

# ATTRIBUTES, GROUPS, SCRIPTS, AND RULES

## Computer Attributes

- nworks VMware Collector
- nworks VMware vCenter
- nworks Enterprise Manager

## Computer Groups

- nworks Enterprise Manager Servers
- nworks VMware ESX Host Servers
- nworks VMware vCenter Servers
- nworks VMware VIC Collectors
- nworks VMware VMTools Installed

## Notification Groups

- nworks VMware Administrators

## Scripts

- nworks Collector Discovery- Create VMware Collector State & Role views
- nworks Collector Object Count script- Gets number of objects per collector from nEM registry setting
- nworks Enterprise Manager Discovery- Create nworks Enterprise Manager Server State & Role views
- nworks ESX Group Discovery- Creates and populates ESX Group
- nworks Event Response- Processes events from nworksEventLog
- nworks Hardware Status Discovery- Discovers Hardware Status role properties
- nworks SensorStats Collection- Collects Hardware Stats from ESX Sensors
- nworks Set Properties- Set Properties for Computer Role
- nworks Set State Thresholds- Set thresholds to throw event for State Alerts
- nworks vCenter Logging Config Task- Configures the destination Computer in MOM for VC events
- nworks VMstats metrics and properties collection- Create performance data, state events, discovery data
- nworks WMI Query- Queries WMI for specified class instances

## Rule Groups

Rule Groups are used to organize rules into a logical structure. You can create your own custom rule groups that let you further customize your MOM configuration.

The VMware ESX Management Pack includes rule groups to organize rules as follows:

- **Collector Messages** - the rules in this group handle messages generated by the Collector regarding its overall operation. The API connections to vCenter/ESX are monitored here. Also, Virtual Machine aspects such as VMTools heartbeat and status are monitored here.
- **Enterprise Manager Messages** – this rule group contains rules, which capture Enterprise Manager server-generated events associated with the status of the Enterprise Manager server and the operation of Collectors.
- **ESX Syslog Monitoring** - the rules in this group monitor syslog messages sent from the ESX hosts to the Virtual Enterprise Monitor server.
- **vCenter Events** - the rules in this group handle vCenter events gathered by the Collector.
- **vCenter Monitoring** - the rules in this group monitor the core required services on vCenter servers—the vCenter service, and the vCenter Web Service.
- **VEM Monitoring** - the rules in this group monitor the status of the nworks Collector application itself, and the MOM Agent also running on that Virtual Enterprise Monitor server.
- **VMStats Metric & Property Collection** - gathers metrics and properties as they are posted to WMI by the Collector.
- **VMStats Monitoring Thresholds** - Events rules to set metric thresholds, and generate alerts.

## Rules

The most common rule types are:

- **Event Rules** - they instruct MOM 2005 to generate an alert or run a response when specific events occur. These can be events that are written to Windows event logs, or events internally generated by the MOM Agent. The nworks Collector creates its own Windows event log, used for both internal nworks messages and to log events from vCenter. This is called nworksEventLog and is visible in Event Viewer on the server where nworks Collector (or Enterprise Manager) is installed.
- **Performance Rules** - they collect and/or alert on performance data. You can view this information by using the MOM Operator Console. Note that, unlike the way MOM handles performance thresholds for Windows servers, the nworks MP uses:
  - Scripts - to create performance data
  - Event rules - to set thresholds for your VMware servers (you can define multiple threshold values, with a separate alert severity level for each value)

The lists of rules are provided in the tables below.

**Table 1. Collector Messages**

Name	Enabled	Type	Provider Name
0000 - Collector Event Trigger	Yes	Event	nworksEventLog
_Collector Discovery	Yes	Event	Schedule every 5 minutes

## Veeam nworks for VMware 5.6 | Attributes, Groups, Scripts, and Rules

Name	Enabled	Type	Provider Name
EC020 - Failure instantiating VmConnectParams, VmCOM DLL may not be registered	Yes	Event	Script-generated Data
EC040 - Cannot connect to vm on host	Yes	Event	Script-generated Data
EC050 - Cannot connect to vm, invalid host connection parameters (bad username, bad password, insufficient rights)	Yes	Event	Script-generated Data
EC060 - Cannot connect to vm on host (host down or bad connection parms - username, password, or rights)	Yes	Event	Script-generated Data
EC070 - Maximum number of VMware API connections to host has been exceeded.	Yes	Event	Script-generated Data
EC080 - Unhandled exception on vm connect	Yes	Event	Script-generated Data
EC100 - No guests found on host	Yes	Event	Script-generated Data
EC110 - Invalid VMware server type for host	Yes	Event	Script-generated Data
EC112 - No guests found on host	Yes	Event	Script-generated Data
EC114 - Invalid VMware server type for host	Yes	Event	Script-generated Data
EC142 - VMware guest deleted on host	Yes	Event	Script-generated Data
EC260 - SPI for VMware Collector plink.exe does not exist	Yes	Event	Script-generated Data
EC330 - SPI for VMware Collector Plink cmd error	Yes	Event	Script-generated Data

Name	Enabled	Type	Provider Name
EC340 - SPI for VMware Collector plink.exe does not exist	Yes	Event	Script-generated Data
EC350 - SPI for VMware Collector VDF error on Host	Yes	Event	Script-generated Data
EC380 - SPI for VMware Collector VDF error	Yes	Event	Script-generated Data
nworks Virtual Infrastructure Collector Service is not running!	Yes	Event	Internally-generated Event
SM010 - List and map	Yes	Event	Script-generated Data
SV045 - Collector received shutdown request	Yes	Event	Script-generated Data
VP050 - Error retrieving performance metrics for cluster	Yes	Event	Script-generated Data
VT010 - Internal Collector Message	Yes	Event	Script-generated Data

**Table 2. Connection State**

Name	Enabled	Type	Provider Name
nworks Collector: Error collecting Events from ESX Host	Yes	Event	Script-generated Data
nworks Collector: Error collecting Events from vCenter	Yes	Event	Script-generated Data
nworks Collector: Error collecting Performance metrics from ESX 2 Host	Yes	Event	Script-generated Data
nworks Collector: Error collecting Performance metrics from ESX 3 Host	Yes	Event	Script-generated Data

