

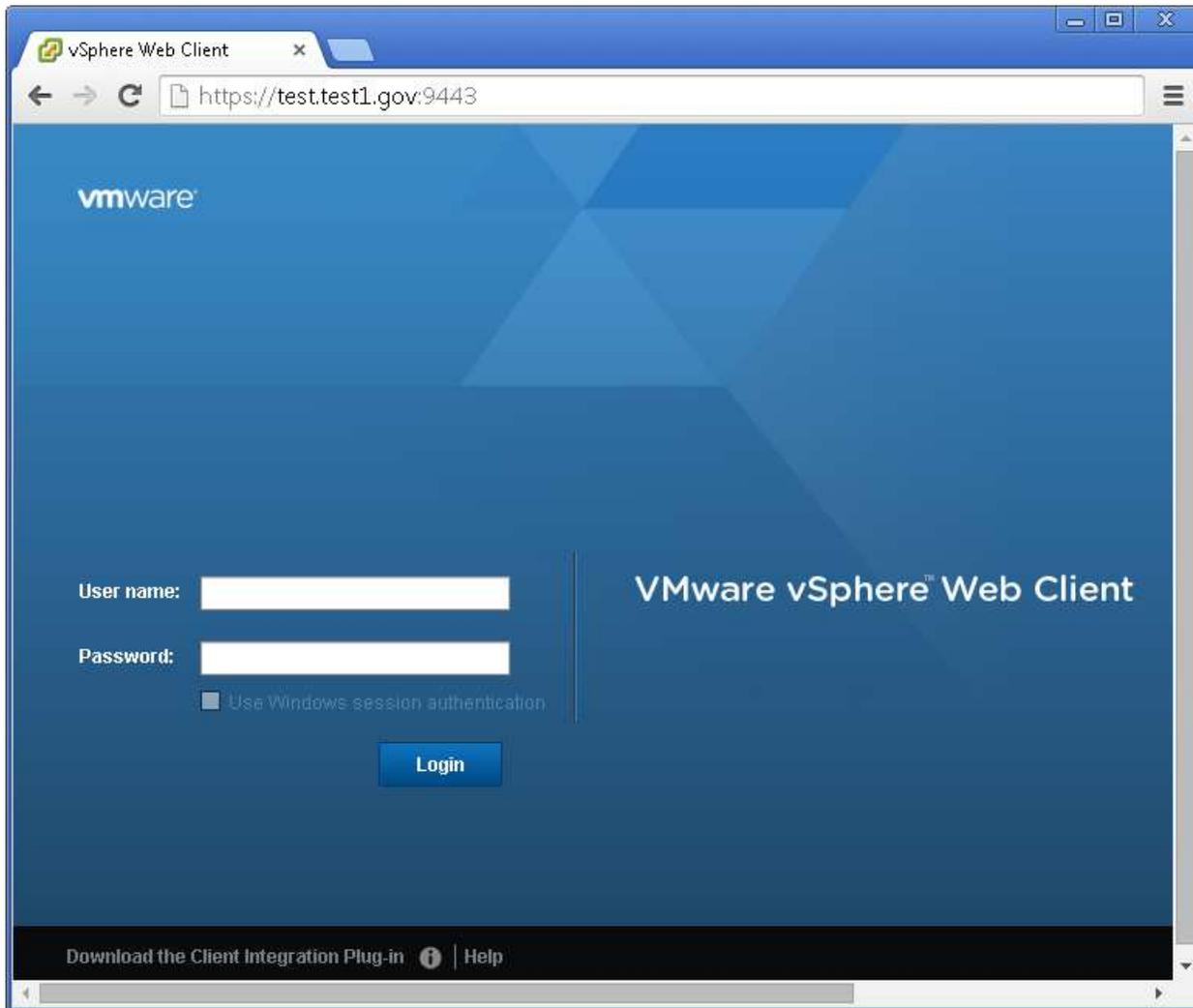
How to Access vRealize Operations

January 20, 2015

Connecting to vCenter

You will connect to your vCenter Server through vSphere web client. Point your browser(Internet Explorer, Chrome, or Firefox) to the vCenter URL provided by OIT.

