

dinManage Analytics and Monitoring

User Guide

Version 1.0

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Disclaimer: Data/ records shown in the images are used for illustrative purposes only and have no relation to original data; this data has been used solely to explain system functionality. Please enter original data in the system when using the system.

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Chapter 1

Setting up Analytics and Monitoring

Overview

Analytics feature enable dinManage users to grab and view real-time VM stats within dinManage. The stats presented include the utility and availability of CPU, Memory, Disk, and Network in and out time. Analytics data can be viewed in real-time, or historically. You can also setup monitoring alerts, which provide notifications when specified utilizations reach certain thresholds.

This chapter includes information about installing and setting up Analytics and Monitoring features on your virtual machine.

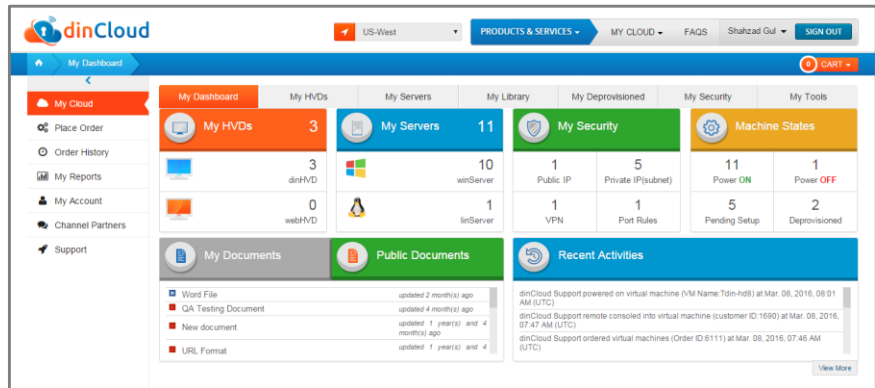
Installing Analytics Agent

To enable Analytics and Monitoring features for a VM, you will be required to download and install the Analytics Agent on the relevant VM.

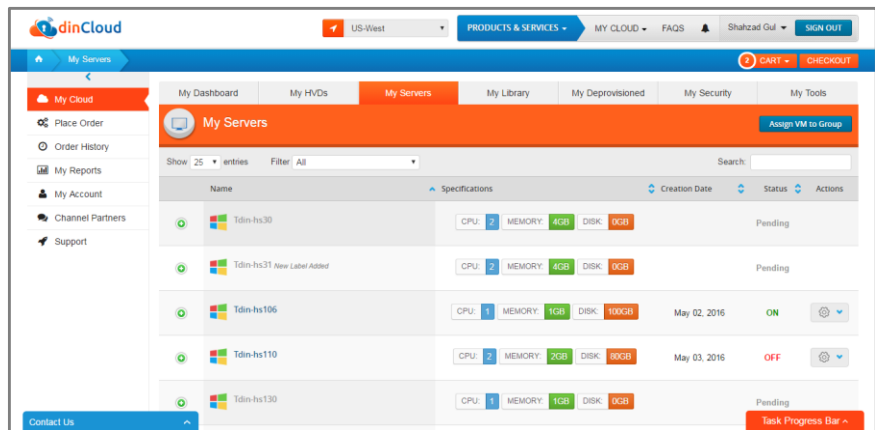
To download and install the Analytics Agent, you will be required to perform the following steps:

- 1 Using a supported browser, log in to your dinManage account.

The dinManage Homepage displays.

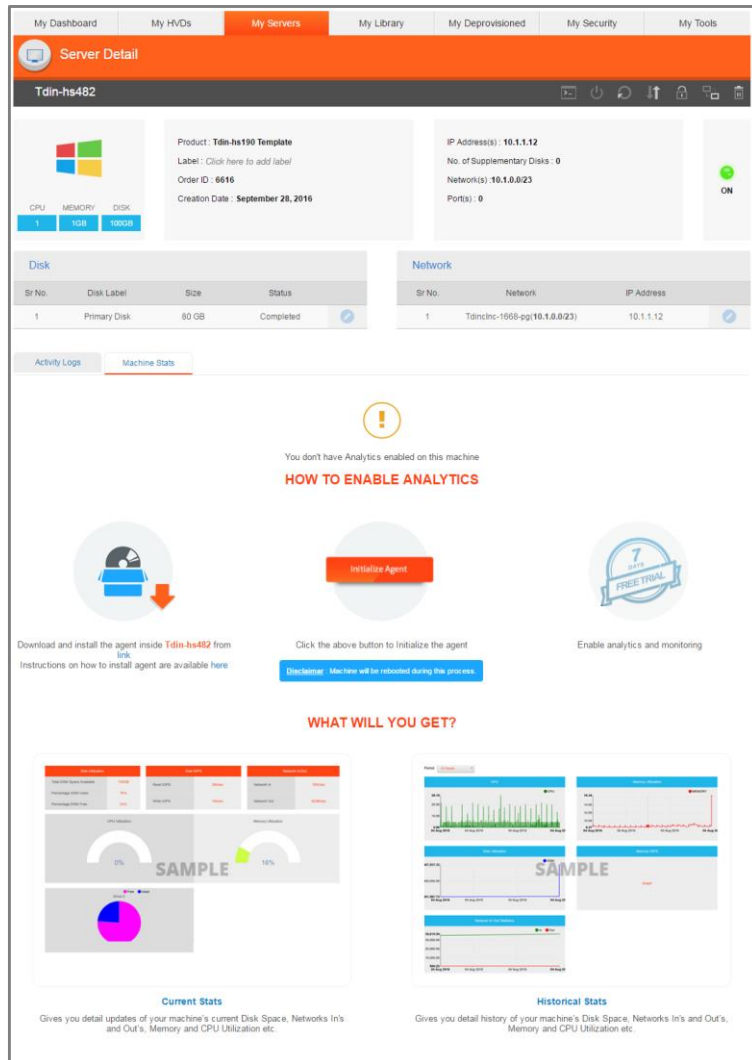


- 2 Click **My Servers** tab if the relevant VM is a server machine, or click **My HVDs** if the VM is listed as an HVD. In either case a list of VMs displays.



- 3 Click the name of the VM on which the Analytics Agent needs to be installed.

The Server Detail screen displays. Click the **Machine Stats** tab.



My Dashboard My HVDs **My Servers** My Library My Deprovisioned My Security My Tools

Server Detail

Tdin-hs482

Product: **Tdin-hs190 Template**
 Label: [Click here to add label](#)
 Order ID: **6616**
 Creation Date: **September 28, 2016**

IP Address(s): **10.1.1.12**
 No. of Supplementary Disks: **0**
 Network(s): **10.1.0.0/23**
 Ports: **0**

ON

Disk

Sr No.	Disk Label	Size	Status
1	Primary Disk	80 GB	Completed

Network

Sr No.	Network	IP Address
1	Tdin-hs-190-10.1.0.0/23	10.1.1.12

Activity Logs **Machine Stats**

HOW TO ENABLE ANALYTICS

You don't have Analytics enabled on this machine

1 Download and install the agent inside **Tdin-hs482** from [link](#). Instructions on how to install agent are available [here](#).