Name	Enabled	Type	Provider Name
nworks Collector: Error collecting Performance metrics from vCenter	Yes	Event	Script-generated Data
nworks Collector: Error with SSH connection to ESX Host	Yes	Event	Script-generated Data
nworks Collector: ESX Host Connection Status	Yes	Event	Script-generated Data
nworks Collector: The internal events queue for the nworks Collector has reached its limit	Yes	Event	Script-generated Data

**Table 3. ESX Hardware Health**

Name	Enabled	Type	Provider Name
nworks VMware ESX: Host Hardware Health Status	Yes	Event	Script-generated Data

**Table 4. VC Event Destination**

Name	Enabled	Type	Provider Name
Task 'Configure vCenter events destination' has completed successfully	Yes	Event	Script-generated Data
Task 'Configure vCenter events destination' needs to be run	Yes	Event	Script-generated Data

**Table 5. VMTools State**

Name	Enabled	Type	Provider Name
nworks Collector: VM Power State Monitoring	No	Event	Script-generated Data
nworks Collector: VMTools Heartbeat	No	Event	Script-generated Data
nworks Collector: VMTools Status	No	Event	Script-generated Data

**Table 6. Enterprise Manager Messages**

Name	Enabled	Type	Provider Name
_EM Server Discovery	Yes	Event	Schedule every 5 minutes
Error from nworksMC application	Yes	Event	nworksEventLog
nworks Enterprise Manager Service is not running!	Yes	Event	Internally-generated event
nworks VIC Object Count Alert	Yes	Event	Script-generated data
nworks VIC Object Count Collection	Yes	Event	Schedule every 2 minutes
Warning from nworksMC application	Yes	Event	nworksEventLog

**Table 7. ESX Syslog Monitoring**

Name	Enabled	Type	Provider Name
nworks Syslog: _Sample MessageString Search Alert	No	Event	Script-generated Data
nworks Syslog: authentication failure	Yes	Event	Script-generated Data
nworks Syslog: Error - Critical messages	Yes	Event	Script-generated Data
nworks Syslog: ESX syslog daemon has been shutdown	Yes	Event	Script-generated Data
nworks Syslog: Info & Debug messages	Yes	Event	Script-generated Data
nworks Syslog: Warning & Notice messages	Yes	Event	Script-generated Data

**Table 8. vCenter Events**

Name	Enabled	Type	Provider Name
nworks vCenter: Account Event	Yes	Event	Script-generated Data
nworks vCenter: Alarm Failed	Yes	Event	Script-generated Data
nworks vCenter: Cluster Info Event	Yes	Event	Script-generated Data
nworks vCenter: Cluster Overcommitted	Yes	Event	Script-generated Data
nworks vCenter: Cluster Warning Event	Yes	Event	Script-generated Data
nworks vCenter: Create VM Disk Failed	Yes	Event	Script-generated Data

## Veeam nworks for VMware 5.6 | Attributes, Groups, Scripts, and Rules

Name	Enabled	Type	Provider Name
nworks vCenter: Datacenter Created	Yes	Event	Script-generated Data
nworks vCenter: Datacenter Renamed	Yes	Event	Script-generated Data
nworks vCenter: Datastore Duplicated	Yes	Event	Script-generated Data
nworks vCenter: DRS Cannot Migrate VM	Yes	Event	Script-generated Data
nworks vCenter: DRS Disabled for Cluster	Yes	Event	Script-generated Data
nworks vCenter: DRS Enabled for Cluster	Yes	Event	Script-generated Data
nworks vCenter : DRS Invocation failed in Cluster	Yes	Event	Script-generated Data
nworks vCenter: DRS Migrated VM	Yes	Event	Script-generated Data
nworks vCenter: DRS Powered On VM	No	Event	Script-generated Data
nworks vCenter: DRS Resource Configure Failed in Cluster	Yes	Event	Script-generated Data
nworks vCenter: Duplicate VM IP Detected	Yes	Event	Script-generated Data
nworks vCenter: Failed to Add Host	Yes	Event	Script-generated Data
nworks vCenter: Failed to clone VM	Yes	Event	Script-generated Data

Name	Enabled	Type	Provider Name
nworks vCenter: Failover Level Restored in Cluster	Yes	Event	Script-generated Data
nworks vCenter: General Host Error	Yes	Event	Script-generated Data
nworks vCenter: General Host Info	Yes	Event	Script-generated Data
nworks vCenter: General Host Warning	Yes	Event	Script-generated Data
nworks vCenter: General VM Error	Yes	Event	Script-generated Data
nworks vCenter: General VM Info	Yes	Event	Script-generated Data
nworks vCenter: General VM Warning	Yes	Event	Script-generated Data
nworks vCenter: HA Agent Error in Cluster	Yes	Event	Script-generated Data
nworks vCenter: HA Agent Unavailable in Cluster	Yes	Event	Script-generated Data
nworks vCenter: HA Disabled in Cluster	Yes	Event	Script-generated Data
nworks vCenter: HA Enabled in Cluster	Yes	Event	Script-generated Data
nworks vCenter: HA Host Failed in Cluster	Yes	Event	Script-generated Data
nworks vCenter: HA Host Isolated from Cluster	Yes	Event	Script-generated Data
nworks vCenter: Host Connected	Yes	Event	Script-generated Data

