

MCICOM - Cloudforms

July 18, 2014

Red Hat, Inc

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1 Document Information

1.1 Originator

Red Hat Consulting

Jose Simonelli

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Jose Simonelli

2 Project Approach

2.1 Scope

2.1.1 Project Scope:

- [] Assist the Customer review and modification of the design and modification of the cloud management implementation, as applicable;
 - [] Confirm appliance architecture & sizing
 - [] Make adjustments to database cache for optimal performance
 - [] General tuning and config (ie. excluding EMS event storm data)
 - [] Determine and define database backup strategy
 - [] Discuss and define load balancing plan for WebUI's (make appropriate changes to cache settings)
 - [] Define and Implement tagging taxonomy
 - [] Integrate with Active Directory
 - [] Define and configure RBAC
 - [] Identify additional point of integration
- [] Assist the Customer with the configuration and updates to the current implementation of Red Hat CloudForms per the architectural review as well as the below:
 - [] 2 node with HA to serve the dashboard functions
 - [] 2 node with HA to serve the snapshot scanning portion
 - [] 2 node with HA to handle the provisioning, lifecycle, automation, etc.
- [] Assist in the custom design, implementation, and integration of CloudForms with Netapp VSC plugin for enablement of rapid cloning;
 - [] Perform the customer implementation to have CloudForms automate and control the Netapp rapid cloning process;
 - [] Assist in defining and mentoring on best practices setting up dashboards
- [] Assist in the design and setup of Reporting and Dashboards that support the ability to do disk and registry scans/reports;
- [] Assist the Customer with the STIG of the CloudForms product

2.1.2 Proposed Schedule

- Duration
 - 6 weeks, Jul 14 – Aug 22
- Start Date
 - July 14, 2014 @ noon
- Travel Schedule
 - Week 1 (7/14 - 7/18)
 - * On-site support with 2 consultants and 2 DAs
 - Week 2-6 (7/21 - 8/22)
 - * On-site support with 2 consultants (1 DA available as needed)

2.2 Logistics

- Place of Performance
 - 2306 E. Bannister Road, Kansas City, MO 64131-3088
- On-Site Customer Contact
 - Massimo Perreca: 816.394.7588
- Security Requirements
 - JPAS or background check
- Parking
 - [TBD]

2.3 Contact Information

Table 1: MCICOM Information

Name	title	Phone	E-mail
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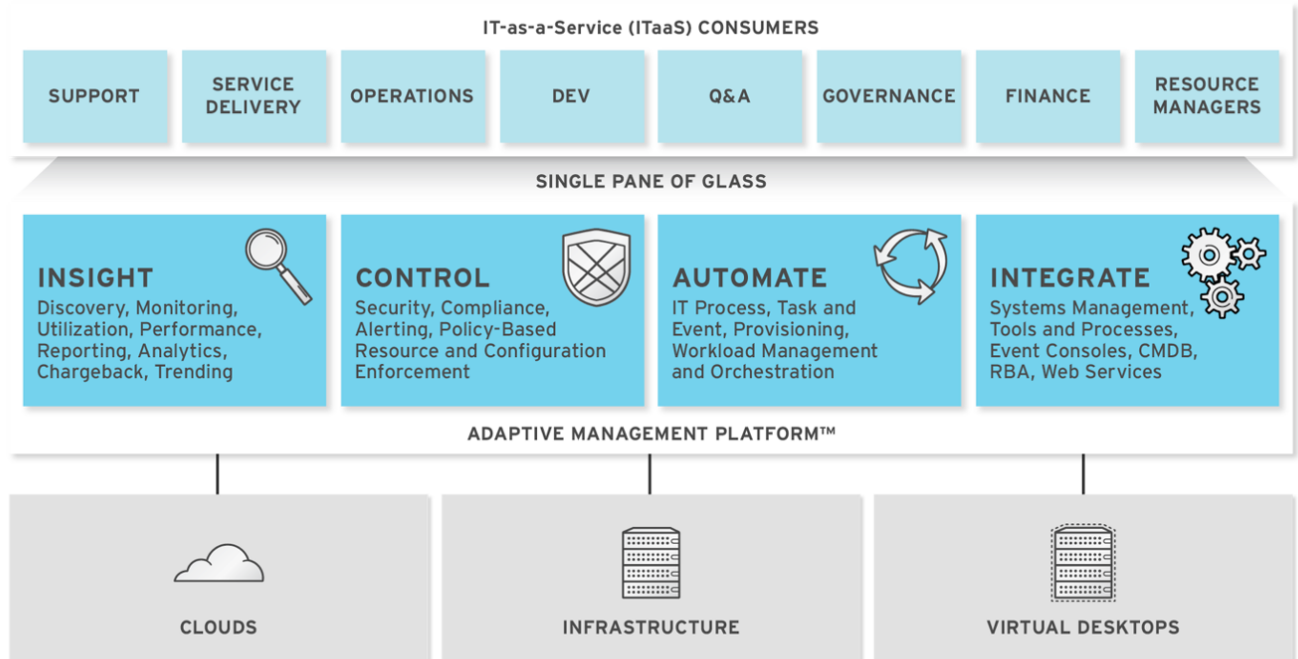
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3 Cloudforms POC

3.1 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.



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.

Note

Reference https://access.redhat.com/documentation/en-US/CloudForms/3.0/html/Management_Engine_5.2_Settings_And_Operations/-Architecture2.html

3.2 Cloudforms Appliance Allocations

3.2.1 CFME Appliance System Requirements

- POC CFME Appliance:

- 10x CFME Appliance:
 - * 4 vCPU
 - * 6 GB of RAM
 - * 1x 40 Root Vol Disk
 - * 1x 160GB DB Disk
 - * 2x Network Interface

Note

[Simplified-CFME-VMDB-Region-Zone-Global-Size-Estimator](#)

3.3 CFME Appliance Setup

3.3.1 Initial Setup

1. Download the CFME appliance from the Red Hat Customer Portal (login required). The CFME appliance is available as an OVA (Open Virtualization Format) file from: Download Software > Red Hat Enterprise Linux (v. 6 for 64-bit x86_64) > Red Hat CloudForms Management Engine (v5.2) > VMware Virtual Appliance.
2. Upload the OVA file to the VMware Datastore and create the appliances virtual machines using this file. Convert the virtual machine into a template and use it to create all the appliances.

Note

To increase performance, increase the default 4 vCPUs/6GB RAM appliance configuration to 4 vCPUs/8GB RAM for the Web UI appliance and 4 vCPUs/8GB RAM for the DB and the Worker appliances.

3.3.2 Network Configuration

- Once started, the appliances need to be configured with basic network settings using the virtual serial console in the VMware client. Login as **admin / smartvm** and press Enter to go to the Advanced Settings menu. Set Static Network Configuration, Set Hostname, Set Timezone, Date, and Time. When done entering the settings, select Summary Information to review.
- Host & IP Allocations

Table 3: Primary Interface Configuration

Host	IP Address	Netmask	Gateway	DNS Server	Notes
zp11000.mcip.usmc.nh	10.1.101.10	255.255.252.0	10.1.101.1	10.1.100.130, 10.1.100.131	CFME UI Appliance
zp11001.mcip.usmc.nh	10.1.101.11	255.255.252.0	10.1.101.1	10.1.100.130, 10.1.100.131	CFME UI Appliance
zp11002.mcip.usmc.nh	10.1.101.12	255.255.252.0	10.1.101.1	10.1.100.130, 10.1.100.131	CFME Worker Appliance
zp11003.mcip.usmc.nh	10.1.101.13	255.255.252.0	10.1.101.1	10.1.100.130, 10.1.100.131	CFME Worker Appliance
zp11004.mcip.usmc.nh	10.1.101.14	255.255.252.0	10.1.101.1	10.1.100.130, 10.1.100.131	CFME Worker Appliance
zp11005.mcip.usmc.nh	10.1.101.15	255.255.252.0	10.1.101.1	10.1.100.130, 10.1.100.131	CFME Worker Appliance

Table 3: (continued)

Host	IP Address	Netmask	Gateway	DNS Server	Notes
zp11006.mcip.usmc.mil	10.1.101.16	255.255.252.0	10.1.101.1	10.1.100.130, 10.1.100.131	CFME Worker Appliance
zp11007.mcip.usmc.mil	10.1.101.17	255.255.252.0	10.1.101.1	10.1.100.130, 10.1.100.131	CFME Worker Appliance
zp11008.mcip.usmc.mil	10.1.101.18	255.255.252.0	10.1.101.1	10.1.100.130, 10.1.100.131	CFME Worker Appliance
zp11009.mcip.usmc.mil	10.1.101.19	255.255.252.0	10.1.101.1	10.1.100.130, 10.1.100.131	CFME DB Appliance

Table 4: Storage Interface Configuration

Host	IP Address	Netmask	Gateway	DNS Server
zp11000.mcip.usmc.mil	10.1.130.10	255.255.252.0	none	none
zp11001.mcip.usmc.mil	10.1.130.11	255.255.252.0	none	none
zp11002.mcip.usmc.mil	10.1.130.12	255.255.252.0	none	none
zp11003.mcip.usmc.mil	10.1.130.13	255.255.252.0	none	none
zp11004.mcip.usmc.mil	10.1.130.14	255.255.252.0	none	none
zp11005.mcip.usmc.mil	10.1.130.15	255.255.252.0	none	none
zp11006.mcip.usmc.mil	10.1.130.16	255.255.252.0	none	none
zp11007.mcip.usmc.mil	10.1.130.17	255.255.252.0	none	none
zp11008.mcip.usmc.mil	10.1.130.18	255.255.252.0	none	none
zp11009.mcip.usmc.mil	10.1.130.19	255.255.252.0	none	none

3.3.3 Hostname Configuration

- Select Option 4
- Set the hostname of the CFME appliance. Refer to the table in Network Configuration section

3.3.4 Database Configuration

- With the new appliance the Database is not shipped configured by default. There will need to be a separate Database disk created outside of the appliance and then connected once the appliance has been started. In this case, after looking at where the current VM count and number of VM's that will be coming over the next few years the Database has been sized to 100GB. This will allow for growth over the next few years.

Note

The database uses LVM and storage can be extended at a later time

- On the main console window select Option 10 (To Configure Database)
- Select 1) Internal

- c. Select 1) /dev/sdb
- d. Input Region **10** for the Region Selection
- e. Press **Enter**

Region Name	Region #	Notes
Region	10	POC to Production
DBRegion	99	Optional: When MCICOM decides to scale to have DB Replication

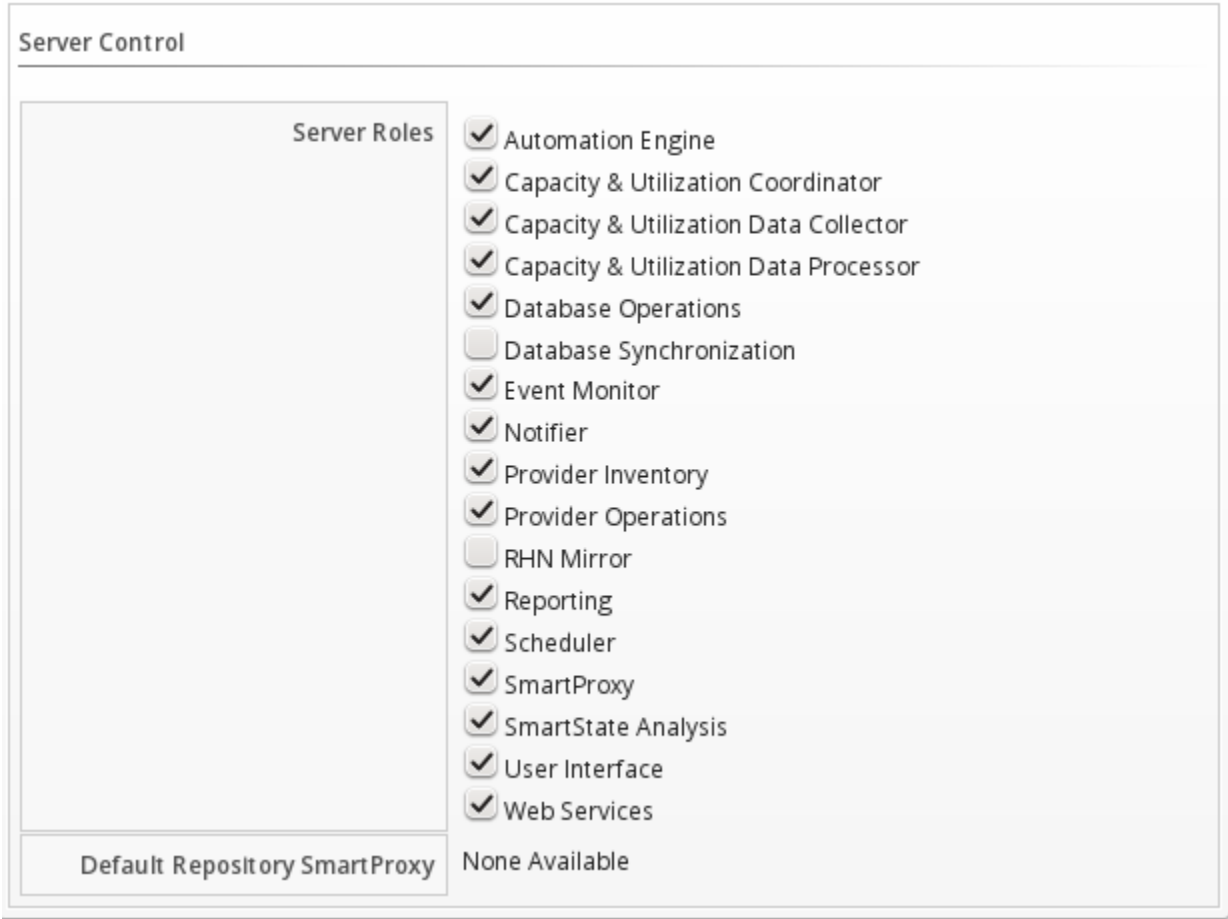
Non-DB appliances configure an external database, using the DB appliance.

3.4 SMTP Configuration

SMTP Server	205.110.86.80
email	mcicomcloud@mcip.usmc.mil

3.5 Setup POC Cloudforms Appliance Roles

- Log in to the Cloudforms Web interface and go to Configure > Configuration > Select EVM Appliance > Server Tab
- Check the server roles using the following image as a guide



3.6 Database Backups

Database backups are scheduled to occur daily at 2AM CST. Backups are saved to an NFS volume.

NFS Volume Location	nfs://10.1.130.3:/vol/cf_nfs_data1
Frequency	Daily
Time	02:00 CST

images/screenshots/db_backup_schedule.png // placeholder

3.7 Access URL

UI URL
https://zp11000.mcip.usmc.mil

3.8 Configure Zones

1. Access the Web Interface and go to Configure > Configuration > Click on Zones
2. In the right frame use the Configuration Icon then select "Add a new zone"

Region Name	Region #	Notes
Region	10	POC to Production
DBRegion	99	Optional: When MCICOM decides to scale to have DB Replication

3.9 VMware Service Account

**Important**

Need a CFME Service Account in order to access VMware vCenter and be able to provision and manage the vCenter environment from Cloudforms

Note

See the VMware documentation for instructions on how to create a role. This role will need to be associated with whatever credentials you enter for the Management System's instance.

- From the Global group, check:
 - Cancel task
 - Diagnostics
 - Log Event
 - Set custom attribute
 - Settings
- The entire set of privileges for the following groups should be checked.
 - Alarms
 - Datastores
 - dvPort Group
 - Host
 - Network
 - Resource
 - Scheduled Task
 - Tasks
 - Virtual Machine
 - vSphere Distributed Switch

In addition, you must also have the following objects and new role in place:

- Datacenter: At the Datacenter the CloudForms Management Engine (CFME) (formerly EVM) user/group must have at least the read-only role at the Datacenter level (Not Propagated) to be able to see the datacenter. Without this access, relationships cannot be made. Specifically, the datastores will not show up.
- Cluster: Each Cluster that the CFME needs access to must have the new role assigned and propagated.
- Folders: Each Folder that CFME needs access to must have the new role assigned and propagated.

- Datastores: Each Datastore that CFME needs access to must have the new role assigned and propagated.
- Networking: Each vLAN or Port Group that CFME needs access to must have the new role assigned and propagated.

Note

For latest update on this section refer to [Creating Role for CFME in VMware](#) article in Customer Portal

3.10 Install VMware VDDK

The integration of the VMware VDDK (Virtual Disk Development Kit) optimizes the execution of SmartState Analysis on Virtual Machines and is required for CFME Appliances to successfully collect insight information within VMware vCenter. The VDDK can be downloaded from the VMware website with a valid customer account.

1. Download the VDDK 1.2.2 from VMware's website at <https://my.vmware.com>
2. Download the file VMware-vix-disklib-5.1.1-1042608.x86_64.tar.gz
3. Copy the file to the /root folder of the CFME Appliances
4. Start an SSH session into the CFME Appliance
5. Run the following commands to extract and install vmware vddk, accept defaults during the installation process:

```
cd /root
tar xvzf VMware-vix-disklib-5.1.1-1042608.x86_64.tar.gz
cd vmware-vix-disklib-distrib
./vmware-install.pl
```

1. Once the VDDK is installed, run the ldconfig command in order for EVM to find the newly installed vddk library.:

```
ldconfig
```

1. Reboot the CloudForms Appliance. The VDDK is now installed on the CFME appliance.

Note

Reference: <https://access.redhat.com/knowledge/articles/329683>

3.11 User Roles

Access Type	Super Admin	Admin	Developer	Manager
Everything	X			
!- Cloud Intelligence	X	X	X	X
..!- Dashboard	X	X	X	X
...!- View	X	X	X	X
....!- Modify	X	X	X	X
.....!- Add and Remove a Widget	X	X	X	X
.....!- Reset Dashboard Widgets	X	X	X	X
..!- Reports	X	X		X

Access Type	Super Admin	Admin	Developer	Manager
... - Dashboard Widgets	X	X		X
..... - Operate	X	X		X
..... - Generate Content	X	X		X
..... - Modify	X	X		X
..... - Add	X	X		X
..... - Copy	X	X		X
..... - Delete	X	X		X
..... - Edit	X	X		X
... - Dashboards	X	X		X
..... - Modify	X	X		X
..... - Add	X	X		X
..... - Copy	X	X		X
..... - Delete	X	X		X
..... - Edit	X	X		X
..... - Edit Sequence	X	X		X
... - Edit Report Menus	X	X		
... - Import / Export	X	X		X
... - Reports	X	X		X
..... - View	X	X		X
..... - Operate	X	X		X
..... - Run a selected Report	X	X		X
..... - Modify	X	X		X
..... - Add	X	X		X
..... - Copy	X	X		X
..... - Copy	X	X		X
..... - Delete	X	X		X
..... - Download CSV Format	X	X		X
..... - Download PDF Format	X	X		X
..... - Download Text Format	X	X		X
..... - Edit	X	X		X
... - Saved Reports	X	X		X
..... - Modify	X	X		X
..... - Delete	X	X		X
... - Schedules	X	X		X
..... - Operate	X	X		X
..... - Run Now	X	X		X
..... - Modify	X	X		X
..... - Add	X	X		X
..... - Copy	X	X		X
..... - Delete	X	X		X
..... - Disable	X	X		X
..... - Edit	X	X		X
..... - Enable	X	X		X
.. - Chargeback	X	X		X
... - Assignments	X	X		X
... - Rates	X	X		X
..... - Add	X	X		X
..... - Copy	X	X		X
..... - Copy	X	X		X
..... - Delete	X	X		X
..... - Edit	X	X		X
... - Reports	X	X		X
.. - Timelines	X	X	X	X

Access Type	Super Admin	Admin	Developer	Manager
.. - RSS	X	X	X	X
- Services	X	X	X	X
.. - My Services	X	X	X	
... - All Services	X	X	X	
..... - View All Services	X	X	X	
..... - Operate	X	X	X	
..... - Edit Tags	X	X		
..... - Retire Services	X	X	X	
..... - Set Retirement Date	X	X	X	
..... - Modify	X	X	X	
..... - Set Ownership	X	X		
..... - Edit Services	X	X	X	
..... - Remove Services	X	X	X	
.. - Catalogs Explorer	X	X	X	
... - Catalog Items	X	X		
..... - View Catalog Items	X	X		
..... - Operate	X	X		
..... - Edit Tags	X	X		
..... - Modify	X	X		
..... - Add Atomic Catalog Item	X	X		
..... - Add Composite Catalog Item	X	X		
..... - Edit Atomic Catalog Item	X	X		
..... - Edit Composite Catalog Item	X	X		
..... - Remove Catalog Item	X	X		
... - Catalogs	X	X	X	
..... - View Catalogs	X	X	X	
..... - Modify	X	X		
..... - Add Catalog	X	X		
..... - Edit Catalog	X	X		
..... - Remove Catalog	X	X		
... - Service Catalogs	X	X	X	
..... - Modify	X	X	X	
..... - Provision Services	X	X	X	
.. - Requests	X	X	X	X
... - View	X	X	X	X
..... - List	X	X	X	X
..... - Show	X	X	X	
... - Operate	X	X		X
..... - Approve and Deny	X	X		X
... - Modify	X	X	X	
..... - Copy	X	X	X	
..... - Delete	X	X	X	
..... - Edit	X	X	X	
.. - Workloads	X	X	X	X
... - Accordions	X	X	X	X
..... - Templates & Images	X	X	X	X
..... - VMs & Instances	X	X	X	X
- Clouds	X	X	X	X
.. - Cloud Providers	X	X	X	
... - View	X	X	X	
..... - List	X	X	X	

Access Type	Super Admin	Admin	Developer	Manager
..... - Show	X	X	X	
..... - Timeline	X	X	X	
... - Operate	X	X		
..... - Discover	X	X		
..... - Edit Tags	X	X		
..... - Manage Policies	X	X		
..... - Refresh	X	X		
... - Modify	X	X		
..... - Add	X	X		
..... - Edit	X	X		
..... - Remove	X	X		
.. - Availability Zones	X	X		
... - View	X	X		
..... - List	X	X		
..... - Show	X	X		
..... - Timeline	X	X		
..... - Utilization	X	X		
... - Operate	X	X		
..... - Edit Tags	X	X		
.. - Flavors	X	X		
... - View	X	X		
..... - List	X	X		
..... - Show	X	X		
... - Operate	X	X		
..... - Edit Tags	X	X		
.. - Security Groups	X	X		
... - View	X	X		
..... - List	X	X		
..... - Show	X	X		
... - Operate	X	X		
..... - Edit Tags	X	X		
.. - Instances	X	X	X	X
... - Accordions	X	X	X	
..... - Images	X	X	X	
..... - Images by Provider	X	X	X	
..... - Instances	X	X	X	
..... - Instances by Provider	X	X	X	
... - Image Access Rules	X	X	X	
..... - View	X	X	X	X
..... - Compare	X	X	X	X
..... - Drift	X	X	X	X
..... - List	X	X	X	X
..... - Show	X	X	X	X
..... - Timelines	X	X	X	X
..... - Utilization	X	X	X	X
..... - Operate	X	X		X
..... - Check Compliance	X	X		X
..... - Edit Tags	X	X		X
..... - Manage Policies	X	X		X
..... - Policy Simulation	X	X		X
..... - Refresh	X	X		X
..... - Set Ownership	X	X		X
..... - Modify	X	X		

Access Type	Super Admin	Admin	Developer	Manager
..... - Edit	X	X		X
..... - Edit EVM Server Relationship	X	X		
..... - Remove	X	X		X
... - Instance Access Rules	X	X	X	
..... - View	X	X	X	X
..... - Compare	X	X	X	X
..... - Drift	X	X	X	X
..... - List	X	X	X	X
..... - Show	X	X	X	X
..... - Timelines	X	X	X	X
..... - Utilization	X	X	X	X
..... - Operate	X	X		
..... - Check Compliance	X	X		X
..... - Edit Tags	X	X		X
..... - Manage Policies	X	X		X
..... - Policy Simulation	X	X		X
..... - Power Off	X	X	X	
..... - Power On	X	X	X	
..... - Refresh	X	X	X	
..... - Reset	X	X	X	
..... - Restart Guest	X	X	X	
..... - Retire Instances	X	X	X	X
..... - Set Ownership	X	X		
..... - Set Retirement Date	X	X	X	X
..... - Shutdown Guest	X	X	X	
..... - Suspend	X	X	X	
..... - Terminate	X	X		
..... - Modify	X	X	X	
..... - Edit	X	X		
..... - Edit EVM Server Relationship	X	X		
..... - Provision Instances	X	X	X	
..... - Remove	X	X		
- Infrastructure	X	X	X	X
.. - Infrastructure Providers	X	X		X
... - View	X	X		X
..... - List	X	X		X
..... - Show	X	X		X
..... - Timeline	X	X		X
... - Operate	X	X		
..... - Discover	X	X		
..... - Edit Tags	X	X		X
..... - Manage Policies	X	X		
..... - Refresh	X	X		
... - Modify	X	X		
..... - Add	X	X		
..... - Edit	X	X		
..... - Remove	X	X		
.. - Clusters	X	X		X
... - View	X	X		X
..... - Compare	X	X		X
..... - Drift	X	X		X

Access Type	Super Admin	Admin	Developer	Manager
..... - List	X	X		X
..... - Show	X	X		X
..... - Timelines	X	X		X
..... - Utilization	X	X		X
... - Operate	X	X		
..... - Analysis	X	X		
..... - Manage Policies	X	X		
..... - Tag	X	X		X
... - Modify	X	X		
..... - Remove	X	X		
.. - Hosts	X	X		X
... - View	X	X		X
..... - Compare	X	X		X
..... - Drift	X	X		X
..... - List	X	X		X
..... - Show	X	X		X
..... - Timelines	X	X		X
..... - Utilization	X	X		X
... - Operate	X	X		
..... - Analysis	X	X		X
..... - Analyze then Check Compliance	X	X		X
..... - Check Compliance	X	X		X
..... - Discover	X	X		
..... - Edit Tags	X	X		X
..... - Enter Maintenance Mode	X	X		
..... - Exit Maintenance Mode	X	X		
..... - Manage Policies	X	X		
..... - Power Off	X	X		
..... - Power On	X	X		
..... - Refresh	X	X		
..... - Reset	X	X		
..... - Restart Host	X	X		
..... - Shutdown Host	X	X		
..... - Shutdown Host to Standby	X	X		
... - Modify	X	X		
..... - Add	X	X		
..... - Edit	X	X		
..... - Provision Hosts	X	X		
..... - Remove	X	X		
.. - Resource Pools	X	X		X
... - View	X	X		X
..... - List	X	X		X
..... - Show	X	X		X
... - Operate	X	X		X
..... - Edit Tags	X	X		X
..... - Manage Policies	X	X		
... - Modify	X	X		
..... - Remove	X	X		
.. - Datastores	X	X		X
... - View	X	X		X
..... - List	X	X		X
..... - Show	X	X		X

Access Type	Super Admin	Admin	Developer	Manager
..... - Utilization	X	X		X
... - Operate	X	X		X
..... - Analysis	X	X		
..... - Edit Tags	X	X		X
... - Modify	X	X		
..... - Remove	X	X		
.. - Repositories	X	X		
... - View	X	X		
..... - List	X	X		
..... - Show	X	X		
... - Operate	X	X		
..... - Edit Tags	X	X		
..... - Manage Policies	X	X		
..... - Refresh	X	X		
... - Modify	X	X		
..... - Add	X	X		
..... - Edit	X	X		
..... - Remove	X	X		
.. - Virtual Machines	X	X	X	X
... - Accordions	X	X	X	X
..... - Templates	X	X	X	X
..... - VMs	X	X	X	X
..... - VMs & Templates	X	X	X	X
... - Template Access Rules	X	X	X	X
..... - View	X	X	X	X
..... - Compare	X	X	X	X
..... - Drift	X	X	X	X
..... - List	X	X	X	X
..... - Show	X	X	X	X
..... - Timelines	X	X	X	X
..... - Utilization	X	X	X	X
..... - Operate	X	X		X
..... - Analysis	X	X		X
..... - Check Compliance	X	X		X
..... - Edit Tags	X	X		X
..... - Manage Policies	X	X		X
..... - Policy Simulation	X	X		X
..... - Refresh	X	X		X
..... - Set Ownership	X	X		X
..... - Modify	X	X		X
..... - Clone Templates	X	X		
..... - Edit	X	X		X
..... - Edit EVM Server Relationship	X	X		
..... - Remove	X	X		X
..... - Snapshots	X	X	X	X
..... - View	X	X	X	X
..... - List	X	X	X	X
..... - Operate	X	X	X	
..... - Create new Snapshots	X	X	X	
..... - Delete All Existing Snapshots	X	X		
..... - Delete Snapshots	X	X		

Access Type	Super Admin	Admin	Developer	Manager
..... - Revert to selected snapshot	X	X	X	
... - VM Access Rules	X	X	X	X
..... - View	X	X	X	X
..... - Compare	X	X	X	X
..... - Drift	X	X	X	X
..... - List	X	X	X	X
..... - Show	X	X	X	X
..... - Timelines	X	X	X	X
..... - Utilization	X	X	X	X
..... - Operate	X	X	X	X
..... - Analysis	X	X		X
..... - Check Compliance	X	X		X
..... - Console using MKS	X	X	X	
..... - Console using VMRC	X	X	X	
..... - Console using VNC	X	X	X	
..... - Edit Tags	X	X		X
..... - Extract Running Processes	X	X		
..... - Manage Policies	X	X		X
..... - Policy Simulation	X	X		X
..... - Power Off	X	X	X	
..... - Power On	X	X	X	
..... - Refresh	X	X	X	
..... - Reset	X	X	X	
..... - Restart Guest	X	X	X	
..... - Retire VMs	X	X	X	X
..... - Set Ownership	X	X		X
..... - Set Retirement Date	X	X		X
..... - Shutdown Guest	X	X	X	
..... - Suspend	X	X	X	
..... - Modify	X	X	X	X
..... - Mark as VDI Desktops	X	X		
..... - Clone VMs	X	X		
..... - Edit	X	X		X
..... - Edit EVM Server Relationship	X	X		
..... - Migrate VMs	X	X		
..... - Provision VMs	X	X	X	
..... - Publish VMs to a Template	X	X		
..... - Reconfigure VMs	X	X		
..... - Remove	X	X		X
..... - Right-Size VMs	X	X	X	X
..... - Snapshots	X	X	X	X
..... - View	X	X	X	X
..... - List	X	X	X	X
..... - Operate	X	X	X	
..... - Create new Snapshots	X	X	X	
..... - Delete All Existing Snapshots	X	X		
..... - Delete Snapshots	X	X		

Access Type	Super Admin	Admin	Developer	Manager
..... - Revert to selected snapshot	X	X	X	
.. - PXE	X	X		X
... - Customization Templates	X	X		X
..... - View	X	X		X
..... - Modify	X	X		X
..... - Add	X	X		
..... - Copy	X	X		
..... - Edit	X	X		
..... - Remove	X	X		
... - ISO Datastores	X	X		
..... - View	X	X		
..... - Operate	X	X		
..... - Refresh	X	X		
..... - Modify	X	X		
..... - Add	X	X		
..... - Edit ISO Images	X	X		
..... - Remove	X	X		
... - PXE Servers	X	X		
..... - View	X	X		
..... - Operate	X	X		
..... - Refresh	X	X		
..... - Modify	X	X		
..... - Add	X	X		
..... - Edit	X	X		
..... - Edit PXE Image	X	X		
..... - Edit Windows Image	X	X		
..... - Remove	X	X		
... - System Image Types	X	X		
..... - View	X	X		
..... - Modify	X	X		
..... - Add	X	X		
..... - Edit	X	X		
..... - Remove	X	X		
- Control	X	X		X
.. - Explorer	X	X		X
... - View All Records	X	X		X
... - Actions	X	X		
..... - Modify	X	X		
..... - Add	X	X		
..... - Delete	X	X		
..... - Edit	X	X		
... - Alert Profiles	X	X		
..... - Modify	X	X		
..... - Add	X	X		
..... - Delete	X	X		
..... - Edit	X	X		
... - Alerts	X	X		
..... - Modify	X	X		
..... - Add/Copy	X	X		
..... - Delete	X	X		
..... - Edit	X	X		
... - Conditions	X	X		

Access Type	Super Admin	Admin	Developer	Manager
..... - Host Conditions	X	X		
..... - Modify	X	X		
..... - Add/Copy	X	X		
..... - Delete	X	X		
..... - Edit	X	X		
..... - VM Conditions	X	X		
..... - Modify	X	X		
..... - Add/Copy	X	X		
..... - Delete	X	X		
..... - Edit	X	X		
... - Events	X	X		
... - Policies	X	X		
..... - Compliance	X	X		
..... - Host Compliance Policy	X	X		
..... - Modify	X	X		
..... - Add/Copy	X	X		
..... - Delete	X	X		
..... - Edit	X	X		
..... - VM Compliance Policy	X	X		
..... - Modify	X	X		
..... - Add/Copy	X	X		
..... - Delete	X	X		
..... - Edit	X	X		
..... - Control	X	X		
..... - Host Control Policy	X	X		
..... - Modify	X	X		
..... - Add/Copy	X	X		
..... - Delete	X	X		
..... - Edit	X	X		
..... - VM Control Policy	X	X		
..... - Modify	X	X		
..... - Add/Copy	X	X		
..... - Delete	X	X		
..... - Edit	X	X		
... - Policy Profiles	X	X		
..... - Modify	X	X		
..... - Add	X	X		
..... - Delete	X	X		
..... - Edit	X	X		
.. - Simulation	X	X		X
.. - Import/Export	X	X		
.. - Log	X	X		X
- Automate	X			
.. - Explorer	X			
.. - Simulation	X			
.. - Buttons	X			
.. - Import/Export	X			
.. - Log	X			
- Optimize	X	X		X
.. - Utilization	X	X		X
.. - Planning	X	X		X
.. - Bottlenecks	X	X		
- Settings & Operations	X	X	X	X

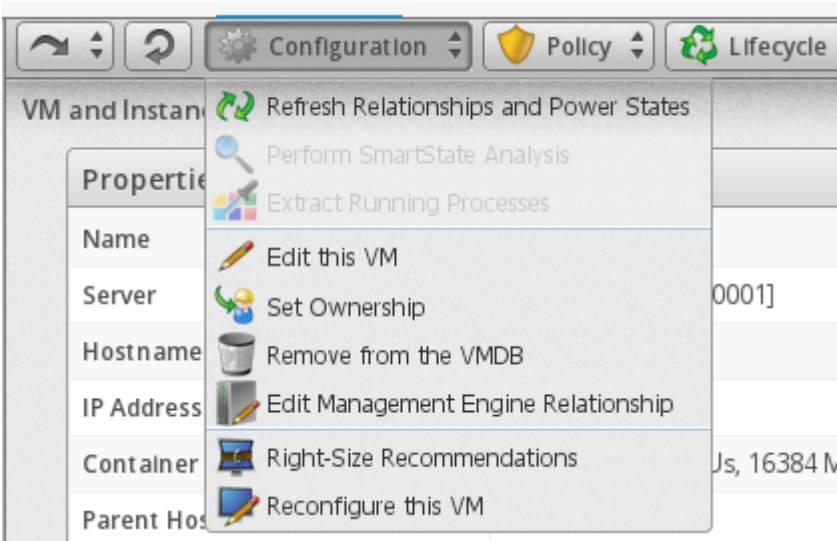
Access Type	Super Admin	Admin	Developer	Manager
.. - My Settings	X	X	X	X
... - Modify	X	X	X	X
..... - Default Filters	X	X		
..... - Default Views	X	X	X	X
..... - Time Profiles	X	X	X	X
..... - Visual	X	X	X	X
.. - Tasks	X	X		X
... - View	X	X		X
..... - All Other Tasks	X	X		
..... - All VM Analysis Tasks	X	X		
..... - Other UI Tasks	X	X		X
..... - VM Analysis Tasks	X	X		X
.. - Configuration	X	X		
... - Access Control	X	X		
... - Database	X			
... - Diagnostics	X	X		
... - Settings	X			
.. - SmartProxies	X	X		
... - View	X	X		
..... - List	X	X		
..... - Show	X	X		
... - Operate	X	X		
..... - Deploy	X	X		
... - Modify	X	X		
..... - Add	X	X		
..... - Edit	X	X		
.. - About	X	X	X	X

Note

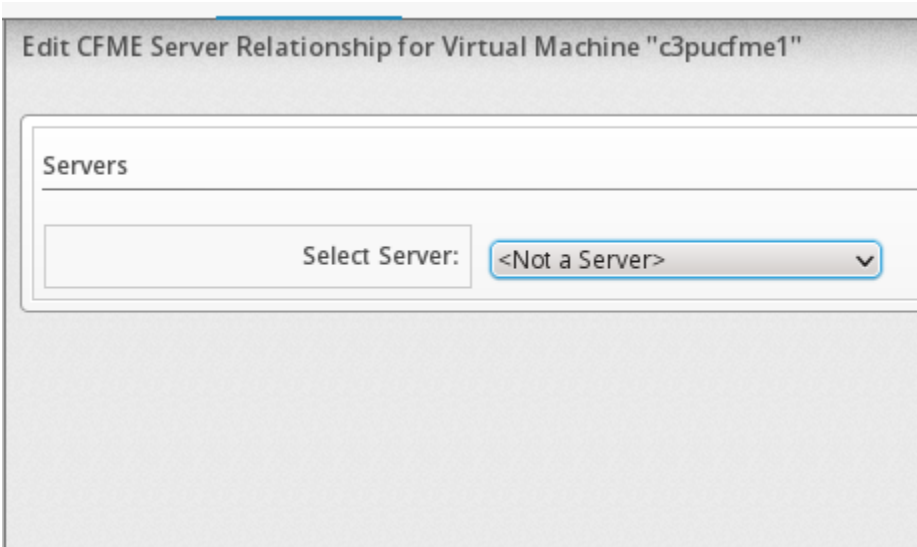
[CFME-rolematrix.xls](#) or [CFME-rolematrix.csv](#)

3.12 Associate Cloudforms Appliance as a VM within vCenter Provider

In order for Cloudforms to know which appliance is which VM to execute certain jobs it needs to be associated * Go to Infrastructure > Virtual Machines > Search for <appliance name> (i.e. c3pucfme1) > Click on VM * In the VM object view Use the VM Configuration menu > Select Edit Management Engine Relationship



- Use the drop down menu to associate the EVM appliance that matches up with this VM. (i.e. EVM100000000000001)



- Click on Save

3.13 Configure NTP Server

- Go to Configure > Configuration > Select EVM Server > Click on Server Tab > Enter NTP Information

Label	value
Servers	10.1.100.130
Servers	10.1.100.131

- Click on Save

3.14 Configure outgoing E-mail settings

To use the email action in CloudForms Management Engine, you need to set an email address that you will have the emails sent from.

Note

To be able to send any emails from the server, you must have the Notifier Server role enabled. You can test the settings without the role enabled.

Outgoing SMTP E-mail Server

Host	mailserver.domain.com
Port	25
Domain	domain.com
Start TLS Automatically	<input checked="" type="checkbox"/>
SSL Verify Mode	None
Authentication	login
User Name	admin
Password	
From E-mail Address	admin@domain.com
Test E-mail Address	testemail@domain.com

- Environment Specific Settings:

Label	value
Host	mailhost.premierinc.com
Port	25
Domain	premierinc.com
Start TLS Automatically	<NOT checked>
SSL Verify Mode	None
Authentication	none
User Name	<blank>

Label	value
Password	<blank>
From E-mail Address	cloudforms@corp.premierinc.com
Test E-mail Address	

- Use Host to specify the host name of the mail server.
- Use Port to specify the port for the mail server.
- Use Domain to specify domain name for the mail server.
- Check Start TLS Automatically if the mail server requires TLS.
- Select the appropriate SSL Verify Mode.
- Use the Authentication drop down to specify if you want to use login or plain authentication.
- Use User Name to specify the user name required for login authentication.
- Use Password to specify the password for login authentication.
- Use From Email Address to set the address you want to send the email from.
- Use To Email Address if you want to test your email settings.
- Click on Save

3.15 Register Appliance

3.15.1 Editing Customer Information

The Red Hat Updates page allows the user to edit customer information.

- To edit customer information
 - Navigate to Configure → Configuration.
 - Click on the Settings accordion, then Region, then click on the Red Hat Updates tab.
 - Click Edit Registration in the Customer Information area
 - The Customer Information area will display options to edit registration, User ID and Password.
 - * Register to field provides options for the Customer Portal, RHN Satellite v5 for Red Hat Satellite 5.x servers, and RHN Satellite v6 for Red Hat Satellite 6.x servers. If switching to RHN Satellite v5 or v6, the page will refresh and a prompt for a Server URL will be included in the Customer Information area.
 - * The HTTP Proxy area displays options to enable usage of the HTTP Proxy.
 - * The User ID and Password are the customer account details for the Customer Portal or Satellite.

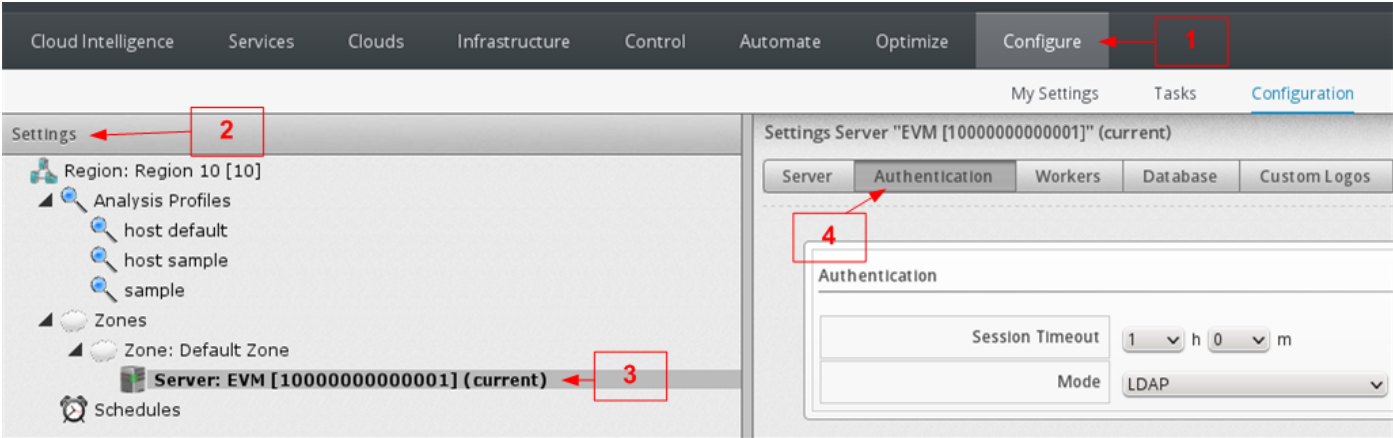
Note

Reference https://access.redhat.com/documentation/en-US/CloudForms/3.0/html/Management_Engine_5.2_Installation_Guide/-chap-Registering_and_Updating_CloudForms_Management_Engine.html

3.16 AD Integration

3.16.1 Go to the LDAP Configuration Page:

Configure > Settings > Select EVM Server > Select Authentication Tab



3.16.2 Fill out the LDAP Settings

- Set the Session Timeout and Mode

Session Timeout:	[1]h [0]m
Mode:	LDAPS

LDAP Settings

LDAP Host Names

c3picorpd5.corp.premierinc.com

LDAP Port

389

User Type

E-mail Address

User Suffix: <user>@

- Set the LDAP Settings

LDAP Host Names:	10.1.100.130 10.1.100.131
LDAP Port:	636
User Type:	User Principle Name
User Suffix: <user>@	mcip.usmc.mil

LDAP Settings	
LDAP Host Names	c3picorpd5.corp.premierinc.com
LDAP Port	389
User Type	E-mail Address
User Suffix: <user>@	

- Set the Role Settings

Get User Groups from LDAP	<Checked>
Get Roles from Home Forest	<Checked>
Follow Referrals	<Checked>
Base DN:	DC=mcip,DC=usmc,DC=mil
Bind DN:	cf.cloud.svc@mcip.usmc.mil
Bind Password:	<See MCICOM's Password list for this user>

Role Settings	
Get User Groups from LDAP	<input checked="" type="checkbox"/>
Get Roles from Home Forest	<input checked="" type="checkbox"/>
Follow Referrals	<input checked="" type="checkbox"/>
Base DN	DC=corp,DC=premierinc,DC=com
Bind DN	CN=cloudforms,OU=Privileged Accc
Bind Password
<input type="button" value="Validate"/>	

- Click [Validate]
- Click on Save button at the bottom right of the page

3.17 Add Openstack Provider

After initial installation and creation of a CloudForms Management Engine environment, add cloud providers with the following procedure.

- Navigate to Clouds → Providers.
- Click (Configuration), then click (Add a New Cloud Provider).
- Enter a Name for the provider.
- Select the OpenStack in the Provider field
- Fill out the Credentials by typing in a User ID, Password, and a verification of this password (Verify Password).
 - If editing an OpenStack provider, use the AMQP subtab to provide credentials required for the Advanced Message Queuing Protocol service on your OpenStack Nova component.
- Click Validate to validate the credentials.
- Click Add.

3.18 Add VMware Provider

After initial installation and creation of a CloudForms Management Engine environment, add providers to the appliance with the following procedure.

- Navigate to Infrastructure → Providers.
- Click (Configuration), then click (Add a New Infrastructure Provider).
- Type in the Name of the provider to add. The Name is how the device is labeled in the console.
- Select the Type of provider: VMware vCenter.
- Type in the Host Name, and IP Address of the provider to add.
- Type in a User ID and Password with administrator privileges to the provider. To refresh a provider, these credentials are required.
- Click Validate to confirm that the user and password connects.
- Click Save.