Your screen should look similar to the screen shot below

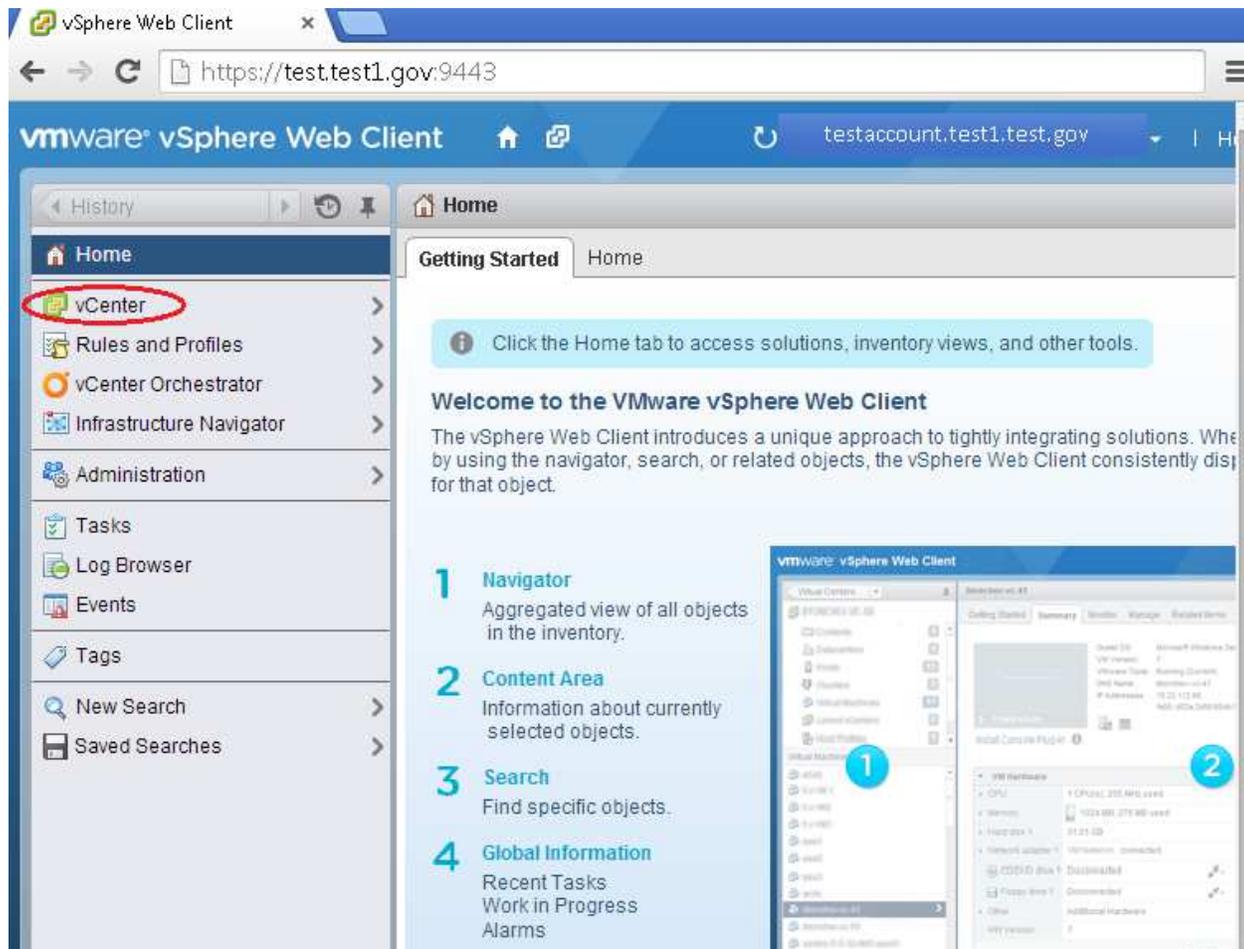


Login to vCenter

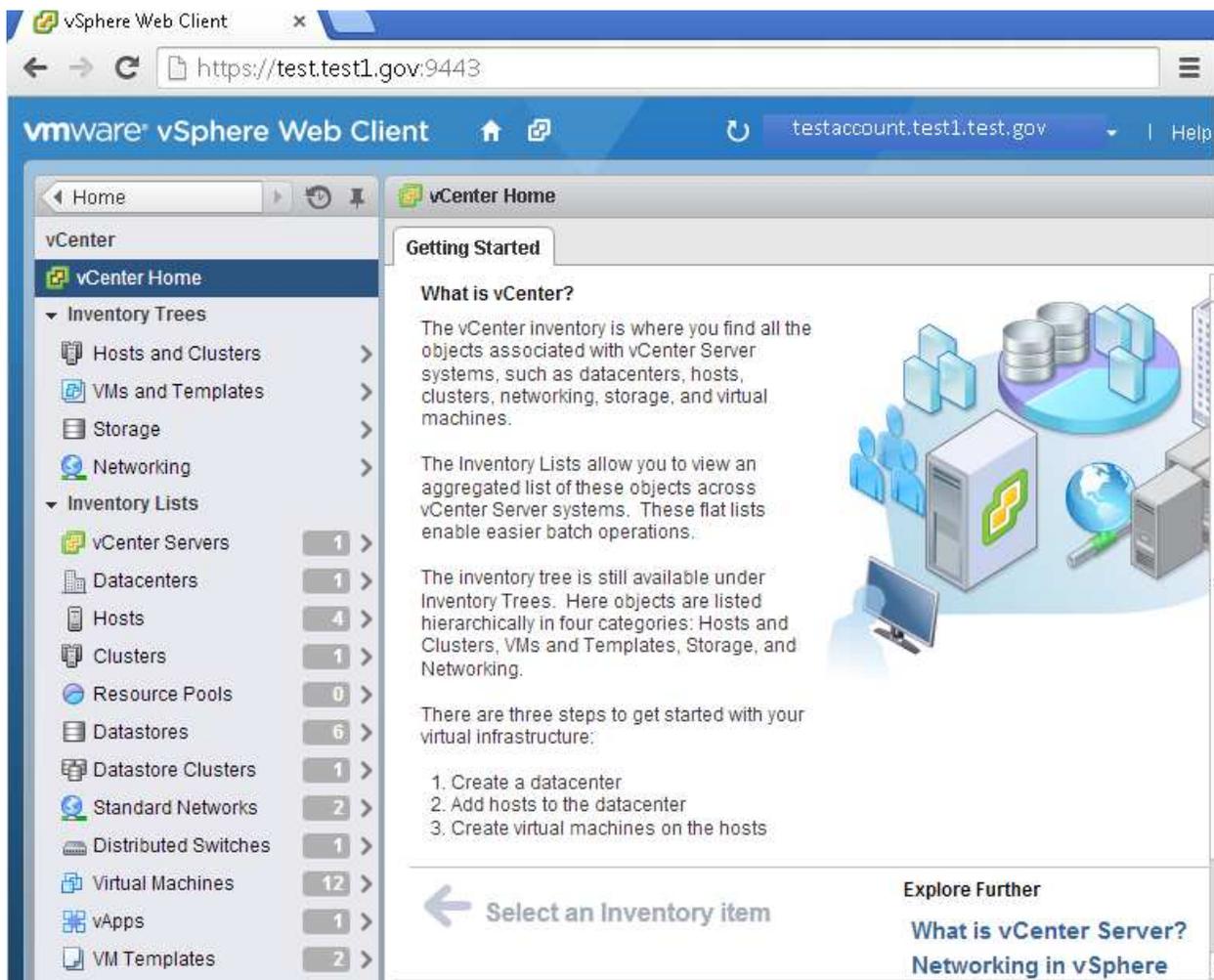
User Name & Password : Your credentials to login to vCenter

vCenter Home

Once you are in the vCenter Web client, Click on “vCenter”



This will take you to vCenter Home, which lists all the components of vCenter.



