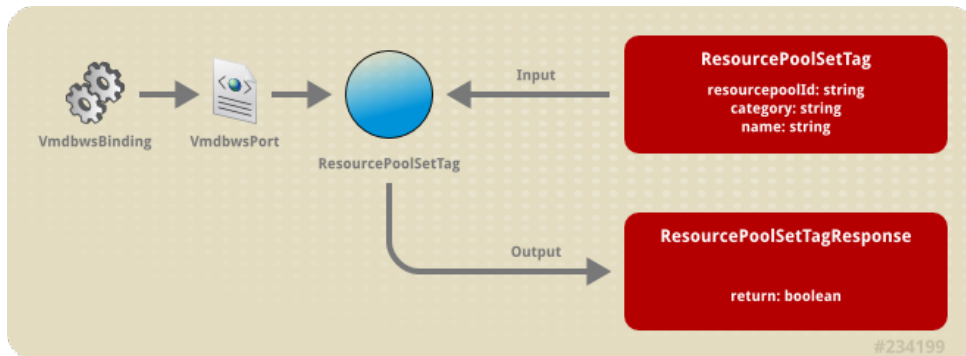
Syntax

» *Input:*

```
[{:resourcepoolId => :string},
 {:category=>:string},
 {:name=>:string}]
```

» *Output:*

```
[:boolean]
```

Examples

The following examples demonstrate **ResourcePoolSetTag** usage:

Example 3.35. ResourcePoolSetTag WSDL

```
<message name="ResourcePoolSetTag">
  <part name="resourcepoolId" type="xsd:string"/>
  <part name="category" type="xsd:string"/>
  <part name="name" type="xsd:string"/>
</message>
<message name="ResourcePoolSetTagResponse">
  <part name="return" type="xsd:boolean"/>
</message>
```

Example 3.36. ResourcePoolSetTag Output (Windows PowerShell)

```
...Result:true
```

Report a bug

3.20. VmAddCustomAttribute

VmAddCustomAttribute adds or updates a custom attribute of a virtual machine for a **ProxyCustomAttribute** object. See the **VmAddCustomAttributeByFields** method for details on setting properties. The method returns the resultant set of custom attributes associated with the virtual machine after the operation's completion.
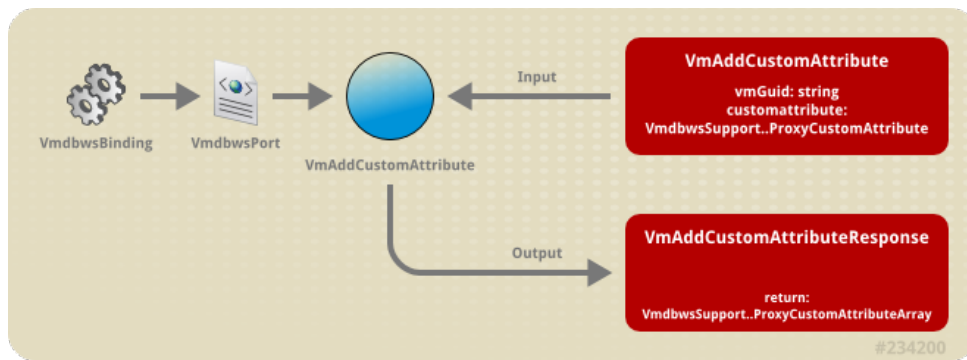
Syntax

▹ *Input:*

```
[{:vmGuid => :string},
 {:customAttribute=>ProxyCustomAttribute}]
```

▹ *Output:*

```
[[ProxyCustomAttribute]]
```

Examples

The following examples demonstrate **VmAddCustomAttribute** usage:

Example 3.37. VmAddCustomAttribute WSDL

```
<message name="VmAddCustomAttribute">
  <part name="vmGuid" type="xsd:string"/>
  <part name="customAttribute" type="typens:VmdbwsSupport..ProxyCustomAttribute"/>
</message>
<message name="VmAddCustomAttributeResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyCustomAttributeArray"/>
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyCustomAttribute">
      <xsd:all>
        <xsd:element name="value" type="xsd:string"/>
        <xsd:element name="section" type="xsd:string"/>
        <xsd:element name="source" type="xsd:string"/>
        <xsd:element name="resource_type" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="resource_id" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 3.38. VmAddCustomAttribute Output (Windows PowerShell)

```
section             :
resource_type       : Vm
value               : V1
resource_id         : 3
source              : EVM
region_number       : 0
name                : N1
region_description  : Region 0
id                  : 94

section             :
resource_type       : Vm
value               : V2
resource_id         : 3
source              : EVM
region_number       : 0
name                : N2
region_description  : Region 0
id                  : 95
```

Report a bug

3.21. VmAddCustomAttributes

VmAddCustomAttributes adds or updates multiple custom attributes of a virtual machine for an array of **ProxyCustomAttribute** objects. See the **VmAddCustomAttributeByFields** method for details on setting properties. The method returns the resultant set of custom attributes associated with the virtual machine after the operation has completed.

Syntax

» *Input:*

```
[{:vmGuid => :string},
 {:customAttribute=>ProxyCustomAttribute}]
```

» *Output:*

```
[[ProxyCustomAttribute]]
```
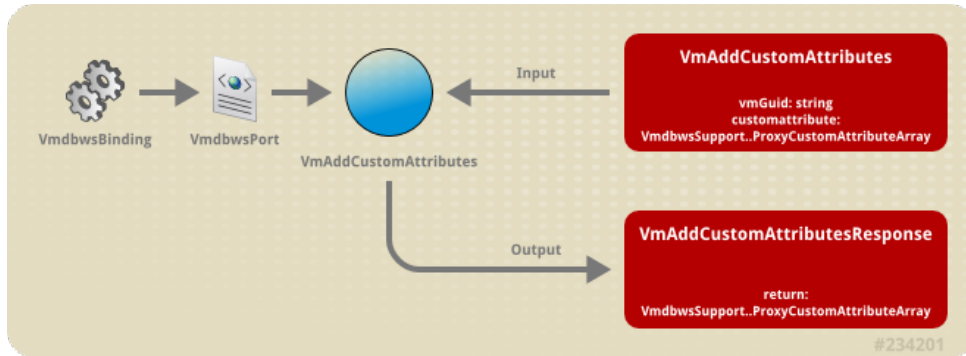
Examples

The following examples demonstrate **VmAddCustomAttributes** usage:

Example 3.39. VmAddCustomAttributes WSDL

```
<message name="VmAddCustomAttributes">
  <part name="vmGuid" type="xsd:string" />
  <part name="customAttribute" type="typens:VmdbwsSupport..ProxyCustomAttributeArray" />
</message>
<message name="VmAddCustomAttributesResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyCustomAttributeArray" />
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyCustomAttribute">
      <xsd:all>
        <xsd:element name="value" type="xsd:string"/>
        <xsd:element name="section" type="xsd:string"/>
        <xsd:element name="source" type="xsd:string"/>
        <xsd:element name="resource_type" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="resource_id" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 3.40. VmAddCustomAttributes Output (Windows PowerShell)

```
section            :
resource_type      : Vm
value              : V1
resource_id        : 3
source             : EVM
region_number      : 0
name               : N1
region_description : Region 0
id                 : 94

section            :
resource_type      : Vm
value              : V2
resource_id        : 3
source             : EVM
region_number      : 0
name               : N2
region_description : Region 0
id                 : 95
```

Report a bug

3.22. VmAddCustomAttributeByFields

VmAddCustomAttributeByFields adds or updates a custom attribute of a virtual machine. The method returns the resultant set of custom attributes associated with the virtual machine after the operation has completed.

Parameters

vmGuid

GUID of VM to update

name

Name of custom attribute to add or update

value

Value of custom attribute

section (optional)

Custom attribute section name. Default: null.

source (optional)

If set to **VC** the custom attribute name must already exist in the Virtual Center that the virtual machine is connected to and the value is set within Virtual Center as well as the CloudForms Management Engine database. Default: null.
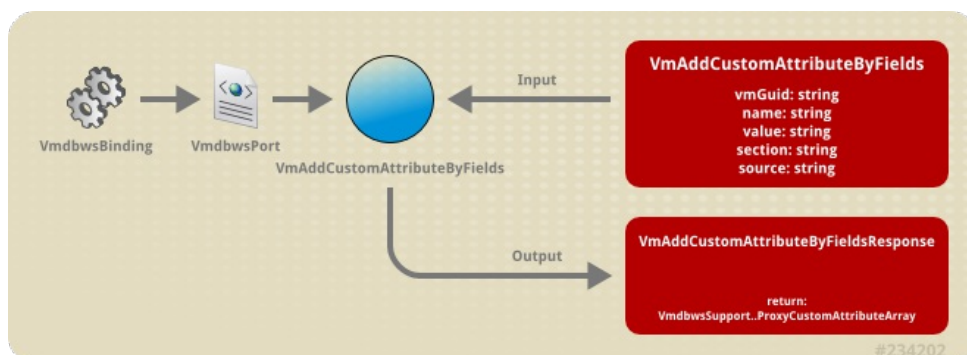
Syntax

▸ *Input:*

```
[{:vmGuid => :string},
 {:name => :string},
 {:value => :string},
 {:section => :string},
 {:source => :string}]
```

◦ *Output:*

```
[[ProxyCustomAttribute]]
```

Examples

The following examples demonstrate **VmAddCustomAttributeByFields** usage:

Example 3.41. VmAddCustomAttributeByFields WSDL

```
<message name="VmAddCustomAttributeByFields">
  <part name="vmGuid" type="xsd:string" />
  <part name="name" type="xsd:string" />
  <part name="value" type="xsd:string" />
  <part name="section" type="xsd:string" />
  <part name="source" type="xsd:string" />
</message>
<message name="VmAddCustomAttributeByFieldsResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyCustomAttributeArray" />
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyCustomAttribute">
      <xsd:all>
        <xsd:element name="value" type="xsd:string"/>
        <xsd:element name="section" type="xsd:string"/>
        <xsd:element name="source" type="xsd:string"/>
        <xsd:element name="resource_type" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="resource_id" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 3.42. VmAddCustomAttributeByFields Output (Windows PowerShell)

```
section            :
resource_type      : Vm
value              : V1
resource_id        : 3
source             : EVM
region_number      : 0
name               : N1
region_description : Region 0
id                 : 94

section            :
resource_type      : Vm
value              : V2
resource_id        : 3
source             : EVM
region_number      : 0
name               : N2
region_description : Region 0
id                 : 95
```

Report a bug

3.23. VmDeleteCustomAttribute

VmDeleteCustomAttribute deletes a custom attribute associated with a virtual machine based on the values of a **ProxyCustomAttribute** object. The method returns the resultant set of custom attributes associated with the virtual machine after the operation has completed.

Syntax

» *Input:*

```
[{vmGuid => :string},
 {:customAttribute=>ProxyCustomAttribute}]
```

» *Output:*

```
[[ProxyCustomAttribute]]
```
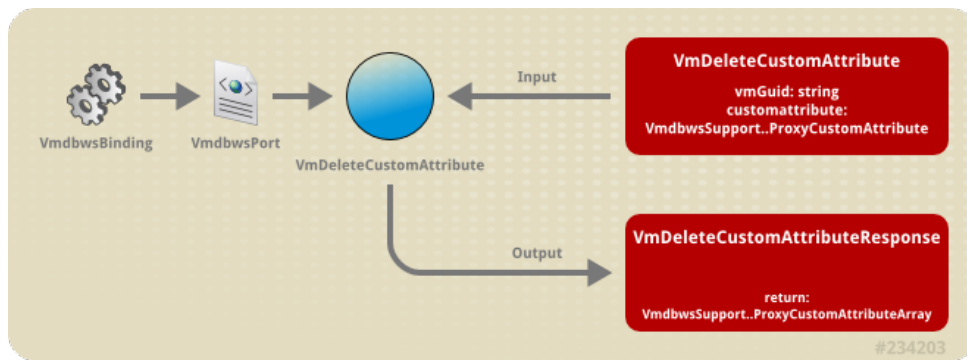
Examples

The following examples demonstrate **VmDeleteCustomAttribute** usage:

Example 3.43. VmDeleteCustomAttribute WSDL

```
<message name="VmDeleteCustomAttribute">
  <part name="vmGuid" type="xsd:string" />
  <part name="customAttribute" type="typens:VmdbwsSupport..ProxyCustomAttribute" />
</message>
<message name="VmDeleteCustomAttributeResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyCustomAttributeArray" />
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyCustomAttribute">
      <xsd:all>
        <xsd:element name="value" type="xsd:string"/>
        <xsd:element name="section" type="xsd:string"/>
        <xsd:element name="source" type="xsd:string"/>
        <xsd:element name="resource_type" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="resource_id" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 3.44. VmDeleteCustomAttribute Output (Windows PowerShell)

```
section            :
resource_type      : Vm
value              : V1
resource_id        : 3
source             : EVM
region_number      : 0
name               : N1
region_description : Region 0
id                 : 94

section            :
resource_type      : Vm
value              : V2
resource_id        : 3
source             : EVM
region_number      : 0
name               : N2
region_description : Region 0
id                 : 95
```

Report a bug

3.24. VmDeleteCustomAttributes

VmDeleteCustomAttributes deletes multiple custom attributes associated with a virtual machine based on the values of the **ProxyCustomAttribute** objects. The method returns the resultant set of custom attributes associated with the virtual machine after the operation has completed.

Syntax

▹ *Input:*

```
[{vmGuid => :string},
 {:customAttribute=>ProxyCustomAttribute}]
```

▹ *Output:*

```
[[ProxyCustomAttribute]]
```
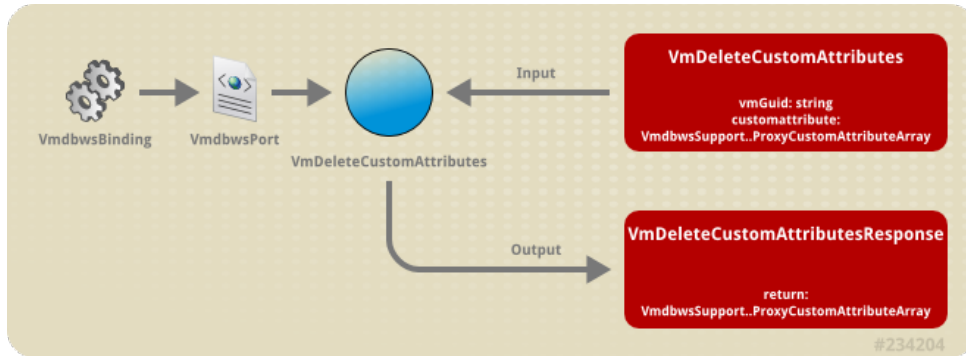
Examples

The following examples demonstrate **VmDeleteCustomAttributes** usage:

Example 3.45. VmDeleteCustomAttributes WSDL

```
<message name="VmDeleteCustomAttributes">
  <part name="vmGuid" type="xsd:string" />
  <part name="customAttribute" type="typens:VmdbwsSupport..ProxyCustomAttributeArray" />
</message>
<message name="VmDeleteCustomAttributesResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyCustomAttributeArray" />
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyCustomAttribute">
      <xsd:all>
        <xsd:element name="value" type="xsd:string"/>
        <xsd:element name="section" type="xsd:string"/>
        <xsd:element name="source" type="xsd:string"/>
        <xsd:element name="resource_type" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="resource_id" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 3.46. VmDeleteCustomAttributes Output (Windows PowerShell)

```
section            :
resource_type      : Vm
value              : V1
resource_id        : 3
source             : EVM
region_number      : 0
name               : N1
region_description : Region 0
id                 : 94

section            :
resource_type      : Vm
value              : V2
resource_id        : 3
source             : EVM
region_number      : 0
name               : N2
region_description : Region 0
id                 : 95
```

Report a bug

3.25. VmSetTag

VmSetTag applies a tag to a virtual machine. It identifies the tag through a tag **category** and **name**.
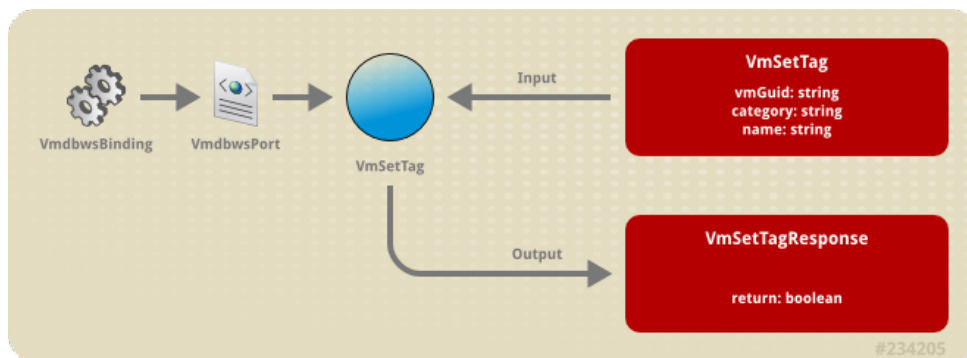
Syntax

▹ *Input:*

```
[{:vmGuid => :string},
 {:category=>:string},
 {:name=>:string}]
```

▹ *Output:*

```
[:boolean]
```

Examples

The following examples demonstrate **VmSetTag** usage:

Example 3.47. VmSetTag WSDL

```
<message name="VmSetTag">
  <part name="vmGuid" type="xsd:string" />
  <part name="category" type="xsd:string" />
  <part name="name" type="xsd:string" />
</message>
<message name="VmSetTagResponse">
  <part name="return" type="xsd:boolean" />
</message>
```

Example 3.48. VmSetTag Output (Windows PowerShell)

```
...Result:true
```

3.26. VmSetOwner

VmSetOwner assigns an owner to a virtual machine in the CloudForms Management Engine database. If the owner does not exist in the CloudForms Management Engine database and CloudForms Management Engine is configured to use LDAP, it attempts to look up and add the user to the CloudForms Management Engine database.
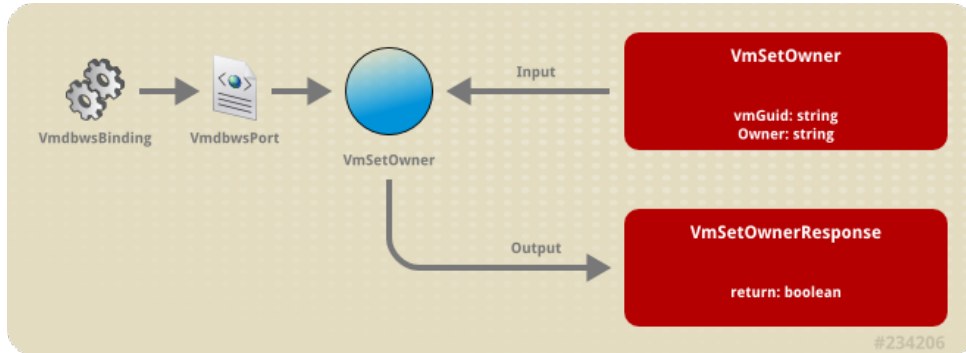
Syntax

» *Input:*

```
[{:vmGuid => :string},
 {:owner=>:string}]
```

» *Output:*

```
[:boolean]
```

Examples

The following examples demonstrate **VmSetOwner** usage:

Example 3.49. VmSetOwner WSDL

```
<message name="VmSetOwner">
  <part name="vmGuid" type="xsd:string" />
  <part name="owner" type="xsd:string" />
</message>
<message name="VmSetOwnerResponse">
  <part name="return" type="xsd:boolean" />
</message>
```

Example 3.50. mSetOwner Output (Windows PowerShell)

```
...Result:true
```

Chapter 4. Automate Web Services

This chapter describes web services used by CloudForms Management Engine Automate Feature Set.

At the end of this chapter, you will:

▷ Know what web service methods are available to Automate.

▷ Be familiar with the parameters that each method can take.

▷ See examples of the outputs for each method.

Web Services associated with Automate pertain to creating automated workflows and provisioning. For each Web service, we supply a brief description, input, output, the excerpt from the WSDL, and a sample output.

You can find a full copy of the WSDL file in the WSDL File Appendix.

Report a bug

4.1. CreateAutomationRequest

This method initiates an automation request. Use it to drive an automation workflow and provide feedback to the requester.
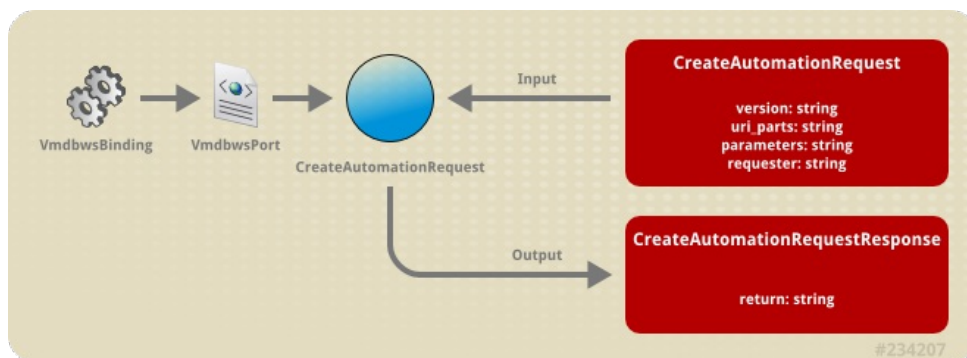
Syntax

▷ *Input:*

```
[{:version => :string},
 {:uri_parts => :string},
 {:parameters => :string},
 {:requester => :string}]
```

uri_parts example: **namespace=NNN|class=CCC|instance=IIII|message=MMMM**

paramaters example: **var1=vvvvv|var2=wwww|var3=xxxxx**

requester example: **user_name=fred|auto_approve=true**

▷ *Output:*

```
[string]
```

Examples

The following examples demonstrate **CreateAutomationRequest** usage:

Example 4.1. CreateAutomationRequest WSDL

```
<message name="CreateAutomationRequest">
  <part name="version" type="xsd:string"/>
  <part name="uri_parts" type="xsd:string"/>
  <part name="parameters" type="xsd:string"/>
  <part name="requester" type="xsd:string"/>
</message>
<message name="CreateAutomationRequestResponse">
  <part name="return" type="xsd:string"/>
</message>
```

Example 4.2. CreateAutomationRequest Output (Windows PowerShell)