3.19 NetApp Rapid Clone

3.19.1 Login Information

Hostname	IP Address	Username	Password
netapp02a	10.2.100.19	vsc.netapp.svc	<See MCICOM's Password List>
netapp02b	10.2.100.20	vsc.netapp.svc	<See MCICOM's Password List>
netapp03a	??????????	vsc.netapp.svc	<See MCICOM's Password List>

3.19.2 NetApp Rapid Clone: Dialog_Storage_Controller Workflow

TODO: Will provide workflow when coding is complete

3.19.3 NetApp Rapid Clone: Dialog_VM_Sizing Workflow

TODO: Will provide workflow when coding is complete

3.19.4 NetApp Rapid Clone: Dialog_VM_Folder Workflow

TODO: Will provide workflow when coding is complete

3.19.5 NetApp Rapid Clone: Dialog_Clone_Source Workflow

TODO: Will provide workflow when coding is complete

3.19.6 NetApp Rapid Clone: Execute_Rapid_Clone Workflow

TODO: Will provide workflow when coding is complete

3.19.7 Infoblox Automate Overview

/MCICOM

/Integration

/RapidClone

- Instances:
 - Dialog_Storage_Controller
 - Dialog_VM_Sizing_CPU
 - Dialog_VM_Sizing_Memory
 - Execute_Rapid_Clone
 - Rapid_Clone_Email_Complete
 - Retrieve_Clone_Source
 - Retrieve_Clone_Source_Path
 - Retrieve_Customization_Specification
 - Retrieve_Datastore_List
 - Retrieve_Destination_Folder
 - Retrieve_Destination_Host
 - Retrieve_Storage_Controller
- Class Schema:

Name	Type	Data Type	Default Value	Display Name	Description	Sub	Collect	Message	On Entry	On Exit	On Error	Collect	Max Re-tries	Max Time
servername	Attribute	String	mcimgmt1.mcis.usmc.mil	[x]				create						
username	Attribute	String	MCIS\jose	[x]				create						
password	Attribute	Password		[x]				create						
controller1	Attribute	String	10.2.100.19	[x]				create						
controller2	Attribute	String	vsc.netapp.svc	[x]				create						
controller3	Attribute	Password		[x]				create						
action	Attribute	String		[x]				create						
method1	Method	String		[x]				create						
method2	Method	String		[x]				create						

3.19.8 Methods:

Dialog_Storage_Controller

```
#####
#
# EVM Automate Method: Dialog_Storage_Controller
#
# Notes: Populate Dialog_Storage_Controller
#
#####
begin
  @method = 'Dialog_Storage_Controller'
  $evm.log("info", "#{@method} - EVM Automate Method Started")

  # Turn of verbose logging
  @debug = true

  dialog_hash = { "netapp02a (Default)" => "10.2.100.19", "netapp02a" => "10.2.100.19", " ↔
    netapp02b" => "10.2.100.20", "netapp03a" => "10.2.100.21" }
  dialog_field = $evm.object
  dialog_field["sort_by"] = "none"
  dialog_field["data_type"] = "string"
  dialog_field["required"] = "true"
  dialog_field["values"] = dialog_hash
  dialog_field["default_value"] = "netapp02a"

  $evm.log("info", "==== EVM Automate Method: <#{@method}> display drop-down: #{dialog_hash. ↔
    inspect}")

  #
  # Exit method
  #
  $evm.log("info", "#{@method} - EVM Automate Method Ended")
  exit MIQ_OK

  #
  # Set Ruby rescue behavior
  #
rescue => err
  $evm.log("error", "#{@method} - [{err}]\n#{err.backtrace.join("\n")}")
  exit MIQ_ABORT
end
```

Dialog_VM_Sizing

```
#####
#
# EVM Automate Method: Dialog_VM_Sizing
#
# Notes: Populate Dialog_VM_Sizing CPU and Memory
#
#####
begin
  @method = 'Dialog_VM_Sizing'
  $evm.log("info", "#{@method} - EVM Automate Method Started")
```

```

# Turn of verbose logging
@debug = true

@action = nil
@action ||= $evm.object['action']

vm = $evm.root['vm']

@vm_memory_cpu = vm.hardware['memory_cpu']
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_memory_cpu: #{@vm_memory_cpu}")

@vm_numvcpus = vm.hardware['numvcpus']
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_numvcpus: #{@vm_numvcpus}")

case @action
when "memory"
  mem_val = 1024
  vm_mem = @vm_memory_cpu.to_i / 1024
  mem_array = []
  default_val = [nil,nil]
  mem_array << default_val
  for n in 1..16
    $evm.log("info", "==== EVM Automate Method: <#{@method}> mem_val: #{@mem_val}, ←
      mem_array: #{@mem_array}")
    val = []
    val << "#{n}"
    val << mem_val.to_i
    mem_array << val
    mem_val = mem_val.to_i + 1024
  end
  list_values = {
    'sort_by' => :none,
    'data_type' => :string,
    'required' => :true,
    'values' => mem_array
  }

  $evm.log("info", "==== EVM Automate Method: <#{@method}> display drop-down: #{@ ←
    list_values}")
  list_values.each {|k,v| $evm.object[k] = v }

when "cpu"
  cpu_array = []
  default_val = [nil,nil]
  cpu_array << default_val
  for n in 1..12
    val = []
    val << n
    val << n
    cpu_array << val
  end

  list_values = {
    'sort_by' => :none,
    'data_type' => :integer,
    'required' => :true,
    'values' => cpu_array
  }
}

```

```

$evm.log("info", "==== EVM Automate Method: <#{@method}> display drop-down: #{ ←
  list_values}")
list_values.each {|k,v| $evm.object[k] = v }

end

#
# Exit method
#
$evm.log("info", "#{@method} - EVM Automate Method Ended")
exit MIQ_OK

#
# Set Ruby rescue behavior
#
rescue => err
  $evm.log("error", "#{@method} - [{err}]\n#{err.backtrace.join("\n")}")
  exit MIQ_ABORT
end

```

Execute_Rapid_Clone

```

#####
#
# EVM Automate Method: Execute_Rapid_Clone
#
#
#
#####
begin
  @method = 'Execute_Rapid_Clone'
  $evm.log("info", "==== EVM Automate Method: <#{@method}> Started")

  #####
  # Method: dumpRoot
  # Description: Dump Root information
  #####
  def dumpRoot
    $evm.log("info", "#{@method} - Root:<$evm.root> Begin Attributes")
    $evm.root.attributes.sort.each { |k, v| $evm.log("info", "#{@method} - Root:<$evm.root> ←
      Attributes - #{k}: #{v}") }
    $evm.log("info", "#{@method} - Root:<$evm.root> End Attributes")
    $evm.log("info", "")
  end

  # dump root object attributes
  dumpRoot

  #####
  # add required gems
  #####
  require 'savon'
  require 'nokogiri'
  require 'httpclient'
  HTTPClient.adapter = :httpclient

```

```
#####
# Gather up instance object variables
#####
@servername = nil
@servername ||= $evm.object['servername']

@username = nil
@username ||= $evm.object['username']

@password = nil
@password ||= $evm.object.decrypt('password')

controller_ip = nil
controller_ip ||= $evm.object['controller_ip']

controller_username = nil
controller_username ||= $evm.object['controller_username']

controller_password = nil
controller_password ||= $evm.object.decrypt('controller_password')

@netapp_url = "https://#{@servername.to_s}:8143/kamino/public/api?wsdl"

#####
# Gather up VM object variables
#####
vm = $evm.root['vm']
@vm_name = vm.attributes['name']
@vm_location = vm.attributes['location']
@vm_vendor = vm.attributes['vendor']
@vm_host_id = vm.attributes['host_id']
@vm_ems_ref = vm.attributes['ems_ref']
@vm_type = vm.attributes['type']
@vm_storage_name = vm.storage['name']
@vm_storage_ems_ref = vm.storage['ems_ref']
@vm_v_ems_cluster_name = vm.ems_cluster_name
@vm_v_parent_blue_folder_1_name = vm.parent_blue_folder_1_name
$evm.log("info", "==== EVM Automate Method: <#{@method}> @vm_v_parent_blue_folder_1_name. ↵
inspect: #{@vm_v_parent_blue_folder_1_name.inspect}")

@vm_v_parent_blue_folder_2_name = vm.parent_blue_folder_2_name
$evm.log("info", "==== EVM Automate Method: <#{@method}> @vm_v_parent_blue_folder_2_name. ↵
inspect: #{@vm_v_parent_blue_folder_2_name.inspect}")

@vm_v_parent_blue_folder_3_name = vm.parent_blue_folder_3_name
$evm.log("info", "==== EVM Automate Method: <#{@method}> @vm_v_parent_blue_folder_3_name. ↵
inspect: #{@vm_v_parent_blue_folder_3_name.inspect}")

@vm_v_parent_blue_folder_4_name = vm.parent_blue_folder_4_name
@vm_v_parent_blue_folder_5_name = vm.parent_blue_folder_5_name
@vm_v_parent_blue_folder_6_name = vm.parent_blue_folder_6_name
@vm_v_parent_blue_folder_7_name = vm.parent_blue_folder_7_name
@vm_v_parent_blue_folder_8_name = vm.parent_blue_folder_8_name
@vm_v_owning_datacenter = vm.v_owning_datacenter
@vm_v_parent_blue_folder_9_name = vm.parent_blue_folder_9_name
@vm_v_storage_name = vm.storage_name

#####
# Method: getObjectRef
```

```

# Query the NetApp API with real object name to get VMware Object Reference Names
#####
def getObjectRef(netapp_url, servername, username, password, arg_name, arg_type)
  #####
  # Savon Configuration
  #####
  Savon.configure do |config|
    config.log = false
    config.log_level = :info
    config.pretty_print_xml = true
  end

  client = Savon::Client.new do |wsdl, http, wsse|
    wsdl.document = "#{netapp_url}"
    wsdl.endpoint = "#{netapp_url}"
    http.auth.ssl.verify_mode = :none
  end
  response = client.request "ser:getMoreRef" do
    soap.namespaces.merge!({
      "xmlns:soapenv" => "http://schemas.xmlsoap.org/soap/envelope/" ←
      "xmlns:ser" => "http://server.kamino.netapp.com/"
    })

    soap.header = {}
    soap.body = { 'arg0' => "#{arg_name}", 'arg1' => "#{arg_type}", 'arg2' => { 'serviceUrl' ←
      => "https://#{servername.to_s}/sdk", 'vcPassword' => "#{password.to_s}", 'vcUser' ←
      => "#{username.to_s}" } }
  end
  response_hash = response.to_hash[:get_more_ref_response]
  ref_obj = "#{response_hash[:return]}"
  return ref_obj
end

#####
# Method: getObjectRef
# Query the NetApp API with real object name to get VMware Object Reference Names
#####
def getVmFiles(netapp_url, servername, username, password, arg_name)
  #####
  # Savon Configuration
  #####
  Savon.configure do |config|
    config.log = false
    config.log_level = :info
    config.pretty_print_xml = true
  end

  client = Savon::Client.new do |wsdl, http, wsse|
    wsdl.document = "#{netapp_url}"
    wsdl.endpoint = "#{netapp_url}"
    http.auth.ssl.verify_mode = :none
  end
  response = client.request "ser:getVmFiles" do
    soap.namespaces.merge!({
      "xmlns:soapenv" => "http://schemas.xmlsoap.org/soap/envelope/" ←
      "xmlns:ser" => "http://server.kamino.netapp.com/"
    })

    soap.header = {}

```

```

    soap.body = { 'arg0' => "#{arg_name}", 'arg1' => { 'serviceUrl' => "https://#{servername} ←
      .to_s}/sdk", 'vcPassword' => "#{password.to_s}", 'vcUser' => "#{username.to_s}" } }
  end

  $evm.log("info", "==== EVM Automate Method: <#{@method}> response.to_hash.inspect: #{ ←
    response.to_hash.inspect}")

  response_hash = response.to_hash[:get_vm_files_response]
  $evm.log("info", "==== EVM Automate Method: <#{@method}> response_hash.inspect: #{ ←
    response_hash.inspect}")

  file_array = []
  response_hash[:return].each { |v|
    file_hash = {}
    file_hash['source_path'] = v[:source_path].to_s
    file_hash['mor'] = v[:dest_datastore_spec][:mor].to_s
    file_hash['num_datastores'] = v[:dest_datastore_spec][:num_datastores].to_s
    file_hash['storage_service'] = v[:dest_datastore_spec][:storage_service].to_s
    file_hash['thin_provision'] = v[:dest_datastore_spec][:thin_provision].to_s
    file_hash['vol_auto_grow'] = v[:dest_datastore_spec][:vol_auto_grow].to_s
    file_hash['wrapper_vol'] = v[:dest_datastore_spec][:wrapper_vol].to_s
    file_array.push(file_hash)
  }

  $evm.log("info", "==== EVM Automate Method: <#{@method}> file_array.inspect: #{file_array ←
    .inspect}")

  return file_array
end

#####
# Get Source VM Files locations
#####
@vm_files = getVmFiles(@netapp_url, @servername, @username, @password, "VirtualMachine:#{ ←
  @vm_ems_ref}")
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_files.inspect: #{@vm_files. ←
  inspect}")
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_files.class: #{@vm_files.class} ←
  ")

#####
# Get VMware object References
#####
@vm_object = getObjectRef(@netapp_url, @servername, @username, @password, "#{@vm_name}", " ←
  VirtualMachine")
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_object: #{@vm_object.inspect}")

dialog_clone_destination = getObjectRef(@netapp_url, @servername, @username, @password, "#{ ←
  @vm_v_owning_datacenter}", "Datacenter")
$evm.log("info", "==== EVM Automate Method: <#{@method}> dialog_clone_destination: #{ ←
  dialog_clone_destination}")

dialog_clone_vm_folder = getObjectRef(@netapp_url, @servername, @username, @password, " ←
  templates", "Folder")
$evm.log("info", "==== EVM Automate Method: <#{@method}> dialog_clone_destination: #{ ←
  dialog_clone_destination}")

#####

```

```

# Get vars from dialogs
#####
dialog_clone_name = $evm.root.attributes['dialog_clone_name']

if $evm.root.attributes['dialog_clone_name'] == 1
  dialog_power_on = 'true'
else
  dialog_power_on = 'false'
end

dialog_destination_folder = $evm.root.attributes['dialog_destination_folder']
dialog_vm_cpu = $evm.root.attributes['dialog_vm_cpu']
dialog_memory_size = $evm.root.attributes['dialog_memory_size']

dialog_number_of_clones = $evm.root.attributes['dialog_number_of_clones']
dialog_starting_clone_number = $evm.root.attributes['dialog_starting_clone_number']
dialog_clone_number_increment = $evm.root.attributes['dialog_clone_number_increment']

#####
# Create XML Message for the API
#####
builder = Nokogiri::XML::Builder.new do |xml|
  xml.arg0 {
    xml.cloneSpec {
      xml.containerMoref "#{dialog_clone_destination.to_s}"
    }
    xml.serviceUrl "https://#{@servername.to_s}/sdk"
    xml.vcPassword "#{@password.to_s}"
    xml.vcUser "#{@username.to_s}"
  }
end

#####
# Create Number of Clones entries
#####
count = 0
increment = dialog_starting_clone_number.to_i
while count < dialog_number_of_clones.to_i do
  if dialog_number_of_clones == 1
    clone_name = "#{dialog_clone_name.to_s}"
  else
    clone_name = "#{dialog_clone_name.to_s}#{increment.to_s}"
  end
  clones = Nokogiri::XML::Builder.new do |xml|
    xml.clones {
      xml.entry {
        xml.key "#{clone_name.to_s}"
        xml.value {
          xml.powerOn "#{dialog_power_on.to_s}"
        }
      }
    }
  end
  builder.doc.root.at('cloneSpec').add_child(clones.doc.root)
  count += 1
  increment += dialog_clone_number_increment.to_i
end

@vm_files.each { |k|

```

```

$evm.log("info", "==== EVM Automate Method: <#{@method}> @vm_files.each: #{k.inspect}")

xml_files = Nokogiri::XML::Builder.new do |xml|
  xml.files {
    xml.destDatastoreSpec {
      xml.controller {
        xml.ipAddress "#{controller_ip.to_s}"
        xml.password "#{controller_password.to_s}"
        xml.ssl "false"
        xml.username "#{controller_username.to_s}"
      }
      xml.mor "#{k['mor'].to_s}"
      xml.numDatastores k['num_datastores'].to_s
      xml.thinProvision k['thin_provision'].to_s
      xml.volAutoGrow k['vol_auto_grow'].to_s
      xml.wrapperVol k['wrapper_vol'].to_s
    }
    xml.sourcePath "#{k['source_path'].to_s}"
  }
end

# Add this files section to the the end of cloneSpec
builder.doc.root.at('cloneSpec').add_child(xml_files.doc.root)
}

unless dialog_destination_folder.nil?
  # Add Destination Folder to the the end of cloneSpec
  destVmFolderMoref = Nokogiri::XML::Builder.new do |xml|
    xml.destVmFolderMoref "Folder:#{dialog_destination_folder.to_s}"
  end
  builder.doc.root.at('cloneSpec').add_child(destVmFolderMoref.doc.root)
end

# Add numberCPU to the the end of cloneSpec
numberCPU = Nokogiri::XML::Builder.new do |xml|
  xml.numberCPU dialog_vm_cpu.to_s
end
builder.doc.root.at('cloneSpec').add_child(numberCPU.doc.root)

# Add Memory to the the end of cloneSpec
memMB = Nokogiri::XML::Builder.new do |xml|
  xml.memMB dialog_memory_size.to_s
end
builder.doc.root.at('cloneSpec').add_child(memMB.doc.root)

# Add templateMoref to the the end of cloneSpec
templateMoref = Nokogiri::XML::Builder.new do |xml|
  xml.templateMoref "#{@vm_object.to_s}"
end
builder.doc.root.at('cloneSpec').add_child(templateMoref.doc.root)

#####
# Setup client connection to API
#####
client = Savon::Client.new do |wsdl, http, wsse|
  wsdl.document = "#{@netapp_url}"
  wsdl.endpoint = "#{@netapp_url}"
  http.auth.ssl.verify_mode = :none
end

```



```
#####
# Send message to API
#####
response = client.request "ser:createClones" do
  soap.namespaces.merge!({
    "xmlns:soapenv" => "http://schemas.xmlsoap.org/soap/envelope/",
    "xmlns:ser" => "http://server.kamino.netapp.com/"
  })

  soap.header = {}
  soap.body = builder.doc.root.to_xml
end

#####
# Convert response to hash
#####
response_hash = response.to_hash
$evm.log("info", "==== EVM Automate Method: <#{@method}> #{response_hash.inspect}")

#
# Exit method
#
$evm.log("info", "==== EVM Automate Method: <#{@method}> Ended")
exit MIQ_OK

#
# Set Ruby rescue behavior
#
rescue => err
$evm.log("error", "<#{@method}>: [#{err}]\n#{err.backtrace.join("\n")}")
exit MIQ_STOP
end
```

3.20 Import Control Policies, Profiles, Alerts

- Go to Control > Import/Export
- Click on "Browse" and select the local file to upload
- Click Upload
- Next page will populate showing you all of the items that will be imported
- Click on "Commit"

Do the previous steps for each of the files in the next 3 sections.

3.20.1 Policies.yaml

Link: [Policies.yaml](#)

Source:

```
---
- MiqPolicy:
  name: 427a4378-6519-11df-b637-005056a435be
  description: ! 'Analysis: Post Provisioning'
```

```

expression:
towhat: Vm
guid: 427a4378-6519-11df-b637-005056a435be
created_by: admin
updated_by: admin
notes: This policy triggers a vm analysis of any newly provisioned VM
active: true
mode: control
MiqPolicyContent:
- qualifier: success
  success_sequence: 1
  MiqEvent:
    name: vm_provisioned
    description: VM Provision Complete
    guid: 2a17a20a-3e8e-11df-9fe2-005056a435be
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: vm_analyze
    description: Initiate SmartState Analysis for VM
    guid: 5cbel082-ce35-11de-a117-005056b0503e
    action_type: default
    options: {}
  Condition: []
- MiqPolicy:
  name: ! 'Do Not Analyze '
  description: ! 'Analysis: Prevent Analysis of Selected VMs'
  expression:
  towhat: Vm
  guid: 3a7959c0-2866-11de-af2a-0050568026c2
  created_by:
  updated_by: admin
  notes: ! 'This policies prevents analysis ofany vm that is tagged as Do Not Analyze '
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    failure_synchronous: true
    MiqEvent:
      name: request_vm_scan
      description: VM Analysis Request
      guid: e3292c46-1ele-11de-8918-0050568005db
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: prevent
      description: Prevent current event from proceeding
      guid: d885a118-519b-11e0-8d82-005056af0000
      action_type: default
      options: {}
    Condition:
  - name: Do Not Analyze
    description: VM classified as DO_NOT_ANALYZE
    modifier: allow

```

```

    expression: !ruby/object:MiqExpression
      exp:
        CONTAINS:
          tag: Vm.managed-exclusions
          value: do_not_analyze
        context_type:
      towhat: Vm
      file_mtime:
      guid: 39ff4444-08e2-11de-829f-005056a164b2
      filename:
      applies_to_exp:
      miq_policy_id: 10000000000001
      notes:
- MiqPolicy:
  name: 782068f8-44ee-11e0-99a6-00505688000a
  description: ! 'Analysis: VDI Login'
  expression:
  towhat: Vm
  guid: 782068f8-44ee-11e0-99a6-00505688000a
  created_by: admin
  updated_by: admin
  notes: This policy triggers an analysis of a VDI session when a user logs in to
    that session
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
  MiqEvent:
    name: vm_vdi_login_session
    description: VDI Login Session
    guid: 15fc3cce-448a-11e0-9ad1-00505688000a
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: vm_analyze
    description: Initiate SmartState Analysis for VM
    guid: 5cbe1082-ce35-11de-a117-005056b0503e
    action_type: default
    options: {}
  Condition: []
- MiqPolicy:
  name: 467f80ce-4808-11df-badc-005056a7121f
  description: ! 'Analysis: VM Configuration Only Profile'
  expression:
  towhat: Vm
  guid: 467f80ce-4808-11df-badc-005056a7121f
  created_by: admin
  updated_by: admin
  notes: ! 'This policy assigns an analysis profile that only gathers vm configuration
    data. Note: the specified action requires that you create an analysis profile
    that only scans vm configuration data. Once it has been created, associate it
    with the specified action'
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success

```

```

    success_sequence: 1
    MiqEvent:
      name: vm_scan_start
      description: VM Analysis Start
      guid: 057b9baa-519c-11e0-8d82-005056af0000
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: b52a86f0-4807-11df-badc-005056a7121f
      description: ! 'Profile: VM configuration only'
      guid: b52a86f0-4807-11df-badc-005056a7121f
      action_type: assign_scan_profile
      options:
        :scan_item_set_name: vm configuration only
    Condition: []
- MiqPolicy:
  name: 2f2a1a1c-4806-11df-badc-005056a7121f
  description: ! 'Analysis: VM Reconfiguration'
  expression:
  towhat: Vm
  guid: 2f2a1a1c-4806-11df-badc-005056a7121f
  created_by: admin
  updated_by: admin
  notes: Performs an analysis on any vm that has been reconfigured
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: vm_reconfigure
      description: VM Settings Change
      guid: 07367e62-449a-11de-bd4f-005056a83e5d
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: vm_analyze
      description: Initiate SmartState Analysis for VM
      guid: 5cbel082-ce35-11de-a117-005056b0503e
      action_type: default
      options: {}
    Condition: []
- MiqPolicy:
  name: d658fe5c-de2c-11e1-9088-005056af009e
  description: Collect Logged on User Info
  expression:
  towhat: Vm
  guid: d658fe5c-de2c-11e1-9088-005056af009e
  created_by: admin
  updated_by: admin
  notes:
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success

```

```

    success_sequence: 1
  MiqEvent:
    name: vm_scan_complete
    description: VM Analysis Complete
    guid: f7b8361e-1139-11e1-9333-005056af009e
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: raise_automation_event
    description: Raise Automation Event
    guid: e7da3b7a-1139-11e1-9333-005056af009e
    action_type: default
    options: {}
  Condition:
- name: ab61c97a-de2e-11e1-9088-005056af009e
  description: Check files starting with nb
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkcount:
          ! '>=':
            value: '1'
            field: <count>
        search:
          INCLUDES:
            value: nb
            field: Vm.filesystems-name
        context_type:
      towhat: Vm
      file_mtime:
    guid: ab61c97a-de2e-11e1-9088-005056af009e
    filename:
    applies_to_exp:
    miq_policy_id: 5
    notes:
- MiqPolicy:
  name: c66e6d58-d2fc-11de-b4f6-0050568a547d
  description: ! 'Configuration: Host - DMZ Fully Collapsed Advanced Settings'
  expression:
  towhat: Host
  guid: c66e6d58-d2fc-11de-b4f6-0050568a547d
  created_by: admin
  updated_by: admin
  notes: This policy verifies designated host advanced settings values to ensure
    that they meet DMZ requirements
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_scan_complete
      description: Host Analysis Complete
      guid: ffcfb368-455d-11de-86a0-005056a81f62
      event_type: Default
      definition:

```

```
default:
enabled:
MiqAction:
name: 4fffb6baa-d2e6-11de-b4f6-0050568a547d
description: Email - DMZ
guid: 4fffb6baa-d2e6-11de-b4f6-0050568a547d
action_type: email
options:
:variables:
- :value: ''
:oid: ''
:var_type: <None>
- :value: ''
:oid: ''
:var_type: <None>
- :value: ''
:oid: ''
:var_type: <None>
- :value: ''
:oid: ''
:var_type: <None>
- :value: ''
:oid: ''
:var_type: <None>
- :value: ''
:oid: ''
:var_type: <None>
- :value: ''
:oid: ''
:var_type: <None>
- :value: ''
:oid: ''
:var_type: <None>
- :value: ''
:oid: ''
:var_type: <None>
- :value: ''
:oid: ''
:var_type: <None>
:to: dmzalert@manageiq.com
Condition:
- name: 1ea32d10-d2fd-11de-b4f6-0050568a547d
description: host - dmz - advanced settings - ssl
modifier: allow
expression: !ruby/object:MiqExpression
exp:
FIND:
checkall:
=:
value: 'true'
field: Host.advanced_settings-value
search:
=:
value: Config.Defaults.security.host.ruissl
field: Host.advanced_settings-name
towhat: Host
file_mtime:
guid: 1ea32d10-d2fd-11de-b4f6-0050568a547d
filename:
```

```

    applies_to_exp:
    miq_policy_id: 10000000000013
    notes:
- MiqPolicy:
  name: 8a8f247a-480a-11df-badc-005056a7121f
  description: ! 'Configuration: VM - CPU Reservation > 500Mhz'
  expression:
  towhat: Vm
  guid: 8a8f247a-480a-11df-badc-005056a7121f
  created_by: admin
  updated_by: admin
  notes: Sends an email if CPU reservation is set to a value greater than 500Mhz
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: vm_scan_complete
      description: VM Analysis Complete
      guid: f7b8361e-1139-11e1-9333-005056af009e
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: 5189755e-480a-11df-badc-005056a7121f
      description: Alert - CPU Reservation > 500Mhz
      guid: 5189755e-480a-11df-badc-005056a7121f
      action_type: evaluate_alerts
      options:
        :alert_guids:
        - ca26a9c6-4802-11df-badc-005056a7121f
      Condition: []
- MiqPolicy:
  name: 6adebf82-d2e4-11de-b4f6-0050568a547d
  description: ! 'Configuration: VM - DMZ Fully Collapsed Network'
  expression:
  towhat: Vm
  guid: 6adebf82-d2e4-11de-b4f6-0050568a547d
  created_by: admin
  updated_by: admin
  notes: ! 'created by: Rod Moore

  purpose: validates vm vlan configuration'
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: vm_reconfigure
      description: VM Settings Change
      guid: 07367e62-449a-11de-bd4f-005056a83e5d
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:

```

```
name: 4ffb6baa-d2e6-11de-b4f6-0050568a547d
description: Email - DMZ
guid: 4ffb6baa-d2e6-11de-b4f6-0050568a547d
action_type: email
options:
  :variables:
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
  :to: dmzalert@manageiq.com
- qualifier: failure
failure_sequence: 2
MiqEvent:
  name: vm_reconfigure
  description: VM Settings Change
  guid: 07367e62-449a-11de-bd4f-005056a83e5d
  event_type: Default
  definition:
    default:
    enabled:
MiqAction:
  name: vm_shutdown_guest
  description: Shutdown Virtual Machine Guest OS
  guid: 26b84380-bbd5-11de-aaab-0050568a2c6a
  action_type: default
  options: {}
- qualifier: failure
failure_sequence: 1
MiqEvent:
  name: vm_migrate
  description: VM Live Migration (VMOTION)
  guid: 07500602-449a-11de-bd4f-005056a83e5d
```


[illegible]

```

    description: Shutdown Virtual Machine Guest OS
    guid: 26b84380-bbd5-11de-aaab-0050568a2c6a
    action_type: default
    options: {}
Condition:
- name: 278843f0-d2e6-11de-b4f6-0050568a547d
  description: vm - vlan - webserver
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      and:
        - FIND:
            checkany:
              IS NOT NULL:
                field: Vm.lans-created_on
            search:
              INCLUDES:
                value: External
                field: Vm.lans-name
        - CONTAINS:
            tag: Vm.managed-function
            value: web_server
      towhat: Vm
      file_mtime:
        guid: 278843f0-d2e6-11de-b4f6-0050568a547d
        filename:
        applies_to_exp:
        miq_policy_id: 10000000000015
      notes:
- MiqPolicy:
    name: 39fbf6bc-d2fa-11de-b4f6-0050568a547d
    description: ! 'Configuration: VM - DMZ Fully Collapsed Windows Services'
    expression:
    towhat: Vm
    guid: 39fbf6bc-d2fa-11de-b4f6-0050568a547d
    created_by: admin
    updated_by: admin
    notes: This policies verifies that certain services are disabled on DMZ vms
    active: true
    mode: control
    MiqPolicyContent:
      - qualifier: failure
        failure_sequence: 1
        MiqEvent:
          name: vm_reconfigure
          description: VM Settings Change
          guid: 07367e62-449a-11de-bd4f-005056a83e5d
          event_type: Default
          definition:
            default:
            enabled:
        MiqAction:
          name: 4fffb6baa-d2e6-11de-b4f6-0050568a547d
          description: Email - DMZ
          guid: 4fffb6baa-d2e6-11de-b4f6-0050568a547d
          action_type: email
          options:
            :variables:
            - :value: ''

```

```

      :oid: ''
      :var_type: <None>
-   :value: ''
      :oid: ''
      :var_type: <None>
-   :value: ''
      :oid: ''
      :var_type: <None>
-   :value: ''
      :oid: ''
      :var_type: <None>
-   :value: ''
      :oid: ''
      :var_type: <None>
-   :value: ''
      :oid: ''
      :var_type: <None>
-   :value: ''
      :oid: ''
      :var_type: <None>
      :to: dmzalert@manageiq.com
-   qualifier: failure
      failure_sequence: 2
      MiqEvent:
        name: vm_reconfigure
        description: VM Settings Change
        guid: 07367e62-449a-11de-bd4f-005056a83e5d
        event_type: Default
        definition:
          default:
            enabled:
      MiqAction:
        name: vm_shutdown_guest
        description: Shutdown Virtual Machine Guest OS
        guid: 26b84380-bbd5-11de-aaab-0050568a2c6a
        action_type: default
        options: {}
-   qualifier: failure
      failure_sequence: 1
      MiqEvent:
        name: vm_migrate
        description: VM Live Migration (VMOTION)
        guid: 07500602-449a-11de-bd4f-005056a83e5d
        event_type: Default
        definition:
          default:
            enabled:
      MiqAction:
        name: 4ffb6baa-d2e6-11de-b4f6-0050568a547d
        description: Email - DMZ

```

[illegible]

```
default:  
enabled:  
MiqAction:  
name: 4ffb6baa-d2e6-11de-b4f6-0050568a547d  
description: Email - DMZ  
guid: 4ffb6baa-d2e6-11de-b4f6-0050568a547d  
action_type: email  
options:  
  :variables:  
    - :value: ''  
      :oid: ''  
      :var_type: <None>  
    - :value: ''  
      :oid: ''  
      :var_type: <None>  
    - :value: ''  
      :oid: ''  
      :var_type: <None>  
    - :value: ''  
      :oid: ''  
      :var_type: <None>  
    - :value: ''  
      :oid: ''  
      :var_type: <None>  
    - :value: ''  
      :oid: ''  
      :var_type: <None>  
    - :value: ''  
      :oid: ''  
      :var_type: <None>  
    - :value: ''  
      :oid: ''  
      :var_type: <None>  
    - :value: ''  
      :oid: ''  
      :var_type: <None>  
    - :value: ''  
      :oid: ''  
      :var_type: <None>  
    - :value: ''  
      :oid: ''  
      :var_type: <None>  
  :to: dmzalert@manageiq.com  
- qualifier: failure  
failure_sequence: 2  
MiqEvent:  
name: assigned_company_tag  
description: Tag Complete  
guid: e384ecb6-1ele-11de-8918-0050568005db  
event_type: Default  
definition:  
default:  
enabled:  
MiqAction:  
name: vm_shutdown_guest  
description: Shutdown Virtual Machine Guest OS  
guid: 26b84380-bbd5-11de-aaab-0050568a2c6a  
action_type: default  
options: {}  
Condition:  
- name: ed4daf4e-d2fa-11de-b4f6-0050568a547d  
description: dmz - windows alerter - disabled
```

```

    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        =:
          regkey: HKLM\SYSTEM\CurrentControlSet\Services\Alerter
          regval: Start
          value: 4
    towhat: Vm
    file_mtime:
    guid: ed4daf4e-d2fa-11de-b4f6-0050568a547d
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000016
    notes:
  - name: 469a8766-d2fb-11de-b4f6-0050568a547d
    description: dmz - windows messenger - disabled
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        =:
          regkey: HKLM\SYSTEM\CurrentControlSet\Services\Messenger
          regval: Start
          value: 4
    towhat: Vm
    file_mtime:
    guid: 469a8766-d2fb-11de-b4f6-0050568a547d
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000016
    notes:
  - name: 7f648a84-d2fa-11de-b4f6-0050568a547d
    description: dmz - windows automatic update - disabled
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        =:
          regkey: HKLM\SYSTEM\CurrentControlSet\Services\wuauserv
          regval: Start
          value: 4
    towhat: Vm
    file_mtime:
    guid: 7f648a84-d2fa-11de-b4f6-0050568a547d
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000016
    notes:
- MiqPolicy:
  name: de3af0f2-d2f0-11de-b4f6-0050568a547d
  description: ! 'Configuration: VM - Internal Network'
  expression:
  towhat: Vm
  guid: de3af0f2-d2f0-11de-b4f6-0050568a547d
  created_by: admin
  updated_by: admin
  notes: This policy shutdown application or database vms that are incorrectly configured
    to access the dmz network
  active: true
  mode: control
  MiqPolicyContent:

```

[illegible]

[illegible]


```

failure_sequence: 2
MiqEvent:
  name: assigned_company_tag
  description: Tag Complete
  guid: e384ecb6-1e1e-11de-8918-0050568005db
  event_type: Default
  definition:
    default:
    enabled:
MiqAction:
  name: vm_shutdown_guest
  description: Shutdown Virtual Machine Guest OS
  guid: 26b84380-bbd5-11de-aaab-0050568a2c6a
  action_type: default
  options: {}
Condition:
- name: 020dd9c2-d2f1-11de-b4f6-0050568a547d
  description: vm - internal vlan check
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      and:
        - FIND:
            checkany:
              IS NOT NULL:
                field: Vm.lans-created_on
            search:
              INCLUDES:
                value: Internal
                field: Vm.lans-name
        - or:
          - CONTAINS:
              tag: Vm.managed-function
              value: application_servers
          - CONTAINS:
              tag: Vm.managed-function
              value: database
    towhat: Vm
    file_mtime:
    guid: 020dd9c2-d2f1-11de-b4f6-0050568a547d
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000014
    notes:
- MiqPolicy:
  name: 56c4d50e-3069-11de-971a-005056a12545
  description: DISA ESX Server STIG - ESX1170 requires IAO/SA to remove or disable
    all unused hardware on VM
  expression:
  towhat: Vm
  guid: 56c4d50e-3069-11de-971a-005056a12545
  created_by:
  updated_by:
  notes:
  active: true
  mode: control
  MiqPolicyContent: []
  Condition:
  - name: 627379ac-3067-11de-971a-005056a12545

```

```

description: ! 'ESX1170: CAT II - Guest OS remove all unused hardware'
modifier: allow
expression: !ruby/object:MiqExpression
  exp:
    and:
      - FIND:
          checkcount:
            =:
              value: 0
              field: <count>
          search:
            INCLUDES:
              value: floppy
              field: Vm.hardware.disks-device_type
      - FIND:
          checkcount:
            =:
              value: 0
              field: <count>
          search:
            INCLUDES:
              value: cdrom
              field: Vm.hardware.disks-device_type
  towhat: Vm
  file_mtime:
  guid: 627379ac-3067-11de-971a-005056a12545
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000010
  notes:
- MiqPolicy:
  name: 69b1559e-3068-11de-971a-005056a12545
  description: DISA ESX Server STIG requires that the Virtual Machine Administrator
    be responsible for the following
  expression:
  towhat: Vm
  guid: 69b1559e-3068-11de-971a-005056a12545
  created_by:
  updated_by:
  notes:
  active: true
  mode: control
  MiqPolicyContent: []
  Condition:
  - name: ed826874-3066-11de-971a-005056a12545
    description: ! 'ESX1030: CAT II - Test and Development VMs must be seperated
      from Production VMs'
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        and:
          - FIND:
              checkcount:
                ! '>=':
                  value: 1
                  field: <count>
              search:
                STARTS WITH:
                  value: '192.168'

```

```

        field: Vm.hardware.networks-ipaddress
      - CONTAINS:
        tag: Vm.managed-environment
        value: prod
    towhat: Vm
    file_mtime:
    guid: ed826874-3066-11de-971a-005056a12545
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000011
    notes:
  - name: 28e35e32-3067-11de-971a-005056a12545
    description: ! 'ESX0940: CAT II - prevent use of nonpersistent disk mode'
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkcount:
            =:
              value: 0
              field: <count>
          search:
            INCLUDES:
              value: nonpersistent
              field: Vm.hardware.disks-mode
    towhat: Vm
    file_mtime:
    guid: 28e35e32-3067-11de-971a-005056a12545
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000011
    notes:
- MiqPolicy:
  name: de9aa7ec-3069-11de-971a-005056a12545
  description: DISA Information Assurance Vulnerability Alert - MS08-67
  expression:
  towhat: Vm
  guid: de9aa7ec-3069-11de-971a-005056a12545
  created_by:
  updated_by:
  notes:
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
  MiqEvent:
    name: vm_start
    description: VM Power On
    guid: 404b4630-21a8-11e2-b47a-0050568b19a3
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: vm_stop
    description: Stop Virtual Machine
    guid: 37f2da3e-21a8-11e2-b47a-0050568b19a3
    action_type: default

```

```

    options: {}
Condition:
- name: 7e492e4c-3067-11de-971a-005056a12545
  description: IAVA - MS08-067 for Windows 2000 Service Pack 4
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      and:
        - FIND:
            checkall:
              STARTS WITH:
                value: 5.00.2195.7203
                field: Vm.filesystems-file_version
            search:
              =:
                value: c:/winnt/system32/netapi32.dll
                field: Vm.filesystems-name
        - KEY EXISTS:
            regkey: HKLM\SOFTWARE\Microsoft\Updates\Windows 2000\SP5\KB958644\Filelist
towhat: Vm
file_mtime:
guid: 7e492e4c-3067-11de-971a-005056a12545
filename:
applies_to_exp: !ruby/object:MiqExpression
  exp:
    and:
      - STARTS WITH:
          value: Microsoft Windows 2000
          field: Vm.operating_system-product_name
      - =:
          value: Service Pack 4
          field: Vm.operating_system-service_pack
miq_policy_id: 10000000000012
notes:
- name: 8b0d83d0-3067-11de-971a-005056a12545
  description: IAVA - MS08-067 for Windows Server 2003 Service Pack 1 & 2
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      or:
        - and:
            - =:
                value: Service Pack 1
                field: Vm.operating_system-service_pack
            - FIND:
                checkall:
                  STARTS WITH:
                    value: 5.2.3790.3229
                    field: Vm.filesystems-file_version
                search:
                  =:
                    value: c:/windows/system32/netapi32.dll
                    field: Vm.filesystems-name
        - and:
            - =:
                value: Service Pack 2
                field: Vm.operating_system-service_pack
            - FIND:
                checkall:

```

```

      STARTS WITH:
        value: 5.2.3790.4392
        field: Vm.filesystems-file_version
    search:
      =:
        value: c:/windows/system32/netapi32.dll
        field: Vm.filesystems-name
  towhat: Vm
  file_mtime:
  guid: 8b0d83d0-3067-11de-971a-005056a12545
  filename:
  applies_to_exp: !ruby/object:MiqExpression
    exp:
      and:
        - STARTS WITH:
            value: Microsoft Windows Server 2003
            field: Vm.operating_system-product_name
        - or:
            - =:
                value: Service Pack 1
                field: Vm.operating_system-service_pack
            - =:
                value: Service Pack 2
                field: Vm.operating_system-service_pack
  miq_policy_id: 10000000000012
  notes:
- name: 9482beb2-3067-11de-971a-005056a12545
  description: IAVA - MS08-067 for Windows XP Service Pack 2 & 3
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      and:
        - FIND:
            checkall:
              STARTS WITH:
                value: 5.1.2600.3462
                field: Vm.filesystems-file_version
            search:
              =:
                value: c:/windows/system32/netapi32.dll
                field: Vm.filesystems-name
        - KEY EXISTS:
            regkey: HKLM\SOFTWARE\Microsoft\Updates\Windows XP\SP4\KB958644\Filelist
  towhat: Vm
  file_mtime:
  guid: 9482beb2-3067-11de-971a-005056a12545
  filename:
  applies_to_exp: !ruby/object:MiqExpression
    exp:
      and:
        - STARTS WITH:
            value: Microsoft Windows XP
            field: Vm.operating_system-product_name
        - or:
            - =:
                value: Service Pack 2
                field: Vm.operating_system-service_pack
            - =:
                value: Service Pack 3

```

```

      field: Vm.operating_system-service_pack
      miq_policy_id: 10000000000012
      notes:
- MiqPolicy:
  name: 69fbd202-8ba3-11e0-b8fc-005056a40e59
  description: DMZ - Shutdown VM after Analysis if it has more than 1 NIC
  expression: !ruby/object:MiqExpression
  exp:
    =:
      value: 'on'
      field: Vm-power_state
  context_type:
  towhat: Vm
  guid: 69fbd202-8ba3-11e0-b8fc-005056a40e59
  created_by: admin
  updated_by: admin
  notes:
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: vm_scan_complete
      description: VM Analysis Complete
      guid: f7b8361e-1139-11e1-9333-005056af009e
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: vm_shutdown_guest
      description: Shutdown Virtual Machine Guest OS
      guid: 26b84380-bbd5-11de-aaab-0050568a2c6a
      action_type: default
      options: {}
  - qualifier: success
    success_sequence: 2
    MiqEvent:
      name: vm_scan_complete
      description: VM Analysis Complete
      guid: f7b8361e-1139-11e1-9333-005056af009e
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: evm_event
      description: Show EVM Event on Timeline
      guid: 16b1810c-44e8-11e0-acda-005056a40e59
      action_type: default
      options: {}
  Condition:
  - name: efcf3702-8b9e-11e0-b8fc-005056a40e59
    description: DMZ - VM has more than 1 NIC
    modifier: allow
    expression: !ruby/object:MiqExpression
    exp:
      ! '>':

```



```

        count: Vm.hardware.nics
        value: '1'
        context_type:
        towhat: Vm
        file_mtime:
        guid: efcf3702-8b9e-11e0-b8fc-005056a40e59
        filename:
        applies_to_exp:
        miq_policy_id: 100000000000077
        notes:
- MiqPolicy:
  name: 0de66508-8b9f-11e0-b8fc-005056a40e59
  description: DMZ - Shutdown VM after Starting if it has more than 1 NIC
  expression:
  towhat: Vm
  guid: 0de66508-8b9f-11e0-b8fc-005056a40e59
  created_by: admin
  updated_by: admin
  notes:
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: vm_start
      description: VM Power On
      guid: 404b4630-21a8-11e2-b47a-0050568b19a3
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: vm_stop
      description: Stop Virtual Machine
      guid: 37f2da3e-21a8-11e2-b47a-0050568b19a3
      action_type: default
      options: {}
  - qualifier: success
    success_sequence: 2
    MiqEvent:
      name: vm_start
      description: VM Power On
      guid: 404b4630-21a8-11e2-b47a-0050568b19a3
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: evm_event
      description: Show EVM Event on Timeline
      guid: 16b1810c-44e8-11e0-acda-005056a40e59
      action_type: default
      options: {}
  - qualifier: success
    success_sequence: 3
    MiqEvent:
      name: vm_start
      description: VM Power On

```

```

    guid: 404b4630-21a8-11e2-b47a-0050568b19a3
    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: d91bbabc-b0be-11e1-b0dc-005056b057a8
    description: ! 'VM Attribute: Allowed NIC Count Exceeded'
    guid: d91bbabc-b0be-11e1-b0dc-005056b057a8
    action_type: set_custom_attribute
    options:
      :attribute: EVM Policy
      :value: Allowed NIC Limit Exceeded
  Condition:
- name: efcf3702-8b9e-11e0-b8fc-005056a40e59
  description: DMZ - VM has more than 1 NIC
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      ! '>':
        count: Vm.hardware.nics
        value: '1'
    context_type:
  towhat: Vm
  file_mtime:
  guid: efcf3702-8b9e-11e0-b8fc-005056a40e59
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000077
  notes:
- MiqPolicy:
  name: 0f2cc826-fa4b-11de-83ca-005056ba0614
  description: Directory Service Used for Authentication for sudo
  expression:
  towhat: Host
  guid: 0f2cc826-fa4b-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that sudo is configured to use a directory for user
    authentication.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}

```

```

Condition:
- name: 684b2a60-fa4b-11de-83ca-005056ba0614
  description: Directory Service used for sudo authentication
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          REGULAR EXPRESSION MATCHES:
            value: ^\s*auth\s+required\s+.*pam_stack\.so\s+service=system-auth
            field: Host.filesystems-contents
        search:
          =:
            value: /etc/pam.d/sudo
            field: Host.filesystems-name
        towhat: Host
        file_mtime:
        guid: 684b2a60-fa4b-11de-83ca-005056ba0614
        filename:
        applies_to_exp:
        miq_policy_id: 100000000000053
        notes: ! 'This condition verifies that the line "auth required pam_stack.so
          service=system-auth" exists in /etc/pam.d/sudo. '
- MiqPolicy:
  name: 1c4c7772-a7fb-11e0-abed-005056af0000
  description: Do Not Analyze Active VDI VMs
  expression:
  towhat: Vm
  guid: 1c4c7772-a7fb-11e0-abed-005056af0000
  created_by: admin
  updated_by: admin
  notes: This policy prevents analysis of a vm that has an active user session
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: vm_scan_start
      description: VM Analysis Start
      guid: 057b9baa-519c-11e0-8d82-005056af0000
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: prevent
      description: Prevent current event from proceeding
      guid: d885a118-519b-11e0-8d82-005056af0000
      action_type: default
      options: {}
  Condition:
  - name: 0a50f750-a7fb-11e0-abed-005056af0000
    description: VM has an active session
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        =:
          value: 'true'

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      field: Vm-has_active_vdi_session
      context_type:
      towhat: Vm
      file_mtime:
      guid: 0a50f750-a7fb-11e0-abed-005056af0000
      filename:
      applies_to_exp:
      miq_policy_id: 10000000000007
      notes:
- MiqPolicy:
  name: af2d74ea-fa39-11de-83ca-005056ba0614
  description: Firewall - Incoming Security Level
  expression:
  towhat: Host
  guid: af2d74ea-fa39-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that only a defined set of incoming TCP and UDP Ports
    are open.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: b4a0843a-fa43-11de-83ca-005056ba0614
    description: Valid Incoming UDP Ports
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        LIMITED TO:
          value: '427'
          field: Host-enabled_udp_inbound_ports
    towhat: Host
    file_mtime:
    guid: b4a0843a-fa43-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000021
    notes: This condition verifies that the only open incoming UDP port is 427.
  - name: 03529e9e-f961-11de-9e9d-0050568a07c7
    description: Valid Incoming TCP Ports
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:

```

```

    LIMITED TO:
      value: '902,80,443,427,5989,22,5988'
      field: Host-enabled_tcp_inbound_ports
    towhat: Host
    file_mtime:
    guid: 03529e9e-f961-11de-9e9d-0050568a07c7
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000021
    notes: This condition verifies that the only open incoming TCP ports are ↔
      22,80,427,443,902,5988,and
      5989.
- MiqPolicy:
  name: edaf1082-fa54-11de-83ca-005056ba0614
  description: Firewall - Outgoing NTP Port
  expression:
  towhat: Host
  guid: edaf1082-fa54-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy validates that the Firewall is configured properly for NTP
    support.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
  - name: 1cb7f0ba-fa55-11de-83ca-005056ba0614
    description: Valid NTP Outgoing UDP Port
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        INCLUDES ANY:
          value: '123'
          field: Host-enabled_udp_outbound_ports
    towhat: Host
    file_mtime:
    guid: 1cb7f0ba-fa55-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000052
    notes: This condition verifies that the outgoing UDP port required by NTP (port
      123) is open.
- MiqPolicy:

```

```

name: 04db603c-fa3a-11de-83ca-005056ba0614
description: Firewall - Outgoing Security Level
expression:
towhat: Host
guid: 04db603c-fa3a-11de-83ca-005056ba0614
created_by: admin
updated_by: admin
notes: This policy verifies that only a defined set of outgoing TCP and UDP Ports
      are open.
active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
        enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: f0afd7d6-fa3a-11de-83ca-005056ba0614
  description: Valid Outgoing TCP Ports
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      LIMITED TO:
        value: '902,427,443,27000,27010'
        field: Host-enabled_tcp_outbound_ports
  towhat: Host
  file_mtime:
  guid: f0afd7d6-fa3a-11de-83ca-005056ba0614
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000020
  notes: This condition verifies that the only open outgoing TCP ports are ↔
        427,443,902,27000,
        and 27010.
- name: 1778fb28-fa44-11de-83ca-005056ba0614
  description: Valid Outgoing UDP Ports
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      LIMITED TO:
        value: '427,123,902'
        field: Host-enabled_udp_outbound_ports
  towhat: Host
  file_mtime:
  guid: 1778fb28-fa44-11de-83ca-005056ba0614
  filename:
  applies_to_exp:

```

```

    miq_policy_id: 10000000000020
    notes: This condition verifies that the only open outgoing UDP ports are 123,427,
           and 902.
- MiqPolicy:
  name: 2d6bfc2c-fa3b-11de-83ca-005056ba0614
  description: Limit Log Size
  expression:
  towhat: Vm
  guid: 2d6bfc2c-fa3b-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes:
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: vm_compliance_check
      description: VM Compliance Check
      guid: 816a598a-f57d-11de-a41a-005056ba0614
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: 8b9cf076-fa3b-11de-83ca-005056ba0614
    description: Log Size Limit <= 100KB
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkall:
            <=:
              value: '100000'
              field: Vm.advanced_settings-value
          search:
            =:
              value: log.rotateSize
              field: Vm.advanced_settings-name
    towhat: Vm
    file_mtime:
    guid: 8b9cf076-fa3b-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000061
    notes:
- MiqPolicy:
  name: f1af8b44-fa3b-11de-83ca-005056ba0614
  description: Limit Number of Log Files
  expression:
  towhat: Vm
  guid: f1af8b44-fa3b-11de-83ca-005056ba0614

```

```

created_by: admin
updated_by: admin
notes:
active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: vm_compliance_check
    description: VM Compliance Check
    guid: 816a598a-f57d-11de-a41a-005056ba0614
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: f2ad72ac-fa3d-11de-83ca-005056ba0614
  description: Number of Log Files to Keep <= 10
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkall:
          <=:
            value: '10'
            field: Vm.advanced_settings-value
        search:
          =:
            value: log.keepOld
            field: Vm.advanced_settings-name
      towhat: Vm
      file_mtime:
      guid: f2ad72ac-fa3d-11de-83ca-005056ba0614
      filename:
      applies_to_exp:
      miq_policy_id: 10000000000060
      notes:
- MiqPolicy:
  name: 2cd1b736-fa52-11de-83ca-005056ba0614
  description: Limit Software and Services Running in Service Console
  expression:
  towhat: Host
  guid: 2cd1b736-fa52-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy validates that only an approved list of services are enabled
    at boot time on an ESX host.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1

```



```

MiqEvent:
  name: host_compliance_check
  description: Host Compliance Check
  guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
  event_type: Default
  definition:
    default:
    enabled:
MiqAction:
  name: compliance_failed
  description: Mark as Non-Compliant
  guid: ba452d94-f586-11de-8ebc-0050568a07c7
  action_type: default
  options: {}
Condition:
- name: c4c80bfa-fa55-11de-83ca-005056ba0614
  description: Default Services Running in Service Console
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      LIMITED TO:
        value: crond, firewall, gpm, ipmi, irqbalance, mgmt-vmware, microcode_ctl,
          mptctlnode, network, ntpd, pegasus, portmap, random, rawdevices, sshd,
          syslog, vmware, vmware-autostart, vmware-late, vmware-vmkauthd, vmware-vpxa,
          vmware-webAccess, wsman, xinetd
        field: Host-enabled_run_level_3_services
  towhat: Host
  file_mtime:
  guid: c4c80bfa-fa55-11de-83ca-005056ba0614
  filename:
  applies_to_exp:
  miq_policy_id: 100000000000051
  notes: This conditions validates that a defined list of services are enabled
    with the ESX host is booted with networking support (run level 3). This list
    includes the generic services included in ESX. Additional hardware specific
    services can be added to the expression.
- MiqPolicy:
  name: 8cecc84c-fa46-11de-83ca-005056ba0614
  description: Limit su Access to root Account
  expression:
  towhat: Host
  guid: 8cecc84c-fa46-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy validates that only members of the group wheel can access the
    su command.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:

```

```

    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: 63b243fc-fa47-11de-83ca-005056ba0614
    description: Only members of wheel group can execute su command
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkany:
            REGULAR EXPRESSION MATCHES:
              value: ^\s*auth\s+required\s+.*pam_wheel\.so\s+use_uid
              field: Host.filesystems-contents
          search:
            =:
              value: /etc/pam.d/su
              field: Host.filesystems-name
        towhat: Host
        file_mtime:
        guid: 63b243fc-fa47-11de-83ca-005056ba0614
        filename:
        applies_to_exp:
        miq_policy_id: 10000000000050
        notes: This condition validates that the file /etc/pam.d/su contains a variation
              of the string "auth required pam_wheel.so use_uid".
- MiqPolicy:
  name: c79821fa-fa53-11de-83ca-005056ba0614
  description: Limit vmkernel Size
  expression:
  towhat: Host
  guid: c79821fa-fa53-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy checks the vmkernel log is limited to a specified size.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: be9722e0-fa53-11de-83ca-005056ba0614

```

```

description: vmkernel Log Size <= 4096KB
modifier: allow
expression: !ruby/object:MiqExpression
  exp:
    FIND:
      checkany:
        REGULAR EXPRESSION MATCHES:
          value: ^\s*size\s+(409[0-6]|40[0-8][0-9]|[123][0-9]{3}|\d{1,3})k
          field: Host.filesystems-contents
        search:
          =:
            value: /etc/logrotate.d/vmkernel
            field: Host.filesystems-name
      towhat: Host
      file_mtime:
      guid: be9722e0-fa53-11de-83ca-005056ba0614
      filename:
      applies_to_exp:
      miq_policy_id: 10000000000049
      notes: This condition verifies that the file /etc/logrotate.d/vmkernel is configured
        to limit the associated log to 4096KB.
- MiqPolicy:
  name: fc63df74-fa52-11de-83ca-005056ba0614
  description: Limit vmksummary Size
  expression:
  towhat: Host
  guid: fc63df74-fa52-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy checks the vmksummary log is limited to a specified size.
  active: true
  mode: compliance
  MiqPolicyContent:
    - qualifier: failure
      failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
    - name: def33840-fa52-11de-83ca-005056ba0614
      description: vmksummary Log Size <= 4096KB
      modifier: allow
      expression: !ruby/object:MiqExpression
        exp:
          FIND:
            checkany:
              REGULAR EXPRESSION MATCHES:
                value: ^\s*size\s+(409[0-6]|40[0-8][0-9]|[123][0-9]{3}|\d{1,3})k

```

```

        field: Host.filesystems-contents
      search:
        =:
          value: /etc/logrotate.d/vmksummary
          field: Host.filesystems-name
    towhat: Host
    file_mtime:
    guid: def33840-fa52-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000056
    notes: This condition verifies that the file /etc/logrotate.d/vmksummary is
           configured to limit the associated log to 4096KB.
- MiqPolicy:
  name: 79548666-fa51-11de-83ca-005056ba0614
  description: Limit vmkwarning Size
  expression:
  towhat: Host
  guid: 79548666-fa51-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy checks the vmkwarning log is limited to a specified size.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: 14d35e46-fa52-11de-83ca-005056ba0614
    description: vmkwarning Log Size <= 4096KB
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkany:
            REGULAR EXPRESSION MATCHES:
              value: ^\s*size\s+(409[0-6]|40[0-8][0-9]|123[0-9]{3}|\d{1,3})k
              field: Host.filesystems-contents
            search:
              =:
                value: /etc/logrotate.d/vmkwarning
                field: Host.filesystems-name
          towhat: Host
          file_mtime:
          guid: 14d35e46-fa52-11de-83ca-005056ba0614

```

```
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000048
    notes: This condition verifies that the file /etc/logrotate.d/vmkwarning is
           configured to limit the associated log to 4096KB.
- MiqPolicy:
  name: b218c83c-c01c-11e3-b785-001a4a0f459e
  description: MyNew VM Control Policy
  expression:
  towhat: Vm
  guid: b218c83c-c01c-11e3-b785-001a4a0f459e
  created_by: admin
  updated_by: admin
  notes:
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    success_synchronous: true
  MiqEvent:
    name: vm_retired
    description: VM Retired
    guid: e363d8aa-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: raise_automation_event
    description: Raise Automation Event
    guid: e7da3b7a-1139-11e1-9333-005056af009e
    action_type: default
    options: {}
  Condition: []
- MiqPolicy:
  name: 61b355f2-fee1-11de-83dd-005056ba5e76
  description: Network - Forged Transmits Must Be Disabled
  expression:
  towhat: Host
  guid: 61b355f2-fee1-11de-83dd-005056ba5e76
  created_by: admin
  updated_by: admin
  notes: This policy insures that forged transmits are disabled on both vLans and
        vSwitches.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
```

```

    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: f246e3e0-fee1-11de-83dd-005056ba5e76
  description: Forged Transmits Disabled in vLan
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      not:
        CONTAINS:
          value: 'false'
          field: Host.lans-forged_transmits
  towhat: Host
  file_mtime:
  guid: f246e3e0-fee1-11de-83dd-005056ba5e76
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000022
  notes: This condition verifies that forged transmits are disabled on vlans.
- name: a3ac5774-fee1-11de-83dd-005056ba5e76
  description: Forged Transmits Disabled in vSwitch
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      not:
        CONTAINS:
          value: 'false'
          field: Host.switches-forged_transmits
  towhat: Host
  file_mtime:
  guid: a3ac5774-fee1-11de-83dd-005056ba5e76
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000022
  notes: This condition verifies that forged transmits are disabled on vSwitches.
- MiqPolicy:
  name: de683aa6-fedf-11de-83dd-005056ba5e76
  description: Network - Mac Changes not Allowed
  expression:
  towhat: Host
  guid: de683aa6-fedf-11de-83dd-005056ba5e76
  created_by: admin
  updated_by: admin
  notes: This policy checks that MAC changes are not allowed on vSwitches and vLans.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
    default:

```

```

    enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
- name: 0a6eb332-fee0-11de-83dd-005056ba5e76
  description: Mac Changes Disabled in vSwitches
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      not:
        CONTAINS:
          value: 'false'
          field: Host.switches-mac_changes
        towhat: Host
        file_mtime:
        guid: 0a6eb332-fee0-11de-83dd-005056ba5e76
        filename:
        applies_to_exp:
        miq_policy_id: 10000000000028
        notes: This condition verifies that MAC changes are not allowed on vSwitches.
- name: 3ed9fb4a-fee0-11de-83dd-005056ba5e76
  description: Mac Changes Disabled in vLans
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      not:
        CONTAINS:
          value: 'false'
          field: Host.lans-mac_changes
        towhat: Host
        file_mtime:
        guid: 3ed9fb4a-fee0-11de-83dd-005056ba5e76
        filename:
        applies_to_exp:
        miq_policy_id: 10000000000028
        notes: This condition verifies that MAC changes are not allowed on vLans.
- MiqPolicy:
  name: 7cc14778-fe0f-11de-83dd-005056ba5e76
  description: Network - Promiscuous Mode Setting Not Disabled
  expression:
  towhat: Host
  guid: 7cc14778-fe0f-11de-83dd-005056ba5e76
  created_by: admin
  updated_by: admin
  notes: Check the Host Vlan setting for Promiscuous Mode which should be disabled.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default

```

```

    definition:
    default:
    enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
- name: 2045b314-fe58-11de-83dd-005056ba5e76
  description: Check Host vSwitch - Promiscuous Mode Must Not Be Enable
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      not:
        CONTAINS:
          value: 'true'
          field: Host.switches-allow_promiscuous
  towhat: Host
  file_mtime:
  guid: 2045b314-fe58-11de-83dd-005056ba5e76
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000029
  notes: This condition verifies that vSwitches do not allow Promiscuous mode
    via inheritance.
- name: 80e5ff5e-fe16-11de-83dd-005056ba5e76
  description: Check Host Port - Promiscuous Mode Must Not Be Enabled
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      not:
        CONTAINS:
          value: 'true'
          field: Host.lans-computed_allow_promiscuous
  towhat: Host
  file_mtime:
  guid: 80e5ff5e-fe16-11de-83dd-005056ba5e76
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000029
  notes: This condition verifies that vLans do not allow Promiscuous mode via
    inheritance.
- MiqPolicy:
  name: Configuration Policy Restrict Cloning SQL Server
  description: ! 'Operational: Prevent Cloning of Database VMs'
  expression:
  towhat: Vm
  guid: 39fdeba0-2866-11de-af2a-0050568026c2
  created_by:
  updated_by: admin
  notes: prevents cloning of vms with a workload tag value of database
  active: true
  mode: control
  MiqPolicyContent:
    - qualifier: success
      success_sequence: 1
  MiqEvent:

```


[illegible]

```

      :var_type: <None>
      :from: evmadmin@manageiq.com
      :to: evm_demo@manageiq.com
- qualifier: success
  success_sequence: 3
  MiqEvent:
    name: vm_clone_start
    description: VM Clone Start
    guid: e30f6720-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: 4468f036-0b6d-11df-bd07-005056a7121f
    description: VM Attribute - Prevent Clone of SQL Server
    guid: 4468f036-0b6d-11df-bd07-005056a7121f
    action_type: set_custom_attribute
    options:
      :variables:
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      :value: Clone Prevented for SQL Server VM
      :attribute: EVM Policy
  Condition:
    - name: VMs running SQL Server
      description: VMs with Workload - Database
      modifier: allow
      expression: !ruby/object:MiqExpression
      exp:
        CONTAINS:

```

```

        tag: Vm.managed-function
        value: database
        context_type:
towhat: Vm
file_mtime:
guid: 121ecf62-01c6-11de-a701-005056903dbc
filename:
applies_to_exp:
miq_policy_id: 100000000000064
notes:
- MiqPolicy:
  name: Automation Policy - Scope VM Retirement Warning, ResponseExecute Automation
  Model
  description: ! 'Operational: Retirement Warning'
  expression:
towhat: Vm
guid: 39621392-2866-11de-af2a-0050568026c2
created_by:
updated_by: admin
notes: This policy raises an automation event when a retirement warning event
  is raised
active: true
mode: control
MiqPolicyContent:
- qualifier: success
  success_sequence: 1
  failure_synchronous: true
  MiqEvent:
    name: vm_retire_warn
    description: VM Retirement Warning
    guid: 97c85330-fe93-11dd-b5e1-005056903dbc
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: raise_automation_event
    description: Raise Automation Event
    guid: e7da3b7a-1139-11e1-9333-005056af009e
    action_type: default
    options: {}
  Condition: []
- MiqPolicy:
  name: Automation Policy - Scope VM Retired Response Execute Automation Model
  description: ! 'Operational: Vm Retired'
  expression:
towhat: Vm
guid: 397700ae-2866-11de-af2a-0050568026c2
created_by:
updated_by: admin
notes: This policy raises an automation event when a vm retirement event is raised
active: true
mode: control
MiqPolicyContent:
- qualifier: success
  success_sequence: 1
  failure_synchronous: true
  MiqEvent:
    name: vm_retired

```

```

    description: VM Retired
    guid: e363d8aa-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: raise_automation_event
    description: Raise Automation Event
    guid: e7da3b7a-1139-11e1-9333-005056af009e
    action_type: default
    options: {}
  Condition: []
- MiqPolicy:
  name: 2f9fad14-fa4e-11de-83ca-005056ba0614
  description: Password Aging - Default Maximum
  expression:
  towhat: Host
  guid: 2f9fad14-fa4e-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy validates the ESX host's maximum password age configuration.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
      default:
      enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: a4a0e740-fa4e-11de-83ca-005056ba0614
    description: Default Maximum Password Age <= 90days
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkany:
            REGULAR EXPRESSION MATCHES:
              value: ^\s*PASS_MAX_DAYS\s+([0-9]|[1-8][0-9]|90)
              field: Host.filesystems-contents
          search:
            =:
              value: /etc/login.defs
              field: Host.filesystems-name
    towhat: Host
    file_mtime:
    guid: a4a0e740-fa4e-11de-83ca-005056ba0614

```

```

    filename:
    applies_to_exp:
    miq_policy_id: 10000000000047
    notes: This condition checks the file /etc/login.defs and verifies that the
           PASS_MAX_DAYS parameter's value is 90 days or greater.
- MiqPolicy:
  name: 32b26f2c-fa4f-11de-83ca-005056ba0614
  description: Password Aging - Default Minimum
  expression:
  towhat: Host
  guid: 32b26f2c-fa4f-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy validates the ESX host's minimum password age configuration.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: 79d39ad4-fa4f-11de-83ca-005056ba0614
    description: Default Minimum Password Age >= 0
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkany:
            REGULAR EXPRESSION MATCHES:
              value: ^\s*PASS_MIN_DAYS\s+\d+
              field: Host.filesystems-contents
          search:
            =:
              value: /etc/login.defs
              field: Host.filesystems-name
    towhat: Host
    file_mtime:
    guid: 79d39ad4-fa4f-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000059
    notes: This condition checks the file /etc/login.defs and verifies that the
           PASS_MIN_DAYS parameter's value is greater than or equal to 0 days.
- MiqPolicy:
  name: 305e6832-fa51-11de-83ca-005056ba0614
  description: Password Complexity - Minimum Length

```

```

expression:
towhat: Host
guid: 305e6832-fa51-11de-83ca-005056ba0614
created_by: admin
updated_by: admin
notes: This policy verifies the minimum password length.
active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: c0ba559e-fa51-11de-83ca-005056ba0614
  description: Minimum Password Length >= 8
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          REGULAR EXPRESSION MATCHES:
            value: ^\s*PASS_MIN_LEN\s+([8-9]||[1-9][0-9]+)
            field: Host.filesystems-contents
        search:
          =:
            value: /etc/login.defs
            field: Host.filesystems-name
        towhat: Host
        file_mtime:
        guid: c0ba559e-fa51-11de-83ca-005056ba0614
        filename:
        applies_to_exp:
        miq_policy_id: 100000000000057
        notes: This condition checks the file /etc/login.defs and verifies that the
          PASS_MIN_LEN parameter's value is 8 or greater.
- MiqPolicy:
  name: 40b796dc-fa50-11de-83ca-005056ba0614
  description: Password Expiration Warning Default
  expression:
  towhat: Host
  guid: 40b796dc-fa50-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies the default setting for password expiration warning.
  active: true
  mode: compliance

```

```

MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
        enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: 0e842bde-fa51-11de-83ca-005056ba0614
  description: Password Expiration Warning Default >= 7days
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          REGULAR EXPRESSION MATCHES:
            value: ^\s*PASS_WARN_AGE\s+([7-9]|[1-9][0-9]+)
            field: Host.filesystems-contents
          search:
            =:
              value: /etc/login.defs
              field: Host.filesystems-name
        towhat: Host
        file_mtime:
        guid: 0e842bde-fa51-11de-83ca-005056ba0614
        filename:
        applies_to_exp:
        miq_policy_id: 10000000000046
        notes: This condition checks the file /etc/login.defs and verifies that PASS_WARN_AGE
          parameter's value is set to 7 or greater.
- MiqPolicy:
  name: e6f082ba-fa4c-11de-83ca-005056ba0614
  description: Password checking enabled for sudo
  expression:
  towhat: Host
  guid: e6f082ba-fa4c-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that password checking is enabled for sudo.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default

```

```

    definition:
    default:
    enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
- name: 3d2074e2-fa4d-11de-83ca-005056ba0614
  description: NOPASSWD does not exist in sudoers file
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          REGULAR EXPRESSION DOES NOT MATCH:
            value: /^[^#]*NOPASSWD/i
            field: Host.filesystems-contents
        search:
          =:
            value: /etc/sudoers
            field: Host.filesystems-name
        towhat: Host
        file_mtime:
        guid: 3d2074e2-fa4d-11de-83ca-005056ba0614
        filename:
        applies_to_exp:
        miq_policy_id: 100000000000058
        notes: This condition check the file /etc/sudoers and verifies that it does
              not contain the word NOPASSWORD on an uncommented line.
- MiqPolicy:
  name: c5d44cb2-4734-11df-b577-005056a7121f
  description: ! 'Patch: MS10-008 Required'
  expression: !ruby/object:MiqExpression
    exp:
      CONTAINS:
        tag: Vm.managed-environment
        value: prod
      context_type:
    towhat: Vm
    guid: c5d44cb2-4734-11df-b577-005056a7121f
    created_by: admin
    updated_by: admin
    notes: Prevents a VM that does not have MS10-008 installed from running in the
          virtual environment. It's scope limits it to vms tagged as production
    active: true
    mode: control
    MiqPolicyContent:
    - qualifier: failure
      failure_sequence: 1
    MiqEvent:
      name: vm_start
      description: VM Power On
      guid: 404b4630-21a8-11e2-b47a-0050568b19a3
      event_type: Default
      definition:
      default:

```


[illegible]

```
name: vm_start
description: VM Power On
guid: 404b4630-21a8-11e2-b47a-0050568b19a3
event_type: Default
definition:
default:
enabled:
MiqAction:
name: 722d25cc-56dc-11df-bb16-005056a7121f
description: VM Attribute - Fails patch policy
guid: 722d25cc-56dc-11df-bb16-005056a7121f
action_type: set_custom_attribute
options:
  :variables:
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
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      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: Failed Windows Required Patch Policy
      :attribute: EVM Policy
Condition:
- name: a3089008-4734-11df-b577-005056a7121f
  description: Verify KB978262 is installed
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      CONTAINS:
        value: KB978262
        field: Vm.patches-name
      context_type:
towhat: Vm
file_mtime:
guid: a3089008-4734-11df-b577-005056a7121f
```

```

    filename:
    applies_to_exp:
    miq_policy_id: 10000000000071
    notes:
- MiqPolicy:
  name: e4c93c82-fa3a-11de-83ca-005056ba0614
  description: Permissions - /etc/grub.conf
  expression:
  towhat: Host
  guid: e4c93c82-fa3a-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that editing the server's boot process requires root
    level authority.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: d2adb400-fa3b-11de-83ca-005056ba0614
    description: Permissions - /etc/grub.conf
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        and:
        - FIND:
            checkany:
              =:
                value: '0600'
                field: Host.filesystems-permissions
            search:
              =:
                value: /etc/grub.conf
                field: Host.filesystems-name
        - FIND:
            checkany:
              =:
                value: root
                field: Host.filesystems-owner
            search:
              =:
                value: /etc/grub.conf
                field: Host.filesystems-name
      towhat: Host

```

```

    file_mtime:
    guid: d2adb400-fa3b-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000027
    notes: This condition verifies that the file /etc/grub.conf's permissions are
           set to 0600 and is owned by root.
- MiqPolicy:
  name: 7ea7db8c-fa46-11de-83ca-005056ba0614
  description: Permissions - /etc/snmp/snmpd.conf
  expression:
  towhat: Host
  guid: 7ea7db8c-fa46-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy ensures that access to SNMP configuration parameters are limited
        to the root user.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: ebb24a50-fa46-11de-83ca-005056ba0614
    description: Permissions - /etc/snmp/snmpd.conf
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
      and:
      - FIND:
        checkany:
        =:
          value: '0700'
          field: Host.filesystems-permissions
        search:
        =:
          value: /etc/snmp/snmpd.conf
          field: Host.filesystems-name
      - FIND:
        checkany:
        =:
          value: root
          field: Host.filesystems-owner
        search:
        =:

```

```

        value: /etc/snmp/snmpd.conf
        field: Host.filesystems-name
    towhat: Host
    file_mtime:
    guid: ebb24a50-fa46-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000045
    notes: This condition verifies that the permissions of /etc/snmp/snmpd.conf
           are 0700 and is owned by root.
- MiqPolicy:
  name: 7408efa8-21b3-11e2-a38c-0050568b19a3
  description: Power-Off Virtual Machines
  expression:
  towhat: Vm
  guid: 7408efa8-21b3-11e2-a38c-0050568b19a3
  created_by: admin
  updated_by: admin
  notes:
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: vm_start
      description: VM Power On
      guid: 404b4630-21a8-11e2-b47a-0050568b19a3
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: vm_stop
      description: Stop Virtual Machine
      guid: 37f2da3e-21a8-11e2-b47a-0050568b19a3
      action_type: default
      options: {}
  Condition:
  - name: d514b2fa-21b3-11e2-a38c-0050568b19a3
    description: VM with Workload Tag Messaging
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        !binary "Q090VEFJTlM=":
        !binary "dGFn": Vm.managed-function
        !binary "dmFsdWU=": messaging
      context_type:
    towhat: Vm
    file_mtime:
    guid: d514b2fa-21b3-11e2-a38c-0050568b19a3
    filename:
    applies_to_exp:
    miq_policy_id:
    notes:
- MiqPolicy:
  name: f4f0e916-bbd5-11e1-a4a4-005056b25af6
  description: Prevent PowerOn of Quarantined VM
  expression:

```

```

towhat: Vm
guid: f4f0e916-bbd5-11e1-a4a4-005056b25af6
created_by: admin
updated_by: admin
notes:
active: true
mode: control
MiqPolicyContent:
- qualifier: success
  success_sequence: 1
  MiqEvent:
    name: request_vm_start
    description: VM Power On Request
    guid: 48b02c4a-ae7c-11e1-a76f-005056b25af6
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: vm_stop
    description: Stop Virtual Machine
    guid: 37f2da3e-21a8-11e2-b47a-0050568b19a3
    action_type: default
    options: {}
- qualifier: success
  success_sequence: 1
  MiqEvent:
    name: vm_start
    description: VM Power On
    guid: 404b4630-21a8-11e2-b47a-0050568b19a3
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: vm_stop
    description: Stop Virtual Machine
    guid: 37f2da3e-21a8-11e2-b47a-0050568b19a3
    action_type: default
    options: {}
Condition:
- name: 1cbc27da-bbd6-11e1-ac0c-005056b25af6
  description: VM Tagged as Do Not PowerOn
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      CONTAINS:
        tag: Vm.managed-exclusions
        value: do_not_power_on
      context_type:
towhat: Vm
file_mtime:
guid: 1cbc27da-bbd6-11e1-ac0c-005056b25af6
filename:
applies_to_exp:
miq_policy_id:
notes:
- MiqPolicy:
  name: eb84f288-fa39-11de-83ca-005056ba0614

```

```

description: Protect Root File System Filling /home
expression:
towhat: Host
guid: eb84f288-fa39-11de-83ca-005056ba0614
created_by: admin
updated_by: admin
notes: This policy verifies that the /home directory is mounted on a different
      partition than the root filesystem.
active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: 62447a1a-fa3a-11de-83ca-005056ba0614
  description: Protect Root File System Filling /home
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          REGULAR EXPRESSION MATCHES:
            value: ^[^\#]*\home
            field: Host.filesystems-contents
        search:
          =:
            value: /etc/fstab
            field: Host.filesystems-name
  towhat: Host
  file_mtime:
  guid: 62447a1a-fa3a-11de-83ca-005056ba0614
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000019
  notes: This condition verifies that the file /etc/fstab has an uncommented line
        that references the directory /home.
- MiqPolicy:
  name: a128d356-fa36-11de-83ca-005056ba0614
  description: Protect Root File System Filling /tmp
  expression:
  towhat: Host
  guid: a128d356-fa36-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that the /tmp directory is mounted on a different

```

```

    partition than the root filesystem.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: 267dd9de-fa37-11de-83ca-005056ba0614
    description: Protect Root File System Filling /tmp
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkany:
            REGULAR EXPRESSION MATCHES:
              value: ^[^\#]*\tmp
              field: Host.filesystems-contents
          search:
            =:
              value: /etc/fstab
              field: Host.filesystems-name
        towhat: Host
        file_mtime:
        guid: 267dd9de-fa37-11de-83ca-005056ba0614
        filename:
        applies_to_exp:
        miq_policy_id: 10000000000044
        notes: This condition verifies that the file /etc/fstab has an uncommented line
              that references the directory /tmp.
- MiqPolicy:
  name: 854d45aa-fa3a-11de-83ca-005056ba0614
  description: Protect Root File System Filling /var/log
  expression:
  towhat: Host
  guid: 854d45aa-fa3a-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that the /var/log directory is mounted on a different
    partition than the root filesystem.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:

```



```

    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
    Condition:
- name: a84173e2-fa3a-11de-83ca-005056ba0614
  description: Protect Root File System Filling /var/log
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          REGULAR EXPRESSION MATCHES:
            value: ^[^\#]*\var\log
            field: Host.filesystems-contents
        search:
          =:
            value: /etc/fstab
            field: Host.filesystems-name
        towhat: Host
        file_mtime:
        guid: a84173e2-fa3a-11de-83ca-005056ba0614
        filename:
        applies_to_exp:
        miq_policy_id: 100000000000055
        notes: This condition verifies that the file /etc/fstab has an uncommented line
              that references the directory /var/log.
- MiqPolicy:
  name: 57189108-d1d3-11e1-9ede-005056af009e
  description: Record Last RDP User
  expression:
  towhat: Vm
  guid: 57189108-d1d3-11e1-9ede-005056af009e
  created_by: admin
  updated_by: admin
  notes: ! 'When a user logs on to the VM through an RDP session, the file c:\rdp_login\rdp. ←
        log
        is automatically created by the logon script.

  A analysis profile should be set to retrieve this file and its content.

  This policy will automatically raise an automate event so the content of the
  file can be parsed and elements set as custom attributes of the VM '
  active: true
  mode: control
  MiqPolicyContent:
- qualifier: success
  success_sequence: 1

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MiqEvent:
  name: vm_scan_complete
  description: VM Analysis Complete
  guid: f7b8361e-1139-11e1-9333-005056af009e
  event_type: Default
  definition:
  default:
  enabled:
MiqAction:
  name: raise_automation_event
  description: Raise Automation Event
  guid: e7da3b7a-1139-11e1-9333-005056af009e
  action_type: default
  options: {}
Condition:
- name: 5a4c3456-de30-11e1-9088-005056af009e
  description: Check for files starting with rep
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkcount:
          ! '>=':
            field: <count>
            value: '1'
        search:
          INCLUDES:
            field: Vm.filesystems-name
            value: rdp
        context_type:
        towhat: Vm
        file_mtime:
        guid: 5a4c3456-de30-11e1-9088-005056af009e
        filename:
        applies_to_exp:
        miq_policy_id: 4
        notes:
- MiqPolicy:
  name: 5ce6be9a-fa4c-11de-83ca-005056ba0614
  description: Require users to enter own password - no ROOTPW entry
  expression:
  towhat: Host
  guid: 5ce6be9a-fa4c-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that when the sudo command is used, each user is prompted
    for their password and not the root password.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
    default:

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    enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
- name: a791b882-fa4c-11de-83ca-005056ba0614
  description: ROOTPW does not exist in sudoers file
  modifier: allow
  expression: !ruby/object:MiqExpression
  exp:
    FIND:
      checkany:
        REGULAR EXPRESSION DOES NOT MATCH:
          value: /^[^#]*ROOTPW/i
          field: Host.filesystems-contents
      search:
        =:
          value: /etc/sudoers
          field: Host.filesystems-name
  towhat: Host
  file_mtime:
  guid: a791b882-fa4c-11de-83ca-005056ba0614
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000043
  notes: This condition check the file /etc/sudoers and verifies that it does
    not contain the word ROOTPW on an uncommented line.
- MiqPolicy:
  name: a3a56370-c015-11e3-b785-001a4a0f459e
  description: Retirement of VM
  expression: !ruby/object:MiqExpression
  exp:
    =:
      field: Vm-retired
      value: 'true'
  context_type:
  towhat: Vm
  guid: a3a56370-c015-11e3-b785-001a4a0f459e
  created_by: admin
  updated_by: admin
  notes:
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    success_synchronous: true
  MiqEvent:
    name: vm_retired
    description: VM Retired
    guid: e363d8aa-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
      default:
        enabled:
  MiqAction:

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    name: vm_retire
    description: Retire Virtual Machine
    guid: 047c677e-431c-11e3-91d5-001a4a0f459e
    action_type: default
    options: {}
  Condition: []
- MiqPolicy:
  name: eb0151ea-fa47-11de-83ca-005056ba0614
  description: Root Login on console should be Disabled
  expression:
  towhat: Host
  guid: eb0151ea-fa47-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that the root account cannot directly login via the
    console.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: 571e6e76-fa48-11de-83ca-005056ba0614
    description: File /etc/securetty should be empty
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkall:
            =:
              value: '0'
              field: Host.filesystems-size
          search:
            =:
              value: /etc/securetty
              field: Host.filesystems-name
    towhat: Host
    file_mtime:
    guid: 571e6e76-fa48-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000026
    notes: This condition checks the file /etc/securetty and verifies that it's
      empty by checking for a 0KB file size.
- MiqPolicy:

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name: c63b0560-fa45-11de-83ca-005056ba0614
description: Root Login via SSH should be Disabled
expression:
towhat: Host
guid: c63b0560-fa45-11de-83ca-005056ba0614
created_by: admin
updated_by: admin
notes: This policy verifies that the root account cannot login to the host via
      SSH.
active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: 4435b6d6-fa46-11de-83ca-005056ba0614
  description: PermitRootLogin = no in sshd_config file
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          REGULAR EXPRESSION MATCHES:
            value: ^\s*PermitRootLogin\s+no
            field: Host.filesystems-contents
        search:
          =:
            value: /etc/ssh/sshd_config
            field: Host.filesystems-name
      towhat: Host
      file_mtime:
      guid: 4435b6d6-fa46-11de-83ca-005056ba0614
      filename:
      applies_to_exp:
      miq_policy_id: 10000000000042
      notes: This condition checks the file /etc/ssh/sshd_config and verifies that
            the PermitRootLogin parameter's value is set to no.
- MiqPolicy:
  name: 24b92088-399c-11de-ae27-005056a11a54
  description: Service Level Gold - RAM must be 1GB and 1 vCPU - off
  expression: !ruby/object:MiqExpression
    exp:
      and:
      - CONTAINS:
        tag: Vm.managed-service_level

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      value: gold
    - =:
      value: 'off'
      field: Vm-power_state
    context_type:
towhat: Vm
guid: 24b92088-399c-11de-ae27-005056a11a54
created_by:
updated_by: admin
notes: This policy verifies that a vm that has a service level tag of gold has
      1vCPU and 1GB of memory. If not it changes the vm to these values. This policy
      is used on a powered off vm.
active: true
mode: control
MiqPolicyContent:
- qualifier: success
  success_sequence: 1
  MiqEvent:
    name: assigned_company_tag
    description: Tag Complete
    guid: e384ecb6-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: VM_RAM_1GB
    description: Set VM RAM to 1GB
    guid: 2d8445f2-9aec-11dd-8e55-005056ac7d2c
    action_type: reconfigure_memory
    options:
      :value: 1024
- qualifier: success
  success_sequence: 2
  MiqEvent:
    name: assigned_company_tag
    description: Tag Complete
    guid: e384ecb6-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: VM_CPU_1
    description: Set VM CPU to 1
    guid: d97dafba-9af1-11dd-8e55-005056ac7d2c
    action_type: reconfigure_cpus
    options:
      :value: '1'
Condition:
- name: 1c6ec35e-3908-11de-b6d5-005056a11a54
  description: Service Level Gold - VM RAM and CPU check
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
    or:
    - ! '!=':
      value: 1024
      field: Vm.hardware-memory_cpu

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      - ! '!=':
        value: 1
        field: Vm.hardware-numvcpus
    towhat: Vm
    file_mtime:
    guid: 1c6ec35e-3908-11de-b6d5-005056a11a54
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000069
    notes:
- MiqPolicy:
  name: 7a91f3ac-3908-11de-b6d5-005056a11a54
  description: Service Level Gold - RAM must be 1GB and 1 vCPU - on
  expression: !ruby/object:MiqExpression
  exp:
    and:
    - CONTAINS:
      tag: Vm.managed-service_level
      value: gold
    - =:
      value: 'on'
      field: Vm-power_state
  context_type:
  towhat: Vm
  guid: 7a91f3ac-3908-11de-b6d5-005056a11a54
  created_by:
  updated_by: admin
  notes: This policy verifies that a vm that has a service level tag of gold has
    1vCPU and 1GB of memory. If not it changes the vm to these values. This policy
    is used on a powered on vm.
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
  MiqEvent:
    name: assigned_company_tag
    description: Tag Complete
    guid: e384ecb6-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: vm_stop
    description: Stop Virtual Machine
    guid: 37f2da3e-21a8-11e2-b47a-0050568b19a3
    action_type: default
    options: {}
  - qualifier: success
    success_sequence: 2
  MiqEvent:
    name: assigned_company_tag
    description: Tag Complete
    guid: e384ecb6-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
      default:
      enabled:

```

```

MiqAction:
  name: VM_RAM_1GB
  description: Set VM RAM to 1GB
  guid: 2d8445f2-9aec-11dd-8e55-005056ac7d2c
  action_type: reconfigure_memory
  options:
    :value: 1024
- qualifier: success
  success_sequence: 3
MiqEvent:
  name: assigned_company_tag
  description: Tag Complete
  guid: e384ecb6-1e1e-11de-8918-0050568005db
  event_type: Default
  definition:
    default:
    enabled:
MiqAction:
  name: VM_CPU_1
  description: Set VM CPU to 1
  guid: d97dafba-9af1-11dd-8e55-005056ac7d2c
  action_type: reconfigure_cpus
  options:
    :value: '1'
- qualifier: success
  success_sequence: 4
MiqEvent:
  name: assigned_company_tag
  description: Tag Complete
  guid: e384ecb6-1e1e-11de-8918-0050568005db
  event_type: Default
  definition:
    default:
    enabled:
MiqAction:
  name: vm_start
  description: Start Virtual Machine
  guid: 55b5a422-3348-11de-bde2-005056a170fa
  action_type: default
  options: {}
Condition:
- name: 1c6ec35e-3908-11de-b6d5-005056a11a54
  description: Service Level Gold - VM RAM and CPU check
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      or:
        - ! '!=':
            value: 1024
            field: Vm.hardware-memory_cpu
        - ! '!=':
            value: 1
            field: Vm.hardware-numvcpus
  towhat: Vm
  file_mtime:
  guid: 1c6ec35e-3908-11de-b6d5-005056a11a54
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000069

```



```

    notes:
- MiqPolicy:
  name: b265c970-3908-11de-b6d5-005056a11a54
  description: Service Level Platinum - RAM must be 2GB and 2 vCPUs - off
  expression: !ruby/object:MiqExpression
    exp:
      and:
        - CONTAINS:
            tag: Vm.managed-service_level
            value: platinum
        - =:
            value: 'off'
            field: Vm-power_state
      context_type:
towhat: Vm
guid: b265c970-3908-11de-b6d5-005056a11a54
created_by:
updated_by: admin
notes: This policy verifies that a vm that has a service level tag of platinum
  has 2 vCPUs and 2GB of memory. If not it changes the vm to these values. This
  policy is used on a powered off vm.
active: true
mode: control
MiqPolicyContent:
- qualifier: success
  success_sequence: 1
  MiqEvent:
    name: assigned_company_tag
    description: Tag Complete
    guid: e384ecb6-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: VM_RAM_2GB
    description: Set VM RAM to 2GB
    guid: cf1570b2-9af1-11dd-8e55-005056ac7d2c
    action_type: reconfigure_memory
    options:
      :value: 2048
- qualifier: success
  success_sequence: 2
  MiqEvent:
    name: assigned_company_tag
    description: Tag Complete
    guid: e384ecb6-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: VM_CPU_2
    description: Set VM CPU to 2
    guid: e2c3d64e-9af1-11dd-8e55-005056ac7d2c
    action_type: reconfigure_cpus
    options:
      :value: '2'
Condition:

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- name: 34218558-3909-11de-b6d5-005056a11a54
  description: Service Level Platinum - VM RAM and CPU check
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      or:
        - ! '!=':
            value: 2048
            field: Vm.hardware-memory_cpu
        - ! '!=':
            value: 2
            field: Vm.hardware-numvcpus
      towhat: Vm
      file_mtime:
      guid: 34218558-3909-11de-b6d5-005056a11a54
      filename:
      applies_to_exp:
      miq_policy_id: 10000000000070
      notes:
- MiqPolicy:
  name: 4cb4d05c-3909-11de-b6d5-005056a11a54
  description: Service Level Platinum - RAM must be 2GB and 2 vCPUs - on
  expression: !ruby/object:MiqExpression
    exp:
      and:
        - CONTAINS:
            tag: Vm.managed-service_level
            value: platinum
        - =:
            value: 'on'
            field: Vm-power_state
      context_type:
      towhat: Vm
      guid: 4cb4d05c-3909-11de-b6d5-005056a11a54
      created_by:
      updated_by: admin
      notes: This policy verifies that a vm that has a service level tag of platinum
        has 2 vCPUs and 2GB of memory. If not it changes the vm to these values. This
        policy is used on a powered on vm.
      active: true
      mode: control
      MiqPolicyContent:
        - qualifier: success
          success_sequence: 1
      MiqEvent:
        name: assigned_company_tag
        description: Tag Complete
        guid: e384ecb6-1e1e-11de-8918-0050568005db
        event_type: Default
        definition:
          default:
          enabled:
      MiqAction:
        name: vm_stop
        description: Stop Virtual Machine
        guid: 37f2da3e-21a8-11e2-b47a-0050568b19a3
        action_type: default
        options: {}
        - qualifier: success

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    success_sequence: 2
  MiqEvent:
    name: assigned_company_tag
    description: Tag Complete
    guid: e384ecb6-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: VM_RAM_2GB
    description: Set VM RAM to 2GB
    guid: cf1570b2-9af1-11dd-8e55-005056ac7d2c
    action_type: reconfigure_memory
    options:
      :value: 2048
- qualifier: success
  success_sequence: 3
  MiqEvent:
    name: assigned_company_tag
    description: Tag Complete
    guid: e384ecb6-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: VM_CPU_2
    description: Set VM CPU to 2
    guid: e2c3d64e-9af1-11dd-8e55-005056ac7d2c
    action_type: reconfigure_cpus
    options:
      :value: '2'
- qualifier: success
  success_sequence: 4
  MiqEvent:
    name: assigned_company_tag
    description: Tag Complete
    guid: e384ecb6-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: vm_start
    description: Start Virtual Machine
    guid: 55b5a422-3348-11de-bde2-005056a170fa
    action_type: default
    options: {}
  Condition:
- name: 34218558-3909-11de-b6d5-005056a11a54
  description: Service Level Platinum - VM RAM and CPU check
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      or:
      - ! '!=' :
          value: 2048
          field: Vm.hardware-memory_cpu

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      - ! '!=':
        value: 2
        field: Vm.hardware-numvcpus
    towhat: Vm
    file_mtime:
    guid: 34218558-3909-11de-b6d5-005056a11a54
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000070
    notes:
- MiqPolicy:
  name: Service Level Policy Verify Virtual Hardware - Silver Level
  description: Service Level Silver - RAM must be 512MB and 1 vCPU - off
  expression: !ruby/object:MiqExpression
  exp:
    and:
      - CONTAINS:
        tag: Vm.managed-service_level
        value: silver
      - =:
        value: 'off'
        field: Vm-power_state
    context_type:
  towhat: Vm
  guid: 3659b8bc-2866-11de-af2a-0050568026c2
  created_by:
  updated_by: admin
  notes: This policy verifies that a vm that has a service level tag of silver has
    1 vCPU and 512MB of memory. If not it changes the vm to these values. This policy
    is used on a powered off vm.
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: assigned_company_tag
      description: Tag Complete
      guid: e384ecb6-1e1e-11de-8918-0050568005db
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: VM_CPU_1
      description: Set VM CPU to 1
      guid: d97dafba-9af1-11dd-8e55-005056ac7d2c
      action_type: reconfigure_cpus
      options:
        :value: '1'
  - qualifier: success
    success_sequence: 2
    MiqEvent:
      name: assigned_company_tag
      description: Tag Complete
      guid: e384ecb6-1e1e-11de-8918-0050568005db
      event_type: Default
      definition:
        default:

```

```

    enabled:
  MiqAction:
    name: VM_RAM_512MB
    description: Set VM RAM to 512MB
    guid: bab04cb4-9af1-11dd-8e55-005056ac7d2c
    action_type: reconfigure_memory
    options:
      :value: 512
  Condition:
  - name: Service Level Validation Silver - Powered Off
    description: Service Level Silver - VM RAM and CPU check
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        or:
          - ! '!=':
              value: 512
              field: Vm.hardware-memory_cpu
          - ! '!=':
              value: 1
              field: Vm.hardware-numvcpus
        towhat: Vm
        file_mtime:
        guid: 531575ae-9b1c-11dd-bbd7-005056ac7d2c
        filename:
        applies_to_exp:
        miq_policy_id: 10000000000068
        notes:
  - MiqPolicy:
    name: d16643b6-3905-11de-b6d5-005056a11a54
    description: Service Level Silver - RAM must be 512MB and 1 vCPU - on
    expression: !ruby/object:MiqExpression
      exp:
        and:
          - CONTAINS:
              tag: Vm.managed-service_level
              value: silver
          - =:
              value: 'on'
              field: Vm-power_state
        context_type:
        towhat: Vm
        guid: d16643b6-3905-11de-b6d5-005056a11a54
        created_by:
        updated_by: admin
        notes: This policy verifies that a vm that has a service level tag of silver has
          1 vCPU and 512MB of memory. If not it changes the vm to these values. This policy
          is used on a powered on vm.
        active: true
        mode: control
        MiqPolicyContent:
        - qualifier: success
          success_sequence: 1
        MiqEvent:
          name: assigned_company_tag
          description: Tag Complete
          guid: e384ecb6-1e1e-11de-8918-0050568005db
          event_type: Default
          definition:

```

```

    default:
    enabled:
  MiqAction:
    name: vm_stop
    description: Stop Virtual Machine
    guid: 37f2da3e-21a8-11e2-b47a-0050568b19a3
    action_type: default
    options: {}
- qualifier: success
  success_sequence: 2
  MiqEvent:
    name: assigned_company_tag
    description: Tag Complete
    guid: e384ecb6-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: VM_RAM_512MB
    description: Set VM RAM to 512MB
    guid: bab04cb4-9af1-11dd-8e55-005056ac7d2c
    action_type: reconfigure_memory
    options:
      :value: 512
- qualifier: success
  success_sequence: 3
  MiqEvent:
    name: assigned_company_tag
    description: Tag Complete
    guid: e384ecb6-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: VM_CPU_1
    description: Set VM CPU to 1
    guid: d97dafba-9af1-11dd-8e55-005056ac7d2c
    action_type: reconfigure_cpus
    options:
      :value: '1'
- qualifier: success
  success_sequence: 4
  MiqEvent:
    name: assigned_company_tag
    description: Tag Complete
    guid: e384ecb6-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: vm_start
    description: Start Virtual Machine
    guid: 55b5a422-3348-11de-bde2-005056a170fa
    action_type: default
    options: {}
Condition:

```

```

- name: Service Level Validation Silver - Powered Off
  description: Service Level Silver - VM RAM and CPU check
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      or:
        - ! '!=':
            value: 512
            field: Vm.hardware-memory_cpu
        - ! '!=':
            value: 1
            field: Vm.hardware-numvcpus
  towhat: Vm
  file_mtime:
  guid: 531575ae-9b1c-11dd-bbd7-005056ac7d2c
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000068
  notes:
- MiqPolicy:
  name: 498f5330-fa4b-11de-83ca-005056ba0614
  description: Settings - Remote syslog Logging
  expression:
  towhat: Host
  guid: 498f5330-fa4b-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that syslog is configured to utilize a remote server.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
- name: ee09af6e-fa4b-11de-83ca-005056ba0614
  description: Verify syslog Utilizes a Remote Host
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          REGULAR EXPRESSION MATCHES:
            value: /^[^#*]\s*.*@/
            field: Host.filesystems-contents
          search:

```

```

      =:
        value: /etc/syslog.conf
        field: Host.filesystems-name
    towhat: Host
    file_mtime:
    guid: ee09af6e-fa4b-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000025
    notes: This condition checks the file /etc/syslog.conf and verifies the existence
           of the @ parameter, which is used to specify the use of a remote server.
- MiqPolicy:
  name: c340f524-fa3e-11de-83ca-005056ba0614
  description: Settings - /etc/grub.conf
  expression:
  towhat: Host
  guid: c340f524-fa3e-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that a password is required in order to edit the server's
        boot process.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: 1f18225a-fa3f-11de-83ca-005056ba0614
    description: Verify /etc/grub.conf Settings
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkany:
            REGULAR EXPRESSION MATCHES:
              value: ^\s*password\s\-\md5
              field: Host.filesystems-contents
          search:
            =:
              value: /etc/grub.conf
              field: Host.filesystems-name
    towhat: Host
    file_mtime:
    guid: 1f18225a-fa3f-11de-83ca-005056ba0614
    filename:

```



```

    applies_to_exp:
    miq_policy_id: 10000000000041
    notes: This condition check the file /etc/grub.conf and verifies that the parameter
           "password --md5" exists.
- MiqPolicy:
  name: e3f6428c-a85a-11e3-9c44-001a4a0f459e
  description: Settings - /etc/resolv.conf
  expression: !ruby/object:MiqExpression
  exp:
    FIND:
      search:
        =:
          field: Vm.filesystems-name
          value: resolv.conf
      checkall:
        =:
          field: Vm.filesystems-contents_available
          value: 'true'
  context_type:
  towhat: Vm
  guid: e3f6428c-a85a-11e3-9c44-001a4a0f459e
  created_by: admin
  updated_by: admin
  notes:
  active: true
  mode: compliance
  MiqPolicyContent:
- qualifier: success
  success_sequence: 1
  success_synchronous: true
  MiqEvent:
    name: vm_compliance_check
    description: VM Compliance Check
    guid: 816a598a-f57d-11de-a41a-005056ba0614
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: log
    description: Generate log message
    guid: 04771f80-431c-11e3-91d5-001a4a0f459e
    action_type: default
    options: {}
- qualifier: success
  success_sequence: 2
  success_synchronous: true
  MiqEvent:
    name: vm_compliance_check
    description: VM Compliance Check
    guid: 816a598a-f57d-11de-a41a-005056ba0614
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: c26b7988-a860-11e3-9c44-001a4a0f459e
    description: resolv.conf
    guid: c26b7988-a860-11e3-9c44-001a4a0f459e

```

```

    action_type: custom_automation
    options:
      :ae_request: resolvsend
      :ae_message: create
- qualifier: failure
  failure_sequence: 1
  failure_synchronous: true
  MiqEvent:
    name: vm_compliance_check
    description: VM Compliance Check
    guid: 816a598a-f57d-11de-a41a-005056ba0614
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: log
    description: Generate log message
    guid: 04771f80-431c-11e3-91d5-001a4a0f459e
    action_type: default
    options: {}
  Condition: []
- MiqPolicy:
  name: 6576a074-fa48-11de-83ca-005056ba0614
  description: Settings - /etc/sudoers
  expression:
  towhat: Host
  guid: 6576a074-fa48-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that sudo is configured to use syslog for logging.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: ade186c6-fa48-11de-83ca-005056ba0614
    description: Verify sudo is Logging via syslog
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
        checkany:
        REGULAR EXPRESSION MATCHES:

```

```

        value: ^\s*Defaults\s+syslog\=
        field: Host.filesystems-contents
    search:
    =:
        value: /etc/sudoers
        field: Host.filesystems-name
    towhat: Host
    file_mtime:
    guid: ade186c6-fa48-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000040
    notes: This condition check the file /etc/sudoers and verifies that the parameter
           "Defaults syslog=" exists.
- MiqPolicy:
  name: ab373d88-fa4a-11de-83ca-005056ba0614
  description: Settings - Display Logs on Different Terminals
  expression:
  towhat: Host
  guid: ab373d88-fa4a-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that critical, error, and warning level log messages
         are directed to distinct terminals.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: f383ec6c-fa4a-11de-83ca-005056ba0614
    description: Verify Different Logs Displayed on Different Terminals
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
      and:
      - FIND:
        checkany:
        REGULAR EXPRESSION MATCHES:
          value: ^\s*\*\.crit\s+\/dev\/tty
          field: Host.filesystems-contents
        search:
        =:
          value: /etc/syslog.conf
          field: Host.filesystems-name

```

```

- FIND:
  checkany:
    REGULAR EXPRESSION MATCHES:
      value: ^\s*\*\.err\s+\/dev\/tty
      field: Host.filesystems-contents
    search:
      =:
        value: /etc/syslog.conf
        field: Host.filesystems-name
- FIND:
  checkany:
    REGULAR EXPRESSION MATCHES:
      value: ^\s*\*\.warning\s+\/dev\/tty
      field: Host.filesystems-contents
    search:
      =:
        value: /etc/syslog.conf
        field: Host.filesystems-name
towhat: Host
file_mtime:
guid: f383ec6c-fa4a-11de-83ca-005056ba0614
filename:
applies_to_exp:
miq_policy_id: 10000000000024
notes: This condition checks the file /etc/syslog.conf has three seperate parameters
      defined for critical, error, and warning level log messages. These parameters
      specify the tty will display the specified log messages.
- MiqPolicy:
  name: 4b188948-fa45-11de-83ca-005056ba0614
  description: Settings - SNMP Read Only Access
  expression:
  towhat: Host
  guid: 4b188948-fa45-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that SNMP is configured to only allow read-only access.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
  - name: e328c720-fa45-11de-83ca-005056ba0614
    description: SNMP Configured for Read-only Access
    modifier: allow

```

```

    expression: !ruby/object:MiqExpression
      exp:
        and:
          - FIND:
              checkany:
                REGULAR EXPRESSION MATCHES:
                  value: ^\s*rocommunity
                  field: Host.filesystems-contents
              search:
                =:
                  value: /etc/snmp/snmpd.conf
                  field: Host.filesystems-name
          - FIND:
              checkany:
                REGULAR EXPRESSION DOES NOT MATCH:
                  value: ^\s*rwcommunity
                  field: Host.filesystems-contents
              search:
                =:
                  value: /etc/snmp/snmpd.conf
                  field: Host.filesystems-name
      towhat: Host
      file_mtime:
      guid: e328c720-fa45-11de-83ca-005056ba0614
      filename:
      applies_to_exp:
      miq_policy_id: 10000000000054
      notes: This condition checks the file /etc/snmp/snmpd.conf and verifies that
             the rocommunity parameter is defined and the rwcommunity parameter is not.
- MiqPolicy:
  name: 0864fae6-fa54-11de-83ca-005056ba0614
  description: Settings - vmkernel Compress Option
  expression:
  towhat: Host
  guid: 0864fae6-fa54-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that the vmkernel log is compressed by default.
  active: true
  mode: compliance
  MiqPolicyContent:
    - qualifier: failure
      failure_sequence: 1
      MiqEvent:
        name: host_compliance_check
        description: Host Compliance Check
        guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
        event_type: Default
        definition:
          default:
          enabled:
      MiqAction:
        name: compliance_failed
        description: Mark as Non-Compliant
        guid: ba452d94-f586-11de-8ebc-0050568a07c7
        action_type: default
        options: {}
  Condition:
    - name: fe7378be-fa53-11de-83ca-005056ba0614

```

```

description: Verify Compression Enabled in vmkernel
modifier: allow
expression: !ruby/object:MiqExpression
  exp:
    FIND:
      checkany:
        REGULAR EXPRESSION MATCHES:
          value: \s+compress
          field: Host.filesystems-contents
      search:
        =:
          value: /etc/logrotate.d/vmkernel
          field: Host.filesystems-name
  towhat: Host
  file_mtime:
  guid: fe7378be-fa53-11de-83ca-005056ba0614
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000039
  notes: This condition checks the file /etc/logrotate.d/vmkernel and verifies
    that the option compress is enabled.
- MiqPolicy:
  name: 6353b57e-fa53-11de-83ca-005056ba0614
  description: Settings - vmksummary Compress Option
  expression:
  towhat: Host
  guid: 6353b57e-fa53-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that the vmksummary log is compressed by default.
  active: true
  mode: compliance
  MiqPolicyContent:
    - qualifier: failure
      failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
    - name: 510f7286-fa53-11de-83ca-005056ba0614
      description: Verify Compression Enabled in vmksummary
      modifier: allow
      expression: !ruby/object:MiqExpression
        exp:
          FIND:
            checkany:
              REGULAR EXPRESSION MATCHES:
                value: \s+compress

```

```

        field: Host.filesystems-contents
      search:
        =:
          value: /etc/logrotate.d/vmksummary
          field: Host.filesystems-name
    towhat: Host
    file_mtime:
    guid: 510f7286-fa53-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000038
    notes: This condition checks the file /etc/logrotate.d/vmksummary and verifies
           that the option compress is enabled.
- MiqPolicy:
  name: 4614d62e-fa52-11de-83ca-005056ba0614
  description: Settings - vmkwarning Compress Option
  expression:
  towhat: Host
  guid: 4614d62e-fa52-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that the vmkwarning log is compressed by default.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: a51cbaba-fa52-11de-83ca-005056ba0614
    description: Verify Compression Enabled in vmkwarning
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkany:
            REGULAR EXPRESSION MATCHES:
              value: \s+compress
              field: Host.filesystems-contents
            search:
              =:
                value: /etc/logrotate.d/vmkwarning
                field: Host.filesystems-name
          towhat: Host
          file_mtime:
          guid: a51cbaba-fa52-11de-83ca-005056ba0614

```

```

    filename:
    applies_to_exp:
    miq_policy_id: 100000000000037
    notes: This condition checks the file /etc/logrotate.d/vmwarning and verifies
           that the option compress is enabled.
- MiqPolicy:
  name: 994efe7e-18e6-11e0-88b4-005056a7184a
  description: ! 'Snapshots: Delete based on Count'
  expression:
  towhat: Vm
  guid: 994efe7e-18e6-11e0-88b4-005056a7184a
  created_by: admin
  updated_by: admin
  notes: This policy deletes the most recent snapshot when more than 2 snapshots
        exists
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: vm_snapshot_complete
      description: VM Snapshot Create Complete
      guid: 7eb82802-135e-11e0-8706-005056a7184a
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: delete_most_recent_snapshot
      description: Delete Most Recent Snapshot
      guid: 7f6e2f8a-135e-11e0-8706-005056a7184a
      action_type: default
      options: {}
  Condition:
  - name: 992035fc-18e7-11e0-88b4-005056a7184a
    description: Check for more than 2 snapshots
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        ! '>':
          value: '2'
          field: Vm-v_total_snapshots
        context_type:
        towhat: Vm
        file_mtime:
        guid: 992035fc-18e7-11e0-88b4-005056a7184a
        filename:
        applies_to_exp:
        miq_policy_id: 100000000000075
        notes: Checks to see if more than 2 snapshots exist
- MiqPolicy:
  name: cf87e7fc-99d8-11e1-a4bf-005056b057a8
  description: ! 'Snapshots: limit to max of 2'
  expression:
  towhat: Vm
  guid: cf87e7fc-99d8-11e1-a4bf-005056b057a8
  created_by: admin
  updated_by: admin

```



```

notes: This policy prevents a vm from starting if there are more than 2 snapshots.
      If this number is exceeded, the vm is not allowed to start and the vm annotations
      are updated in the VC
active: true
mode: control
MiqPolicyContent:
- qualifier: success
  success_sequence: 1
  MiqEvent:
    name: vm_start
    description: VM Power On
    guid: 404b4630-21a8-11e2-b47a-0050568b19a3
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: vm_stop
    description: Stop Virtual Machine
    guid: 37f2da3e-21a8-11e2-b47a-0050568b19a3
    action_type: default
    options: {}
- qualifier: success
  success_sequence: 2
  MiqEvent:
    name: vm_start
    description: VM Power On
    guid: 404b4630-21a8-11e2-b47a-0050568b19a3
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: 8d6ebd90-99d9-11e1-a4bf-005056b057a8
    description: ! 'VM Attribute: Max Snapshots'
    guid: 8d6ebd90-99d9-11e1-a4bf-005056b057a8
    action_type: set_custom_attribute
    options:
      :value: Snapshot Limit Exceeded
      :attribute: EVM Policy
Condition:
- name: 9db4783a-99d8-11e1-a4bf-005056b057a8
  description: Snapshot Count >=3
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      ! '>=':
        count: Vm.snapshots
        value: '3'
    context_type:
  towhat: Vm
  file_mtime:
  guid: 9db4783a-99d8-11e1-a4bf-005056b057a8
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000079
  notes: This condition checks to see if 3 or more snapshots exist
- MiqPolicy:
  name: 98557866-d2ee-11de-b4f6-0050568a547d

```

```

description: ! 'Tag: Host Workload - DMZ'
expression:
towhat: Host
guid: 98557866-d2ee-11de-b4f6-0050568a547d
created_by: admin
updated_by: admin
notes: This policy will automatically apply a DMZ tag to a host if it has access
      to the external vlan
active: true
mode: control
MiqPolicyContent:
- qualifier: success
  success_sequence: 1
  MiqEvent:
    name: host_scan_complete
    description: Host Analysis Complete
    guid: ffcfb368-455d-11de-86a0-005056a81f62
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: 330828a4-d2ef-11de-b4f6-0050568a547d
    description: Tag as DMZ
    guid: 330828a4-d2ef-11de-b4f6-0050568a547d
    action_type: tag
    options:
      :tags:
        - /managed/network_location/dmz
Condition:
- name: ed3edf84-d2ee-11de-b4f6-0050568a547d
  description: Host - DMZ vlan check
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          IS NOT NULL:
            field: Host.lans-created_on
        search:
          INCLUDES:
            value: External
            field: Host.lans-name
      towhat: Host
      file_mtime:
      guid: ed3edf84-d2ee-11de-b4f6-0050568a547d
      filename:
      applies_to_exp:
      miq_policy_id: 10000000000017
      notes:
- MiqPolicy:
  name: 0c2517d8-1ea2-11e0-8e71-005056910000
  description: ! 'Tag: VM Inherit Cluster Location Tag'
  expression:
  towhat: Vm
  guid: 0c2517d8-1ea2-11e0-8e71-005056910000
  created_by: admin
  updated_by: admin
  notes: This policy allows a vm to inherit the location tag of it's parent cluster

