Magento Commerce Pro: Cloud - monitoring

Applicable only for PRO instances on Magento Platform

Overview

Monitoring provides visibility into the overall health of Magento Commerce Pro: Cloud instances. Magento Commerce Pro: Cloud is instrumented with various monitoring tools to track the health of critical parts of the underlying systems in order to deliver optimized performance.

This document provides information about the systems/sub-systems being monitored, thresholds set on mission critical parameters and notifications.

Monitoring enables customers, system integrators and Magento internal teams to:

1. Measure performance metrics, along with the health of individual sub-components and Cloud
2. Analyze ecommerce site performance.
3. Troubleshoot problems such as service availability, insufficient disk space, etc.

Problem troubleshooting and resolution

Merchant's Magento Commerce Pro: Cloud store instance generally contains custom code and configurations on top of Magento commerce software. In case of a notification event, Magento internal teams will be involved in taking necessary steps to resolve the issue. Customer will be notified on case-by-case basis. Customer/Partner will have to resolve the issues caused by custom updates introduced by customers.

Monitoring tools in action

Monitoring - Magento Commerce Site and Subsystems Availability

Merchant's Magento Commerce Pro: Cloud store instances are monitored by endpoint monitoring tools. Home page and Version page are checked for availability in real-time to trigger notifications so that issues could be addressed effectively.

The following table describes how the monitoring is instrumented for site availability:

Monitoring goal	Monitoring is instrumented around	Metric	Description	Notification Recipient	Actions taken by [1]	
					Magento/Adobe	Customer/Partner
To track site availability	Home page (cached). Version page (un-cached)	Full Page Load Time (FPLT) is less than 30 seconds with HTTP response code 200.	Site availability is determined based on the thresholds configured around the metric. Notification gets triggered if the check fails for 10 minutes and there is no active deployment in progress.	Customer/ Partner & Magento	Responsible for triaging and fixing if the issue is on Magento commerce platform.	Responsible for fixing the issue if caused by changes introduced by customer/partner. For troubleshooting, please refer: Site Down Troubleshooter

The following table describes how stuck deployments are monitored:

Monitoring goal	Monitoring is instrumented around	Metric	Description	Notification Recipient	Actions taken by [2]	
					Magento/Adobe	Customer/Partner
To track seamless deployment on Magento Commerce platform.	Deployment infrastructure. Production site.	Deployment infrastructure	Deployment infrastructure availability is determined based on the thresholds configured around the metric.	Magento Internal alert is created within Magento.	Responsible for triaging and fixing if the issue is on Magento commerce platform.	Responsible for fixing the issue if caused by changes introduced by customer/partner.

The following table describes the monitoring setup around subsystems:

Monitoring goal	Subsystems currently monitored	Metric	Description	Notification Recipient	Actions taken by [1]	
					Magento/Adobe	Customer/Partner
To track subsystem availability to avoid built-in service outage.	Galera, Maria DB, Solr, Redis, Elasticsearch, Nginx, Memchached, Deployment Infrastructure	*"Service availability"* check is performed on each subsystem with regular intervals.	Site availability is determined based on the thresholds configured around the metric. Single threshold for all subsystems.	Internal alert is created within Magento.	Responsible for triaging and fixing if the issue is on Magento commerce platform.	Responsible for fixing the issue if caused by changes introduced by customer/partner.

The following table describes the monitoring setup around external services:

Monitoring goal	Monitoring is instrumented around	Metric	Description	Notification Recipient	Actions taken by [1]	
					Magento/Adobe	Customer/Partner
To track 3rd party service availability.	Sendgrid, Fastly, NewRelic, Blackfire.	*Information on particular metric is not available.*	Third party systems/ services are monitored by corresponding 3rd parties. For example, Fastly is responsible for their edge services (CDN, DDoS, etc).	Magento & Customer (on some specific cases)	Responsible for triaging and fixing if the issue is on Magento commerce platform.	Responsible for fixing the issue if caused by changes introduced by customer/partner.

Monitoring - diskspace

Monitoring goal	Storage components monitored for	Metric	Description	Notification Recipient	Actions taken by [1]	
					Magento/Adobe	Customer/Partner
To track enough diskspace.	Host system running containers with services or services directly. Services include Galera, MariaDB, Solr, Redis, Elasticsearch, Nginx, Memcached and deployment infrastructure.	*Free diskspace is monitored every minute on the host. Warning is raised if just 5% or 2GB free space is left. Critical threshold is set at the remaining free space is 2% or 1GB .*	Notification is sent based on the thresholds configured around free diskspace for the host.	Internal alert is created within Magento.	Responsible for triaging and fixing if the issue is on Magento commerce platform.	Responsible for fixing the issue if caused by changes introduced by customer/partner.

Monitoring - memory usage

Monitoring goal	Memory associated with systems	Health check metric	Description	Notification Recipient	Actions taken by [1]	
					Magento/Adobe	Customer/Partner
To track sufficient RAM is available for computation and satisfactory performance.	Host system running containers with services or services directly.	*RAM Usage level is monitored every minute on the host. **Warning** threshold is set if the free memory space is less than **20%.** **Critical** threshold is set if the free memory space is less that **10%**.*	Notification is sent based on the thresholds configured around memory usage for the host.	Internal alert is created within Magento.	Responsible for triaging and fixing if the issue is on Magento commerce platform.	Responsible for fixing the issue if caused by changes introduced by customer/partner.

Monitoring – CPU/Load

Monitoring goal	CPU/Load is monitored around	Health check metric	Description	Notification Recipient	Actions taken by [1]	
					Magento/Adobe	Customer/Partner
To track enough compute power in terms of CPU load is available.	Host (virtual compute node in High Availability cluster) running containers with services.	Average CPU load of the Host over last 5, 10 and 15 minutes.	Load averages for set time intervals are monitored. Alert is triggered based on load average, number of virtual CPUs and set threshold.	Internal alert is created within Magento.	Responsible for triaging and fixing if the issue is on Magento commerce platform.	Responsible for fixing the issue if caused by changes introduced by customer/partner.

[1]Upon on notifications received. Adobe Commerce Support team would triage the issue. Triage latency is about 15min at the time of publishing this data sheet. As part of the triage error logs and other resources will be analyzed. Based on the triage, additional Zendesk support tickets might be created either to Customer/Partner (in case of custom updates) or Magento internal teams to resolve the issue.

[2]An alert is triggered to notify a stuck deployment to Adobe Pager Duty. A SO (Service Operations) JIRA ticket will be created by Adobe Commerce Support team in response to Pager Duty Alert. The team triages the notification and creates an internal Zendesk ticket to Level-1 team for troubleshooting and eventual resolution. Customer/Partner may refer following resources to resolve stuck deployments – (a) Environment redeployment failed or MySQL server gone away (b) Deployment fails with "Error building project: he build hook failed with status code 1" (c) Deployment stuck with "Unable to upload the application to the remote cluster" error (d) Deadlocks in MySQL