```
CreateAutomationRequest ID:17
done
```

Report a bug

4.2. EVMProvisionRequestEx

EVMProvisionRequestEx initiates a virtual machine provision request. Except for **version**, all fields are strings that allow for multiple values passed using the format **name=value** and separating name-value pairs with the pipe symbol ("**|**"). For example:

number_of_cpus=1|vm_name=test_ws_vm|vm_memory=1024

Name	Type	Description
version	string	Interface version. Should be set to 1.1
templateFields	string	Fields used to find template virtual machine. Provide any or all fields. Supply a **guid** or **ems_guid** to protect against matching same-named templates on different Management Systems within CloudForms Management Engine. Supported fields are: name=*[VM Template Name]* Example: **template_1** guid=*[guid value from vms table]* ems_guid=*[uid_ems value from vms table]*
vmFields	string	Allows for the setting of properties on the Catalog, Hardware, vLan, "Customize" and "Schedule" tabs in the Provisioning dialog.
requester	string	Allows for the setting of properties on the Requester tab in the Provisioning dialog.
tags	string	Tags to apply to newly created VM. Example: **network_location=Internal|cc=001**
additionalValues	string	Additional values are name-value pairs stored with a provision request, but not used by the core provisioning code. These values are usually referenced from automate methods for custom processing. Example: Store a **request_id** from an external system so the system can be notified during the provisioning process.
emsCustomAttributes	string	Custom attributes applied to the virtual machine through the Management System as part of provisioning.
miqCustomAttributes	string	Custom attributes applied to the virtual machine and stored in the CloudForms Management Engine database as part of provisioning.

Syntax

▹ *Input:*

```
[{:version => :string},
 {:templateFields => :string},
 {:vmFields => :string},
 {:requester => :string},
 {:tags => :string},
 {:additionalValues => :string},
 {:emsCustomAttributes => :string},
 {:miqCustomAttributes => :string}]
```

▹ *Output:*

```
[:boolean]
```

Examples

The following examples demonstrate **EVMProvisionRequestEx** usage:

Example 4.3. EVMProvisionRequestEx WSDL

```
<message name="EVMProvisionRequestEx">
  <part name="version" type="xsd:string" />
  <part name="templateFields" type="xsd:string" />
  <part name="vmFields" type="xsd:string" />
  <part name="requester" type="xsd:string" />
  <part name="tags" type="xsd:string" />
  <part name="additionalValues" type="xsd:string" />
  <part name="emsCustomAttributes" type="xsd:string" />
  <part name="miqCustomAttributes" type="xsd:string" />
</message>
<message name="EVMProvisionRequestExResponse">
  <part name="return" type="xsd:boolean" />
</message>
```

Example 4.4. EVMProvisionRequestEx Output (Windows PowerShell)

```
id             : 110
description    : Provision from [WinXP Template] to [test_ws_vm]
state          : pending_approval
resource_type  : MiqProvisionRequest
resource_id    : 112
created_on     : 12/16/2010 3:40:48 PM
updated_on     : 12/16/2010 3:40:48 PM
fulfilled_on   : 1/1/0001 12:00:00 AM
requester_id   : 1
requester_name : Administrator
```

Report a bug

4.3. GetAutomationRequest

This method queries the current automation request and returns the request object.
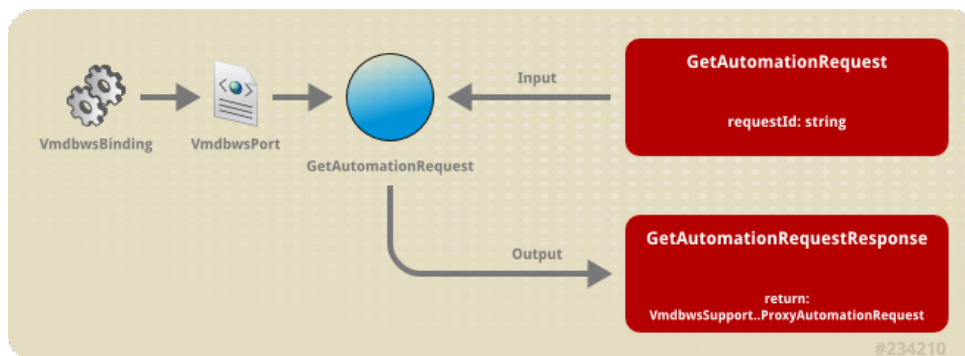
Syntax

- *Input:* **[{:requestid => :xsd:string}]**
- *Output:* **[VmdbwsSupport..ProxyAutomationRequest]**

Examples

The following examples demonstrate **GetAutomationRequest** usage:

Example 4.5. GetAutomationRequest WSDL

```
<message name="GetAutomationRequest">
  <part name="requestId" type="xsd:string"/>
</message>
<message name="GetAutomationRequestResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyAutomationRequest"/>
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyAutomationRequest">
      <xsd:all>
        <xsd:element name="description" type="xsd:string"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="status" type="xsd:string"/>
        <xsd:element name="userid" type="xsd:string"/>
        <xsd:element name="state" type="xsd:string"/>
        <xsd:element name="message" type="xsd:string"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="automation_tasks" type="typens:VmdbwsSupport..AutomationTaskSummaryArray"/>
      </xsd:all>
    </xsd:complexType>
```

Example 4.6. GetAutomationRequest Output (Windows PowerShell)

```
status              : Ok
updated_on          : 1/6/2012 5:25:32 AM
description         : Automation Request
userid              : admin
message             : Automation Request completed
region_number       : 0
region_description  : Region 0
created_on          : 1/6/2012 5:24:56 AM
automation_tasks    : {8}
id                  : 8
state               : finished
```

Report a bug

4.4. GetAutomationTask

This method is used to get the individual task details from an automation request.
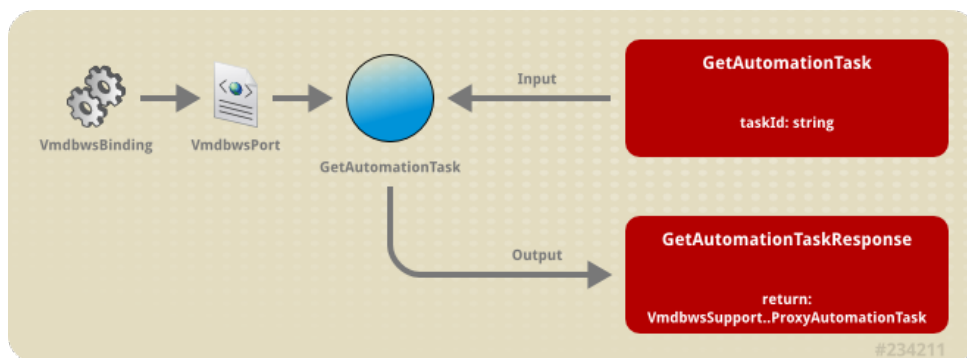
Syntax

- *Input:* **[{:taskId => :string}]**
- *Output:* **[VmdbwsSupport..ProxyMiqProvisionRequest]**

Examples

The following examples demonstrate **GetAutomationTask** usage:

Example 4.7. GetAutomationTask WSDL

```
<message name="GetAutomationTask">
  <part name="taskId" type="xsd:string"/>
</message>
<message name="GetAutomationTaskResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyAutomationTask"/>
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyAutomationTask">
      <xsd:all>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="description" type="xsd:string"/>
        <xsd:element name="userid" type="xsd:string"/>
        <xsd:element name="status" type="xsd:string"/>
        <xsd:element name="automation_request" type="typens:VmdbwsSupport..AutomationRequestSummary"/>
        <xsd:element name="state" type="xsd:string"/>
        <xsd:element name="message" type="xsd:string"/>
        <xsd:element name="automation_request_id" type="xsd:string"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="id" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Report a bug

4.5. GetVmProvisionRequest

This method queries the current request and returns the provision request object.

Syntax

- *Input:* **[{:requestid => :xsd:string}]**
- *Output:* **[VmdbwsSupport..ProxyMiqProvisionRequest]**

Examples

The following examples demonstrate **GetVmProvisionRequest** usage:

Example 4.8. GetVmProvisionRequest WSDL

```
<message name="GetVmProvisionRequest">
  <part name="requestId" type="xsd:string"/>
</message>
<message name="GetVmProvisionRequestResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyMiqProvisionRequest"/>
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyMiqProvisionRequest">
      <xsd:all>
        <xsd:element name="request_tags" type="typens:VmdbwsSupport..TagArray"/>
        <xsd:element name="src_vm_id" type="xsd:string"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="description" type="xsd:string"/>
        <xsd:element name="status" type="xsd:string"/>
        <xsd:element name="userid" type="xsd:string"/>
        <xsd:element name="approval_state" type="xsd:string"/>
        <xsd:element name="provision_type" type="xsd:string"/>
        <xsd:element name="request_state" type="xsd:string"/>
        <xsd:element name="state" type="xsd:string"/>
        <xsd:element name="message" type="xsd:string"/>
        <xsd:element name="vms" type="typens:VmdbwsSupport..VmListArray"/>
        <xsd:element name="source" type="typens:VmdbwsSupport..VmList"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="miq_request_tasks" type="typens:VmdbwsSupport..MiqProvisionTaskListArray"/>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="request_options" type="typens:VmdbwsSupport..KeyValueStructArray"/>
      </xsd:all>
    </xsd:complexType>
```

Example 4.9. GetVmProvisionRequest Output (Windows PowerShell)

```
request_tags       : {Cost Center, Network Location}
request_state      : pending
region_description : Region 0
status             : Ok
updated_on         : 9/12/2011 5:41:57 PM
approval_state     : approved
provision_type     : template
vms                : {}
description        : Provision from [WinXP Template] to [test_ws_vm]
src_vm_id          : 33
message            : VM Provisioning - Automation Starting
request_options    : {sysprep_identification, network_adapters, delivered_on, sysprep_change
                     _sid...}
state              : pending
created_on         : 9/12/2011 5:41:21 PM
miq_request_tasks  : {13}
source             : VmdbwsSupport.VmdbwsSupportVmList
id                 : 21
userid             : admin
region_number      : 0
```

Example 4.10. GetAutomationTask Output (Windows PowerShell)

```
automation_request    : VmdbwsSupport.VmdbwsSupportAutomationRequestSummary
updated_on            : 1/6/2012 5:25:32 AM
status                : Ok
description           : Automation Request
message               : Automation Request completed
userid                : admin
region_description    : Region 0
id                    : 8
region_number         : 0
state                 : finished
automation_request_id : 8
```

Report a bug

4.6. GetVmProvisionTask

This method is used to get the individual task details from a virtual machine provision request. The **miq_request_tasks** property returned in the **ProxyMiqProvisionRequest** object contains the array of **task_ids**.
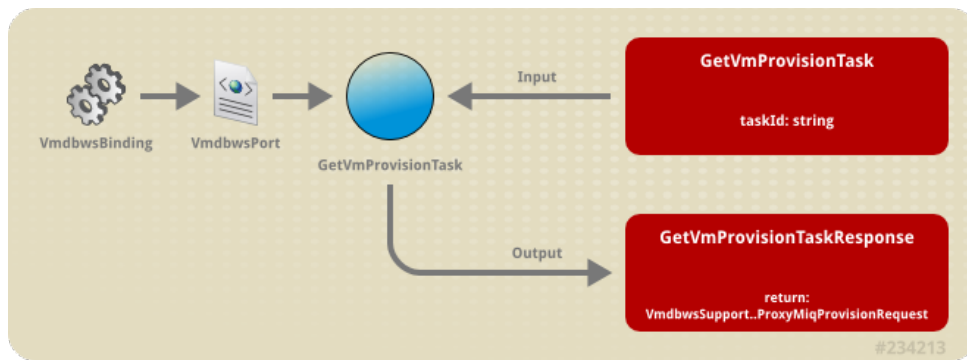
Syntax

» *Input:* **[{:taskId => :string}]**

» *Output:* **[VmdbwsSupport..ProxyMiqProvisionRequest]**

Examples

The following examples demonstrate **GetVmProvisionTask** usage:

Example 4.11. GetVmProvisionTask WSDL

```
<message name="GetVmProvisionTask">
  <part name="taskId" type="xsd:string"/>
</message>
<message name="GetVmProvisionTaskResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyMiqProvisionTask"/>
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyMiqProvisionTask">
      <xsd:all>
        <xsd:element name="destination" type="typens:VmdbwsSupport..VmList"/>
        <xsd:element name="request_tags" type="typens:VmdbwsSupport..TagArray"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="src_vm_id" type="xsd:string"/>
        <xsd:element name="vm_id" type="xsd:string"/>
        <xsd:element name="description" type="xsd:string"/>
        <xsd:element name="status" type="xsd:string"/>
        <xsd:element name="userid" type="xsd:string"/>
        <xsd:element name="provision_type" type="xsd:string"/>
        <xsd:element name="state" type="xsd:string"/>
        <xsd:element name="message" type="xsd:string"/>
        <xsd:element name="source" type="typens:VmdbwsSupport..VmList"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="miq_provision_request_id" type="xsd:string"/>
        <xsd:element name="request_options" type="typens:VmdbwsSupport..KeyValueStructArray"/>
        <xsd:element name="id" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
```

Example 4.12. GetVmProvisionTask Output (Windows PowerShell)

```
request_tags             : {Cost Center, Network Location}
region_description       : Region 0
status                   : Ok
updated_on               : 9/12/2011 6:23:35 PM
provision_type           : template
description              : Provision from [WinXP Template] to [test_ws_vm]
destination              :
request_options          : {sysprep_identification, network_adapters, delivered_on,
sysprep_change_sid...}
src_vm_id                : 33
message                  : Created VM
vm_id                    :
state                    : queued
miq_provision_request_id : 27
created_on               : 9/12/2011 6:22:22 PM
source                   : VmdbwsSupport.VmdbwsSupportVmList
id                       : 19
userid                   : admin
region_number            : 0
```

4.7. VmProvisionRequest

This method initiates a virtual machine provision request. It is different from the **EVMProvisionRequestEx** method in that optional values are provided through the **ProvisionOptions** object and the return value is the **MiqRequest** object generated by the operation. Refer to the **EVMProvisionRequestEx** method for details on each field.
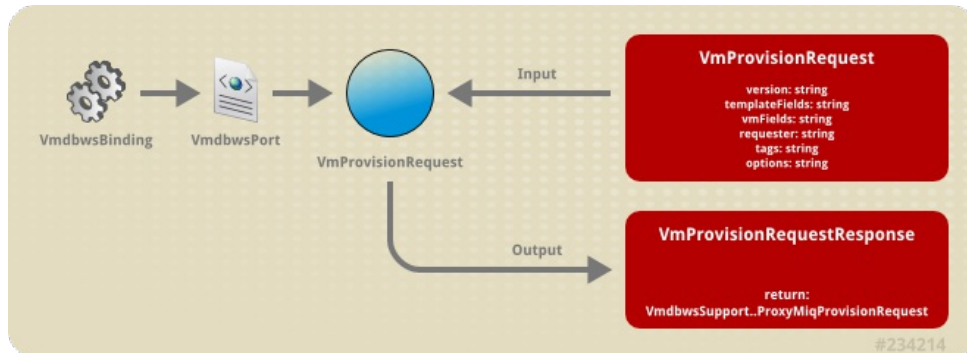
Syntax

› *Input:*

```
[{:version => :string},
 {:templateFields => :string},
 {:vmFields => :string},
 {:requester => :string},
 {:tags => :string},
 {:options => ProvisionOptions}]
```

› *Output:*

```
[VmdbwsSupport..ProxyMiqProvisionRequest]
```

Examples

The following examples demonstrate **VmProvisionRequest** usage:

Example 4.13. VmProvisionRequest WSDL

```
<message name="VmProvisionRequest">
  <part name="version" type="xsd:string" />
  <part name="templateFields" type="xsd:string" />
  <part name="vmFields" type="xsd:string" />
  <part name="requester" type="xsd:string" />
  <part name="tags" type="xsd:string" />
  <part name="options" type="typens:VmdbwsSupport..ProvisionOptions" />
</message>
<message name="VmProvisionRequestResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyMiqProvisionRequest"/>
</message>
...
    <xsd:complexType name="VmdbwsSupport..ProxyMiqProvisionRequest">
      <xsd:all>
        <xsd:element name="request_tags" type="typens:VmdbwsSupport..TagArray"/>
        <xsd:element name="src_vm_id" type="xsd:string"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="description" type="xsd:string"/>
        <xsd:element name="status" type="xsd:string"/>
        <xsd:element name="userid" type="xsd:string"/>
        <xsd:element name="approval_state" type="xsd:string"/>
        <xsd:element name="provision_type" type="xsd:string"/>
        <xsd:element name="request_state" type="xsd:string"/>
        <xsd:element name="state" type="xsd:string"/>
        <xsd:element name="message" type="xsd:string"/>
        <xsd:element name="vms" type="typens:VmdbwsSupport..VmListArray"/>
        <xsd:element name="source" type="typens:VmdbwsSupport..VmList"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="miq_request_tasks" type="typens:VmdbwsSupport..MiqProvisionTaskListArray"/>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="request_options" type="typens:VmdbwsSupport..KeyValueStructArray"/>
      </xsd:all>
    </xsd:complexType>
```
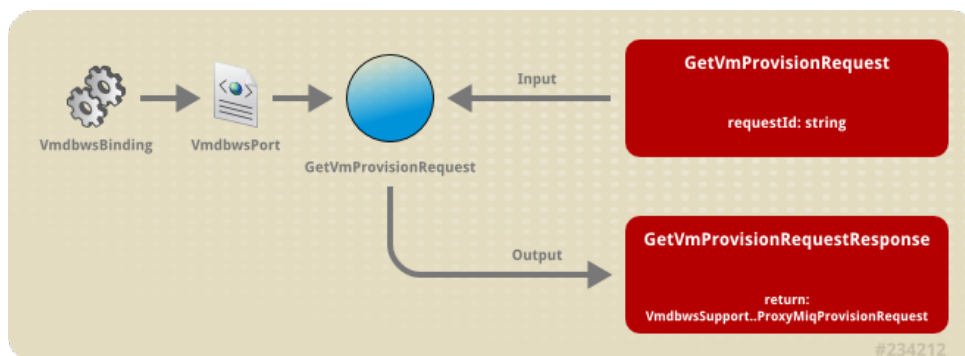
Example 4.14. VmProvisionRequest Output (Windows PowerShell)

```
request_tags       : {Cost Center, Network Location}
request_state      : pending
region_description : Region 0
status             : Ok
updated_on         : 9/12/2011 5:41:22 PM
approval_state     : pending_approval
provision_type     : template
vms                : {}
description        : Provision from [WinXP Template] to [test_ws_vm]
src_vm_id          : 33
message            : VM Provisioning - Request Created
request_options    : {sysprep_auto_logon_count, number_of_vms, src_ems_id, cpu_limit...}
state              : pending
created_on         : 9/12/2011 5:41:21 PM
miq_request_tasks  : {}
source             : VmdbwsSupport.VmdbwsSupportVmList
id                 : 21
userid             : admin
region_number      : 0
```

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```
request_tags       : {Cost Center, Network Location}
```

Examples

This appendix shows examples of how to call the CloudForms Management Engine WSDL. Note that how the WSDL is called is entirely dependent on which web services client you are using.

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A.1. Windows PowerShell: List All Management System, Hosts and VMs

This script lists each Management System, Host and virtual machine. It also shows how to access the ws_attributes property which contains an array of name/value/data_type structures containing the virtual column data. For ease of use, a method has been included that converts the ws_attributes array into a hash of key/value pairs which allowing for easier data lookup.