2 Click the above button to Initialize the agent

3 Enable analytics and monitoring

WHAT WILL YOU GET?

Current Stats

Gives you detail updates of your machine's current Disk Space, Networks In's and Out's, Memory and CPU Utilization etc.

Historical Stats

Gives you detail history of your machine's Disk Space, Networks In's and Out's, Memory and CPU Utilization etc.

- Under the Machine Stats tab, click the link under the *Download and Install Agent* icon.



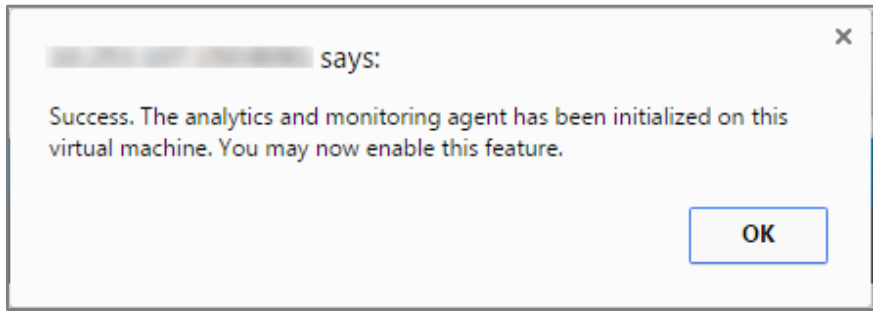
Make sure you are performing this task on the machine for which you want to enable Analytics and Monitoring features.

- 5 Once you have installed the Analytics Agent on the target VM, using the installer file you just downloaded, click [Initialize Agent] under the **Machine Stats** tab.



For more information about installing the Analytics Agent for guest VMs, refer to the *dinManage Agents Installation Guide*.

- 6 A confirmation message displays, notifying you that the agent has been successfully initialized on this VM.

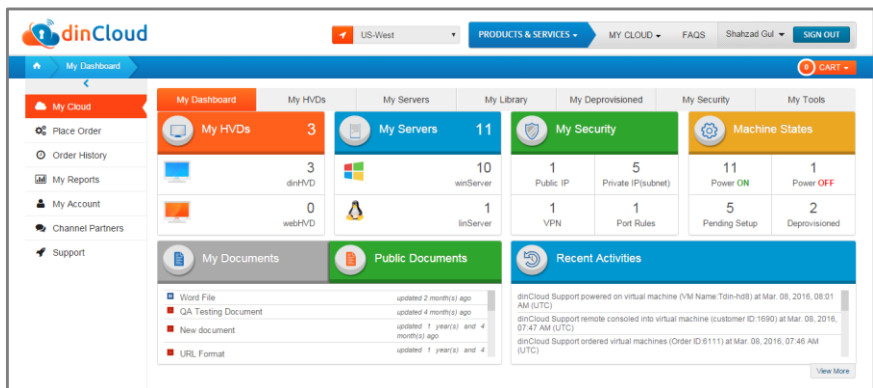


Activating Analytics and Monitoring Features

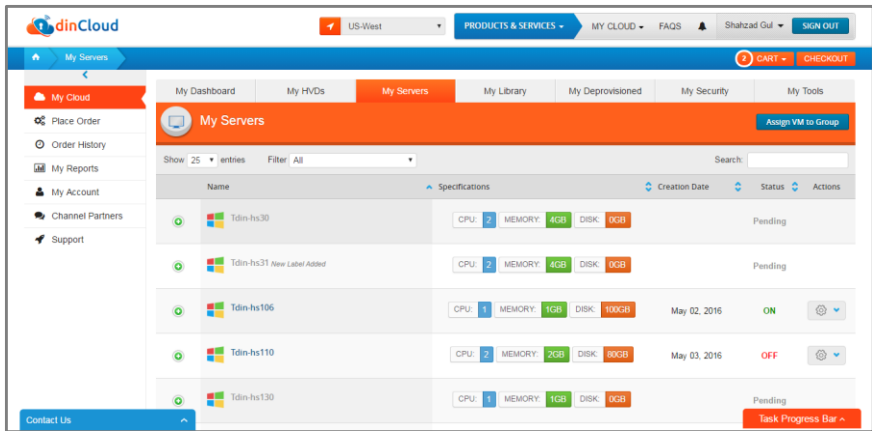
To activate Analytics and Monitoring features on your VM, you will be required to perform the following steps:

- 1 Using a supported browser, log in to your dinManage account.

The dinManage Homepage displays.

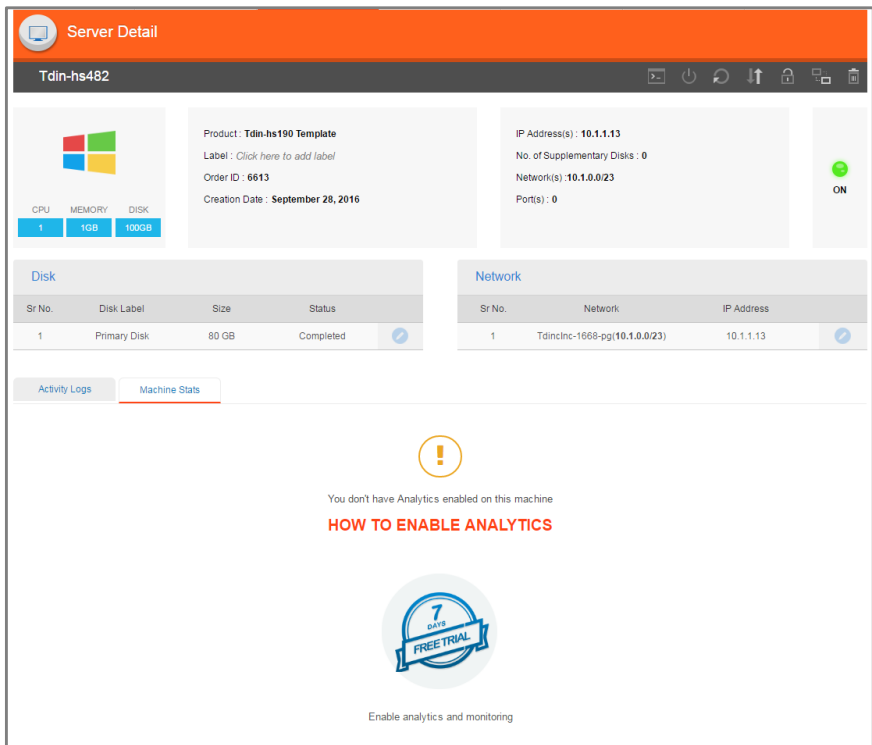


- 2 Click **My Servers** tab if the relevant VM is a server machine, or click **My HVDs** if the VM is listed as an HVD. In either case a list of VMs displays.



