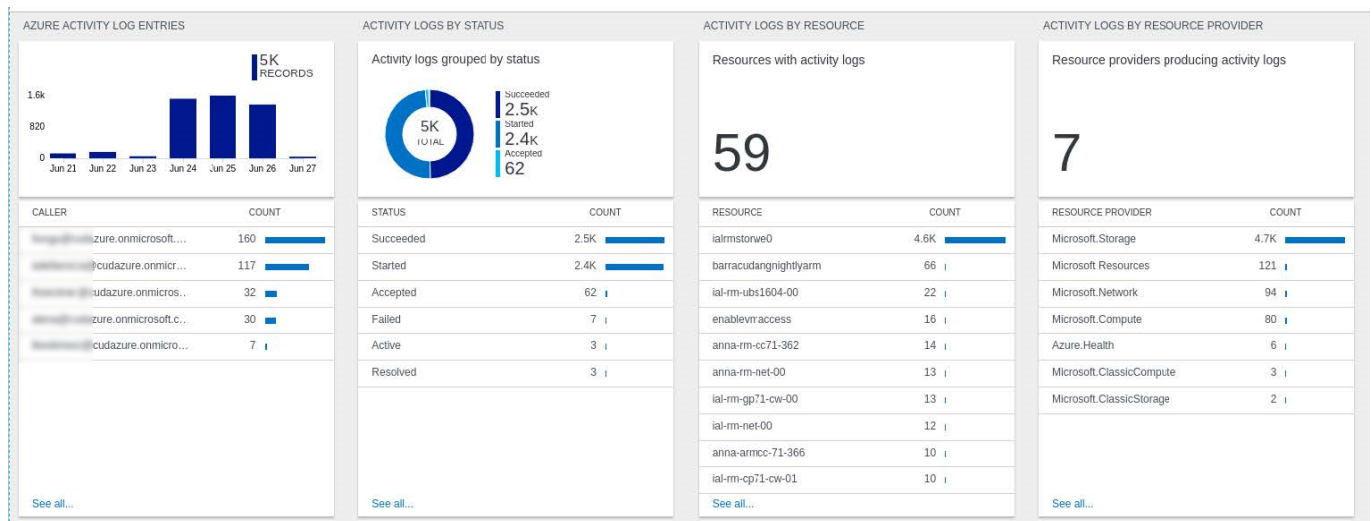


## How to Configure Azure OMS Log Streaming

<https://campus.barracuda.com/doc/69402630/>

To stream log data and custom metrics from your firewall to Microsoft OMS in Azure, you must connect the firewall VM to your OMS workspace and configure syslog streaming on the firewall to send the syslog stream to Azure OMS. On the Azure side, the virtual machines are connected to the OMS workspace. All selected log files are then streamed to Azure OMS, where they can be stored, analyzed, or processed.



### Custom VPN Metrics

- Client-to-site VPN tunnels
- SSL VPN clients
- Site-to-site VPN tunnels up
- Site-to-site VPN tunnels down

### Custom System Metrics

- Load
- Used memory
- Protected IPs

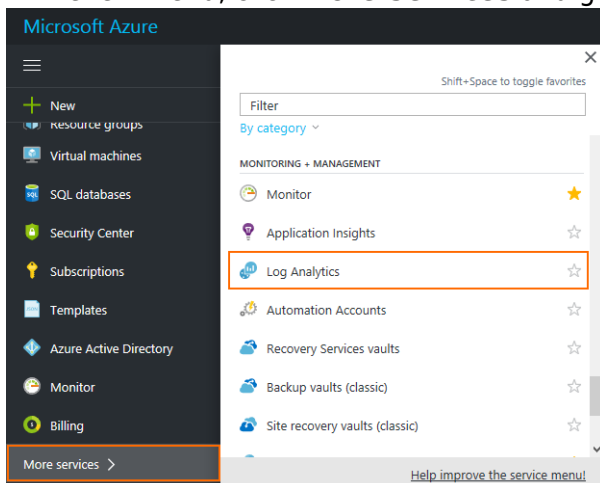
### Custom Firewall Metrics

- Bytes in
- Bytes out
- Bytes total
- Packets in

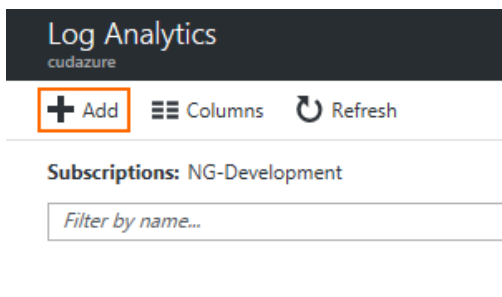
- Packets out
- Packets total
- Connections dropped
- IPS Hits
- Forwarding Connections new
- Forwarding Connections total
- Connections new
- Connections total
- Connections blocked
- Connections failed