Using Badges to Monitor Objects in the Virtual Environment

Badges appear in the vSphere Web Client interface when you register an instance of vRealize Operations with a vCenter Server that you want to monitor.

In the vSphere Web Client interface, you can view the vRealize Operations badges and widgets on the **Summary** tab, and on the **Monitor** tab, under **Health**, for the following objects in the inventory tree.

Supported Object Types

| Icon | Description |
|--|-----------------------------|
|  | vCenter Server system |
|  | Datacenter |
|  | Cluster |
|  | ESX/ESXi host |
|  | Datastore |
|  | Powered on virtual machine |
|  | Powered off virtual machine |

Your vRealize Operations license determines which badges and widgets you can see in the vSphere Web Client.

Badges that you see depending on the Licenses as shown below

| vSphere Web Client Component | Foundation License | Standard or Advanced License |
|----------------------------------|---------------------|------------------------------|
| Summary tab | Health badge | Health badge |
| | | Risk badge |
| | | Efficiency badge |
| Health tab under the Monitor tab | Health Trend widget | Health Trend widget |
| | Workload badge | Workload badge |
| | Faults badge | Anomalies badge |
| | | Faults badge |

You can pick any item from Inventory trees or from Inventory Items to start with.

If you want to navigate to a particular Virtual machine, “VMs and Templates” is the good place, since you can see folders there for easy navigation.

In this example we click on “VMs and Templates”, this will take you to the vCenter DataCenter. Navigate to a desired folder, then select the Virtual machine you want to view health statistics for.

The screenshot displays the VMware vSphere Web Client interface. The browser address bar shows `https://test.test1.gov:9443`. The main navigation bar includes the VMware logo, the text "vSphere Web Client", and a user account dropdown for "testaccount.test1.test.gov".

The left-hand navigation pane shows a tree structure under "vCenter":

- TEST.TEST1.GOV
 - Lab
 - Agency1
 - Agency4
 - Discovered virtual machine
 - IT-Managed
 - Templates
 - TSM Lab Testing
 - 456testServer
 - 123testServer