- 3 Click the name of the VM for which the Analytics and Monitoring features will be enabled.

The Server Detail screen displays. Click the **Machine Stats** tab.



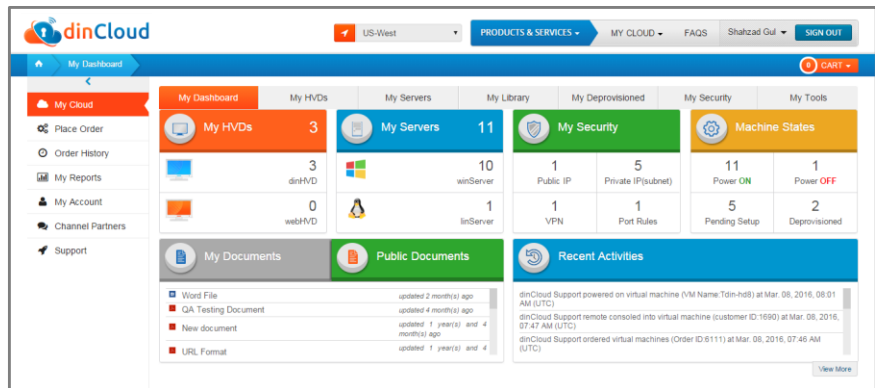
- 4 Under the Machine Stats tab, click the **Enable analytics and monitoring** icon.
- 5 You have successfully enabled analytics and monitoring features on the target VM. After the trial period ends, you may continue using these features for a charge.

Disabling/Enabling Analytics and Monitoring

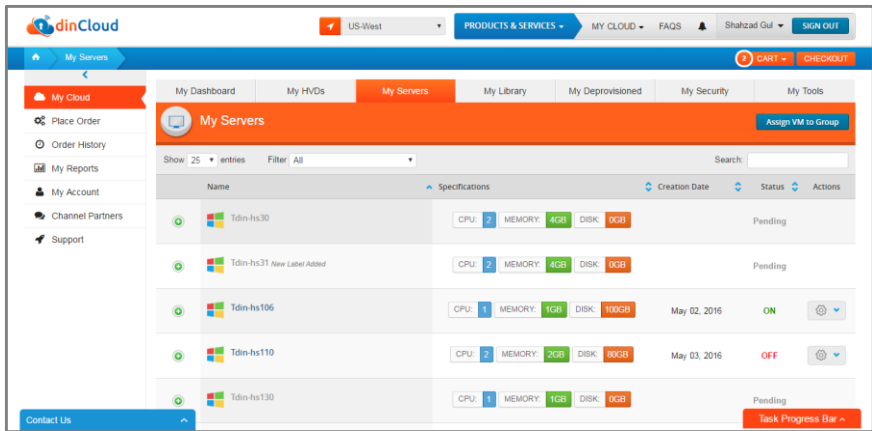
To disable or enable Analytics and Monitoring features on your VM (on which agent installation and setup is already complete), you will be required to perform the following steps:

- 1 Using a supported browser, log in to your dinManage account.

The dinManage Homepage displays.



- 2 Click **My Servers** tab if the relevant VM is a server machine, or click **My HVDs** if the VM is listed as an HVD. In either case a list of VMs displays.



- 3 Click the name of the VM for which the Analytics and Monitoring features will be disabled or enabled.

The Server Detail screen displays. Click the **Machine Stats** tab.



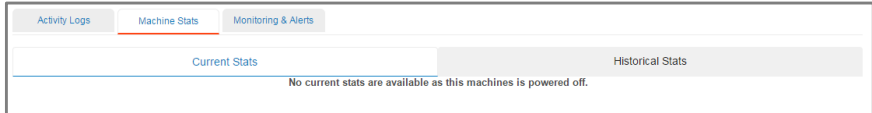
- 4 Click [Disable] against the feature you want to disable.
- 5 A confirmation message is displayed. The relevant feature is now disabled.
- 6 To re-enable disabled analytics or monitoring features, under the same tab, click [Activate] against the feature you want to enable.



- 7 A confirmation message is displayed. The relevant feature is now reactivated.

Important Notes

- 1 In case a user powers off a VM, the agent also deactivates, and a message is displayed once you click the **Machine Stats** tab while the relevant VM is powered off, as shown in the image below. The Analytics data automatically reappears under the **Machine Stats** tab once the relevant VM is powered back on.



- 2 On a VM that has agent installed and running, you will be required to click the *start 7 day trial* icon to start viewing the fully functional analytics screens on **VM Details** page. Your billing for Analytics feature shall automatically begin once the 7 day trial period ends, unless you disable the Analytics feature before the end of your trial period.
- 3 You will also receive a reminder email before your Analytics trial period expires.

Chapter 2

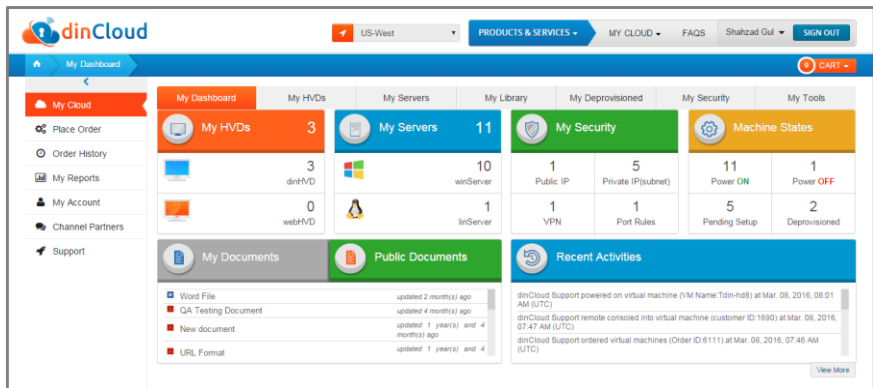
Working with dinManage Analytics

Viewing Current Stats

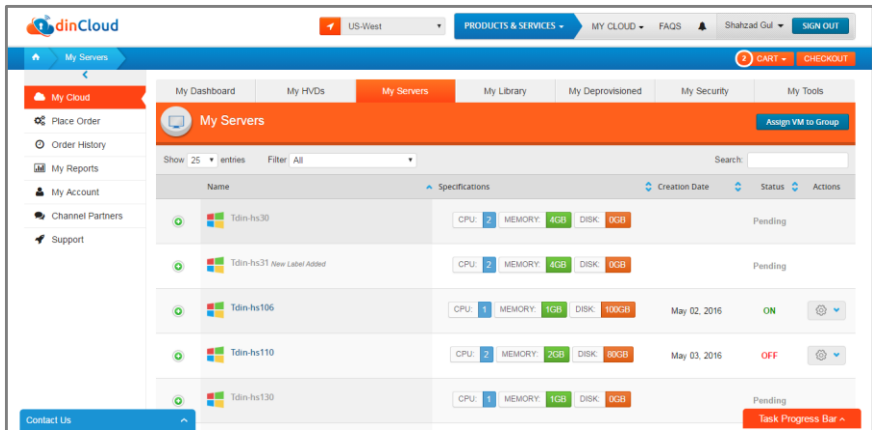
You can view the current live stats of a VM with Analytics enabled. Perform the following steps to view current stats for a VM.

