Terraform - Cloud Q on AWS

Using the Custom CloudWatch Dashboard

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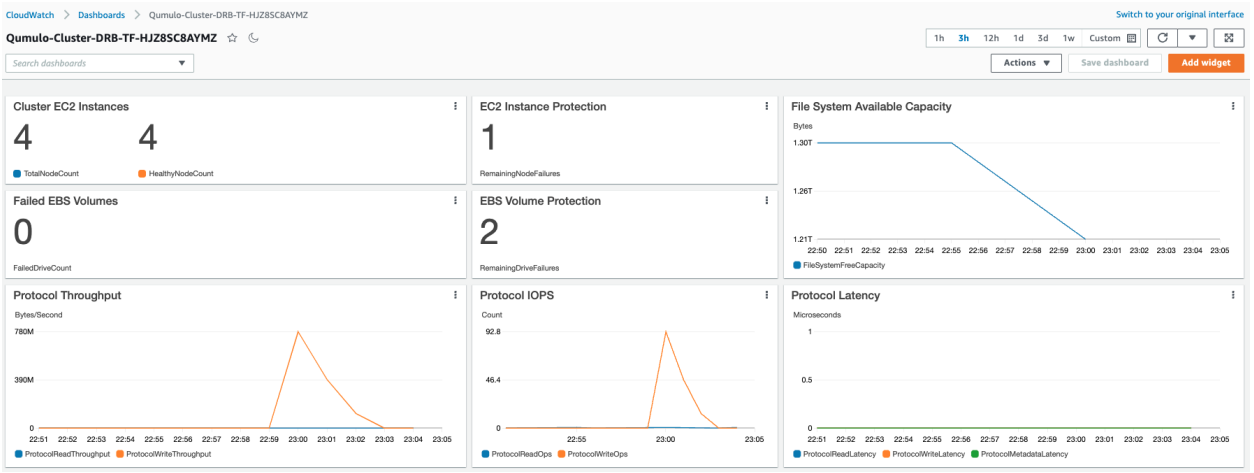
Overview

The **cloudwatch** Terraform module creates a CloudWatch dashboard, resource groups, and a CloudWatch log group (optional) for the cluster. First, it creates a resource group for the EC2 instances and then it creates one or more resource groups for the EBS volumes. The resource groups created for the EBS volumes depend on the EBS volume configuration of the cluster. All Flash clusters will have just one resource group with the stack name and -SSD. Hybrid clusters will have two resource groups for EBS: one with -SSD and one with -HDD. The purpose of these resource groups is to provide a simple means to create a filtered view in CloudWatch for the EC2 and EBS metrics native to AWS. A CloudWatch Dashboard is also created that presents key metrics sent by the Sidecar Metrics Lambda function. These are Qumulo specific metrics. Finally, if Audit Logging was enabled a CloudWatch log group is created for the cluster. All administrative activity, Lambda access, and file/directory create/modify/delete activity is captured in this log.

Viewing the CloudWatch Dashboard

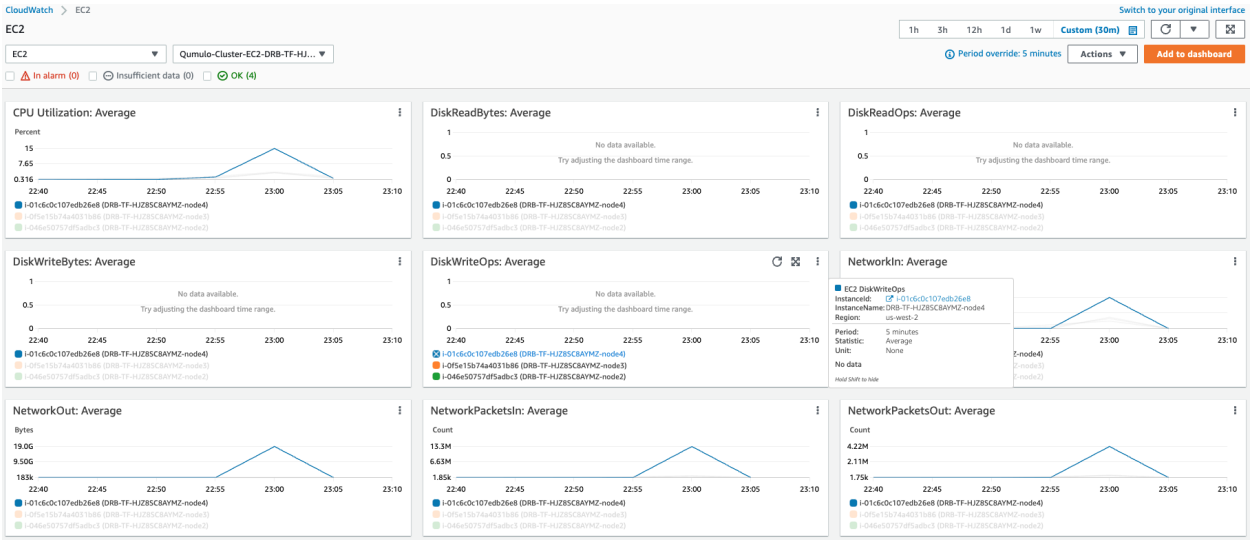
In the AWS Console go to **CloudWatch > Dashboard > Qumulo-Cluster-[deployment_unique_name]**. This is a dashboard that has been built to display the metrics sent by the Qumulo Sidecar Metrics Lambda function. This dashboard is useful for historical data. For real-time data visit the Qumulo cluster's UI.