Name	Enabled	Type	Provider Name
nworks vCenter: Host Connection Error	Yes	Event	Script-generated Data
nworks vCenter: Host Disconnected	Yes	Event	Script-generated Data
nworks vCenter : Host Does not comply with Profile	Yes	Event	Script-generated Data
nworks vCenter : Host DVS Configuration out of sync	Yes	Event	Script-generated Data
nworks vCenter: Host Entered Maintenance Mode	Yes	Event	Script-generated Data
nworks vCenter: Host Entered Standby Mode	Yes	Event	Script-generated Data
nworks vCenter : Host Entered Standby Mode in DRS ClustervCenter	Yes	Event	Script-generated Data
nworks vCenter: Host Entering Maintenance Mode	Yes	Event	Script-generated Data
nworks vCenter: Host Entering Standby Mode	Yes	Event	Script-generated Data
nworks vCenter : Host Entering Standby Mode in DRS Cluster	Yes	Event	Script-generated Data
nworks vCenter: Host Exited Maintenance Mode	Yes	Event	Script-generated Data
nworks vCenter: Host Exited Standby Mode in DRS Cluster	Yes	Event	Script-generated Data
nworks vCenter : Host Exiting Standby Mode	Yes	Event	Script-generated Data
nworks vCenter : Host Exiting Standby Mode in DRS Cluster	Yes	Event	Script-generated Data

Name	Enabled	Type	Provider Name
nworks vCenter : Host Failed to exit Standby Mode	Yes	Event	Script-generated Data
nworks vCenter : Host Failed to exit Standby Mode in DRS Cluster	Yes	Event	Script-generated Data
nworks vCenter: Host GetShortName Failed	Yes	Event	Script-generated Data
nworks vCenter : Host Has no available network for HA Cluster	Yes	Event	Script-generated Data
nworks vCenter: Host Has No Redundant Management Network	Yes	Event	Script-generated Data
nworks vCenter: Host Inventory Full	Yes	Event	Script-generated Data
nworks vCenter: Host IP Changed	Yes	Event	Script-generated Data
nworks vCenter: Host IP Inconsistent	Yes	Event	Script-generated Data
nworks vCenter: Host IP To ShortName Failed	Yes	Event	Script-generated Data
nworks vCenter: Host Isolation IP Ping Failed	Yes	Event	Script-generated Data
nworks vCenter: Host License Expired	Yes	Event	Script-generated Data
nworks vCenter: Host Not In Cluster	Yes	Event	Script-generated Data
nworks vCenter: Host Not Responding	Yes	Event	Script-generated Data
nworks vCenter: Host Operation Timed Out	Yes	Event	Script-generated Data

Name	Enabled	Type	Provider Name
nworks vCenter: Host Primary Agent Not ShortName	Yes	Event	Script-generated Data
nworks vCenter: Host Reconnection Failed	Yes	Event	Script-generated Data
nworks vCenter: Host ShortName To IP Failed	Yes	Event	Script-generated Data
nworks vCenter: Host Shutdown	Yes	Event	Script-generated Data
nworks vCenter : Host Synchronisation error	Yes	Event	Script-generated Data
nworks vCenter : Hosts isolated in HA Cluster	Yes	Event	Script-generated Data
nworks vCenter: Insufficient Failover Resources in Cluster	Yes	Event	Script-generated Data
nworks vCenter: Insufficient Resources to Start VM	Yes	Event	Script-generated Data
nworks vCenter: Invalid License Edition	Yes	Event	Script-generated Data
nworks vCenter : iSCSI Boot Failure	Yes	Event	Script-generated Data
nworks vCenter : License assignment failed	Yes	Event	Script-generated Data
nworks vCenter : License compliance alert	Yes	Event	Script-generated Data
nworks vCenter: License Expired	Yes	Event	Script-generated Data
nworks vCenter : License Expiry	Yes	Event	Script-generated Data

Name	Enabled	Type	Provider Name
nworks vCenter: License Not Reserved	Yes	Event	Script-generated Data
nworks vCenter: License Server Unavailable	Yes	Event	Script-generated Data
nworks vCenter : Lock Corruption Detected in VMFS Volume	Yes	Event	Script-generated Data
nworks vCenter: Locker Misconfigured	Yes	Event	Script-generated Data
nworks vCenter: Locker Reconfigured	Yes	Event	Script-generated Data
nworks vCenter: Login Failed	Yes	Event	Script-generated Data
nworks vCenter : Lost connection to NFS server	Yes	Event	Script-generated Data
nworks vCenter: Migration Error	Yes	Event	Script-generated Data
nworks vCenter: Migration Snapshot Warning	No	Event	Script-generated Data
nworks vCenter: Migration Warning	Yes	Event	Script-generated Data
nworks vCenter : Network Connectivity Lost	Yes	Event	Script-generated Data
nworks vCenter : Network Connectivity Restored	Yes	Event	Script-generated Data
nworks vCenter : Network Redundancy Issue	Yes	Event	Script-generated Data
nworks vCenter : Network Redundancy Restored	Yes	Event	Script-generated Data

Name	Enabled	Type	Provider Name
nworks vCenter: No Datastores Configured	Yes	Event	Script-generated Data
nworks vCenter: No Maintenance Mode DRS Recommendation For VM	Yes	Event	Script-generated Data
nworks vCenter: No Network Access for VM	Yes	Event	Script-generated Data
nworks vCenter : No Space To Create VMFS Journal	Yes	Event	Script-generated Data
vCenter : Non VI Workload Detected on Datastore	Yes	Event	Script-generated Data
nworks vCenter: Permissions Event	Yes	Event	Script-generated Data
nworks vCenter: Repeated Login Failures	Yes	Event	Script-generated Data
nworks vCenter: Resource Pool Event	Yes	Event	Script-generated Data
nworks vCenter: Resource usage exceeds configuration	Yes	Event	Script-generated Data
nworks vCenter: Role Change Event	Yes	Event	Script-generated Data
nworks vCenter : Storage Connectivity Lost	Yes	Event	Script-generated Data
nworks vCenter : Storage Connectivity Restored	Yes	Event	Script-generated Data
nworks vCenter : Storage Path Redundancy Issue	Yes	Event	Script-generated Data