- 1 Using a supported browser, log in to your dinManage account.

The dinManage Homepage displays.

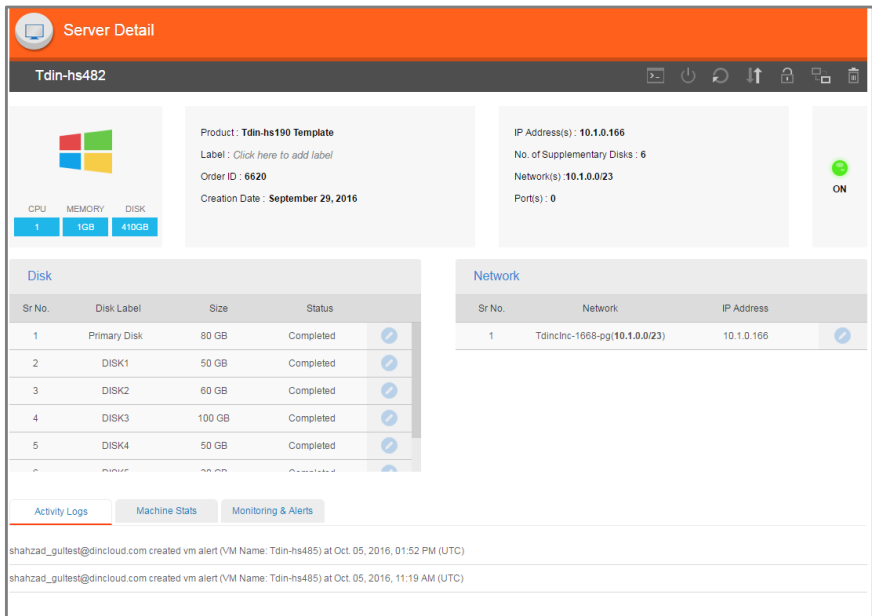


- 2 Click **My Servers** tab if the relevant VM is a server machine, or click **My HVDs** if the VM is listed as an HVD. In either case a list of VMs displays.



The screenshot shows the 'My Servers' page in the dinCloud interface. The top navigation bar includes 'US-West', 'PRODUCTS & SERVICES', 'MY CLOUD', 'FAQS', 'Shahzad Gul', and 'SIGN OUT'. The left sidebar has links for 'My Cloud', 'Place Order', 'Order History', 'My Reports', 'My Account', 'Channel Partners', and 'Support'. The main content area is titled 'My Servers' and includes a search bar and a table of servers. The table has columns for Name, Specifications, Creation Date, Status, and Actions. The servers listed are Tdin-hs30, Tdin-hs31 (New Label Added), Tdin-hs106, Tdin-hs110, and Tdin-hs130. Tdin-hs106 and Tdin-hs110 are in 'ON' status, while others are 'Pending' or 'OFF'.

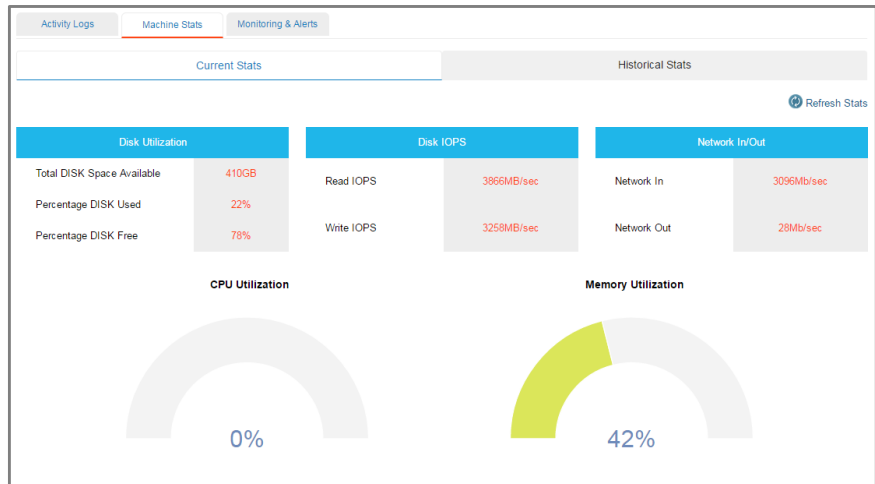
- 3 Click the name of the VM for which you want to view Analytics stats.
The Server Detail screen displays.



The screenshot shows the 'Server Detail' page for VM Tdin-hs482. The page displays various details about the VM, including its name, product (Tdin-hs190 Template), label, order ID (6620), and creation date (September 29, 2016). It also shows hardware specifications: CPU (1), MEMORY (1GB), and DISK (410GB). The status is 'ON'. Below this, there are sections for 'Disk' and 'Network'. The 'Disk' section shows a table of disks with columns for Sr No., Disk Label, Size, and Status. The 'Network' section shows a table of network interfaces with columns for Sr No., Network, and IP Address. At the bottom, there are tabs for 'Activity Logs', 'Machine Stats', and 'Monitoring & Alerts'. The 'Machine Stats' tab is selected, showing a log of VM creation events.

- 4 Click the **Machine Stats** tab.

