

# Building Interactive Dashboards in Oracle Management Cloud

## Part 2 – Using Out-of-box Data Explorer Widgets with Drill-Down Capabilities

By Pratul Mathur

Oracle Management Cloud (OMC) allows users to build custom dashboards. OMC provides ability to dashboard authors to make their dashboards highly interactive by allowing in-context drill-down/linking to other dashboards or OMC pages such as Application Performance Monitoring Page.

Following are the types of drill-down capabilities that make diagnostics process faster:

- A widget using logs allows you to drill-down and view the underlying logs with a single click.
- A metric widget built using Data Explorer allows users to navigate to Data Explorer to perform ad-hoc diagnostics.
- You can use the Entity Link API to customize the destination link to a custom dashboard.
- You can leverage out-of-box (OOB) widgets for Status and Alerts to enable their users to drill-down to Entity Summary and Alerts pages respectively.
- You can use the Widget title link to let users go to another custom dashboard or OMC page.

In my last article, I showed how to use the Entity Link API. In this article, I will show how to use the out-of-the-box widgets.

### What is an OOB Widget?

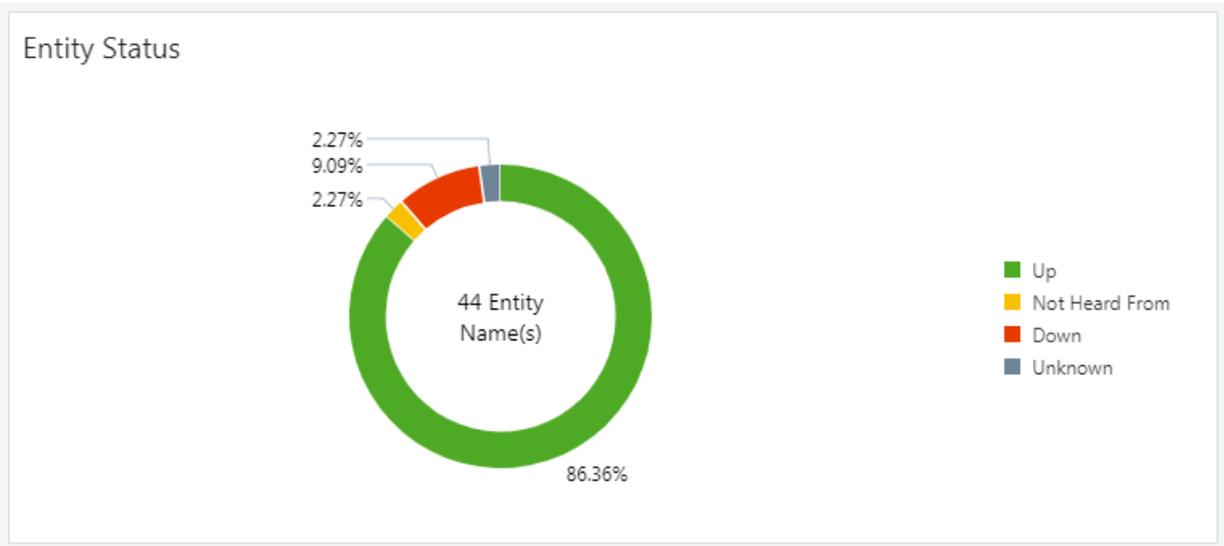
Oracle Management Cloud provides several generic purpose widgets (metric, logs and security) that you can use in your dashboards. You can also make a copy of a widget to customize based on your need.

Data Explorer provides two OOB widgets with drill down to Infrastructure Monitoring and Alerts pages. Using widget with drill down capabilities make the dashboards interactive and more useful for diagnosis. You can select these widgets while building or editing your dashboard. Ensure that you are looking for the widgets created by Oracle. Note that the links are activated for a dashboard with a composite entity such as Application or Group in the global entity selector.

Following are the details of these widgets.