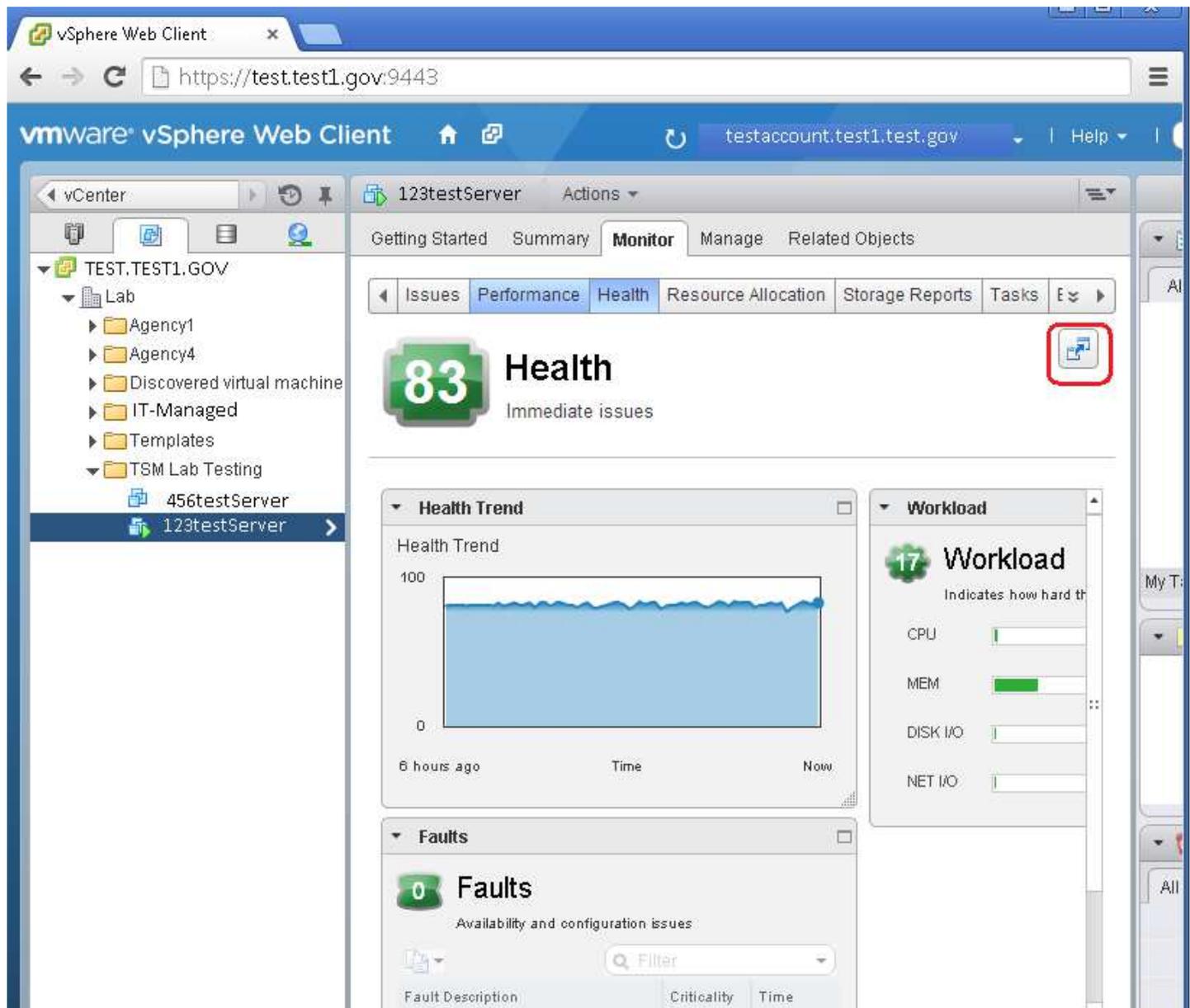
The main content area is titled "123testServer" and features a "Monitor" tab highlighted with a red box. Below the tabs, the "Health" sub-tab is also highlighted with a red box. The Health section displays a large green badge with the number "83" and the text "Health" and "Immediate issues".

Below the Health section, there are three panels:

- Health Trend:** A line graph showing health status over time from "6 hours ago" to "Now". The y-axis ranges from 0 to 100. The graph shows a stable, high health score.
- Faults:** A section titled "0 Faults" with the subtitle "Availability and configuration issues". It includes a search filter and a table with columns for "Fault Description", "Criticality", and "Time". The table is currently empty.
- Workload:** A section titled "17 Workload" with the subtitle "Indicates how hard th...". It contains four progress bars for "CPU", "MEM", "DISK I/O", and "NET I/O".