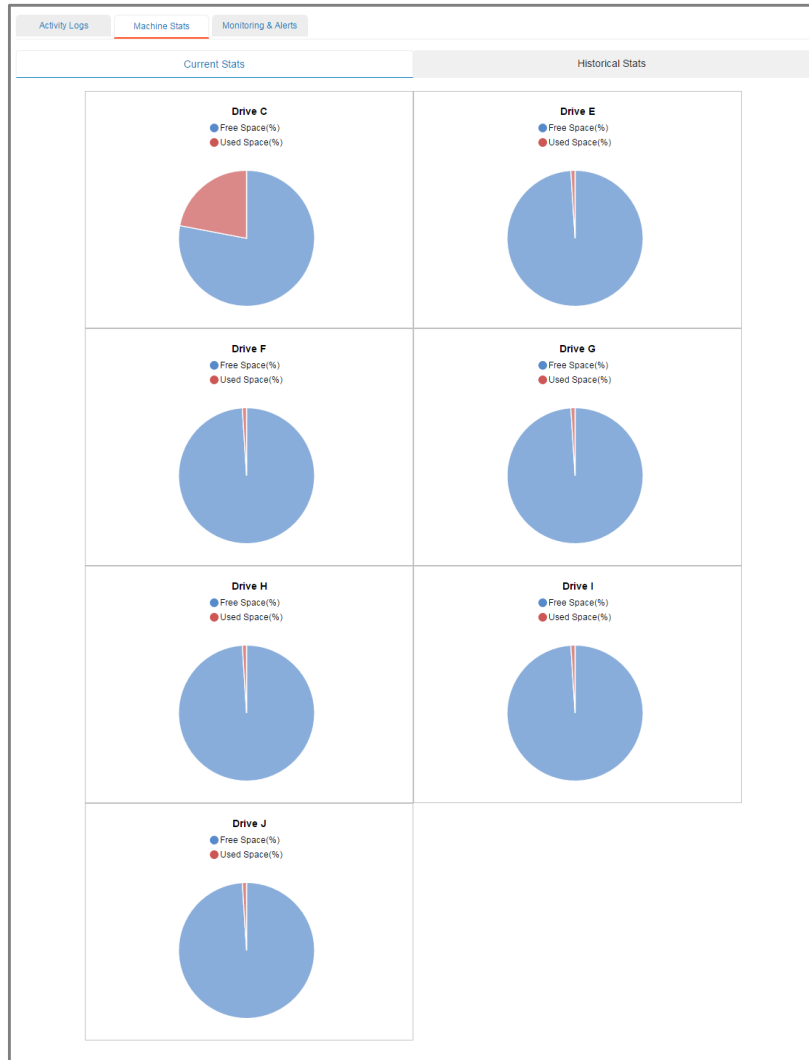
The Current Stats display under the Machine Stats tab.



5 The following current stats are displayed:

- Disk Utilization
 - Total disk space available
 - Percentage disk used
 - Percentage disk free
- Disk IOPS
 - Read IOPS
 - Write IOPS
- Network In/Out
 - Network In
 - Network Out

- CPU utilization graph
- Memory utilization graph
- Drive utilization graphs (including all supplementary disks)

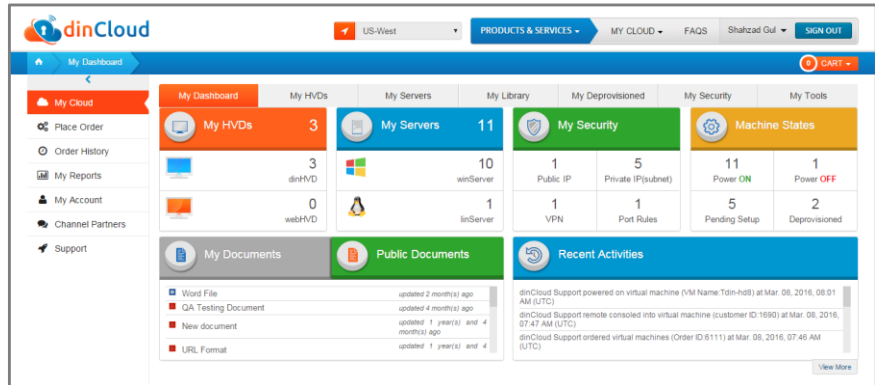


Viewing Historical Stats

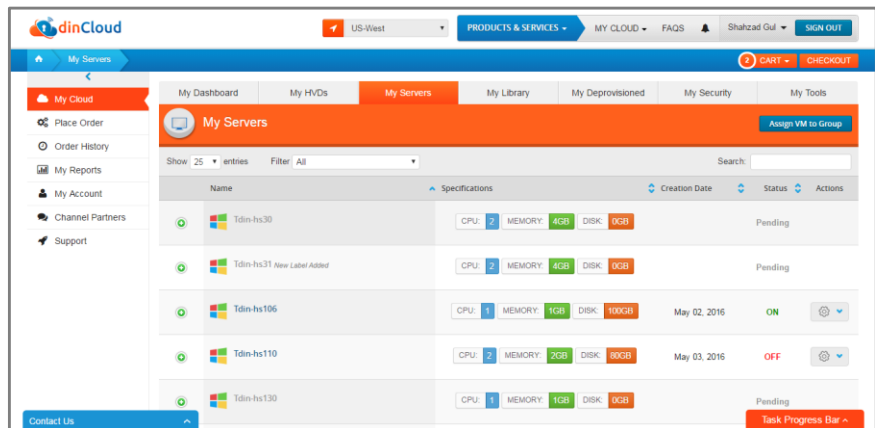
You can view the historical stats of a VM with Analytics enabled. Perform the following steps to view historical stats for a VM:

- 1 Using a supported browser, log in to your dinManage account.

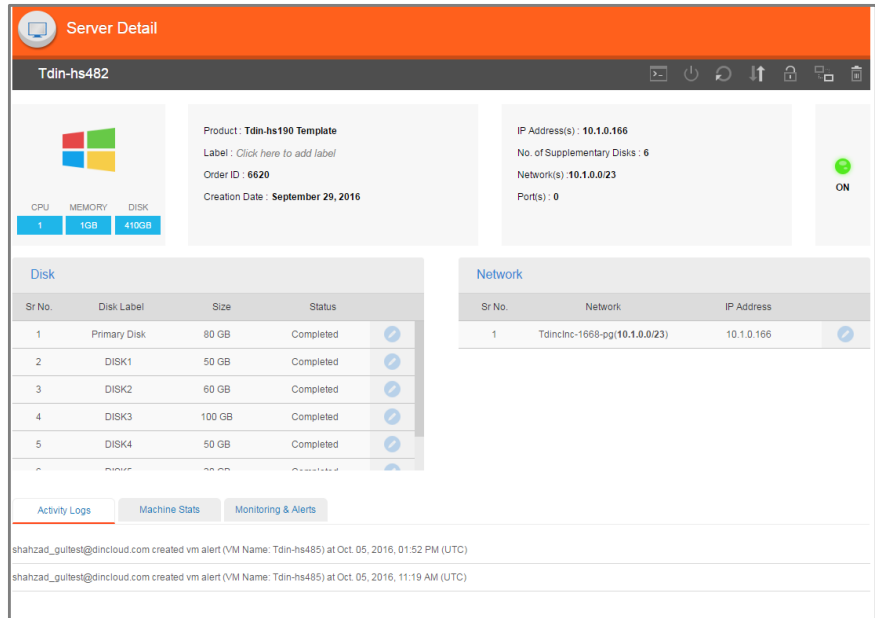
The dinManage Homepage displays.



- 2 Click **My Servers** tab if the relevant VM is a server machine, or click **My HVDs** if the VM is listed as an HVD. In either case a list of VMs displays.



- 3 Click the name of the VM for which you want to view Analytics stats.
The Server Detail screen displays.