Name	Enabled	Type	Provider Name
nworks vCenter : Storage Path Redundancy Restored	Yes	Event	Script-generated Data
nworks vCenter: Task Timeout	Yes	Event	Script-generated Data
nworks vCenter: Unable to update HA Agent with VM State	Yes	Event	Script-generated Data
nworks vCenter: Unlicensed Virtual Machines on Host	Yes	Event	Script-generated Data
nworks vCenter: Unsupported VM guest	Yes	Event	Script-generated Data
nworks vCenter: Updated Agent Being Restarted	Yes	Event	Script-generated Data
nworks vCenter: User Session Event	No	Event	Script-generated Data
nworks vCenter : VC Agent uninstall failed on Host	Yes	Event	Script-generated Data
nworks vCenter: VC Agent Upgrade Failed on Host	Yes	Event	Script-generated Data
nworks vCenter: VM Action Failed	Yes	Event	Script-generated Data
nworks vCenter: VM Being Hot Migrated	Yes	Event	Script-generated Data
nworks vCenter: VM Being Migrated	Yes	Event	Script-generated Data
nworks vCenter: VM Being Relocated	Yes	Event	Script-generated Data
nworks vCenter: VM Clone Failed	Yes	Event	Script-generated Data

Name	Enabled	Type	Provider Name
nworks vCenter: VM Configuration File Missing	Yes	Event	Script-generated Data
nworks vCenter: VM Customization Failed	Yes	Event	Script-generated Data
nworks vCenter: VM Customization LinuxIdentity Failed	Yes	Event	Script-generated Data
nworks vCenter: VM Customization NetworkSetup Failed	Yes	Event	Script-generated Data
nworks vCenter: VM Customization Started	Yes	Event	Script-generated Data
nworks vCenter: VM Customization Succeeded	Yes	Event	Script-generated Data
nworks vCenter: VM Customization Sysprep Failed	Yes	Event	Script-generated Data
nworks vCenter: VM Customization Unknown Failure	Yes	Event	Script-generated Data
nworks vCenter: VM Date rolled back	Yes	Event	Script-generated Data
nworks vCenter: VM Deploy Failed	Yes	Event	Script-generated Data
nworks vCenter: VM Deployed	Yes	Event	Script-generated Data
nworks vCenter: VM Disconnected	Yes	Event	Script-generated Data
nworks vCenter: VM Disk Failed	Yes	Event	Script-generated Data
nworks vCenter : VM DRS Rule Compliance	Yes	Event	Script-generated Data

**Veeam nworks for VMware 5.6 | Attributes, Groups, Scripts, and Rules**

Name	Enabled	Type	Provider Name
nworks vCenter : VM DRS Rule Violation	Yes	Event	Script-generated Data
nworks vCenter: VM Emigrating	Yes	Event	Script-generated Data
nworks vCenter : VM Error Message	Yes	Event	Script-generated Data
nworks vCenter: VM Failed Migrate	Yes	Event	Script-generated Data
nworks vCenter : VM failed over to new Host	Yes	Event	Script-generated Data
nworks vCenter: VM Failed To Power On	Yes	Event	Script-generated Data
nworks vCenter: VM Failed To Reset	Yes	Event	Script-generated Data
nworks vCenter : VM Failed to update secondary VM config	Yes	Event	Script-generated Data
nworks vCenter: VM Failover Failed	Yes	Event	Script-generated Data
nworks vCenter: VM Guest OS Event	No	Event	Script-generated Data
nworks vCenter : VM Has no compatible Hosts for secondary VM	Yes	Event	Script-generated Data
nworks vCenter: VM MAC Conflict	Yes	Event	Script-generated Data
nworks vCenter: VM Moved from Resource Pool	Yes	Event	Script-generated Data
nworks vCenter: VM Network Access Warning	Yes	Event	Script-generated Data

Name	Enabled	Type	Provider Name
nworks vCenter: VM Not Supported	Yes	Event	Script-generated Data
nworks vCenter: VM Orphaned	Yes	Event	Script-generated Data
nworks vCenter: VM Powered Off	No	Event	Script-generated Data
nworks vCenter: VM Powered On	No	Event	Script-generated Data
nworks vCenter : VM Reload From Path Failed	Yes	Event	Script-generated Data
nworks vCenter : VM Reload From Path Succeeded	Yes	Event	Script-generated Data
nworks vCenter: VM Relocate Failed	Yes	Event	Script-generated Data
nworks vCenter : VM Reset due to guestOS error	Yes	Event	Script-generated Data
nworks vCenter : VM Reset due to guestOS error	Yes	Event	Script-generated Data
nworks vCenter : VM Reset failed	Yes	Event	Script-generated Data
nworks vCenter: VM Restarted On Alternate Host	Yes	Event	Script-generated Data
nworks vCenter : VM Secondary failed to start	Yes	Event	Script-generated Data
nworks vCenter: VM Suspended	No	Event	Script-generated Data
nworks vCenter : VM Terminated	Yes	Event	Script-generated Data

Name	Enabled	Type	Provider Name
nworks vCenter : VM Timeout starting secondary VM	Yes	Event	Script-generated Data
nworks vCenter: VM Upgrade Failed	Yes	Event	Script-generated Data
nworks vCenter: VM UUID Conflict	Yes	Event	Script-generated Data
nworks vCenter : VM UUID Conflict	Yes	Event	Script-generated Data
nworks vCenter : VM Warning Message	Yes	Event	Script-generated Data
nworks vCenter: VM WWN Assigned	Yes	Event	Script-generated Data
nworks vCenter: VM WWN Changed	Yes	Event	Script-generated Data
nworks vCenter: VM WWN Conflict	Yes	Event	Script-generated Data
nworks vCenter: VMotion License Expired in Cluster	Yes	Event	Script-generated Data
nworks vCenter : vNIC connect to switch failed	Yes	Event	Script-generated Data
nworks vCenter : Volume Connectivity Degraded	Yes	Event	Script-generated Data
nworks vCenter : Volume Connectivity Lost	Yes	Event	Script-generated Data
nworks vCenter : Volume is locked by Host	Yes	Event	Script-generated Data