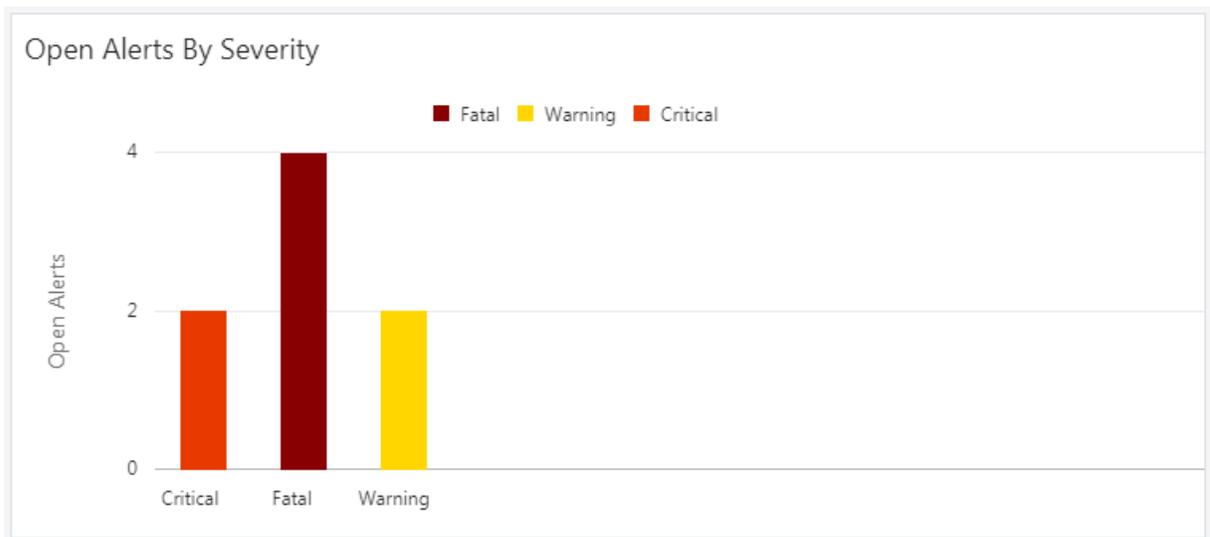
### 1) "Entity Status" widget

When you select the widget, the entity status will be passed to the Entity Summary page along with entity and time context. For example, you have this widget in a dashboard and you saw that three entities are down for OrderApp application and then you can click on the red/down slice of donut to find which entities are down.



### 2) "Open Alerts By Severity" widget

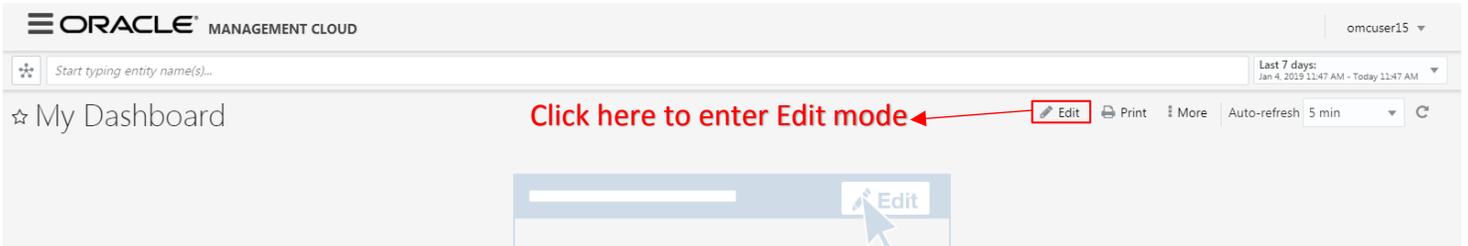
When you select the widget, the alert severity will be passed to the Alerts page along with entity and time context. For example, you have this widget in a dashboard and you saw that three fatal alerts for OrderApp application and then you can click on the fatal alerts bar to view the fatal alerts for this application.