Server Detail
Tdin-hs482

CPU 1 **MEMORY** 1GB **DISK** 410GB

Product: Tdin-hs190 Template
Label: [Click here to add label](#)
Order ID: 6620
Creation Date: September 29, 2016

IP Address(s): 10.1.0.166
No. of Supplementary Disks: 6
Network(s): 10.1.0.0/23
Port(s): 0

ON

Disk

Sr No.	Disk Label	Size	Status
1	Primary Disk	80 GB	Completed
2	DISK1	50 GB	Completed
3	DISK2	60 GB	Completed
4	DISK3	100 GB	Completed
5	DISK4	50 GB	Completed

Network

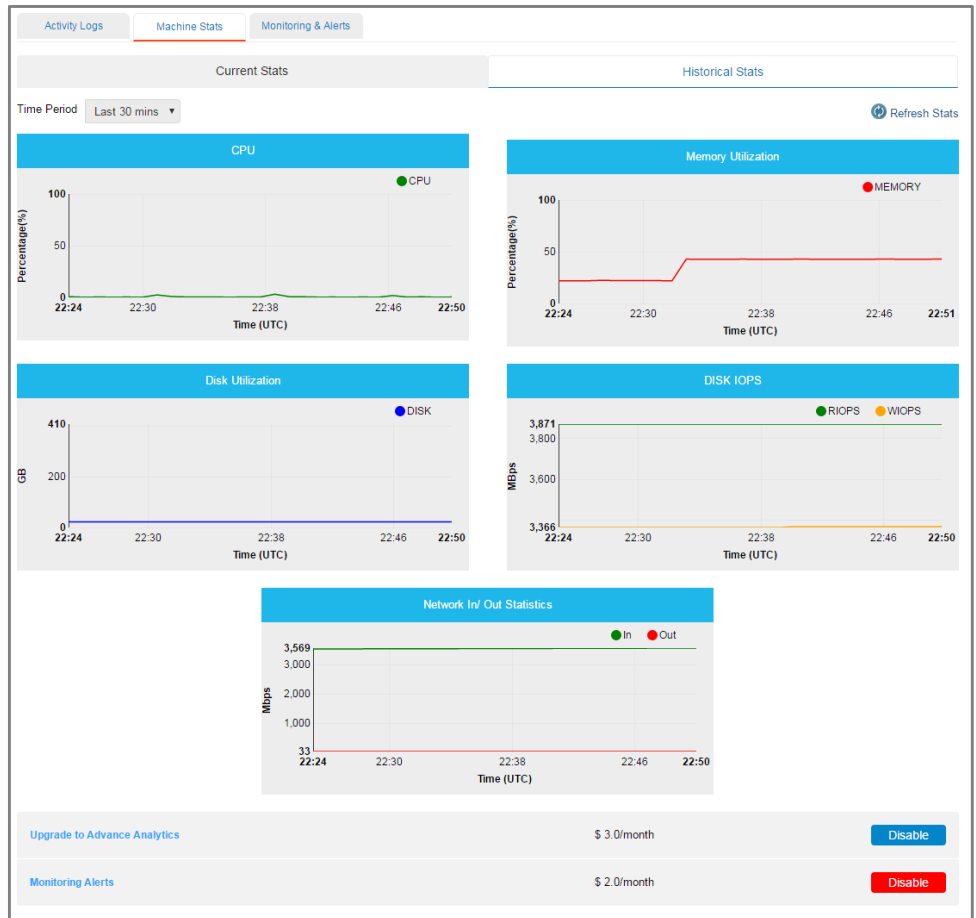
Sr No.	Network	IP Address
1	Tdininc-1668-pg(10.1.0.0/23)	10.1.0.166

Activity Logs **Machine Stats** **Monitoring & Alerts**

shahzad_gullest@dincloud.com created vm alert (VM Name: Tdin-hs485) at Oct. 05, 2016, 01:52 PM (UTC)
shahzad_gullest@dincloud.com created vm alert (VM Name: Tdin-hs485) at Oct. 05, 2016, 11:19 AM (UTC)

- 4 Click the **Machine Stats** tab, and then click the **Historical Stats** tab.

The Historical Stats display under the Machine Stats tab.



5 The following historical stats are displayed:

- CPU utilization
- Memory utilization
- Network In/Out statistics
- Disk utilization (total)
- Disk IOPS

- 6 By default historical data of the latest 30 minutes are displayed. You can change this setting by selecting one of the following time period ranges from the **Time Period** drop-down:
- Last 30 minutes
 - 3 Hours
 - 6 Hours
 - 12 Hours
 - 24 Hours
 - 7 Days
 - 15 Days.



To refresh the stats and graphs currently displayed, click [Refresh Stats].

Chapter 3

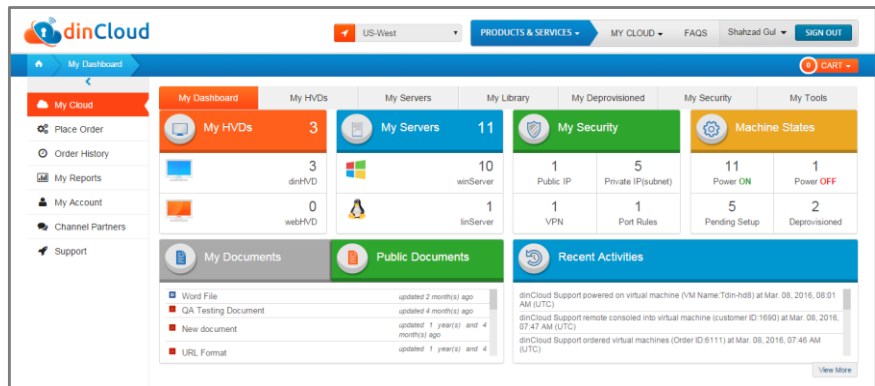
Working with dinManage Monitoring

Creating a New Alert

To create a new alert for a VM, you will be required to perform the following steps:

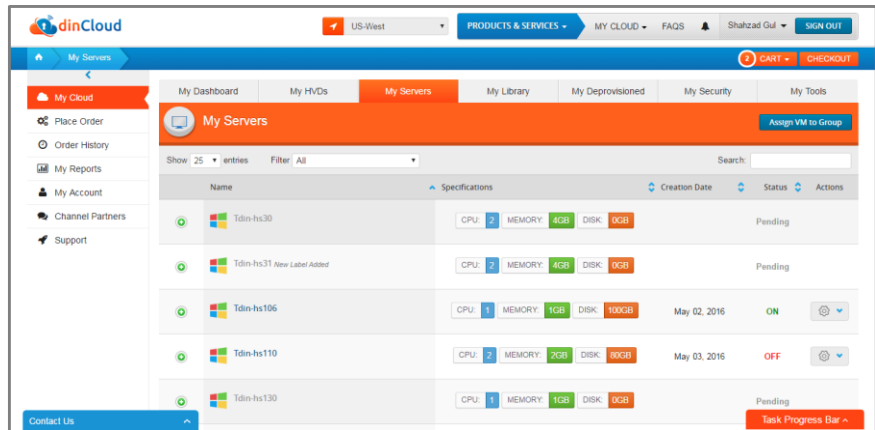
- 1 Using a supported browser, log in to your dinManage account.