vCenter Operations Manager

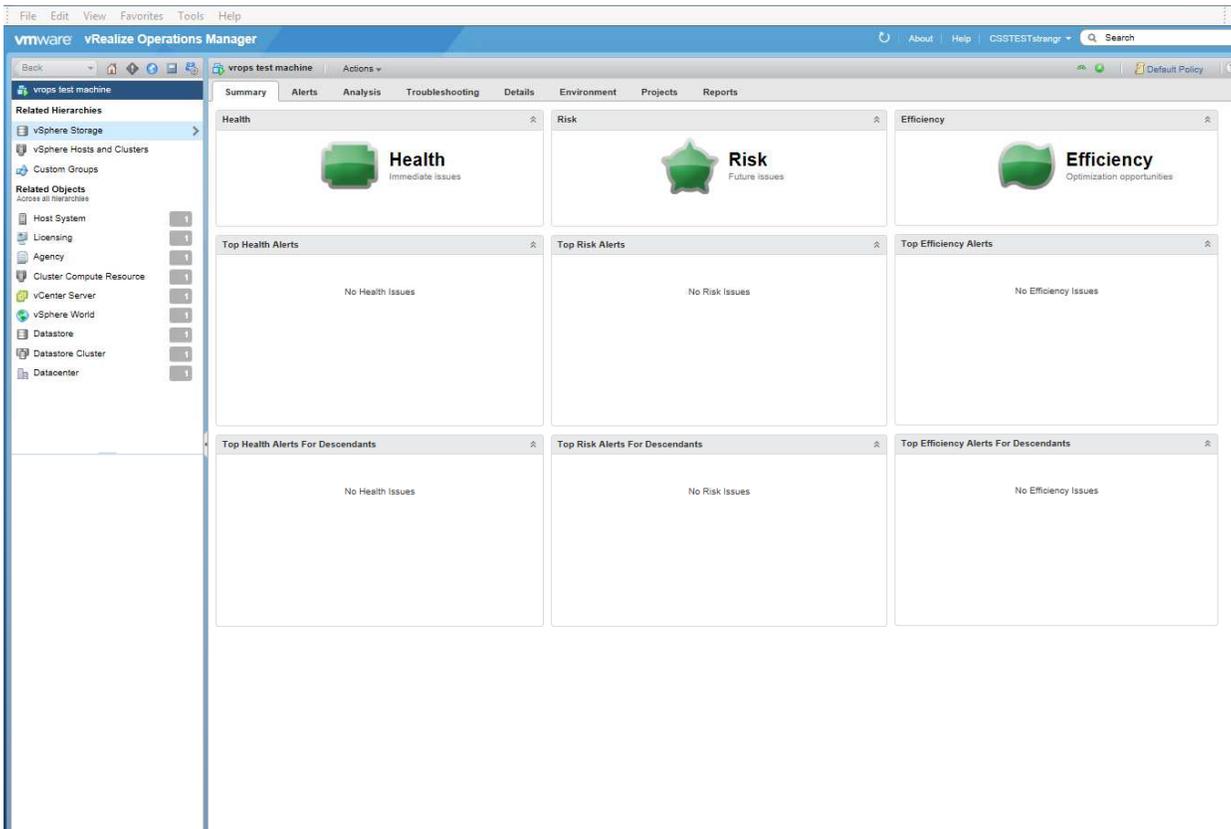
If you want to view more details about the causes for a badge score, you can click the **View details in vRealize Operations** icon  at the upper right of the **Health** tab to open the vRealize Operations user interface. Clicking on that icon takes you to vROPs-VSphere web console.