Note: If you are deploying multiple clusters in an AWS region give them unique Qumulo Cluster Names. Metrics are filtered based on the Qumulo Cluster Name.

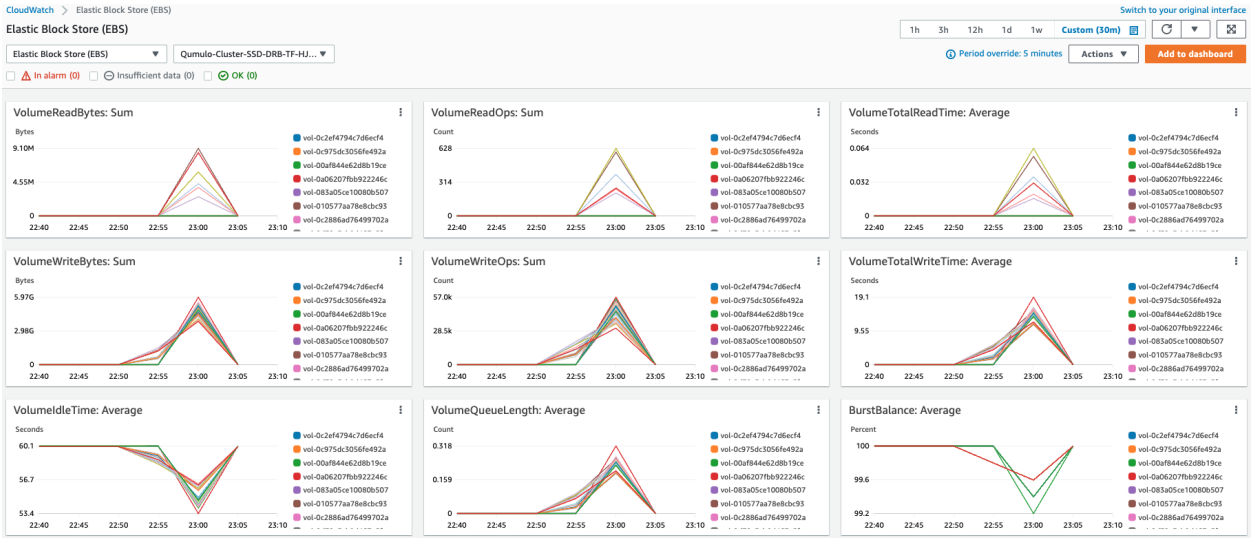


Viewing the CloudWatch Cluster Resource Groups

In the AWS Console go to **CloudWatch**. Choose **Service Dashboards** then choose **EC2**. In the first filter box choose **EC2** and then in the **Filter by resource group** box select the cluster with **Qumulo-Cluster-EC2-[deployment_unique_name]**. This provides a CloudWatch filtered view of the EC2 instances for the cluster. CPU Utilization, network stats, boot volume stats, and alarm events are available. The resource filtered view will look like this:



Now clear the **Filter by resource group** field and select **EBS** in the first filter box. Now in the **Filter by resource group** field choose the cluster with **Qumulo-Cluster-[SSD or HDD]-[deployment_unique_name]**. This is a CloudWatch view of the EBS volumes for the cluster. Note, boot volumes are not included in this view.



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Viewing the CloudWatch Logs (Audit Logging)

In the AWS Console go to **CloudWatch > Log Groups > /qumulo/[deployment_unique_name]-audit-log**. This log group is configured if Audit Logging was enabled in .tfvars. Log files will immediately be available for each instance in the cluster.