## Step 1. Create OMS Workspace

1. Log into the Azure portal: <https://portal.azure.com>
2. In the left menu, click **More Services** and go to **Log Analytics**.



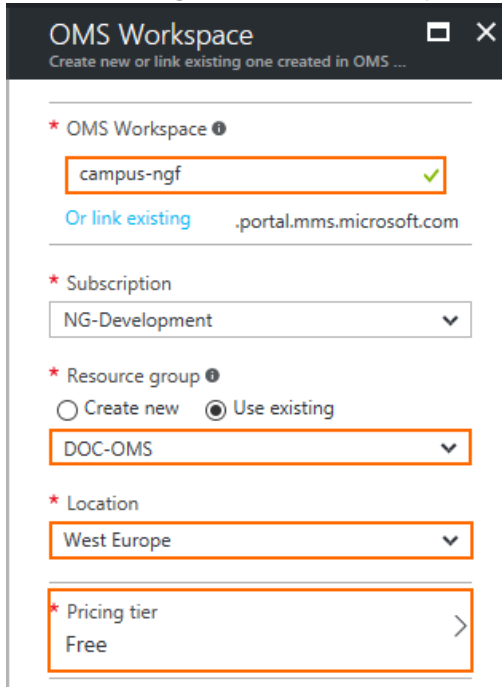
3. In the **Log Analytics** blade, click **Add**.



4. In the **OMS Workspace** blade, enter:
  - **OMS Workspace** – Enter a name for the OMS workspace. The OMS workspace is then reachable via YOURNAME.portal.mms.microsoft.com
  - **Resource Group** – Select an existing resource group, or create a new dedicated resource group for your OMS workspace.
  - **Location** – Select the geographical location where the data for your workspace will be

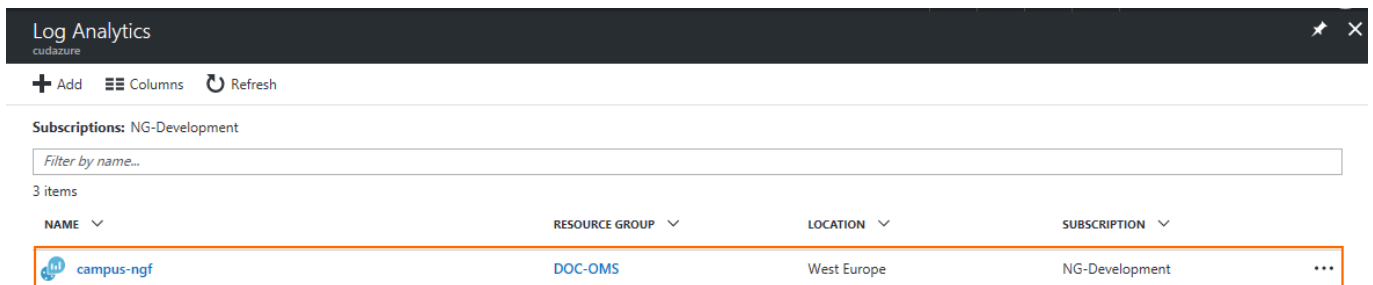
stored.

- **Pricing tier** - Select the pricing tier.