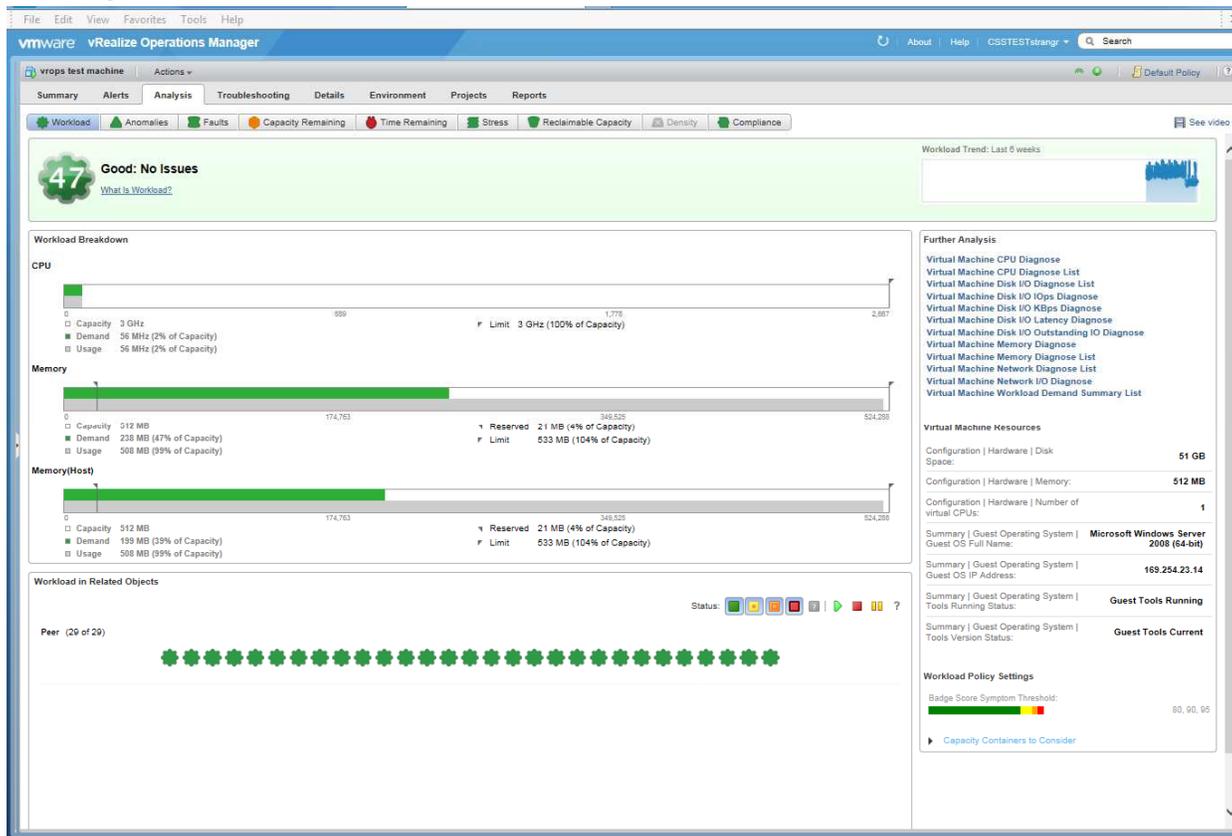
The screenshot displays the vSphere Web Client interface for a virtual machine named '123testServer'. The 'Monitor' tab is active, showing the 'Health' section with a score of 83 and the text 'Immediate issues'. A red box highlights the 'View details in vRealize Operations' icon in the top right corner of the Health section. Below the Health score are three sections: 'Health Trend' showing a line graph of health over time, 'Workload' showing a score of 17 and indicators for CPU, MEM, DISK I/O, and NET I/O, and 'Faults' showing a score of 0 and a list of faults with columns for Fault Description, Criticality, and Time.

Here you will find more details of the workload on the VM you are looking for.

“Summary” Tab



“Analysis” Tab



The Health Badge

The health rating gives you an overview of the current operational state of an inventory object.

The Health badge answers the question "How is my system doing right now?" Health identifies the current problems in the system or issues that need to be resolved immediately to avoid problems. Therefore, health is the first high-level indicator that you should look at to see if your system needs immediate attention. The Health badge breaks down into several sub-badges: Workload, Anomalies, and Faults.

vRealize Operations calculates the Health score by using the scores of the sub-badges that the Health badge contains. Faults are given precedence in the Health score because they describe existing problems, while Workload and Anomalies are combined to identify performance problems. This approach ensures that the score of the Health badge reflects the actual state of the object, without exaggerating or underestimating problems.

The Health score ranges between 0 (bad) and 100 (good). The badge changes its color based on the badge score thresholds that are set by the vRealize Operations administrator.

Object Health States

| Badge Icon | Description | User Action |
|--|--|---|
|  | The health of the object is normal. | No attention required. |
|  | The object is experiencing some level of problems. | At the upper right of the Health tab, click the View details icon  to open the VMware vRealize Operations user interface. Check the Details tab and take appropriate action. |
|  | The object might have serious problems. | At the upper right of the Health tab, click the View details icon  to open the VMware vRealize Operations user interface. Check the Details tab and take appropriate action as soon as possible. |
|  | The object is either not functioning properly or will stop functioning soon. | At the upper right of the Health tab, click the View details icon  to open the VMware vRealize Operations user interface. Check the Details tab to identify the most probable cause of the problem and act immediately. |
|  | No data is available. | |
|  | The object is offline. | |

A vRealize Operations administrator can change the badge score thresholds. For example, a green Health badge can indicate a score above 80 instead of 75, as set by default.

