Hewlett Packard Enterprise

FAQ

Monitoring Amazon EC2 using HPE Cloud Optimizer

Frequently Asked Questions

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Monitoring Amazon EC2 using HPE Cloud Optimizer

Q	What capabilities does HPE Cloud Optimizer provide for Amazon EC2?
A	With HPE Cloud Optimizer, you can monitor the performance and capacity utilization of your Amazon EC2 instances. The top capabilities are as follows: • Visualizing the performance of your cloud instances in HPE Cloud Optimizer with Treemap. • Performing triage and historical performance analysis using the Workbench function. • Getting real-time visibility of applications and processes running in the instance with Real Time Guest OS Drilldown. • Monitoring Amazon EC2 instances for CSA cloud users using HPE Cloud Optimizer.
Q	How to start monitoring Amazon EC2 instances using HPE Cloud Optimizer?
A	To start monitoring your Amazon EC2 instances using HPE Cloud Optimizer, you need to add Amazon Web Services or AWS as a datasource. You need the following information to add the datasource: Account ID - The AWS account ID for the user. User Name - The AWS User Name for the user. Access Key - The AWS assigned Access Key for a secure user request. Secret Key - The AWS assigned Secret Key for a secure user request. See *HPE Cloud Optimizer Online Help* for more information.
Q	How does HPE Cloud Optimizer collect metrics from Amazon EC2?
A	HPE Cloud Optimizer collects capacity and performance metrics from Amazon CloudWatch for the Amazon EC2 instances.
Q	My HPE Cloud Optimizer setup is within my organization's intranet. How can it reach Amazon CloudWatch to source metrics?
A	You need to configure a proxy in the HPE Cloud Optimizer system to connect to cloudwatch.aws.com. See *HPE Cloud Optimizer Online Help, Adding AWS Datasource* for more information.
Q	What metrics does HPE Cloud Optimizer provide to monitor my Amazon EC2 instances?
A	HPE Cloud Optimizer sources metrics from Amazon CloudWatch. The following metrics are collected and logged for Amazon EC2 instances: CPUCycleTotalUsed CPUTotalUtil DiskPhysRead DiskPhysReadByteRate DiskPhysWrite DiskPhysWriteByteRate NetInByte

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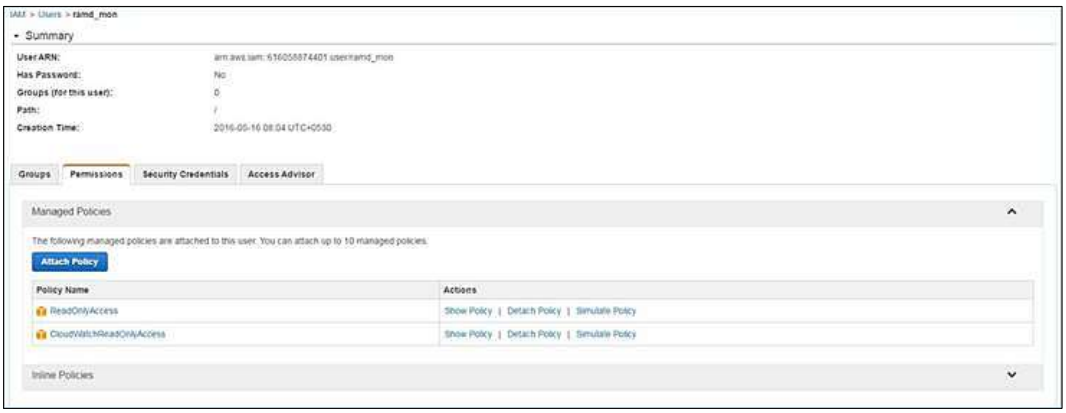
	NetOutByte NumCPU See *HPE Cloud Optimizer Metric Definitions Guide* for metric definitions.
Q	Where can I find the full list of capabilities that HPE Cloud Optimizer offers for Amazon EC2 instances?
A	See the entitlement table available here for the list of capabilities that HPE Cloud Optimizer provides across all supported virtual and cloud environments including Amazon EC2.
Q	In order to connect to AWS CloudWatch, is it enough to have free AWS CloudWatch tier? If not, at what tier can HPE Cloud Optimizer be integrated with AWS?
A	AWS CloudWatch's free tier would work. If you are using Amazon IAM, which is recommended for managing users, create a user with the default *ReadOnlyAccess* and *CloudWatchReadOnlyAccess* policies and use it for adding to HPE Cloud Optimizer.
Q	When I add an AWS datasource, HPE Cloud Optimizer reports the error message *AWS Connection Failed*. What could be the problem?
A	If the HPE Cloud Optimizer system is within your organization's intranet, you need to configure a proxy in the HPE Cloud Optimizer for it to reach cloudwatch.aws.com. See *HPE Cloud Optimizer Online Help* to set the proxy configuration.
Q	I have configured a proxy server in the HPE Cloud Optimizer system as mentioned in the documentation. However, when I add an AWS datasource in HPE Cloud Optimizer, I see a connection failure error message. How can I troubleshoot this?
A	In AWS IAM, make sure that *CloudWatchReadOnlyAccess* policy is attached to the AWS user. If not, attach the policy to the AWS user before generating Access Key and Secret Key. This policy is required, so that HPE Cloud Optimizer can source appropriate metrics from Amazon CloudWatch. 
Q	Why does HPE Cloud Optimizer show NULL for NumCPU and CPUClockSpeed metrics for certain Amazon EC2 instances (VMs)?