```
$ip, $userid, $password = "https://evm_appl_address", "admin", "smartvm"

# Convert ws_attributes into a hash values
function ws_attributes_to_hash($obj) {
 $result = @{}
 $obj.ws_attributes | foreach {$result[$_.name] = $_.value}
 return $result
}

[System.Net.ServicePointManager]::ServerCertificateValidationCallback = { $true }
$cred = New-Object System.Management.Automation.PsCredential $userid, (convertto-securestring $password -
asplaintext -force)
$miqvmdb = New-WebServiceProxy -uri "$($ip)/vmdbws/wsdl" -Credential $cred -ErrorAction Stop -Namespace
VmdbWs
Write-Host "Successfully connected to EVM integrate web-services version: $([string]::join(".",
$miqvmdb.Version()))"

Clear-Host

# Get all Management Systems
$ems_list = $miqvmdb.GetEmsList()
foreach ($e in $miqvmdb.GetEmsByList($ems_list)) {
 Write-Host "Management System: $($e.emstype_description) - $($e.hostname)"
 $attributes = ws_attributes_to_hash($e)
 $attributes | ft name, value

 foreach ($h in $miqvmdb.GetHostsByList($e.hosts)) {
  Write-Host "  Host: $($h.vmm_vendor):$($h.vmm_product) - $($h.hostname)"
  $attributes = ws_attributes_to_hash($h)
  $attributes | ft name, value

  # Print the list of all the VMs attached to this host
  foreach ($v in $h.vms) {Write-Host "    VM: $($v.name)"}

  # Print all the attributes for the first VM on this host
  if ($h.vms.Length -gt 0) {
   $vm = $miqvmdb.FindVmByGuid($h.vms[0].guid)
   Write-Host "`n`n    Printing attributes for VM: $($vm.name)"
   $attributes = ws_attributes_to_hash($vm)
   $attributes | ft name, value
```

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A.2. Windows PowerShell: VM Provisioning

```
[System.Net.ServicePointManager]::ServerCertificateValidationCallback = { $true }

$ip, $userid, $password = "https://127.0.0.1", <username>, <password>
$cred = New-Object System.Management.Automation.PsCredential $userid, (convertto-securestring $password -
asplaintext -force)

$miqvmdb = New-WebServiceProxy -uri "$($ip)/vmdbws/wsdl" -Credential $cred -ErrorAction Stop -Namespace
VmdbWs
Write-Host "Successfully connected to EVM integrate web-services version: $([string]::join(".",
$miqvmdb.Version()))"

$version = "1.1"
$templateFields = "name=Standard Template|ems_guid=423a73ad-97b4-43d1-462e-6f5b7bbdf38b"
$vmFields = "number_of_cpus=1|vm_name=test_ws_vm|vm_memory=1024"
$requrestor = "owner_email=tester1@redhat.com|user_name=tester1"
$tags = "network_location=Internal|cc=001"
$additionalValues = "request_id=874d58c94a36231c000251b8408fae5b|item_id=874d58cc4a36231c0013b21934aa12b4"
$emsCustomAttributes = $null
$miqCustomAttributes = "CreatedBy=web-service|WS Version=1.1"

$result = $miqvmdb.EVMProvisionRequestEx($version, $templateFields, $vmFields, $requrestor, $tags,
$additionalValues, $emsCustomAttributes, $miqCustomAttributes)
```

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A.3. Windows PowerShell: GetVMProvisionRequest

```
[System.Net.ServicePointManager]::ServerCertificateValidationCallback = { $true }

$ip, $userid, $password = "https://evm_appl_address", "admin", "smartvm"
$cred = New-Object System.Management.Automation.PsCredential $userid, (convertto-securestring $password -
asplaintext -force)

Write-Host "Connecting to EVM integrate web-services at $($ip)/vmdbws/wsdl"
$miqvmdb = New-WebServiceProxy -uri "$($ip)/vmdbws/wsdl" -Credential $cred -ErrorAction Stop -Namespace
VmdbWs
Write-Host "Successfully connected to EVM integrate web-services version: $([string]::join(".",
$miqvmdb.Version()))"

$param1 = "name=Test Template"
$param2 = "vm_name=ws_test"
$param3 = "owner_email=test@redhat.com|owner_last_name=admin|owner_first_name=admin"
$param4 = "network_location=Internal|cc=001"
$prov_options = New-Object VmdbWs.VmdbwsSupportProvisionOptions

$result = $miqvmdb.VmProvisionRequest("1.1", $param1, $param2, $param3, $param4, $prov_options)
Write-Host "VM Provision request created."
$result | ft

do {
 Sleep(10)
 $result = $miqvmdb.GetVmProvisionRequest($result.id)
 Write-Host "Status: $($result.status)  ReqState: $($result.request_state)  ApprovalState:
$($result.approval_state)  LastMsg: $($result.message)"
} while ($result.request_state -ne "finished" -and $result.status -ne "Error")

Write-Host "Provision Request VM list"
$result.vms | ft

$vms = $miqvmdb.GetVmsByList($result.vms[0])
Write-Host "VM Properties"
$vms | fl

Write-Host "done"
```

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A.4. Windows PowerShell: CreateAutomationRequest

```
[System.Net.ServicePointManager]::ServerCertificateValidationCallback = { $true }
$ip = "https://evm_appl_address"
$userid, $password = "admin", "smartvm"
$cred = New-Object System.Management.Automation.PsCredential $userid, (convertto-securestring $password -
asplaintext -force)

trap {Write-Host $Error[0]; break}

$Error.Clear()
Write-Host "Connecting to EVM integrate web-services at $($ip)/vmdbws/wsdl"
$miqvmdb = New-WebServiceProxy -uri "$($ip)/vmdbws/wsdl" -Credential $cred -ErrorAction Stop -Namespace
VmdbWs
Write-Host "Successfully connected to EVM integrate web-services"

###############
#
# Parameter1 - version
#
###############
$version = "1.1"

###############
#
# Parameter2 - uri_parts
#
###############
$uri_parts = @()
$uri_parts += "namespace=Sample"
$uri_parts += "class=Methods"
$uri_parts += "instance=InspectME"
$uri_parts += "message=create"
$uri_parts = [string]::join("|", $uri_parts)

###############
#
# Parameter3 - parameters
#
###############
$parameters = @()
$parameters += "parm1=1"
$parameters += "parm2=2"
$parameters = [string]::join("|", $parameters)

###############
#
# Parameter4 - requester
#
###############
$requester = @()
$requester += "owner_email=kmorey@redhat.com"
$requester += "user_name=admin"
$requester += "auto_approve=true"
$requester = [string]::join("|", $requester)

$result = $miqvmdb.CreateAutomationRequest($version, $uri_parts, $parameters, $requester)
Write-Host "CreateAutomationRequest ID:"  $result

Write-Host "done"
```

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A.5. Windows PowerShell: GetAutomationRequest

```
[System.Net.ServicePointManager]::ServerCertificateValidationCallback = { $true }
$ip = "https://evm_appl_address"
$userid, $password = "admin", "smartvm"
$cred = New-Object System.Management.Automation.PsCredential $userid, (convertto-securestring $password -
asplaintext -force)

trap {Write-Host $Error[0]; break}

$Error.Clear()
Write-Host "Connecting to EVM integrate web-services at $($ip)/vmdbws/wsdl"
$miqvmdb = New-WebServiceProxy -uri "$($ip)/vmdbws/wsdl" -Credential $cred -ErrorAction Stop -Namespace
VmdbWs
Write-Host "Successfully connected to EVM integrate web-services"

###############
#
# Parameter1 - request
#
###############
$request = @()
$request += "9"
$request = [string]::join("|", $request)

$result = $miqvmdb.GetAutomationRequest($request)
Write-Host "Results:"
$result |fl

Write-Host "done"
```

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A.6. Windows PowerShell: GetAutomationTask

```
[System.Net.ServicePointManager]::ServerCertificateValidationCallback = { $true }
$ip = "https://evm_appl_address"
$userid, $password = "admin", "smartvm"
$cred = New-Object System.Management.Automation.PsCredential $userid, (convertto-securestring $password -
asplaintext -force)

trap {Write-Host $Error[0]; break}

$Error.Clear()
Write-Host "Connecting to EVM integrate web-services at $($ip)/vmdbws/wsdl"
$miqvmdb = New-WebServiceProxy -uri "$($ip)/vmdbws/wsdl" -Credential $cred -ErrorAction Stop -Namespace
VmdbWs
Write-Host "Successfully connected to EVM integrate web-services"

###############
#
# Parameter1 - task
#
###############
$task = @()
$task += "2"
$task = [string]::join("|", $task)

$result = $miqvmdb.GetAutomationTask($task)
Write-Host "Results:"
$result |fl

Write-Host "done"
```

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Advanced Provisioning Values

This appendix shows parameters that only apply to web-service initiated provisioning. Note that these variables can not be found in the CloudForms Management Engine provisioning dialogs.

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B.1. Defining new vLans adapters during provisioning

This value allows you to add new vLan adapters during the provisioning web service.

Usable in these Methods: EVMProvisionRequestEx, VmProvisionRequest.

```
network##=<network_name>
Optional:
network##.mac_address=<mac_address>
network##.deviceType=<> Default: VirtualPCNet32
(VirtualEthernetCard types: VirtualE1000, VirtualPCNet32, VirtualVmxnet)

network##.connectable.allowGuestControl = <true/false>  Default: true
network##.connectable.startConnected = <true/false>  Default: true
network##.connectable.connected  = <true/false>  Default: true
```

Example:

```
network0=VM Network
network0.mac_address=00:50:56:57:58:59
```

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B.2. Defining new SCSI Controller during provisioning

The SCSI Controller section is optional. If a controller is required, it will be added with the defined defaults. These settings are only required if you need to override a default value.

Usable in these Methods: EVMProvisionRequestEx, VmProvisionRequest.

```
ctrlscsi##  = <device type> Default: VirtualLsiLogicController
(VirtualSCSIController types: VirtualBusLogicController, VirtualLsiLogicController)
ctrlscsi##.sharedBus =   Default: noSharing
(VirtualSCSISharing types: noSharing, physicalSharing, virtualSharing)
(Note: The ## value defines the controller bus number.)
```

Example:

```
ctrlscsi00=VirtualBusLogicController
ctrlscsi00.sharedBus=virtualSharing
```

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B.3. Defining new disks during provisioning

This parameter value and its options allow you to add disks as part of the provisioning web service.

Usable in these Methods: EVMProvisionRequestEx, VmProvisionRequest.

```
diskscsi##=<controller_#>:<controller_position_#>:<size_in_mb>
Optional:
diskscsi##.datastore=<datastore name>
diskscsi##.filename =<filename>

diskscsi##.connectable.allowGuestControl = <true/false>  Default: false
diskscsi##.connectable.startConnected = <true/false>  Default: true
diskscsi##.connectable.connected  = <true/false>  Default: true

diskscsi##.backing.diskmode  = <>  Default: persistent
(diskMode types: persistent, independent_persistent, independent_nonpersistent, nonpersistent)
diskscsi##.backing.split  = <true/false>  Default: false
diskscsi##.backing.thinProvisioned = <true/false>  Default: false
diskscsi##.backing.writeThrough = <true/false>  Default: false
```

Example:

```
diskscsi0=0:0:10
diskscsi1=0:0:8
diskscsi1.datastore=storage1
diskscsi1.backing.diskmode=independent_persistent
```

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B.4. Changing Provisioning Requester

The default Requester for provisioning is the user used to authenticate the web-service transaction. This field allows the requester to be changed to a different user.

Usable in these Methods: EVMProvisionRequestEx, VmProvisionRequest.

Property Name: user_name

Parameter: 4 requester

Example:

```
owner_email=tester@redhat.com|user_name=prov_tester
```

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B.5. Cloning Type

This parameters value sets the type of cloning request, either clone to vm or clone to template.

Usable in these Methods: EVMProvisionRequestEx, VmProvisionRequest.

Property Name: request_type

Parameter: 2 templateFields

Supported Values: clone_to_vm, clone_to_template

Example:

```
name=Template1|request_type=clone_to_template
```

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B.6. Limit template selection

This parameters value limits template selection to the Datacenters contained in the specified cluster.

Usable in these Methods: EVMProvisionRequestEx, VmProvisionRequest.

Property Name: cluster

Parameter: 6 additionalValues

Example:

```
request_id=874d58|cluster=sales_prod
```

This example limits the templates available by tag.

```
Clear-Host
[System.Net.ServicePointManager]::ServerCertificateValidationCallback = { $true }
$ip = "https://192.168.253.42"

$userid = "admin"
$password = "smartvm"
$cred = New-Object System.Management.Automation.PsCredential $userid, (convertto-securestring $password -
asplaintext -force)

trap {Write-Host $Error[0]; break}

$Error.Clear()
Write-Host "Connecting to EVM integrate web-services at $($ip)/vmdbws/wsdl"
$miqvmdb = New-WebServiceProxy -uri "$($ip)/vmdbws/wsdl" -Credential $cred -ErrorAction Stop -Namespace
VmdbWs
Write-Host "Successfully connected to EVM integrate web-services"

$vms = $miqvmdb.GetTemplatesByTag("prov_scope/all")

foreach ($vm in $vms) {
 $idx = $idx + 1
 Write-Host "$($idx). VM: $($vm.name) - GUID: $($vm.guid)"
}

Write-Host "done"
```

Output example:

```
Connecting to EVM integrate web-services at https://192.168.253.42/vmdbws/wsdl
Successfully connected to EVM integrate web-services
1. VM: TinyVM - GUID: 2e1b5a54-4480-11e2-a836-005056910000
2. VM: rhel63server - GUID: 95d1550a-449d-11e2-9ae3-005056910000
done
```

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Model Properties

The tables below show data returned via web services.

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C.1. Management Systems

These are the ws_attributes for Management Systems.

Management Systems Returned Attribute	Returned Value Example	Returned Value Units	Returned Value Description
aggregate_cpu_speed	19152	MHz	Total CPU Speed
aggregate_logical_cpus	8	Number	Total Number of Logical CPUs
aggregate_memory	48251	MB	Total Memory
aggregate_physical_cpus	1	Number	Total Number of Physical CPUs
aggregate_vm_cpus	15	Number	Aggregate VM Cpus
aggregate_vm_memory	49152	MB	Aggregate VM Memory
authentication_status	Valid	Text	Authentication Status
cpu_usagemhz_rate_average_avg_over_time_period	1557.939422	MHz	CPU - Aggregate Usage Rate for Child VMs for Collected Intervals 30 Day Avg
cpu_usagemhz_rate_average_high_over_time_period	1859.498564	MHz	CPU - Aggregate Usage Rate for Child VMs for Collected Intervals 30 Day High Avg
cpu_usagemhz_rate_average_low_over_time_period	1256.380281	MHz	CPU - Aggregate Usage Rate for Child VMs for Collected Intervals 30 Day Low Avg
derived_memory_used_avg_over_time_period	13090.82021	MB	Memory - Aggregate Used for Child VMs for Collected Intervals 30 Day Avg
derived_memory_used_high_over_time_period	13172.3163	MB	Memory - Aggregate Used for Child VMs for Collected Intervals 30 Day High Avg
derived_memory_used_low_over_time_period	13009.32411	MB	Memory - Aggregate Used for Child VMs for Collected Intervals 30 Day Low Avg
emstype_description	Red Hat Virtualization Manager	Text	Type
max_cpu_usage_rate_average_avg_over_time_period	5.680555556	%	CPU - Peak Usage Rate Avg for Collected Intervals 30 Day Avg
max_cpu_usage_rate_average_avg_over_time_period_without_overhead	5.530555556	%	CPU - Peak Usage Rate Avg for Collected Intervals Without Host Overhead 30 Day Avg
max_cpu_usage_rate_average_high_over_time_period	8.137319022	%	CPU - Peak Usage Rate Avg for Collected Intervals 30 Day High Avg
max_cpu_usage_rate_average_high_over_time_period_without_overhead	7.987319022	%	CPU - Peak Usage Rate Avg for Collected Intervals Without Host Overhead 30 Day High Avg
max_cpu_usage_rate_average_low_over_time_period	3.223792089	%	CPU - Peak Usage Rate Avg for Collected Intervals 30 Day Low Avg
max_cpu_usage_rate_average_low_over_time_period_without_overhead	3.073792089	%	CPU - Peak Usage Rate Avg for Collected Intervals Without Host Overhead 30 Day Low Avg (%)
max_mem_usage_absolute_average_avg_over_time_period	27.50416667	%	Memory - Peak Usage of Allocated for Collected Intervals 30 Day Avg
max_mem_usage_absolute_average_avg_over_time_period_without_overhead	25.49416667	%	Memory - Peak Usage of Allocated for Collected Intervals Without Host Overhead 30 Day Avg
max_mem_usage_absolute_average_high_over_time_period	28.00003501	%	Memory - Peak Usage of Allocated for Collected Intervals 30 Day High Avg
max_mem_usage_absolute_average_high_over_time_period_without_overhead	25.99003501	%	Memory - Peak Usage of Allocated for Collected Intervals Without Host Overhead 30 Day

			High Avg
max_mem_usage_absolute_average_low_over_time_period	27.00829832	%	Memory - Peak Usage of Allocated for Collected Intervals 30 Day Low Avg
max_mem_usage_absolute_average_low_over_time_period_without_overhead	24.99829832	%	Memory - Peak Usage of Allocated for Collected Intervals Without Host Overhead 30 Day Low Avg
region_description	Worker	Text	Region Description
region_number	0	Number	Region Number
total_clusters	1	Number	Total Clusters
total_hosts	1	Number	Total Hosts
total_miq_templates	2	Number	Total MIQ Templates
total_storages	3	Number	Total Storages
total_vms	10	Number	Total Vms
total_vms_and_templates	12	number	Total Vms And Templates
zone_name	default	Text	EVM Zone

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C.2. Clusters

These are the ws_attributes that are derived values that do not come directly from the Cluster VMDB table.

Clusters Returned Attribute	Returned Value Example	Returned Value Units	Returned Value Description
aggregate_cpu_speed	51048	MHz	Total CPU Speed
aggregate_logical_cpus	24	Number	Total Number of Logical CPUs
aggregate_memory	172002	MB	Total Memory
aggregate_physical_cpus	6	Number	Total Number of Physical CPUs
aggregate_vm_cpus	220	Number	Aggregate Vm Cpus
aggregate_vm_memory	480528	MB	Aggregate Vm Memory
capacity_profile_1_available_host_memory	161777451008		Capacity - Profile 1 - Total Memory with HA
capacity_profile_1_available_host_vcpu	24	Number	Capacity - Profile 1 - Total CPU with HA
capacity_profile_1_memory_commitment_ratio	1.2	Number	Capacity - Profile 1 - Memory Commitment Ratio
capacity_profile_1_memory_maximum			Capacity - Profile 1 - Maximum Memory per VM
capacity_profile_1_memory_method	Average of Allocated Memory	Text	Capacity - Profile 1 - Memory Calculation Method
capacity_profile_1_memory_minimum			Capacity - Profile 1 - Minimum Memory per VM
capacity_profile_1_memory_per_vm	3936485376.0		Capacity - Profile 1 - Memory per VM
capacity_profile_1_memory_per_vm_with_min_max	3936485376.0		Capacity - Profile 1 - Memory per VM Used in Calculation
capacity_profile_1_projected_vm_count_based_on_all	28	Number	Capacity - Profile 1 - VM Count (combined)
capacity_profile_1_projected_vm_count_based_on_memory	50	Number	Capacity - Profile 1 - VM Count based on Memory
capacity_profile_1_projected_vm_count_based_on_vcpu	28	Number	Capacity - Profile 1 - VM Count based on vCPU
capacity_profile_1_remaining_host_memory	309737186918.4		Capacity - Profile 1 - Available Memory for New VMs
capacity_profile_1_remaining_host_vcpu	-172.0	Number	Capacity - Profile 1 - Available vCPUs for New VMs
capacity_profile_1_remaining_vm_count_based_on_all	-100	Number	Capacity - Profile 1 - Available VM Count (combined)
capacity_profile_1_remaining_vm_count_based_on_memory	-78	Number	Capacity - Profile 1 - Available VM Count based on Memory
capacity_profile_1_remaining_vm_count_based_on_vcpu	-100	Number	Capacity - Profile 1 - Available VM Count based on vCPU

capacity_profile_1_vcpu_commitment_ratio	2.0	Number	Capacity - Profile 1 - vCPU Commitment Ratio
capacity_profile_1_vcpu_maximum		Number	Capacity - Profile 1 - Maximum vCPU per VM
capacity_profile_1_vcpu_method	Average of Allocated vCPU	Text	Capacity - Profile 1 - vCPU Calculation Method
capacity_profile_1_vcpu_minimum		Number	Capacity - Profile 1 - Minimum vCPU per VM
capacity_profile_1_vcpu_per_vm	1.71875	Number	Capacity - Profile 1 - Number of vCPUs per VM
capacity_profile_1_vcpu_per_vm_with_min_max	1.71875	Number	Capacity - Profile 1 - Number of vCPUs per VM Used in Calculation
capacity_profile_2_available_host_memory	161777451008		Capacity - Profile 2 - Memory Effective with HA
capacity_profile_2_available_host_vcpu	45622	Number	Capacity - Profile 2 - CPU Effective with HA
capacity_profile_2_memory_commitment_ratio	1.0	Number	Capacity - Profile 2 - Memory Commitment Ratio
capacity_profile_2_memory_maximum		Number	Capacity - Profile 2 - Maximum Memory per VM
capacity_profile_2_memory_method	High Normal Range of Allocated Memory	Text	Capacity - Profile 2 - Memory Calculation Method
capacity_profile_2_memory_minimum			Capacity - Profile 2 - Minimum Memory per VM
capacity_profile_2_memory_per_vm	1263886336.0		Capacity - Profile 2 - Memory per VM
capacity_profile_2_memory_per_vm_with_min_max	1263886336.0		Capacity - Profile 2 - Memory per VM Used in Calculation
capacity_profile_2_projected_vm_count_based_on_all	128	Number	Capacity - Profile 2 - VM Count (combined)
capacity_profile_2_projected_vm_count_based_on_memory	128	Number	Capacity - Profile 2 - VM Count based on Memory
capacity_profile_2_projected_vm_count_based_on_vcpu	128	Number	Capacity - Profile 2 - VM Count based on vCPU
capacity_profile_2_remaining_host_memory	0.0		Capacity - Profile 2 - Available Memory for New VMs
capacity_profile_2_remaining_host_vcpu	0.0		Capacity - Profile 2 - Available vCPUs for New VMs
capacity_profile_2_remaining_vm_count_based_on_all	0	Number	Capacity - Profile 2 - Available VM Count (combined)
capacity_profile_2_remaining_vm_count_based_on_memory	0	Number	Capacity - Profile 2 - Available VM Count based on Memory
capacity_profile_2_remaining_vm_count_based_on_vcpu	0	Number	Capacity - Profile 2 - Available VM Count based on vCPU
capacity_profile_2_vcpu_commitment_ratio	1.0	Number	Capacity - Profile 2 - vCPU Commitment Ratio
capacity_profile_2_vcpu_maximum		Number	Capacity - Profile 2 - Maximum vCPU per VM
capacity_profile_2_vcpu_method	High Normal Range of Allocated vCPU	Text	Capacity - Profile 2 - vCPU Calculation Method
capacity_profile_2_vcpu_minimum		Number	Capacity - Profile 2 - Minimum vCPU per VM
capacity_profile_2_vcpu_per_vm	356.421875		Capacity - Profile 2 - CPU Peak Avg per VM
capacity_profile_2_vcpu_per_vm_with_min_max	356.421875		Capacity - Profile 2 - CPU Peak Avg per VM Used in Calculation
cpu_usagemhz_rate_average_avg_over_time_period		Mhz	CPU - Aggregate Usage Rate for Child VMs for Collected Intervals 30 Day Avg
cpu_usagemhz_rate_average_high_over_time_period		Mhz	CPU - Aggregate Usage Rate for Child VMs for Collected Intervals 30 Day High Avg
cpu_usagemhz_rate_average_low_over_time_period		Mhz	CPU - Aggregate Usage Rate for Child VMs for Collected Intervals 30 Day Low Avg

derived_memory_used_avg_over_time_period			Memory - Aggregate Used for Child VMs for Collected Intervals 30 Day Avg
derived_memory_used_high_over_time_period		MB	Memory - Aggregate Used for Child VMs for Collected Intervals 30 Day High Avg
derived_memory_used_low_over_time_period		MB	Memory - Aggregate Used for Child VMs for Collected Intervals 30 Day Low Avg
first_drift_state_timestamp		Time	First Drift State Timestamp
last_drift_state_timestamp		Time	Last Drift State Timestamp
last_scan_on		Time	Last Analysis Time
max_cpu_usage_rate_average_avg_over_time_period		%	CPU - Peak Usage Rate Avg for Collected Intervals 30 Day Avg (%)
max_cpu_usage_rate_average_avg_over_time_period_without_overhead		%	CPU - Peak Usage Rate Avg for Collected Intervals Without Host Overhead 30 Day Avg (%)
max_cpu_usage_rate_average_high_over_time_period		%	CPU - Peak Usage Rate Avg for Collected Intervals 30 Day High Avg (%)
max_cpu_usage_rate_average_high_over_time_period_without_overhead		%	CPU - Peak Usage Rate Avg for Collected Intervals Without Host Overhead 30 Day High Avg (%)
max_cpu_usage_rate_average_low_over_time_period		%	CPU - Peak Usage Rate Avg for Collected Intervals 30 Day Low Avg (%)
max_cpu_usage_rate_average_low_over_time_period_without_overhead		%	CPU - Peak Usage Rate Avg for Collected Intervals Without Host Overhead 30 Day Low Avg (%)
max_mem_usage_absolute_average_avg_over_time_period		%	Memory - Peak Usage of Allocated for Collected Intervals 30 Day Avg (%)
max_mem_usage_absolute_average_avg_over_time_period_without_overhead		%	Memory - Peak Usage of Allocated for Collected Intervals Without Host Overhead 30 Day Avg (%)
max_mem_usage_absolute_average_high_over_time_period		%	Memory - Peak Usage of Allocated for Collected Intervals 30 Day High Avg (%)
max_mem_usage_absolute_average_high_over_time_period_without_overhead		%	Memory - Peak Usage of Allocated for Collected Intervals Without Host Overhead 30 Day High Avg (%)
max_mem_usage_absolute_average_low_over_time_period		%	Memory - Peak Usage of Allocated for Collected Intervals 30 Day Low Avg (%)
max_mem_usage_absolute_average_low_over_time_period_without_overhead		%	Memory - Peak Usage of Allocated for Collected Intervals Without Host Overhead 30 Day Low Avg (%)
region_description	Region 0	Text	Region Description
region_number	0	Number	Region Number
total_hosts	3	Number	Total Hosts
total_miq_templates	5	Number	Total Miq Templates
total_vms	128	Number	Total Vms
v_cpu_vr_ratio	9.200000000000001	Number	CPU Cores Virtual to Real Ratio
v_parent_datacenter	Prod	Text	Parent Datacenter
v_qualified_desc	Testing-Production Cluster in Prod	Text	Cluster in Datacenter
v_ram_vr_ratio	2.8000000000000003	Number	Memory Virtual to Real Ratio

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C.3. Hosts

These are the ws_attributes that are derived values that do not come directly from the **Host** VMDB table.

Hosts Returned Attribute	Returned Value Example	Returned Value Units	Returned Value Description
all_enabled_ports	22|123|427|443|902|3260|5988|5989	Text	All Enabled Ports
authentication_status	Valid	Text	Authentication Status
cpu_usagemhz_rate_average_avg_over_time_period	1557.939422	MHz	CPU - Aggregate Usage Rate for Child VMs for Collected Intervals 30 Day Avg
cpu_usagemhz_rate_average_high_over_time_period	1859.498564	MHz	CPU - Aggregate Usage Rate for Child VMs for Collected Intervals 30 Day High Avg
cpu_usagemhz_rate_average_low_over_time_period	1256.380281	MHz	CPU - Aggregate Usage Rate for Child VMs for Collected Intervals 30 Day Low Avg
derived_memory_used_avg_over_time_period	13090.82021	MB	Memory - Aggregate Used for Child VMs for Collected Intervals 30 Day Avg
derived_memory_used_high_over_time_period	13172.3163	MB	Memory - Aggregate Used for Child VMs for Collected Intervals 30 Day High Avg
derived_memory_used_low_over_time_period	13009.32411	MB	Memory - Aggregate Used for Child VMs for Collected Intervals 30 Day Low Avg
enabled_inbound_ports	22|427|5988|5989	Text	Enabled Inbound Ports
enabled_outbound_ports	123|427|443|902|3260	Text	Enabled Outbound Ports
enabled_run_level_0_services		Text	Enabled Run Level 0 Services
enabled_run_level_1_services	acpid|auditd|cgconfig|crond|cups|ip6tables|lvm2-monitor|md...	Text	Enabled Run Level 1 Services
enabled_run_level_2_services	acpid|auditd|cgconfig|crond|cups|ip6tables|lvm2-monitor|md...	Text	Enabled Run Level 2 Services
enabled_run_level_3_services	abrt-ccpp|abrt-oops|abrtd|acpid|atd|auditd|autofs|cgconfig...	Text	Enabled Run Level 3 Services
enabled_run_level_4_services	acpid|atd|auditd|autofs|cgconfig|crond|cups|haldaemon|ip6t...	Text	Enabled Run Level 4 Services
enabled_run_level_5_services	abrt-ccpp|abrt-oops|abrtd|acpid|atd|auditd|autofs|cgconfig...	Text	Enabled Run Level 5 Services
enabled_run_level_6_services		Text	Enabled Run Level 6 Services
enabled_tcp_inbound_ports	22|427|5988|5989	Text	Enabled Tcp Inbound Ports
enabled_tcp_outbound_ports	427|443|902|3260	Text	Enabled Tcp Outbound Ports
enabled_udp_inbound_ports	427	Text	Enabled Udp Inbound Ports
enabled_udp_outbound_ports	123|427|902	Text	Enabled Udp Outbound Ports
first_drift_state_timestamp	7/23/12	Date	First Drift State Timestamp
ipmi_enabled	FALSE	Text	Ipmi Enabled
last_compliance_status		Text	Last Compliance Status
last_compliance_timestamp		Time	Last Compliance Timestamp
last_drift_state_timestamp	7/24/12	Date	Last Drift State Timestamp
last_scan_on	7/24/12	Date	Last Analysis Time
max_cpu_usage_rate_average_avg_over_time_period	5.680555556	%	CPU - Peak Usage Rate Avg for Collected Intervals 30 Day Avg (%)
max_cpu_usage_rate_average_avg_over_time_period_without_overhead	5.530555556	%	CPU - Peak Usage Rate Avg for Collected Intervals Without Host Overhead 30 Day Avg
max_cpu_usage_rate_average_high_over_time_period	8.137319022	%	CPU - Peak Usage Rate Avg for Collected Intervals 30 Day High Avg
max_cpu_usage_rate_average_high_over_time_period_without_overhead	7.987319022	%	CPU - Peak Usage Rate Avg for Collected Intervals Without Host Overhead 30 Day High Avg
max_cpu_usage_rate_average_low_over_time_period	3.223792089	%	CPU - Peak Usage Rate Avg for Collected Intervals 30 Day Low Avg

max_cpu_usage_rate_average_low_over_time_period_without_overhead	3.073792089	%	CPU - Peak Usage Rate Avg for Collected Intervals Without Host Overhead 30 Day Low Avg
max_mem_usage_absolute_average_avg_over_time_period	27.50416667	%	Memory - Peak Usage of Allocated for Collected Intervals 30 Day Avg
max_mem_usage_absolute_average_avg_over_time_period_without_overhead	25.49416667	%	Memory - Peak Usage of Allocated for Collected Intervals Without Host Overhead 30 Day Avg
max_mem_usage_absolute_average_high_over_time_period	28.00003501	%	Memory - Peak Usage of Allocated for Collected Intervals 30 Day High Avg
max_mem_usage_absolute_average_high_over_time_period_with overhead	25.99003501	%	Memory - Peak Usage of Allocated for Collected Intervals Without Host Overhead 30 Day High Avg
max_mem_usage_absolute_average_low_over_time_period	27.00829832	%	Memory - Peak Usage of Allocated for Collected Intervals 30 Day Low Avg
max_mem_usage_absolute_average_low_over_time_period_without_overhead	24.99829832	%	Memory - Peak Usage of Allocated for Collected Intervals Without Host Overhead 30 Day Low Avg
os_image_name	linux_generic	Text	OS Name
platform	linux	Text	Platform
region_description	Worker Region	Text	Region Description
region_number	0	Number	Region Number
service_names	abrt-ccpp|abrt-oops|abrtd|acpid|atd|auditd|autofs|certmong...	Text	Service Names
v_annotation		Text	Annotation
v_owning_cluster	Pod1	Text	Parent cluster
v_owning_datacenter	Default	Text	Parent datacenter
v_owning_folder	Datacenters	Text	Parent Folder (hosts & clusters)
v_total_miq_templates	0	Number	Total Miq Templates
v_total_storages	3	Number	Total Datastores
v_total_vms	2	Number	Total VMs

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C.4. Host Hardware Attributes

These are the attributes returned from **Hosts Hardware** table.

Host Hardware Returned Attribute	Returned Value Example	Returned Value Units	Returned Value Description
annotation		Text	Annotation
bios		Text	BIOS
bios_location		Text	BIOS Location
config_version		Text	Config Version
cores_per_socket	4	Number	Cores Per Socket
cpu_speed	2400	MHz	CPU Speed
cpu_type	Intel(R) Xeon(R) CPU X3220 @ 2.40GHz	Text	CPU Type
cpu_usage	4290	MB	CPU Usage
disk_capacity	0		Disk Capacity
disk_free_space	0	B	Disk Free Space
guest_os	ESX	Text	Guest OS
guest_os_full_name	ESX	Text	Guest OS Full Name
host_id	1000000000001	Number	Host Id
hostnames		Text	Host Names
id	1000000000001	Number	Id
ipaddresses	{10.1.1.69, 192.168.254.50}	Text	IP Addresses
logical_cpus	4	Number	Number of CPU Cores

manufacturer	Dell Inc.	Text	Manufacturer
memory_console	800	MB	Memory Console
memory_cpu	8191	MB	RAM
memory_usage	5305	MB	Memory Usage
model	PowerEdge R200	Text	Model
number_of_nics	2	Number	Number Of Nics
numvcpus	1	Number	Number of CPUs
size_on_disk	0	B	Size On Disk
time_sync		Text	Time Sync
virtual_hw_version		Text	Virtual Hardware Version
vm_id		NA	Vm Id
vmotion_enabled	1	Text	Vmotion Enabled

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C.5. Resource Pools

These are the ws_attributes that are derived values that do not come directly from the **Resource Pool** VMDB table.

Resource Pools Returned Attribute	Returned Value Example	Returned Value Units	Description
aggregate_cpu_speed	51048	MHz	Total CPU Speed
aggregate_logical_cpus	24	Number	Total Number of Logical CPUs
aggregate_memory	172002	MB	Total Memory
aggregate_physical_cpus	6	Number	Total Number of Physical CPUs
aggregate_vm_cpus	213	Number	Aggregate Vm Cpus
aggregate_vm_memory	467728	MB	Aggregate Vm Memory
region_description	Region	Text	Region Description
region_number	0	Number	Region Number
v_direct_miq_templates	0	Number	Direct Miq Templates
v_direct_vms	9	Number	Direct VMs
v_parent_cluster	Testing	Text	Parent Cluster
v_parent_datacenter	Prod	Text	Parent Datacenter
v_parent_folder	Datacenter	Text	Parent Folder
v_parent_host		Text	Parent Host
v_parent_resource_pool		Text	Parent Resource Pool
v_total_miq_templates	0	Number	Total Miq Templates
v_total_vms	126	Number	Total VMs

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C.6. Datastores

These are the ws_attributes that are derived values that do not come directly from the **Datastore** VMDB table.

Storage Returned Attribute	Returned Value Example	Returned Value Units	Description
count_of_vmdk_disk_files	0	Number	Count of VMDK Disk Files
cpu_usagemhz_rate_average_avg_over_time_period		MHz	CPU - Aggregate Usage Rate for Child VMs for Collected Intervals 30 Day Avg
cpu_usagemhz_rate_average_high_over_time_period		MHz	CPU - Aggregate Usage Rate for Child VMs for Collected Intervals 30 Day High Avg
cpu_usagemhz_rate_average_low_over_time_period		MHz	CPU - Aggregate Usage Rate for Child VMs for Collected Intervals 30 Day Low Avg
debris_size	0	B	Debris Size
derived_memory_used_avg_over_time_period		MB	Memory - Aggregate Used for Child VMs for Collected Intervals 30 Day Avg
derived_memory_used_high_over_time_period		MB	Memory - Aggregate Used for Child VMs for Collected Intervals 30 Day High Avg

derived_memory_used_low_over_time_period		MB	Memory - Aggregate Used for Child VMs for Collected Intervals 30 Day Low Avg
disk_size	0	B	Disk Size
max_cpu_usage_rate_average_avg_over_time_period		%	CPU - Peak Usage Rate Avg for Collected Intervals 30 Day Avg (%)
max_cpu_usage_rate_average_avg_over_time_period_without_overhead		%	CPU - Peak Usage Rate Avg for Collected Intervals Without Host Overhead 30 Day Avg (%)
max_cpu_usage_rate_average_high_over_time_period		%	CPU - Peak Usage Rate Avg for Collected Intervals 30 Day High Avg (%)
max_cpu_usage_rate_average_high_over_time_period_without_overhead		%	CPU - Peak Usage Rate Avg for Collected Intervals Without Host Overhead 30 Day High Avg (%)
max_cpu_usage_rate_average_low_over_time_period		%	CPU - Peak Usage Rate Avg for Collected Intervals 30 Day Low Avg (%)
max_cpu_usage_rate_average_low_over_time_period_without_overhead		%	CPU - Peak Usage Rate Avg for Collected Intervals Without Host Overhead 30 Day Low Avg (%)
max_mem_usage_absolute_average_avg_over_time_period		%	Memory - Peak Usage of Allocated for Collected Intervals 30 Day Avg (%)
max_mem_usage_absolute_average_avg_over_time_period_without_overhead		%	Memory - Peak Usage of Allocated for Collected Intervals Without Host Overhead 30 Day Avg (%)
max_mem_usage_absolute_average_high_over_time_period		%	Memory - Peak Usage of Allocated for Collected Intervals 30 Day High Avg (%)
max_mem_usage_absolute_average_high_over_time_period_without_overhead		%	Memory - Peak Usage of Allocated for Collected Intervals Without Host Overhead 30 Day High Avg (%)
max_mem_usage_absolute_average_low_over_time_period		%	Memory - Peak Usage of Allocated for Collected Intervals 30 Day Low Avg (%)
max_mem_usage_absolute_average_low_over_time_period_without_overhead		%	Memory - Peak Usage of Allocated for Collected Intervals Without Host Overhead 30 Day Low Avg (%)
region_description	Region 0	Text	Region Description
region_number	0	Number	Region Number
snapshot_size	0	B	Snapshot Size
total_managed_registered_vms	0	Number	Total Managed Registered Vms
total_managed_unregistered_vms	0	Number	Total Managed Unregistered Vms
total_unmanaged_vms	0	Number	Total Unmanaged Vms
v_debris_percent_of_used	0	%	Non-VM Files Percent of Used
v_disk_percent_of_used	0	%	Disk Files Percent of Used
v_free_space_percent_of_total	18.5	%	Free Space Percent of Total
v_memory_percent_of_used	0	%	VM Memory Files Percent of Used
v_provisioned_percent_of_total	81.5	%	Provisioned Space Percent of Total
v_snapshot_percent_of_used	0	%	Snapshot Files Percent of Used
v_total_debris_size	0	B	Size of Non-VM Files
v_total_hosts	4	Number	Total Hosts
v_total_memory_size	0	B	Size of VM Memory Files
v_total_provisioned	115181363200	B	Total Provisioned Space
v_total_snapshot_size	0	B	Size of VM Snapshot Files
v_total_vm_misc_size	0	B	Size of Other VM Files
v_total_vms	0	Number	Total VMs
v_used_space	115181363200	B	Used Space

v_used_space_percent_of_total	81.5	%	Used Space Percent of Total
v_vm_misc_percent_of_used	0	%	Other VM Files Percent of Used
vm_misc_size	0		Vm Misc Size
vm_ram_size	0		Vm Ram Size

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C.7. Virtual Machines

These are the ws_attributes that are derived values that do not come directly from the **Virtual Machine** VMDB table.

Virtual Machines Returned Attribute	Returned Value Example	Returned Value Units	Description
aggressive_mem_recommended_change	4232	MB	Memory - Aggressive Recommendation Savings
aggressive_mem_recommended_change_pct	68.9	%	Memory - Aggressive Recommendation Savings (%)
aggressive_recommended_mem	1912	MB	Memory - Aggressive Recommendation
aggressive_recommended_vcpus	1	Number	CPU - Aggressive Recommendation
aggressive_vcpus_recommended_change	1	Number	CPU - Aggressive Recommendation Savings
aggressive_vcpus_recommended_change_pct	50	%	CPU - Aggressive Recommendation Savings (%)
allocated_disk_storage	6442450944	B	Allocated Disk Storage
archived	FALSE	Text	Archived
conservative_mem_recommended_change	304	MB	Memory - Conservative Recommendation Savings
conservative_mem_recommended_change_pct	4.9	%	Memory - Conservative Recommendation Savings (%)
conservative_recommended_mem	5840	MB	Memory - Conservative Recommendation
conservative_recommended_vcpus	3	Number	CPU - Conservative Recommendation
conservative_vcpus_recommended_change	-1	Number	CPU - Conservative Recommendation Savings
conservative_vcpus_recommended_change_pct	-50	%	CPU - Conservative Recommendation Savings (%)
cpu_usagemhz_rate_average_avg_over_time_period	651.6342141	MHz	CPU - Aggregate Usage Rate for Child VMs for Collected Intervals 30 Day Avg
cpu_usagemhz_rate_average_high_over_time_period	937.0011231	MHz	CPU - Aggregate Usage Rate for Child VMs for Collected Intervals 30 Day High Avg
cpu_usagemhz_rate_average_low_over_time_period	366.2673051	MHz	CPU - Aggregate Usage Rate for Child VMs for Collected Intervals 30 Day Low Avg
cpu_usagemhz_rate_average_max_over_time_period	1053.934933	MHz	CPU - Aggregate Usage Rate for Child VMs for Collected Intervals 30 Day Max
debris_size	15114072	B	Debris Size
derived_memory_used_avg_over_time_period	1377.763556	MB	Memory - Aggregate Used for Child VMs for Collected Intervals 30 Day Avg
derived_memory_used_high_over_time_period	2522.695426	MB	Memory - Aggregate Used for Child VMs for Collected Intervals 30 Day High Avg
derived_memory_used_low_over_time_period	232.8316856	MB	Memory - Aggregate Used for Child VMs for Collected Intervals 30 Day Low Avg
derived_memory_used_max_over_time_period	3234.033778	MB	Memory - Aggregate Used for Child VMs for Collected Intervals 30 Day Max
disconnected	FALSE	Text	Disconnected
disk_1_disk_type	thick	Text	Disk 1 Disk Type

disk_1_mode	persistent	Text	Disk 1 Mode
disk_1_partitions_aligned	False	Text	Disk 1 Partitions Aligned
disk_1_size	4294967296	B	Disk 1 Size (As labeled in CloudForms Management Engine Console)
disk_1_size_on_disk	4294967296	B	Disk 1 Size On Disk (As labeled in CloudForms Management Engine Console)
disk_1_used_percent_of_provisioned	100.0	%	Disk 1 Used Percent Of Provisioned
disk_2_disk_type	thin	Text	Disk 2 Disk Type
disk_2_mode	persistent	Text	Disk 2 Mode
disk_2_partitions_aligned	TRUE	Text	Disk 2 Partitions Aligned
disk_2_size	2147483648	B	Disk 2 Size (As labeled in CloudForms Management Engine Console)
disk_2_size_on_disk		B	Disk 2 Size On Disk (As labeled in CloudForms Management Engine Console)
disk_2_used_percent_of_provisioned	0	%	Disk 2 Used Percent Of Provisioned
disk_3_disk_type		Text	Disk 3 Disk Type
disk_3_mode		Text	Disk 3 Mode
disk_3_partitions_aligned	TRUE	Text	Disk 3 Partitions Aligned
disk_3_size		B	Disk 3 Size (As labeled in CloudForms Management Engine Console)
disk_3_size_on_disk		B	Disk 3 Size On Disk (As labeled in CloudForms Management Engine Console)
disk_3_used_percent_of_provisioned	0	%	Disk 3 Used Percent Of Provisioned
disk_4_disk_type		Text	Disk 4 Disk Type
disk_4_mode		Text	Disk 4 Mode
disk_4_partitions_aligned	TRUE	Text	Disk 4 Partitions Aligned
disk_4_size		B	Disk 4 Size (As labeled in CloudForms Management Engine Console)
disk_4_size_on_disk		B	Disk 4 Size On Disk (As labeled in CloudForms Management Engine Console)
disk_4_used_percent_of_provisioned	0	%	Disk 4 Used Percent Of Provisioned
disk_5_disk_type		Text	Disk 5 Disk Type
disk_5_mode		Text	Disk 5 Mode
disk_5_partitions_aligned	FALSE	Text	Disk 5 Partitions Aligned
disk_5_size		B	Disk 5 Size (As labeled in CloudForms Management Engine Console)
disk_5_size_on_disk		B	Disk 5 Size On (As labeled in CloudForms Management Engine Console)
disk_5_used_percent_of_provisioned	0	%	Disk 5 Used Percent Of Provisioned
disk_6_disk_type		Text	Disk 6 Disk Type
disk_6_mode		Text	Disk 6 Mode
disk_6_partitions_aligned		Text	Disk 6 Partitions Aligned