The dinManage Homepage displays.



- 2 Click **My Servers** tab if the relevant VM is a server machine, or click **My HVDs** if the VM is listed as an HVD.

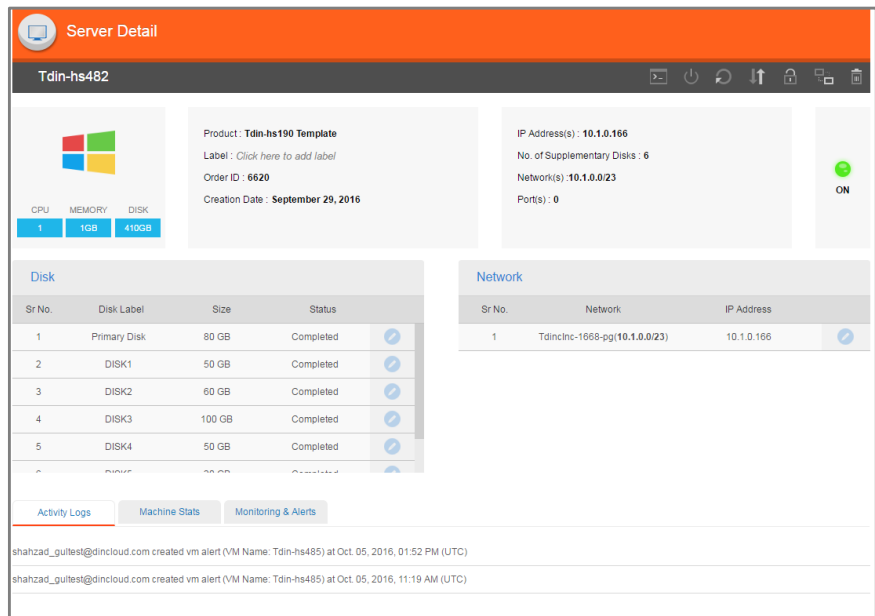
In either case a list of VMs displays.



Name	Specifications	Creation Date	Status	Actions
Tdin-hs30	CPU: 2, MEMORY: 4GB, DISK: 8GB		Pending	
Tdin-hs31 New Label Added	CPU: 2, MEMORY: 4GB, DISK: 8GB		Pending	
Tdin-hs106	CPU: 1, MEMORY: 4GB, DISK: 100GB	May 02, 2016	ON	
Tdin-hs110	CPU: 2, MEMORY: 2GB, DISK: 80GB	May 03, 2016	OFF	
Tdin-hs130	CPU: 1, MEMORY: 1GB, DISK: 8GB		Pending	

- 3 Click the name of the VM for which you want to create a new alert.

The Server Detail screen displays.



Server Detail
Tdin-hs482

Product: Tdin-hs190 Template
Label: [Click here to add label](#)
Order ID: 6620
Creation Date: September 29, 2016

IP Address(s): 10.1.0.166
No. of Supplementary Disks: 6
Network(s): 10.1.0.0/23
Port(s): 0

ON

Sr No.	Disk Label	Size	Status
1	Primary Disk	80 GB	Completed
2	DISK1	50 GB	Completed
3	DISK2	60 GB	Completed
4	DISK3	100 GB	Completed
5	DISK4	50 GB	Completed

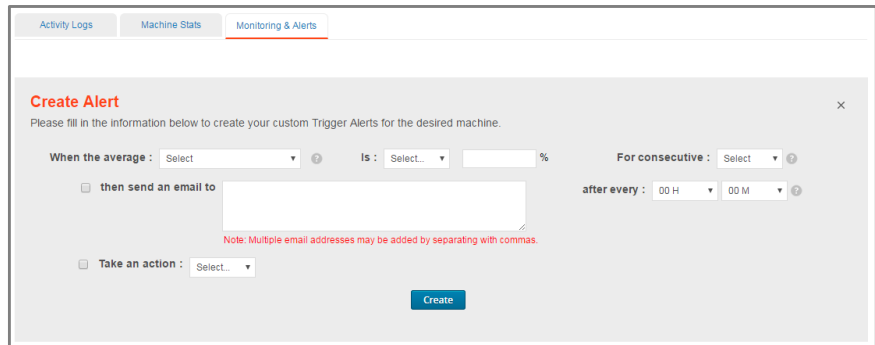
Sr No.	Network	IP Address
1	Tdininc-1668-pg(10.1.0.0/23)	10.1.0.166

Activity Logs Machine Stats Monitoring & Alerts

shahzad_gulrest@dincloud.com created vm alert (VM Name: Tdin-hs485) at Oct. 05, 2016, 01:52 PM (UTC)
shahzad_gulrest@dincloud.com created vm alert (VM Name: Tdin-hs485) at Oct. 05, 2016, 11:19 AM (UTC)

- 4 Click the **Monitoring & Alerts** tab, and then click [Add Alert].

The Create Alert dialog displays.



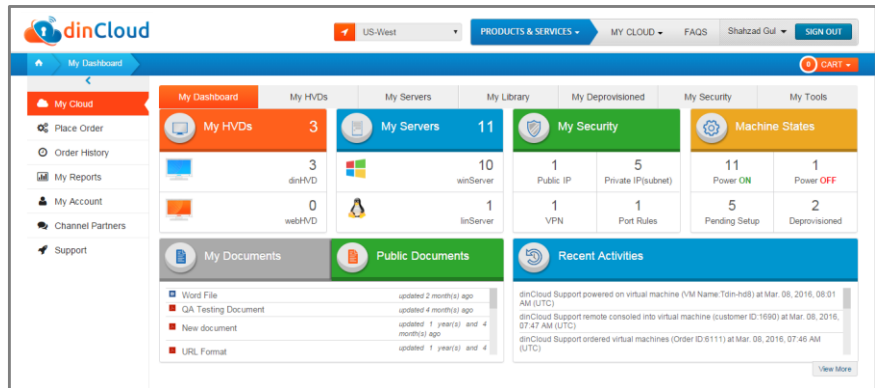
- 5 Select or enter the following information to configure the new alert:
 - **When the average:** select the element which needs to be monitored
 - **Is:** select operator and percentage value
 - **For consecutive:** select the period after which alert should be re-sent if the state remains unchanged
 - **Then send an email to:** select checkbox if required, and then enter email address(es) to receive alerts
 - **After every:** select the period after which an alert is to be triggered
 - **Take an action:** select checkbox if required, and then select the relevant action from the drop-down.
- 6 Click [Create] to create and enable the newly configured alert.