```

```

    on creation or completion of analysis
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: vm_create
      description: VM Create Complete
      guid: 4c0b4f12-37c0-11df-b567-005056a40709
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: 60e5d690-1ea2-11e0-8e71-005056910000
      description: ! 'Tag: Inherit Cluster Location Tag'
      guid: 60e5d690-1ea2-11e0-8e71-005056910000
      action_type: inherit_parent_tags
      options:
        :parent_type: ems_cluster
        :cats:
        - location
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: vm_scan_complete
      description: VM Analysis Complete
      guid: f7b8361e-1139-11e1-9333-005056af009e
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: 60e5d690-1ea2-11e0-8e71-005056910000
      description: ! 'Tag: Inherit Cluster Location Tag'
      guid: 60e5d690-1ea2-11e0-8e71-005056910000
      action_type: inherit_parent_tags
      options:
        :parent_type: ems_cluster
        :cats:
        - location
  Condition: []
- MiqPolicy:
  name: 66fbec86-d2ef-11de-b4f6-0050568a547d
  description: ! 'Tag: VM Workload - DMZ'
  expression:
  towhat: Vm
  guid: 66fbec86-d2ef-11de-b4f6-0050568a547d
  created_by: admin
  updated_by: admin
  notes: This policy will automatically apply a DMZ tag to a vm if it has access
    to the external vlan
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    MiqEvent:

```

```

    name: vm_scan_complete
    description: VM Analysis Complete
    guid: f7b8361e-1139-11e1-9333-005056af009e
    event_type: Default
    definition:
      default:
      enabled:
    MiqAction:
      name: 330828a4-d2ef-11de-b4f6-0050568a547d
      description: Tag as DMZ
      guid: 330828a4-d2ef-11de-b4f6-0050568a547d
      action_type: tag
      options:
        :tags:
        - /managed/network_location/dmz
    Condition:
  - name: 8a975658-d2ef-11de-b4f6-0050568a547d
    description: VM - DMZ check
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkany:
            IS NOT NULL:
              field: Vm.lans-created_on
          search:
            INCLUDES:
              value: External
              field: Vm.lans-name
    towhat: Vm
    file_mtime:
    guid: 8a975658-d2ef-11de-b4f6-0050568a547d
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000018
    notes:
  - MiqPolicy:
      name: 07cea762-3d1b-11df-a7e9-005056a40709
      description: ! 'Tag: VM if Analysis not successful'
      expression:
      towhat: Vm
      guid: 07cea762-3d1b-11df-a7e9-005056a40709
      created_by: admin
      updated_by: admin
      notes:
      active: true
      mode: control
      MiqPolicyContent:
      - qualifier: success
        success_sequence: 1
      MiqEvent:
        name: vm_scan_abort
        description: VM Analysis Failure
        guid: 4c48a6fa-37c0-11df-b567-005056a40709
        event_type: Default
        definition:
          default:
          enabled:
      MiqAction:

```

```
name: fc7f2dde-3d22-11df-a7e9-005056a40709
description: Tag VM that Fails Analysis
guid: fc7f2dde-3d22-11df-a7e9-005056a40709
action_type: tag
options:
  :variables:
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
  :tags:
    - /managed/operations/analysis_failed
Condition: []
- MiqPolicy:
  name: 0ce6cf38-3d2d-11df-a7e9-005056a40709
  description: ! 'Tag: VM on Successful Analysis'
  expression:
  towhat: Vm
  guid: 0ce6cf38-3d2d-11df-a7e9-005056a40709
  created_by: admin
  updated_by: admin
  notes:
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
  MiqEvent:
    name: vm_scan_complete
    description: VM Analysis Complete
    guid: f7b8361e-1139-11e1-9333-005056af009e
    event_type: Default
    definition:
```

```

    default:
    enabled:
  MiqAction:
    name: cd2f3222-3d2c-11df-a7e9-005056a40709
    description: Tag VM after Successful Analysis
    guid: cd2f3222-3d2c-11df-a7e9-005056a40709
    action_type: tag
    options:
      :tags:
        - /managed/operations/analysis_success
  Condition: []
- MiqPolicy:
  name: b968f0a0-3d2e-11df-a7e9-005056a40709
  description: ! 'Tag: VM that Requires Analysis'
  expression:
  towhat: Vm
  guid: b968f0a0-3d2e-11df-a7e9-005056a40709
  created_by: admin
  updated_by: admin
  notes:
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: vm_start
      description: VM Power On
      guid: 404b4630-21a8-11e2-b47a-0050568b19a3
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: a4ccd026-3d2e-11df-a7e9-005056a40709
      description: Tag VM that Requires Analysis
      guid: a4ccd026-3d2e-11df-a7e9-005056a40709
      action_type: tag
      options:
        :tags:
          - /managed/operations/analysis_required
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: vm_create
      description: VM Create Complete
      guid: 4c0b4f12-37c0-11df-b567-005056a40709
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: a4ccd026-3d2e-11df-a7e9-005056a40709
      description: Tag VM that Requires Analysis
      guid: a4ccd026-3d2e-11df-a7e9-005056a40709
      action_type: tag
      options:
        :tags:
          - /managed/operations/analysis_required

```

```

- qualifier: success
  success_sequence: 1
  MiqEvent:
    name: vm_reset
    description: VM Reset
    guid: 4c1b8a3a-37c0-11df-b567-005056a40709
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: a4ccd026-3d2e-11df-a7e9-005056a40709
    description: Tag VM that Requires Analysis
    guid: a4ccd026-3d2e-11df-a7e9-005056a40709
    action_type: tag
    options:
      :tags:
        - /managed/operations/analysis_required
  Condition: []
- MiqPolicy:
  name: ccadf9fa-fa56-11de-83ca-005056ba0614
  description: Time Keeping - NTP Configured to Use Loopback Adapter
  expression:
  towhat: Host
  guid: ccadf9fa-fa56-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that NTP performs all name resolutions via a loopback
    network.
  active: true
  mode: compliance
  MiqPolicyContent:
    - qualifier: failure
      failure_sequence: 1
      MiqEvent:
        name: host_compliance_check
        description: Host Compliance Check
        guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
        event_type: Default
        definition:
          default:
          enabled:
      MiqAction:
        name: compliance_failed
        description: Mark as Non-Compliant
        guid: ba452d94-f586-11de-8ebc-0050568a07c7
        action_type: default
        options: {}
  Condition:
    - name: 2b9bb8b2-fa57-11de-83ca-005056ba0614
      description: NTP Configured to Use Loopback Adapter
      modifier: allow
      expression: !ruby/object:MiqExpression
        exp:
          FIND:
            checkany:
              REGULAR EXPRESSION MATCHES:
                value: ^\s*restrict\s+127\.0\.0\.1
                field: Host.filesystems-contents

```

```

        search:
          =:
            value: /etc/ntp.conf
            field: Host.filesystems-name
        towhat: Host
        file_mtime:
        guid: 2b9bb8b2-fa57-11de-83ca-005056ba0614
        filename:
        applies_to_exp:
        miq_policy_id: 10000000000036
        notes: This condition checks the file /etc/ntp.conf and verifies that the restrict
              parameter's value is set to 127.0.0.1.
- MiqPolicy:
  name: ebc02cea-fa57-11de-83ca-005056ba0614
  description: Time Keeping - Restrict Access for Machines without Loopback
  expression:
  towhat: Host
  guid: ebc02cea-fa57-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that only non-loopback machines can access the NTP
        service.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: ddc26260-fa58-11de-83ca-005056ba0614
    description: Access Restricted for Machines without Loopback
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkany:
            REGULAR EXPRESSION MATCHES:
              value: ^\s*restrict\s+default\s+kod\s+nomodify\s+notrap
              field: Host.filesystems-contents
            search:
              =:
                value: /etc/ntp.conf
                field: Host.filesystems-name
          towhat: Host
          file_mtime:
          guid: ddc26260-fa58-11de-83ca-005056ba0614

```



```

    filename:
    applies_to_exp:
    miq_policy_id: 100000000000035
    notes: This condition checks the file /etc/ntp.conf and verifies that the line
           "restrict default kod nomodify notrap" exists.
- MiqPolicy:
  name: 3819638c-fa57-11de-83ca-005056ba0614
  description: Timekeeping - Drift Enabled
  expression:
  towhat: Host
  guid: 3819638c-fa57-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that NTP's driftfile support is enabled.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: 71fae5da-fa57-11de-83ca-005056ba0614
    description: Verify NTP Uses a Driftfile
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkany:
            REGULAR EXPRESSION MATCHES:
              value: ^\s*driftfile\s+\s+\/var\/lib\/ntp\/drift
              field: Host.filesystems-contents
          search:
            =:
              value: /etc/ntp.conf
              field: Host.filesystems-name
    towhat: Host
    file_mtime:
    guid: 71fae5da-fa57-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000034
    notes: This condition checks the file /etc/ntp.conf and verifies that the driftfile
           parameter exists.
- MiqPolicy:
  name: c4396f3a-fa55-11de-83ca-005056ba0614
  description: Timekeeping - Minimum of 3 NTP Servers Defined in hosts

```

```

expression:
towhat: Host
guid: c4396f3a-fa55-11de-83ca-005056ba0614
created_by: admin
updated_by: admin
notes: This policy verifies that a minimum of 3 NTP servers are defined in the
      local hosts file.
active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: 2698c39c-fa56-11de-83ca-005056ba0614
  description: Verify 3 NTP Servers Defined in hosts File
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          RUBY:
            value: ! "count = 0\ncontext.each_line { |line|
              Break up the input by lines\n  count += 1 if line =~ /^[^#]*NTP/i
              \ # Increment Count if line matches our regular expression\n}\nreturn
              true if count >= 3\nreturn false\n"
            field: Host.filesystems-contents
          search:
            =:
              value: /etc/hosts
              field: Host.filesystems-name
        towhat: Host
        file_mtime:
        guid: 2698c39c-fa56-11de-83ca-005056ba0614
        filename:
        applies_to_exp:
        miq_policy_id: 10000000000033
        notes: ! 'This conditions checks the file /etc/hosts and veries that there are
          at least 3 uncommented lines that reference ntp servers. The included expression
          can be modified to match the appropriate values for the ntp servers for your
          environment.
      ,
- MiqPolicy:
  name: a6c2a51e-fa57-11de-83ca-005056ba0614
  description: Timekeeping - Minimum of 3 NTP Servers Defined in ntp.conf

```

```

expression:
towhat: Host
guid: a6c2a51e-fa57-11de-83ca-005056ba0614
created_by: admin
updated_by: admin
notes: This policy verifies that a minimum of 3 servers are defined in the NTP
      configuration.
active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: 03c821bc-fa58-11de-83ca-005056ba0614
  description: Verify 3 NTP Servers Defined in ntp.conf
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          RUBY:
            value: ! "count = 0\ncontext.each_line { |line|
                      Break up the input by lines\n  count += 1 if line =~ /^^[^#]*server\\s+[0-9A- ↵
                      Za-z]+/
                      \  # Increment Count if line matches our regular expression\n)\nreturn
                      true if count >= 3\nreturn false"
            field: Host.filesystems-contents
          search:
            =:
              value: /etc/ntp.conf
              field: Host.filesystems-name
          towhat: Host
          file_mtime:
          guid: 03c821bc-fa58-11de-83ca-005056ba0614
          filename:
          applies_to_exp:
          miq_policy_id: 10000000000032
          notes: This condition checks the file /etc/ntp.conf and verifies that a minimum
                of three ntp servers are defined.
- MiqPolicy:
  name: 8d4a7bee-fa56-11de-83ca-005056ba0614
  description: Timekeeping - Minimum of 3 NTP Servers defined in step-tickers
  expression:
  towhat: Host
  guid: 8d4a7bee-fa56-11de-83ca-005056ba0614

```

```

created_by: admin
updated_by: admin
notes: This policy verifies that a minimum of 3 servers are defined in the NTP
      step-tickers configuration.
active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
- name: 0806448a-fa57-11de-83ca-005056ba0614
  description: Verify 3 NTP Servers Defined in step-tickers File
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          RUBY:
            value: ! "count = 0\ncontext.each_line { |line|
                      Break up the input by lines\n  count += 1 if line =~ /^[^#]*server\\s+[0-9A- ←
                      Za-z]*/
                      \ # Increment Count if line matches our regular expression\n}\nreturn
                      true if count >= 3\nreturn false\n"
            field: Host.filesystems-contents
        search:
          =:
            value: /etc/ntp/step-tickers
            field: Host.filesystems-name
        towhat: Host
        file_mtime:
        guid: 0806448a-fa57-11de-83ca-005056ba0614
        filename:
        applies_to_exp:
        miq_policy_id: 10000000000023
        notes: This condition checks the file /etc/ntp/step-tickers and verifies that
              a minimum of three ntp servers are defined.
- MiqPolicy:
  name: 4ed279b2-fa55-11de-83ca-005056ba0614
  description: Timekeeping - NTP Service Running
  expression:
  towhat: Host
  guid: 4ed279b2-fa55-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that the NTP servers is configured to automatically

```

```

    start.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: 9a08d21e-fa55-11de-83ca-005056ba0614
    description: Verify NTP is Running
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkany:
            INCLUDES:
              value: '3'
              field: Host.host_services-enable_run_levels
          search:
            =:
              value: ntpd
              field: Host.host_services-name
        towhat: Host
        file_mtime:
        guid: 9a08d21e-fa55-11de-83ca-005056ba0614
        filename:
        applies_to_exp:
        miq_policy_id: 10000000000031
        notes: This condition verifies that the run level of the service ntpd is set
              to three.
  - MiqPolicy:
      name: a8e0ef7c-fa48-11de-83ca-005056ba0614
      description: Use sudo aliases
      expression:
      towhat: Host
      guid: a8e0ef7c-fa48-11de-83ca-005056ba0614
      created_by: admin
      updated_by: admin
      notes: This policy verifies that user aliases are enabled in the configuration
            of the sudo command.
      active: true
      mode: compliance
      MiqPolicyContent:
      - qualifier: failure
        failure_sequence: 1
        MiqEvent:

```

```

    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
    Condition:
- name: 99496ebc-fa49-11de-83ca-005056ba0614
  description: Aliases are being used for sudo authorization
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          REGULAR EXPRESSION MATCHES:
            value: ^\s*User_Alias
            field: Host.filesystems-contents
        search:
          =:
            value: /etc/sudoers
            field: Host.filesystems-name
    towhat: Host
    file_mtime:
    guid: 99496ebc-fa49-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000030
    notes: This condition checks the file /etc/sudoers and verifies that the parameter
      "User_Alias" is defined.
- MiqPolicy:
  name: 2cd19756-c1ec-11e1-ae68-000c29cc1a4c
  description: VMWare SHG v4.x & v5.x - VMX01 - Prevent virtual disk shrinking.
  expression: !ruby/object:MiqExpression
    exp:
      =:
        value: VMware
        field: Vm-vendor
    context_type:
  towhat: Vm
  guid: 2cd19756-c1ec-11e1-ae68-000c29cc1a4c
  created_by: admin
  updated_by: admin
  notes: VMWare SHG v4.x & v5.x - VMX01 - Prevent virtual disk shrinking. R1
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
  MiqEvent:
    name: vm_compliance_check
    description: VM Compliance Check
    guid: 816a598a-f57d-11de-a41a-005056ba0614

```

```

    event_type: Default
    definition:
      default:
      enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
    Condition:
  - name: 11564bce-c1ed-11e1-ae68-000c29cc1a4c
    description: VMWare SHG v4.x - VMX01 - Prevent virtual disk shrinking
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        and:
          - FIND:
              checkany:
                =:
                  field: Vm.advanced_settings-value
                  value: 'true'
              search:
                =:
                  field: Vm.advanced_settings-name
                  value: isolation.tools.diskShrink.disable
          - FIND:
              checkany:
                =:
                  field: Vm.advanced_settings-value
                  value: 'true'
              search:
                =:
                  field: Vm.advanced_settings-name
                  value: isolation.tools.diskWiper.disable
        context_type:
        towhat: Vm
        file_mtime:
        guid: 11564bce-c1ed-11e1-ae68-000c29cc1a4c
        filename:
        applies_to_exp: !ruby/object:MiqExpression
          exp:
            STARTS WITH:
              value: '4'
              field: Vm.host-vmm_version
            context_type:
        miq_policy_id: 13
        notes: VMWare SHG v4.x - VMX01 - Prevent virtual disk shrinking R1
  - name: d4bd19f4-d7d6-11e1-b3e5-000c2999f7f1
    description: VMWare SHG v5.x - VMX01 - Prevent virtual disk shrinking
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkany:
            =:
              field: Vm.advanced_settings-value
              value: 'true'
          search:

```

```

      =:
        field: Vm.advanced_settings-name
        value: isolation.tools.diskWiper.disable
      context_type:
    towhat: Vm
    file_mtime:
    guid: d4bd19f4-d7d6-11e1-b3e5-000c2999f7f1
    filename:
    applies_to_exp: !ruby/object:MiqExpression
      exp:
        STARTS WITH:
          field: Vm.host-vmm_version
          value: '5'
        context_type:
      miq_policy_id: 13
      notes: VMWare SHG v5.x - VMX01 - Prevent virtual disk shrinking R1
- MiqPolicy:
  name: 774404fc-c1c1-11e1-ae68-000c29cc1a4c
  description: VMWare SHG v4.x & v5.x - VMX22 - Avoid using independent nonpersistent
    disks.
  expression: !ruby/object:MiqExpression
    exp:
      =:
        value: VMware
        field: Vm-vendor
      context_type:
    towhat: Vm
    guid: 774404fc-c1c1-11e1-ae68-000c29cc1a4c
    created_by: admin
    updated_by: admin
    notes: VMWare SHG v4.x & v5.x - VMX22 - Avoid using independent nonpersistent
      disks.
    active: true
    mode: compliance
  MiqPolicyContent:
    - qualifier: failure
      failure_sequence: 1
  MiqEvent:
    name: vm_compliance_check
    description: VM Compliance Check
    guid: 816a598a-f57d-11de-a41a-005056ba0614
    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
    - name: b6c3548e-c1c1-11e1-ae68-000c29cc1a4c
      description: VMWare SHG v4.x & v5.x - VMX22 - Avoid using independent nonpersistent
        disks.
      modifier: allow
      expression: !ruby/object:MiqExpression
        exp:
          FIND:

```



```

      checkcount:
        =:
          value: '0'
          field: <count>
      search:
        INCLUDES:
          value: independent_nonpersistent
          field: Vm.hardware.disks-mode
      context_type:
      towhat: Vm
      file_mtime:
      guid: b6c3548e-c1c1-11e1-ae68-000c29cc1a4c
      filename:
      applies_to_exp:
      miq_policy_id: 3
      notes: VMWare SHG v4.x & v5.x - VMX22 - Avoid using independent nonpersistent
        disks. R1
- MiqPolicy:
  name: 5e3a568e-cfe3-11e1-986c-000c29cc1a4c
  description: VMWare SHG v4.x & v5.x - VSH05 - Install VMware vCenter Server using
    a service account
  expression: !ruby/object:MiqExpression
  exp:
    CONTAINS:
      field: Vm.win32_services-name
      value: vpxd
    context_type:
  towhat: Vm
  guid: 5e3a568e-cfe3-11e1-986c-000c29cc1a4c
  created_by: admin
  updated_by: admin
  notes: VMWare SHG v4.x & v5.x - VSH05 - Install VMware vCenter Server using a
    service account R1
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
  MiqEvent:
    name: vm_compliance_check
    description: VM Compliance Check
    guid: 816a598a-f57d-11de-a41a-005056ba0614
    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
  - name: 9e841928-cfe8-11e1-986c-000c29cc1a4c
    description: VMWare SHG v4.x & v5.x - VSH05 - Install VMware vCenter Server
      using a service account
    modifier: allow
    expression: !ruby/object:MiqExpression
    exp:

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      FIND:
        checkany:
          REGULAR EXPRESSION DOES NOT MATCH:
            field: Vm.win32_services-object_name
            value: \bLocalSystem
        search:
          =:
            field: Vm.win32_services-name
            value: vpxd
        context_type:
  towhat: Vm
  file_mtime:
  guid: 9e841928-cfe8-11e1-986c-000c29cc1a4c
  filename:
  applies_to_exp:
  miq_policy_id: 4
  notes: VMWare SHG v4.x & v5.x - VSH05 - Install VMware vCenter Server using
    a service account R1
- MiqPolicy:
  name: 17fce8ee-c39f-11e1-aed6-000c29cc1a4c
  description: VMware SHG - VMX24 - Disable certain unexposed features.
  expression:
  towhat: Vm
  guid: 17fce8ee-c39f-11e1-aed6-000c29cc1a4c
  created_by: admin
  updated_by: admin
  notes: VMware SHG - VMX24 - Disable certain unexposed features.
  active: true
  mode: compliance
  MiqPolicyContent:
    - qualifier: failure
      failure_sequence: 1
      MiqEvent:
        name: vm_compliance_check
        description: VM Compliance Check
        guid: 816a598a-f57d-11de-a41a-005056ba0614
        event_type: Default
        definition:
          default:
          enabled:
      MiqAction:
        name: compliance_failed
        description: Mark as Non-Compliant
        guid: ba452d94-f586-11de-8ebc-0050568a07c7
        action_type: default
        options: {}
  Condition:
    - name: 98427d34-c39f-11e1-aed6-000c29cc1a4c
      description: Disable certain unexposed features
      modifier: allow
      expression: !ruby/object:MiqExpression
        exp:
          and:
            - FIND:
              checkany:
                =:
                  field: Vm.advanced_settings-value
                  value: 'true'
              search:

```

```

      =:
        field: Vm.advanced_settings-name
        value: isolation.tools.unity.push.update.disable
- FIND:
  checkany:
    =:
      field: Vm.advanced_settings-value
      value: 'true'
  search:
    =:
      field: Vm.advanced_settings-name
      value: isolation.tools.ghi.launchmenu.change
- FIND:
  checkany:
    =:
      field: Vm.advanced_settings-value
      value: 'true'
  search:
    =:
      field: Vm.advanced_settings-name
      value: isolation.tools.memSchedFakeSampleStats.disable
- FIND:
  checkany:
    =:
      field: Vm.advanced_settings-value
      value: 'true'
  search:
    =:
      field: Vm.advanced_settings-name
      value: isolation.tools.getCreds.disable
  context_type:
  towhat: Vm
  file_mtime:
  guid: 98427d34-c39f-11e1-aed6-000c29ccla4c
  filename:
  applies_to_exp:
  miq_policy_id: 1
  notes:
- MiqPolicy:
  name: e5871bee-d435-11e1-9935-000c2999f7f1
  description: VMware SHG v4.x & v5.x - HCN05 - Disable DCUI to prevent all local
    administrative control
  expression: !ruby/object:MiqExpression
  exp:
    =:
      value: ESXi
      field: Host-vmm_product
  context_type:
  towhat: Host
  guid: e5871bee-d435-11e1-9935-000c2999f7f1
  created_by: admin
  updated_by: admin
  notes: VMware SHG v4.x & v5.x - HCN05 - Disable DCUI to prevent all local administrative
    control R1
  active: true
  mode: compliance
  MiqPolicyContent:
    - qualifier: failure
      failure_sequence: 1

```

```

MiqEvent:
  name: host_compliance_check
  description: Host Compliance Check
  guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
  event_type: Default
  definition:
    default:
    enabled:
MiqAction:
  name: compliance_failed
  description: Mark as Non-Compliant
  guid: ba452d94-f586-11de-8ebc-0050568a07c7
  action_type: default
  options: {}
Condition:
- name: 0f6761b2-d436-11e1-9935-000c2999f7f1
  description: VMware SHG v4.x & v5.x - HCN05 - Disable DCUI to prevent all local
    administrative control
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkall:
          =:
            value: 'false'
            field: Host.host_services-running
        search:
          =:
            value: DCUI
            field: Host.host_services-name
        context_type:
        towhat: Host
        file_mtime:
        guid: 0f6761b2-d436-11e1-9935-000c2999f7f1
        filename:
        applies_to_exp:
        miq_policy_id: 14
        notes: VMware SHG v4.x & v5.x - HCN05 - Disable DCUI to prevent all local administrative
          control R1
- MiqPolicy:
  name: 3a2acbde-d434-11e1-9935-000c2999f7f1
  description: VMware SHG v4.x & v5.x - HCN06 - Disable Tech Support Mode unless
    needed for diagnostics and break-fix
  expression: !ruby/object:MiqExpression
    exp:
      =:
        field: Host-vmm_product
        value: ESXi
      context_type:
      towhat: Host
      guid: 3a2acbde-d434-11e1-9935-000c2999f7f1
      created_by: admin
      updated_by: admin
      notes: VMware SHG v4.x & v5.x - HCN06 - Disable Tech Support Mode unless needed
        for diagnostics and break-fix R1
      active: true
      mode: compliance
      MiqPolicyContent:
        - qualifier: failure

```

```

failure_sequence: 1
MiqEvent:
  name: host_compliance_check
  description: Host Compliance Check
  guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
  event_type: Default
  definition:
    default:
    enabled:
MiqAction:
  name: compliance_failed
  description: Mark as Non-Compliant
  guid: ba452d94-f586-11de-8ebc-0050568a07c7
  action_type: default
  options: {}
Condition:
- name: e35c1be0-d434-11e1-9935-000c2999f7f1
  description: VMware SHG v4.x & v5.x - HCN06 - Disable Tech Support Mode unless
    needed for diagnostics and break-fix
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkall:
          =:
            field: Host.host_services-running
            value: 'false'
        search:
          =:
            field: Host.host_services-name
            value: TSM
        context_type:
      towhat: Host
      file_mtime:
      guid: e35c1be0-d434-11e1-9935-000c2999f7f1
      filename:
      applies_to_exp:
      miq_policy_id: 15
      notes: VMware SHG v4.x & v5.x - HCN06 - Disable Tech Support Mode unless needed
        for diagnostics and break-fix R1
- MiqPolicy:
  name: 36021318-d435-11e1-9935-000c2999f7f1
  description: VMware SHG v4.x & v5.x - HCN07 - Set a timeout for Tech Support Mode.
  expression: !ruby/object:MiqExpression
    exp:
      =:
        field: Host-vmm_product
        value: ESXi
      context_type:
    towhat: Host
    guid: 36021318-d435-11e1-9935-000c2999f7f1
    created_by: admin
    updated_by: admin
    notes: VMware SHG v4.x & v5.x - HCN07 - Set a timeout for Tech Support Mode. R1
    active: true
    mode: compliance
    MiqPolicyContent:
      - qualifier: failure
        failure_sequence: 1

```

```

MiqEvent:
  name: host_compliance_check
  description: Host Compliance Check
  guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
  event_type: Default
  definition:
  default:
  enabled:
MiqAction:
  name: compliance_failed
  description: Mark as Non-Compliant
  guid: ba452d94-f586-11de-8ebc-0050568a07c7
  action_type: default
  options: {}
Condition:
- name: 9f3b5376-d435-11e1-9935-000c2999f7f1
  description: VMware SHG v4.x - HCN07 - Set a timeout for Tech Support Mode.
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      not:
        FIND:
          checkall:
            =:
              field: Host.advanced_settings-value
              value: '0'
          search:
            =:
              field: Host.advanced_settings-name
              value: UserVars.TSMTIMEOUT
        context_type:
      towhat: Host
      file_mtime:
      guid: 9f3b5376-d435-11e1-9935-000c2999f7f1
      filename:
      applies_to_exp: !ruby/object:MiqExpression
        exp:
          STARTS WITH:
            field: Host-vmx_version
            value: '4'
          context_type:
      miq_policy_id: 5
      notes: VMware SHG v4.x - HCN07 - Set a timeout for Tech Support Mode. R1
- name: fc017d86-d7cf-11e1-b3e5-000c2999f7f1
  description: VMware SHG v5.x - HCN07 - Set a timeout for Tech Support Mode.
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      not:
        FIND:
          checkall:
            =:
              value: '0'
              field: Host.advanced_settings-value
          search:
            =:
              value: UserVars.ESXiShellTimeout
              field: Host.advanced_settings-name
        context_type:

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```

    towhat: Host
    file_mtime:
    guid: fc017d86-d7cf-11e1-b3e5-000c2999f7f1
    filename:
    applies_to_exp: !ruby/object:MiqExpression
      exp:
        STARTS WITH:
          value: '5'
          field: Host-vmm_version
        context_type:
    miq_policy_id: 5
    notes: VMware SHG v5.x - HCN07 - Set a timeout for Tech Support Mode. R1
- MiqPolicy:
  name: 4dadd9bc-d443-11e1-9935-000c2999f7f1
  description: VMware SHG v4.x & v5.x - HLG01 - Remote syslog should be configured
  expression: !ruby/object:MiqExpression
    exp:
      =:
        value: ESXi
        field: Host-vmm_product
    context_type:
  towhat: Host
  guid: 4dadd9bc-d443-11e1-9935-000c2999f7f1
  created_by: admin
  updated_by: admin
  notes: VMware SHG v4.x & v5.x - HLG01 - Remote syslog should be configured
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: b60247d2-d443-11e1-9935-000c2999f7f1
    description: VMware SHG v5.x - HLG01 - Remote syslog should be configured
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkall:
            IS NOT EMPTY:
              value: ''
              field: Host.advanced_settings-value
          search:
            =:
              value: Syslog.global.logHost

```

```

        field: Host.advanced_settings-name
        context_type:
        towhat: Host
        file_mtime:
        guid: b60247d2-d443-11e1-9935-000c2999f7f1
        filename:
        applies_to_exp: !ruby/object:MiqExpression
        exp:
          STARTS WITH:
            field: Host-vmm_version
            value: '5'
          context_type:
        miq_policy_id: 6
        notes: VMware SHG - HLG01 - Remote syslog should be configured VERSION 5.x ONLY
        R1
- name: 456a882a-d7ce-11e1-b3e5-000c2999f7f1
  description: VMware SHG v4.x - HLG01 - Remote syslog should be configured
  modifier: allow
  expression: !ruby/object:MiqExpression
  exp:
    FIND:
      checkall:
        IS NOT EMPTY:
          field: Host.advanced_settings-value
          value: ''
      search:
        =:
          field: Host.advanced_settings-name
          value: Syslog.Remote.Hostname
    context_type:
    towhat: Host
    file_mtime:
    guid: 456a882a-d7ce-11e1-b3e5-000c2999f7f1
    filename:
    applies_to_exp: !ruby/object:MiqExpression
    exp:
      STARTS WITH:
        field: Host-vmm_version
        value: '4'
      context_type:
    miq_policy_id: 6
    notes: VMware SHG - HLG01 - Remote syslog should be configured VERSION 4.x ONLY
    R1
- MiqPolicy:
  name: 197d032e-d016-11e1-986c-000c29cc1a4c
  description: ! "VMware SHG v4.x & v5.x - NCN03 - Ensure that the \x80\x9CMAC
    Address Change\x80\x9D policy is set to \x80\x9Creject.\x80\x9D"
  expression: !ruby/object:MiqExpression
  exp:
    =:
      value: ESXi
      field: Host-vmm_product
    context_type:
    towhat: Host
    guid: 197d032e-d016-11e1-986c-000c29cc1a4c
    created_by: admin
    updated_by: admin
    notes: ! "VMware SHG v4.x & v5.x - NCN03 - Ensure that the \x80\x9CMAC Address
      Change\x80\x9D policy is set to \x80\x9Creject.\x80\x9D R1"

```



```

active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
- name: 3531486e-d016-11e1-986c-000c29cc1a4c
  description: ! "VMware SHG v4.x & v5.x - NCN03 - Ensure that the \x80\x9CMAC
    Address Change\x80\x9D policy is set to \x80\x9Creject.\x80\x9D"
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkall:
          =:
            value: 'false'
            field: Host.lans-mac_changes
        search:
          IS NOT NULL:
            value: ''
            field: Host.lans-name
        context_type:
      towhat: Host
      file_mtime:
      guid: 3531486e-d016-11e1-986c-000c29cc1a4c
      filename:
      applies_to_exp:
      miq_policy_id: 7
      notes: ! "VMware SHG v4.x & v5.x - NCN03 - Ensure that the \x80\x9CMAC Address
        Change\x80\x9D policy is set to \x80\x9Creject.\x80\x9D R1"
- MiqPolicy:
  name: e4d7e0e6-d00e-11e1-986c-000c29cc1a4c
  description: ! "VMware SHG v4.x & v5.x - NCN04 - Ensure that the \x80\x9CForged
    Transmits\x80\x9D policy is set to \x80\x9Creject.\x80\x9D"
  expression: !ruby/object:MiqExpression
    exp:
      =:
        field: Host-vmm_product
        value: ESXi
      context_type:
    towhat: Host
    guid: e4d7e0e6-d00e-11e1-986c-000c29cc1a4c
    created_by: admin
    updated_by: admin
    notes: ! "VMware SHG v4.x & v5.x - NCN04 - Ensure that the \x80\x9CForged Transmits\x80\x9D

```

```

    x9D
    policy is set to â\x80\x9Creject.â\x80\x9D R1"
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: ed54d6d8-d00f-11e1-986c-000c29cc1a4c
    description: ! "VMware SHG v4.x & v5.x - NCN04 - Ensure that the â\x80\x9CForged
      Transmitsâ\x80\x9D policy is set to â\x80\x9Creject.â\x80\x9D"
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkall:
            =:
              value: 'false'
              field: Host.lans-forged_transmits
          search:
            IS NOT NULL:
              value: ''
              field: Host.lans-name
          context_type:
        towhat: Host
        file_mtime:
        guid: ed54d6d8-d00f-11e1-986c-000c29cc1a4c
        filename:
        applies_to_exp:
        miq_policy_id: 8
        notes: ! "VMware SHG v4.x & v5.x - NCN04 - Ensure that the â\x80\x9CForged Transmitsâ\ ←
          x80\x9D
          policy is set to â\x80\x9Creject.â\x80\x9D R1"
  - MiqPolicy:
    name: d7ed01f4-d00e-11e1-986c-000c29cc1a4c
    description: ! "VMware SHG v4.x & v5.x - NCN05 -Ensure that the â\x80\x9CPromiscuous
      Modeâ\x80\x9D policy is set to â\x80\x9Creject.â\x80\x9D"
    expression: !ruby/object:MiqExpression
      exp:
        =:
          field: Host-vmm_product
          value: ESXi
          context_type:
        towhat: Host
        guid: d7ed01f4-d00e-11e1-986c-000c29cc1a4c

```

```

created_by: admin
updated_by: admin
notes: ! "VMware SHG v4.x & v5.x - NCN05 -Ensure that the \x80\x9CPromiscuous
  Mode\x80\x9D policy is set to \x80\x9Creject.\x80\x9D R1"
active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: abb1772c-d00f-11e1-986c-000c29cc1a4c
  description: ! "VMware SHG v4.x & v5.x - NCN05 -Ensure that the \x80\x9CPromiscuous
    Mode\x80\x9D policy is set to \x80\x9Creject.\x80\x9D"
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkall:
          =:
            field: Host.lans-allow_promiscuous
            value: 'false'
        search:
          IS NOT NULL:
            field: Host.lans-name
            value: ''
      context_type:
      towhat: Host
      file_mtime:
      guid: abb1772c-d00f-11e1-986c-000c29cc1a4c
      filename:
      applies_to_exp:
      miq_policy_id: 9
      notes: ! "VMware SHG v4.x & v5.x - NCN05 -Ensure that the \x80\x9CPromiscuous
        Mode\x80\x9D policy is set to \x80\x9Creject.\x80\x9D R1"
- MiqPolicy:
  name: 86c84f3a-d005-11e1-986c-000c29cc1a4c
  description: VMware SHG v4.x & v5.x - NCN10 - Ensure that port groups are configured
    with a clear network label
  expression: !ruby/object:MiqExpression
    exp:
      =:
        field: Host-vmm_product
        value: ESXi
      context_type:
      towhat: Host

```

```

guid: 86c84f3a-d005-11e1-986c-000c29cc1a4c
created_by: admin
updated_by: admin
notes: VMware SHG v4.x & v5.x - NCN10 - Ensure that port groups are configured
      with a clear network label R1
active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: elc666a0-d006-11e1-986c-000c29cc1a4c
  description: VMware SHG v4.x & v5.x - NCN10 - Ensure that port groups are configured
    with a clear network label
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      or:
      - FIND:
          checkcount:
            =:
              field: <count>
              value: '0'
          search:
            IS NULL:
              field: Host.lans-name
              value: ''
      - FIND:
          checkcount:
            =:
              value: '0'
              field: <count>
          search:
            IS EMPTY:
              value: ''
              field: Host.lans-name
          context_type:
          towhat: Host
          file_mtime:
          guid: elc666a0-d006-11e1-986c-000c29cc1a4c
          filename:
          applies_to_exp:
          miq_policy_id: 11
          notes: VMware SHG v4.x & v5.x - NCN10 - Ensure that port groups are configured
            with a clear network label R1

```

```

- MiqPolicy:
  name: cee396f8-clf0-11e1-ae68-000c29cc1a4c
  description: VMware SHG v4.x & v5.x - VMX02 - Prevent other users from spying
    on administrator remote consoles.
  expression: !ruby/object:MiqExpression
    exp:
      =:
        value: VMware
        field: Vm-vendor
    context_type:
  towhat: Vm
  guid: cee396f8-clf0-11e1-ae68-000c29cc1a4c
  created_by: admin
  updated_by: admin
  notes: VMware SHG v4.x & v5.x - VMX02 - Prevent other users from spying on administrator
    remote consoles.
  active: true
  mode: compliance
  MiqPolicyContent:
    - qualifier: failure
      failure_sequence: 1
    MiqEvent:
      name: vm_compliance_check
      description: VM Compliance Check
      guid: 816a598a-f57d-11de-a41a-005056ba0614
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
    - name: 71089c6c-clf1-11e1-ae68-000c29cc1a4c
      description: VMware SHG v4.x & v5.x - VMX02 - Prevent other users from spying
        on administrator remote consoles.
      modifier: allow
      expression: !ruby/object:MiqExpression
        exp:
          FIND:
            checkany:
              =:
                value: '1'
                field: Vm.advanced_settings-value
            search:
              =:
                value: RemoteDisplay.maxConnections
                field: Vm.advanced_settings-name
          context_type:
        towhat: Vm
        file_mtime:
        guid: 71089c6c-clf1-11e1-ae68-000c29cc1a4c
        filename:
        applies_to_exp:
        miq_policy_id: 2
        notes: VMware SHG v4.x & v5.x - VMX02 - Prevent other users from spying on administrator

```

```

    remote consoles. R1
- MiqPolicy:
  name: 1d60a788-clf3-11e1-ae68-000c29cc1a4c
  description: VMware SHG v4.x & v5.x - VMX11 Prevent unauthorized removal, connection
    and modification of devices
  expression: !ruby/object:MiqExpression
    exp:
      and:
        - =:
            field: Vm-vendor
            value: VMware
        - STARTS WITH:
            value: '5'
            field: Vm.host-vmm_version
      context_type:
towhat: Vm
guid: 1d60a788-clf3-11e1-ae68-000c29cc1a4c
created_by: admin
updated_by: admin
notes: VMware SHG v4.x & v5.x - VMX11 Prevent unauthorized removal, connection
  and modification of devices
active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: vm_compliance_check
    description: VM Compliance Check
    guid: 816a598a-f57d-11de-a41a-005056ba0614
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
- name: 728e7050-clf3-11e1-ae68-000c29cc1a4c
  description: VMware SHG v5.x - VMX11 Prevent unauthorized removal, connection
    and modification of devices
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          =:
            value: 'true'
            field: Vm.advanced_settings-value
        search:
          =:
            value: isolation.device.connectable.disable
            field: Vm.advanced_settings-name
      context_type:
towhat: Vm
file_mtime:

```

```

guid: 728e7050-clf3-11e1-ae68-000c29cc1a4c
filename:
applies_to_exp: !ruby/object:MiqExpression
  exp:
    STARTS WITH:
      field: Vm.host-vmm_version
      value: '5'
    context_type:
miq_policy_id: 12
notes: VMware SHG v5.x - VMX11 Prevent unauthorized removal, connection and
modification of devices R1
- name: aaa64a08-d7d8-11e1-b3e5-000c2999f7f1
description: VMware SHG v4.x - VMX11 Prevent unauthorized removal, connection
and modification of devices
modifier: allow
expression: !ruby/object:MiqExpression
  exp:
    and:
      - FIND:
        checkany:
          =:
            value: 'true'
            field: Vm.advanced_settings-value
        search:
          =:
            value: isolation.device.connectable.disable
            field: Vm.advanced_settings-name
      - FIND:
        checkany:
          =:
            field: Vm.advanced_settings-value
            value: 'true'
        search:
          =:
            field: Vm.advanced_settings-name
            value: isolation.device.edit.disable
    context_type:
towhat: Vm
file_mtime:
guid: aaa64a08-d7d8-11e1-b3e5-000c2999f7f1
filename:
applies_to_exp: !ruby/object:MiqExpression
  exp:
    STARTS WITH:
      value: '4'
      field: Vm.host-vmm_version
    context_type:
miq_policy_id: 12
notes: VMware SHG v4.x - VMX11 Prevent unauthorized removal, connection and
modification of devices R1
- MiqPolicy:
  name: 769b4b1e-clf8-11e1-ae68-000c29cc1a4c
  description: VMware SHG v4.x & v5.x - VMX30 - Disable remote operations within
the guest.
  expression: !ruby/object:MiqExpression
  exp:
    =:
      value: VMware
      field: Vm-vendor

```

```

    context_type:
  towhat: Vm
  guid: 769b4b1e-c1f8-11e1-ae68-000c29cc1a4c
  created_by: admin
  updated_by: admin
  notes: VMware SHG v4.x & v5.x - VMX30 - Disable remote operations within the guest.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: vm_compliance_check
      description: VM Compliance Check
      guid: 816a598a-f57d-11de-a41a-005056ba0614
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: 8b7f39d2-c1f8-11e1-ae68-000c29cc1a4c
    description: VMware SHG v4.x - VMX30 - Disable remote operations within the
      guest.
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkany:
            =:
              field: Vm.advanced_settings-value
              value: 'false'
          search:
            =:
              field: Vm.advanced_settings-name
              value: guest.commands.enabled
        context_type:
        towhat: Vm
        file_mtime:
        guid: 8b7f39d2-c1f8-11e1-ae68-000c29cc1a4c
        filename:
        applies_to_exp: !ruby/object:MiqExpression
          exp:
            STARTS WITH:
              value: '4'
              field: Vm.host-vmx_version
        context_type:
        miq_policy_id: 16
        notes: VMware SHG v4.x - VMX30 - Disable remote operations within the guest.
        R1
- MiqPolicy:
  name: e99a4c3e-d00b-11e1-986c-000c29cc1a4c
  description: VMware SHG v4x. & v5.x - NCN11 - Ensure that all vSwitches have a
    clear network label.

```



```

expression: !ruby/object:MiqExpression
  exp:
    =:
      value: ESXi
      field: Host-vmm_product
    context_type:
  towhat: Host
guid: e99a4c3e-d00b-11e1-986c-000c29cc1a4c
created_by: admin
updated_by: admin
notes: VMware SHG v4x. & v5.x - NCN11 - Ensure that all vSwitches have a clear
  network label. R1
active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
- name: 5ca4abca-d00c-11e1-986c-000c29cc1a4c
  description: VMware SHG v4x. & v5.x - NCN11 - Ensure that all vSwitches have
    a clear network label.
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      or:
      - FIND:
          checkall:
            IS NOT NULL:
              value: ''
              field: Host.hardware.ports-device_name
          search:
            =:
              value: ethernet
              field: Host.hardware.ports-device_type
      - FIND:
          checkall:
            IS NOT EMPTY:
              field: Host.hardware.ports-device_name
              value: ''
          search:
            =:
              field: Host.hardware.ports-device_type
              value: ethernet
    context_type:
  towhat: Host

```

```
    file_mtime:
    guid: 5ca4abca-d00c-11e1-986c-000c29cc1a4c
    filename:
    applies_to_exp:
    miq_policy_id: 10
    notes: VMware SHG v4x. & v5.x - NCN11 - Ensure that all vSwitches have a clear
      network label. R1
- MiqPolicy:
  name: d4640a18-e15d-11e1-acfa-005056b25af6
  description: powervm
  expression:
  towhat: Vm
  guid: d4640a18-e15d-11e1-acfa-005056b25af6
  created_by: admin
  updated_by: admin
  notes:
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: vm_start
      description: VM Power On
      guid: 404b4630-21a8-11e2-b47a-0050568b19a3
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: b0138b70-e15d-11e1-8744-005056b25af6
      description: powerVM
      guid: b0138b70-e15d-11e1-8744-005056b25af6
      action_type: custom_automation
      options:
        :ae_message: create
        :ae_request: powerVM
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: vm_poweroff
      description: VM Power Off
      guid: 48beeadc-ae7c-11e1-a76f-005056b25af6
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: b0138b70-e15d-11e1-8744-005056b25af6
      description: powerVM
      guid: b0138b70-e15d-11e1-8744-005056b25af6
      action_type: custom_automation
      options:
        :ae_message: create
        :ae_request: powerVM
  Condition: []
```

3.20.2 Profiles.yaml

Link: [Profiles.yaml](#)

Source:

```
---
- MiqPolicySet:
  name: 612b936c-3d2d-11df-a7e9-005056a40709
  description: ! 'ACTIVE - Analysis: Manage VMs'
  set_type: MiqPolicySet
  guid: 612b936c-3d2d-11df-a7e9-005056a40709
  read_only:
  set_data:
    :notes: ! '1)Create a new Tag Category called Operations (Show in EVM Console
      and Single Value)

      2)Create the following Tags under this new Operations Category (analysis_failed,
      analysis_required, analysis_success)

      3)Create Global Filters for VMs for Analysis Failed and Analysis Required
      to easily find tagged VMs.

      4)Set up a Schedule to run as desired that will process the VMs that currently
      match the Global Filter. Ex: Analyze all VMs that are tagged with "Analysis
      Required".'

,

  mode: control
  owner_type:
  owner_id:
  MiqPolicy:
  - name: 07cea762-3d1b-11df-a7e9-005056a40709
    description: ! 'Tag: VM if Analysis not successful'
    expression:
    towhat: Vm
    guid: 07cea762-3d1b-11df-a7e9-005056a40709
    created_by: admin
    updated_by: admin
    notes:
    active: true
    mode: control
    MiqPolicyContent:
    - qualifier: success
      success_sequence: 1
      MiqEvent:
        name: vm_scan_abort
        description: VM Analysis Failure
        guid: 4c48a6fa-37c0-11df-b567-005056a40709
        event_type: Default
        definition:
          default:
          enabled:
      MiqAction:
        name: fc7f2dde-3d22-11df-a7e9-005056a40709
        description: Tag VM that Fails Analysis
        guid: fc7f2dde-3d22-11df-a7e9-005056a40709
        action_type: tag
        options:
```

```

      :variables:
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      :tags:
      - /managed/operations/analysis_failed
    Condition: []
  - name: 0ce6cf38-3d2d-11df-a7e9-005056a40709
    description: ! 'Tag: VM on Successful Analysis'
    expression:
    towhat: Vm
    guid: 0ce6cf38-3d2d-11df-a7e9-005056a40709
    created_by: admin
    updated_by: admin
    notes:
    active: true
    mode: control
    MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: vm_scan_complete
      description: VM Analysis Complete
      guid: f7b8361e-1139-11e1-9333-005056af009e
      event_type: Default
      definition:
      default:
      enabled:
    MiqAction:
      name: cd2f3222-3d2c-11df-a7e9-005056a40709
      description: Tag VM after Successful Analysis
      guid: cd2f3222-3d2c-11df-a7e9-005056a40709

```

```

    action_type: tag
    options:
      :tags:
        - /managed/operations/analysis_success
  Condition: []
- name: b968f0a0-3d2e-11df-a7e9-005056a40709
  description: ! 'Tag: VM that Requires Analysis'
  expression:
    towhat: Vm
  guid: b968f0a0-3d2e-11df-a7e9-005056a40709
  created_by: admin
  updated_by: admin
  notes:
    active: true
    mode: control
  MiqPolicyContent:
    - qualifier: success
      success_sequence: 1
      MiqEvent:
        name: vm_start
        description: VM Power On
        guid: 404b4630-21a8-11e2-b47a-0050568b19a3
        event_type: Default
        definition:
          default:
          enabled:
      MiqAction:
        name: a4ccd026-3d2e-11df-a7e9-005056a40709
        description: Tag VM that Requires Analysis
        guid: a4ccd026-3d2e-11df-a7e9-005056a40709
        action_type: tag
        options:
          :tags:
            - /managed/operations/analysis_required
    - qualifier: success
      success_sequence: 1
      MiqEvent:
        name: vm_create
        description: VM Create Complete
        guid: 4c0b4f12-37c0-11df-b567-005056a40709
        event_type: Default
        definition:
          default:
          enabled:
      MiqAction:
        name: a4ccd026-3d2e-11df-a7e9-005056a40709
        description: Tag VM that Requires Analysis
        guid: a4ccd026-3d2e-11df-a7e9-005056a40709
        action_type: tag
        options:
          :tags:
            - /managed/operations/analysis_required
    - qualifier: success
      success_sequence: 1
      MiqEvent:
        name: vm_reset
        description: VM Reset
        guid: 4clb8a3a-37c0-11df-b567-005056a40709
        event_type: Default

```

```

    definition:
    default:
    enabled:
  MiqAction:
    name: a4ccd026-3d2e-11df-a7e9-005056a40709
    description: Tag VM that Requires Analysis
    guid: a4ccd026-3d2e-11df-a7e9-005056a40709
    action_type: tag
    options:
      :tags:
        - /managed/operations/analysis_required
  Condition: []
- name: ! 'Do Not Analyze '
  description: ! 'Analysis: Prevent Analysis of Selected VMs'
  expression:
  towhat: Vm
  guid: 3a7959c0-2866-11de-af2a-0050568026c2
  created_by:
  updated_by: admin
  notes: ! 'This policies prevents analysis ofany vm that is tagged as Do Not
    Analyze '
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    failure_synchronous: true
  MiqEvent:
    name: request_vm_scan
    description: VM Analysis Request
    guid: e3292c46-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: prevent
    description: Prevent current event from proceeding
    guid: d885a118-519b-11e0-8d82-005056af0000
    action_type: default
    options: {}
  Condition:
  - name: Do Not Analyze
    description: VM classified as DO_NOT_ANALYZE
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        CONTAINS:
          tag: Vm.managed-exclusions
          value: do_not_analyze
        context_type:
  towhat: Vm
  file_mtime:
  guid: 39ff4444-08e2-11de-829f-005056a164b2
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000001
  notes:
- MiqPolicySet:

```

```

name: 74de8372-bbd6-11e1-a4a4-005056b25af6
description: ACTIVE - Prevent PowerOn of Quarantined VMs
set_type: MiqPolicySet
guid: 74de8372-bbd6-11e1-a4a4-005056b25af6
read_only:
set_data:
mode: control
owner_type:
owner_id:
MiqPolicy:
- name: f4f0e916-bbd5-11e1-a4a4-005056b25af6
  description: Prevent PowerOn of Quarantined VM
  expression:
  towhat: Vm
  guid: f4f0e916-bbd5-11e1-a4a4-005056b25af6
  created_by: admin
  updated_by: admin
  notes:
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: request_vm_start
      description: VM Power On Request
      guid: 48b02c4a-ae7c-11e1-a76f-005056b25af6
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: vm_stop
      description: Stop Virtual Machine
      guid: 37f2da3e-21a8-11e2-b47a-0050568b19a3
      action_type: default
      options: {}
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: vm_start
      description: VM Power On
      guid: 404b4630-21a8-11e2-b47a-0050568b19a3
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: vm_stop
      description: Stop Virtual Machine
      guid: 37f2da3e-21a8-11e2-b47a-0050568b19a3
      action_type: default
      options: {}
  Condition:
  - name: 1cbc27da-bbd6-11e1-ac0c-005056b25af6
    description: VM Tagged as Do Not PowerOn
    modifier: allow
    expression: !ruby/object:MiqExpression
    exp:

```

```

CONTAINS:
  tag: Vm.managed-exclusions
  value: do_not_power_on
  context_type:
towhat: Vm
file_mtime:
guid: 1cbc27da-bbd6-11e1-ac0c-005056b25af6
filename:
applies_to_exp:
miq_policy_id:
notes:
- MiqPolicySet:
  name: 3a78daca-99da-11e1-a4bf-005056b057a8
  description: ! 'ACTIVE - Snapshot Management: Max of 2'
  set_type: MiqPolicySet
  guid: 3a78daca-99da-11e1-a4bf-005056b057a8
  read_only:
  set_data:
  mode: control
  owner_type:
  owner_id:
  MiqPolicy:
  - name: cf87e7fc-99d8-11e1-a4bf-005056b057a8
    description: ! 'Snapshots: limit to max of 2'
    expression:
    towhat: Vm
    guid: cf87e7fc-99d8-11e1-a4bf-005056b057a8
    created_by: admin
    updated_by: admin
    notes: This policy prevents a vm from starting if there are more than 2 snapshots.
      If this number is exceeded, the vm is not allowed to start and the vm annotations
      are updated in the VC
    active: true
    mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
  MiqEvent:
    name: vm_start
    description: VM Power On
    guid: 404b4630-21a8-11e2-b47a-0050568b19a3
    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: vm_stop
    description: Stop Virtual Machine
    guid: 37f2da3e-21a8-11e2-b47a-0050568b19a3
    action_type: default
    options: {}
  - qualifier: success
    success_sequence: 2
  MiqEvent:
    name: vm_start
    description: VM Power On
    guid: 404b4630-21a8-11e2-b47a-0050568b19a3
    event_type: Default
    definition:

```



```

    default:
    enabled:
  MiqAction:
    name: 8d6ebd90-99d9-11e1-a4bf-005056b057a8
    description: ! 'VM Attribute: Max Snapshots'
    guid: 8d6ebd90-99d9-11e1-a4bf-005056b057a8
    action_type: set_custom_attribute
    options:
      :value: Snapshot Limit Exceeded
      :attribute: EVM Policy
  Condition:
- name: 9db4783a-99d8-11e1-a4bf-005056b057a8
  description: Snapshot Count >=3
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      ! '>=':
        count: Vm.snapshots
        value: '3'
    context_type:
  towhat: Vm
  file_mtime:
  guid: 9db4783a-99d8-11e1-a4bf-005056b057a8
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000079
  notes: This condition checks to see if 3 or more snapshots exist
- MiqPolicySet:
  name: 98eea278-8b9f-11e0-b8fc-005056a40e59
  description: ACTIVE - VMs in DMZ NIC Check
  set_type: MiqPolicySet
  guid: 98eea278-8b9f-11e0-b8fc-005056a40e59
  read_only:
  set_data:
    :notes: This Policy Profile will check VM Network Adapter count and if > 1 will
      Stop the VM. This will happen after VM Analysis is Complete or when the VM
      is Powered On.
  mode: control
  owner_type:
  owner_id:
  MiqPolicy:
- name: 69fbd202-8ba3-11e0-b8fc-005056a40e59
  description: DMZ - Shutdown VM after Analysis if it has more than 1 NIC
  expression: !ruby/object:MiqExpression
    exp:
      =:
        value: 'on'
        field: Vm-power_state
    context_type:
  towhat: Vm
  guid: 69fbd202-8ba3-11e0-b8fc-005056a40e59
  created_by: admin
  updated_by: admin
  notes:
  active: true
  mode: control
  MiqPolicyContent:
- qualifier: success
  success_sequence: 1

```

```

MiqEvent:
  name: vm_scan_complete
  description: VM Analysis Complete
  guid: f7b8361e-1139-11e1-9333-005056af009e
  event_type: Default
  definition:
    default:
    enabled:
MiqAction:
  name: vm_shutdown_guest
  description: Shutdown Virtual Machine Guest OS
  guid: 26b84380-bbd5-11de-aaab-0050568a2c6a
  action_type: default
  options: {}
- qualifier: success
  success_sequence: 2
MiqEvent:
  name: vm_scan_complete
  description: VM Analysis Complete
  guid: f7b8361e-1139-11e1-9333-005056af009e
  event_type: Default
  definition:
    default:
    enabled:
MiqAction:
  name: evm_event
  description: Show EVM Event on Timeline
  guid: 16b1810c-44e8-11e0-acda-005056a40e59
  action_type: default
  options: {}
Condition:
- name: efcf3702-8b9e-11e0-b8fc-005056a40e59
  description: DMZ - VM has more than 1 NIC
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      ! '>':
        count: Vm.hardware.nics
        value: '1'
    context_type:
  towhat: Vm
  file_mtime:
  guid: efcf3702-8b9e-11e0-b8fc-005056a40e59
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000077
  notes:
- name: 0de66508-8b9f-11e0-b8fc-005056a40e59
  description: DMZ - Shutdown VM after Starting if it has more than 1 NIC
  expression:
  towhat: Vm
  guid: 0de66508-8b9f-11e0-b8fc-005056a40e59
  created_by: admin
  updated_by: admin
  notes:
  active: true
  mode: control
MiqPolicyContent:
- qualifier: success

```

```

    success_sequence: 1
  MiqEvent:
    name: vm_start
    description: VM Power On
    guid: 404b4630-21a8-11e2-b47a-0050568b19a3
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: vm_stop
    description: Stop Virtual Machine
    guid: 37f2da3e-21a8-11e2-b47a-0050568b19a3
    action_type: default
    options: {}
- qualifier: success
  success_sequence: 2
  MiqEvent:
    name: vm_start
    description: VM Power On
    guid: 404b4630-21a8-11e2-b47a-0050568b19a3
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: evm_event
    description: Show EVM Event on Timeline
    guid: 16b1810c-44e8-11e0-acda-005056a40e59
    action_type: default
    options: {}
- qualifier: success
  success_sequence: 3
  MiqEvent:
    name: vm_start
    description: VM Power On
    guid: 404b4630-21a8-11e2-b47a-0050568b19a3
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: d91bbabc-b0be-11e1-b0dc-005056b057a8
    description: ! 'VM Attribute: Allowed NIC Count Exceeded'
    guid: d91bbabc-b0be-11e1-b0dc-005056b057a8
    action_type: set_custom_attribute
    options:
      :attribute: EVM Policy
      :value: Allowed NIC Limit Exceeded
  Condition:
- name: efcf3702-8b9e-11e0-b8fc-005056a40e59
  description: DMZ - VM has more than 1 NIC
  modifier: allow
  expression: !ruby/object:MiqExpression
  exp:
    ! '>':
      count: Vm.hardware.nics
      value: '1'
  context_type:

```

```

    towhat: Vm
    file_mtime:
    guid: efcf3702-8b9e-11e0-b8fc-005056a40e59
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000077
    notes:
- MiqPolicySet:
  name: 820849ce-a7fb-11e0-abed-005056af0000
  description: ! 'Analysis: Do Not Analyze Active VDI VMs'
  set_type: MiqPolicySet
  guid: 820849ce-a7fb-11e0-abed-005056af0000
  read_only:
  set_data:
    :notes: This policy profile checks to see if a VDI vm is being actively used
      by a user. If a user is currently connected to the session, it will prevent
      the vm from being analyzed
  mode: control
  owner_type:
  owner_id:
  MiqPolicy:
- name: 1c4c7772-a7fb-11e0-abed-005056af0000
  description: Do Not Analyze Active VDI VMs
  expression:
  towhat: Vm
  guid: 1c4c7772-a7fb-11e0-abed-005056af0000
  created_by: admin
  updated_by: admin
  notes: This policy prevents analysis of a vm that has an active user session
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: vm_scan_start
      description: VM Analysis Start
      guid: 057b9baa-519c-11e0-8d82-005056af0000
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: prevent
      description: Prevent current event from proceeding
      guid: d885a118-519b-11e0-8d82-005056af0000
      action_type: default
      options: {}
  Condition:
- name: 0a50f750-a7fb-11e0-abed-005056af0000
  description: VM has an active session
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      =:
        value: 'true'
        field: Vm-has_active_vdi_session
    context_type:
    towhat: Vm

```

```

    file_mtime:
    guid: 0a50f750-a7fb-11e0-abad-005056af0000
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000007
    notes:
- MiqPolicySet:
  name: 43e76af6-3f8e-11e0-aaa0-00505688000a
  description: ! 'Analysis: Exclude Specially Tagged VMs'
  set_type: MiqPolicySet
  guid: 43e76af6-3f8e-11e0-aaa0-00505688000a
  read_only:
  set_data:
    :notes: Prevents the analysis of vms tagged as do not analyze
  mode: control
  owner_type:
  owner_id:
  MiqPolicy:
  - name: ! 'Do Not Analyze '
    description: ! 'Analysis: Prevent Analysis of Selected VMs'
    expression:
    towhat: Vm
    guid: 3a7959c0-2866-11de-af2a-0050568026c2
    created_by:
    updated_by: admin
    notes: ! 'This policies prevents analysis ofany vm that is tagged as Do Not
      Analyze '
    active: true
    mode: control
    MiqPolicyContent:
    - qualifier: success
      success_sequence: 1
      failure_synchronous: true
    MiqEvent:
      name: request_vm_scan
      description: VM Analysis Request
      guid: e3292c46-1e1e-11de-8918-0050568005db
      event_type: Default
      definition:
      default:
      enabled:
    MiqAction:
      name: prevent
      description: Prevent current event from proceeding
      guid: d885a118-519b-11e0-8d82-005056af0000
      action_type: default
      options: {}
    Condition:
  - name: Do Not Analyze
    description: VM classified as DO_NOT_ANALYZE
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        CONTAINS:
          tag: Vm.managed-exclusions
          value: do_not_analyze
        context_type:
    towhat: Vm
    file_mtime:

```

```

    guid: 39ff4444-08e2-11de-829f-005056a164b2
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000001
    notes:
- MiqPolicySet:
  name: 3872a0e8-50bc-11e0-880e-00505688000a
  description: ! 'Analysis: On VM Reconfiguration'
  set_type: MiqPolicySet
  guid: 3872a0e8-50bc-11e0-880e-00505688000a
  read_only:
  set_data:
    :notes: Triggers a VM analysis when a VM is reconfigured
  mode: control
  owner_type:
  owner_id:
  MiqPolicy:
  - name: 2f2a1a1c-4806-11df-badc-005056a7121f
    description: ! 'Analysis: VM Reconfiguration'
    expression:
    towhat: Vm
    guid: 2f2a1a1c-4806-11df-badc-005056a7121f
    created_by: admin
    updated_by: admin
    notes: Performs an analysis on any vm that has been reconfigured
    active: true
    mode: control
    MiqPolicyContent:
    - qualifier: success
      success_sequence: 1
      MiqEvent:
        name: vm_reconfigure
        description: VM Settings Change
        guid: 07367e62-449a-11de-bd4f-005056a83e5d
        event_type: Default
        definition:
          default:
          enabled:
      MiqAction:
        name: vm_analyze
        description: Initiate SmartState Analysis for VM
        guid: 5cbe1082-ce35-11de-a117-005056b0503e
        action_type: default
        options: {}
      Condition: []
- MiqPolicySet:
  name: 079d2408-44ef-11e0-99a6-00505688000a
  description: ! 'Analysis: VDI Login'
  set_type: MiqPolicySet
  guid: 079d2408-44ef-11e0-99a6-00505688000a
  read_only:
  set_data:
    :notes: This policy profile automatically analyzes a VDI session when a user
      logs in to it.
  mode: control
  owner_type:
  owner_id:
  MiqPolicy:
  - name: 782068f8-44ee-11e0-99a6-00505688000a

```

```

description: ! 'Analysis: VDI Login'
expression:
towhat: Vm
guid: 782068f8-44ee-11e0-99a6-00505688000a
created_by: admin
updated_by: admin
notes: This policy triggers an analysis of a VDI session when a user logs in
      to that session
active: true
mode: control
MiqPolicyContent:
- qualifier: success
  success_sequence: 1
  MiqEvent:
    name: vm_vdi_login_session
    description: VDI Login Session
    guid: 15fc3cce-448a-11e0-9ad1-00505688000a
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: vm_analyze
    description: Initiate SmartState Analysis for VM
    guid: 5cbe1082-ce35-11de-a117-005056b0503e
    action_type: default
    options: {}
  Condition: []
- MiqPolicySet:
  name: aa699b96-de34-11e1-9088-005056af009e
  description: Collect VDI User Information
  set_type: MiqPolicySet
  guid: aa699b96-de34-11e1-9088-005056af009e
  read_only:
  set_data:
  mode: control
  owner_type:
  owner_id:
  MiqPolicy:
  - name: 57189108-d1d3-11e1-9ede-005056af009e
    description: Record Last RDP User
    expression:
    towhat: Vm
    guid: 57189108-d1d3-11e1-9ede-005056af009e
    created_by: admin
    updated_by: admin
    notes: ! 'When a user logs on to the VM through an RDP session, the file c:\rdp_login\ ↵
          rdp.log
          is automatically created by the logon script.

    A analysis profile should be set to retrieve this file and its content.

    This policy will automatically raise an automate event so the content of the
    file can be parsed and elements set as custom attributes of the VM '
  active: true
  mode: control
  MiqPolicyContent:

```

```

- qualifier: success
  success_sequence: 1
  MiqEvent:
    name: vm_scan_complete
    description: VM Analysis Complete
    guid: f7b8361e-1139-11e1-9333-005056af009e
    event_type: Default
    definition:
      default:
        enabled:
  MiqAction:
    name: raise_automation_event
    description: Raise Automation Event
    guid: e7da3b7a-1139-11e1-9333-005056af009e
    action_type: default
    options: {}
  Condition:
- name: 5a4c3456-de30-11e1-9088-005056af009e
  description: Check for files starting with rep
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkcount:
          ! '>=':
            field: <count>
            value: '1'
        search:
          INCLUDES:
            field: Vm.filesystems-name
            value: rdp
        context_type:
      towhat: Vm
      file_mtime:
      guid: 5a4c3456-de30-11e1-9088-005056af009e
      filename:
      applies_to_exp:
      miq_policy_id: 4
      notes:
- name: d658fe5c-de2c-11e1-9088-005056af009e
  description: Collect Logged on User Info
  expression:
  towhat: Vm
  guid: d658fe5c-de2c-11e1-9088-005056af009e
  created_by: admin
  updated_by: admin
  notes:
  active: true
  mode: control
  MiqPolicyContent:
- qualifier: success
  success_sequence: 1
  MiqEvent:
    name: vm_scan_complete
    description: VM Analysis Complete
    guid: f7b8361e-1139-11e1-9333-005056af009e
    event_type: Default
    definition:
      default:

```



```

    enabled:
  MiqAction:
    name: raise_automation_event
    description: Raise Automation Event
    guid: e7da3b7a-1139-11e1-9333-005056af009e
    action_type: default
    options: {}
  Condition:
  - name: ab61c97a-de2e-11e1-9088-005056af009e
    description: Check files starting with nb
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkcount:
            ! '>=':
              value: '1'
              field: <count>
          search:
            INCLUDES:
              value: nb
              field: Vm.filesystems-name
          context_type:
        towhat: Vm
        file_mtime:
        guid: ab61c97a-de2e-11e1-9088-005056af009e
        filename:
        applies_to_exp:
        miq_policy_id: 5
        notes:
- MiqPolicySet:
  name: e4bcd3de-2480-11e2-b7d5-005056b25af6
  description: ! 'Compliance Hosts: November 2012'
  set_type: MiqPolicySet
  guid: e4bcd3de-2480-11e2-b7d5-005056b25af6
  read_only:
  set_data:
  mode: control
  owner_type:
  owner_id:
  MiqPolicy:
  - name: de683aa6-fedf-11de-83dd-005056ba5e76
    description: Network - Mac Changes not Allowed
    expression:
    towhat: Host
    guid: de683aa6-fedf-11de-83dd-005056ba5e76
    created_by: admin
    updated_by: admin
    notes: This policy checks that MAC changes are not allowed on vSwitches and
      vLans.
    active: true
    mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7

```

```

    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
  - name: 0a6eb332-fee0-11de-83dd-005056ba5e76
    description: Mac Changes Disabled in vSwitches
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        not:
          CONTAINS:
            value: 'false'
            field: Host.switches-mac_changes
    towhat: Host
    file_mtime:
    guid: 0a6eb332-fee0-11de-83dd-005056ba5e76
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000028
    notes: This condition verifies that MAC changes are not allowed on vSwitches.
  - name: 3ed9fb4a-fee0-11de-83dd-005056ba5e76
    description: Mac Changes Disabled in vLans
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        not:
          CONTAINS:
            value: 'false'
            field: Host.lans-mac_changes
    towhat: Host
    file_mtime:
    guid: 3ed9fb4a-fee0-11de-83dd-005056ba5e76
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000028
    notes: This condition verifies that MAC changes are not allowed on vLans.
  - name: 61b355f2-fee1-11de-83dd-005056ba5e76
    description: Network - Forged Transmits Must Be Disabled
    expression:
    towhat: Host
    guid: 61b355f2-fee1-11de-83dd-005056ba5e76
    created_by: admin
    updated_by: admin
    notes: This policy insures that forged transmits are disabled on both vLans
      and vSwitches.
    active: true
    mode: compliance
    MiqPolicyContent:
      - qualifier: failure
        failure_sequence: 1
    MiqEvent:
      name: host_compliance_check

```

```

    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
- name: f246e3e0-fee1-11de-83dd-005056ba5e76
  description: Forged Transmits Disabled in vLan
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      not:
        CONTAINS:
          value: 'false'
          field: Host.lans-forged_transmits
  towhat: Host
  file_mtime:
  guid: f246e3e0-fee1-11de-83dd-005056ba5e76
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000022
  notes: This condition verifies that forged transmits are disabled on vlans.
- name: a3ac5774-fee1-11de-83dd-005056ba5e76
  description: Forged Transmits Disabled in vSwitch
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      not:
        CONTAINS:
          value: 'false'
          field: Host.switches-forged_transmits
  towhat: Host
  file_mtime:
  guid: a3ac5774-fee1-11de-83dd-005056ba5e76
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000022
  notes: This condition verifies that forged transmits are disabled on vSwitches.
- MiqPolicySet:
  name: 587352f0-fb88-11de-a067-005056ba0614
  description: ! 'Compliance: Hosts'
  set_type: MiqPolicySet
  guid: 587352f0-fb88-11de-a067-005056ba0614
  read_only:
  set_data:
    :notes: This policy profile validates that an ESX host meets the standard defined
      in VMWare's security hardening documentation
  mode: pr
  owner_type:
  owner_id:
  MiqPolicy:
- name: eb84f288-fa39-11de-83ca-005056ba0614

```

```

description: Protect Root File System Filling /home
expression:
towhat: Host
guid: eb84f288-fa39-11de-83ca-005056ba0614
created_by: admin
updated_by: admin
notes: This policy verifies that the /home directory is mounted on a different
      partition than the root filesystem.
active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: 62447a1a-fa3a-11de-83ca-005056ba0614
  description: Protect Root File System Filling /home
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          REGULAR EXPRESSION MATCHES:
            value: ^[^\#]*\ /home
            field: Host.filesystems-contents
        search:
          =:
            value: /etc/fstab
            field: Host.filesystems-name
  towhat: Host
  file_mtime:
  guid: 62447a1a-fa3a-11de-83ca-005056ba0614
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000019
  notes: This condition verifies that the file /etc/fstab has an uncommented
        line that references the directory /home.
- name: 04db603c-fa3a-11de-83ca-005056ba0614
  description: Firewall - Outgoing Security Level
  expression:
  towhat: Host
  guid: 04db603c-fa3a-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that only a defined set of outgoing TCP and UDP
        Ports are open.

```

```

active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: f0afd7d6-fa3a-11de-83ca-005056ba0614
  description: Valid Outgoing TCP Ports
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      LIMITED TO:
        value: '902,427,443,27000,27010'
        field: Host-enabled_tcp_outbound_ports
  towhat: Host
  file_mtime:
  guid: f0afd7d6-fa3a-11de-83ca-005056ba0614
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000020
  notes: This condition verifies that the only open outgoing TCP ports are ←
    427,443,902,27000,
    and 27010.
- name: 1778fb28-fa44-11de-83ca-005056ba0614
  description: Valid Outgoing UDP Ports
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      LIMITED TO:
        value: '427,123,902'
        field: Host-enabled_udp_outbound_ports
  towhat: Host
  file_mtime:
  guid: 1778fb28-fa44-11de-83ca-005056ba0614
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000020
  notes: This condition verifies that the only open outgoing UDP ports are 123,427,
    and 902.
- name: af2d74ea-fa39-11de-83ca-005056ba0614
  description: Firewall - Incoming Security Level
  expression:
  towhat: Host
  guid: af2d74ea-fa39-11de-83ca-005056ba0614
  created_by: admin

```

```

updated_by: admin
notes: This policy verifies that only a defined set of incoming TCP and UDP
      Ports are open.
active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: b4a0843a-fa43-11de-83ca-005056ba0614
  description: Valid Incoming UDP Ports
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      LIMITED TO:
        value: '427'
        field: Host-enabled_udp_inbound_ports
  towhat: Host
  file_mtime:
  guid: b4a0843a-fa43-11de-83ca-005056ba0614
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000021
  notes: This condition verifies that the only open incoming UDP port is 427.
- name: 03529e9e-f961-11de-9e9d-0050568a07c7
  description: Valid Incoming TCP Ports
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      LIMITED TO:
        value: '902,80,443,427,5989,22,5988'
        field: Host-enabled_tcp_inbound_ports
  towhat: Host
  file_mtime:
  guid: 03529e9e-f961-11de-9e9d-0050568a07c7
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000021
  notes: This condition verifies that the only open incoming TCP ports are ←
        22,80,427,443,902,5988,and
        5989.
- name: 61b355f2-fee1-11de-83dd-005056ba5e76
  description: Network - Forged Transmits Must Be Disabled
  expression:
  towhat: Host

```

```

guid: 61b355f2-fee1-11de-83dd-005056ba5e76
created_by: admin
updated_by: admin
notes: This policy insures that forged transmits are disabled on both vLans
      and vSwitches.
active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: f246e3e0-fee1-11de-83dd-005056ba5e76
  description: Forged Transmits Disabled in vLan
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      not:
        CONTAINS:
          value: 'false'
          field: Host.lans-forged_transmits
  towhat: Host
  file_mtime:
  guid: f246e3e0-fee1-11de-83dd-005056ba5e76
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000022
  notes: This condition verifies that forged transmits are disabled on vlans.
- name: a3ac5774-fee1-11de-83dd-005056ba5e76
  description: Forged Transmits Disabled in vSwitch
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      not:
        CONTAINS:
          value: 'false'
          field: Host.switches-forged_transmits
  towhat: Host
  file_mtime:
  guid: a3ac5774-fee1-11de-83dd-005056ba5e76
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000022
  notes: This condition verifies that forged transmits are disabled on vSwitches.
- name: 8d4a7bee-fa56-11de-83ca-005056ba0614
  description: Timekeeping - Minimum of 3 NTP Servers defined in step-tickers

```

```

expression:
towhat: Host
guid: 8d4a7bee-fa56-11de-83ca-005056ba0614
created_by: admin
updated_by: admin
notes: This policy verifies that a minimum of 3 servers are defined in the NTP
      step-tickers configuration.
active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: 0806448a-fa57-11de-83ca-005056ba0614
  description: Verify 3 NTP Servers Defined in step-tickers File
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          RUBY:
            value: ! "count = 0\ncontext.each_line { |line| ↵
                      #
                      Break up the input by lines\n  count += 1 if line =~ /^^[^#]*server\\s+[0-9 ↵
                      A-Za-z]+/
                      \ # Increment Count if line matches our regular expression\n\nreturn
                      true if count >= 3\nreturn false\n"
            field: Host.filesystems-contents
          search:
            =:
              value: /etc/ntp/step-tickers
              field: Host.filesystems-name
        towhat: Host
        file_mtime:
        guid: 0806448a-fa57-11de-83ca-005056ba0614
        filename:
        applies_to_exp:
        miq_policy_id: 100000000000023
        notes: This condition checks the file /etc/ntp/step-tickers and verifies that
              a minimum of three ntp servers are defined.
- name: ab373d88-fa4a-11de-83ca-005056ba0614
  description: Settings - Display Logs on Different Terminals
  expression:
    towhat: Host
    guid: ab373d88-fa4a-11de-83ca-005056ba0614

```



```

created_by: admin
updated_by: admin
notes: This policy verifies that critical, error, and warning level log messages
      are directed to distinct terminals.
active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: f383ec6c-fa4a-11de-83ca-005056ba0614
  description: Verify Different Logs Displayed on Different Terminals
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      and:
        - FIND:
            checkany:
              REGULAR EXPRESSION MATCHES:
                value: ^\s*\*\.crit\s+\/dev\/tty
                field: Host.filesystems-contents
            search:
              =:
                value: /etc/syslog.conf
                field: Host.filesystems-name
        - FIND:
            checkany:
              REGULAR EXPRESSION MATCHES:
                value: ^\s*\*\.err\s+\/dev\/tty
                field: Host.filesystems-contents
            search:
              =:
                value: /etc/syslog.conf
                field: Host.filesystems-name
        - FIND:
            checkany:
              REGULAR EXPRESSION MATCHES:
                value: ^\s*\*\.warning\s+\/dev\/tty
                field: Host.filesystems-contents
            search:
              =:
                value: /etc/syslog.conf
                field: Host.filesystems-name
  towhat: Host
  file_mtime:

```

```

    guid: f383ec6c-fa4a-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000024
    notes: This condition checks the file /etc/syslog.conf has three separate
           parameters defined for critical, error, and warning level log messages.
           These parameters specify the tty will display the specified log messages.
- name: 498f5330-fa4b-11de-83ca-005056ba0614
  description: Settings - Remote syslog Logging
  expression:
  towhat: Host
  guid: 498f5330-fa4b-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that syslog is configured to utilize a remote server.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: ee09af6e-fa4b-11de-83ca-005056ba0614
    description: Verify syslog Utilizes a Remote Host
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkany:
            REGULAR EXPRESSION MATCHES:
              value: /^[^#*]\s*.*@/
              field: Host.filesystems-contents
          search:
            =:
              value: /etc/syslog.conf
              field: Host.filesystems-name
    towhat: Host
    file_mtime:
    guid: ee09af6e-fa4b-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000025
    notes: This condition checks the file /etc/syslog.conf and verifies the existence
           of the @ parameter, which is used to specify the use of a remote server.
- name: eb0151ea-fa47-11de-83ca-005056ba0614
  description: Root Login on console should be Disabled

```

```

expression:
towhat: Host
guid: eb0151ea-fa47-11de-83ca-005056ba0614
created_by: admin
updated_by: admin
notes: This policy verifies that the root account cannot directly login via
      the console.
active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: 571e6e76-fa48-11de-83ca-005056ba0614
  description: File /etc/securetty should be empty
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkall:
          =:
            value: '0'
            field: Host.filesystems-size
        search:
          =:
            value: /etc/securetty
            field: Host.filesystems-name
  towhat: Host
  file_mtime:
  guid: 571e6e76-fa48-11de-83ca-005056ba0614
  filename:
  applies_to_exp:
  miq_policy_id: 100000000000026
  notes: This condition checks the file /etc/securetty and verifies that it's
        empty by checking for a 0KB file size.
- name: e4c93c82-fa3a-11de-83ca-005056ba0614
  description: Permissions - /etc/grub.conf
  expression:
  towhat: Host
  guid: e4c93c82-fa3a-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that editing the server's boot process requires
        root level authority.
  active: true

```

```

mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
        enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: d2adb400-fa3b-11de-83ca-005056ba0614
  description: Permissions - /etc/grub.conf
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      and:
        - FIND:
            checkany:
              =:
                value: '0600'
                field: Host.filesystems-permissions
            search:
              =:
                value: /etc/grub.conf
                field: Host.filesystems-name
        - FIND:
            checkany:
              =:
                value: root
                field: Host.filesystems-owner
            search:
              =:
                value: /etc/grub.conf
                field: Host.filesystems-name
      towhat: Host
      file_mtime:
        guid: d2adb400-fa3b-11de-83ca-005056ba0614
        filename:
        applies_to_exp:
        miq_policy_id: 10000000000027
        notes: This condition verifies that the file /etc/grub.conf's permissions
          are set to 0600 and is owned by root.
- name: de683aa6-fedf-11de-83dd-005056ba5e76
  description: Network - Mac Changes not Allowed
  expression:
    towhat: Host
    guid: de683aa6-fedf-11de-83dd-005056ba5e76
    created_by: admin
    updated_by: admin
    notes: This policy checks that MAC changes are not allowed on vSwitches and

```

```

    vLans.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: 0a6eb332-fee0-11de-83dd-005056ba5e76
    description: Mac Changes Disabled in vSwitches
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        not:
          CONTAINS:
            value: 'false'
            field: Host.switches-mac_changes
    towhat: Host
    file_mtime:
    guid: 0a6eb332-fee0-11de-83dd-005056ba5e76
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000028
    notes: This condition verifies that MAC changes are not allowed on vSwitches.
  - name: 3ed9fb4a-fee0-11de-83dd-005056ba5e76
    description: Mac Changes Disabled in vLans
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        not:
          CONTAINS:
            value: 'false'
            field: Host.lans-mac_changes
    towhat: Host
    file_mtime:
    guid: 3ed9fb4a-fee0-11de-83dd-005056ba5e76
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000028
    notes: This condition verifies that MAC changes are not allowed on vLans.
  - name: 7cc14778-fe0f-11de-83dd-005056ba5e76
    description: Network - Promiscuous Mode Setting Not Disabled
    expression:
    towhat: Host
    guid: 7cc14778-fe0f-11de-83dd-005056ba5e76
    created_by: admin

```

```

updated_by: admin
notes: Check the Host VLAN setting for Promiscuous Mode which should be disabled.
active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
- name: 2045b314-fe58-11de-83dd-005056ba5e76
  description: Check Host vSwitch - Promiscuous Mode Must Not Be Enable
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      not:
        CONTAINS:
          value: 'true'
          field: Host.switches-allow_promiscuous
  towhat: Host
  file_mtime:
  guid: 2045b314-fe58-11de-83dd-005056ba5e76
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000029
  notes: This condition verifies that vSwitches do not allow Promiscuous mode
    via inheritance.
- name: 80e5ff5e-fe16-11de-83dd-005056ba5e76
  description: Check Host Port - Promiscuous Mode Must Not Be Enabled
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      not:
        CONTAINS:
          value: 'true'
          field: Host.lans-computed_allow_promiscuous
  towhat: Host
  file_mtime:
  guid: 80e5ff5e-fe16-11de-83dd-005056ba5e76
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000029
  notes: This condition verifies that vLans do not allow Promiscuous mode via
    inheritance.
- name: a8e0ef7c-fa48-11de-83ca-005056ba0614
  description: Use sudo aliases
  expression:

```

```

towhat: Host
guid: a8e0ef7c-fa48-11de-83ca-005056ba0614
created_by: admin
updated_by: admin
notes: This policy verifies that user aliases are enabled in the configuration
      of the sudo command.
active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: 99496ebc-fa49-11de-83ca-005056ba0614
  description: Aliases are being used for sudo authorization
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          REGULAR EXPRESSION MATCHES:
            value: ^\s*User_Alias
            field: Host.filesystems-contents
        search:
          =:
            value: /etc/sudoers
            field: Host.filesystems-name
towhat: Host
file_mtime:
guid: 99496ebc-fa49-11de-83ca-005056ba0614
filename:
applies_to_exp:
miq_policy_id: 100000000000030
notes: This condition checks the file /etc/sudoers and verifies that the parameter
      "User_Alias" is defined.
- name: 4ed279b2-fa55-11de-83ca-005056ba0614
  description: Timekeeping - NTP Service Running
  expression:
towhat: Host
guid: 4ed279b2-fa55-11de-83ca-005056ba0614
created_by: admin
updated_by: admin
notes: This policy verifies that the NTP servers is configured to automatically
      start.
active: true
mode: compliance

```

```

MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
MiqEvent:
  name: host_compliance_check
  description: Host Compliance Check
  guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
  event_type: Default
  definition:
  default:
  enabled:
MiqAction:
  name: compliance_failed
  description: Mark as Non-Compliant
  guid: ba452d94-f586-11de-8ebc-0050568a07c7
  action_type: default
  options: {}
Condition:
- name: 9a08d21e-fa55-11de-83ca-005056ba0614
  description: Verify NTP is Running
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          INCLUDES:
            value: '3'
            field: Host.host_services-enable_run_levels
        search:
          =:
            value: ntpd
            field: Host.host_services-name
      towhat: Host
      file_mtime:
      guid: 9a08d21e-fa55-11de-83ca-005056ba0614
      filename:
      applies_to_exp:
      miq_policy_id: 10000000000031
      notes: This condition verifies that the run level of the service ntpd is set
        to three.
- name: a6c2a51e-fa57-11de-83ca-005056ba0614
  description: Timekeeping - Minimum of 3 NTP Servers Defined in ntp.conf
  expression:
  towhat: Host
  guid: a6c2a51e-fa57-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that a minimum of 3 servers are defined in the NTP
    configuration.
  active: true
  mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
MiqEvent:
  name: host_compliance_check
  description: Host Compliance Check
  guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
  event_type: Default

```



```

    definition:
    default:
    enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
  - name: 03c821bc-fa58-11de-83ca-005056ba0614
    description: Verify 3 NTP Servers Defined in ntp.conf
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkany:
            RUBY:
              value: ! "count = 0\ncontext.each_line { |line| ↵
                #
                Break up the input by lines\n  count += 1 if line =~ /^[^#]*server\s+[0-9 ↵
                  A-Za-z]+/
                \ # Increment Count if line matches our regular expression\n}\nreturn
                true if count >= 3\nreturn false"
              field: Host.filesystems-contents
            search:
              =:
                value: /etc/ntp.conf
                field: Host.filesystems-name
          towhat: Host
          file_mtime:
          guid: 03c821bc-fa58-11de-83ca-005056ba0614
          filename:
          applies_to_exp:
          miq_policy_id: 100000000000032
          notes: This condition checks the file /etc/ntp.conf and verifies that a minimum
            of three ntp servers are defined.
  - name: c4396f3a-fa55-11de-83ca-005056ba0614
    description: Timekeeping - Minimum of 3 NTP Servers Defined in hosts
    expression:
    towhat: Host
    guid: c4396f3a-fa55-11de-83ca-005056ba0614
    created_by: admin
    updated_by: admin
    notes: This policy verifies that a minimum of 3 NTP servers are defined in the
      local hosts file.
    active: true
    mode: compliance
    MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
    default:
    enabled:

```

```

MiqAction:
  name: compliance_failed
  description: Mark as Non-Compliant
  guid: ba452d94-f586-11de-8ebc-0050568a07c7
  action_type: default
  options: {}
Condition:
- name: 2698c39c-fa56-11de-83ca-005056ba0614
  description: Verify 3 NTP Servers Defined in hosts File
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          RUBY:
            value: ! "count = 0\ncontext.each_line { |line|
                                #
                                Break up the input by lines\n  count += 1 if line =~ /^[^#]*NTP/i
                                \  # Increment Count if line matches our regular expression\n}\nreturn
                                true if count >= 3\nreturn false\n"
            field: Host.filesystems-contents
          search:
            =:
              value: /etc/hosts
              field: Host.filesystems-name
        towhat: Host
        file_mtime:
        guid: 2698c39c-fa56-11de-83ca-005056ba0614
        filename:
        applies_to_exp:
        miq_policy_id: 100000000000033
        notes: ! 'This conditions checks the file /etc/hosts and veries that there
          are at least 3 uncommented lines that reference ntp servers. The included
          expression can be modified to match the appropriate values for the ntp servers
          for your environment.
,
- name: 3819638c-fa57-11de-83ca-005056ba0614
  description: Timekeeping - Drift Enabled
  expression:
  towhat: Host
  guid: 3819638c-fa57-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that NTP's driftfile support is enabled.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:

```

```

    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: 71fae5da-fa57-11de-83ca-005056ba0614
  description: Verify NTP Uses a Driftfile
  modifier: allow
  expression: !ruby/object:MiqExpression
  exp:
    FIND:
      checkany:
        REGULAR EXPRESSION MATCHES:
          value: ^\s*driftfile\s+\s*\var\lib\ntp\drift
          field: Host.filesystems-contents
        search:
          =:
            value: /etc/ntp.conf
            field: Host.filesystems-name
      towhat: Host
      file_mtime:
    guid: 71fae5da-fa57-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000034
    notes: This condition checks the file /etc/ntp.conf and verifies that the
      driftfile parameter exists.
- name: ebc02cea-fa57-11de-83ca-005056ba0614
  description: Time Keeping - Restrict Access for Machines without Loopback
  expression:
  towhat: Host
  guid: ebc02cea-fa57-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that only non-loopback machines can access the NTP
    service.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
Condition:
- name: ddc26260-fa58-11de-83ca-005056ba0614
  description: Access Restricted for Machines without Loopback

```

```

    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkany:
            REGULAR EXPRESSION MATCHES:
              value: ^\s*restrict\s+default\s+kod\s+nomodify\s+notrap
              field: Host.filesystems-contents
          search:
            =:
              value: /etc/ntp.conf
              field: Host.filesystems-name
    towhat: Host
    file_mtime:
    guid: ddc26260-fa58-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000035
    notes: This condition checks the file /etc/ntp.conf and verifies that the
           line "restrict default kod nomodify notrap" exists.
- name: ccadf9fa-fa56-11de-83ca-005056ba0614
  description: Time Keeping - NTP Configured to Use Loopback Adapter
  expression:
  towhat: Host
  guid: ccadf9fa-fa56-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that NTP performs all name resolutions via a loopback
        network.
  active: true
  mode: compliance
  MiqPolicyContent:
    - qualifier: failure
      failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
- name: 2b9bb8b2-fa57-11de-83ca-005056ba0614
  description: NTP Configured to Use Loopback Adapter
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          REGULAR EXPRESSION MATCHES:
            value: ^\s*restrict\s+127\.0\.0\.1
            field: Host.filesystems-contents

```

```

      search:
        =:
          value: /etc/ntp.conf
          field: Host.filesystems-name
    towhat: Host
    file_mtime:
    guid: 2b9bb8b2-fa57-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000036
    notes: This condition checks the file /etc/ntp.conf and verifies that the
           restrict parameter's value is set to 127.0.0.1.
- name: 4614d62e-fa52-11de-83ca-005056ba0614
  description: Settings - vmkwarning Compress Option
  expression:
  towhat: Host
  guid: 4614d62e-fa52-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that the vmkwarning log is compressed by default.
  active: true
  mode: compliance
  MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
- name: a51cbaba-fa52-11de-83ca-005056ba0614
  description: Verify Compression Enabled in vmkwarning
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          REGULAR EXPRESSION MATCHES:
            value: \s+compress
            field: Host.filesystems-contents
        search:
          =:
            value: /etc/logrotate.d/vmkwarning
            field: Host.filesystems-name
    towhat: Host
    file_mtime:
    guid: a51cbaba-fa52-11de-83ca-005056ba0614
    filename:
    applies_to_exp:

```

```

    miq_policy_id: 100000000000037
    notes: This condition checks the file /etc/logrotate.d/vmkwarning and verifies
           that the option compress is enabled.
- name: 6353b57e-fa53-11de-83ca-005056ba0614
  description: Settings - vmksummary Compress Option
  expression:
  towhat: Host
  guid: 6353b57e-fa53-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that the vmksummary log is compressed by default.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: 510f7286-fa53-11de-83ca-005056ba0614
    description: Verify Compression Enabled in vmksummary
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkany:
            REGULAR EXPRESSION MATCHES:
              value: \s+compress
              field: Host.filesystems-contents
          search:
            =:
              value: /etc/logrotate.d/vmksummary
              field: Host.filesystems-name
    towhat: Host
    file_mtime:
    guid: 510f7286-fa53-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000038
    notes: This condition checks the file /etc/logrotate.d/vmksummary and verifies
           that the option compress is enabled.
- name: 0864fae6-fa54-11de-83ca-005056ba0614
  description: Settings - vmkernel Compress Option
  expression:
  towhat: Host
  guid: 0864fae6-fa54-11de-83ca-005056ba0614
  created_by: admin

```

```

updated_by: admin
notes: This policy verifies that the vmkernel log is compressed by default.
active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: fe7378be-fa53-11de-83ca-005056ba0614
  description: Verify Compression Enabled in vmkernel
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          REGULAR EXPRESSION MATCHES:
            value: \s+compress
            field: Host.filesystems-contents
        search:
          =:
            value: /etc/logrotate.d/vmkernel
            field: Host.filesystems-name
      towhat: Host
      file_mtime:
      guid: fe7378be-fa53-11de-83ca-005056ba0614
      filename:
      applies_to_exp:
      miq_policy_id: 10000000000039
      notes: This condition checks the file /etc/logrotate.d/vmkernel and verifies
        that the option compress is enabled.
- name: 6576a074-fa48-11de-83ca-005056ba0614
  description: Settings - /etc/sudoers
  expression:
  towhat: Host
  guid: 6576a074-fa48-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that sudo is configured to use syslog for logging.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check

```

```

    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
    default:
    enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
    Condition:
  - name: ade186c6-fa48-11de-83ca-005056ba0614
    description: Verify sudo is Logging via syslog
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkany:
            REGULAR EXPRESSION MATCHES:
              value: ^\s*Defaults\s+syslog\=
              field: Host.filesystems-contents
          search:
            =:
              value: /etc/sudoers
              field: Host.filesystems-name
      towhat: Host
      file_mtime:
      guid: ade186c6-fa48-11de-83ca-005056ba0614
      filename:
      applies_to_exp:
      miq_policy_id: 100000000000040
      notes: This condition check the file /etc/sudoers and verifies that the parameter
            "Defaults syslog=" exists.
  - name: c340f524-fa3e-11de-83ca-005056ba0614
    description: Settings - /etc/grub.conf
    expression:
    towhat: Host
    guid: c340f524-fa3e-11de-83ca-005056ba0614
    created_by: admin
    updated_by: admin
    notes: This policy verifies that a password is required in order to edit the
          server's boot process.
    active: true
    mode: compliance
    MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
      default:
      enabled:
    MiqAction:
      name: compliance_failed

```



```

    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
  - name: 1f18225a-fa3f-11de-83ca-005056ba0614
    description: Verify /etc/grub.conf Settings
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkany:
            REGULAR EXPRESSION MATCHES:
              value: ^\s*password\s\-\-md5
              field: Host.filesystems-contents
          search:
            =:
              value: /etc/grub.conf
              field: Host.filesystems-name
        towhat: Host
        file_mtime:
        guid: 1f18225a-fa3f-11de-83ca-005056ba0614
        filename:
        applies_to_exp:
        miq_policy_id: 10000000000041
        notes: This condition check the file /etc/grub.conf and verifies that the
              parameter "password --md5" exists.
  - name: c63b0560-fa45-11de-83ca-005056ba0614
    description: Root Login via SSH should be Disabled
    expression:
    towhat: Host
    guid: c63b0560-fa45-11de-83ca-005056ba0614
    created_by: admin
    updated_by: admin
    notes: This policy verifies that the root account cannot login to the host via
          SSH.
    active: true
    mode: compliance
    MiqPolicyContent:
    - qualifier: failure
      failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: 4435b6d6-fa46-11de-83ca-005056ba0614
    description: PermitRootLogin = no in sshd_config file
    modifier: allow

```

```

    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkany:
            REGULAR EXPRESSION MATCHES:
              value: ^\s*PermitRootLogin\s+no
              field: Host.filesystems-contents
          search:
            =:
              value: /etc/ssh/sshd_config
              field: Host.filesystems-name
    towhat: Host
    file_mtime:
    guid: 4435b6d6-fa46-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000042
    notes: This condition checks the file /etc/ssh/sshd_config and verifies that
           the PermitRootLogin parameter's value is set to no.
- name: 5ce6be9a-fa4c-11de-83ca-005056ba0614
  description: Require users to enter own password - no ROOTPW entry
  expression:
  towhat: Host
  guid: 5ce6be9a-fa4c-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that when the sudo command is used, each user is
        prompted for their password and not the root password.
  active: true
  mode: compliance
  MiqPolicyContent:
    - qualifier: failure
      failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
- name: a791b882-fa4c-11de-83ca-005056ba0614
  description: ROOTPW does not exist in sudoers file
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          REGULAR EXPRESSION DOES NOT MATCH:
            value: /^[^#]*ROOTPW/i
            field: Host.filesystems-contents
        search:

```

```

      =:
        value: /etc/sudoers
        field: Host.filesystems-name
    towhat: Host
    file_mtime:
    guid: a791b882-fa4c-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000043
    notes: This condition check the file /etc/sudoers and verifies that it does
      not contain the word ROOTPW on an uncommented line.
- name: a128d356-fa36-11de-83ca-005056ba0614
  description: Protect Root File System Filling /tmp
  expression:
  towhat: Host
  guid: a128d356-fa36-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that the /tmp directory is mounted on a different
    partition than the root filesystem.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
- name: 267dd9de-fa37-11de-83ca-005056ba0614
  description: Protect Root File System Filling /tmp
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          REGULAR EXPRESSION MATCHES:
            value: ^[^\#]*\ /tmp
            field: Host.filesystems-contents
        search:
          =:
            value: /etc/fstab
            field: Host.filesystems-name
  towhat: Host
  file_mtime:
  guid: 267dd9de-fa37-11de-83ca-005056ba0614
  filename:
  applies_to_exp:

```

```

    miq_policy_id: 100000000000044
    notes: This condition verifies that the file /etc/fstab has an uncommented
           line that references the directory /tmp.
- name: 7ea7db8c-fa46-11de-83ca-005056ba0614
  description: Permissions - /etc/snmp/snmpd.conf
  expression:
  towhat: Host
  guid: 7ea7db8c-fa46-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy ensures that access to SNMP configuration parameters are
         limited to the root user.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: ebb24a50-fa46-11de-83ca-005056ba0614
    description: Permissions - /etc/snmp/snmpd.conf
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        and:
        - FIND:
            checkany:
            =:
              value: '0700'
              field: Host.filesystems-permissions
            search:
            =:
              value: /etc/snmp/snmpd.conf
              field: Host.filesystems-name
        - FIND:
            checkany:
            =:
              value: root
              field: Host.filesystems-owner
            search:
            =:
              value: /etc/snmp/snmpd.conf
              field: Host.filesystems-name
      towhat: Host
      file_mtime:
      guid: ebb24a50-fa46-11de-83ca-005056ba0614

```

```

    filename:
    applies_to_exp:
    miq_policy_id: 100000000000045
    notes: This condition verifies that the permissions of /etc/snmp/snmpd.conf
           are 0700 and is owned by root.
- name: 40b796dc-fa50-11de-83ca-005056ba0614
  description: Password Expiration Warning Default
  expression:
  towhat: Host
  guid: 40b796dc-fa50-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies the default setting for password expiration warning.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
- name: 0e842bde-fa51-11de-83ca-005056ba0614
  description: Password Expiration Warning Default >= 7days
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          REGULAR EXPRESSION MATCHES:
            value: ^\s*PASS_WARN_AGE\s+([7-9]|[1-9][0-9]+)
            field: Host.filesystems-contents
          search:
            =:
              value: /etc/login.defs
              field: Host.filesystems-name
        towhat: Host
        file_mtime:
        guid: 0e842bde-fa51-11de-83ca-005056ba0614
        filename:
        applies_to_exp:
        miq_policy_id: 100000000000046
        notes: This condition checks the file /etc/login.defs and verifies that PASS_WARN_AGE
               parameter's value is set to 7 or greater.
- name: 2f9fad14-fa4e-11de-83ca-005056ba0614
  description: Password Aging - Default Maximum
  expression:
  towhat: Host

```

```

guid: 2f9fad14-fa4e-11de-83ca-005056ba0614
created_by: admin
updated_by: admin
notes: This policy validates the ESX host's maximum password age configuration.
active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: a4a0e740-fa4e-11de-83ca-005056ba0614
  description: Default Maximum Password Age <= 90days
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          REGULAR EXPRESSION MATCHES:
            value: ^\s*PASS_MAX_DAYS\s+([0-9]|[1-8][0-9]|90)
            field: Host.filesystems-contents
        search:
          =:
            value: /etc/login.defs
            field: Host.filesystems-name
    towhat: Host
    file_mtime:
    guid: a4a0e740-fa4e-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000047
    notes: This condition checks the file /etc/login.defs and verifies that the
      PASS_MAX_DAYS parameter's value is 90 days or greater.
- name: 79548666-fa51-11de-83ca-005056ba0614
  description: Limit vmkwarning Size
  expression:
    towhat: Host
  guid: 79548666-fa51-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy checks the vmkwarning log is limited to a specified size.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1

```

```

MiqEvent:
  name: host_compliance_check
  description: Host Compliance Check
  guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
  event_type: Default
  definition:
    default:
    enabled:
MiqAction:
  name: compliance_failed
  description: Mark as Non-Compliant
  guid: ba452d94-f586-11de-8ebc-0050568a07c7
  action_type: default
  options: {}
Condition:
- name: 14d35e46-fa52-11de-83ca-005056ba0614
  description: vmkwarning Log Size <= 4096KB
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          REGULAR EXPRESSION MATCHES:
            value: ^\s*size\s+(409[0-6]|40[0-8][0-9]|123[0-9]{3}|\d{1,3})k
            field: Host.filesystems-contents
          search:
            =:
              value: /etc/logrotate.d/vmkwarning
              field: Host.filesystems-name
        towhat: Host
        file_mtime:
        guid: 14d35e46-fa52-11de-83ca-005056ba0614
        filename:
        applies_to_exp:
        miq_policy_id: 10000000000048
        notes: This condition verifies that the file /etc/logrotate.d/vmkwarning is
              configured to limit the associated log to 4096KB.
- name: c79821fa-fa53-11de-83ca-005056ba0614
  description: Limit vmkernel Size
  expression:
  towhat: Host
  guid: c79821fa-fa53-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy checks the vmkernel log is limited to a specified size.
  active: true
  mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
MiqEvent:
  name: host_compliance_check
  description: Host Compliance Check
  guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
  event_type: Default
  definition:
    default:
    enabled:
MiqAction:

```

```

    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: be9722e0-fa53-11de-83ca-005056ba0614
  description: vmkernel Log Size <= 4096KB
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          REGULAR EXPRESSION MATCHES:
            value: ^\s*size\s+(409[0-6]|40[0-8][0-9]|123[0-9]{3}|\d{1,3})k
            field: Host.filesystems-contents
          search:
            =:
              value: /etc/logrotate.d/vmkernel
              field: Host.filesystems-name
        towhat: Host
        file_mtime:
        guid: be9722e0-fa53-11de-83ca-005056ba0614
        filename:
        applies_to_exp:
        miq_policy_id: 10000000000049
        notes: This condition verifies that the file /etc/logrotate.d/vmkernel is
              configured to limit the associated log to 4096KB.
- name: 8cecc84c-fa46-11de-83ca-005056ba0614
  description: Limit su Access to root Account
  expression:
  towhat: Host
  guid: 8cecc84c-fa46-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy validates that only members of the group wheel can access
        the su command.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: 63b243fc-fa47-11de-83ca-005056ba0614
  description: Only members of wheel group can execute su command

```



```

modifier: allow
expression: !ruby/object:MiqExpression
  exp:
    FIND:
      checkany:
        REGULAR EXPRESSION MATCHES:
          value: ^\s*auth\s+required\s+.*pam_wheel\.\s*\s+use_uid
          field: Host.filesystems-contents
      search:
        =:
          value: /etc/pam.d/su
          field: Host.filesystems-name
towhat: Host
file_mtime:
guid: 63b243fc-fa47-11de-83ca-005056ba0614
filename:
applies_to_exp:
miq_policy_id: 100000000000050
notes: This condition validates that the file /etc/pam.d/su contains a variation
      of the string "auth required pam_wheel.so use_uid".
- name: 2cd1b736-fa52-11de-83ca-005056ba0614
  description: Limit Software and Services Running in Service Console
  expression:
towhat: Host
guid: 2cd1b736-fa52-11de-83ca-005056ba0614
created_by: admin
updated_by: admin
notes: This policy validates that only an approved list of services are enabled
      at boot time on an ESX host.
active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
MiqEvent:
  name: host_compliance_check
  description: Host Compliance Check
  guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
  event_type: Default
  definition:
    default:
    enabled:
MiqAction:
  name: compliance_failed
  description: Mark as Non-Compliant
  guid: ba452d94-f586-11de-8ebc-0050568a07c7
  action_type: default
  options: {}
Condition:
- name: c4c80bfa-fa55-11de-83ca-005056ba0614
  description: Default Services Running in Service Console
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      LIMITED TO:
        value: crond, firewall, gpm, ipmi, irqbalance, mgmt-vmware, microcode_ctl,
          mptctlnode, network, ntpd, pegasus, portmap, random, rawdevices, sshd,
          syslog, vmware, vmware-autostart, vmware-late, vmware-vmkauthd, vmware-vpxa,
          vmware-webAccess, wsman, xinetd

```

```

      field: Host-enabled_run_level_3_services
    towhat: Host
    file_mtime:
    guid: c4c80bfa-fa55-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000051
    notes: This conditions validates that a defined list of services are enabled
           with the ESX host is booted with networking support (run level 3). This
           list includes the generic services included in ESX. Additional hardware
           specific services can be added to the expression.
- name: edaf1082-fa54-11de-83ca-005056ba0614
  description: Firewall - Outgoing NTP Port
  expression:
  towhat: Host
  guid: edaf1082-fa54-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy validates that the Firewall is configured properly for NTP
        support.
  active: true
  mode: compliance
  MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
- name: 1cb7f0ba-fa55-11de-83ca-005056ba0614
  description: Valid NTP Outgoing UDP Port
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      INCLUDES ANY:
        value: '123'
        field: Host-enabled_udp_outbound_ports
  towhat: Host
  file_mtime:
  guid: 1cb7f0ba-fa55-11de-83ca-005056ba0614
  filename:
  applies_to_exp:
  miq_policy_id: 100000000000052
  notes: This condition verifies that the outgoing UDP port required by NTP
        (port 123) is open.
- name: 0f2cc826-fa4b-11de-83ca-005056ba0614
  description: Directory Service Used for Authentication for sudo
  expression:

```

```

towhat: Host
guid: 0f2cc826-fa4b-11de-83ca-005056ba0614
created_by: admin
updated_by: admin
notes: This policy verifies that sudo is configured to use a directory for user
      authentication.
active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: 684b2a60-fa4b-11de-83ca-005056ba0614
  description: Directory Service used for sudo authentication
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          REGULAR EXPRESSION MATCHES:
            value: ^\s*auth\s+required\s+.*pam_stack\.so\s+service=system-auth
            field: Host.filesystems-contents
        search:
          =:
            value: /etc/pam.d/sudo
            field: Host.filesystems-name
towhat: Host
file_mtime:
guid: 684b2a60-fa4b-11de-83ca-005056ba0614
filename:
applies_to_exp:
miq_policy_id: 100000000000053
notes: ! 'This condition verifies that the line "auth required pam_stack.so
      service=system-auth" exists in /etc/pam.d/sudo. '
- name: 4b188948-fa45-11de-83ca-005056ba0614
  description: Settings - SNMP Read Only Access
  expression:
towhat: Host
guid: 4b188948-fa45-11de-83ca-005056ba0614
created_by: admin
updated_by: admin
notes: This policy verifies that SNMP is configured to only allow read-only
      access.
active: true
mode: compliance

```

```

MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
Condition:
- name: e328c720-fa45-11de-83ca-005056ba0614
  description: SNMP Configured for Read-only Access
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      and:
        - FIND:
            checkany:
              REGULAR EXPRESSION MATCHES:
                value: ^\s*rocommunity
                field: Host.filesystems-contents
            search:
              =:
                value: /etc/snmp/snmpd.conf
                field: Host.filesystems-name
        - FIND:
            checkany:
              REGULAR EXPRESSION DOES NOT MATCH:
                value: ^\s*rwcommunity
                field: Host.filesystems-contents
            search:
              =:
                value: /etc/snmp/snmpd.conf
                field: Host.filesystems-name
      towhat: Host
      file_mtime:
      guid: e328c720-fa45-11de-83ca-005056ba0614
      filename:
      applies_to_exp:
      miq_policy_id: 10000000000054
      notes: This condition checks the file /etc/snmp/snmpd.conf and verifies that
        the rocommunity parameter is defined and the rwcommunity parameter is not.
- name: 854d45aa-fa3a-11de-83ca-005056ba0614
  description: Protect Root File System Filling /var/log
  expression:
  towhat: Host
  guid: 854d45aa-fa3a-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that the /var/log directory is mounted on a different
    partition than the root filesystem.