**Table 9. vCenter Alarms**

Name	Enabled	Type	Provider Name
nworks vCenter: Cluster high availability error Alarm	Yes	Event	Script-generated Data
nworks vCenter: Custom Alarm Triggered	No	Event	Script-generated Data
nworks vCenter: Host Battery Status Alarm	Yes	Event	Script-generated Data
nworks vCenter: Host BMC Status Alarm	Yes	Event	Script-generated Data
nworks vCenter: Host Cannot Connect to network Alarm	Yes	Event	Script-generated Data
nworks vCenter: Host Cannot Connect to storage Alarm	Yes	Event	Script-generated Data
nworks vCenter: Host Connection and power state Alarm	Yes	Event	Script-generated Data
nworks vCenter: Host Connection failure Alarm	Yes	Event	Script-generated Data
nworks vCenter: Host Connection State Alarm	Yes	Event	Script-generated Data
nworks vCenter: Host CPU Usage Alarm	Yes	Event	Script-generated Data
nworks vCenter: Host Disk Usage Alarm	Yes	Event	Script-generated Data
nworks vCenter: Host Error Alarm	Yes	Event	Script-generated Data
nworks vCenter: Host Exit standby error Alarm	Yes	Event	Script-generated Data
nworks vCenter: Host Hardware fan status Alarm	Yes	Event	Script-generated Data

Name	Enabled	Type	Provider Name
nworks vCenter: Host Hardware power status Alarm	Yes	Event	Script-generated Data
nworks vCenter: Host Hardware system board status Alarm	Yes	Event	Script-generated Data
nworks vCenter: Host Hardware temperature status Alarm	Yes	Event	Script-generated Data
nworks vCenter: Host Hardware voltage Alarm	Yes	Event	Script-generated Data
nworks vCenter: Host IPMI System Event Log Status Alarm	Yes	Event	Script-generated Data
nworks vCenter: Host Memory status Alarm	Yes	Event	Script-generated Data
nworks vCenter: Host Memory Usage Alarm	Yes	Event	Script-generated Data
nworks vCenter: Host Network Usage Alarm	Yes	Event	Script-generated Data
nworks vCenter: Host Processor status Alarm	Yes	Event	Script-generated Data
nworks vCenter: Host Service console swap rates Alarm	Yes	Event	Script-generated Data
nworks vCenter: Host Status of other hardware objects Alarm	Yes	Event	Script-generated Data
nworks vCenter: Host Storage status Alarm	Yes	Event	Script-generated Data
nworks vCenter: Virtual Machine CPU Usage Alarm	Yes	Event	Script-generated Data
nworks vCenter: Virtual Machine Disk Usage Alarm	Yes	Event	Script-generated Data

Name	Enabled	Type	Provider Name
nworks vCenter: Virtual Machine Error Alarm	Yes	Event	Script-generated Data
nworks vCenter: Virtual Machine Fault Tolerance Secondary VM latency status Alarm	Yes	Event	Script-generated Data
nworks vCenter: Virtual Machine Fault Tolerance state changed Alarm	Yes	Event	Script-generated Data
nworks vCenter: Virtual Machine High Availability Error Alarm	Yes	Event	Script-generated Data
nworks vCenter: Virtual Machine Memory Usage Alarm	Yes	Event	Script-generated Data
nworks vCenter: Virtual Machine Migration Error Alarm	Yes	Event	Script-generated Data
nworks vCenter: Virtual Machine Network Usage Alarm	Yes	Event	Script-generated Data
nworks vCenter: Virtual Machine No compatible host for Secondary VM Alarm	Yes	Event	Script-generated Data
nworks vCenter: Virtual Machine State Alarm	Yes	Event	Script-generated Data
nworks vCenter: Virtual Machine Timed out starting Secondary VM Alarm	Yes	Event	Script-generated Data
nworks vCenter: Virtual Machine Total disk latency Alarm	Yes	Event	Script-generated Data

**Table 10. vCenter Monitoring—Events**

Name	Enabled	Type	Provider Name
nworks VMware: vCenter Error	Yes	Event	Application
nworks VMware: vCenter Warning	Yes	Event	Application
VMware vCenter Server service status	Yes	Event	Internally-generated Event
VMware vCenter Web service status	Yes	Event	Internally-generated Event

**Table 11. vCenter Monitoring—Performance**

Name	Enabled	Type	Provider Name
Process-% Processor Time-vpxd-5.0-minutes	Yes	Measuring	Process-% Processor Time-vpxd-5.0-minutes
Process-Page File Bytes-vpxd-5.0-minutes	Yes	Measuring	Process-Page File Bytes-vpxd-5.0-minutes

**Table 12. VEM Monitoring—Events**

Name	Enabled	Type	Provider Name
Error from nworks VIC Install	Yes	Event	Application
Error from nworks Virtual Infrastructure Collector	Yes	Event	Application
Error from nworksVIC application	Yes	Event	Application
Warning from nworks VIC Install	Yes	Event	Application

Name	Enabled	Type	Provider Name
Warning from nworks Virtual Infrastructure Collector	Yes	Event	Application
Warning from nworksVIC application	Yes	Event	Application

**Table 13. VEM Monitoring—Performance**

Name	Enabled	Type	Provider Name
Process-% Processor Time-nworksVIC-1.0-minutes	Yes	Measuring	Process-% Processor Time-nworksVIC-1.0-minutes
Process-Page File Bytes-nworksWMI-1.0-minutes	Yes	Measuring	Process-Page File Bytes-nworksWMI-1.0-minutes
Process-% Processor Time-MOMService-1.0-minutes	Yes	Measuring	Process-% Processor Time-MOMService-1.0-minutes
Process-% Processor Time-nworksWMI-1.0-minutes	Yes	Measuring	Process-% Processor Time-nworksWMI-1.0-minutes
Process-Page File Bytes-nworksVIC-1.0-minutes	Yes	Measuring	Process-Page File Bytes-nworksVIC-1.0-minutes
Process-% Processor Time-MOMHost-1.0-minutes	Yes	Measuring	Process-% Processor Time-MOMHost-1.0-minutes
MOM Agent-Queue Space Percent Used-<All>-20s	Yes	Measuring	MOM Agent-Queue Space Percent Used-<All>-20s
MOM Agent on the nworks VEM has breached critical threshold for Queue Usage	Yes	Threshold	MOM Agent-Queue Space Percent Used-<All>-20s
MOM Agent on the nworks VEM has breached warning threshold for Queue Usage	Yes	Threshold	MOM Agent-Queue Space Percent Used-<All>-20s