disk_6_size		B	Disk 6 Size (As labeled in CloudForms Management Engine Console)
disk_6_size_on_disk		B	Disk 6 Size On Disk (As labeled in CloudForms Management Engine Console)
disk_6_used_percent_of_provisioned		%	Disk 6 Used Percent Of Provisioned

disk_7_disk_type		Text	Disk 7 Disk Type
disk_7_mode		Text	Disk 7 Mode
disk_7_partitions_aligned		Text	Disk 7 Partitions Aligned
disk_7_size		B	Disk 7 Size (As labeled in CloudForms Management Engine Console)
disk_7_size_on_disk		B	Disk 7 Size On Disk (As labeled in CloudForms Management Engine Console)
disk_7_used_percent_of_provisioned		%	Disk 7 Used Percent Of Provisioned
disk_8_disk_type		Text	Disk 8 Disk Type
disk_8_mode		Text	Disk 8 Mode
disk_8_partitions_aligned		Text	Disk 8 Partitions Aligned
disk_8_size		B	Disk 8 Size (As labeled in CloudForms Management Engine Console)
disk_8_size_on_disk		B	Disk 8 Size On Disk (As labeled in CloudForms Management Engine Console)
disk_8_used_percent_of_provisioned		%	Disk 8 Used Percent Of Provisioned
disk_9_disk_type		Text	Disk 9 Disk Type
disk_9_mode		Text	Disk 9 Mode
disk_9_partitions_aligned		Text	Disk 9 Partitions Aligned
disk_9_size		B	Disk 9 Size (As labeled in CloudForms Management Engine Console)
disk_9_size_on_disk		B	Disk 9 Size On Disk (As labeled in CloudForms Management Engine Console)
disk_9_used_percent_of_provisioned		%	Disk 9 Used Percent Of Provisioned
disk_size	0	B	Disk Size (As labeled in CloudForms Management Engine Console)
disks_aligned	FALSE	Text	Disks Aligned
ems_cluster_name	Pod1	Text	Cluster
evm_owner_email		Text	Evm Owner Email
evm_owner_name		Text	Evm Owner Name
evm_owner_userid		Text	Evm Owner Userid
first_drift_state_timestamp	7/24/12 20:12	Time	First Drift State Timestamp
has_active_vdi_session	FALSE	Text	Has Active Vdi Session
has_rdm_disk	FALSE	Text	Has an RDM Disk?
host_name	ESX5.miq.net	Text	Parent Host
Hostnames	prod_gxf_D3	Text	Host Names
Ipaddresses	192.168.252.15	Text	IP Addresses
is_evm_appliance	FALSE	Text	Is an EVM Appliance?
last_compliance_status			Last Compliance Status
last_compliance_timestamp			Last Compliance Timestamp
last_drift_state_timestamp	7/24/12 20:12	Time	Last Drift State Timestamp
mac_addresses	00:1a:4a:0a:01:00	Text	MAC Addresses
max_cpu_usage_rate_average_avg_over_time_period	24.77638889	%	CPU - Peak Usage Rate Avg for Collected Intervals 30 Day Avg (%)
max_cpu_usage_rate_average_avg_over_time_period_without_overhead	24.77638889	%	CPU - Peak Usage Rate Avg for Collected Intervals Without Host Overhead 30 Day Avg (%)
max_cpu_usage_rate_average_high_over_time_period (%)	44.02290027	%	CPU - Peak Usage Rate Avg for Collected Intervals 30 Day High Avg (%)
max_cpu_usage_rate_average_high_over_time_period_without_overhead	44.02290027	%	CPU - Peak Usage Rate Avg for Collected Intervals Without Host Overhead 30 Day High Avg (%)
max_cpu_usage_rate_average_	5.529877511	%	CPU - Peak Usage Rate Avg for

_p_____g_____g_2_low_over_time_period			Collected Intervals 30 Day Low Avg (%)
max_cpu_usage_rate_average_low_over_time_period_without_overhead	5.529877511	%	CPU - Peak Usage Rate Avg for Collected Intervals Without Host Overhead 30 Day Low Avg (%)
max_cpu_usage_rate_average_max_over_time_period	100	%	CPU - Peak Usage Rate for Collected Intervals 30 Day Max (%)
max_mem_usage_absolute_average_avg_over_time_period	31.08472222	%	Memory - Peak Usage of Allocated for Collected Intervals 30 Day Avg (%)
max_mem_usage_absolute_average_avg_over_time_period_without_overhead	31.08472222	%	Memory - Peak Usage of Allocated for Collected Intervals Without Host Overhead 30 Day Avg (%)
max_mem_usage_absolute_average_high_over_time_period	55.17875591	%	Memory - Peak Usage of Allocated for Collected Intervals 30 Day High Avg (%)
max_mem_usage_absolute_average_high_over_time_period_with overhead	55.17875591	%	Memory - Peak Usage of Allocated for Collected Intervals Without Host Overhead 30 Day High Avg (%)
max_mem_usage_absolute_average_low_over_time_period	6.990688531	%	Memory - Peak Usage of Allocated for Collected Intervals 30 Day Low Avg (%)
max_mem_usage_absolute_average_low_over_time_period_without_overhead	6.990688531	%	Memory - Peak Usage of Allocated for Collected Intervals Without Host Overhead 30 Day Low Avg (%)
max_mem_usage_absolute_average_max_over_time_period	95	%	Memory - Peak Usage of Allocated for Collected Intervals 30 Day Max (%)
mem_cpu	6144	MB	Memory
moderate_mem_recommended_change	2752	MB	Memory - Moderate Recommendation Savings
moderate_mem_recommended_change_pct	44.8	%	Memory - Moderate Recommendation Savings (%)
moderate_recommended_mem	3392	MB	Memory - Moderate Recommendation
moderate_recommended_vcpus	1	Number	CPU - Moderate Recommendation
moderate_vcpus_recommended_change	1	Number	CPU - Moderate Recommendation Savings
moderate_vcpus_recommended_change_pct	50	%	CPU - Moderate Recommendation Savings (%)
num_cpu	2	Number	Number of CPUs
num_disks	5	Number	Number of Disks
num_hard_disks	5	Number	Number of Hard Disks
Orphaned	FALSE	Text	Orphaned
os_image_name	linux_centos	Text	OS Name
overallocated_mem_pct	68.9	%	Memory - % Overallocated
overallocated_vcpus_pct	50	%	CPU - % Overallocated
owned_by_current_ldap_group	FALSE	Text	In My LDAP Group?
owned_by_current_user	FALSE	Text	Owned by Me?
owning_ldap_group		Text	LDAP Group
paravirtualization			Paravirtualization
parent_blue_folder_1_name	DC1	Text	Folder Name (VMs & Templates) 1
parent_blue_folder_2_name	DIV1	Text	Folder Name (VMs & Templates) 2
parent_blue_folder_3_name	Engineering	Text	Folder Name (VMs & Templates) 3
parent_blue_folder_4_name	SelfService	Text	Folder Name (VMs & Templates) 4
parent_blue_folder_5_name		Text	Folder Name (VMs & Templates) 5

parent_blue_folder_6_name		Text	Folder Name (VMs & Templates) 6
parent_blue_folder_7_name		Text	Folder Name (VMs & Templates) 7
parent_blue_folder_8_name		Text	Folder Name (VMs & Templates) 8
parent_blue_folder_9_name		Text	Folder Name (VMs & Templates) 9
Platform	linux	Text	Platform
provisioned_storage	6442450944	B	Total Provisioned Space
recommended_mem	1912	MB	Memory - Recommendation
recommended_vcpus	1	Number	CPU - Recommendation
region_description	Region 0	Text	Region Description
region_number	0	Number	Region Number
snapshot_size (B)	47286	B	Snapshot Size (As labeled in CloudForms Management Engine Console)
storage_name	Demo2San1	Text	Storage Name
thin_provisioned	true	Text	Thin Provisioned
uncommitted_storage	2147483648	B	Uncommitted Space (As labeled in CloudForms Management Engine Console)
used_disk_storage	6442450944	B	Total Used Disk Space (As labeled in CloudForms Management Engine Console)
used_storage	6442450944	B	Used Storage (As labeled in CloudForms Management Engine Console)
used_storage_by_state	6442450944	B	Currently Used Space (As labeled in CloudForms Management Engine Console)
v_annotation	Production V5 EVM appliance (iSCSI scanning)	Text	Annotation
v_datastore_path	MTCRHDS001/17830c59-6ae4-420f-af5c-f6898c6c5b27.ovf	Text	Datastore Path
v_host_vmm_product	RHEV-H	Text	Parent Host Platform
v_is_a_template	FALSE	Text	Is a Template
v_owning_blue_folder	vm	Text	Parent Folder (VMs & Templates)
v_owning_blue_folder_path	Datacenters/Default/vm	Text	Parent Folder Path (VMs & Templates)
v_owning_cluster	Pod1	Text	Parent Cluster
v_owning_datacenter	Default	Text	Parent Datacenter
v_owning_folder	Datacenters	Text	Parent Folder (Hosts & Clusters)
v_owning_folder_path	Datacenters	Text	Parent Folder Path (Hosts & Clusters)
v_owning_resource_pool	Default for Cluster Pod1	Text	Parent Resource Pool
v_pct_free_disk_space	39.67	%	Pct Free Disk
v_pct_used_disk_space	60.33	%	Pct Used Disk
v_snapshot_newest_description	_ActiveImage_PRDv5EVM002_ Tue Jun 19 17:13:11 EDT 2012	Text	Snapshot Newest Description
v_snapshot_newest_name	Active Image	Text	Snapshot Newest Name
v_snapshot_newest_timestamp	6/19/12 14:04	Time	Snapshot Newest Timestamp
v_snapshot_newest_total_size		B	Snapshot Newest Total Size
v_snapshot_oldest_description	_ActiveImage_PRDv5EVM002_ Tue Jun 19 17:13:11 EDT 2012	Text	Snapshot Oldest Description
v_snapshot_oldest_name	Active Image	Text	Snapshot Oldest Name
v_snapshot_oldest_timestamp	6/19/12 14:04	Time	Snapshot Oldest Timestamp
v_snapshot_oldest_total_size		B	Snapshot Oldest Total Size (As labeled in CloudForms Management Engine Console)
v_total_snapshots	1	Number	Total Snapshots
vdi_available	FALSE	Text	Vdi Available
vdi_connection_dns_name -	RETIRED	NA	Vdi Connection Dns Name

vdi_connection_logon_server -	RETIRED	NA	Vdi Connection Logon Server
vdi_connection_name -	RETIRED	NA	Vdi Connection Name
vdi_connection_remote_ip_address -	RETIRED	NA	Vdi Connection Remote Ip Address
vdi_connection_session_name-	RETIRED	NA	Vdi Connection Session Name
vdi_connection_session_type-	RETIRED	NA	Vdi Connection Session Type
vdi_connection_url	RETIRED	NA	Vdi Connection Url
vdi_endpoint_ip_address	RETIRED	NA	Vdi Endpoint Ip Address
vdi_endpoint_mac_address	RETIRED	NA	Vdi Endpoint Mac Address
vdi_endpoint_name	RETIRED	NA	Vdi Endpoint Name
vdi_endpoint_type	RETIRED	NA	Vdi Endpoint Type
vdi_user_appdata	RETIRED	NA	Vdi User Appdata
vdi_user_dns_domain	RETIRED	NA	Vdi User Dns Domain
vdi_user_domain	RETIRED	NA	Vdi User Domain
vdi_user_home_drive	RETIRED	NA	Vdi User Home Drive
vdi_user_home_path	RETIRED	NA	Vdi User Home Path
vdi_user_home_share	RETIRED	NA	Vdi User Home Share
vdi_user_logon_time	RETIRED	NA	Vdi User Logon Time
vdi_user_name	RETIRED	NA	Vdi User Name
vm_misc_size	782765	B	Vm Misc Size
vm_ram_size	2684363244	B	Vm Ram Size
vmsafe_agent_address		Text	VMsafe Agent Address
vmsafe_agent_port		Text	VMsafe Agent Port
vmsafe_enable		Text	VMsafe Enable
vmsafe_fail_open		Text	VMsafe Fail Open
vmsafe_immutable_vm		Text	VMsafe Immutable VM
vmsafe_timeout_ms		Ms	VMsafe Timeout (ms)

Report a bug

C.8. Virtual Machines Hardware Attributes

These are the attributes returned from `Virtual Machines Hardware` table.

Virtual Machine Hardware Returned Attribute	Returned Value Example	Returned Value Units	Returned Value Description
annotation	VM has RawDevice attached	Text	Annotation
bios	422434f1-6185-71ef-9726-376292f56c3c	Text	BIOS
bios_location	564dfe81-2d72-b1c3-299a-2914b4a02c86	Text	BIOS Location
config_version	vmx-07	Text	Config Version
cores_per_socket	0	Number	Cores Per Socket
cpu_speed	0	MHz	CPU Speed
cpu_type		Text	CPU Type
cpu_usage	0	MB	CPU Usage
disk_capacity	8589934592	B	Disk Capacity
disk_free_space	3407292416	B	Disk Free Space
guest_os	winnetstandard	Text	Guest OS
guest_os_full_name	Microsoft Windows Server 2003, Standard Edition (32-bit)	Text	Guest OS Full Name
host_id		Text	Host Id
hostnames	{prod_sf_D2}	Text	Host Names
id	1000000000041	Text	Id
ipaddresses	{192.168.255.25}	Text	IP Addresses
logical_cpus	0	Number	Number of CPU Cores
manufacturer		Text	Manufacturer
memory_console	0	MB	Memory Console
memory_cpu	2048	MB	RAM
memory_usage	0	MB	Memory Usage
model		Text	Model
number_of_nics	1	Number	Number Of Nics

numvcpus	1	Number	Number of CPUs
size_on_disk	19930439179	B	Size On Disk
time_sync		Text	Time Sync
virtual_hw_version		Text	Virtual Hardware Version
vm_id	1000000000039	Text	Vm Id
vmotion_enabled	0	Text	Vmotion Enabled

Report a bug

WSDL File

This appendix includes the contents of the entire WSDL file. It can be found on the CloudForms Management Engine Appliance by going to:**https://<cfmeserver_ip>/vmdbws/wsdl**.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<definitions name="" targetNamespace="urn:ActionWebService" xmlns:typens="urn:ActionWebService"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"
xmlns="http://schemas.xmlsoap.org/wsdl/">
  <types>
    <xsd:schema xmlns="http://www.w3.org/2001/XMLSchema" targetNamespace="urn:ActionWebService">
      <xsd:complexType name="VmdbwsSupport..VmListArray">
        <xsd:complexContent>
          <xsd:restriction base="soapenc:Array">
            <xsd:attribute ref="soapenc:arrayType" wsdl:arrayType="typens:VmdbwsSupport..VmList[]"/>
          </xsd:restriction>
        </xsd:complexContent>
      </xsd:complexType>
      <xsd:complexType name="VmdbwsSupport..HostListArray">
        <xsd:complexContent>
          <xsd:restriction base="soapenc:Array">
            <xsd:attribute ref="soapenc:arrayType" wsdl:arrayType="typens:VmdbwsSupport..HostList[]"/>
          </xsd:restriction>
        </xsd:complexContent>
      </xsd:complexType>
      <xsd:complexType name="VmdbwsSupport..ClusterListArray">
        <xsd:complexContent>
          <xsd:restriction base="soapenc:Array">
            <xsd:attribute ref="soapenc:arrayType" wsdl:arrayType="typens:VmdbwsSupport..ClusterList[]"/>
          </xsd:restriction>
        </xsd:complexContent>
      </xsd:complexType>
      <xsd:complexType name="VmdbwsSupport..ResourcePoolListArray">
        <xsd:complexContent>
          <xsd:restriction base="soapenc:Array">
            <xsd:attribute ref="soapenc:arrayType"
wsdl:arrayType="typens:VmdbwsSupport..ResourcePoolList[]"/>
          </xsd:restriction>
        </xsd:complexContent>
      </xsd:complexType>
      <xsd:complexType name="VmdbwsSupport..DatastoreListArray">
        <xsd:complexContent>
          <xsd:restriction base="soapenc:Array">
            <xsd:attribute ref="soapenc:arrayType" wsdl:arrayType="typens:VmdbwsSupport..DatastoreList[]"/>
          </xsd:restriction>
        </xsd:complexContent>
      </xsd:complexType>
      <xsd:complexType name="VmdbwsSupport..VmSoftwareArray">
        <xsd:complexContent>
          <xsd:restriction base="soapenc:Array">
            <xsd:attribute ref="soapenc:arrayType" wsdl:arrayType="typens:VmdbwsSupport..VmSoftware[]"/>
          </xsd:restriction>
        </xsd:complexContent>
      </xsd:complexType>
      <xsd:complexType name="VmdbwsSupport..VmAccountsArray">
        <xsd:complexContent>
          <xsd:restriction base="soapenc:Array">
            <xsd:attribute ref="soapenc:arrayType" wsdl:arrayType="typens:VmdbwsSupport..VmAccounts[]"/>
          </xsd:restriction>
        </xsd:complexContent>
      </xsd:complexType>
      <xsd:complexType name="HostArray">
        <xsd:complexContent>
          <xsd:restriction base="soapenc:Array">
            <xsd:attribute ref="soapenc:arrayType" wsdl:arrayType="typens:Host[]"/>
          </xsd:restriction>
        </xsd:complexContent>
      </xsd:complexType>
      <xsd:complexType name="VmdbwsSupport..ClusterArray">
        <xsd:complexContent>
          <xsd:restriction base="soapenc:Array">
            <xsd:attribute ref="soapenc:arrayType" wsdl:arrayType="typens:VmdbwsSupport..Cluster[]"/>
          </xsd:restriction>
        </xsd:complexContent>
      </xsd:complexType>
      <xsd:complexType name="ResourcePoolArray">
        <xsd:complexContent>
          <xsd:restriction base="soapenc:Array">
            <xsd:attribute ref="soapenc:arrayType" wsdl:arrayType="typens:ResourcePool[]"/>
          </xsd:restriction>
        </xsd:complexContent>
      </xsd:complexType>
      <xsd:complexType name="VmdbwsSupport..DatastoreArray">
        <xsd:complexContent>
          <xsd:restriction base="soapenc:Array">
            <xsd:attribute ref="soapenc:arrayType" wsdl:arrayType="typens:VmdbwsSupport..Datastore[]"/>
```

```
            </xsd:restriction>
          </xsd:complexContent>
        </xsd:complexType>
        <xsd:complexType name="VmArray">
          <xsd:complexContent>
            <xsd:restriction base="soapenc:Array">
              <xsd:attribute ref="soapenc:arrayType" wsdl:arrayType="typens:Vm[]"/>
            </xsd:restriction>
          </xsd:complexContent>
        </xsd:complexType>
        <xsd:complexType name="VmdbwsSupport..EventListArray">
          <xsd:complexContent>
            <xsd:restriction base="soapenc:Array">
              <xsd:attribute ref="soapenc:arrayType" wsdl:arrayType="typens:VmdbwsSupport..EventList[]"/>
            </xsd:restriction>
          </xsd:complexContent>
        </xsd:complexType>
        <xsd:complexType name="VmdbwsSupport..ConditionListArray">
          <xsd:complexContent>
            <xsd:restriction base="soapenc:Array">
              <xsd:attribute ref="soapenc:arrayType" wsdl:arrayType="typens:VmdbwsSupport..ConditionList[]"/>
            </xsd:restriction>
          </xsd:complexContent>
        </xsd:complexType>
        <xsd:complexType name="VmdbwsSupport..ActionListArray">
          <xsd:complexContent>
            <xsd:restriction base="soapenc:Array">
              <xsd:attribute ref="soapenc:arrayType" wsdl:arrayType="typens:VmdbwsSupport..ActionList[]"/>
            </xsd:restriction>
          </xsd:complexContent>
        </xsd:complexType>
        <xsd:complexType name="VmdbwsSupport..PolicyListArray">
          <xsd:complexContent>
            <xsd:restriction base="soapenc:Array">
              <xsd:attribute ref="soapenc:arrayType" wsdl:arrayType="typens:VmdbwsSupport..PolicyList[]"/>
            </xsd:restriction>
          </xsd:complexContent>
        </xsd:complexType>
        <xsd:complexType name="VmdbwsSupport..EmsListArray">
          <xsd:complexContent>
            <xsd:restriction base="soapenc:Array">
              <xsd:attribute ref="soapenc:arrayType" wsdl:arrayType="typens:VmdbwsSupport..EmsList[]"/>
            </xsd:restriction>
          </xsd:complexContent>
        </xsd:complexType>
        <xsd:complexType name="VmdbwsSupport..WSAttributesArray">
          <xsd:complexContent>
            <xsd:restriction base="soapenc:Array">
              <xsd:attribute ref="soapenc:arrayType" wsdl:arrayType="typens:VmdbwsSupport..WSAttributes[]"/>
            </xsd:restriction>
          </xsd:complexContent>
        </xsd:complexType>
        <xsd:complexType name="StringArray">
          <xsd:complexContent>
            <xsd:restriction base="soapenc:Array">
              <xsd:attribute ref="soapenc:arrayType" wsdl:arrayType="xsd:string[]"/>
            </xsd:restriction>
          </xsd:complexContent>
        </xsd:complexType>
        <xsd:complexType name="VmdbwsSupport..ProxyHostArray">
          <xsd:complexContent>
            <xsd:restriction base="soapenc:Array">
              <xsd:attribute ref="soapenc:arrayType" wsdl:arrayType="typens:VmdbwsSupport..ProxyHost[]"/>
            </xsd:restriction>
          </xsd:complexContent>
        </xsd:complexType>
        <xsd:complexType name="VmdbwsSupport..ProxyCustomAttributeArray">
          <xsd:complexContent>
            <xsd:restriction base="soapenc:Array">
              <xsd:attribute ref="soapenc:arrayType"
wsdl:arrayType="typens:VmdbwsSupport..ProxyCustomAttribute[]"/>
            </xsd:restriction>
          </xsd:complexContent>
        </xsd:complexType>
        <xsd:complexType name="VmdbwsSupport..ProxyClusterArray">
          <xsd:complexContent>
            <xsd:restriction base="soapenc:Array">
              <xsd:attribute ref="soapenc:arrayType" wsdl:arrayType="typens:VmdbwsSupport..ProxyCluster[]"/>
            </xsd:restriction>
          </xsd:complexContent>
        </xsd:complexType>
        <xsd:complexType name="VmdbwsSupport..ProxyDatastoreArray">
```

```
        <xsd:complexContent>
          <xsd:restriction base="soapenc:Array">
            <xsd:attribute ref="soapenc:arrayType"
wsdl:arrayType="typens:VmdbwsSupport..ProxyDatastore[]"/>
          </xsd:restriction>
        </xsd:complexContent>
      </xsd:complexType>
      <xsd:complexType name="VmdbwsSupport..ProxyResourcePoolArray">
        <xsd:complexContent>
          <xsd:restriction base="soapenc:Array">
            <xsd:attribute ref="soapenc:arrayType"
wsdl:arrayType="typens:VmdbwsSupport..ProxyResourcePool[]"/>
          </xsd:restriction>
        </xsd:complexContent>
      </xsd:complexType>
      <xsd:complexType name="VmdbwsSupport..ProxyVmArray">
        <xsd:complexContent>
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            <xsd:attribute ref="soapenc:arrayType" wsdl:arrayType="typens:VmdbwsSupport..ProxyVm[]"/>
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      </xsd:complexType>
      <xsd:complexType name="VmdbwsSupport..ProxyExtManagementSystemArray">
        <xsd:complexContent>
          <xsd:restriction base="soapenc:Array">
            <xsd:attribute ref="soapenc:arrayType"
wsdl:arrayType="typens:VmdbwsSupport..ProxyExtManagementSystem[]"/>
          </xsd:restriction>
        </xsd:complexContent>
      </xsd:complexType>
      <xsd:complexType name="VmdbwsSupport..MiqProvisionTaskListArray">
        <xsd:complexContent>
          <xsd:restriction base="soapenc:Array">
            <xsd:attribute ref="soapenc:arrayType"
wsdl:arrayType="typens:VmdbwsSupport..MiqProvisionTaskList[]"/>
          </xsd:restriction>
        </xsd:complexContent>
      </xsd:complexType>
      <xsd:complexType name="VmdbwsSupport..KeyValueStructArray">
        <xsd:complexContent>
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            <xsd:attribute ref="soapenc:arrayType"
wsdl:arrayType="typens:VmdbwsSupport..KeyValueStruct[]"/>
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        </xsd:complexContent>
      </xsd:complexType>
      <xsd:complexType name="VmdbwsSupport..TagArray">
        <xsd:complexContent>
          <xsd:restriction base="soapenc:Array">
            <xsd:attribute ref="soapenc:arrayType" wsdl:arrayType="typens:VmdbwsSupport..Tag[]"/>
          </xsd:restriction>
        </xsd:complexContent>
      </xsd:complexType>
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        <xsd:complexContent>
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wsdl:arrayType="typens:VmdbwsSupport..AutomationTaskSummary[]"/>
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        </xsd:complexContent>
      </xsd:complexType>
      <xsd:complexType name="VmdbwsSupport..VmList">
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          <xsd:element name="name" type="xsd:string"/>
        </xsd:all>
      </xsd:complexType>
      <xsd:complexType name="VmdbwsSupport..HostList">
        <xsd:all>
          <xsd:element name="guid" type="xsd:string"/>
          <xsd:element name="name" type="xsd:string"/>
        </xsd:all>
      </xsd:complexType>
      <xsd:complexType name="VmdbwsSupport..ClusterList">
        <xsd:all>
          <xsd:element name="id" type="xsd:string"/>
          <xsd:element name="name" type="xsd:string"/>
        </xsd:all>
      </xsd:complexType>
      <xsd:complexType name="VmdbwsSupport..ResourcePoolList">
        <xsd:all>
          <xsd:element name="id" type="xsd:string"/>
```

```xml
        <xsd:element name="name" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
    <xsd:complexType name="VmdbwsSupport..DatastoreList">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="name" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
    <xsd:complexType name="VmdbwsSupport..VmSoftware">
      <xsd:all>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="vendor" type="xsd:string"/>
        <xsd:element name="description" type="xsd:string"/>
        <xsd:element name="version" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
    <xsd:complexType name="VmdbwsSupport..VmAccounts">
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        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="type" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
    <xsd:complexType name="Host">
      <xsd:all>
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        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="hostname" type="xsd:string"/>
        <xsd:element name="ipaddress" type="xsd:string"/>
        <xsd:element name="vmm_vendor" type="xsd:string"/>
        <xsd:element name="vmm_version" type="xsd:string"/>
        <xsd:element name="vmm_product" type="xsd:string"/>
        <xsd:element name="vmm_buildnumber" type="xsd:string"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="guid" type="xsd:string"/>
        <xsd:element name="ems_id" type="xsd:int"/>
        <xsd:element name="user_assigned_os" type="xsd:string"/>
        <xsd:element name="power_state" type="xsd:string"/>
        <xsd:element name="smart" type="xsd:int"/>
        <xsd:element name="settings" type="xsd:string"/>
        <xsd:element name="last_perf_capture_on" type="xsd:dateTime"/>
        <xsd:element name="uid_ems" type="xsd:string"/>
        <xsd:element name="connection_state" type="xsd:string"/>
        <xsd:element name="ssh_permit_root_login" type="xsd:string"/>
        <xsd:element name="ems_ref_obj" type="xsd:string"/>
        <xsd:element name="admin_disabled" type="xsd:boolean"/>
        <xsd:element name="service_tag" type="xsd:string"/>
        <xsd:element name="asset_tag" type="xsd:string"/>
        <xsd:element name="ipmi_address" type="xsd:string"/>
        <xsd:element name="mac_address" type="xsd:string"/>
        <xsd:element name="type" type="xsd:string"/>
        <xsd:element name="failover" type="xsd:boolean"/>
        <xsd:element name="ems_ref" type="xsd:string"/>
        <xsd:element name="hyperthreading" type="xsd:boolean"/>
        <xsd:element name="ems_cluster_id" type="xsd:int"/>
        <xsd:element name="next_available_vnc_port" type="xsd:int"/>
      </xsd:all>
    </xsd:complexType>
    <xsd:complexType name="VmdbwsSupport..Cluster">
      <xsd:all>
        <xsd:element name="id" type="xsd:int"/>
        <xsd:element name="name" type="xsd:string"/>
        <xsd:element name="ems_id" type="xsd:int"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="uid_ems" type="xsd:string"/>
        <xsd:element name="ha_enabled" type="xsd:boolean"/>
        <xsd:element name="ha_admit_control" type="xsd:boolean"/>
        <xsd:element name="ha_max_failures" type="xsd:int"/>
        <xsd:element name="drs_enabled" type="xsd:boolean"/>
        <xsd:element name="drs_automation_level" type="xsd:string"/>
        <xsd:element name="drs_migration_threshold" type="xsd:int"/>
        <xsd:element name="last_perf_capture_on" type="xsd:dateTime"/>
        <xsd:element name="ems_ref_obj" type="xsd:string"/>
        <xsd:element name="effective_cpu" type="xsd:int"/>
        <xsd:element name="effective_memory" type="xsd:int"/>
        <xsd:element name="ems_ref" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
    <xsd:complexType name="ResourcePool">
      <xsd:all>
```

```xml
            <xsd:element name="id" type="xsd:int"/>
            <xsd:element name="name" type="xsd:string"/>
            <xsd:element name="ems_id" type="xsd:int"/>
            <xsd:element name="created_on" type="xsd:dateTime"/>
            <xsd:element name="updated_on" type="xsd:dateTime"/>
            <xsd:element name="uid_ems" type="xsd:string"/>
            <xsd:element name="memory_reserve" type="xsd:int"/>
            <xsd:element name="memory_reserve_expand" type="xsd:boolean"/>
            <xsd:element name="memory_limit" type="xsd:int"/>
            <xsd:element name="memory_shares" type="xsd:int"/>
            <xsd:element name="memory_shares_level" type="xsd:string"/>
            <xsd:element name="cpu_reserve" type="xsd:int"/>
            <xsd:element name="cpu_reserve_expand" type="xsd:boolean"/>
            <xsd:element name="cpu_limit" type="xsd:int"/>
            <xsd:element name="cpu_shares" type="xsd:int"/>
            <xsd:element name="cpu_shares_level" type="xsd:string"/>
            <xsd:element name="is_default" type="xsd:boolean"/>
            <xsd:element name="ems_ref_obj" type="xsd:string"/>
            <xsd:element name="vapp" type="xsd:boolean"/>
            <xsd:element name="ems_ref" type="xsd:string"/>
        </xsd:all>
    </xsd:complexType>
    <xsd:complexType name="VmdbwsSupport..Datastore">
        <xsd:all>
            <xsd:element name="id" type="xsd:int"/>
            <xsd:element name="name" type="xsd:string"/>
            <xsd:element name="store_type" type="xsd:string"/>
            <xsd:element name="total_space" type="xsd:int"/>
            <xsd:element name="free_space" type="xsd:int"/>
            <xsd:element name="created_on" type="xsd:dateTime"/>
            <xsd:element name="updated_on" type="xsd:dateTime"/>
            <xsd:element name="multiplehostaccess" type="xsd:int"/>
            <xsd:element name="location" type="xsd:string"/>
            <xsd:element name="last_scan_on" type="xsd:dateTime"/>
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            <xsd:element name="ems_ref_obj" type="xsd:string"/>
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            <xsd:element name="busy" type="xsd:boolean"/>
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```