5. Click **OK**.

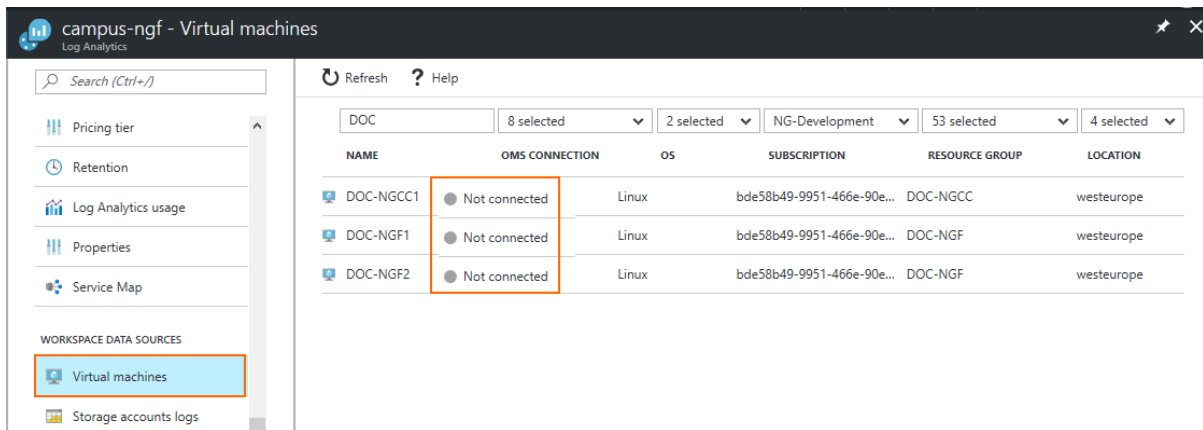
Click **Refresh** in the **Log Analytics** blade to display the new OMS workspace.



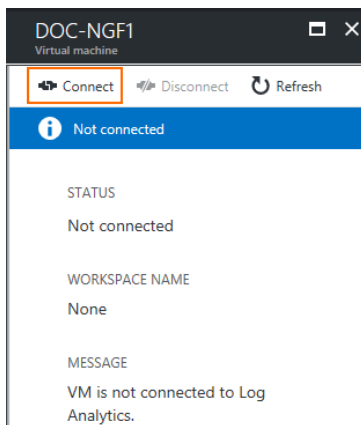
NAME	RESOURCE GROUP	LOCATION	SUBSCRIPTION
campus-ngf	DOC-OMS	West Europe	NG-Development

## Step 2. Connect Virtual Machines to OMS Workspace

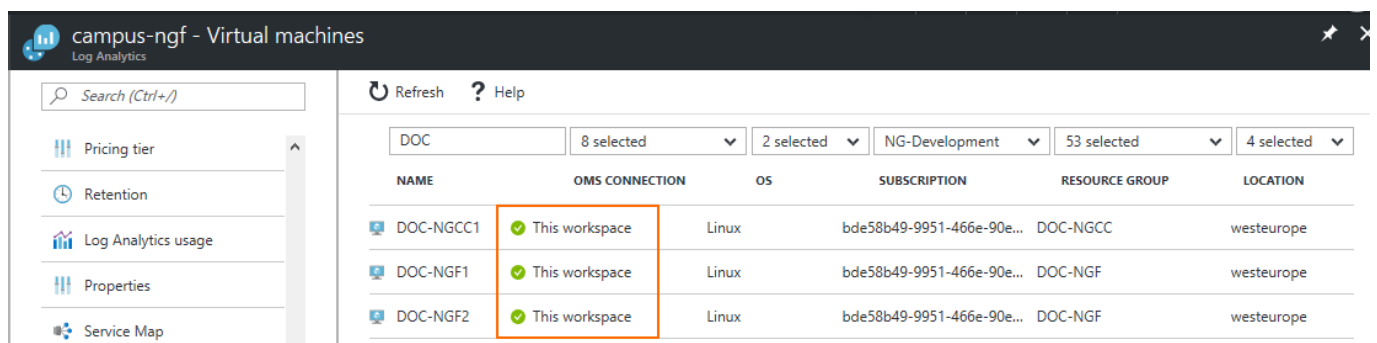
1. Log into the Azure portal: <https://portal.azure.com>.
2. In the left menu, click **More Services** and go to **Log Analytics**.
3. In the **Log Analytics** blade, click the OMS workspace created in step 1.
4. In the **Workspace data sources** section, click **Virtual machines**.
5. In the **OM Connection** column, click on **Not Connected**. The **Virtual machine** blade opens.



6. Click **Connect**.



It may take a couple of minutes for the extension to be installed on the firewall.