```

```

active: true
mode: compliance
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
- name: a84173e2-fa3a-11de-83ca-005056ba0614
  description: Protect Root File System Filling /var/log
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          REGULAR EXPRESSION MATCHES:
            value: ^[^\#]*\var\log
            field: Host.filesystems-contents
        search:
          =:
            value: /etc/fstab
            field: Host.filesystems-name
      towhat: Host
      file_mtime:
      guid: a84173e2-fa3a-11de-83ca-005056ba0614
      filename:
      applies_to_exp:
      miq_policy_id: 100000000000055
      notes: This condition verifies that the file /etc/fstab has an uncommented
        line that references the directory /var/log.
- name: fc63df74-fa52-11de-83ca-005056ba0614
  description: Limit vmksummary Size
  expression:
  towhat: Host
  guid: fc63df74-fa52-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy checks the vmksummary log is limited to a specified size.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7

```

```

    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
- name: def33840-fa52-11de-83ca-005056ba0614
  description: vmksummary Log Size <= 4096KB
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          REGULAR EXPRESSION MATCHES:
            value: ^\s*size\s+(409[0-6]|40[0-8][0-9]|[123][0-9]{3}|\d{1,3})k
            field: Host.filesystems-contents
          search:
            =:
              value: /etc/logrotate.d/vmksummary
              field: Host.filesystems-name
        towhat: Host
        file_mtime:
        guid: def33840-fa52-11de-83ca-005056ba0614
        filename:
        applies_to_exp:
        miq_policy_id: 100000000000056
        notes: This condition verifies that the file /etc/logrotate.d/vmksummary is
          configured to limit the associated log to 4096KB.
- name: 305e6832-fa51-11de-83ca-005056ba0614
  description: Password Complexity - Minimum Length
  expression:
  towhat: Host
  guid: 305e6832-fa51-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies the minimum password length.
  active: true
  mode: compliance
  MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default

```

```

    options: {}
  Condition:
  - name: c0ba559e-fa51-11de-83ca-005056ba0614
    description: Minimum Password Length >= 8
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkany:
            REGULAR EXPRESSION MATCHES:
              value: ^\s*PASS_MIN_LEN\s+([8-9]|[1-9][0-9]+)
              field: Host.filesystems-contents
            search:
              =:
                value: /etc/login.defs
                field: Host.filesystems-name
          towhat: Host
          file_mtime:
          guid: c0ba559e-fa51-11de-83ca-005056ba0614
          filename:
          applies_to_exp:
          miq_policy_id: 100000000000057
          notes: This condition checks the file /etc/login.defs and verifies that the
            PASS_MIN_LEN parameter's value is 8 or greater.
  - name: e6f082ba-fa4c-11de-83ca-005056ba0614
    description: Password checking enabled for sudo
    expression:
    towhat: Host
    guid: e6f082ba-fa4c-11de-83ca-005056ba0614
    created_by: admin
    updated_by: admin
    notes: This policy verifies that password checking is enabled for sudo.
    active: true
    mode: compliance
    MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
      default:
      enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: 3d2074e2-fa4d-11de-83ca-005056ba0614
    description: NOPASSWD does not exist in sudoers file
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkany:

```

```

        REGULAR EXPRESSION DOES NOT MATCH:
        value: /^[^#]*NOPASSWD/i
        field: Host.filesystems-contents
    search:
    =:
        value: /etc/sudoers
        field: Host.filesystems-name
    towhat: Host
    file_mtime:
    guid: 3d2074e2-fa4d-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000058
    notes: This condition check the file /etc/sudoers and verifies that it does
        not contain the word NOPASSWORD on an uncommented line.
- name: 32b26f2c-fa4f-11de-83ca-005056ba0614
  description: Password Aging - Default Minimum
  expression:
  towhat: Host
  guid: 32b26f2c-fa4f-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy validates the ESX host's minimum password age configuration.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
- name: 79d39ad4-fa4f-11de-83ca-005056ba0614
  description: Default Minimum Password Age >= 0
  modifier: allow
  expression: !ruby/object:MiqExpression
  exp:
    FIND:
      checkany:
        REGULAR EXPRESSION MATCHES:
          value: ^\s*PASS_MIN_DAYS\s+\d+
          field: Host.filesystems-contents
      search:
      =:
          value: /etc/login.defs
          field: Host.filesystems-name
  towhat: Host
  file_mtime:

```



```

    guid: 79d39ad4-fa4f-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000059
    notes: This condition checks the file /etc/login.defs and verifies that the
           PASS_MIN_DAYS parameter's value is greater than or equal to 0 days.
- MiqPolicySet:
  name: 97c27462-1592-11df-b613-0050568a1ed6
  description: ! 'Compliance: VM'
  set_type: MiqPolicySet
  guid: 97c27462-1592-11df-b613-0050568a1ed6
  read_only:
  set_data:
    :notes: This policy profile validates that a vm meets the standard defined in
           VMWare's security hardening documentation
  mode: control
  owner_type:
  owner_id:
  MiqPolicy:
  - name: 2d6bfc2c-fa3b-11de-83ca-005056ba0614
    description: Limit Log Size
    expression:
    towhat: Vm
    guid: 2d6bfc2c-fa3b-11de-83ca-005056ba0614
    created_by: admin
    updated_by: admin
    notes:
    active: true
    mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: vm_compliance_check
      description: VM Compliance Check
      guid: 816a598a-f57d-11de-a41a-005056ba0614
      event_type: Default
      definition:
      default:
      enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: 8b9cf076-fa3b-11de-83ca-005056ba0614
    description: Log Size Limit <= 100KB
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkall:
            <=:
              value: '100000'
              field: Vm.advanced_settings-value
          search:
            =:

```

```

        value: log.rotateSize
        field: Vm.advanced_settings-name
    towhat: Vm
    file_mtime:
    guid: 8b9cf076-fa3b-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000061
    notes:
- name: f1af8b44-fa3b-11de-83ca-005056ba0614
  description: Limit Number of Log Files
  expression:
  towhat: Vm
  guid: f1af8b44-fa3b-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes:
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
  MiqEvent:
    name: vm_compliance_check
    description: VM Compliance Check
    guid: 816a598a-f57d-11de-a41a-005056ba0614
    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
- name: f2ad72ac-fa3d-11de-83ca-005056ba0614
  description: Number of Log Files to Keep <= 10
  modifier: allow
  expression: !ruby/object:MiqExpression
  exp:
    FIND:
      checkall:
        <=:
          value: '10'
          field: Vm.advanced_settings-value
      search:
        =:
          value: log.keepOld
          field: Vm.advanced_settings-name
    towhat: Vm
    file_mtime:
    guid: f2ad72ac-fa3d-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000060
    notes:
- MiqPolicySet:

```

```

name: 17fa069a-480b-11df-badc-005056a7121f
description: ! 'Demo: CPU Reservation'
set_type: MiqPolicySet
guid: 17fa069a-480b-11df-badc-005056a7121f
read_only:
set_data:
  :notes: This policy profile analyzes a vm's configuration data when it's reconfigured
    an sends an email if the cpu reservation is set to a value greater than 500.
mode: control
owner_type:
owner_id:
MiqPolicy:
- name: 2f2a1a1c-4806-11df-badc-005056a7121f
  description: ! 'Analysis: VM Reconfiguration'
  expression:
  towhat: Vm
  guid: 2f2a1a1c-4806-11df-badc-005056a7121f
  created_by: admin
  updated_by: admin
  notes: Performs an analysis on any vm that has been reconfigured
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: vm_reconfigure
      description: VM Settings Change
      guid: 07367e62-449a-11de-bd4f-005056a83e5d
      event_type: Default
      definition:
      default:
      enabled:
    MiqAction:
      name: vm_analyze
      description: Initiate SmartState Analysis for VM
      guid: 5cbe1082-ce35-11de-a117-005056b0503e
      action_type: default
      options: {}
  Condition: []
- name: 8a8f247a-480a-11df-badc-005056a7121f
  description: ! 'Configuration: VM - CPU Reservation > 500Mhz'
  expression:
  towhat: Vm
  guid: 8a8f247a-480a-11df-badc-005056a7121f
  created_by: admin
  updated_by: admin
  notes: Sends an email if CPU reservation is set to a value greater than 500Mhz
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: vm_scan_complete
      description: VM Analysis Complete
      guid: f7b8361e-1139-11e1-9333-005056af009e
      event_type: Default
      definition:

```

```

    default:
    enabled:
  MiqAction:
    name: 5189755e-480a-11df-badc-005056a7121f
    description: Alert - CPU Reservation > 500Mhz
    guid: 5189755e-480a-11df-badc-005056a7121f
    action_type: evaluate_alerts
    options:
      :alert_guids:
        - ca26a9c6-4802-11df-badc-005056a7121f
  Condition: []
- name: 467f80ce-4808-11df-badc-005056a7121f
  description: ! 'Analysis: VM Configuration Only Profile'
  expression:
  towhat: Vm
  guid: 467f80ce-4808-11df-badc-005056a7121f
  created_by: admin
  updated_by: admin
  notes: ! 'This policy assigns an analysis profile that only gathers vm configuration
    data. Note: the specified action requires that you create an analysis profile
    that only scans vm configuration data. Once it has been created, associate
    it with the specified action'
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
  MiqEvent:
    name: vm_scan_start
    description: VM Analysis Start
    guid: 057b9baa-519c-11e0-8d82-005056af0000
    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: b52a86f0-4807-11df-badc-005056a7121f
    description: ! 'Profile: VM configuration only'
    guid: b52a86f0-4807-11df-badc-005056a7121f
    action_type: assign_scan_profile
    options:
      :scan_item_set_name: vm configuration only
  Condition: []
- MiqPolicySet:
  name: 6fb380a4-3b86-11e0-9dc0-005056910001
  description: ! 'Demo: Prevent Cloning of Database VMs '
  set_type: MiqPolicySet
  guid: 6fb380a4-3b86-11e0-9dc0-005056910001
  read_only:
  set_data:
    :notes: This policy prevents any vm with a workload tag of database from being
      cloned
  mode: control
  owner_type:
  owner_id:
  MiqPolicy:
  - name: Configuration Policy Restrict Cloning SQL Server
    description: ! 'Operational: Prevent Cloning of Database VMs'
    expression:

```

```

towhat: Vm
guid: 39fdeba0-2866-11de-af2a-0050568026c2
created_by:
updated_by: admin
notes: prevents cloning of vms with a workload tag value of database
active: true
mode: control
MiqPolicyContent:
- qualifier: success
  success_sequence: 1
  MiqEvent:
    name: vm_clone_start
    description: VM Clone Start
    guid: e30f6720-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: cancel_task
    description: Cancel vCenter Task
    guid: e49bfee6-1e1e-11de-8918-0050568005db
    action_type: default
    options: {}
- qualifier: success
  success_sequence: 2
  MiqEvent:
    name: vm_clone_start
    description: VM Clone Start
    guid: e30f6720-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: SendEmail
    description: SendEmail
    guid: abcf406c-02cd-11de-86d4-005056903dbc
    action_type: email
    options:
      :variables:
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>

```

```

      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      :from: evmadmin@manageiq.com
      :to: evm_demo@manageiq.com
- qualifier: success
  success_sequence: 3
  MiqEvent:
    name: vm_clone_start
    description: VM Clone Start
    guid: e30f6720-1ele-11de-8918-0050568005db
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: 4468f036-0b6d-11df-bd07-005056a7121f
    description: VM Attribute - Prevent Clone of SQL Server
    guid: 4468f036-0b6d-11df-bd07-005056a7121f
    action_type: set_custom_attribute
    options:
      :variables:
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
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        :oid: ''
        :var_type: <None>
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        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>
      - :value: ''
        :oid: ''
        :var_type: <None>

```

```

      :oid: ''
      :var_type: <None>
      :value: Clone Prevented for SQL Server VM
      :attribute: EVM Policy
Condition:
- name: VMs running SQL Server
  description: VMs with Workload - Database
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      CONTAINS:
        tag: Vm.managed-function
        value: database
      context_type:
        towhat: Vm
        file_mtime:
        guid: 121ecf62-01c6-11de-a701-005056903dbc
        filename:
        applies_to_exp:
        miq_policy_id: 100000000000064
        notes:
- MiqPolicySet:
  name: 3b818590-2866-11de-af2a-0050568026c2
  description: ! 'Demo: Service Level Resource Allocation'
  set_type: MiqPolicySet
  guid: 3b818590-2866-11de-af2a-0050568026c2
  read_only:
  set_data:
    :notes: This policy demonstrates EVM's ability to check and , if necessary,
      reconfigure a VM's vCPU and Memory configuration based on designated service
      level
  mode: control
  owner_type:
  owner_id:
  MiqPolicy:
- name: d16643b6-3905-11de-b6d5-005056a11a54
  description: Service Level Silver - RAM must be 512MB and 1 vCPU - on
  expression: !ruby/object:MiqExpression
    exp:
      and:
      - CONTAINS:
        tag: Vm.managed-service_level
        value: silver
      - =:
        value: 'on'
        field: Vm-power_state
      context_type:
        towhat: Vm
        guid: d16643b6-3905-11de-b6d5-005056a11a54
        created_by:
        updated_by: admin
        notes: This policy verifies that a vm that has a service level tag of silver
          has 1 vCPU and 512MB of memory. If not it changes the vm to these values.
          This policy is used on a powered on vm.
        active: true
        mode: control
        MiqPolicyContent:
      - qualifier: success
        success_sequence: 1

```

```

MiqEvent:
  name: assigned_company_tag
  description: Tag Complete
  guid: e384ecb6-1e1e-11de-8918-0050568005db
  event_type: Default
  definition:
    default:
    enabled:
MiqAction:
  name: vm_stop
  description: Stop Virtual Machine
  guid: 37f2da3e-21a8-11e2-b47a-0050568b19a3
  action_type: default
  options: {}
- qualifier: success
  success_sequence: 2
MiqEvent:
  name: assigned_company_tag
  description: Tag Complete
  guid: e384ecb6-1e1e-11de-8918-0050568005db
  event_type: Default
  definition:
    default:
    enabled:
MiqAction:
  name: VM_RAM_512MB
  description: Set VM RAM to 512MB
  guid: bab04cb4-9afl-11dd-8e55-005056ac7d2c
  action_type: reconfigure_memory
  options:
    :value: 512
- qualifier: success
  success_sequence: 3
MiqEvent:
  name: assigned_company_tag
  description: Tag Complete
  guid: e384ecb6-1e1e-11de-8918-0050568005db
  event_type: Default
  definition:
    default:
    enabled:
MiqAction:
  name: VM_CPU_1
  description: Set VM CPU to 1
  guid: d97dafba-9afl-11dd-8e55-005056ac7d2c
  action_type: reconfigure_cpus
  options:
    :value: '1'
- qualifier: success
  success_sequence: 4
MiqEvent:
  name: assigned_company_tag
  description: Tag Complete
  guid: e384ecb6-1e1e-11de-8918-0050568005db
  event_type: Default
  definition:
    default:
    enabled:
MiqAction:

```



```

    name: vm_start
    description: Start Virtual Machine
    guid: 55b5a422-3348-11de-bde2-005056a170fa
    action_type: default
    options: {}
  Condition:
  - name: Service Level Validation Silver - Powered Off
    description: Service Level Silver - VM RAM and CPU check
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        or:
        - ! '!=':
            value: 512
            field: Vm.hardware-memory_cpu
        - ! '!=':
            value: 1
            field: Vm.hardware-numvcpus
    towhat: Vm
    file_mtime:
    guid: 531575ae-9b1c-11dd-bbd7-005056ac7d2c
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000068
    notes:
  - name: 4cb4d05c-3909-11de-b6d5-005056a11a54
    description: Service Level Platinum - RAM must be 2GB and 2 vCPUs - on
    expression: !ruby/object:MiqExpression
      exp:
        and:
        - CONTAINS:
            tag: Vm.managed-service_level
            value: platinum
        - =:
            value: 'on'
            field: Vm-power_state
    context_type:
    towhat: Vm
    guid: 4cb4d05c-3909-11de-b6d5-005056a11a54
    created_by:
    updated_by: admin
    notes: This policy verifies that a vm that has a service level tag of platinum
      has 2 vCPUs and 2GB of memory. If not it changes the vm to these values. This
      policy is used on a powered on vm.
    active: true
    mode: control
    MiqPolicyContent:
    - qualifier: success
      success_sequence: 1
    MiqEvent:
      name: assigned_company_tag
      description: Tag Complete
      guid: e384ecb6-1e1e-11de-8918-0050568005db
      event_type: Default
      definition:
      default:
      enabled:
    MiqAction:
      name: vm_stop

```

```

    description: Stop Virtual Machine
    guid: 37f2da3e-21a8-11e2-b47a-0050568b19a3
    action_type: default
    options: {}
- qualifier: success
  success_sequence: 2
  MiqEvent:
    name: assigned_company_tag
    description: Tag Complete
    guid: e384ecb6-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: VM_RAM_2GB
    description: Set VM RAM to 2GB
    guid: cf1570b2-9af1-11dd-8e55-005056ac7d2c
    action_type: reconfigure_memory
    options:
      :value: 2048
- qualifier: success
  success_sequence: 3
  MiqEvent:
    name: assigned_company_tag
    description: Tag Complete
    guid: e384ecb6-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: VM_CPU_2
    description: Set VM CPU to 2
    guid: e2c3d64e-9af1-11dd-8e55-005056ac7d2c
    action_type: reconfigure_cpus
    options:
      :value: '2'
- qualifier: success
  success_sequence: 4
  MiqEvent:
    name: assigned_company_tag
    description: Tag Complete
    guid: e384ecb6-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: vm_start
    description: Start Virtual Machine
    guid: 55b5a422-3348-11de-bde2-005056a170fa
    action_type: default
    options: {}
  Condition:
- name: 34218558-3909-11de-b6d5-005056a11a54
  description: Service Level Platinum - VM RAM and CPU check
  modifier: allow
  expression: !ruby/object:MiqExpression

```

```

    exp:
      or:
        - ! '!=':
            value: 2048
            field: Vm.hardware-memory_cpu
        - ! '!=':
            value: 2
            field: Vm.hardware-numvcpus
    towhat: Vm
    file_mtime:
    guid: 34218558-3909-11de-b6d5-005056a11a54
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000070
    notes:
- name: 7a91f3ac-3908-11de-b6d5-005056a11a54
  description: Service Level Gold - RAM must be 1GB and 1 vCPU - on
  expression: !ruby/object:MiqExpression
    exp:
      and:
        - CONTAINS:
            tag: Vm.managed-service_level
            value: gold
        - =:
            value: 'on'
            field: Vm-power_state
      context_type:
    towhat: Vm
    guid: 7a91f3ac-3908-11de-b6d5-005056a11a54
    created_by:
    updated_by: admin
    notes: This policy verifies that a vm that has a service level tag of gold has
      1vCPU and 1GB of memory. If not it changes the vm to these values. This policy
      is used on a powered on vm.
    active: true
    mode: control
    MiqPolicyContent:
      - qualifier: success
        success_sequence: 1
      MiqEvent:
        name: assigned_company_tag
        description: Tag Complete
        guid: e384ecb6-1e1e-11de-8918-0050568005db
        event_type: Default
        definition:
          default:
          enabled:
      MiqAction:
        name: vm_stop
        description: Stop Virtual Machine
        guid: 37f2da3e-21a8-11e2-b47a-0050568b19a3
        action_type: default
        options: {}
      - qualifier: success
        success_sequence: 2
      MiqEvent:
        name: assigned_company_tag
        description: Tag Complete
        guid: e384ecb6-1e1e-11de-8918-0050568005db

```

```

    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: VM_RAM_1GB
    description: Set VM RAM to 1GB
    guid: 2d8445f2-9aec-11dd-8e55-005056ac7d2c
    action_type: reconfigure_memory
    options:
      :value: 1024
- qualifier: success
  success_sequence: 3
  MiqEvent:
    name: assigned_company_tag
    description: Tag Complete
    guid: e384ecb6-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: VM_CPU_1
    description: Set VM CPU to 1
    guid: d97dafba-9af1-11dd-8e55-005056ac7d2c
    action_type: reconfigure_cpus
    options:
      :value: '1'
- qualifier: success
  success_sequence: 4
  MiqEvent:
    name: assigned_company_tag
    description: Tag Complete
    guid: e384ecb6-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: vm_start
    description: Start Virtual Machine
    guid: 55b5a422-3348-11de-bde2-005056a170fa
    action_type: default
    options: {}
  Condition:
- name: 1c6ec35e-3908-11de-b6d5-005056a11a54
  description: Service Level Gold - VM RAM and CPU check
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      or:
      - ! '!=':
          value: 1024
          field: Vm.hardware-memory_cpu
      - ! '!=':
          value: 1
          field: Vm.hardware-numvcpus
  towhat: Vm
  file_mtime:

```

```

    guid: 1c6ec35e-3908-11de-b6d5-005056a11a54
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000069
    notes:
  - name: Service Level Policy Verify Virtual Hardware - Silver Level
    description: Service Level Silver - RAM must be 512MB and 1 vCPU - off
    expression: !ruby/object:MiqExpression
      exp:
        and:
          - CONTAINS:
              tag: Vm.managed-service_level
              value: silver
          - =:
              value: 'off'
              field: Vm-power_state
        context_type:
      towhat: Vm
    guid: 3659b8bc-2866-11de-af2a-0050568026c2
    created_by:
    updated_by: admin
    notes: This policy verifies that a vm that has a service level tag of silver
      has 1 vCPU and 512MB of memory. If not it changes the vm to these values.
      This policy is used on a powered off vm.
    active: true
    mode: control
    MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: assigned_company_tag
      description: Tag Complete
      guid: e384ecb6-1e1e-11de-8918-0050568005db
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: VM_CPU_1
      description: Set VM CPU to 1
      guid: d97dafba-9af1-11dd-8e55-005056ac7d2c
      action_type: reconfigure_cpus
      options:
        :value: '1'
  - qualifier: success
    success_sequence: 2
    MiqEvent:
      name: assigned_company_tag
      description: Tag Complete
      guid: e384ecb6-1e1e-11de-8918-0050568005db
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: VM_RAM_512MB
      description: Set VM RAM to 512MB
      guid: bab04cb4-9af1-11dd-8e55-005056ac7d2c
      action_type: reconfigure_memory

```

```

      options:
        :value: 512
    Condition:
  - name: Service Level Validation Silver - Powered Off
    description: Service Level Silver - VM RAM and CPU check
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        or:
          - ! '!=':
              value: 512
              field: Vm.hardware-memory_cpu
          - ! '!=':
              value: 1
              field: Vm.hardware-numvcpus
    towhat: Vm
    file_mtime:
    guid: 531575ae-9b1c-11dd-bbd7-005056ac7d2c
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000068
    notes:
  - name: 24b92088-399c-11de-ae27-005056a11a54
    description: Service Level Gold - RAM must be 1GB and 1 vCPU - off
    expression: !ruby/object:MiqExpression
      exp:
        and:
          - CONTAINS:
              tag: Vm.managed-service_level
              value: gold
          - =:
              value: 'off'
              field: Vm-power_state
      context_type:
    towhat: Vm
    guid: 24b92088-399c-11de-ae27-005056a11a54
    created_by:
    updated_by: admin
    notes: This policy verifies that a vm that has a service level tag of gold has
      1vCPU and 1GB of memory. If not it changes the vm to these values. This policy
      is used on a powered off vm.
    active: true
    mode: control
    MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: assigned_company_tag
      description: Tag Complete
      guid: e384ecb6-1e1e-11de-8918-0050568005db
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: VM_RAM_1GB
      description: Set VM RAM to 1GB
      guid: 2d8445f2-9aec-11dd-8e55-005056ac7d2c
      action_type: reconfigure_memory

```

```

      options:
        :value: 1024
-   qualifier: success
    success_sequence: 2
    MiqEvent:
      name: assigned_company_tag
      description: Tag Complete
      guid: e384ecb6-1e1e-11de-8918-0050568005db
      event_type: Default
      definition:
        default:
          enabled:
            MiqAction:
              name: VM_CPU_1
              description: Set VM CPU to 1
              guid: d97dafba-9af1-11dd-8e55-005056ac7d2c
              action_type: reconfigure_cpus
              options:
                :value: '1'
    Condition:
-   name: 1c6ec35e-3908-11de-b6d5-005056a11a54
      description: Service Level Gold - VM RAM and CPU check
      modifier: allow
      expression: !ruby/object:MiqExpression
        exp:
          or:
            - ! '!=':
                value: 1024
                field: Vm.hardware-memory_cpu
            - ! '!=':
                value: 1
                field: Vm.hardware-numvcpus
      towhat: Vm
      file_mtime:
        guid: 1c6ec35e-3908-11de-b6d5-005056a11a54
        filename:
          applies_to_exp:
            miq_policy_id: 10000000000069
            notes:
-   name: b265c970-3908-11de-b6d5-005056a11a54
      description: Service Level Platinum - RAM must be 2GB and 2 vCPUs - off
      expression: !ruby/object:MiqExpression
        exp:
          and:
            - CONTAINS:
                tag: Vm.managed-service_level
                value: platinum
            - =:
                value: 'off'
                field: Vm-power_state
        context_type:
      towhat: Vm
      guid: b265c970-3908-11de-b6d5-005056a11a54
      created_by:
      updated_by: admin
      notes: This policy verifies that a vm that has a service level tag of platinum
        has 2 vCPUs and 2GB of memory. If not it changes the vm to these values. This
        policy is used on a powered off vm.
      active: true

```

```

mode: control
MiqPolicyContent:
- qualifier: success
  success_sequence: 1
  MiqEvent:
    name: assigned_company_tag
    description: Tag Complete
    guid: e384ecb6-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: VM_RAM_2GB
    description: Set VM RAM to 2GB
    guid: cfl570b2-9afl-11dd-8e55-005056ac7d2c
    action_type: reconfigure_memory
    options:
      :value: 2048
- qualifier: success
  success_sequence: 2
  MiqEvent:
    name: assigned_company_tag
    description: Tag Complete
    guid: e384ecb6-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: VM_CPU_2
    description: Set VM CPU to 2
    guid: e2c3d64e-9afl-11dd-8e55-005056ac7d2c
    action_type: reconfigure_cpus
    options:
      :value: '2'
Condition:
- name: 34218558-3909-11de-b6d5-005056a11a54
  description: Service Level Platinum - VM RAM and CPU check
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      or:
        - ! '!=':
            value: 2048
            field: Vm.hardware-memory_cpu
        - ! '!=':
            value: 2
            field: Vm.hardware-numvcpus
  towhat: Vm
  file_mtime:
  guid: 34218558-3909-11de-b6d5-005056a11a54
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000070
  notes:
- MiqPolicySet:
  name: fc164798-3b81-11e0-9dc0-005056910001
  description: ! 'Demo: Windows Mandatory Patch'

```



```

set_type: MiqPolicySet
guid: fc164798-3b81-11e0-9dc0-005056910001
read_only:
set_data:
mode: control
owner_type:
owner_id:
MiqPolicy:
- name: c5d44cb2-4734-11df-b577-005056a7121f
  description: ! 'Patch: MS10-008 Required'
  expression: !ruby/object:MiqExpression
    exp:
      CONTAINS:
        tag: Vm.managed-environment
        value: prod
      context_type:
towhat: Vm
guid: c5d44cb2-4734-11df-b577-005056a7121f
created_by: admin
updated_by: admin
notes: Prevents a VM that does not have MS10-008 installed from running in the
       virtual environment. It's scope limits it to vms tagged as production
active: true
mode: control
MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: vm_start
    description: VM Power On
    guid: 404b4630-21a8-11e2-b47a-0050568b19a3
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: vm_stop
    description: Stop Virtual Machine
    guid: 37f2da3e-21a8-11e2-b47a-0050568b19a3
    action_type: default
    options: {}
- qualifier: failure
  failure_sequence: 2
  MiqEvent:
    name: vm_start
    description: VM Power On
    guid: 404b4630-21a8-11e2-b47a-0050568b19a3
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: SendEmail
    description: SendEmail
    guid: abcf406c-02cd-11de-86d4-005056903dbc
    action_type: email
    options:
      :variables:
      - :value: ''

```

```

      :oid: ''
      :var_type: <None>
-   :value: ''
      :oid: ''
      :var_type: <None>
-   :value: ''
      :oid: ''
      :var_type: <None>
-   :value: ''
      :oid: ''
      :var_type: <None>
-   :value: ''
      :oid: ''
      :var_type: <None>
-   :value: ''
      :oid: ''
      :var_type: <None>
-   :value: ''
      :oid: ''
      :var_type: <None>
      :from: evmadmin@manageiq.com
      :to: evm_demo@manageiq.com
-   qualifier: failure
      failure_sequence: 3
MiqEvent:
  name: vm_start
  description: VM Power On
  guid: 404b4630-21a8-11e2-b47a-0050568b19a3
  event_type: Default
  definition:
    default:
    enabled:
MiqAction:
  name: 722d25cc-56dc-11df-bb16-005056a7121f
  description: VM Attribute - Fails patch policy
  guid: 722d25cc-56dc-11df-bb16-005056a7121f
  action_type: set_custom_attribute
  options:
    :variables:
-   :value: ''
      :oid: ''
      :var_type: <None>
-   :value: ''
      :oid: ''
      :var_type: <None>
-   :value: ''
      :oid: ''
      :var_type: <None>
-   :value: ''
      :oid: ''

```

```

      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: Failed Windows Required Patch Policy
      :attribute: EVM Policy
Condition:
- name: a3089008-4734-11df-b577-005056a7121f
  description: Verify KB978262 is installed
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      CONTAINS:
        value: KB978262
        field: Vm.patches-name
      context_type:
        towhat: Vm
      file_mtime:
        guid: a3089008-4734-11df-b577-005056a7121f
        filename:
          applies_to_exp:
            miq_policy_id: 100000000000071
            notes:
              - MiqPolicySet:
                  name: 3be240d8-2866-11de-af2a-0050568026c2
                  description: ! 'Mandatory: Provisioning and Retirement'
                  set_type: MiqPolicySet
                  guid: 3be240d8-2866-11de-af2a-0050568026c2
                  read_only:
                    set_data:
                      :notes: ! 'This policy profile is REQUIRED if EVM is being used to Provision or Retire vms. It must be entitled to the desired management systems. Note: this policy profile will potentially result in the removal of a vm from the management system upon retirement if the associated VM Retirement statemachine [/Factory/StateMachine/VMRetirement] in the the Automate model is configured to delete vms. It is not configured for vm deletion out-of-the-box.'
                  mode: control
                  owner_type:
                    owner_id:
                      MiqPolicy:
                        - name: Automation Policy - Scope VM Retired Response Execute Automation Model
                          description: ! 'Operational: Vm Retired'
                          expression:
                            towhat: Vm

```

```

guid: 397700ae-2866-11de-af2a-0050568026c2
created_by:
updated_by: admin
notes: This policy raises an automation event when a vm retirement event is
      raised
active: true
mode: control
MiqPolicyContent:
- qualifier: success
  success_sequence: 1
  failure_synchronous: true
  MiqEvent:
    name: vm_retired
    description: VM Retired
    guid: e363d8aa-1ele-11de-8918-0050568005db
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: raise_automation_event
    description: Raise Automation Event
    guid: e7da3b7a-1139-11e1-9333-005056af009e
    action_type: default
    options: {}
  Condition: []
- name: Automation Policy - Scope VM Retirement Warning,  ResponseExecute Automation
  Model
  description: ! 'Operational: Retirement Warning'
  expression:
  towhat: Vm
  guid: 39621392-2866-11de-af2a-0050568026c2
  created_by:
  updated_by: admin
  notes: This policy raises an automation event when a retirement warning event
        is raised
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    failure_synchronous: true
    MiqEvent:
      name: vm_retire_warn
      description: VM Retirement Warning
      guid: 97c85330-fe93-11dd-b5e1-005056903dbc
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: raise_automation_event
      description: Raise Automation Event
      guid: e7da3b7a-1139-11e1-9333-005056af009e
      action_type: default
      options: {}
    Condition: []
- name: 427a4378-6519-11df-b637-005056a435be
  description: ! 'Analysis: Post Provisioning'

```

```

expression:
towhat: Vm
guid: 427a4378-6519-11df-b637-005056a435be
created_by: admin
updated_by: admin
notes: This policy triggers a vm analysis of any newly provisioned VM
active: true
mode: control
MiqPolicyContent:
- qualifier: success
  success_sequence: 1
  MiqEvent:
    name: vm_provisioned
    description: VM Provision Complete
    guid: 2a17a20a-3e8e-11df-9fe2-005056a435be
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: vm_analyze
    description: Initiate SmartState Analysis for VM
    guid: 5cbe1082-ce35-11de-a117-005056b0503e
    action_type: default
    options: {}
  Condition: []
- MiqPolicySet:
  name: 63aaa3aa-53fa-11e0-babf-00505688000a
  description: ! 'Operational: Prevent Cloning of Database VMs'
  set_type: MiqPolicySet
  guid: 63aaa3aa-53fa-11e0-babf-00505688000a
  read_only:
  set_data:
    :notes: This policy profile prevents database vms from being cloned. Database
      vms are defined as those that have a workload tag value of database
  mode: control
  owner_type:
  owner_id:
  MiqPolicy:
  - name: Configuration Policy Restrict Cloning SQL Server
    description: ! 'Operational: Prevent Cloning of Database VMs'
    expression:
    towhat: Vm
    guid: 39fdeba0-2866-11de-af2a-0050568026c2
    created_by:
    updated_by: admin
    notes: prevents cloning of vms with a workload tag value of database
    active: true
    mode: control
    MiqPolicyContent:
    - qualifier: success
      success_sequence: 1
      MiqEvent:
        name: vm_clone_start
        description: VM Clone Start
        guid: e30f6720-1e1e-11de-8918-0050568005db
        event_type: Default
        definition:
          default:

```

[illegible]

[illegible]

```

    filename:
    applies_to_exp:
    miq_policy_id: 10000000000064
    notes:
- MiqPolicySet:
  name: 97fe0866-b8e5-11e2-87c6-001a4a034c7a
  description: RHEL + KVM
  set_type: MiqPolicySet
  guid: 97fe0866-b8e5-11e2-87c6-001a4a034c7a
  read_only:
  set_data:
  mode: control
  owner_type:
  owner_id:
  MiqPolicy:
- name: c63b0560-fa45-11de-83ca-005056ba0614
  description: Root Login via SSH should be Disabled
  expression:
  towhat: Host
  guid: c63b0560-fa45-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that the root account cannot login to the host via
    SSH.
  active: true
  mode: compliance
  MiqPolicyContent:
- qualifier: failure
  failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
- name: 4435b6d6-fa46-11de-83ca-005056ba0614
  description: PermitRootLogin = no in sshd_config file
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        checkany:
          REGULAR EXPRESSION MATCHES:
            value: ^\s*PermitRootLogin\s+no
            field: Host.filesystems-contents
        search:
          =:
            value: /etc/ssh/sshd_config
            field: Host.filesystems-name
    towhat: Host

```



```

    file_mtime:
    guid: 4435b6d6-fa46-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000042
    notes: This condition checks the file /etc/ssh/sshd_config and verifies that
           the PermitRootLogin parameter's value is set to no.
- name: af2d74ea-fa39-11de-83ca-005056ba0614
  description: Firewall - Incoming Security Level
  expression:
  towhat: Host
  guid: af2d74ea-fa39-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that only a defined set of incoming TCP and UDP
        Ports are open.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
- name: b4a0843a-fa43-11de-83ca-005056ba0614
  description: Valid Incoming UDP Ports
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      LIMITED TO:
        value: '427'
        field: Host-enabled_udp_inbound_ports
  towhat: Host
  file_mtime:
  guid: b4a0843a-fa43-11de-83ca-005056ba0614
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000021
  notes: This condition verifies that the only open incoming UDP port is 427.
- name: 03529e9e-f961-11de-9e9d-0050568a07c7
  description: Valid Incoming TCP Ports
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      LIMITED TO:
        value: '902,80,443,427,5989,22,5988'
        field: Host-enabled_tcp_inbound_ports

```

```

    towhat: Host
    file_mtime:
    guid: 03529e9e-f961-11de-9e9d-0050568a07c7
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000021
    notes: This condition verifies that the only open incoming TCP ports are ←
           22,80,427,443,902,5988,and
           5989.
- name: 04db603c-fa3a-11de-83ca-005056ba0614
  description: Firewall - Outgoing Security Level
  expression:
  towhat: Host
  guid: 04db603c-fa3a-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that only a defined set of outgoing TCP and UDP
        Ports are open.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
  - name: f0afd7d6-fa3a-11de-83ca-005056ba0614
    description: Valid Outgoing TCP Ports
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        LIMITED TO:
          value: '902,427,443,27000,27010'
          field: Host-enabled_tcp_outbound_ports
    towhat: Host
    file_mtime:
    guid: f0afd7d6-fa3a-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000020
    notes: This condition verifies that the only open outgoing TCP ports are ←
           427,443,902,27000,
           and 27010.
- name: 1778fb28-fa44-11de-83ca-005056ba0614
  description: Valid Outgoing UDP Ports
  modifier: allow
  expression: !ruby/object:MiqExpression

```

```

    exp:
      LIMITED TO:
        value: '427,123,902'
        field: Host-enabled_udp_outbound_ports
  towhat: Host
  file_mtime:
  guid: 1778fb28-fa44-11de-83ca-005056ba0614
  filename:
  applies_to_exp:
  miq_policy_id: 10000000000020
  notes: This condition verifies that the only open outgoing UDP ports are 123,427,
    and 902.
- name: 8cecc84c-fa46-11de-83ca-005056ba0614
  description: Limit su Access to root Account
  expression:
  towhat: Host
  guid: 8cecc84c-fa46-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy validates that only members of the group wheel can access
    the su command.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
  MiqEvent:
    name: host_compliance_check
    description: Host Compliance Check
    guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: compliance_failed
    description: Mark as Non-Compliant
    guid: ba452d94-f586-11de-8ebc-0050568a07c7
    action_type: default
    options: {}
  Condition:
  - name: 63b243fc-fa47-11de-83ca-005056ba0614
    description: Only members of wheel group can execute su command
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkany:
            REGULAR EXPRESSION MATCHES:
              value: ^\s*auth\s+required\s+.*pam_wheel\.so\s+use_uid
              field: Host.filesystems-contents
          search:
            =:
              value: /etc/pam.d/su
              field: Host.filesystems-name
    towhat: Host
    file_mtime:
    guid: 63b243fc-fa47-11de-83ca-005056ba0614
    filename:

```

```

    applies_to_exp:
    miq_policy_id: 100000000000050
    notes: This condition validates that the file /etc/pam.d/su contains a variation
           of the string "auth required pam_wheel.so use_uid".
- name: 4ed279b2-fa55-11de-83ca-005056ba0614
  description: Timekeeping - NTP Service Running
  expression:
  towhat: Host
  guid: 4ed279b2-fa55-11de-83ca-005056ba0614
  created_by: admin
  updated_by: admin
  notes: This policy verifies that the NTP servers is configured to automatically
        start.
  active: true
  mode: compliance
  MiqPolicyContent:
  - qualifier: failure
    failure_sequence: 1
    MiqEvent:
      name: host_compliance_check
      description: Host Compliance Check
      guid: b9abe0a8-f586-11de-8ebc-0050568a07c7
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: compliance_failed
      description: Mark as Non-Compliant
      guid: ba452d94-f586-11de-8ebc-0050568a07c7
      action_type: default
      options: {}
  Condition:
  - name: 9a08d21e-fa55-11de-83ca-005056ba0614
    description: Verify NTP is Running
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        FIND:
          checkany:
            INCLUDES:
              value: '3'
              field: Host.host_services-enable_run_levels
          search:
            =:
              value: ntpd
              field: Host.host_services-name
    towhat: Host
    file_mtime:
    guid: 9a08d21e-fa55-11de-83ca-005056ba0614
    filename:
    applies_to_exp:
    miq_policy_id: 100000000000031
    notes: This condition verifies that the run level of the service ntpd is set
          to three.
- MiqPolicySet:
  name: 51149d78-cb15-11e3-b1c5-001a4a0f459e
  description: Resolv.conf
  set_type: MiqPolicySet

```

```

guid: 51149d78-cb15-11e3-b1c5-001a4a0f459e
read_only:
set_data:
mode: control
owner_type:
owner_id:
MiqPolicy:
- name: e3f6428c-a85a-11e3-9c44-001a4a0f459e
  description: Settings - /etc/resolv.conf
  expression: !ruby/object:MiqExpression
    exp:
      FIND:
        search:
          =:
            field: Vm.filesystems-name
            value: resolv.conf
        checkall:
          =:
            field: Vm.filesystems-contents_available
            value: 'true'
      context_type:
towhat: Vm
guid: e3f6428c-a85a-11e3-9c44-001a4a0f459e
created_by: admin
updated_by: admin
notes:
active: true
mode: compliance
MiqPolicyContent:
- qualifier: success
  success_sequence: 1
  success_synchronous: true
  MiqEvent:
    name: vm_compliance_check
    description: VM Compliance Check
    guid: 816a598a-f57d-11de-a41a-005056ba0614
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: log
    description: Generate log message
    guid: 04771f80-431c-11e3-91d5-001a4a0f459e
    action_type: default
    options: {}
- qualifier: success
  success_sequence: 2
  success_synchronous: true
  MiqEvent:
    name: vm_compliance_check
    description: VM Compliance Check
    guid: 816a598a-f57d-11de-a41a-005056ba0614
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: c26b7988-a860-11e3-9c44-001a4a0f459e

```

```

    description: resolv.conf
    guid: c26b7988-a860-11e3-9c44-001a4a0f459e
    action_type: custom_automation
    options:
      :ae_request: resolvsend
      :ae_message: create
- qualifier: failure
  failure_sequence: 1
  failure_synchronous: true
  MiqEvent:
    name: vm_compliance_check
    description: VM Compliance Check
    guid: 816a598a-f57d-11de-a41a-005056ba0614
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: log
    description: Generate log message
    guid: 04771f80-431c-11e3-91d5-001a4a0f459e
    action_type: default
    options: {}
  Condition: []
- MiqPolicySet:
  name: 5a7d53b4-53f9-11e0-babf-00505688000a
  description: ! 'Snapshot Management: Delete Based On Count'
  set_type: MiqPolicySet
  guid: 5a7d53b4-53f9-11e0-babf-00505688000a
  read_only:
  set_data:
    :notes: This policy profile deletes the most recent snapshot when more that
      2 snapshots exists
  mode: control
  owner_type:
  owner_id:
  MiqPolicy:
- name: 994efe7e-18e6-11e0-88b4-005056a7184a
  description: ! 'Snapshots: Delete based on Count'
  expression:
  towhat: Vm
  guid: 994efe7e-18e6-11e0-88b4-005056a7184a
  created_by: admin
  updated_by: admin
  notes: This policy deletes the most recent snapshot when more that 2 snapshots
    exists
  active: true
  mode: control
  MiqPolicyContent:
- qualifier: success
  success_sequence: 1
  MiqEvent:
    name: vm_snapshot_complete
    description: VM Snapshot Create Complete
    guid: 7eb82802-135e-11e0-8706-005056a7184a
    event_type: Default
    definition:
      default:
      enabled:

```

```

    MiqAction:
      name: delete_most_recent_snapshot
      description: Delete Most Recent Snapshot
      guid: 7f6e2f8a-135e-11e0-8706-005056a7184a
      action_type: default
      options: {}
  Condition:
  - name: 992035fc-18e7-11e0-88b4-005056a7184a
    description: Check for more than 2 snapshots
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        ! '>':
          value: '2'
          field: Vm-v_total_snapshots
      context_type:
        towhat: Vm
        file_mtime:
          guid: 992035fc-18e7-11e0-88b4-005056a7184a
          filename:
            applies_to_exp:
              miq_policy_id: 100000000000075
            notes: Checks to see if more than 2 snapshots exist
- MiqPolicySet:
  name: 05b51354-53fd-11e0-babf-00505688000a
  description: Standards
  set_type: MiqPolicySet
  guid: 05b51354-53fd-11e0-babf-00505688000a
  read_only:
  set_data:
    :notes: This policy profile is an example of creation of a single profile that
      contains all policies that should be enforced on all objects in the environment.
  mode: control
  owner_type:
  owner_id:
  MiqPolicy:
  - name: Configuration Policy Restrict Cloning SQL Server
    description: ! 'Operational: Prevent Cloning of Database VMs'
    expression:
    towhat: Vm
    guid: 39fdeba0-2866-11de-af2a-0050568026c2
    created_by:
    updated_by: admin
    notes: prevents cloning of vms with a workload tag value of database
    active: true
    mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: vm_clone_start
      description: VM Clone Start
      guid: e30f6720-1e1e-11de-8918-0050568005db
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: cancel_task

```

```
- description: Cancel vCenter Task  
  guid: e49bf6ee6-1e1e-11de-8918-0050568005db  
  action_type: default  
  options: {}  
  
- qualifier: success  
  success_sequence: 2  
  MiqEvent:  
    name: vm_clone_start  
    description: VM Clone Start  
    guid: e30f6720-1e1e-11de-8918-0050568005db  
    event_type: Default  
    definition:  
      default:  
        enabled:  
  
  MiqAction:  
    name: SendEmail  
    description: SendEmail  
    guid: abcf406c-02cd-11de-86d4-005056903dbc  
    action_type: email  
    options:  
      :variables:  
      - :value: ''  
        :oid: ''  
        :var_type: <None>  
      - :value: ''  
        :oid: ''  
        :var_type: <None>  
      - :value: ''  
        :oid: ''  
        :var_type: <None>  
      - :value: ''  
        :oid: ''  
        :var_type: <None>  
      - :value: ''  
        :oid: ''  
        :var_type: <None>  
      - :value: ''  
        :oid: ''  
        :var_type: <None>  
      - :value: ''  
        :oid: ''  
        :var_type: <None>  
      - :value: ''  
        :oid: ''  
        :var_type: <None>  
      - :value: ''  
        :oid: ''  
        :var_type: <None>  
      - :value: ''  
        :oid: ''  
        :var_type: <None>  
      :from: evmadmin@manageiq.com  
      :to: evm_demo@manageiq.com  
  
- qualifier: success  
  success_sequence: 3  
  MiqEvent:  
    name: vm_clone_start  
    description: VM Clone Start  
    guid: e30f6720-1e1e-11de-8918-0050568005db
```



```
event_type: Default
definition:
default:
enabled:
MiqAction:
name: 4468f036-0b6d-11df-bd07-005056a7121f
description: VM Attribute - Prevent Clone of SQL Server
guid: 4468f036-0b6d-11df-bd07-005056a7121f
action_type: set_custom_attribute
options:
  :variables:
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
    - :value: ''
      :oid: ''
      :var_type: <None>
  :value: Clone Prevented for SQL Server VM
  :attribute: EVM Policy
Condition:
- name: VMs running SQL Server
description: VMs with Workload - Database
modifier: allow
expression: !ruby/object:MiqExpression
exp:
CONTAINS:
tag: Vm.managed-function
value: database
context_type:
towhat: Vm
file_mtime:
guid: 121ecf62-01c6-11de-a701-005056903dbc
filename:
applies_to_exp:
miq_policy_id: 100000000000064
```

```

    notes:
- name: 994efe7e-18e6-11e0-88b4-005056a7184a
  description: ! 'Snapshots: Delete based on Count'
  expression:
  towhat: Vm
  guid: 994efe7e-18e6-11e0-88b4-005056a7184a
  created_by: admin
  updated_by: admin
  notes: This policy deletes the most recent snapshot when more that 2 snapshots
    exists
  active: true
  mode: control
  MiqPolicyContent:
- qualifier: success
  success_sequence: 1
  MiqEvent:
    name: vm_snapshot_complete
    description: VM Snapshot Create Complete
    guid: 7eb82802-135e-11e0-8706-005056a7184a
    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: delete_most_recent_snapshot
    description: Delete Most Recent Snapshot
    guid: 7f6e2f8a-135e-11e0-8706-005056a7184a
    action_type: default
    options: {}
  Condition:
- name: 992035fc-18e7-11e0-88b4-005056a7184a
  description: Check for more than 2 snapshots
  modifier: allow
  expression: !ruby/object:MiqExpression
    exp:
      ! '>':
        value: '2'
        field: Vm-v_total_snapshots
    context_type:
  towhat: Vm
  file_mtime:
  guid: 992035fc-18e7-11e0-88b4-005056a7184a
  filename:
  applies_to_exp:
  miq_policy_id: 100000000000075
  notes: Checks to see if more than 2 snapshots exist
- name: Automation Policy - Scope VM Retirement Warning,  ResponseExecute Automation
  Model
  description: ! 'Operational: Retirement Warning'
  expression:
  towhat: Vm
  guid: 39621392-2866-11de-af2a-0050568026c2
  created_by:
  updated_by: admin
  notes: This policy raises an automation event when a retirement warning event
    is raised
  active: true
  mode: control
  MiqPolicyContent:

```

```

- qualifier: success
  success_sequence: 1
  failure_synchronous: true
  MiqEvent:
    name: vm_retire_warn
    description: VM Retirement Warning
    guid: 97c85330-fe93-11dd-b5e1-005056903dbc
    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: raise_automation_event
    description: Raise Automation Event
    guid: e7da3b7a-1139-11e1-9333-005056af009e
    action_type: default
    options: {}
  Condition: []
- name: Automation Policy - Scope VM Retired Response Execute Automation Model
  description: ! 'Operational: Vm Retired'
  expression:
  towhat: Vm
  guid: 397700ae-2866-11de-af2a-0050568026c2
  created_by:
  updated_by: admin
  notes: This policy raises an automation event when a vm retirement event is
    raised
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    failure_synchronous: true
    MiqEvent:
      name: vm_retired
      description: VM Retired
      guid: e363d8aa-1e1e-11de-8918-0050568005db
      event_type: Default
      definition:
      default:
      enabled:
    MiqAction:
      name: raise_automation_event
      description: Raise Automation Event
      guid: e7da3b7a-1139-11e1-9333-005056af009e
      action_type: default
      options: {}
    Condition: []
- name: 427a4378-6519-11df-b637-005056a435be
  description: ! 'Analysis: Post Provisioning'
  expression:
  towhat: Vm
  guid: 427a4378-6519-11df-b637-005056a435be
  created_by: admin
  updated_by: admin
  notes: This policy triggers a vm analysis of any newly provisioned VM
  active: true
  mode: control
  MiqPolicyContent:

```

```

- qualifier: success
  success_sequence: 1
  MiqEvent:
    name: vm_provisioned
    description: VM Provision Complete
    guid: 2a17a20a-3e8e-11df-9fe2-005056a435be
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: vm_analyze
    description: Initiate SmartState Analysis for VM
    guid: 5cbe1082-ce35-11de-a117-005056b0503e
    action_type: default
    options: {}
  Condition: []
- name: 0c2517d8-1ea2-11e0-8e71-005056910000
  description: ! 'Tag: VM Inherit Cluster Location Tag'
  expression:
  towhat: Vm
  guid: 0c2517d8-1ea2-11e0-8e71-005056910000
  created_by: admin
  updated_by: admin
  notes: This policy allows a vm to inherit the location tag of it's parent cluster
    on creation or completion of analysis
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: vm_create
      description: VM Create Complete
      guid: 4c0b4f12-37c0-11df-b567-005056a40709
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: 60e5d690-1ea2-11e0-8e71-005056910000
      description: ! 'Tag: Inherit Cluster Location Tag'
      guid: 60e5d690-1ea2-11e0-8e71-005056910000
      action_type: inherit_parent_tags
      options:
        :parent_type: ems_cluster
        :cats:
        - location
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: vm_scan_complete
      description: VM Analysis Complete
      guid: f7b8361e-1139-11e1-9333-005056af009e
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:

```

```

    name: 60e5d690-1ea2-11e0-8e71-005056910000
    description: ! 'Tag: Inherit Cluster Location Tag'
    guid: 60e5d690-1ea2-11e0-8e71-005056910000
    action_type: inherit_parent_tags
    options:
      :parent_type: ems_cluster
      :cats:
      - location
  Condition: []
- name: ! 'Do Not Analyze '
  description: ! 'Analysis: Prevent Analysis of Selected VMs'
  expression:
  towhat: Vm
  guid: 3a7959c0-2866-11de-af2a-0050568026c2
  created_by:
  updated_by: admin
  notes: ! 'This policies prevents analysis of any vm that is tagged as Do Not
    Analyze '
  active: true
  mode: control
  MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    failure_synchronous: true
  MiqEvent:
    name: request_vm_scan
    description: VM Analysis Request
    guid: e3292c46-1e1e-11de-8918-0050568005db
    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: prevent
    description: Prevent current event from proceeding
    guid: d885a118-519b-11e0-8d82-005056af0000
    action_type: default
    options: {}
  Condition:
  - name: Do Not Analyze
    description: VM classified as DO_NOT_ANALYZE
    modifier: allow
    expression: !ruby/object:MiqExpression
      exp:
        CONTAINS:
          tag: Vm.managed-exclusions
          value: do_not_analyze
        context_type:
    towhat: Vm
    file_mtime:
    guid: 39ff4444-08e2-11de-829f-005056a164b2
    filename:
    applies_to_exp:
    miq_policy_id: 10000000000001
    notes:
- name: b968f0a0-3d2e-11df-a7e9-005056a40709
  description: ! 'Tag: VM that Requires Analysis'
  expression:
  towhat: Vm

```

```
guid: b968f0a0-3d2e-11df-a7e9-005056a40709
created_by: admin
updated_by: admin
notes:
active: true
mode: control
MiqPolicyContent:
- qualifier: success
  success_sequence: 1
  MiqEvent:
    name: vm_start
    description: VM Power On
    guid: 404b4630-21a8-11e2-b47a-0050568b19a3
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: a4ccd026-3d2e-11df-a7e9-005056a40709
    description: Tag VM that Requires Analysis
    guid: a4ccd026-3d2e-11df-a7e9-005056a40709
    action_type: tag
    options:
      :tags:
        - /managed/operations/analysis_required
- qualifier: success
  success_sequence: 1
  MiqEvent:
    name: vm_create
    description: VM Create Complete
    guid: 4c0b4f12-37c0-11df-b567-005056a40709
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: a4ccd026-3d2e-11df-a7e9-005056a40709
    description: Tag VM that Requires Analysis
    guid: a4ccd026-3d2e-11df-a7e9-005056a40709
    action_type: tag
    options:
      :tags:
        - /managed/operations/analysis_required
- qualifier: success
  success_sequence: 1
  MiqEvent:
    name: vm_reset
    description: VM Reset
    guid: 4c1b8a3a-37c0-11df-b567-005056a40709
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: a4ccd026-3d2e-11df-a7e9-005056a40709
    description: Tag VM that Requires Analysis
    guid: a4ccd026-3d2e-11df-a7e9-005056a40709
    action_type: tag
    options:
```

```

      :tags:
      - /managed/operations/analysis_required
    Condition: []
  - name: 2f2a1alc-4806-11df-badc-005056a7121f
    description: ! 'Analysis: VM Reconfiguration'
    expression:
    towhat: Vm
    guid: 2f2a1alc-4806-11df-badc-005056a7121f
    created_by: admin
    updated_by: admin
    notes: Performs an analysis on any vm that has been reconfigured
    active: true
    mode: control
    MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: vm_reconfigure
      description: VM Settings Change
      guid: 07367e62-449a-11de-bd4f-005056a83e5d
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: vm_analyze
      description: Initiate SmartState Analysis for VM
      guid: 5cbe1082-ce35-11de-a117-005056b0503e
      action_type: default
      options: {}
    Condition: []
  - name: 0ce6cf38-3d2d-11df-a7e9-005056a40709
    description: ! 'Tag: VM on Successful Analysis'
    expression:
    towhat: Vm
    guid: 0ce6cf38-3d2d-11df-a7e9-005056a40709
    created_by: admin
    updated_by: admin
    notes:
    active: true
    mode: control
    MiqPolicyContent:
  - qualifier: success
    success_sequence: 1
    MiqEvent:
      name: vm_scan_complete
      description: VM Analysis Complete
      guid: f7b8361e-1139-11e1-9333-005056af009e
      event_type: Default
      definition:
        default:
        enabled:
    MiqAction:
      name: cd2f3222-3d2c-11df-a7e9-005056a40709
      description: Tag VM after Successful Analysis
      guid: cd2f3222-3d2c-11df-a7e9-005056a40709
      action_type: tag
      options:
      :tags:

```

[illegible]


```

      :var_type: <None>
      :tags:
      - /managed/operations/analysis_failed
    Condition: []
  - name: 782068f8-44ee-11e0-99a6-00505688000a
    description: ! 'Analysis: VDI Login'
    expression:
    towhat: Vm
    guid: 782068f8-44ee-11e0-99a6-00505688000a
    created_by: admin
    updated_by: admin
    notes: This policy triggers an analysis of a VDI session when a user logs in
      to that session
    active: true
    mode: control
    MiqPolicyContent:
    - qualifier: success
      success_sequence: 1
    MiqEvent:
      name: vm_vdi_login_session
      description: VDI Login Session
      guid: 15fc3cce-448a-11e0-9ad1-00505688000a
      event_type: Default
      definition:
      default:
      enabled:
    MiqAction:
      name: vm_analyze
      description: Initiate SmartState Analysis for VM
      guid: 5cbe1082-ce35-11de-a117-005056b0503e
      action_type: default
      options: {}
    Condition: []
- MiqPolicySet:
  name: fbc1c9bc-53f9-11e0-babf-00505688000a
  description: ! 'Tag Management: Inheritance Policy'
  set_type: MiqPolicySet
  guid: fbc1c9bc-53f9-11e0-babf-00505688000a
  read_only:
  set_data:
    :notes: This policy profile contains policies that enforce Host and VM inheritance
      of parent cluster tags.
  mode: control
  owner_type:
  owner_id:
  MiqPolicy:
  - name: 0c2517d8-1ea2-11e0-8e71-005056910000
    description: ! 'Tag: VM Inherit Cluster Location Tag'
    expression:
    towhat: Vm
    guid: 0c2517d8-1ea2-11e0-8e71-005056910000
    created_by: admin
    updated_by: admin
    notes: This policy allows a vm to inherit the location tag of it's parent cluster
      on creation or completion of analysis
    active: true
    mode: control
    MiqPolicyContent:
    - qualifier: success

```

```

    success_sequence: 1
  MiqEvent:
    name: vm_create
    description: VM Create Complete
    guid: 4c0b4f12-37c0-11df-b567-005056a40709
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: 60e5d690-1ea2-11e0-8e71-005056910000
    description: ! 'Tag: Inherit Cluster Location Tag'
    guid: 60e5d690-1ea2-11e0-8e71-005056910000
    action_type: inherit_parent_tags
    options:
      :parent_type: ems_cluster
      :cats:
      - location
- qualifier: success
  success_sequence: 1
  MiqEvent:
    name: vm_scan_complete
    description: VM Analysis Complete
    guid: f7b8361e-1139-11e1-9333-005056af009e
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: 60e5d690-1ea2-11e0-8e71-005056910000
    description: ! 'Tag: Inherit Cluster Location Tag'
    guid: 60e5d690-1ea2-11e0-8e71-005056910000
    action_type: inherit_parent_tags
    options:
      :parent_type: ems_cluster
      :cats:
      - location
  Condition: []
- MiqPolicySet:
  name: bc33dd42-c01d-11e3-b785-001a4a0f459e
  description: VM retirement test
  set_type: MiqPolicySet
  guid: bc33dd42-c01d-11e3-b785-001a4a0f459e
  read_only:
  set_data:
  mode: control
  owner_type:
  owner_id:
  MiqPolicy:
- name: b218c83c-c01c-11e3-b785-001a4a0f459e
  description: MyNew VM Control Policy
  expression:
  towhat: Vm
  guid: b218c83c-c01c-11e3-b785-001a4a0f459e
  created_by: admin
  updated_by: admin
  notes:
  active: true
  mode: control

```

```
MiqPolicyContent:
- qualifier: success
  success_sequence: 1
  success_synchronous: true
MiqEvent:
  name: vm_retired
  description: VM Retired
  guid: e363d8aa-1e1e-11de-8918-0050568005db
  event_type: Default
  definition:
  default:
  enabled:
MiqAction:
  name: raise_automation_event
  description: Raise Automation Event
  guid: e7da3b7a-1139-11e1-9333-005056af009e
  action_type: default
  options: {}
Condition: []
- MiqPolicySet:
  name: 4a554d7c-21b4-11e2-a38c-0050568b19a3
  description: VM-Operation Policies
  set_type: MiqPolicySet
  guid: 4a554d7c-21b4-11e2-a38c-0050568b19a3
  read_only:
  set_data:
  mode: control
  owner_type:
  owner_id:
MiqPolicy:
- name: 7408efa8-21b3-11e2-a38c-0050568b19a3
  description: Power-Off Virtual Machines
  expression:
  towhat: Vm
  guid: 7408efa8-21b3-11e2-a38c-0050568b19a3
  created_by: admin
  updated_by: admin
  notes:
  active: true
  mode: control
MiqPolicyContent:
- qualifier: success
  success_sequence: 1
MiqEvent:
  name: vm_start
  description: VM Power On
  guid: 404b4630-21a8-11e2-b47a-0050568b19a3
  event_type: Default
  definition:
  default:
  enabled:
MiqAction:
  name: vm_stop
  description: Stop Virtual Machine
  guid: 37f2da3e-21a8-11e2-b47a-0050568b19a3
  action_type: default
  options: {}
Condition:
- name: d514b2fa-21b3-11e2-a38c-0050568b19a3
```

```

description: VM with Workload Tag Messaging
modifier: allow
expression: !ruby/object:MiqExpression
  exp:
    !binary "Q09OVEFJTlM=":
    !binary "dGFn": Vm.managed-function
    !binary "dmFsdWU=": messaging
  context_type:
  towhat: Vm
  file_mtime:
  guid: d514b2fa-21b3-11e2-a38c-0050568b19a3
  filename:
  applies_to_exp:
  miq_policy_id:
  notes:
- MiqPolicySet:
  name: 99a57bb8-e15e-11e1-acfa-005056b25af6
  description: poweron
  set_type: MiqPolicySet
  guid: 99a57bb8-e15e-11e1-acfa-005056b25af6
  read_only:
  set_data:
  mode: control
  owner_type:
  owner_id:
  MiqPolicy:
- name: d4640a18-e15d-11e1-acfa-005056b25af6
  description: powervm
  expression:
  towhat: Vm
  guid: d4640a18-e15d-11e1-acfa-005056b25af6
  created_by: admin
  updated_by: admin
  notes:
  active: true
  mode: control
  MiqPolicyContent:
- qualifier: success
  success_sequence: 1
  MiqEvent:
    name: vm_start
    description: VM Power On
    guid: 404b4630-21a8-11e2-b47a-0050568b19a3
    event_type: Default
    definition:
      default:
      enabled:
  MiqAction:
    name: b0138b70-e15d-11e1-8744-005056b25af6
    description: powerVM
    guid: b0138b70-e15d-11e1-8744-005056b25af6
    action_type: custom_automation
    options:
      :ae_message: create
      :ae_request: powerVM
- qualifier: success
  success_sequence: 1
  MiqEvent:
    name: vm_poweroff

```

```

    description: VM Power Off
    guid: 48beeadc-ae7c-11e1-a76f-005056b25af6
    event_type: Default
    definition:
    default:
    enabled:
  MiqAction:
    name: b0138b70-e15d-11e1-8744-005056b25af6
    description: powerVM
    guid: b0138b70-e15d-11e1-8744-005056b25af6
    action_type: custom_automation
    options:
      :ae_message: create
      :ae_request: powerVM
  Condition: []

```

3.20.3 Alerts.yaml

Link: [Alerts.yaml](#)

Source:

```

---
- MiqAlert:
  guid: d59185a4-40bc-11de-bd12-005056a170fa
  description: CPU Ready > 4000 ms for more than 10 min
  options:
    :notifications:
      :email:
        :from: ''
        :to:
          - alert@manageiq.com
  db: Vm
  expression:
    :mode: internal
    :eval_method: realtime_performance
    :options:
      :operator: ! '>'
      :perf_column: cpu_ready_delta_summation
      :value_threshold: '4000'
      :rt_time_threshold: 600
  responds_to_events: vm_perf_complete
  enabled:
- MiqAlert:
  guid: 20d93374-fde1-11e1-a360-005056b25af6
  description: CPU Usage > 50
  options:
    :notifications:
      :delay_next_evaluation: 600
      :evm_event: {}
      :automate:
        :event_name: alert_cpu
  db: Vm
  expression:
    :eval_method: realtime_performance
    :mode: internal
    :options:
      :perf_column: cpu_usage_rate_average

```

```

      :operator: ! '>'
      :value_threshold: '50'
      :trend_direction: none
      :trend_steepness:
      :debug_trace: 'false'
      :rt_time_threshold: 60
      responds_to_events: vm_perf_complete
      enabled: true
- MiqAlert:
  guid: 5bfdef56-13d2-11e2-a735-005056b057a8
  description: CPU Usage Exceeds 90% For More Than 1 Min
  options:
    :notifications:
      :delay_next_evaluation: 600
      :snmp:
        :host:
        - 192.168.255.26
        :trap_id: 1.3.6.1.4.1.33482.3
        :snmp_version: v2
        :variables:
        - :oid: description
          :var_type: OctetString
          :value: Virtual Machine
        - :oid: category
          :var_type: OctetString
          :value: Perfomance
        - :oid: Message
          :var_type: OctetString
          :value: ${cause.description}
        - :oid: object
          :var_type: OctetString
          :value: Name:${object.name}
        - :oid: location
          :var_type: OctetString
          :value: Datastore:${object.path}
        - :oid: platform
          :var_type: OctetString
          :value: OS:${object.platform}
        - :oid: url
          :var_type: OctetString
          :value: http://10.10.1.200/VM/${object.id}
        - :oid: source
          :var_type: OctetString
          :value: EVM:${object.ems}
        - :oid: custom1
          :var_type: OctetString
          :value: Created:${object.created_on} Retires:${retires_on}
        - :oid: custom2
          :var_type: OctetString
          :value: ! 'Cluster:${object.ems_cluster_name} Host: ${object.host_name}'
  db: Vm
  expression:
    :eval_method: realtime_performance
    :mode: internal
    :options:
      :value_threshold: '90'
      :perf_column: v_pct_cpu_used_delta_summation
      :trend_steepness:
      :rt_time_threshold: 60

```

```

      :trend_direction: none
      :operator: ! '>'
      :debug_trace: 'false'
    responds_to_events: vm_perf_complete
    enabled: true
  - MiqAlert:
    guid: 59174666-cfed-11e2-a54c-000c2980bea6
    description: CloudFLEX
    options:
      :notifications:
        :delay_next_evaluation: 120
        :evm_event: {}
        :automate:
          :event_name: CloudFLEX_EVENT
    db: Vm
    expression:
      :eval_method: realtime_performance
      :mode: !binary |-
        aW50ZXJuYWw=
      :options:
        :perf_column: v_pct_cpu_used_delta_summation
        :operator: !binary |-
          Pg==
        :value_threshold: '50'
        :trend_direction: !binary |-
          bm9uZQ==
        :trend_steepness:
        :debug_trace: !binary |-
          ZmFsc2U=
        :rt_time_threshold: 120
    responds_to_events: vm_perf_complete
    enabled: true
  - MiqAlert:
    guid: eb88f942-c23e-11de-a3be-000c290de4f9
    description: Cluster DRS not enabled
    options:
      :notifications:
        :email:
          :from: ''
          :to:
            - alert@manageiq.com
    db: EmsCluster
    expression: !ruby/object:MiqExpression
    exp:
      =:
        value: 'false'
        field: EmsCluster-drs_enabled
    responds_to_events:
    enabled:
  - MiqAlert:
    guid: 196868de-c23f-11de-a3be-000c290de4f9
    description: Cluster HA not enabled
    options:
      :notifications:
        :email:
          :from: ''
          :to:
            - alert@manageiq.com
    db: EmsCluster

```

```

    expression: !ruby/object:MiqExpression
      exp:
        =:
          value: 'false'
          field: EmsCluster-ha_enabled
      responds_to_events:
        enabled:
- MiqAlert:
  guid: 82f853b0-bf36-11de-b3b4-000c290de4f9
  description: Datacenter VMs > 10
  options:
    :notifications:
      :email:
        :from: ''
        :to:
          - alert@manageiq.com
  db: Storage
  expression: !ruby/object:MiqExpression
    exp:
      ! '>':
        value: 10
        field: Storage-v_total_vms
    responds_to_events:
      enabled:
- MiqAlert:
  guid: 655cccdca-6ae5-11e0-bdef-005056a461b8
  description: Datastore Free Space <= 10%
  options:
    :notifications:
      :snmp:
        :variables:
          - :value: ! 'MIQ Datatstore Alert: DEMO'
            :oid: category
            :var_type: OctetString
          - :value: Datastore Free Space <= 10%
            :oid: message
            :var_type: OctetString
        :host:
          - 204.130.60.75
        :trap_id: critical
        :snmp_version: v2
      :delay_next_evaluation: 86400
      :email:
        :from: ''
        :to:
          - cloud_ops@miq.net
      :evm_event: {}
  db: Storage
  expression: !ruby/object:MiqExpression
    exp:
      <=:
        value: '10'
        field: Storage-v_free_space_percent_of_total
    context_type:
    responds_to_events: _hourly_timer_
    enabled: true
- MiqAlert:
  guid: f0782622-fa6c-11e0-98ad-005056be005b
  description: EVM Server High App Disk Usage

```



```
options:
  :notifications:
    :delay_next_evaluation: 14400
    :evm_event: {}
db: MiqServer
expression:
  :mode: internal
  :eval_method: nothing
  :options: {}
responds_to_events: evm_server_app_disk_high_usage
enabled: true
- MiqAlert:
  guid: 50b6ae6e-fa6d-11e0-a117-005056be005b
  description: EVM Server High DB Disk Usage
  options:
    :notifications:
      :delay_next_evaluation: 14400
      :evm_event: {}
  db: MiqServer
  expression:
    :mode: internal
    :eval_method: nothing
    :options: {}
  responds_to_events: evm_server_db_disk_high_usage
  enabled: true
- MiqAlert:
  guid: 6f0f695a-fa6d-11e0-a117-005056be005b
  description: EVM Server High Log Disk Usage
  options:
    :notifications:
      :delay_next_evaluation: 14400
      :evm_event: {}
  db: MiqServer
  expression:
    :mode: internal
    :eval_method: nothing
    :options: {}
  responds_to_events: evm_server_log_disk_high_usage
  enabled: true
- MiqAlert:
  guid: 8ef83828-fa6d-11e0-98ad-005056be005b
  description: EVM Server High System Disk Usage
  options:
    :notifications:
      :delay_next_evaluation: 14400
      :evm_event: {}
  db: MiqServer
  expression:
    :mode: internal
    :eval_method: nothing
    :options: {}
  responds_to_events: evm_server_system_disk_high_usage
  enabled: true
- MiqAlert:
  guid: 3bfdde58-fa6c-11e0-a117-005056be005b
  description: EVM Server Not Responding
  options:
    :notifications:
      :delay_next_evaluation: 14400
```

```

      :evm_event: {}
db: MiqServer
expression:
  :mode: internal
  :eval_method: nothing
  :options: {}
responds_to_events: evm_server_not_responding
enabled: true
- MiqAlert:
  guid: cdf91470-fa6d-11e0-a117-005056be005b
  description: EVM Server Started
  options:
    :notifications:
      :delay_next_evaluation: 14400
      :evm_event: {}
  db: MiqServer
  expression:
    :mode: internal
    :eval_method: nothing
    :options: {}
  responds_to_events: evm_server_start
  enabled: true
- MiqAlert:
  guid: fc2ae066-44b8-11de-900a-005056a170fa
  description: Host Event Log Error - Failed to validate VM IP address
  options:
    :notifications:
      :email:
        :from: ''
        :to:
          - alert@manageiq.com
  db: Host
  expression:
    :mode: internal
    :eval_method: hostd_log_threshold
    :options:
      :event_log_message_filter_type: INCLUDES
      :event_log_source: VmMisc
      :freq_threshold: '2'
      :event_log_message_filter_value: Failed to validate VM IP address
      :time_threshold: 86400
  responds_to_events: host_scan_complete
  enabled:
- MiqAlert:
  guid: 0bd6ac74-fa70-11e0-a117-005056be005b
  description: Host Credentials Authentication Error
  options:
    :notifications:
      :delay_next_evaluation: 14400
      :evm_event: {}
  db: Host
  expression:
    :mode: internal
    :eval_method: nothing
    :options: {}
  responds_to_events: host_auth_error
  enabled: true
- MiqAlert:
  guid: 3599fa6e-f9d7-11e0-a117-005056be005b

```

```

description: Host Credentials are Invalid
options:
  :notifications:
    :delay_next_evaluation: 14400
    :evm_event: {}
db: Host
expression:
  :mode: internal
  :eval_method: nothing
  :options: {}
responds_to_events: host_auth_invalid
enabled: true
- MiqAlert:
  guid: 9bc0d572-40bd-11de-bd12-005056a170fa
  description: Host Datastore < 5% of Free Space
  options:
    :notifications:
      :email:
        :from: ''
        :to:
          - alert@manageiq.com
  db: Host
  expression: !ruby/object:MiqExpression
  exp:
    FIND:
      checkany:
        ! '>':
          value: 95
          field: Host.storages-v_used_space_percent_of_total
      search:
        IS NOT NULL:
          field: Host.storages-name
  responds_to_events:
  enabled:
- MiqAlert:
  guid: 8a6d32a8-44b8-11de-900a-005056a170fa
  description: ! 'Host Event Log Error - Memory Exceed Soft Limit '
  options:
    :notifications:
      :email:
        :from: ''
        :to:
          - alert@manageiq.com
  db: Host
  expression:
    :mode: internal
    :eval_method: hostd_log_threshold
    :options:
      :event_log_message_filter_type: INCLUDES
      :event_log_source: Memory checker
      :freq_threshold: '2'
      :event_log_message_filter_value: exceeds soft limit
      :event_log_level: warn
      :time_threshold: 86400
  responds_to_events: host_scan_complete
  enabled:
- MiqAlert:
  guid: 561d023c-bf36-11de-b3b4-000c290de4f9
  description: Host VMs >10

```

```

options:
  :notifications:
    :email:
      :from: ''
      :to:
        - alert@manageiq.com
db: Host
expression: !ruby/object:MiqExpression
exp:
  ! '>':
    value: 10
    field: Host-v_total_vms
responds_to_events:
enabled:
- MiqAlert:
  guid: a6c34cee-94f3-11df-92e9-0050569a006f
  description: Max - Allocated RAM per VM
  options:
    :notifications:
      :delay_next_evaluation: 3600
      :evm_event: {}
  db: Vm
  expression: !ruby/object:MiqExpression
  exp:
    ! '>':
      value: '255'
      field: Vm-mem_cpu
    context_type:
  responds_to_events: vm_discover
  enabled: true
- MiqAlert:
  guid: ddfd7df4-950e-11df-b1e3-0050568a6293
  description: Max - Hosts per Cluster
  options:
    :notifications:
      :delay_next_evaluation: 3600
      :evm_event: {}
  db: EmsCluster
  expression: !ruby/object:MiqExpression
  exp:
    ! '>':
      count: EmsCluster.hosts
      value: '32'
    context_type:
  responds_to_events: host_connect
  enabled: true
- MiqAlert:
  guid: 7129b8d8-978d-11df-8cd7-0050569a4433
  description: Max - vCPU per Core >20
  options:
    :notifications:
      :delay_next_evaluation: 3600
      :evm_event: {}
  db: Host
  expression: !ruby/object:MiqExpression
  exp:
    ! '>':
      value: '20'
      field: Host.ems_cluster-v_cpu_vr_ratio

```

```

    context_type:
    responds_to_events: host_connect
    enabled: true
- MiqAlert:
  guid: 2f4e5e06-94f3-11df-92e9-0050569a006f
  description: Max - vCpus per VM
  options:
    :notifications:
      :delay_next_evaluation: 3600
      :evm_event: {}
  db: Vm
  expression: !ruby/object:MiqExpression
  exp:
    ! '>':
      value: '8'
      field: Vm.hardware-numvcpus
      context_type:
      responds_to_events: vm_discover
      enabled: true
- MiqAlert:
  guid: dab5b816-f789-11e1-9144-005056b25af6
  description: Test - VM Analysis Complete
  options:
    :notifications:
      :delay_next_evaluation: 300
      :email:
        :to:
          - scottfisher1@gmail.com
      :evm_event: {}
  db: Vm
  expression:
    :eval_method: nothing
    :mode: internal
    :options: {}
  responds_to_events: vm_scan_complete
  enabled: true
- MiqAlert:
  guid: 391d87fc-fa70-11e0-98ad-005056be005b
  description: VC Authentication Error
  options:
    :notifications:
      :delay_next_evaluation: 14400
      :evm_event: {}
  db: ExtManagementSystem
  expression:
    :mode: internal
    :eval_method: nothing
    :options: {}
  responds_to_events: ems_auth_error
  enabled: true
- MiqAlert:
  guid: 576aabca-f9d7-11e0-a117-005056be005b
  description: VC Credentials are Invalid
  options:
    :notifications:
      :delay_next_evaluation: 14400
      :evm_event: {}
  db: ExtManagementSystem
  expression:

```

```

      :mode: internal
      :eval_method: nothing
      :options: {}
      responds_to_events: ems_auth_invalid
      enabled: true
- MiqAlert:
  guid: 58e8a372-bff9-11de-b3b4-000c290de4f9
  description: VM CD Drive or Floppy Connected
  options:
    :notifications:
      :email:
        :from: ''
        :to:
          - alert@manageiq.com
  db: Vm
  expression: !ruby/object:MiqExpression
  exp:
    or:
      - FIND:
        checkall:
          STARTS WITH:
            value: 'true'
            field: Vm.hardware.disks-start_connected
        search:
          INCLUDES:
            value: cdrom
            field: Vm.hardware.disks-device_type
      - FIND:
        checkall:
          INCLUDES:
            value: 'true'
            field: Vm.hardware.disks-start_connected
        search:
          INCLUDES:
            value: floppy
            field: Vm.hardware.disks-device_type
  responds_to_events:
  enabled:
- MiqAlert:
  guid: ce2f8846-44a5-11de-b543-005056a170fa
  description: VM CPU count was decreased
  options:
    :notifications:
      :email:
        :from: ''
        :to:
          - alert@manageiq.com
  db: Vm
  expression:
    :mode: internal
    :eval_method: reconfigured_hardware_value
    :options:
      :operator: Decreased
      :hdw_attr: :numvcpus
  responds_to_events: vm_reconfigure
  enabled:
- MiqAlert:
  guid: c2fc477a-44a5-11de-b543-005056a170fa
  description: VM CPU count was increased

```

```

options:
  :notifications:
    :email:
      :from: ''
      :to:
        - alert@manageiq.com
db: Vm
expression:
  :mode: internal
  :eval_method: reconfigured_hardware_value
  :options:
    :operator: Increased
    :hdw_attr: :numvcpus
  responds_to_events: vm_reconfigure
  enabled:
- MiqAlert:
  guid: 4077943a-c240-11de-a3be-000c290de4f9
  description: VM Environment Tag <> Datastore Environment Tag
  options:
    :notifications:
      :email:
        :from: ''
        :to:
          - alert@manageiq.com
  db: Vm
  expression: !ruby/object:MiqExpression
  exp:
    and:
      - CONTAINS:
        tag: Vm.managed-environment
        value: prod
      - not:
        CONTAINS:
          tag: Vm.storage.managed-environment
          value: prod
  responds_to_events:
  enabled:
- MiqAlert:
  guid: 89db0be8-c240-11de-a3be-000c290de4f9
  description: VM Environment Tag <> Host Environment Tag
  options:
    :notifications:
      :email:
        :from: ''
        :to:
          - alert@manageiq.com
  db: Vm
  expression: !ruby/object:MiqExpression
  exp:
    and:
      - CONTAINS:
        tag: Vm.managed-environment
        value: prod
      - not:
        CONTAINS:
          tag: Vm.host.managed-environment
          value: prod
  responds_to_events:
  enabled:

```

```
- MiqAlert:
  guid: 731da3b2-40bc-11de-bd12-005056a170fa
  description: ! 'VM Guest C: Drive < 10% Free'
  options:
    :notifications:
      :email:
      :from: ''
      :to:
      - alert@manageiq.com
  db: Vm
  expression: !ruby/object:MiqExpression
  exp:
    and:
      - =:
        value: windows
        field: Vm-platform
      - FIND:
        checkall:
          <:
            value: 10
            field: Vm.hardware.volumes-free_space_percent
        search:
          =:
            value: ! 'C:'
            field: Vm.hardware.volumes-name
  responds_to_events:
  enabled:
- MiqAlert:
  guid: 1bb81254-44a6-11de-b543-005056a170fa
  description: VM Guest Windows Event Log Error - NtpClient
  options:
    :notifications:
      :email:
      :from: ''
      :to:
      - alert@manageiq.com
  db: Vm
  expression:
    :mode: internal
    :eval_method: event_log_threshold
    :options:
      :event_log_message_filter_type: INCLUDES
      :freq_threshold: '1'
      :event_log_message_filter_value: NtpClient
      :event_log_level: error
      :time_threshold: 86400
  responds_to_events: vm_scan_complete
  enabled:
- MiqAlert:
  guid: f8b870d0-c23d-11de-a3be-000c290de4f9
  description: VM Memory Balloon > 250 in last 10 min
  options:
    :notifications:
      :email:
      :from: ''
      :to:
      - alert@manageiq.com
  db: Vm
  expression:
```



```
:mode: internal
:eval_method: realtime_performance
:options:
  :operator: ! '>'
  :perf_column: mem_vmmemctl_absolute_average
  :value_threshold: '250'
  :rt_time_threshold: 600
responds_to_events: vm_perf_complete
enabled:
- MiqAlert:
  guid: fbe4b5ee-447e-11de-aaba-005056a170fa
  description: VM Memory was decreased
  options:
    :notifications:
      :email:
      :from: ''
      :to:
        - alert@manageiq.com
  db: Vm
  expression:
    :mode: internal
    :eval_method: reconfigured_hardware_value
    :options:
      :operator: Decreased
      :hdw_attr: memory_cpu
  responds_to_events: vm_reconfigure
  enabled:
- MiqAlert:
  guid: e750cdcc-447c-11de-aaba-005056a170fa
  description: VM Memory was increased
  options:
    :notifications:
      :email:
      :from: ''
      :to:
        - alert@manageiq.com
  db: Vm
  expression:
    :mode: internal
    :eval_method: reconfigured_hardware_value
    :options:
      :operator: Increased
      :hdw_attr: memory_cpu
  responds_to_events: vm_reconfigure
  enabled:
- MiqAlert:
  guid: 3cfbb5ce-40be-11de-bd12-005056a170fa
  description: VM Migration > 1 in last 30 min
  options:
    :notifications:
      :email:
      :from: ''
      :to:
        - alert@manageiq.com
  db: Vm
  expression:
    :mode: internal
    :eval_method: event_threshold
    :options:
```

```

      :event_types:
      - RelocateVM_Task_Complete
      :freq_threshold: '2'
      :time_threshold: 1800
      responds_to_events: ! ["RelocateVM_Task_Complete"]
      enabled:
- MiqAlert:
  guid: fb73af80-40bd-11de-bd12-005056a170fa
  description: VM Power On > 2 in last 15 min
  options:
    :notifications:
      :email:
        :from: ''
        :to:
        - alert@manageiq.com
  db: Vm
  expression:
    :mode: internal
    :eval_method: event_threshold
    :options:
      :event_types:
      - PowerOnVM_Task_Complete
      :freq_threshold: '2'
      :time_threshold: 900
      responds_to_events: ! ["PowerOnVM_Task_Complete"]
      enabled:
- MiqAlert:
  guid: fdee2784-bf2c-11de-b3b4-000c290de4f9
  description: VM Silver and CPU > 1
  options:
    :notifications:
      :email:
        :from: ''
        :to:
        - alert@manageiq.com
  db: Vm
  expression: !ruby/object:MiqExpression
  exp:
    and:
      - CONTAINS:
          tag: Vm.managed-service_level
          value: silver
      - ! '>':
          value: 1
          field: Vm.hardware-numvcpus
      responds_to_events:
      enabled:
- MiqAlert:
  guid: 9b61fd9e-bf35-11de-b3b4-000c290de4f9
  description: VM Silver and RAM > 2 GB
  options:
    :notifications:
      :email:
        :from: ''
        :to:
        - alert@manageiq.com
  db: Vm
  expression: !ruby/object:MiqExpression
  exp:

```

```

    and:
    - CONTAINS:
      tag: Vm.managed-service_level
      value: silver
    - ! '>':
      value: 2048
      field: Vm.hardware-memory_cpu
  responds_to_events:
  enabled:
- MiqAlert:
  guid: 5cd2b880-be53-11de-8d65-000c290de4f9
  description: VM Unregistered
  options:
    :notifications:
      :email:
      :from: ''
      :to:
      - alert@manageiq.com
  db: Vm
  expression: !ruby/object:MiqExpression
  exp:
    and:
    - IS EMPTY:
      value: ''
      field: Vm.host-name
    - IS NOT EMPTY:
      field: Vm.storage-name
  responds_to_events:
  enabled:
- MiqAlert:
  guid: a9532172-44a5-11de-b543-005056a170fa
  description: VM VMotion > 1 in last 30 min
  options:
    :notifications:
      :email:
      :from: ''
      :to:
      - alert@manageiq.com
  db: Vm
  expression:
    :mode: internal
    :eval_method: event_threshold
    :options:
      :event_types:
      - MigrateVM_Task
      :freq_threshold: '1'
      :time_threshold: 1800
  responds_to_events: ! '["MigrateVM_Task"]'
  enabled:
- MiqAlert:
  guid: 5709f346-05a5-11e1-9288-005056880000
  description: VM with CPU Ready > 2% for 2mins
  options:
    :notifications:
      :delay_next_evaluation: 600
      :automate:
        :event_name: VM_Alert_CPU_Ready
        :evm_event: {}
  db: Vm

```

```

expression:
  :mode: internal
  :eval_method: realtime_performance
  :options:
    :trend_direction: none
    :operator: ! '>'
    :value_threshold: '2'
    :perf_column: v_pct_cpu_ready_delta_summation
    :debug_trace: 'false'
    :trend_steepness:
    :rt_time_threshold: 120
  responds_to_events: vm_perf_complete
  enabled: true
- MiqAlert:
  guid: 8261bf0a-be54-11de-8d65-000c290de4f9
  description: VMs on local storage
  options:
    :notifications:
      :email:
      :from: ''
      :to:
        - alert@manageiq.com
  db: Storage
  expression: !ruby/object:MiqExpression
  exp:
    ! '!=':
      value: 1
      field: Storage-v_total_hosts
  responds_to_events:
  enabled:

```

3.21 Database Backup Procedure

There are two way to perform backups.

- 1) RECOMMENDED: This method is done through the Web UI and allows you to set up schedules and to have the backups be on an NFS or Samba share.
- 2) Manually through the DB Appliance SSH session

3.21.1 Web UI: Single Run Database Backup

- Go to Configure > Configuration > Diagnostics (Left hand navigation menu) > Select Region (i.e. Region 10) > Click on Database Tab
- in the Database Backup Settings enter the following:

Type:	Network File System
URI: nfs://	c3pudrnas1:/drnas/cloudforms

- Click on Submit
- Click OK in the pop-up "Are you sure you want to Run a Database Backup Now?"

Are you sure you want to Run a Database Backup Now?

Cancel

OK

3.21.2 Web UI: Scheduled Database Backup

- Go to Configure > Configuration > Settings > Select Schedules within the Left Hand Menu

../cloudforms/database/menu.png

- Fill out the settings as show in the image

Basic Information	
Name	Database Backup
Description	Database Backup
Active	<input checked="" type="checkbox"/>
Action	Database Backup ▼

Database Backup Settings	
Type	Network File System ▼
URI	nfs:// c3pudrnas1:drnas/cloudforms

Timer	
Run	Daily ▼ every Day ▼
Time Zone	(GMT-05:00) Eastern Time (US & Canada) ▼ * Changing the Time Zone will reset the Starting Date and Time fields below
Starting Date	07/11/2014
Starting Time (EDT)	22 ▼ h 0 ▼ m

- Click Add

3.21.3 SSH: Manual Database Backup

- SSH into the appliance

- switch to postgres user

```
su - postgres
```

- Run backup command

```
pg_dump vmdb_production | gzip > /tmp/postgres_db_backup.gz
```

- To restore

```
cat /tmp/postgres_db_backup.gz | gunzip | psql vmdb_production
```

3.22 Member Groups

3.22.1 Creating/Importing Group from LDAP/Active Directory

- Go to Configure > Configuration > Access Control > Click on Groups
- Click on the Configuration Button > Select Add New Group
- In the Group Information enter the following:

Description:	<Name of LDAP Group>
Role:	<Select appropriate Role that was created>

- Select Filters for this group on the right.
- Click on Save



Important

The filters selected is what will determine what objects the user in this group will be able to see. Example: If the user is part of Department A, and you select "Department > Department A" this user will only EVER see any objects that are tagged with the "Department A" tag.

Example:

Adding a new Group

Group Information

Description ☒ (Look Up LDAP Groups)

Role

LDAP Group Look Up

User to Look Up

User Id

Password

Assign Filters

Premier, Inc Tags Hosts & Clusters VMs & Templates

This user is limited to items with the selected tags.

- Auto Approve - Max CPU
- Auto Approve - Max Memory
- Auto Approve - Max Retirement Days
- Auto Approve - Max VM
- Cost Center
- Department
 - ☒ Database Team
 - ☒ **Department A**
 - ☐ Department B
 - ☐ Department C
 - ☐ Engineering
 - ☐ Financial Services
 - ☐ Human Resources

Note

You may also leave the Description Blank and then check the "(Look Up LDAP Groups)" check-box and in the "LDAP Group Look Up" section enter a User to Look up and use your LDAP user / password to retrieve all of the groups this member is a part of. Then select from the Drop Down in "Group Information" with the according LDAP/AD Group that you want to create. Once the group is select it will automatically replace the contents of the "Description" Field. After this is done, select the according Filters on the right side.

3.22.2 Adding Smart Management Tag to Group

- Select the Group that was previously created
- Click on Policy
- Click on "Edit Premier, Inc's Tags for this Group"
- in the "Select a customer tag to assign" select Department, then select the appropriate Department
- in the "Select a customer tag to assign" select Cost Center, then select the appropriate Cost Center

Example:

Tag Assignment

Select a customer tag to assign:

Category	Assigned Value
<input type="checkbox"/> Cost Center *	Unix Team
<input type="checkbox"/> Department	Unix Team

* Only a single value can be assigned from these categories

- Click Save

3.22.3 Groups created during Engagement

Group Name	Role	Tag: Cost Center	Tag: Department	Filters	Notes
Unix Admins	Premier-Admin	Unix Team	Unix Team	None	No Tags or Filters are created in order to assure the admins can see ALL resources
ITS Unix Admins	Premier-Admin	Unix Team	Unix Team	None	No Tags or Filters are created in order to assure the admins can see ALL resources
ITS Server Team	Premier-Developer	Department A	Department A	Department A	This will only allow this group to view only objects/resources tagged with Department A

- NOTE: The Smart Management Tags added to groups will make it so that when these users in these groups provision any Instances/VM's it will automatically tag the Instances/VM's with the provided tags

3.23 Tag Taxonomy

3.23.1 Environment

Name	Display
dev	Development
preprod	PreProd
prod	Production
qa	QA
test	Test

3.23.2 Locations

Name	Display
kansas_city	Kansas City

3.23.3 Owners

Name	Display
developers	Developers
engineer	Engineer
unixteam	Unix Team
windowsteam	Windows Team

3.23.4 Provisioning Scope

Name	Display
all	All

Note

Additional Provisioning Scopes to be added at a later time

3.23.5 Storage Types

Name	Display
tier1	Tier 1
tier2	Tier 2
tier3	Tier 3

3.23.6 Cost Center

Name	Display
database_team	Database Team
department_a	Department A
department_b	Department B
department_c	Department C
engineering	Engineering
finance	Financial Services
hr	Human Resources
infrastructure	Infrastructure
marketing	Marketing
network_team	Network Team
unix_team	Unix Team
windows_team	Windows Team

Note

Additional Cost Center to be added at a later time

3.23.7 Department

Name	Display
database_team	Database Team
department_a	Department A
department_b	Department B
department_c	Department C
engineering	Engineering
finance	Financial Services
hr	Human Resources
infrastructure	Infrastructure
marketing	Marketing
network_team	Network Team
unix_team	Unix Team
windows_team	Windows Team

Note

Additional Departments to be added at a later time

3.23.8 Workload

Name	Display
active_directory	Active Directory Server
application_servers	Application Servers
cognos	Cognos
database	Database
db2_server	IBM DB2
desktop	Desktop
dhcp	DHCP Server
evm_appliance	EVM Appliance
hadoop	Hadoop
infrastructure	Virtual Infrastructure Management
jboss_server	JBOSS Server
messaging	Messaging
oracle_server	Oracle Database
proxy_server	Proxy Server
security	Security
web_server	Web Server
websphere_server	Websphere

Note

Additional Cost Center to be added at a later time

3.23.9 Service Level

Name	Display
gold	Gold
platinum	Platinum
silver	Silver

3.23.10 Auto Approve - Max CPU

Name	Display
1	1
2	2
3	3
4	4
5	5

3.23.11 Auto Approve - Max Memory

Name	Display
1024	1GB
2048	2GB
4096	4GB
8192	8GB

3.23.12 Auto Approve - Retirement Days

Name	Display
30	30
60	60
90	90
180	180

3.23.13 Auto Approve - Max VM

Name	Display
1	1
2	2
3	3
4	4
5	5

3.23.14 Quota - Max Memory

Name	Display
1024	1GB
2048	2GB
4096	4GB
8192	8GB
10240	10GB
16384	16GB

3.23.15 Quota - Max Storage

Name	Display
10	10GB
20	20GB
40	40GB
80	80GB
100	100GB
200	200GB
400	400GB
1000	1TB

3.23.16 Quota - Max CPU

Name	Display
1	1
2	2
3	3
4	4
5	5
10	10
20	20
30	30

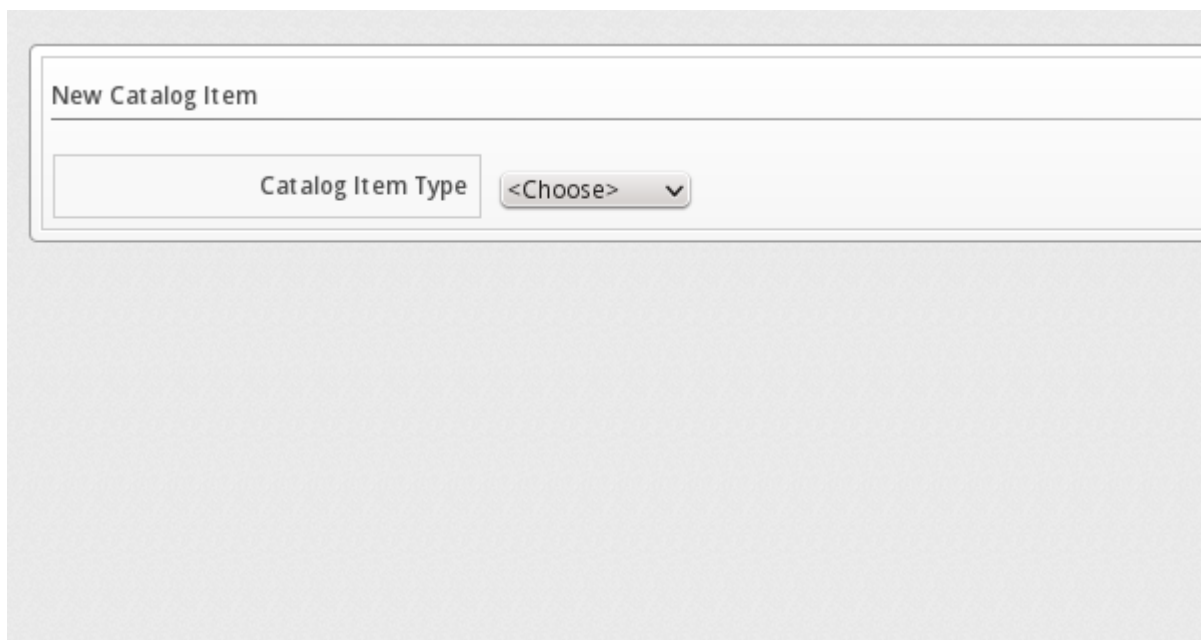
3.24 Service Catalog

3.24.1 Create new Catalogs

- Go to Services > Catalog > Click on "Catalogs" menu on the left hand side
- Click the "Configuration" Button
- Select "Add a New Catalog"
- Enter the Name of the Catalog
- Enter the Description of the Catalog

3.24.2 Create New Catalog Item

- Go to Services > Catalog > Click on "Catalog Items" menu on the left hand side
- Select the Catalog that was previously created
- Click the "Configuration" Button
- Select "Add a New Catalog Item"
- Should bring you to the "Basic Info" Tab
 - Choose the Catalog Item Type, i.e. Openstack



New Catalog Item

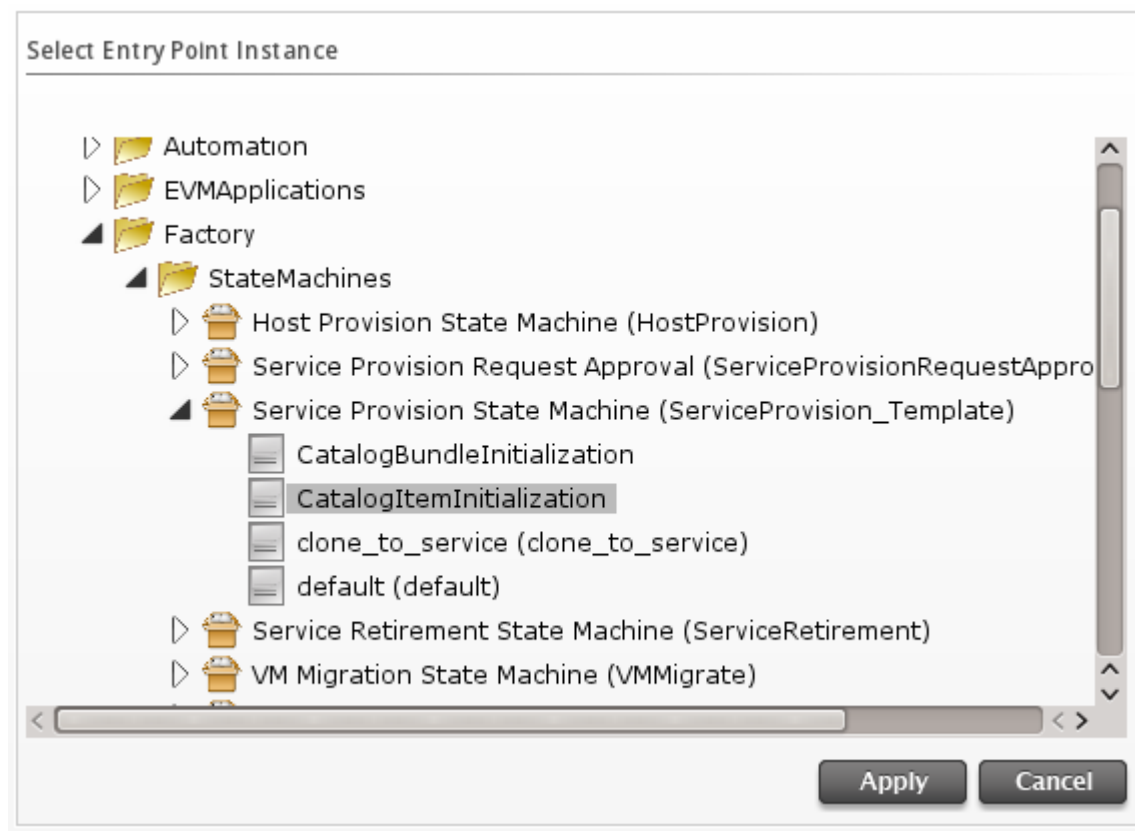
Catalog Item Type <Choose> ▼

- Enter the Name and Description and Check the "Display in Catalog"

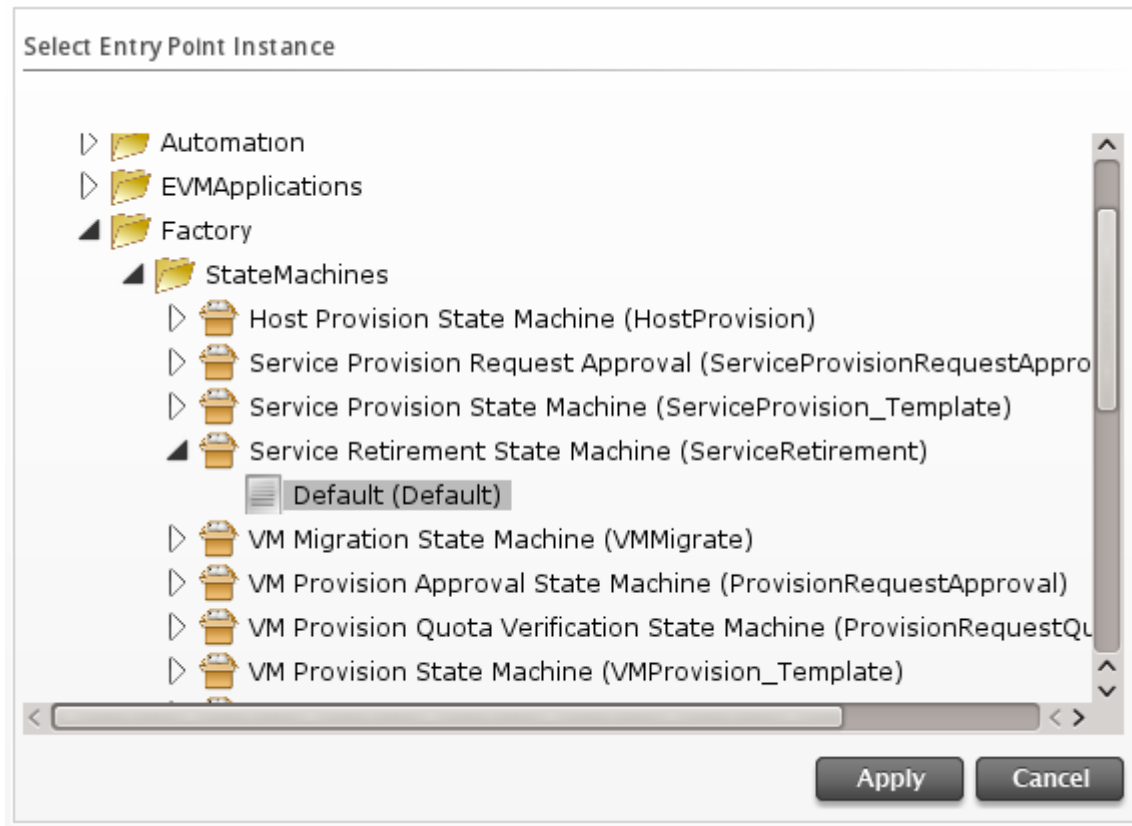


The screenshot shows the 'Basic Info' tab of a configuration window. The 'Name / Description' field is populated with 'RHEL 6.4 - Medium'. To the right, the 'Display in Catalog' checkbox is checked.