```
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          <xsd:element name="linked_clone" type="xsd:boolean"/>
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          <xsd:element name="ems_ref" type="xsd:string"/>
          <xsd:element name="ems_cluster_id" type="xsd:int"/>
          <xsd:element name="retirement_warn" type="xsd:int"/>
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          <xsd:element name="power_state" type="xsd:string"/>
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          <xsd:element name="last_perf_capture_on" type="xsd:dateTime"/>
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          <xsd:element name="connection_state" type="xsd:string"/>
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          <xsd:element name="resource_pools" type="typens:VmdbwsSupport..ResourcePoolListArray"/>
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            <xsd:element name="resource_pools" type="typens:VmdbwsSupport..ResourcePoolListArray"/>
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            <xsd:element name="ws_attributes" type="typens:VmdbwsSupport..WSAttributesArray"/>
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```

```
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            <xsd:element name="memory_reserve_expand" type="xsd:boolean"/>
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            <xsd:element name="blackbox_validated" type="xsd:boolean"/>
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```

```xml
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      <xsd:element name="vdi" type="xsd:boolean"/>
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      <xsd:element name="ems_cluster_id" type="xsd:string"/>
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      <xsd:element name="updated_on" type="xsd:dateTime"/>
      <xsd:element name="fulfilled_on" type="xsd:dateTime"/>
      <xsd:element name="requester_id" type="xsd:string"/>
      <xsd:element name="requester_name" type="xsd:string"/>
      <xsd:element name="request_type" type="xsd:string"/>
      <xsd:element name="request_state" type="xsd:string"/>
      <xsd:element name="message" type="xsd:string"/>
      <xsd:element name="status" type="xsd:string"/>
      <xsd:element name="userid" type="xsd:string"/>
      <xsd:element name="source_id" type="xsd:string"/>
      <xsd:element name="source_type" type="xsd:string"/>
      <xsd:element name="destination_id" type="xsd:string"/>
      <xsd:element name="destination_type" type="xsd:string"/>
      <xsd:element name="source" type="typens:VmdbwsSupport..VmList"/>
      <xsd:element name="vms" type="typens:VmdbwsSupport..VmListArray"/>
      <xsd:element name="miq_request_tasks" type="typens:VmdbwsSupport..MiqProvisionTaskListArray"/>
      <xsd:element name="request_options" type="typens:VmdbwsSupport..KeyValueStructArray"/>
      <xsd:element name="request_tags" type="typens:VmdbwsSupport..TagArray"/>
    </xsd:all>
  </xsd:complexType>
  <xsd:complexType name="VmdbwsSupport..MiqProvisionTaskList">
    <xsd:all>
      <xsd:element name="id" type="xsd:string"/>
      <xsd:element name="description" type="xsd:string"/>
    </xsd:all>
  </xsd:complexType>
  <xsd:complexType name="VmdbwsSupport..KeyValueStruct">
```

```xml
      <xsd:all>
        <xsd:element name="key" type="xsd:string"/>
        <xsd:element name="value" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
    <xsd:complexType name="VmdbwsSupport..Tag">
      <xsd:all>
        <xsd:element name="category" type="xsd:string"/>
        <xsd:element name="category_display_name" type="xsd:string"/>
        <xsd:element name="tag_name" type="xsd:string"/>
        <xsd:element name="tag_display_name" type="xsd:string"/>
        <xsd:element name="tag_path" type="xsd:string"/>
        <xsd:element name="display_name" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
    <xsd:complexType name="VmdbwsSupport..ProxyMiqProvisionTask">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="description" type="xsd:string"/>
        <xsd:element name="state" type="xsd:string"/>
        <xsd:element name="request_type" type="xsd:string"/>
        <xsd:element name="userid" type="xsd:string"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="message" type="xsd:string"/>
        <xsd:element name="status" type="xsd:string"/>
        <xsd:element name="type" type="xsd:string"/>
        <xsd:element name="miq_request_id" type="xsd:string"/>
        <xsd:element name="source_id" type="xsd:string"/>
        <xsd:element name="source_type" type="xsd:string"/>
        <xsd:element name="destination_id" type="xsd:string"/>
        <xsd:element name="destination_type" type="xsd:string"/>
        <xsd:element name="miq_request_task_id" type="xsd:string"/>
        <xsd:element name="phase" type="xsd:string"/>
        <xsd:element name="source" type="typens:VmdbwsSupport..VmList"/>
        <xsd:element name="destination" type="typens:VmdbwsSupport..VmList"/>
        <xsd:element name="request_options" type="typens:VmdbwsSupport..KeyValueStructArray"/>
        <xsd:element name="request_tags" type="typens:VmdbwsSupport..TagArray"/>
      </xsd:all>
    </xsd:complexType>
    <xsd:complexType name="VmdbwsSupport..ProxyAutomationRequest">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="description" type="xsd:string"/>
        <xsd:element name="approval_state" type="xsd:string"/>
        <xsd:element name="type" type="xsd:string"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="fulfilled_on" type="xsd:dateTime"/>
        <xsd:element name="requester_id" type="xsd:string"/>
        <xsd:element name="requester_name" type="xsd:string"/>
        <xsd:element name="request_type" type="xsd:string"/>
        <xsd:element name="request_state" type="xsd:string"/>
        <xsd:element name="message" type="xsd:string"/>
        <xsd:element name="status" type="xsd:string"/>
        <xsd:element name="userid" type="xsd:string"/>
        <xsd:element name="source_id" type="xsd:string"/>
        <xsd:element name="source_type" type="xsd:string"/>
        <xsd:element name="destination_id" type="xsd:string"/>
        <xsd:element name="destination_type" type="xsd:string"/>
        <xsd:element name="automation_tasks" type="typens:VmdbwsSupport..AutomationTaskSummaryArray"/>
      </xsd:all>
    </xsd:complexType>
    <xsd:complexType name="VmdbwsSupport..AutomationTaskSummary">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="description" type="xsd:string"/>
      </xsd:all>
    </xsd:complexType>
    <xsd:complexType name="VmdbwsSupport..ProxyAutomationTask">
      <xsd:all>
        <xsd:element name="id" type="xsd:string"/>
        <xsd:element name="description" type="xsd:string"/>
        <xsd:element name="state" type="xsd:string"/>
        <xsd:element name="request_type" type="xsd:string"/>
        <xsd:element name="userid" type="xsd:string"/>
        <xsd:element name="created_on" type="xsd:dateTime"/>
        <xsd:element name="updated_on" type="xsd:dateTime"/>
        <xsd:element name="message" type="xsd:string"/>
        <xsd:element name="status" type="xsd:string"/>
        <xsd:element name="type" type="xsd:string"/>
        <xsd:element name="miq_request_id" type="xsd:string"/>
```

```xml
              <xsd:element name="source_id" type="xsd:string"/>
              <xsd:element name="source_type" type="xsd:string"/>
              <xsd:element name="destination_id" type="xsd:string"/>
              <xsd:element name="destination_type" type="xsd:string"/>
              <xsd:element name="miq_request_task_id" type="xsd:string"/>
              <xsd:element name="phase" type="xsd:string"/>
              <xsd:element name="automation_request" type="typens:VmdbwsSupport..AutomationRequestSummary"/>
          </xsd:all>
        </xsd:complexType>
        <xsd:complexType name="VmdbwsSupport..AutomationRequestSummary">
          <xsd:all>
              <xsd:element name="id" type="xsd:string"/>
              <xsd:element name="description" type="xsd:string"/>
          </xsd:all>
        </xsd:complexType>
        <xsd:complexType name="VmdbwsSupport..VmInvokeTasksOptions">
          <xsd:all>
              <xsd:element name="ids" type="typens:StringArray"/>
              <xsd:element name="task" type="xsd:string"/>
              <xsd:element name="userid" type="xsd:string"/>
          </xsd:all>
        </xsd:complexType>
      </xsd:schema>
  </types>
  <message name="EVMGet">
    <part name="token" type="xsd:string"/>
    <part name="uri" type="xsd:string"/>
  </message>
  <message name="EVMGetResponse">
    <part name="return" type="xsd:string"/>
  </message>
  <message name="EVMSet">
    <part name="token" type="xsd:string"/>
    <part name="uri" type="xsd:string"/>
    <part name="value" type="xsd:string"/>
  </message>
  <message name="EVMSetResponse">
    <part name="return" type="xsd:string"/>
  </message>
  <message name="EVMPing">
    <part name="data" type="xsd:string"/>
  </message>
  <message name="EVMPingResponse">
    <part name="return" type="xsd:boolean"/>
  </message>
  <message name="EVMVmList">
    <part name="hostGuid" type="xsd:string"/>
  </message>
  <message name="EVMVmListResponse">
    <part name="return" type="typens:VmdbwsSupport..VmListArray"/>
  </message>
  <message name="EVMHostList">
  </message>
  <message name="EVMHostListResponse">
    <part name="return" type="typens:VmdbwsSupport..HostListArray"/>
  </message>
  <message name="EVMClusterList">
  </message>
  <message name="EVMClusterListResponse">
    <part name="return" type="typens:VmdbwsSupport..ClusterListArray"/>
  </message>
  <message name="EVMResourcePoolList">
  </message>
  <message name="EVMResourcePoolListResponse">
    <part name="return" type="typens:VmdbwsSupport..ResourcePoolListArray"/>
  </message>
  <message name="EVMDatastoreList">
  </message>
  <message name="EVMDatastoreListResponse">
    <part name="return" type="typens:VmdbwsSupport..DatastoreListArray"/>
  </message>
  <message name="EVMVmSoftware">
    <part name="vmGuid" type="xsd:string"/>
  </message>
  <message name="EVMVmSoftwareResponse">
    <part name="return" type="typens:VmdbwsSupport..VmSoftwareArray"/>
  </message>
  <message name="EVMVmAccounts">
    <part name="vmGuid" type="xsd:string"/>
  </message>
  <message name="EVMVmAccountsResponse">
    <part name="return" type="typens:VmdbwsSupport..VmAccountsArray"/>
```

```
  </message>
  <message name="EVMGetHost">
    <part name="hostGuid" type="xsd:string"/>
  </message>
  <message name="EVMGetHostResponse">
    <part name="return" type="typens:Host"/>
  </message>
  <message name="EVMGetHosts">
    <part name="emsGuid" type="xsd:string"/>
  </message>
  <message name="EVMGetHostsResponse">
    <part name="return" type="typens:HostArray"/>
  </message>
  <message name="EVMGetCluster">
    <part name="clusterId" type="xsd:string"/>
  </message>
  <message name="EVMGetClusterResponse">
    <part name="return" type="typens:VmdbwsSupport..Cluster"/>
  </message>
  <message name="EVMGetClusters">
    <part name="emsGuid" type="xsd:string"/>
  </message>
  <message name="EVMGetClustersResponse">
    <part name="return" type="typens:VmdbwsSupport..ClusterArray"/>
  </message>
  <message name="EVMGetResourcePool">
    <part name="resourcepoolId" type="xsd:string"/>
  </message>
  <message name="EVMGetResourcePoolResponse">
    <part name="return" type="typens:ResourcePool"/>
  </message>
  <message name="EVMGetResourcePools">
    <part name="emsGuid" type="xsd:string"/>
  </message>
  <message name="EVMGetResourcePoolsResponse">
    <part name="return" type="typens:ResourcePoolArray"/>
  </message>
  <message name="EVMGetDatastore">
    <part name="datastoreId" type="xsd:string"/>
  </message>
  <message name="EVMGetDatastoreResponse">
    <part name="return" type="typens:VmdbwsSupport..Datastore"/>
  </message>
  <message name="EVMGetDatastores">
    <part name="emsGuid" type="xsd:string"/>
  </message>
  <message name="EVMGetDatastoresResponse">
    <part name="return" type="typens:VmdbwsSupport..DatastoreArray"/>
  </message>
  <message name="EVMGetVm">
    <part name="vmGuid" type="xsd:string"/>
  </message>
  <message name="EVMGetVmResponse">
    <part name="return" type="typens:Vm"/>
  </message>
  <message name="EVMGetVms">
    <part name="hostGuid" type="xsd:string"/>
  </message>
  <message name="EVMGetVmsResponse">
    <part name="return" type="typens:VmArray"/>
  </message>
  <message name="EVMDeleteVmByName">
    <part name="vmName" type="xsd:string"/>
  </message>
  <message name="EVMDeleteVmByNameResponse">
    <part name="return" type="xsd:boolean"/>
  </message>
  <message name="EVMSmartStart">
    <part name="vmGuid" type="xsd:string"/>
  </message>
  <message name="EVMSmartStartResponse">
    <part name="return" type="typens:VmdbwsSupport..VmCmdResult"/>
  </message>
  <message name="EVMSmartStop">
    <part name="vmGuid" type="xsd:string"/>
  </message>
  <message name="EVMSmartStopResponse">
    <part name="return" type="typens:VmdbwsSupport..VmCmdResult"/>
  </message>
  <message name="EVMSmartSuspend">
    <part name="vmGuid" type="xsd:string"/>
  </message>
```

```xml
<message name="EVMSmartSuspendResponse">
  <part name="return" type="typens:VmdbwsSupport..VmCmdResult"/>
</message>
<message name="EVMGetPolicy">
  <part name="policyName" type="xsd:string"/>
</message>
<message name="EVMGetPolicyResponse">
  <part name="return" type="typens:MiqPolicy"/>
</message>
<message name="EVMEventList">
  <part name="policyGuid" type="xsd:string"/>
</message>
<message name="EVMEventListResponse">
  <part name="return" type="typens:VmdbwsSupport..EventListArray"/>
</message>
<message name="EVMConditionList">
  <part name="policyGuid" type="xsd:string"/>
</message>
<message name="EVMConditionListResponse">
  <part name="return" type="typens:VmdbwsSupport..ConditionListArray"/>
</message>
<message name="EVMActionList">
  <part name="policyGuid" type="xsd:string"/>
</message>
<message name="EVMActionListResponse">
  <part name="return" type="typens:VmdbwsSupport..ActionListArray"/>
</message>
<message name="EVMPolicyList">
  <part name="hostGuid" type="xsd:string"/>
</message>
<message name="EVMPolicyListResponse">
  <part name="return" type="typens:VmdbwsSupport..PolicyListArray"/>
</message>
<message name="EVMVmRsop">
  <part name="vmGuid" type="xsd:string"/>
  <part name="policyName" type="xsd:string"/>
</message>
<message name="EVMVmRsopResponse">
  <part name="return" type="typens:VmdbwsSupport..VmRsop"/>
</message>
<message name="EVMAssignPolicy">
  <part name="policyGuid" type="xsd:string"/>
  <part name="hostGuid" type="xsd:string"/>
</message>
<message name="EVMAssignPolicyResponse">
  <part name="return" type="xsd:boolean"/>
</message>
<message name="EVMUnassignPolicy">
  <part name="policyGuid" type="xsd:string"/>
  <part name="hostGuid" type="xsd:string"/>
</message>
<message name="EVMUnassignPolicyResponse">
  <part name="return" type="xsd:boolean"/>
</message>
<message name="EVMAddLifecycleEvent">
  <part name="event" type="xsd:string"/>
  <part name="status" type="xsd:string"/>
  <part name="message" type="xsd:string"/>
  <part name="vmGuid" type="xsd:string"/>
  <part name="vmLocation" type="xsd:string"/>
  <part name="createdBy" type="xsd:string"/>
</message>
<message name="EVMAddLifecycleEventResponse">
  <part name="return" type="xsd:boolean"/>
</message>
<message name="EVMProvisionRequest">
  <part name="sourceName" type="xsd:string"/>
  <part name="targetName" type="xsd:string"/>
  <part name="autoApprove" type="xsd:boolean"/>
  <part name="tags" type="xsd:string"/>
  <part name="additionalValues" type="xsd:string"/>
</message>
<message name="EVMProvisionRequestResponse">
  <part name="return" type="xsd:boolean"/>
</message>
<message name="EVMProvisionRequestEx">
  <part name="version" type="xsd:string"/>
  <part name="templateFields" type="xsd:string"/>
  <part name="vmFields" type="xsd:string"/>
  <part name="requester" type="xsd:string"/>
  <part name="tags" type="xsd:string"/>
  <part name="additionalValues" type="xsd:string"/>
```