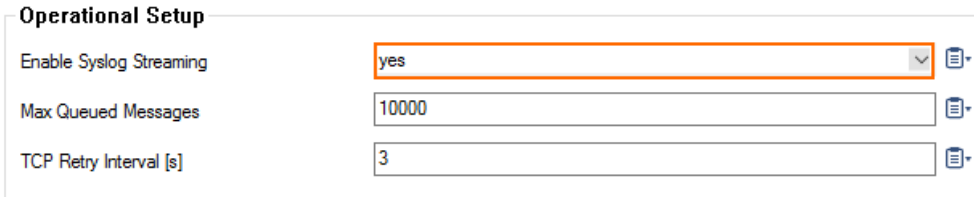


### Step 3. Enable the Syslog Streaming on the Firewall VM

Enable syslog streaming on the firewall.

1. Go to **CONFIGURATION > Full Configuration > Box > Infrastructure Services > Syslog Streaming**.
2. Click **Lock**.

### 3. Set **Enable Syslog Streaming** to **yes**.



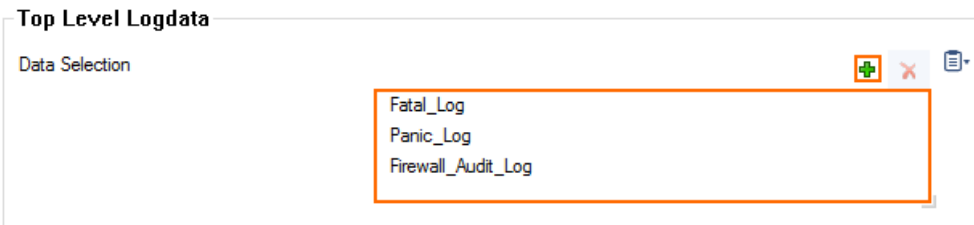
Operational Setup	
Enable Syslog Streaming	yes
Max Queued Messages	10000
TCP Retry Interval [s]	3

### 4. Click **Send Changes** and **Activate**.

## Step 4. Configure Logdata Filters

Define profiles specifying the log file types to be transferred / streamed. Log file are classified into top level, box level, and service level log data sources.

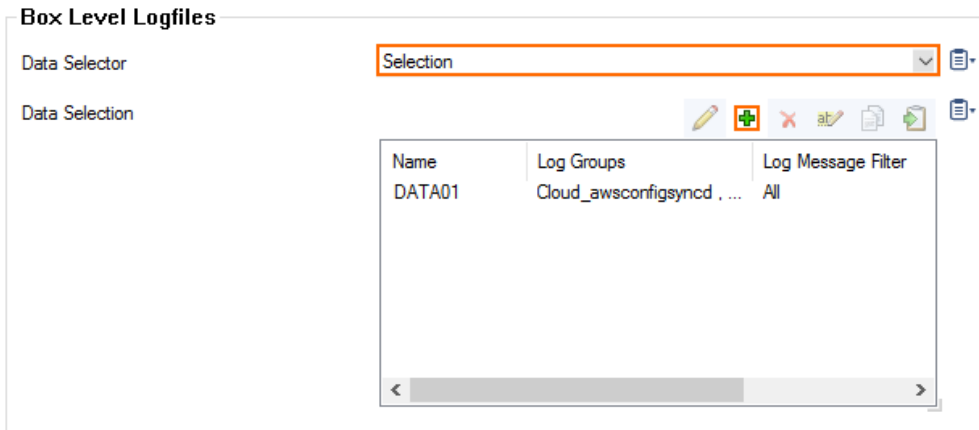
1. Go to **CONFIGURATION > Full Configuration > Box > Infrastructure Services > Syslog Streaming**.
2. In the left menu, select **Logdata Filters**.
3. Click **Lock**.
4. In the **Filters** table, click + to add a new filter. The **Filters** window opens.
5. Enter a **Name**.
6. Click **OK**.
7. In the **Data Selection** table, add the **Top Level Log Files** log files to be streamed. You can select:
  - o **Fatal\_log**
  - o **Firewall\_Audit\_Log** – The firewall audit log must be enabled and configured, and **Audit Delivery** must be set to **Syslog Proxy**. For more information, see [How to Enable the Firewall Audit Log Service](#). Alternatively, the firewall audit log can also be streamed as a part of the firewall service logs.
  - o **Panic\_log**