**Table 14. VMStats Metric & Property Collection**

Name	Enabled	Type	Provider Name
Cluster metric collection	Yes	Event	Script-generated Data
DatastoreStats metric collection	Yes	Event	Script-generated Data
Event Driven Cluster	Yes	Event	nworksEventLog
Event Driven DatastoreStats	Yes	Event	nworksEventLog
Event Driven ESX Group discovery	Yes	Event	nworksEventLog
Event Driven Hardware Status Discovery	Yes	Event	nworksEventLog
Event Driven HostCPUStats	Yes	Event	nworksEventLog
Event Driven HostDiskStats	Yes	Event	nworksEventLog
Event Driven HostNetStats	Yes	Event	nworksEventLog
Event Driven HostProperties	Yes	Event	nworksEventLog
Event Driven HostStats	Yes	Event	nworksEventLog
Event Driven ResourcePool and vApp	Yes	Event	nworksEventLog
Event Driven VMDiskProperties	Yes	Event	nworksEventLog
Event Driven VMDiskStats	Yes	Event	nworksEventLog
Event Driven VMNetStats	Yes	Event	nworksEventLog
Event Driven VMStats	Yes	Event	nworksEventLog
HostCPUStats metric collection	Yes	Event	Script-generated Data
HostDiskStats metric collection	Yes	Event	nworks HostDiskStats Collection

Name	Enabled	Type	Provider Name
HostNetStats metric collection	Yes	Event	Script-generated Data
HostProperties collection	Yes	Event	Script-generated Data
HostStats metric collection	Yes	Event	Script-generated Data
ResourcePool metric collection	Yes	Event	Script-generated Data
SensorStats Metric Collection	Yes	Event	Schedule every 5 minutes
VMDiskProperties collection	Yes	Event	Script-generated Data
VMDiskStats metric collection	Yes	Event	Script-generated Data
VMNetStats metric collection	Yes	Event	Script-generated Data
VMStats metric collection	Yes	Event	Script-generated Data

**Table 15. Filters & Consolidators**

Name	Enabled	Type	Provider Name
0333 Consolidate VC2 Login events	Yes	Consolidation	Script-generated Data
0999 Consolidate script events	Yes	Consolidation	Script-generated Data
0999 nworks VMware MP: Script event	Yes	Event	Script-generated Data
1000 Filter metric events	Yes	Database Filter	Script-generated Data
1001 Filter metric events	Yes	Database Filter	Script-generated Data

Name	Enabled	Type	Provider Name
1003 Consolidate VCDiscovery events	Yes	Consolidation	Script-generated Data
1010 Filter property events	Yes	Database Filter	Script-generated Data
1012 Filter property events	Yes	Conditional Filter	Script-generated Data
1555 Filter Event Driven datasource	Yes	Conditional Filter	Script-generated Data
_Collect eventlog event parameters	Yes	Collection	nworksEventLog
_Collect script event parameters	Yes	Collection	Script-generated Data
Consolidate BadUsernameSession Events	Yes	Consolidation	Script-generated Data
Consolidate NoAccessUser Events	Yes	Consolidation	Script-generated Data
Filter Cluster WMI Events	Yes	Database Filter	nworks Cluster Collection
Filter CollectorInternal WMI Events	Yes	Database Filter	nworks VMware Collector Internal Events
Filter DataStoreStats WMI Events	Yes	Database Filter	nworks DataStoreStats Collection
Filter HostCPUStats WMI Events	Yes	Database Filter	nworks HostCPUStats Collection
Filter HostDiskStats WMI Events	Yes	Database Filter	nworks HostDiskStats Collection
Filter HostNetStats WMI Events	Yes	Database Filter	nworks HostNetStats Collection

Name	Enabled	Type	Provider Name
Filter HostProperties WMI Events	Yes	Database Filter	nworks HostProperties Collection
Filter HostStats WMI Events	Yes	Database Filter	nworks HostStats Collection
Filter nworks VMware MP	Yes	Database Filter	Script-generated Data
Filter nworksEventLog	Yes	Database Filter	nworksEventLog
Filter VMDiskProperties WMI Events	Yes	Database Filter	nworks VMDiskProperties Collection
Filter VMDiskStats WMI Events	Yes	Database Filter	nworks VMDiskStats Collection
Filter VMNetStats WMI Events	Yes	Database Filter	nworks VMNetStats Collection
Filter VMResourcePool WMI Events	Yes	Database Filter	nworks ResourcePool Collection
Filter VMStats WMI Events	Yes	Database Filter	nworks VMStats Collection
SV055 Consolidate nworksVIC Version events	Yes	Consolidation	Script-generated Data

**Table 16. \_\_Cluster Alerts**

Name	Enabled	Type	Provider Name
nworks VMware ESX: Cluster CPU State Alert	Yes	Event	Script-generated Data
nworks VMware ESX: Cluster Memory State Alert	Yes	Event	Script-generated Data

Name	Enabled	Type	Provider Name
nworks VMware ESX: Cluster overall Status	Yes	Event	Script-generated Data

**Table 17. Host Alerts**

Name	Enabled	Type	Provider Name
nworks VMware ESX: Host CPU Alert	Yes	Event	Script-generated Data
nworks VMware ESX: Host CPU_Total Alert	Yes	Event	Script-generated Data
nworks VMware ESX: Host Datastore Alert	Yes	Event	Script-generated Data
nworks VMware ESX: Host Disk Alert	Yes	Event	Script-generated Data
nworks VMware ESX: Host Hardware Alert	Yes	Event	Script-generated Data
nworks VMware ESX: Host Memory Alert	Yes	Event	Script-generated Data
nworks VMware ESX: Host Net Alert	Yes	Event	Script-generated Data
nworks VMware ESX: Host Status Alert	Yes	Event	Script-generated Data
nworks VMware ESX: Host Total Disk Alert	Yes	Event	Script-generated Data