The Workload Badge

The analytics algorithms of vRealize Operations combine the metrics that show the demand for resources on a virtual machine or another object in a single value, called the workload.

These metrics include CPU utilization, memory usage, and so on.

vRealize Operations indicates the workload by a colored icon that is based on the defined badge score thresholds.

The Workload score ranges from 0 (good) to over 100 (bad). The badge changes its color based on the badge score thresholds that are set by the vRealize Operations administrator.

An object with a workload score of 0 is not being used. An object with a workload score above 100 is trying to access more resources than are available to it. In this case, you might have to allocate more resources to the object or move some tasks to other objects.

Object Workload States

| Badge Icon | Description | User Action |
|--|--|--|
|  | Workload on the object is not excessive. | No attention required. |
|  | The object is experiencing some high resource workloads. | At the upper right of the Health tab, click the View details icon  to open the VMware vRealize Operations user interface. Check the Details tab to identify which resources experience abnormal workload. |
|  | Workload on the object is approaching its capacity in at least one area. | At the upper right of the Health tab, click the View details icon  to open the VMware vRealize Operations user interface. Check the Details tab to identify which resources are limited, and take appropriate action as soon as possible. |
|  | Workload on the object is at or over its capacity in one or more areas. | At the upper right of the Health tab, click the View details icon  to open the VMware vRealize Operations user interface. Check the Details tab to identify which resources are exhausted. Act immediately to avoid or correct problems. |
|  | No data is available. | |
|  | The object is offline. | |

The Faults Badge

The Faults badge quantifies the severity of problems the selected object is experiencing.

The Faults score is calculated based on events published by the vCenter Server. This score includes events like loss of redundancy in NICs or HBAs, memory checksum errors, HA failover problems, CIM events, and so on. Faults are included in the health score because they require immediate resolution, while items that contribute to the risk score might not be immediate, but still require your attention.

Each resource in vRealize Operations has a faults score ranging from 0 (no faults) to 100 (critical faults). The scores are computed based on the severity of the underlying problems.

When more than one fault-related problems exists on the resource, the faults score is based on the most severe problem.

The higher the Faults score, the lower the resulting health for that resource. Resolution of the problem indicated by the Fault will restore the resource's health score.

While the Faults score ranges between 0 to 100, the badge changes color based on the badge score thresholds that are set by the vRealize Operations administrator. For example, a green Faults badge can indicate a score below 40 instead of a score below 25 (the system default).

Unlike other badges in vRealize Operations, the Faults badge does not have an alert generated from its threshold score. Instead, each problem generates its own fault alert, and resolution of the problem both clears or cancels the alert and lowers the badge score.

Object Faults States

| Badge Icon | Description | User Action |
|--|--|--|
|  | No faults are registered on the selected object. | No attention required. |
|  | Faults of low importance are registered on the selected object. | At the upper right of the Health tab, click the View details icon  to open the VMware vRealize Operations user interface. Check the Details tab to find more information and take appropriate action. |
|  | Faults of high importance are registered on the selected object. | At the upper right of the Health tab, click the View details icon  to open the VMware vRealize Operations user interface. Check the Details tab to find more information about the reported faults, and take appropriate action as soon as possible. |
|  | Faults of critical importance are registered on the selected object. | At the upper right of the Health tab, click the View details icon  to open the VMware vRealize Operations user interface. Check the Details tab to find more information about the reported faults, and act immediately to avoid or correct problems. |
|  | No data is available. | |
|  | The object is offline. | |

More Information

More information for vRealize Operations may be found at the VMware website
<https://www.vmware.com/support/pubs/vrealize-operations-manager-pubs.html>