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A	Check if the CPU information for the Amazon EC2 instance type is configured in HPE Cloud Optimizer.
	
	`[root@co3 ~]# ovconfget pvcd.aws.template`
	`c1.medium=cpu:2`
	`c1.xlarge=cpu:8`
	`c3.2xlarge=cpu:8,clockspeed:2.8`
	`c3.4xlarge=cpu:16,clockspeed:2.8`
	`c3.8xlarge=cpu:32,clockspeed:2.8`
	`c3.large=cpu:2,clockspeed:2.8`
	`c3.xlarge=cpu:4,clockspeed:2.8`
	`c4.2xlarge=cpu:8,clockspeed:2.9`
	`c4.4xlarge=cpu:16,clockspeed:2.9`
	…
	If the Amazon EC2 instance type of the VM is not found in the list, you may configure it in the HPE Cloud Optimizer system using the "`ovconfchg`" CLI.
	
	Example:
	
	`# ovconfchg -ns pvcd.aws.template -set x1.small "cpu:4,clockspeed:2.8"`

Q	Can I launch Real Time Guest OS Drilldown function from HPE Cloud Optimizer for my instances in Amazon EC2?
A	Yes. You can launch Real Time Guest OS Drilldown function for your Amazon EC2 instances provided that the VM has a public IP address.
Q	I have installed HPE Compute Sensor in my Amazon EC2 VM instance and the VM has a public IP address. I am still not able to launch the Real Time Guest OS Drilldown function in HPE Cloud Optimizer. What am I missing?

A	If your HPE Cloud Optimizer system is within your organization's intranet, you need to configure proxy system for the Amazon EC2 instance. You can check the configuration using the `ovconfget` CLI. You can configure the PROXY parameter using the `ovconfget` CLI.
	
	Example:
	`[root@co3 ~]# ovconfget bbc.http PROXY`
	`PROXY=web-proxy.region.acme.com:8088+(cloudwatch.aws.com,52.*.*.*)`
	
	Here, 52.*.*.* represents the IP address mask setting for the Amazon EC2 VM instance.

Q	I added an AWS datasource successfully in the HPE Cloud Optimizer. However, I see a collection failure error message. How can I troubleshoot this symptom?
A	If HPE Cloud Optimizer system time is not set properly, metric collection from AWS CloudWatch fails. Set the HPE Cloud Optimizer system time as per its time zone and restart collection.
Q	HPE Cloud Optimizer is unable to collect metrics from AWS. How can I troubleshoot? Can I look into any log file for hints?
A	You can look for warnings or error messages in the file `/var/opt/OV/log/status.virtserver`. You can also turn on additional trace messages to look for appropriate messages in the file.

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	To turn on additional trace, edit `/var/opt/OV/conf/PV/VILog4j.xml` and set value of `level` parameter to `trace`.
	…
	`<logger name=com.hp.virt”>`
	`<level value=”trace” />`
	…
	`</logger>`
	…

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