**Table 18. \_\_Resource Pool Alerts**

Name	Enabled	Type	Provider Name
nworks vCenter: ResourcePool CPU State Alert	Yes	Event	Script-generated Data
nworks vCenter: ResourcePool Memory State Alert	Yes	Event	Script-generated Data

**Table 19. \_\_VM Alerts**

Name	Enabled	Type	Provider Name
nworks VMware ESX: VM CPU Usage Alert	Yes	Event	Script-generated Data
nworks VMware ESX: VM guestActive Alert	No	Event	Script-generated Data
nworks VMware ESX: VM guestState Alert	Yes	Event	Script-generated Data
nworks VMware ESX: VM heartbeat Alert	Yes	Event	Script-generated Data
nworks VMware ESX: VM Memory Usage Alert	Yes	Event	Script-generated Data
nworks VMware ESX: VM Net State Alert	Yes	Event	Script-generated Data
nworks VMware ESX: VM Performance Threshold Alert	Yes	Event	Script-generated Data
nworks VMware ESX: VM Usage Disk Alert	Yes	Event	Script-generated Data
nworks VMware ESX: VM Total Disk Usage Alert	Yes	Event	Script-generated Data

Name	Enabled	Type	Provider Name
nworks VMware ESX: VM vDisk Usage Alert	Yes	Event	Script-generated Data

**Table 20. Stateless Cluster Alerts**

Name	Enabled	Type	Provider Name
nworks VMware ESX: Cluster CPU Alert	Yes	Event	Script-generated Data
nworks VMware ESX: Cluster Memory Alert	Yes	Event	Script-generated Data
nworks VMware ESX: Cluster Status is Red	Yes	Event	Script-generated Data
nworks VMware ESX: Cluster Status is Yellow	Yes	Event	Script-generated Data

**Table 21. Stateless Host Alerts**

Name	Enabled	Type	Provider Name
nworks VMware ESX: Host Alert	Yes	Event	Script-generated Data
nworks VMware ESX: Host CPU Alert	Yes	Event	Script-generated Data
nworks VMware ESX: Host CPU_Total Alert	Yes	Event	Script-generated Data
nworks VMware ESX: Host Datastore Alert	Yes	Event	Script-generated Data
nworks VMware ESX: Host Disk Alert	Yes	Event	Script-generated Data

Name	Enabled	Type	Provider Name
nworks VMware ESX: Host Memory Alert	Yes	Event	Script-generated Data
nworks VMware ESX: Host Net Alert	Yes	Event	Script-generated Data
nworks VMware ESX: Host Total Disk Alert	Yes	Event	Script-generated Data

**Table 22. Stateless ResourcePoolAlerts**

Name	Enabled	Type	Provider Name
nworks vCenter: ResourcePool CPU Alert	Yes	Event	Script-generated Data
nworks vCenter: ResourcePool Memory Alert	Yes	Event	Script-generated Data

**Table 23. Stateless VM Alerts**

Name	Enabled	Type	Provider Name
nworks VMware ESX: VM Alert	Yes	Event	Script-generated Data
nworks VMware ESX: VM CPU Alert	Yes	Event	Script-generated Data
nworks VMware ESX: VM Disk Alert	Yes	Event	Script-generated Data
nworks VMware ESX: VM Memory Alert	Yes	Event	Script-generated Data
nworks VMware ESX: VM Net Alert	Yes	Event	Script-generated Data
nworks VMware ESX: VM Total Disk Alert	Yes	Event	Script-generated Data

Name	Enabled	Type	Provider Name
nworks VMware ESX: VM vDisk Alert	Yes	Event	Script-generated Data

**Table 24. Cluster Thresholds**

Name	Enabled	Type	Provider Name
nworks VMware ESX: Cluster-cpuUsedPct	Yes	Event	Script-generated Data
nworks VMware ESX: Cluster-memoryPressure	Yes	Event	Script-generated Data
nworks VMware ESX: Cluster-memoryUsedPct	Yes	Event	Script-generated Data

**Table 25. HostCPU Thresholds**

Name	Enabled	Type	Provider Name
nworks VMware ESX: HostCPUStats-cpuUsedPct	Yes	Event	Script-generated Data
nworks VMware ESX: HostStats-cpuGuestUsedPct	No	Event	Script-generated Data
nworks VMware ESX: HostStats-cpuReadyPct	Yes	Event	Script-generated Data
nworks VMware ESX: HostStats-cpuUsedPct_Total	Yes	Event	Script-generated Data

**Table 26. HostDataStore Thresholds**

Name	Enabled	Type	Provider Name
nworks VMware ESX: DataStoreStats-diskFree (KB)	No	Event	Script-generated Data
nworks VMware ESX: DatastoreStats-diskPercUsed	Yes	Event	Script-generated Data

**Table 27. HostDisk Thresholds**

Name	Enabled	Type	Provider Name
nworks VMware ESX: HostDisk - aborts	Yes	Event	Script-generated Data
nworks VMware ESX: HostDisk - diskIOPS	Yes	Event	Script-generated Data
nworks VMware ESX: HostDisk - kbRead	No	Event	Script-generated Data
nworks VMware ESX: HostDisk - kbWritten	No	Event	Script-generated Data
nworks VMware ESX: HostDisk - resets	Yes	Event	Script-generated Data
nworks VMware ESX: HostDisk - totalDiskIOPS	Yes	Event	Script-generated Data
nworks VMware ESX: HostDisk - totalReadLatency	Yes	Event	Script-generated Data
nworks VMware ESX: HostDisk - totalWriteLatency	Yes	Event	Script-generated Data
nworks VMware ESX: HostDisk - queueLatency	Yes	Event	Script-generated Data