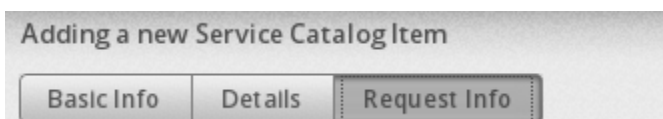
- Once the rest of the view is expanded Select the Catalog. i.e. 001-Dev
- Select the Dialog i.e. Basic VM
- Provisioning Entry Point (NS/CIs/Inst): /Factory/StateMachines/ServiceProvision_Template/CatalogItemInitialization



- Click Apply
- Retirement Entry Point (NS/CIs/Inst): /Factory/StateMachines/ServiceRetirement/Default



- Click Apply
 - Click on the "Request Info" Tab



- Request Info: Catalog
 - Select Name of the Template (i.e. rhel6)
 - Enter Instance Name "changeme" (note: this will be changed later using the Service Dialog, just leave it as changeme)

Request Info

Catalog Environment Properties Customize Schedule

Select

Name *

Name ▲	Operating System	Platform	C
<None>			
cirros		unknown	0
rhel6		linux	0

Naming

Instance Name *

changeme

- Request Info: Click on the Environment Tab
 - Placement Options: Availability Zones: **nova**
 - Placement Options: Cloud Network: **publicnet**

Request Info

Catalog

Environment

Properties

Customize

Schedule

Placement

Choose Automatically



Placement - Options

Availability Zones

nova



Cloud Network

publicnet



Security Groups

<None>

default: default



Public IP Address

<No Choices Available>



- Request Info: Click on the Properties Tab
 - Properties: Instance Type: i.e. m1.medium
 - Properties: Guest Access Key Pair: devops

Request Info

Catalog

Environment

Properties

Customize

Schedule

Properties

Instance Type *

m1.medium



Guest Access Key Pair

devops



- Request Info: Click on the Schedule Tab
 - Schedule: Time until Retirement: i.e. Indefinite

Request Info

Catalog Environment Properties Customize **Schedule**

Lifespan

Time until Retirement Indefinite ▼

Fields marked with * are required.

- Click Add

3.24.3 Change the Catalog Item Custom Image

- Select the Catalog Item to upload a custom image to
- Click on Browse and select Image to use

Custom Image

No custom image has been uploaded.

No file selected. * Requirements - Type: jpg/png Size: 100x100

- Now you will see the custom image for the Catalog Item be updated

Custom Image




Browse... No file selected.

* Requirements - Type: jpg/png Size: 100x100

3.24.4 Create New Catalog Bundle

- Go to Services > Catalog > Click on "Catalog Items" menu on the left hand side
- Select the Catalog that was previously created
- Click the "Configuration" Button
- Select "Add a New Catalog Bundle"
- Should bring you to the "Basic Info" Tab
 - Enter the Name and Description and Check the "Display in Catalog"

Basic Info

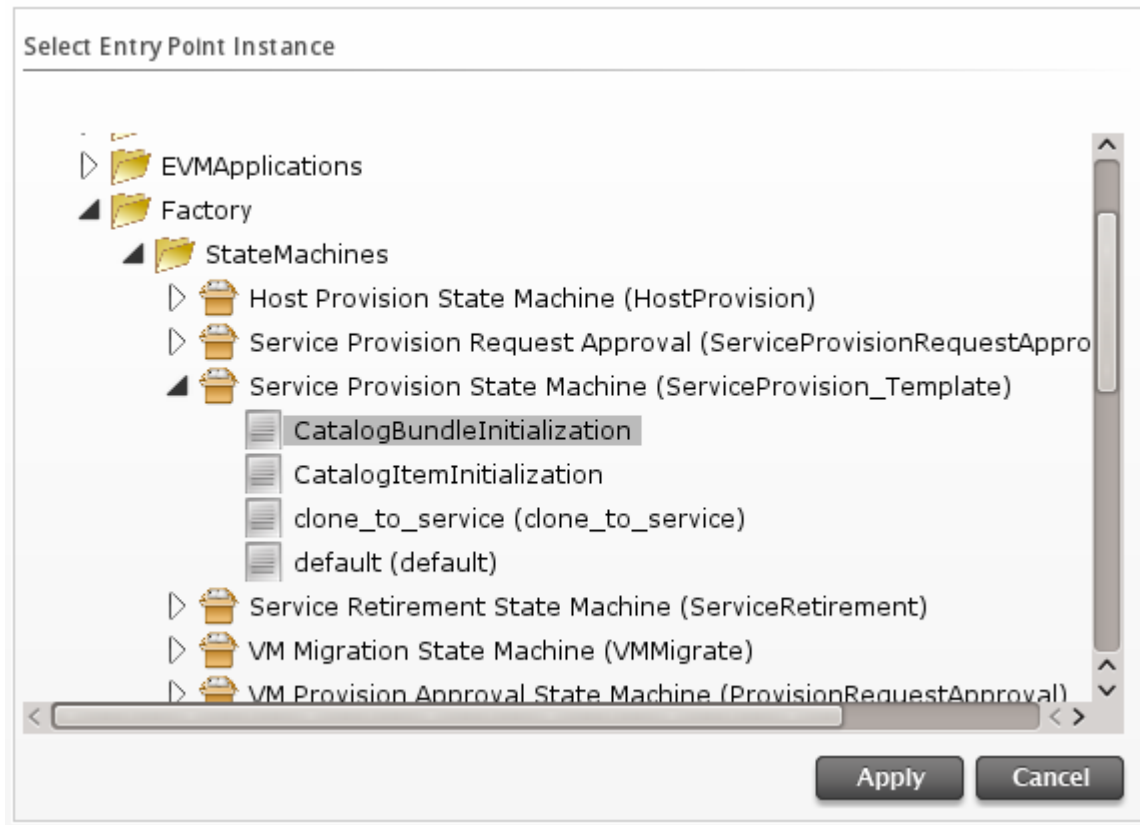
Name / Description	Catalog Bundle Example	/	Catalog Bundle Example	<input checked="" type="checkbox"/> Display in Catalog
Catalog	001-Dev			
Dialog	blank			
Provisioning Entry Point (NS/CIs/Inst)				
Retirement Entry Point (NS/CIs/Inst)				

- Once the rest of the view is expanded Select the Catalog. i.e. 001-Dev
- Select the Dialog <Blank>

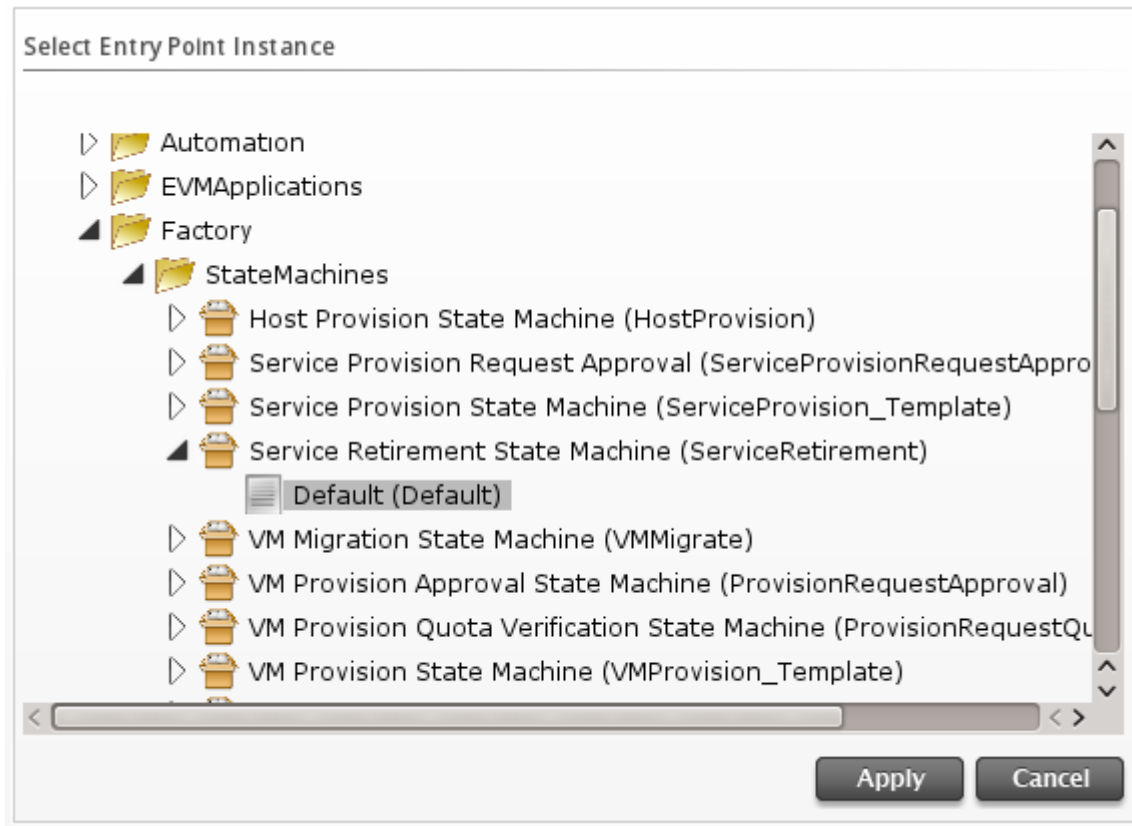
**Important**

You can select another Dialog, but you have to make sure it is for a Bundle and not a single Item)

- Provisioning Entry Point (NS/CIs/Inst): /Factory/StateMachines/ServiceProvision_Template/CatalogBundleInitialization



- Click Apply
- Retirement Entry Point (NS/CIs/Inst): /Factory/StateMachines/ServiceRetirement/Default



- Click Apply

Basic Info			
Name / Description	Catalog Bundle Example / Catalog Bundle Example	<input checked="" type="checkbox"/> Display in Catalog	
Catalog	001-Dev		
Dialog	blank		
Provisioning Entry Point (NS/CIs/Inst)	Factory/StateMachines/ServiceProvision_Template/Ca		X
Retirement Entry Point (NS/CIs/Inst)	Factory/StateMachines/ServiceRetirement/Default		X

- Click on the "Resources" Tab

- Select an existing Catalog Item Resource (i.e. RHEL 6.4 - Small)
- Select an additional Catalog Item Resource (i.e. RHEL 6.4 - Medium)
- Repeat the previous 2 steps as many times as needed for all of the resources required for this bundle
- If needed, modify the Action Order or Provision Order:

Note

Provision Order will only worry about in which order it will actually provision the instance/vm. The Action Order is done once the provisioning is completed it will then perform the action specified in that order. Example: You can have the same Provision Order, but only care about the order that things are powered on.

Selected Resources							
	Name	Action Order	Provision Order	Action		Delay (mins)	
				Start	Stop	Start	Stop
	RHEL 6.4 - Small	1	1	Power On	Shutdown	None	None
	RHEL 6.4 - Medium	2	1	Power On	Shutdown	None	None

- In the above screenshot, "RHEL 6.4 - Small" will power on before "RHEL 6.4 - Medium"
- Click Add

3.25 Cloudforms: Appendix

3.25.1 Datastore Import File: [namespace_MCICOM.xml](#)

```
<?xml version="1.0" encoding="UTF-8"?>
<MiqAeDatastore version="1.0">
  <MiqAeClass name="Rapid_Clone" namespace="MCICOM/StateMachines">
    <MiqAeSchema>
      <MiqAeField name="Execute_Rapid_Clone" substitute="true" aetype="state" datatype="string"
        priority="1" message="create">
/MCICOM/Integration/RapidClone/Execute_Rapid_Clone
      <MiqAeField name="Email_Owner" substitute="true" aetype="state" datatype="string"
        priority="2" message="create">
/MCICOM/Integration/RapidClone/Rapid_Clone_Email_Complete
    </MiqAeSchema>
  </MiqAeClass>
  <MiqAeClass name="RailsRunner" namespace="MCICOM/Integration" display_name="RailsRunner">
```

```

    <MiqAeMethod name="customspecprep" language="ruby" scope="instance" location="inline" ↵
      display_name="CustomSpecPrep"><![CDATA[$evm.object['rails_ruby_code'] = <<EOX.chomp
require 'json'

STDOUT.puts JSON.dump(CustomSpec.all.collect do |cs|
  details = cs.customspec_info_details.collect do |csd|
    csd.attributes.select { |k| ['id', 'name', 'ems_id'].include?(k) }
  end
  cs.attributes.select { |k| ['id', 'name', 'ems_id'].include?(k) }.merge(' ↵
    customspec_info_details' => details)
end)
EOX

$evm.log('info', "Prepaired Ruby: [{#{evm.object['rails_ruby_code']}]])>    </MiqAeMethod>
  <MiqAeSchema>
    <MiqAeField name="PrepairRailsCode" substitute="true" aetype="method" datatype="string" ↵
      priority="1" message="create">
    </MiqAeField>
  </MiqAeSchema>
  <MiqAeInstance name="CustomSpec" display_name="CustomSpec">
    <MiqAeField name="PrepairRailsCode">
CustomSpecPrep    </MiqAeField>
  </MiqAeInstance>
</MiqAeClass>
<MiqAeClass name="RapidClone" namespace="MCICOM/Integration">
  <MiqAeMethod name="Dialog_Destination_Folder" language="ruby" scope="instance" location=" ↵
    inline"><![CDATA[#####
#
# EVM Automate Method: Dialog_Destination_Folder
#
# Notes: Dialog_Destination_Folder
#
#####
begin
  @method = 'Dialog_Destination_Folder'
  $evm.log("info", "#{@method} - EVM Automate Method Started")

  # Turn of verbose logging
  @debug = true

  vm = $evm.root['vm']
  ems = vm.ext_management_system
  folder_array = []
  folder_array << [nil,nil]
  folders = ems.ems_folders.each {|ef|
    val = []
    # $evm.log("info", "#{@method} - #{ef.inspect}")
    if ef.is_datacenter == false && ef.name != "Datacenters" && ef.name != "host" && ef.name ↵
      != "vm"
      val << "#{ef.name}"
      val << "#{ef.ems_ref}"
      folder_array << val
    end
  }

  list_values = {
    'sort_by' => :none,
    'data_type' => :string,
    'required' => :false,

```

```

    'values' => folder_array
  }

  $evm.log("info", "==== EVM Automate Method: <#{@method}> display drop-down: #{list_values ←
    }")
  list_values.each {|k,v| $evm.object[k] = v }

  #
  # Exit method
  #
  $evm.log("info", "#{@method} - EVM Automate Method Ended")
  exit MIQ_OK

  #
  # Set Ruby rescue behavior
  #
rescue => err
  $evm.log("error", "#{@method} - [{err}]\n#{err.backtrace.join("\n")}")
  exit MIQ_ABORT
end
]]>    </MiqAeMethod>
      <MiqAeMethod name="Dialog_Storage_Controller" language="ruby" scope="instance" location=" ←
        inline"><![CDATA[#####
#
# EVM Automate Method: Dialog_Storage_Controller
#
# Notes: Populate Dialog_Storage_Controller
#
#####
begin
  @method = 'Dialog_Storage_Controller'
  $evm.log("info", "#{@method} - EVM Automate Method Started")

  # Turn of verbose logging
  @debug = true

  dialog_hash = { "netapp02a (Default)" => "10.2.100.19", "netapp02a" => "10.2.100.19", " ←
    netapp02b" => "10.2.100.20", "netapp03a" => "10.2.100.21" }
  dialog_field = $evm.object
  dialog_field["sort_by"] = "none"
  dialog_field["data_type"] = "string"
  dialog_field["required"] = "true"
  dialog_field["values"] = dialog_hash
  dialog_field["default_value"] = "netapp02a"

  $evm.log("info", "==== EVM Automate Method: <#{@method}> display drop-down: #{dialog_hash. ←
    inspect}")

  #
  # Exit method
  #
  $evm.log("info", "#{@method} - EVM Automate Method Ended")
  exit MIQ_OK

  #
  # Set Ruby rescue behavior
  #
rescue => err
  $evm.log("error", "#{@method} - [{err}]\n#{err.backtrace.join("\n")}")

```

```

exit MIQ_ABORT
end]]>      </MiqAeMethod>
  <MiqAeMethod name="Dialog_VM_Sizing" language="ruby" scope="instance" location="inline"><! ↵
    [CDATA[#####
#
# EVM Automate Method: Dialog_VM_Sizing
#
# Notes: Populate Dialog_VM_Sizing CPU and Memory
#
#####
begin
  @method = 'Dialog_VM_Sizing'
  $evm.log("info", "#{@method} - EVM Automate Method Started")

  # Turn of verbose logging
  @debug = true

  @action = nil
  @action ||= $evm.object['action']

  vm = $evm.root['vm']

  @vm_memory_cpu = vm.hardware['memory_cpu']
  $evm.log("info", "==== EVM Automate Method: <#{@method}> vm_memory_cpu: #{@vm_memory_cpu}")

  @vm_numvcpus = vm.hardware['numvcpus']
  $evm.log("info", "==== EVM Automate Method: <#{@method}> vm_numvcpus: #{@vm_numvcpus}")

  case @action
    when "memory"
      mem_val = 1024
      vm_mem = @vm_memory_cpu.to_i / 1024
      mem_array = []
      default_val = [nil,nil]
      mem_array << default_val
      for n in 1..16
        $evm.log("info", "==== EVM Automate Method: <#{@method}> mem_val: #{mem_val}, ↵
          mem_array: #{mem_array}")
        val = []
        val << "#{n}"
        val << mem_val.to_i
        mem_array << val
        mem_val = mem_val.to_i + 1024
      end
      list_values = {
        'sort_by' => :none,
        'data_type' => :string,
        'required' => :true,
        'values' => mem_array
      }

      $evm.log("info", "==== EVM Automate Method: <#{@method}> display drop-down: #{ ↵
        list_values}")
      list_values.each {|k,v| $evm.object[k] = v }

    when "cpu"
      cpu_array = []
      default_val = [nil,nil]
      cpu_array << default_val

```



```

    for n in 1..12
      val = []
      val << n
      val << n
      cpu_array << val
    end

    list_values = {
      'sort_by' => :none,
      'data_type' => :integer,
      'required' => :true,
      'values' => cpu_array
    }
    $evm.log("info", "==== EVM Automate Method: <#{@method}> display drop-down: #{ ←
      list_values}")
    list_values.each {|k,v| $evm.object[k] = v }

end

#
# Exit method
#
$evm.log("info", "#{@method} - EVM Automate Method Ended")
exit MIQ_OK

#
# Set Ruby rescue behavior
#
rescue => err
  $evm.log("error", "#{@method} - [{err}]\n#{err.backtrace.join("\n")}")
  exit MIQ_ABORT
end]]> </MiqAeMethod>
  <MiqAeMethod name="Execute_Rapid_Clone" language="ruby" scope="instance" location="inline" ←
    ><![CDATA[#####
#
# EVM Automate Method: Execute_Rapid_Clone
#
#
#
#####
begin
  @method = 'Execute_Rapid_Clone'
  $evm.log("info", "==== EVM Automate Method: <#{@method}> Started")

  #####
  # Method: dumpRoot
  # Description: Dump Root information
  #####
  def dumpRoot
    $evm.log("info", "#{@method} - Root:<$evm.root> Begin Attributes")
    $evm.root.attributes.sort.each { |k, v| $evm.log("info", "#{@method} - Root:<$evm.root> ←
      Attributes - #{k}: #{v}") }
    $evm.log("info", "#{@method} - Root:<$evm.root> End Attributes")
    $evm.log("info", "")
  end

  # dump root object attributes
  dumpRoot

```

```
#####
# add required gems
#####
require 'savon'
require 'nokogiri'
require 'httpclient'
HTTPAPI.adapter = :httpclient

#####
# Gather up instance object variables
#####
@servername = nil
@servername ||= $evm.object['servername']

@username = nil
@username ||= $evm.object['username']

@password = nil
@password ||= $evm.object.decrypt('password')

controller_ip = nil
controller_ip ||= $evm.object['controller_ip']

controller_username = nil
controller_username ||= $evm.object['controller_username']

controller_password = nil
controller_password ||= $evm.object.decrypt('controller_password')

@netapp_url = "https://#{@servername.to_s}:8143/kamino/public/api?wsdl"

#####
# Gather up VM object variables
#####
vm = $evm.root['vm']
@vm_name = vm.attributes['name']
@vm_location = vm.attributes['location']
@vm_vendor = vm.attributes['vendor']
@vm_host_id = vm.attributes['host_id']
@vm_ems_ref = vm.attributes['ems_ref']
@vm_type = vm.attributes['type']
@vm_storage_name = vm.storage['name']
@vm_storage_ems_ref = vm.storage['ems_ref']
@vm_v_ems_cluster_name = vm.ems_cluster_name
@vm_v_parent_blue_folder_1_name = vm.parent_blue_folder_1_name
$evm.log("info", "==== EVM Automate Method: <#{@method}> @vm_v_parent_blue_folder_1_name. ↔
inspect: #{@vm_v_parent_blue_folder_1_name.inspect}")

@vm_v_parent_blue_folder_2_name = vm.parent_blue_folder_2_name
$evm.log("info", "==== EVM Automate Method: <#{@method}> @vm_v_parent_blue_folder_2_name. ↔
inspect: #{@vm_v_parent_blue_folder_2_name.inspect}")

@vm_v_parent_blue_folder_3_name = vm.parent_blue_folder_3_name
$evm.log("info", "==== EVM Automate Method: <#{@method}> @vm_v_parent_blue_folder_3_name. ↔
inspect: #{@vm_v_parent_blue_folder_3_name.inspect}")

@vm_v_parent_blue_folder_4_name = vm.parent_blue_folder_4_name
@vm_v_parent_blue_folder_5_name = vm.parent_blue_folder_5_name
```

```

@vm_v_parent_blue_folder_6_name = vm.parent_blue_folder_6_name
@vm_v_parent_blue_folder_7_name = vm.parent_blue_folder_7_name
@vm_v_parent_blue_folder_8_name = vm.parent_blue_folder_8_name
@vm_v_owning_datacenter = vm.v_owning_datacenter
@vm_v_parent_blue_folder_9_name = vm.parent_blue_folder_9_name
@vm_v_storage_name = vm.storage_name

#####
# Method: getObjectRef
# Query the NetApp API with real object name to get VMware Object Reference Names
#####
def getObjectRef(netapp_url, servername, username, password, arg_name, arg_type)
  #####
  # Savon Configuration
  #####
  Savon.configure do |config|
    config.log = false
    config.log_level = :info
  #    config.pretty_print_xml = true
  end

  client = Savon::Client.new do |wsdl, http, wsse|
    wsdl.document = "#{netapp_url}"
    wsdl.endpoint = "#{netapp_url}"
    http.auth.ssl.verify_mode = :none
  end
  response = client.request "ser:getMoref" do
    soap.namespaces.merge!({
      "xmlns:soapenv" => "http://schemas.xmlsoap.org/soap/envelope" ←
        /",
      "xmlns:ser" => "http://server.kamino.netapp.com/"
    })

    soap.header = {}
    soap.body = { 'arg0' => "#{arg_name}", 'arg1' => "#{arg_type}", 'arg2' => { 'serviceUrl' ←
      => "https://#{servername.to_s}/sdk", 'vcPassword' => "#{password.to_s}", 'vcUser' ←
      => "#{username.to_s}" } }
  end
  response_hash = response.to_hash[:get_moref_response]
  ref_obj = "#{response_hash[:return]}"
  return ref_obj
end

#####
# Method: getObjectRef
# Query the NetApp API with real object name to get VMware Object Reference Names
#####
def getVmFiles(netapp_url, servername, username, password, arg_name)
  #####
  # Savon Configuration
  #####
  Savon.configure do |config|
    config.log = false
    config.log_level = :info
  #    config.pretty_print_xml = true
  end

  client = Savon::Client.new do |wsdl, http, wsse|
    wsdl.document = "#{netapp_url}"
    wsdl.endpoint = "#{netapp_url}"

```

```

    http.auth.ssl.verify_mode = :none
  end
  response = client.request "ser:getVmFiles" do
    soap.namespaces.merge!({
      "xmlns:soapenv" => "http://schemas.xmlsoap.org/soap/envelope ←
        /",
      "xmlns:ser" => "http://server.kamino.netapp.com/"
    })

    soap.header = {}
    soap.body = { 'arg0' => "#{arg_name}", 'arg1' => { 'serviceUrl' => "https://#{servername ←
      .to_s}/sdk", 'vcPassword' => "#{password.to_s}", 'vcUser' => "#{username.to_s}" } }
  end

  $evm.log("info", "==== EVM Automate Method: <#{@method}> response.to_hash.inspect: #{ ←
    response.to_hash.inspect}")

  response_hash = response.to_hash[:get_vm_files_response]
  $evm.log("info", "==== EVM Automate Method: <#{@method}> response_hash.inspect: #{ ←
    response_hash.inspect}")

  file_array = []
  response_hash[:return].each { |v|
    file_hash = {}
    file_hash['source_path'] = v[:source_path].to_s
    file_hash['mor'] = v[:dest_datastore_spec][:mor].to_s
    file_hash['num_datastores'] = v[:dest_datastore_spec][:num_datastores].to_s
    file_hash['storage_service'] = v[:dest_datastore_spec][:storage_service].to_s
    file_hash['thin_provision'] = v[:dest_datastore_spec][:thin_provision].to_s
    file_hash['vol_auto_grow'] = v[:dest_datastore_spec][:vol_auto_grow].to_s
    file_hash['wrapper_vol'] = v[:dest_datastore_spec][:wrapper_vol].to_s
    file_array.push(file_hash)
  }

  $evm.log("info", "==== EVM Automate Method: <#{@method}> file_array.inspect: #{file_array ←
    .inspect}")

  return file_array
end

#####
# Get Source VM Files locations
#####
@vm_files = getVmFiles(@netapp_url, @servername, @username, @password, "VirtualMachine:#{ ←
  @vm_ems_ref}")
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_files.inspect: #{@vm_files. ←
  inspect}")
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_files.class: #{@vm_files.class ←
  }")

#####
# Get VMware object References
#####
@vm_object = getObjectRef(@netapp_url, @servername, @username, @password, "#{@vm_name}", " ←
  VirtualMachine")
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_object: #{@vm_object.inspect}")

dialog_clone_destination = getObjectRef(@netapp_url, @servername, @username, @password, "#{ ←
  @vm_v_owning_datacenter}", "Datacenter")

```

```

$evm.log("info", "==== EVM Automate Method: <#{@method}> dialog_clone_destination: #{ ←
  dialog_clone_destination}")

dialog_clone_vm_folder = getObjectRef(@netapp_url, @servername, @username, @password, " ←
  templates", "Folder")
$evm.log("info", "==== EVM Automate Method: <#{@method}> dialog_clone_destination: #{ ←
  dialog_clone_destination}")

#####
# Get vars from dialogs
#####
dialog_clone_name = $evm.root.attributes['dialog_clone_name']

if $evm.root.attributes['dialog_clone_name'] == 1
  dialog_power_on = 'true'
else
  dialog_power_on = 'false'
end

dialog_destination_folder = $evm.root.attributes['dialog_destination_folder']
dialog_vm_cpu = $evm.root.attributes['dialog_vm_cpu']
dialog_memory_size = $evm.root.attributes['dialog_memory_size']

dialog_number_of_clones = $evm.root.attributes['dialog_number_of_clones']
dialog_starting_clone_number = $evm.root.attributes['dialog_starting_clone_number']
dialog_clone_number_increment = $evm.root.attributes['dialog_clone_number_increment']

#####
# Create XML Message for the API
#####
builder = Nokogiri::XML::Builder.new do |xml|
  xml.arg0 {
    xml.cloneSpec {
      xml.containerMoref "#{dialog_clone_destination.to_s}"
    }
    xml.serviceUrl "https://#{@servername.to_s}/sdk"
    xml.vcPassword "#{@password.to_s}"
    xml.vcUser "#{@username.to_s}"
  }
end
puts builder.doc.root.to_xml

#####
# Create Number of Clones entries
#####
count = 0
increment = dialog_starting_clone_number.to_i
while count < dialog_number_of_clones.to_i do
  if dialog_number_of_clones == 1
    clone_name = "#{dialog_clone_name.to_s}"
  else
    clone_name = "#{dialog_clone_name.to_s}#{increment.to_s}"
  end
  clones = Nokogiri::XML::Builder.new do |xml|
    xml.clones {
      xml.entry {
        xml.key "#{clone_name.to_s}"
        xml.value {

```

```

        xml.powerOn "#{dialog_power_on.to_s}"
      }
    }
  }
end
puts clones.doc.root.to_xml
builder.doc.root.at('cloneSpec').add_child(clones.doc.root)
count +=1
increment += dialog_clone_number_increment.to_i
end

@vm_files.each { |k|
  $evm.log("info", "==== EVM Automate Method: <#{@method}> @vm_files.each: #{k.inspect}")

  xml_files = Nokogiri::XML::Builder.new do |xml|
    xml.files {
      xml.destDatastoreSpec {
        xml.controller {
          xml.ipAddress "#{controller_ip.to_s}"
          xml.password "#{controller_password.to_s}"
          xml.ssl "false"
          xml.username "#{controller_username.to_s}"
        }
        xml.mor "#{k['mor'].to_s}"
        xml.numDatastores k['num_datastores'].to_s
        xml.thinProvision k['thin_provision'].to_s
        xml.volAutoGrow k['vol_auto_grow'].to_s
        xml.wrapperVol k['wrapper_vol'].to_s
      }
      xml.sourcePath "#{k['source_path'].to_s}"
    }
  }
  puts xml_files.doc.root.to_xml

  # Add this files section to the the end of cloneSpec
  builder.doc.root.at('cloneSpec').add_child(xml_files.doc.root)
}

unless dialog_destination_folder.nil?
  # Add Destination Folder to the the end of cloneSpec
  destVmFolderMoref = Nokogiri::XML::Builder.new do |xml|
    xml.destVmFolderMoref "Folder:#{dialog_destination_folder.to_s}"
  end
  builder.doc.root.at('cloneSpec').add_child(destVmFolderMoref.doc.root)
end

# Add numberCPU to the the end of cloneSpec
numberCPU = Nokogiri::XML::Builder.new do |xml|
  xml.numberCPU dialog_vm_cpu.to_s
end
builder.doc.root.at('cloneSpec').add_child(numberCPU.doc.root)

# Add Memory to the the end of cloneSpec
memMB = Nokogiri::XML::Builder.new do |xml|
  xml.memMB dialog_memory_size.to_s
end
builder.doc.root.at('cloneSpec').add_child(memMB.doc.root)

# Add templateMoref to the the end of cloneSpec

```

```

templateMoref = Nokogiri::XML::Builder.new do |xml|
  xml.templateMoref "#{@vm_object.to_s}"
end
builder.doc.root.at('cloneSpec').add_child(templateMoref.doc.root)

#####
# Setup client connection to API
#####
client = Savon::Client.new do |wsdl, http, wsse|
  wsdl.document = "#{@netapp_url}"
  wsdl.endpoint = "#{@netapp_url}"
  http.auth.ssl.verify_mode = :none
end

#####
# Send message to API
#####
response = client.request "ser:createClones" do
  soap.namespaces.merge!({
    "xmlns:soapenv" => "http://schemas.xmlsoap.org/soap/envelope/",
    "xmlns:ser" => "http://server.kamino.netapp.com/"
  })

  soap.header = {}
  soap.body = builder.doc.root.to_xml
end

#####
# Convert response to hash
#####
response_hash = response.to_hash
$evm.log("info", "==== EVM Automate Method: <#{@method}> #{response_hash.inspect}")

#
# Exit method
#
$evm.log("info", "==== EVM Automate Method: <#{@method}> Ended")
exit MIQ_OK

#
# Set Ruby rescue behavior
#
rescue => err
  $evm.log("error", "<#{@method}>: [#{err}]\n#{err.backtrace.join("\n")}")
  exit MIQ_STOP
end]]> </MiqAeMethod>
  <MiqAeMethod name="GetVMInfo" language="ruby" scope="instance" location="inline"><![CDATA ↵
    [#####
#
# EVM Automate Method: GetVMInfo
#
# Notes: Dump the objects in storage to the automation.log
#
#####
begin
  @method = 'GetVMInfo'
  $evm.log("info", "#{@method} - EVM Automate Method Started")

  #####
  # add required gems

```

```
#####
require 'savon'
require 'nokogiri'
require 'httpclient'
HTTPPI.adapter = :httpclient

# Turn of verbose logging
@debug = true

@servername = nil
@servername ||= $evm.object['servername']

@username = nil
@username ||= $evm.object['username']

@password = nil
@password ||= $evm.object.decrypt('password')

controller_ip = nil
controller_ip ||= $evm.object['controller_ip']

controller_username = nil
controller_username ||= $evm.object['controller_username']

controller_password = nil
controller_password ||= $evm.object.decrypt('controller_password')

@netapp_url = "https://#{@servername.to_s}:8143/kamino/public/api?wsdl"

vm = $evm.root['vm']

@vm_name = vm.attributes['name']
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_name: #{@vm_name}")

@vm_location = vm.attributes['location']
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_location: #{@vm_location}")

@vm_vendor = vm.attributes['vendor']
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_vendor: #{@vm_vendor}")

@vm_host_id = vm.attributes['host_id']
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_host_id: #{@vm_host_id}")

@vm_ems_ref = vm.attributes['ems_ref']
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_ems_ref: #{@vm_ems_ref}")

@vm_type = vm.attributes['type']
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_type: #{@vm_type}")

@vm_memory_cpu = vm.hardware['memory_cpu']
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_memory_cpu: #{@vm_memory_cpu}")
```



```
@vm_numvcpus = vm.hardware['numvcpus']
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_numvcpus: #{@vm_numvcpus}")

@vm_storage_name = vm.storage['name']
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_storage_name: #{ ←
  @vm_storage_name}")

@vm_storage_ems_ref = vm.storage['ems_ref']
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_storage_ems_ref: #{ ←
  @vm_storage_ems_ref}")

@vm_v_ems_cluster_name = vm.ems_cluster_name
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_v_ems_cluster_name: #{ ←
  @vm_v_ems_cluster_name}")

@vm_v_parent_blue_folder_1_name = vm.parent_blue_folder_1_name
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_v_parent_blue_folder_1_name: #{ ←
  @vm_v_parent_blue_folder_1_name}")

@vm_v_parent_blue_folder_2_name = vm.parent_blue_folder_2_name
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_v_parent_blue_folder_2_name: #{ ←
  @vm_v_parent_blue_folder_2_name}")

@vm_v_parent_blue_folder_3_name = vm.parent_blue_folder_3_name
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_v_parent_blue_folder_3_name: #{ ←
  @vm_v_parent_blue_folder_3_name}")

@vm_v_parent_blue_folder_4_name = vm.parent_blue_folder_4_name
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_v_parent_blue_folder_4_name: #{ ←
  @vm_v_parent_blue_folder_4_name}")

@vm_v_parent_blue_folder_5_name = vm.parent_blue_folder_5_name
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_v_parent_blue_folder_5_name: #{ ←
  @vm_v_parent_blue_folder_5_name}")

@vm_v_parent_blue_folder_6_name = vm.parent_blue_folder_6_name
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_v_parent_blue_folder_6_name: #{ ←
  @vm_v_parent_blue_folder_6_name}")

@vm_v_parent_blue_folder_7_name = vm.parent_blue_folder_7_name
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_v_parent_blue_folder_7_name: #{ ←
  @vm_v_parent_blue_folder_7_name}")

@vm_v_parent_blue_folder_8_name = vm.parent_blue_folder_8_name
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_v_parent_blue_folder_8_name: #{ ←
  @vm_v_parent_blue_folder_8_name")
```

```

@vm_v_parent_blue_folder_9_name = vm.parent_blue_folder_9_name
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_v_parent_blue_folder_9_name: #{ ←
  @vm_v_parent_blue_folder_9_name}")

@vm_v_storage_name = vm.storage_name
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_v_storage_name: #{ ←
  @vm_v_storage_name}")

dialog_vm_snapshots = {}
if vm.v_total_snapshots > 0
  vm.snapshots.each do |ss|
    dialog_vm_snapshots[ss.ems_ref] = "#{ss.name}"
  end
  $evm.log("info", "===== VM Snapshot Name: #{dialog_vm_snapshots.inspect}")
end

#####
# Method: getObjectRef
# Query the NetApp API with real object name to get VMware Object Reference Names
#####
def getVmFiles(netapp_url, servername, username, password, arg_name)
  #####
  # Savon Configuration
  #####
  # Savon.configure do |config|
  #   config.log = false
  #   config.log_level = :info
  #   config.pretty_print_xml = true
  # end

  client = Savon::Client.new do |wsdl, http, wsse|
    wsdl.document = "#{netapp_url}"
    wsdl.endpoint = "#{netapp_url}"
    http.auth.ssl.verify_mode = :none
  end
  response = client.request "ser:getVmFiles" do
    soap.namespaces.merge!({
      "xmlns:soapenv" => "http://schemas.xmlsoap.org/soap/envelope ←
        /",
      "xmlns:ser" => "http://server.kamino.netapp.com/"
    })

    soap.header = {}
    soap.body = { 'arg0' => "#{arg_name}", 'arg1' => { 'serviceUrl' => "https://#{servername ←
      .to_s}/sdk", 'vcPassword' => "#{password.to_s}", 'vcUser' => "#{username.to_s}" } }
  end

  $evm.log("info", "==== EVM Automate Method: <#{@method}> response.to_hash.inspect: #{ ←
    response.to_hash.inspect}")

  response_hash = response.to_hash[:get_vm_files_response]
  $evm.log("info", "==== EVM Automate Method: <#{@method}> response_hash.inspect: #{ ←
    response_hash.inspect}")

  ret_obj = "#{response_hash[:return]}"
  $evm.log("info", "==== EVM Automate Method: <#{@method}> ret_obj.inspect: #{ret_obj. ←
    inspect}")

```

```

$evm.log("info", "==== EVM Automate Method: <#{@method}> ret_obj.class: #{ret_obj.class} ←
  ")

file_array = []
file_hash = {}
response_hash[:return].each { |k|
  source_path = k[:source_path].to_s
  file_hash['source_path'] = source_path
  $evm.log("info", "==== EVM Automate Method: <#{@method}> k[:source_path].inspect: #{k[:source_path].inspect}")

  mor = k[:dest_datastore_spec][:mor].to_s
  file_hash['mor'] = mor
  $evm.log("info", "==== EVM Automate Method: <#{@method}> k[:dest_datastore_spec][:mor]. ←
    inspect: #{k[:dest_datastore_spec][:mor].inspect}")
  file_array << file_hash
}

return file_array
#puts ref_obj
#return ref_obj
end

#####
# Get VMware object References
#####
@vm_files = getVmFiles(@netapp_url, @servername, @username, @password, "VirtualMachine:#{ ←
  @vm_ems_ref}")
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_files: #{@vm_files.inspect}")

#
# Exit method
#
$evm.log("info", "#{@method} - EVM Automate Method Ended")
exit MIQ_OK

#
# Set Ruby rescue behavior
#
rescue => err
  $evm.log("error", "#{@method} - [{err}]\n#{err.backtrace.join("\n")}")
  exit MIQ_ABORT
end]]> </MiqAeMethod>
  <MiqAeMethod name="Retrieve_Clone_Source" language="ruby" scope="instance" location=" ←
    inline"><![CDATA[#####
#
# EVM Automate Method: Retrieve_Clone_Source
#
# Notes: Populate Clone Source
#
#####
begin
  # Turn of verbose logging
  @debug = true

  @action = nil
  @action ||= $evm.object['action']

```

```

@method = 'Retrieve_Clone_Source'
$evm.log("info", "#{@method}: #{@action} - EVM Automate Method Started")

vm = $evm.root['vm']

@vm_name = vm.attributes['name']
$evm.log("info", "==== EVM Automate Method: <#{@method}>: #{@action} vm_name: #{@vm_name}")

@vm_ems_ref = vm.attributes['ems_ref']
$evm.log("info", "==== EVM Automate Method: <#{@method}>: #{@action} vm_ems_ref: #{ ←
  @vm_ems_ref}")

@vm_location = vm.attributes['location']
$evm.log("info", "==== EVM Automate Method: <#{@method}>: #{@action} vm_location: #{ ←
  @vm_location}")

@vm_v_storage_name = vm.storage_name
$evm.log("info", "==== EVM Automate Method: <#{@method}>: #{@action} vm_v_storage_name: #{ ←
  @vm_v_storage_name}")

dialog_clone_source = "VirtualMachine:#{@vm_ems_ref}"
$evm.log("info", "==== EVM Automate Method: <#{@method}>: #{@action} dialog_clone_source: ←
  #{dialog_clone_source}")

dialog_clone_source_path = "[#{@vm_v_storage_name}]#{@vm_location}"
$evm.log("info", "==== EVM Automate Method: <#{@method}>: #{@action} ←
  dialog_clone_source_path: #{dialog_clone_source_path}")

case @action
  when "clone_source"
    list_values = {
      'sort_by' => :none,
      'data_type' => :string,
      'required' => :true,
      'values' => [[nil,nil],["#{@vm_name}", "#{dialog_clone_source}"]],
    }

    $evm.log("info", "==== EVM Automate Method: <#{@method}>: #{@action} display drop-down: ←
      #{list_values}")
    list_values.each {|k,v| $evm.object[k] = v }

  when "clone_source_path"
    list_values = {
      'sort_by' => :none,
      'data_type' => :string,
      'required' => :true,
      'values' => [[nil,nil],["#{@dialog_clone_source_path}", "#{dialog_clone_source_path}" ←
        ]],
    }
    $evm.log("info", "==== EVM Automate Method: <#{@method}>: #{@action} display drop-down: ←
      #{list_values}")
    list_values.each {|k,v| $evm.object[k] = v }

end

#
# Exit method
#
$evm.log("info", "#{@method} - EVM Automate Method Ended")

```

```

exit MIQ_OK

#
# Set Ruby rescue behavior
#
rescue => err
  $evm.log("error", "#{@method} - [{err}]\n#{err.backtrace.join("\n")}")
  exit MIQ_ABORT
end]]> </MiqAeMethod>
  <MiqAeMethod name="Retrieve_Object" language="ruby" scope="instance" location="inline"><![ ←
    CDATA[#####
#
# EVM Automate Method: Execute_Rapid_Clone
#
#
#
#####
begin
  @method = 'Execute_Rapid_Clone'
  $evm.log("info", "==== EVM Automate Method: <#{@method}> Started")

  #####
  #
  # Method: dumpRoot
  # Description: Dump Root information
  #
  #####
  def dumpRoot
    $evm.log("info", "#{@method} - Root:<$evm.root> Begin Attributes")
    $evm.root.attributes.sort.each { |k, v| $evm.log("info", "#{@method} - Root:<$evm.root> ←
      Attributes - #{k}: #{v}")}
    $evm.log("info", "#{@method} - Root:<$evm.root> End Attributes")
    $evm.log("info", "")
  end

  # dump root object attributes
  dumpRoot

  require 'savon'
  require 'httpclient'
  HTTPPI.adapter = :httpclient
  HTTPPI.log = false

  @servername = 'mcimgmt1.mcis.usmc.mil'
  @username = 'MCIS\jose'
  @password = 'Password1234!@#$$'

  def getObjectRef(servername, username, password, arg_name, arg_type)
    Savon.configure do |config|
      config.log = false
      config.log_level = :info
      config.pretty_print_xml = true
    end

    client = Savon::Client.new do |wsdl, http, wsse|
      wsdl.document = "https://#{@servername.to_s}:8143/kamino/public/api?wsdl"
      wsdl.endpoint = "https://#{@servername.to_s}:8143/kamino/public/api?wsdl"
      http.auth.ssl.verify_mode = :none
    end

```

```

response = client.request "ser:getMoref" do
  soap.namespaces.merge!({
    "xmlns:soapenv" => "http://schemas.xmlsoap.org/soap/envelope/",
    "xmlns:ser" => "http://server.kamino.netapp.com/"
  })
  soap.header = {}
  soap.body = { 'arg0' => "#{arg_name}", 'arg1' => "#{arg_type}", 'arg2' => { 'serviceUrl' ←
    => "https://#{servername.to_s}/sdk", 'vcPassword' => "#{password.to_s}", 'vcUser' ←
    => "#{username.to_s}" } }
end

response_hash = response.to_hash[:get_moref_response]

ref_obj = "#{response_hash[:return]}"

return ref_obj
end

vm_object = getObjectRef(@servername, @username, @password, "w2k8r2-jump-template-20140506", ←
  "VirtualMachine")
$evm.log("info", "==== EVM Automate Method: <#{@method}> vm_object: #{vm_object.inspect}")

#
# Exit method
#
$evm.log("info", "==== EVM Automate Method: <#{@method}> Ended")
exit MIQ_OK

#
# Set Ruby rescue behavior
#
rescue => err
  $evm.log("error", "<#{@method}>: [#{err}]\n#{err.backtrace.join("\n")}")
  exit MIQ_STOP
end]]> </MiqAeMethod>
<MiqAeSchema>
  <MiqAeField name="servername" substitute="true" aetype="attribute" datatype="string" ←
    priority="1" message="create">
mcimgmt1.mcis.usmc.mil </MiqAeField>
  <MiqAeField name="username" substitute="true" aetype="attribute" datatype="string" ←
    priority="2" message="create">
MCIS\jose </MiqAeField>
  <MiqAeField name="password" substitute="true" aetype="attribute" datatype="password" ←
    priority="3" message="create">
v1:{+YT9r2mlxaPyr4RY+dWrlN3HuBkVZ3ePnvGDT48NTsE=} </MiqAeField>
  <MiqAeField name="controller_ip" substitute="true" aetype="attribute" datatype="string" ←
    priority="4" message="create">
10.2.100.19 </MiqAeField>
  <MiqAeField name="controller_username" substitute="true" aetype="attribute" datatype=" ←
    string" priority="5" message="create">
vsc.netapp.svc </MiqAeField>
  <MiqAeField name="controller_password" substitute="true" aetype="attribute" datatype=" ←
    password" priority="6" message="create">
v1:{dbXYedjKxZEGfxtiGNbFgciiClYEyCcalwR3X8FkC0c=} </MiqAeField>
  <MiqAeField name="action" substitute="true" aetype="attribute" datatype="string" ←
    priority="7" message="create">
</MiqAeField>

```

```

    <MiqAeField name="method1" substitute="true" aetype="method" datatype="string" priority= ←
      "8" message="create">
    </MiqAeField>
    <MiqAeField name="method2" substitute="true" aetype="method" datatype="string" priority= ←
      "9" message="create">
    </MiqAeField>
  </MiqAeSchema>
  <MiqAeInstance name="Dialog_Destination_Folder">
    <MiqAeField name="servername">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="username">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="password">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="controller_ip">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="controller_username">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="controller_password">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="action">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="method1">
Dialog_Destination_Folder    </MiqAeField>
    <MiqAeField name="method2">
      <![CDATA[]]>
    </MiqAeField>
  </MiqAeInstance>
  <MiqAeInstance name="Dialog_Storage_Controller">
    <MiqAeField name="servername">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="username">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="password">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="controller_ip">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="controller_username">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="controller_password">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="action">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="method1">
Dialog_Storage_Controller    </MiqAeField>

```

```

    <MiqAeField name="method2">
      <![CDATA[]]>
    </MiqAeField>
  </MiqAeInstance>
  <MiqAeInstance name="Dialog_VM_Sizing_CPU">
    <MiqAeField name="servername">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="username">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="password">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="controller_ip">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="controller_username">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="controller_password">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="action">
      </MiqAeField>
    <MiqAeField name="method1">
      </MiqAeField>
    <MiqAeField name="method2">
      <![CDATA[]]>
    </MiqAeField>
  </MiqAeInstance>
  <MiqAeInstance name="Dialog_VM_Sizing_Memory">
    <MiqAeField name="servername">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="username">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="password">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="controller_ip">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="controller_username">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="controller_password">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="action">
      </MiqAeField>
    <MiqAeField name="method1">
      </MiqAeField>
    <MiqAeField name="method2">
      <![CDATA[]]>
    </MiqAeField>
  </MiqAeInstance>
  <MiqAeInstance name="Execute_Rapid_Clone">

```



```

    <MiqAeField name="servername">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="username">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="password">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="action">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="method1">
Execute_Rapid_Clone    </MiqAeField>
    <MiqAeField name="method2">
      <![CDATA[]]>
    </MiqAeField>
  </MiqAeInstance>
  <MiqAeInstance name="GetVMInfo">
    <MiqAeField name="servername">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="username">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="password">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="controller_ip">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="controller_username">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="controller_password">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="action">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="method1">
GetVMInfo    </MiqAeField>
    <MiqAeField name="method2">
      <![CDATA[]]>
    </MiqAeField>
  </MiqAeInstance>
  <MiqAeInstance name="Rapid_Clone_Email_Complete">
    <MiqAeField name="servername">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="username">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="password">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="controller_ip">
      <![CDATA[]]>
    </MiqAeField>

```

```

    <MiqAeField name="controller_username">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="controller_password">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="action">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="method1">
Rapid_Clone_Email_Complete    </MiqAeField>
    <MiqAeField name="method2">
      <![CDATA[]]>
    </MiqAeField>
  </MiqAeInstance>
  <MiqAeInstance name="Retrieve_Storage_Controller">
    <MiqAeField name="servername">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="username">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="password">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="action">
      <![CDATA[]]>
    </MiqAeField>
    <MiqAeField name="method1">
Retrieve_Storage_Controller    </MiqAeField>
    <MiqAeField name="method2">
      <![CDATA[]]>
    </MiqAeField>
  </MiqAeInstance>
</MiqAeClass>
</MiqAeDatastore>

```

4 Issues Encountered