Working with Existing Alerts

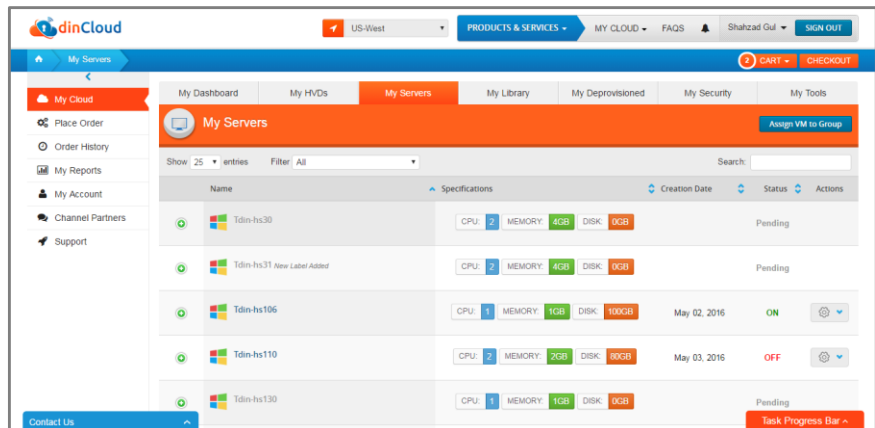
To perform operations on existing alerts, such as edit, disable, or remove an alert, you will be required to perform the following steps:

- 1 Using a supported browser, log in to your dinManage account.

The dinManage Homepage displays.

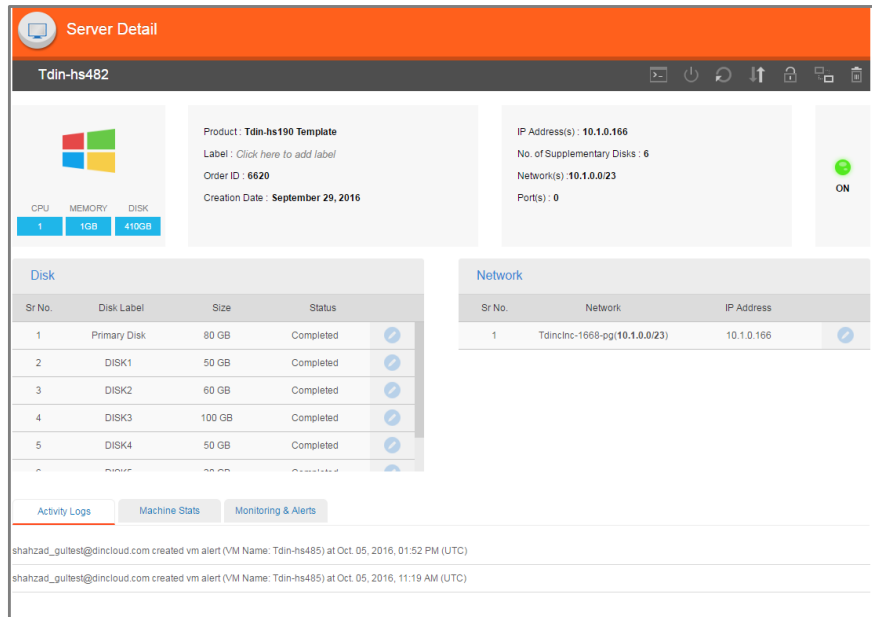


- 2 Click **My Servers** tab if the relevant VM is a server machine, or click **My HVDs** if the VM is listed as an HVD. In either case a list of VMs displays.



- 3 Click the name of the VM for which you want to create a new alert.

The Server Detail screen displays.



Server Detail

Tdin-hs482

Product: Tdin-hs190 Template
Label: [Click here to add label](#)
Order ID: 6620
Creation Date: September 29, 2016

IP Address(s): 10.1.0.166
No. of Supplementary Disks: 6
Network(s): 10.1.0.0/23
Port(s): 0

ON

Sr No.	Disk Label	Size	Status
1	Primary Disk	80 GB	Completed
2	DISK1	50 GB	Completed
3	DISK2	60 GB	Completed
4	DISK3	100 GB	Completed
5	DISK4	50 GB	Completed

Sr No.	Network	IP Address
1	Tdininc-1668-pg(10.1.0.0/23)	10.1.0.166

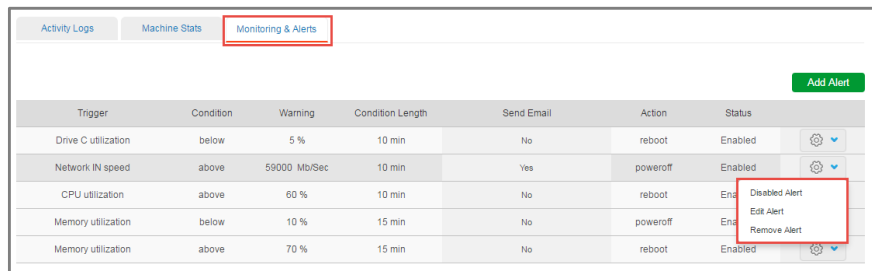
Activity Logs Machine Stats **Monitoring & Alerts**

shahzad_gultest@dincloud.com created vm alert (VM Name: Tdin-hs485) at Oct. 05, 2016, 01:52 PM (UTC)

shahzad_gultest@dincloud.com created vm alert (VM Name: Tdin-hs485) at Oct. 05, 2016, 11:19 AM (UTC)

4 Click the Monitoring & Alerts tab.

The list of existing alerts display.



Activity Logs Machine Stats **Monitoring & Alerts**

Add Alert

Trigger	Condition	Warning	Condition Length	Send Email	Action	Status
Drive C utilization	below	5 %	10 min	No	reboot	Enabled
Network IN speed	above	59000 Mb/Sec	10 min	Yes	poweroff	Enabled
CPU utilization	above	60 %	10 min	No	reboot	Enabled
Memory utilization	below	10 %	15 min	No	poweroff	Enabled
Memory utilization	above	70 %	15 min	No	reboot	Enabled

Disabled Alert
Edit Alert
Remove Alert

5 Review the following information about each alert:

- **Trigger:** displays the element of the VM that is to being monitored
- **Condition:** displays the condition upon which the alert shall be triggered
- **Warning:** displays the value of the element, over or under which the alert shall be triggered

- **Condition Length:** displays the period for which the condition shall need to apply for the alert to be triggered
 - **Send Email:** shows if an alert email is configured to be sent
 - **Action:** displays the action that is executed when alert condition is met
 - **Status:** displays if an alert is enabled or disabled.
- 6 You can also perform the following operation on an alert using the **Actions** button:
- Enable or Disable Alert
 - Edit Alert
 - Remove Alert.
- 7 Click [Create] to create and enable the newly configured alert.

Important Notes

- 1 Users are not allowed to create an alert of a monitoring element, with the same utilization threshold, twice. For example, CPU utilization with a 75% threshold may not be created twice.
- 2 Users are able to select both, or either of the **Action** options.
- 3 Users are allowed to create and apply up to 6 alerts for each virtual machine.