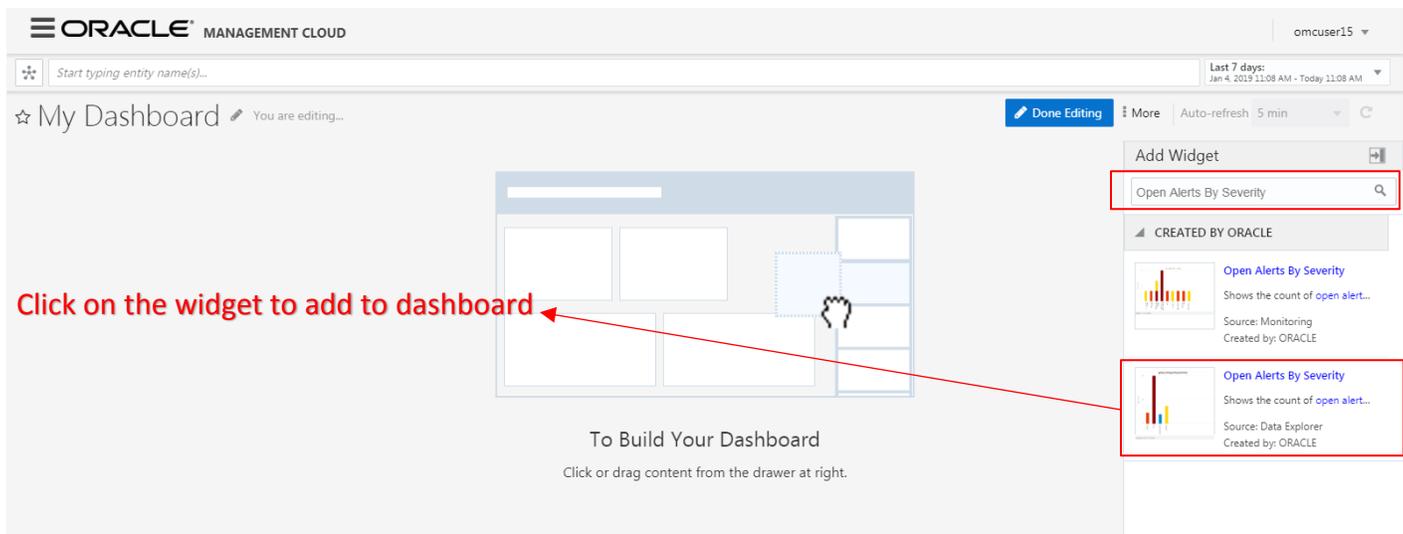
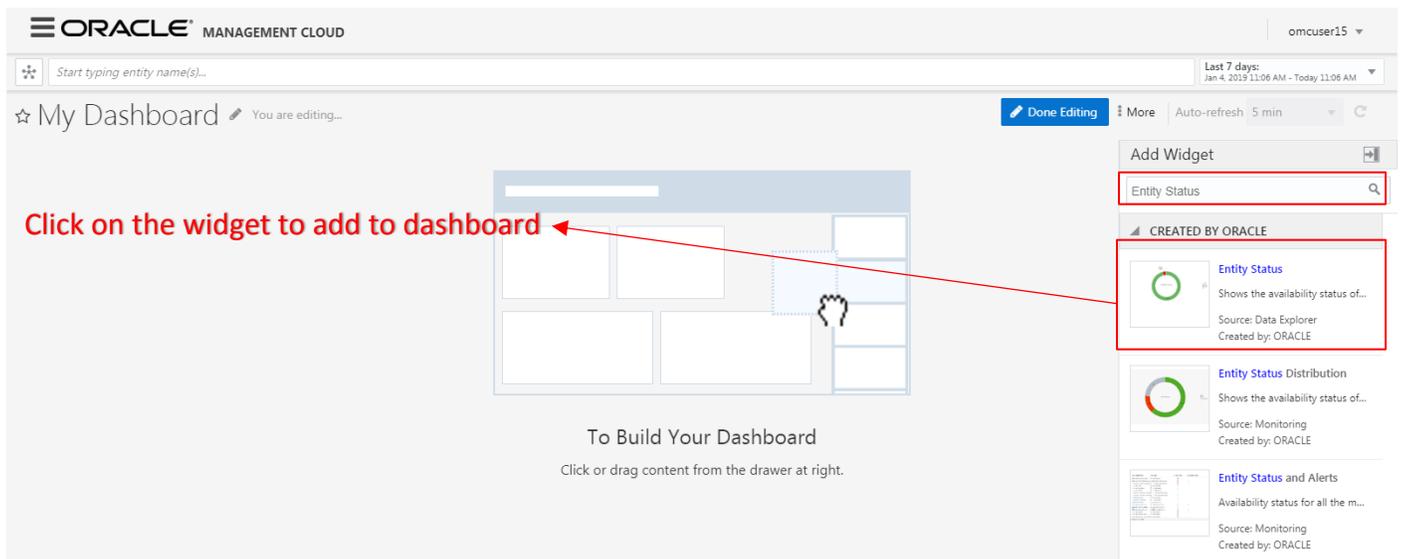
## Using these widgets in a Dashboard

You can add these widgets to your custom dashboard like any other widget.

- First, enter the dashboard Edit mode by clicking on the 'Edit' button.



- Edit mode will show the 'Add Widget' panel. Search for the widget name and click on the widget to add it to the dashboard.



The links in the widgets are activated when a user selects a composite entity such as Application or Group in the global entity.

ORACLE MANAGEMENT CLOUD omcuser15

Composite: OrderApp Last 7 days: Jan 4, 2019 11:33 AM - Today 11:33 AM

My Dashboard Edit Print More Auto-refresh 5 min

Entity Status

44 Entity Name(s)

86.36% Up  
9.09% Not Heard From  
2.27% Down  
2.27% Unknown

Open Alerts By Severity

Severity	Count
Critical	2
Fatal	4
Warning	2



You navigate to the IM page with the appropriate context and filters.