```xml
    <part name="emsCustomAttributes" type="xsd:string"/>
    <part name="miqCustomAttributes" type="xsd:string"/>
  </message>
  <message name="EVMProvisionRequestExResponse">
    <part name="return" type="xsd:boolean"/>
  </message>
  <message name="EVMHostProvisionRequest">
    <part name="version" type="xsd:string"/>
    <part name="templateFields" type="xsd:string"/>
    <part name="hostFields" type="xsd:string"/>
    <part name="requester" type="xsd:string"/>
    <part name="tags" type="xsd:string"/>
    <part name="additionalValues" type="xsd:string"/>
    <part name="emsCustomAttributes" type="xsd:string"/>
    <part name="miqCustomAttributes" type="xsd:string"/>
  </message>
  <message name="EVMHostProvisionRequestResponse">
    <part name="return" type="xsd:boolean"/>
  </message>
  <message name="EVMVmScanByProperty">
    <part name="property" type="xsd:string"/>
    <part name="value" type="xsd:string"/>
  </message>
  <message name="EVMVmScanByPropertyResponse">
    <part name="return" type="xsd:boolean"/>
  </message>
  <message name="EVMVmEventByProperty">
    <part name="property" type="xsd:string"/>
    <part name="value" type="xsd:string"/>
    <part name="eventType" type="xsd:string"/>
    <part name="eventMessage" type="xsd:string"/>
    <part name="eventTime" type="xsd:string"/>
  </message>
  <message name="EVMVmEventByPropertyResponse">
    <part name="return" type="xsd:boolean"/>
  </message>
  <message name="GetEmsList">
  </message>
  <message name="GetEmsListResponse">
    <part name="return" type="typens:VmdbwsSupport..EmsListArray"/>
  </message>
  <message name="GetHostList">
    <part name="emsGuid" type="xsd:string"/>
  </message>
  <message name="GetHostListResponse">
    <part name="return" type="typens:VmdbwsSupport..HostListArray"/>
  </message>
  <message name="GetClusterList">
    <part name="emsGuid" type="xsd:string"/>
  </message>
  <message name="GetClusterListResponse">
    <part name="return" type="typens:VmdbwsSupport..ClusterListArray"/>
  </message>
  <message name="GetResourcePoolList">
    <part name="emsGuid" type="xsd:string"/>
  </message>
  <message name="GetResourcePoolListResponse">
    <part name="return" type="typens:VmdbwsSupport..ResourcePoolListArray"/>
  </message>
  <message name="GetDatastoreList">
    <part name="emsGuid" type="xsd:string"/>
  </message>
  <message name="GetDatastoreListResponse">
    <part name="return" type="typens:VmdbwsSupport..DatastoreListArray"/>
  </message>
  <message name="GetVmList">
    <part name="hostGuid" type="xsd:string"/>
  </message>
  <message name="GetVmListResponse">
    <part name="return" type="typens:VmdbwsSupport..VmListArray"/>
  </message>
  <message name="FindEmsByGuid">
    <part name="emsGuid" type="xsd:string"/>
  </message>
  <message name="FindEmsByGuidResponse">
    <part name="return" type="typens:VmdbwsSupport..ProxyExtManagementSystem"/>
  </message>
  <message name="FindHostsByGuid">
    <part name="hostGuids" type="typens:StringArray"/>
  </message>
  <message name="FindHostsByGuidResponse">
    <part name="return" type="typens:VmdbwsSupport..ProxyHostArray"/>
```

```xml
  </message>
  <message name="FindHostByGuid">
    <part name="hostGuid" type="xsd:string"/>
  </message>
  <message name="FindHostByGuidResponse">
    <part name="return" type="typens:VmdbwsSupport..ProxyHost"/>
  </message>
  <message name="FindClustersById">
    <part name="clusterIds" type="typens:StringArray"/>
  </message>
  <message name="FindClustersByIdResponse">
    <part name="return" type="typens:VmdbwsSupport..ProxyClusterArray"/>
  </message>
  <message name="FindClusterById">
    <part name="clusterId" type="xsd:string"/>
  </message>
  <message name="FindClusterByIdResponse">
    <part name="return" type="typens:VmdbwsSupport..ProxyCluster"/>
  </message>
  <message name="FindDatastoresById">
    <part name="datastoreIds" type="typens:StringArray"/>
  </message>
  <message name="FindDatastoresByIdResponse">
    <part name="return" type="typens:VmdbwsSupport..ProxyDatastoreArray"/>
  </message>
  <message name="FindDatastoreById">
    <part name="datastoreId" type="xsd:string"/>
  </message>
  <message name="FindDatastoreByIdResponse">
    <part name="return" type="typens:VmdbwsSupport..ProxyDatastore"/>
  </message>
  <message name="FindResourcePoolsById">
    <part name="resourcepoolIds" type="typens:StringArray"/>
  </message>
  <message name="FindResourcePoolsByIdResponse">
    <part name="return" type="typens:VmdbwsSupport..ProxyResourcePoolArray"/>
  </message>
  <message name="FindResourcePoolById">
    <part name="resourcepoolId" type="xsd:string"/>
  </message>
  <message name="FindResourcePoolByIdResponse">
    <part name="return" type="typens:VmdbwsSupport..ProxyResourcePool"/>
  </message>
  <message name="FindVmsByGuid">
    <part name="vmGuids" type="typens:StringArray"/>
  </message>
  <message name="FindVmsByGuidResponse">
    <part name="return" type="typens:VmdbwsSupport..ProxyVmArray"/>
  </message>
  <message name="FindVmByGuid">
    <part name="vmGuid" type="xsd:string"/>
  </message>
  <message name="FindVmByGuidResponse">
    <part name="return" type="typens:VmdbwsSupport..ProxyVm"/>
  </message>
  <message name="GetEmsByList">
    <part name="emsList" type="typens:VmdbwsSupport..EmsListArray"/>
  </message>
  <message name="GetEmsByListResponse">
    <part name="return" type="typens:VmdbwsSupport..ProxyExtManagementSystemArray"/>
  </message>
  <message name="GetHostsByList">
    <part name="hostList" type="typens:VmdbwsSupport..HostListArray"/>
  </message>
  <message name="GetHostsByListResponse">
    <part name="return" type="typens:VmdbwsSupport..ProxyHostArray"/>
  </message>
  <message name="GetClustersByList">
    <part name="clusterList" type="typens:VmdbwsSupport..ClusterListArray"/>
  </message>
  <message name="GetClustersByListResponse">
    <part name="return" type="typens:VmdbwsSupport..ProxyClusterArray"/>
  </message>
  <message name="GetDatastoresByList">
    <part name="datastoreList" type="typens:VmdbwsSupport..DatastoreListArray"/>
  </message>
  <message name="GetDatastoresByListResponse">
    <part name="return" type="typens:VmdbwsSupport..ProxyDatastoreArray"/>
  </message>
  <message name="GetResourcePoolsByList">
    <part name="resourcepoolList" type="typens:VmdbwsSupport..ResourcePoolListArray"/>
  </message>
```

```xml
<message name="GetResourcePoolsByListResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyResourcePoolArray"/>
</message>
<message name="GetVmsByList">
  <part name="vmList" type="typens:VmdbwsSupport..VmListArray"/>
</message>
<message name="GetVmsByListResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyVmArray"/>
</message>
<message name="GetVmsByTag">
  <part name="tag" type="xsd:string"/>
</message>
<message name="GetVmsByTagResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyVmArray"/>
</message>
<message name="GetTemplatesByTag">
  <part name="tag" type="xsd:string"/>
</message>
<message name="GetTemplatesByTagResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyVmArray"/>
</message>
<message name="GetClustersByTag">
  <part name="tag" type="xsd:string"/>
</message>
<message name="GetClustersByTagResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyClusterArray"/>
</message>
<message name="GetResourcePoolsByTag">
  <part name="tag" type="xsd:string"/>
</message>
<message name="GetResourcePoolsByTagResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyResourcePoolArray"/>
</message>
<message name="GetDatastoresByTag">
  <part name="tag" type="xsd:string"/>
</message>
<message name="GetDatastoresByTagResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyDatastoreArray"/>
</message>
<message name="VmAddCustomAttributeByFields">
  <part name="vmGuid" type="xsd:string"/>
  <part name="name" type="xsd:string"/>
  <part name="value" type="xsd:string"/>
  <part name="section" type="xsd:string"/>
  <part name="source" type="xsd:string"/>
</message>
<message name="VmAddCustomAttributeByFieldsResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyCustomAttributeArray"/>
</message>
<message name="VmAddCustomAttribute">
  <part name="vmGuid" type="xsd:string"/>
  <part name="customAttribute" type="typens:VmdbwsSupport..ProxyCustomAttribute"/>
</message>
<message name="VmAddCustomAttributeResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyCustomAttributeArray"/>
</message>
<message name="VmAddCustomAttributes">
  <part name="vmGuid" type="xsd:string"/>
  <part name="customAttribute" type="typens:VmdbwsSupport..ProxyCustomAttributeArray"/>
</message>
<message name="VmAddCustomAttributesResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyCustomAttributeArray"/>
</message>
<message name="VmDeleteCustomAttribute">
  <part name="vmGuid" type="xsd:string"/>
  <part name="customAttribute" type="typens:VmdbwsSupport..ProxyCustomAttribute"/>
</message>
<message name="VmDeleteCustomAttributeResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyCustomAttributeArray"/>
</message>
<message name="VmDeleteCustomAttributes">
  <part name="vmGuid" type="xsd:string"/>
  <part name="customAttribute" type="typens:VmdbwsSupport..ProxyCustomAttributeArray"/>
</message>
<message name="VmDeleteCustomAttributesResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyCustomAttributeArray"/>
</message>
<message name="Version">
</message>
<message name="VersionResponse">
  <part name="return" type="typens:StringArray"/>
</message>
```

```
<message name="VmProvisionRequest">
  <part name="version" type="xsd:string"/>
  <part name="templateFields" type="xsd:string"/>
  <part name="vmFields" type="xsd:string"/>
  <part name="requester" type="xsd:string"/>
  <part name="tags" type="xsd:string"/>
  <part name="options" type="typens:VmdbwsSupport..ProvisionOptions"/>
</message>
<message name="VmProvisionRequestResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyMiqProvisionRequest"/>
</message>
<message name="VmSetOwner">
  <part name="vmGuid" type="xsd:string"/>
  <part name="owner" type="xsd:string"/>
</message>
<message name="VmSetOwnerResponse">
  <part name="return" type="xsd:boolean"/>
</message>
<message name="VmSetTag">
  <part name="vmGuid" type="xsd:string"/>
  <part name="category" type="xsd:string"/>
  <part name="name" type="xsd:string"/>
</message>
<message name="VmSetTagResponse">
  <part name="return" type="xsd:boolean"/>
</message>
<message name="VmGetTags">
  <part name="vmGuid" type="xsd:string"/>
</message>
<message name="VmGetTagsResponse">
  <part name="return" type="typens:VmdbwsSupport..TagArray"/>
</message>
<message name="HostSetTag">
  <part name="hostGuid" type="xsd:string"/>
  <part name="category" type="xsd:string"/>
  <part name="name" type="xsd:string"/>
</message>
<message name="HostSetTagResponse">
  <part name="return" type="xsd:boolean"/>
</message>
<message name="HostGetTags">
  <part name="hostGuid" type="xsd:string"/>
</message>
<message name="HostGetTagsResponse">
  <part name="return" type="typens:VmdbwsSupport..TagArray"/>
</message>
<message name="ClusterSetTag">
  <part name="clusterId" type="xsd:string"/>
  <part name="category" type="xsd:string"/>
  <part name="name" type="xsd:string"/>
</message>
<message name="ClusterSetTagResponse">
  <part name="return" type="xsd:boolean"/>
</message>
<message name="ClusterGetTags">
  <part name="clusterId" type="xsd:string"/>
</message>
<message name="ClusterGetTagsResponse">
  <part name="return" type="typens:VmdbwsSupport..TagArray"/>
</message>
<message name="EmsSetTag">
  <part name="emsGuid" type="xsd:string"/>
  <part name="category" type="xsd:string"/>
  <part name="name" type="xsd:string"/>
</message>
<message name="EmsSetTagResponse">
  <part name="return" type="xsd:boolean"/>
</message>
<message name="EmsGetTags">
  <part name="emsGuid" type="xsd:string"/>
</message>
<message name="EmsGetTagsResponse">
  <part name="return" type="typens:VmdbwsSupport..TagArray"/>
</message>
<message name="DatastoreSetTag">
  <part name="datastoreId" type="xsd:string"/>
  <part name="category" type="xsd:string"/>
  <part name="name" type="xsd:string"/>
</message>
<message name="DatastoreSetTagResponse">
  <part name="return" type="xsd:boolean"/>
</message>
```

```
<message name="DatastoreGetTags">
  <part name="datastoreId" type="xsd:string"/>
</message>
<message name="DatastoreGetTagsResponse">
  <part name="return" type="typens:VmdbwsSupport..TagArray"/>
</message>
<message name="ResourcePoolSetTag">
  <part name="resourcepoolId" type="xsd:string"/>
  <part name="category" type="xsd:string"/>
  <part name="name" type="xsd:string"/>
</message>
<message name="ResourcePoolSetTagResponse">
  <part name="return" type="xsd:boolean"/>
</message>
<message name="ResourcePoolGetTags">
  <part name="resourcepoolId" type="xsd:string"/>
</message>
<message name="ResourcePoolGetTagsResponse">
  <part name="return" type="typens:VmdbwsSupport..TagArray"/>
</message>
<message name="GetVmProvisionRequest">
  <part name="requestId" type="xsd:string"/>
</message>
<message name="GetVmProvisionRequestResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyMiqProvisionRequest"/>
</message>
<message name="GetVmProvisionTask">
  <part name="taskId" type="xsd:string"/>
</message>
<message name="GetVmProvisionTaskResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyMiqProvisionTask"/>
</message>
<message name="CreateAutomationRequest">
  <part name="version" type="xsd:string"/>
  <part name="uri_parts" type="xsd:string"/>
  <part name="parameters" type="xsd:string"/>
  <part name="requester" type="xsd:string"/>
</message>
<message name="CreateAutomationRequestResponse">
  <part name="return" type="xsd:string"/>
</message>
<message name="GetAutomationRequest">
  <part name="requestId" type="xsd:string"/>
</message>
<message name="GetAutomationRequestResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyAutomationRequest"/>
</message>
<message name="GetAutomationTask">
  <part name="taskId" type="xsd:string"/>
</message>
<message name="GetAutomationTaskResponse">
  <part name="return" type="typens:VmdbwsSupport..ProxyAutomationTask"/>
</message>
<message name="VmInvokeTasks">
  <part name="options" type="typens:VmdbwsSupport..VmInvokeTasksOptions"/>
</message>
<message name="VmInvokeTasksResponse">
  <part name="return" type="xsd:boolean"/>
</message>
<portType name="VmdbwsPort">
  <operation name="EVMGet">
    <input message="typens:EVMGet"/>
    <output message="typens:EVMGetResponse"/>
  </operation>
  <operation name="EVMSet">
    <input message="typens:EVMSet"/>
    <output message="typens:EVMSetResponse"/>
  </operation>
  <operation name="EVMPing">
    <input message="typens:EVMPing"/>
    <output message="typens:EVMPingResponse"/>
  </operation>
  <operation name="EVMVmList">
    <input message="typens:EVMVmList"/>
    <output message="typens:EVMVmListResponse"/>
  </operation>
  <operation name="EVMHostList">
    <input message="typens:EVMHostList"/>
    <output message="typens:EVMHostListResponse"/>
  </operation>
  <operation name="EVMClusterList">
    <input message="typens:EVMClusterList"/>
```

```
    <output message="typens:EVMClusterListResponse"/>
  </operation>
  <operation name="EVMResourcePoolList">
    <input message="typens:EVMResourcePoolList"/>
    <output message="typens:EVMResourcePoolListResponse"/>
  </operation>
  <operation name="EVMDatastoreList">
    <input message="typens:EVMDatastoreList"/>
    <output message="typens:EVMDatastoreListResponse"/>
  </operation>
  <operation name="EVMVmSoftware">
    <input message="typens:EVMVmSoftware"/>
    <output message="typens:EVMVmSoftwareResponse"/>
  </operation>
  <operation name="EVMVmAccounts">
    <input message="typens:EVMVmAccounts"/>
    <output message="typens:EVMVmAccountsResponse"/>
  </operation>
  <operation name="EVMGetHost">
    <input message="typens:EVMGetHost"/>
    <output message="typens:EVMGetHostResponse"/>
  </operation>
  <operation name="EVMGetHosts">
    <input message="typens:EVMGetHosts"/>
    <output message="typens:EVMGetHostsResponse"/>
  </operation>
  <operation name="EVMGetCluster">
    <input message="typens:EVMGetCluster"/>
    <output message="typens:EVMGetClusterResponse"/>
  </operation>
  <operation name="EVMGetClusters">
    <input message="typens:EVMGetClusters"/>
    <output message="typens:EVMGetClustersResponse"/>
  </operation>
  <operation name="EVMGetResourcePool">
    <input message="typens:EVMGetResourcePool"/>
    <output message="typens:EVMGetResourcePoolResponse"/>
  </operation>
  <operation name="EVMGetResourcePools">
    <input message="typens:EVMGetResourcePools"/>
    <output message="typens:EVMGetResourcePoolsResponse"/>
  </operation>
  <operation name="EVMGetDatastore">
    <input message="typens:EVMGetDatastore"/>
    <output message="typens:EVMGetDatastoreResponse"/>
  </operation>
  <operation name="EVMGetDatastores">
    <input message="typens:EVMGetDatastores"/>
    <output message="typens:EVMGetDatastoresResponse"/>
  </operation>
  <operation name="EVMGetVm">
    <input message="typens:EVMGetVm"/>
    <output message="typens:EVMGetVmResponse"/>
  </operation>
  <operation name="EVMGetVms">
    <input message="typens:EVMGetVms"/>
    <output message="typens:EVMGetVmsResponse"/>
  </operation>
  <operation name="EVMDeleteVmByName">
    <input message="typens:EVMDeleteVmByName"/>
    <output message="typens:EVMDeleteVmByNameResponse"/>
  </operation>
  <operation name="EVMSmartStart">
    <input message="typens:EVMSmartStart"/>
    <output message="typens:EVMSmartStartResponse"/>
  </operation>
  <operation name="EVMSmartStop">
    <input message="typens:EVMSmartStop"/>
    <output message="typens:EVMSmartStopResponse"/>
  </operation>
  <operation name="EVMSmartSuspend">
    <input message="typens:EVMSmartSuspend"/>
    <output message="typens:EVMSmartSuspendResponse"/>
  </operation>
  <operation name="EVMGetPolicy">
    <input message="typens:EVMGetPolicy"/>
    <output message="typens:EVMGetPolicyResponse"/>
  </operation>
  <operation name="EVMEventList">
    <input message="typens:EVMEventList"/>
    <output message="typens:EVMEventListResponse"/>
  </operation>
```

```
<operation name="EVMConditionList">
  <input message="typens:EVMConditionList"/>
  <output message="typens:EVMConditionListResponse"/>
</operation>
<operation name="EVMActionList">
  <input message="typens:EVMActionList"/>
  <output message="typens:EVMActionListResponse"/>
</operation>
<operation name="EVMPolicyList">
  <input message="typens:EVMPolicyList"/>
  <output message="typens:EVMPolicyListResponse"/>
</operation>
<operation name="EVMVmRsop">
  <input message="typens:EVMVmRsop"/>
  <output message="typens:EVMVmRsopResponse"/>
</operation>
<operation name="EVMAssignPolicy">
  <input message="typens:EVMAssignPolicy"/>
  <output message="typens:EVMAssignPolicyResponse"/>
</operation>
<operation name="EVMUnassignPolicy">
  <input message="typens:EVMUnassignPolicy"/>
  <output message="typens:EVMUnassignPolicyResponse"/>
</operation>
<operation name="EVMAddLifecycleEvent">
  <input message="typens:EVMAddLifecycleEvent"/>
  <output message="typens:EVMAddLifecycleEventResponse"/>
</operation>
<operation name="EVMProvisionRequest">
  <input message="typens:EVMProvisionRequest"/>
  <output message="typens:EVMProvisionRequestResponse"/>
</operation>
<operation name="EVMProvisionRequestEx">
  <input message="typens:EVMProvisionRequestEx"/>
  <output message="typens:EVMProvisionRequestExResponse"/>
</operation>
<operation name="EVMHostProvisionRequest">
  <input message="typens:EVMHostProvisionRequest"/>
  <output message="typens:EVMHostProvisionRequestResponse"/>
</operation>
<operation name="EVMVmScanByProperty">
  <input message="typens:EVMVmScanByProperty"/>
  <output message="typens:EVMVmScanByPropertyResponse"/>
</operation>
<operation name="EVMVmEventByProperty">
  <input message="typens:EVMVmEventByProperty"/>
  <output message="typens:EVMVmEventByPropertyResponse"/>
</operation>
<operation name="GetEmsList">
  <input message="typens:GetEmsList"/>
  <output message="typens:GetEmsListResponse"/>
</operation>
<operation name="GetHostList">
  <input message="typens:GetHostList"/>
  <output message="typens:GetHostListResponse"/>
</operation>
<operation name="GetClusterList">
  <input message="typens:GetClusterList"/>
  <output message="typens:GetClusterListResponse"/>
</operation>
<operation name="GetResourcePoolList">
  <input message="typens:GetResourcePoolList"/>
  <output message="typens:GetResourcePoolListResponse"/>
</operation>
<operation name="GetDatastoreList">
  <input message="typens:GetDatastoreList"/>
  <output message="typens:GetDatastoreListResponse"/>
</operation>
<operation name="GetVmList">
  <input message="typens:GetVmList"/>
  <output message="typens:GetVmListResponse"/>
</operation>
<operation name="FindEmsByGuid">
  <input message="typens:FindEmsByGuid"/>
  <output message="typens:FindEmsByGuidResponse"/>
</operation>
<operation name="FindHostsByGuid">
  <input message="typens:FindHostsByGuid"/>
  <output message="typens:FindHostsByGuidResponse"/>
</operation>
<operation name="FindHostByGuid">
  <input message="typens:FindHostByGuid"/>
```