**Table 28. Host Memory Thresholds**

Name	Enabled	Type	Provider Name
nworks VMware ESX: HostStats-memoryActive	No	Event	Script-generated Data
nworks VMware ESX: HostStats-memoryAvail	Yes	Event	Script-generated Data
nworks VMware ESX: HostStats-memoryAvailPct	Yes	Event	Script-generated Data
nworks VMware ESX: HostStats-memoryPressure	Yes	Event	Script-generated Data
nworks VMware ESX: HostStats-memorySwapped	No	Event	Script-generated Data
nworks VMware ESX: HostStats-memorySwapRate	Yes	Event	Script-generated Data

**Table 29. HostNet Thresholds**

Name	Enabled	Type	Provider Name
nworks VMware ESX: HostNetStats-kbRx	No	Event	Script-generated Data
nworks VMware ESX: HostNetStats-kbTx	No	Event	Script-generated Data
nworks VMware ESX: HostNetStats-droppedRx	Yes	Event	Script-generated Data
nworks VMware ESX: HostNetStats-droppedTx	Yes	Event	Script-generated Data

**Table 30. ResourcePool and vApp Thresholds**

Name	Enabled	Type	Provider Name
nworks VMware vCenter: ResourcePool-cpuUsageMhz	No	Event	Script-generated Data
nworks VMware vCenter: ResourcePool-cpuUsedPct	Yes	Event	Script-generated Data
nworks VMware vCenter: ResourcePool-memoryUsed	No	Event	Script-generated Data
nworks VMware vCenter: ResourcePool-memoryUsedPct	Yes	Event	Script-generated Data

**Table 31. VM CPU & Memory Thresholds**

Name	Enabled	Type	Provider Name
nworks VMware ESX: VM-cpuReadyPct	Yes	Event	Script-generated Data
nworks VMware ESX: VM-cpuUsedPct	Yes	Event	Script-generated Data
nworks VMware ESX: VM-memoryActivePct	Yes	Event	Script-generated Data
nworks VMware ESX: VM-memoryCtl	Yes	Event	Script-generated Data
nworks VMware ESX: VM-memorySwapped	No	Event	Script-generated Data
VMware ESX: VM-memorySwapRate	Yes	Event	Script-generated Data
nworks VMware ESX: VM-cpuSwapWaitPct	Yes	Event	Script-generated Data

**Table 32. VMDisk Thresholds**

Name	Enabled	Type	Provider Name
nworks VMware ESX: VM vDisk-freePct	Yes	Event	Script-generated Data
nworks VMware ESX: VM-totalDiskIOPS	Yes	Event	Script-generated Data
nworks VMware ESX: VM-totalDiskKb	Yes	Event	Script-generated Data
nworks VMware ESX: VMDiskStats-aborts	Yes	Event	Script-generated Data
nworks VMware ESX: VMDiskStats-kbRead	No	Event	Script-generated Data
nworks VMware ESX: VMDiskStats-kbWritten	No	Event	Script-generated Data
nworks VMware ESX: VMDiskStats-resets	Yes	Event	Script-generated Data

**Table 33. VMNet Thresholds**

Name	Enabled	Type	Provider Name
nworks VMware ESX: VMNetStats-kbRx	No	Event	Script-generated Data
nworks VMware ESX: VMNetStats-kbTx	No	Event	Script-generated Data

**Table 34. VM Thresholds**

Name	Enabled	Type	Provider Name
nworks VMware ESX: VM-snapshotAge	Yes	Event	Script-generated Data

## Contacting Veeam Software

At Veeam Software we pay close attention to comments from our customers. It is important to us not only to quickly help you with your technical support issues — we make it our mission to listen to your input, and to build our products with your suggestions in mind.

Should you have a Customer Support issue or question, please feel free to contact us. We have qualified English speaking technical and customer support staff in the USA and Europe who will help you with any inquiry that you may have.

## Contacting Veeam Support

We offer technical support via telephone, web, and email to [support@veeam.com](mailto:support@veeam.com).

You can find full details of our support policy online at [http://www.veeam.com/files/veeam\\_software\\_support\\_policy.pdf](http://www.veeam.com/files/veeam_software_support_policy.pdf).

## Online Support

Before contacting technical support, you may be able to find a resolution to your issue at Veeam nworks Forum.

Visit <http://www.veeam.com/forums> to raise questions and find information on all Veeam products.

## Phone Support

<b>United States</b>	+1 (614) 339 8252
<b>UK</b>	+44 (845) 508 70 05
<b>Germany</b>	+49-2241-955-89-99
<b>France</b>	+33 (1) 70 61 83 74
<b>Spain</b>	+34 (91) 182 97 60
<b>New Zealand</b>	+64 (9) 974-9594
<b>Australia</b>	+61 (26) 108-4305
<b>Netherlands</b>	+31 (858) 88 06 55
<b>Norway</b>	+47 (85) 40 43 85
<b>Denmark</b>	+45 (78) 77 54 76
<b>Belgium</b>	+32 (78) 48 02 54
<b>Sweden</b>	+46 (10) 199 25 77

## Company Contacts

Office	U.S. Headquarters	EMEA Headquarters	APAC Headquarters	Veeam Software Benelux
<b>Address</b>	6479 Reflections Drive, Suite 200 Columbus, Ohio 43017 USA	400 Thames Valley Park Thames Valley Park Drive Reading, Berkshire RG6 1PT UNITED KINGDOM	Level 21 & 22, 201 Miller Street North Sydney NSW 2060, AUSTRALIA	Evert van de Beekstraat 310, 1118 CX Schiphol Centrum THE NETHERLANDS
<b>Phone</b>	+1-614-339-8200	+44 (0) 1276-804-501	+61 2 8014 7476	+31(0)20 654 18 05
<b>Fax</b>	+1-614-675-9494	+44 (0) 1276-804-676	+61 2 8088 6899	+31(0)20 654 1801