ORACLE MANAGEMENT CLOUD Infrastructure Monitoring omcuser15

Composite: OrderApp Last 7 days: Jan 4, 2019 11:41 AM - Today 11:41 AM

Entities Auto refresh off

Entity Name Tag

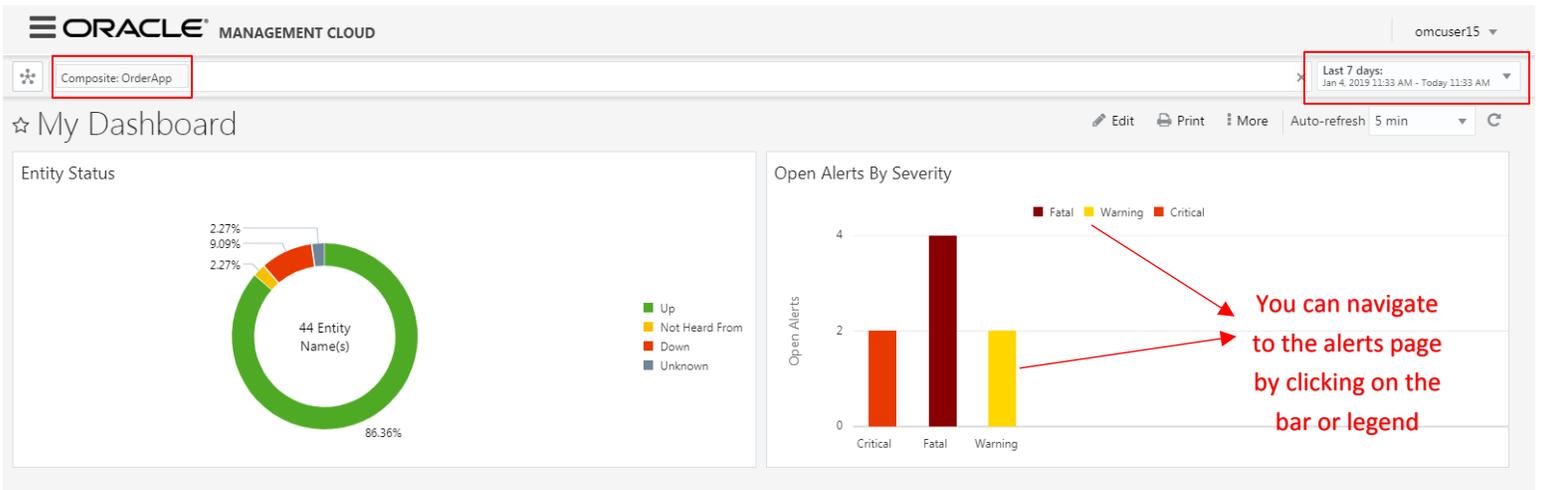
Entity Type

- Entity Type
  - APM Application
  - Automatic Storage Management Instance (1)
  - Cisco Ethernet Switch
  - Docker Container
  - Docker Engine
  - Host (Linux)
  - Host (Windows)
  - Microsoft Internet Information Services
  - Microsoft SQL Server Database
  - Oracle Database
  - Oracle Database Instance (1)
  - Oracle Database Listener
  - Oracle Pluggable Database
  - OrderApp
  - Tomcat (2)
  - Traffic Director Instance
  - WebLogic Server
- Status
  - Down (4)
  - Not Heard From
  - Unknown
  - Up
- Cloud Provider

Entities Status Entity Type

4 Down

Entity Name	Entity Type	Status	Fatal	Warning	Critical	Host
/scratch/emaas/tomcat/orderApp-tomcat2 on fd9477.compute-59...	Tomcat	Down	1	0	0	fd9477.compute-590613586...
apmc/apmc2	Oracle Database Instance	Down	1	0	0	slc15axj.us.oracle.com
orderAppASM2	Automatic Storage Manage...	Down	0	0	0	slc15axj.us.oracle.com
Tomcat@slc14voe_8082	Tomcat	Down	1	0	0	slc14voe.us.oracle.com



You navigate to the alerts page with the appropriate context and filters.

The Alerts page shows the following filters and summary:

- Service: All
- Severity: Warning
- Alerts in Last 7 days: Opened 22, Closed 22
- All Open: Total 2 (Fatal: 0, Critical: 0, Warning: 2, Informational: 0)

Severity	Message	Entity Name	Entity Type	Last Updated	Duration
Warning	Error evaluating PDB_AssociatedEntities:10MinCollection - FetchletException: Suspension exception: oracle.sysman.gcagent.task.TaskSuspensionException: Metric collection item is suspended	dbcsdb	Oracle Database	1/11/19 10:03:11 AM	1h 41m
Warning	Host will reach cpu capacity headroom (75% utilization) in 12 days.	fd9477.compute-590613586.oraclecloud.internal	Host (Linux)	1/10/19 3:15:44 PM	4d 22h 28m 37s

## Conclusion

Oracle Management Cloud allows users to build interactive dashboards. In this article, you learnt how to use the out-of-the-box widgets to drill down to Alerts page or Entity Summary page. In the next article, I will show how to use the widget title linking feature in Dashboard to create your custom link to another dashboard or OMC page.

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