```xml
        <output message="typens:FindHostByGuidResponse"/>
      </operation>
      <operation name="FindClustersById">
        <input message="typens:FindClustersById"/>
        <output message="typens:FindClustersByIdResponse"/>
      </operation>
      <operation name="FindClusterById">
        <input message="typens:FindClusterById"/>
        <output message="typens:FindClusterByIdResponse"/>
      </operation>
      <operation name="FindDatastoresById">
        <input message="typens:FindDatastoresById"/>
        <output message="typens:FindDatastoresByIdResponse"/>
      </operation>
      <operation name="FindDatastoreById">
        <input message="typens:FindDatastoreById"/>
        <output message="typens:FindDatastoreByIdResponse"/>
      </operation>
      <operation name="FindResourcePoolsById">
        <input message="typens:FindResourcePoolsById"/>
        <output message="typens:FindResourcePoolsByIdResponse"/>
      </operation>
      <operation name="FindResourcePoolById">
        <input message="typens:FindResourcePoolById"/>
        <output message="typens:FindResourcePoolByIdResponse"/>
      </operation>
      <operation name="FindVmsByGuid">
        <input message="typens:FindVmsByGuid"/>
        <output message="typens:FindVmsByGuidResponse"/>
      </operation>
      <operation name="FindVmByGuid">
        <input message="typens:FindVmByGuid"/>
        <output message="typens:FindVmByGuidResponse"/>
      </operation>
      <operation name="GetEmsByList">
        <input message="typens:GetEmsByList"/>
        <output message="typens:GetEmsByListResponse"/>
      </operation>
      <operation name="GetHostsByList">
        <input message="typens:GetHostsByList"/>
        <output message="typens:GetHostsByListResponse"/>
      </operation>
      <operation name="GetClustersByList">
        <input message="typens:GetClustersByList"/>
        <output message="typens:GetClustersByListResponse"/>
      </operation>
      <operation name="GetDatastoresByList">
        <input message="typens:GetDatastoresByList"/>
        <output message="typens:GetDatastoresByListResponse"/>
      </operation>
      <operation name="GetResourcePoolsByList">
        <input message="typens:GetResourcePoolsByList"/>
        <output message="typens:GetResourcePoolsByListResponse"/>
      </operation>
      <operation name="GetVmsByList">
        <input message="typens:GetVmsByList"/>
        <output message="typens:GetVmsByListResponse"/>
      </operation>
      <operation name="GetVmsByTag">
        <input message="typens:GetVmsByTag"/>
        <output message="typens:GetVmsByTagResponse"/>
      </operation>
      <operation name="GetTemplatesByTag">
        <input message="typens:GetTemplatesByTag"/>
        <output message="typens:GetTemplatesByTagResponse"/>
      </operation>
      <operation name="GetClustersByTag">
        <input message="typens:GetClustersByTag"/>
        <output message="typens:GetClustersByTagResponse"/>
      </operation>
      <operation name="GetResourcePoolsByTag">
        <input message="typens:GetResourcePoolsByTag"/>
        <output message="typens:GetResourcePoolsByTagResponse"/>
      </operation>
      <operation name="GetDatastoresByTag">
        <input message="typens:GetDatastoresByTag"/>
        <output message="typens:GetDatastoresByTagResponse"/>
      </operation>
      <operation name="VmAddCustomAttributeByFields">
        <input message="typens:VmAddCustomAttributeByFields"/>
        <output message="typens:VmAddCustomAttributeByFieldsResponse"/>
      </operation>
```

```xml
<operation name="VmAddCustomAttribute">
  <input message="typens:VmAddCustomAttribute"/>
  <output message="typens:VmAddCustomAttributeResponse"/>
</operation>
<operation name="VmAddCustomAttributes">
  <input message="typens:VmAddCustomAttributes"/>
  <output message="typens:VmAddCustomAttributesResponse"/>
</operation>
<operation name="VmDeleteCustomAttribute">
  <input message="typens:VmDeleteCustomAttribute"/>
  <output message="typens:VmDeleteCustomAttributeResponse"/>
</operation>
<operation name="VmDeleteCustomAttributes">
  <input message="typens:VmDeleteCustomAttributes"/>
  <output message="typens:VmDeleteCustomAttributesResponse"/>
</operation>
<operation name="Version">
  <input message="typens:Version"/>
  <output message="typens:VersionResponse"/>
</operation>
<operation name="VmProvisionRequest">
  <input message="typens:VmProvisionRequest"/>
  <output message="typens:VmProvisionRequestResponse"/>
</operation>
<operation name="VmSetOwner">
  <input message="typens:VmSetOwner"/>
  <output message="typens:VmSetOwnerResponse"/>
</operation>
<operation name="VmSetTag">
  <input message="typens:VmSetTag"/>
  <output message="typens:VmSetTagResponse"/>
</operation>
<operation name="VmGetTags">
  <input message="typens:VmGetTags"/>
  <output message="typens:VmGetTagsResponse"/>
</operation>
<operation name="HostSetTag">
  <input message="typens:HostSetTag"/>
  <output message="typens:HostSetTagResponse"/>
</operation>
<operation name="HostGetTags">
  <input message="typens:HostGetTags"/>
  <output message="typens:HostGetTagsResponse"/>
</operation>
<operation name="ClusterSetTag">
  <input message="typens:ClusterSetTag"/>
  <output message="typens:ClusterSetTagResponse"/>
</operation>
<operation name="ClusterGetTags">
  <input message="typens:ClusterGetTags"/>
  <output message="typens:ClusterGetTagsResponse"/>
</operation>
<operation name="EmsSetTag">
  <input message="typens:EmsSetTag"/>
  <output message="typens:EmsSetTagResponse"/>
</operation>
<operation name="EmsGetTags">
  <input message="typens:EmsGetTags"/>
  <output message="typens:EmsGetTagsResponse"/>
</operation>
<operation name="DatastoreSetTag">
  <input message="typens:DatastoreSetTag"/>
  <output message="typens:DatastoreSetTagResponse"/>
</operation>
<operation name="DatastoreGetTags">
  <input message="typens:DatastoreGetTags"/>
  <output message="typens:DatastoreGetTagsResponse"/>
</operation>
<operation name="ResourcePoolSetTag">
  <input message="typens:ResourcePoolSetTag"/>
  <output message="typens:ResourcePoolSetTagResponse"/>
</operation>
<operation name="ResourcePoolGetTags">
  <input message="typens:ResourcePoolGetTags"/>
  <output message="typens:ResourcePoolGetTagsResponse"/>
</operation>
<operation name="GetVmProvisionRequest">
  <input message="typens:GetVmProvisionRequest"/>
  <output message="typens:GetVmProvisionRequestResponse"/>
</operation>
<operation name="GetVmProvisionTask">
  <input message="typens:GetVmProvisionTask"/>
```

```
      <output message="typens:GetVmProvisionTaskResponse"/>
    </operation>
    <operation name="CreateAutomationRequest">
      <input message="typens:CreateAutomationRequest"/>
      <output message="typens:CreateAutomationRequestResponse"/>
    </operation>
    <operation name="GetAutomationRequest">
      <input message="typens:GetAutomationRequest"/>
      <output message="typens:GetAutomationRequestResponse"/>
    </operation>
    <operation name="GetAutomationTask">
      <input message="typens:GetAutomationTask"/>
      <output message="typens:GetAutomationTaskResponse"/>
    </operation>
    <operation name="VmInvokeTasks">
      <input message="typens:VmInvokeTasks"/>
      <output message="typens:VmInvokeTasksResponse"/>
    </operation>
  </portType>
  <binding name="VmdbwsBinding" type="typens:VmdbwsPort">
    <soap:binding style="rpc" transport="http://schemas.xmlsoap.org/soap/http"/>
    <operation name="EVMGet">
      <soap:operation soapAction="/vmdbws/api/EVMGet"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="EVMSet">
      <soap:operation soapAction="/vmdbws/api/EVMSet"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="EVMPing">
      <soap:operation soapAction="/vmdbws/api/EVMPing"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="EVMVmList">
      <soap:operation soapAction="/vmdbws/api/EVMVmList"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="EVMHostList">
      <soap:operation soapAction="/vmdbws/api/EVMHostList"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="EVMClusterList">
      <soap:operation soapAction="/vmdbws/api/EVMClusterList"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
```

```
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="EVMResourcePoolList">
      <soap:operation soapAction="/vmdbws/api/EVMResourcePoolList"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="EVMDatastoreList">
      <soap:operation soapAction="/vmdbws/api/EVMDatastoreList"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="EVMVmSoftware">
      <soap:operation soapAction="/vmdbws/api/EVMVmSoftware"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="EVMVmAccounts">
      <soap:operation soapAction="/vmdbws/api/EVMVmAccounts"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="EVMGetHost">
      <soap:operation soapAction="/vmdbws/api/EVMGetHost"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="EVMGetHosts">
      <soap:operation soapAction="/vmdbws/api/EVMGetHosts"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="EVMGetCluster">
      <soap:operation soapAction="/vmdbws/api/EVMGetCluster"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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    </operation>
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    <operation name="EVMGetClusters">
      <soap:operation soapAction="/vmdbws/api/EVMGetClusters"/>
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      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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    </operation>
    <operation name="EVMGetResourcePool">
      <soap:operation soapAction="/vmdbws/api/EVMGetResourcePool"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="EVMGetResourcePools">
      <soap:operation soapAction="/vmdbws/api/EVMGetResourcePools"/>
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        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="EVMGetDatastore">
      <soap:operation soapAction="/vmdbws/api/EVMGetDatastore"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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    </operation>
    <operation name="EVMGetDatastores">
      <soap:operation soapAction="/vmdbws/api/EVMGetDatastores"/>
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        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="EVMGetVm">
      <soap:operation soapAction="/vmdbws/api/EVMGetVm"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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    </operation>
    <operation name="EVMGetVms">
      <soap:operation soapAction="/vmdbws/api/EVMGetVms"/>
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        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="EVMDeleteVmByName">
      <soap:operation soapAction="/vmdbws/api/EVMDeleteVmByName"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="EVMSmartStart">
      <soap:operation soapAction="/vmdbws/api/EVMSmartStart"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="EVMSmartStop">
      <soap:operation soapAction="/vmdbws/api/EVMSmartStop"/>
      <input>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="EVMSmartSuspend">
      <soap:operation soapAction="/vmdbws/api/EVMSmartSuspend"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="EVMGetPolicy">
      <soap:operation soapAction="/vmdbws/api/EVMGetPolicy"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="EVMEventList">
      <soap:operation soapAction="/vmdbws/api/EVMEventList"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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    </operation>
    <operation name="EVMConditionList">
      <soap:operation soapAction="/vmdbws/api/EVMConditionList"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="EVMActionList">
      <soap:operation soapAction="/vmdbws/api/EVMActionList"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
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      </operation>
      <operation name="EVMPolicyList">
        <soap:operation soapAction="/vmdbws/api/EVMPolicyList"/>
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          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </input>
        <output>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </output>
      </operation>
      <operation name="EVMVmRsop">
        <soap:operation soapAction="/vmdbws/api/EVMVmRsop"/>
        <input>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </input>
        <output>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </output>
      </operation>
      <operation name="EVMAssignPolicy">
        <soap:operation soapAction="/vmdbws/api/EVMAssignPolicy"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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        <output>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </output>
      </operation>
      <operation name="EVMUnassignPolicy">
        <soap:operation soapAction="/vmdbws/api/EVMUnassignPolicy"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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        <output>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </output>
      </operation>
      <operation name="EVMAddLifecycleEvent">
        <soap:operation soapAction="/vmdbws/api/EVMAddLifecycleEvent"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </input>
        <output>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </output>
      </operation>
      <operation name="EVMProvisionRequest">
        <soap:operation soapAction="/vmdbws/api/EVMProvisionRequest"/>
        <input>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </input>
        <output>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </output>
      </operation>
      <operation name="EVMProvisionRequestEx">
        <soap:operation soapAction="/vmdbws/api/EVMProvisionRequestEx"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </input>
        <output>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </output>
      </operation>
      <operation name="EVMHostProvisionRequest">
        <soap:operation soapAction="/vmdbws/api/EVMHostProvisionRequest"/>
        <input>
          <soap:body use="encoded" namespace="urn:ActionWebService"
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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    </operation>
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      <soap:operation soapAction="/vmdbws/api/EVMVmScanByProperty"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="EVMVmEventByProperty">
      <soap:operation soapAction="/vmdbws/api/EVMVmEventByProperty"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="GetEmsList">
      <soap:operation soapAction="/vmdbws/api/GetEmsList"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="GetHostList">
      <soap:operation soapAction="/vmdbws/api/GetHostList"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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    </operation>
    <operation name="GetClusterList">
      <soap:operation soapAction="/vmdbws/api/GetClusterList"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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    </operation>
    <operation name="GetResourcePoolList">
      <soap:operation soapAction="/vmdbws/api/GetResourcePoolList"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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    </operation>
    <operation name="GetDatastoreList">
      <soap:operation soapAction="/vmdbws/api/GetDatastoreList"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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        </output>
      </operation>
      <operation name="GetVmList">
        <soap:operation soapAction="/vmdbws/api/GetVmList"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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        <output>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </output>
      </operation>
      <operation name="FindEmsByGuid">
        <soap:operation soapAction="/vmdbws/api/FindEmsByGuid"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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        <output>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </output>
      </operation>
      <operation name="FindHostsByGuid">
        <soap:operation soapAction="/vmdbws/api/FindHostsByGuid"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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      </operation>
      <operation name="FindHostByGuid">
        <soap:operation soapAction="/vmdbws/api/FindHostByGuid"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </input>
        <output>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </output>
      </operation>
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        <soap:operation soapAction="/vmdbws/api/FindClustersById"/>
        <input>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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        <output>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </output>
      </operation>
      <operation name="FindClusterById">
        <soap:operation soapAction="/vmdbws/api/FindClusterById"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </input>
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          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </output>
      </operation>
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        <soap:operation soapAction="/vmdbws/api/FindDatastoresById"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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      </operation>
      <operation name="FindDatastoreById">
        <soap:operation soapAction="/vmdbws/api/FindDatastoreById"/>
        <input>
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        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="FindResourcePoolsById">
      <soap:operation soapAction="/vmdbws/api/FindResourcePoolsById"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
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      <soap:operation soapAction="/vmdbws/api/FindResourcePoolById"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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      <soap:operation soapAction="/vmdbws/api/FindVmsByGuid"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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    </operation>
    <operation name="FindVmByGuid">
      <soap:operation soapAction="/vmdbws/api/FindVmByGuid"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
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      <soap:operation soapAction="/vmdbws/api/GetEmsByList"/>
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        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="GetHostsByList">
      <soap:operation soapAction="/vmdbws/api/GetHostsByList"/>
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        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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    </operation>
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      <soap:operation soapAction="/vmdbws/api/GetClustersByList"/>
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        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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    </operation>
    <operation name="GetDatastoresByList">
      <soap:operation soapAction="/vmdbws/api/GetDatastoresByList"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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    </operation>
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      <soap:operation soapAction="/vmdbws/api/GetVmsByList"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="GetVmsByTag">
      <soap:operation soapAction="/vmdbws/api/GetVmsByTag"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="GetTemplatesByTag">
      <soap:operation soapAction="/vmdbws/api/GetTemplatesByTag"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="GetClustersByTag">
      <soap:operation soapAction="/vmdbws/api/GetClustersByTag"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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    </operation>
    <operation name="GetResourcePoolsByTag">
      <soap:operation soapAction="/vmdbws/api/GetResourcePoolsByTag"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="GetDatastoresByTag">
      <soap:operation soapAction="/vmdbws/api/GetDatastoresByTag"/>
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      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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    <operation name="VmAddCustomAttributeByFields">
      <soap:operation soapAction="/vmdbws/api/VmAddCustomAttributeByFields"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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      <soap:operation soapAction="/vmdbws/api/VmAddCustomAttribute"/>
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encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
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      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="VmAddCustomAttributes">
      <soap:operation soapAction="/vmdbws/api/VmAddCustomAttributes"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="VmDeleteCustomAttribute">
      <soap:operation soapAction="/vmdbws/api/VmDeleteCustomAttribute"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="VmDeleteCustomAttributes">
      <soap:operation soapAction="/vmdbws/api/VmDeleteCustomAttributes"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="Version">
      <soap:operation soapAction="/vmdbws/api/Version"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="VmProvisionRequest">
      <soap:operation soapAction="/vmdbws/api/VmProvisionRequest"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
```

```
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="VmSetOwner">
      <soap:operation soapAction="/vmdbws/api/VmSetOwner"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="VmSetTag">
      <soap:operation soapAction="/vmdbws/api/VmSetTag"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="VmGetTags">
      <soap:operation soapAction="/vmdbws/api/VmGetTags"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="HostSetTag">
      <soap:operation soapAction="/vmdbws/api/HostSetTag"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="HostGetTags">
      <soap:operation soapAction="/vmdbws/api/HostGetTags"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="ClusterSetTag">
      <soap:operation soapAction="/vmdbws/api/ClusterSetTag"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="ClusterGetTags">
      <soap:operation soapAction="/vmdbws/api/ClusterGetTags"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="EmsSetTag">
```

```xml
        <soap:operation soapAction="/vmdbws/api/EmsSetTag"/>
        <input>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </input>
        <output>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </output>
      </operation>
      <operation name="EmsGetTags">
        <soap:operation soapAction="/vmdbws/api/EmsGetTags"/>
        <input>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </input>
        <output>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </output>
      </operation>
      <operation name="DatastoreSetTag">
        <soap:operation soapAction="/vmdbws/api/DatastoreSetTag"/>
        <input>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </input>
        <output>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </output>
      </operation>
      <operation name="DatastoreGetTags">
        <soap:operation soapAction="/vmdbws/api/DatastoreGetTags"/>
        <input>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </input>
        <output>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </output>
      </operation>
      <operation name="ResourcePoolSetTag">
        <soap:operation soapAction="/vmdbws/api/ResourcePoolSetTag"/>
        <input>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </input>
        <output>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </output>
      </operation>
      <operation name="ResourcePoolGetTags">
        <soap:operation soapAction="/vmdbws/api/ResourcePoolGetTags"/>
        <input>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </input>
        <output>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </output>
      </operation>
      <operation name="GetVmProvisionRequest">
        <soap:operation soapAction="/vmdbws/api/GetVmProvisionRequest"/>
        <input>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </input>
        <output>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </output>
      </operation>
      <operation name="GetVmProvisionTask">
        <soap:operation soapAction="/vmdbws/api/GetVmProvisionTask"/>
        <input>
          <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        </input>
```

```
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="CreateAutomationRequest">
      <soap:operation soapAction="/vmdbws/api/CreateAutomationRequest"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="GetAutomationRequest">
      <soap:operation soapAction="/vmdbws/api/GetAutomationRequest"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="GetAutomationTask">
      <soap:operation soapAction="/vmdbws/api/GetAutomationTask"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
    <operation name="VmInvokeTasks">
      <soap:operation soapAction="/vmdbws/api/VmInvokeTasks"/>
      <input>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </input>
      <output>
        <soap:body use="encoded" namespace="urn:ActionWebService"
encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
      </output>
    </operation>
  </binding>
  <service name="Service">
    <port name="VmdbwsPort" binding="typens:VmdbwsBinding">
      <soap:address location="http://cfmedev.usersys.redhat.com/vmdbws/api"/>
    </port>
  </service>
</definitions>
```

Report a bug

Revision History

Revision 1.0.0-12	**Thu Oct 17 2013**	**Dan Macpherson**

Finalizing

Revision 1.0.0-11	**Thu Oct 17 2013**	**Dan Macpherson**

Formatting fixes

Revision 1.0.0-10	**Tue Oct 15 2013**	**Dan Macpherson**

Bumping to version 3.0

Revision 1.0.0-9	**Mon Oct 14 2013**	**Dan Macpherson**

Implemented QE Review for BZ#1009624, BZ#1012081, BZ#1012229, BZ#1012749, BZ#1005847, BZ#1016051, BZ#1016030, BZ#1014504, BZ#1014541, BZ#1014539, BZ#1014538, BZ#1014536, BZ#1014551, BZ#1012236

Revision 1.0.0-8	**Fri Oct 11 2013**	**Dan Macpherson**

Implementation fo QE Review feedback

Revision 1.0.0-7	**Fri Oct 11 2013**	**Dan Macpherson**

Updating Product and Component for Feedback page

Revision 1.0.0-6	**Thu Sep 26 2013**	**Dan Macpherson**

New methods added to the Settings and Ops Guide
Default password added to Quick Start Guide

Revision 1.0.0-5	**Wed Sep 19 2013**	**Dan Macpherson**

Revision of some provisioning sections

Revision 1.0.0-4	**Wed Sep 18 2013**	**Dan Macpherson**

Minor changes

Revision 1.0.0-3	**Wed Sep 18 2013**	**Dan Macpherson**

Generation of new Beta

Revision 1.0.0-1	**Fri Aug 24 2013**	**Dan Macpherson**

Creation of first draft