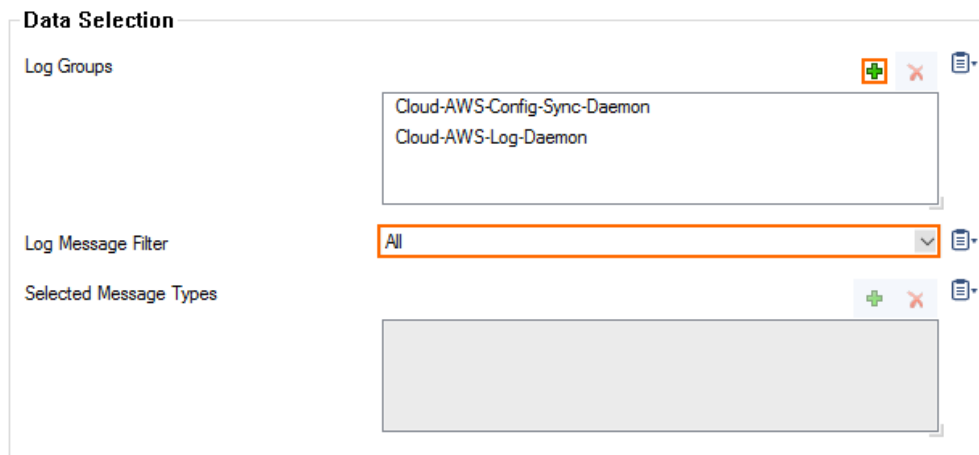
Top Level Logdata	
Data Selection	<ul style="list-style-type: none"> <li>Fatal_Log</li> <li>Panic_Log</li> <li>Firewall_Audit_Log</li> </ul>

### 8. Configure the **Box Level Logfile** filters:

1. From the **Data Selector** list, select which files for this category are streamed:
  - **All** – All box level logs are streamed.
  - **None** – Box level logs are not streamed.
  - **Selection** – Only box level log files defined in the **Data Selection** list are streamed.

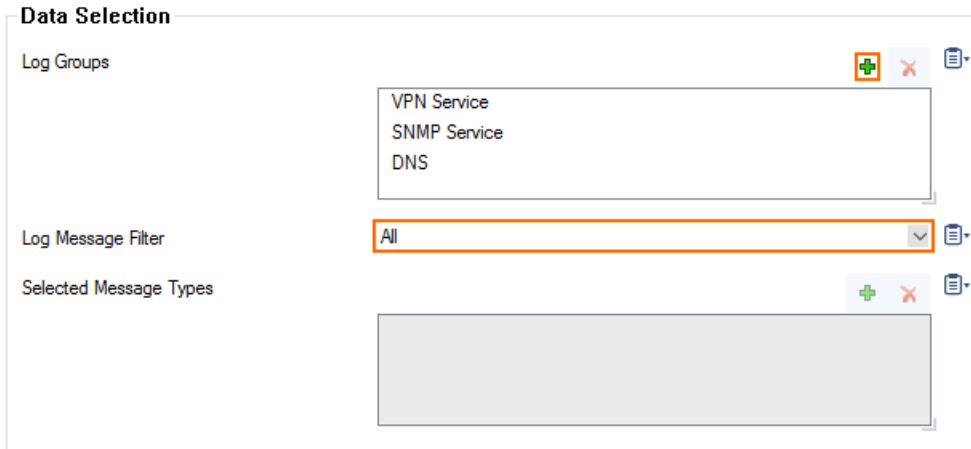


2. (**Selection** only) Click + to add custom filters to the **Data Selection** table.
  1. In the **Log Groups** table, click +.
  2. Select the box level log files, or select **Other** to enter a **user defined log group pattern** to stream log files matching this pattern.
  3. (optional) From the **Log Level Filter** list, select the message types from the log group that are streamed.
  4. (**Selection** only) In the **Selected Messages Types** table, click + to add message types.



9. Configure the **Service Level Logfile** filters:
  1. From the **Data Selector** list, select which files for this category are streamed:
    - **All** - All service logs are streamed.
    - **None** - Service level logs are not streamed.
    - **Selection** - Only service level log files defined in the **Data Selection** list are streamed.
  2. (**Selection** only) Click + to add custom filters to the **Data Selection** table.
    1. In the **Log Groups** table, click +.
    2. Select the box level log files, or select **Other** to enter a **user defined log group pattern** to stream log files matching this pattern.
    3. (optional) From the **Log Level Filter** list, select the message types from the log group that are streamed.
    4. (**Selection** only) In the **Selected Messages Types** table, click + to add message types.

5. Click **OK**.

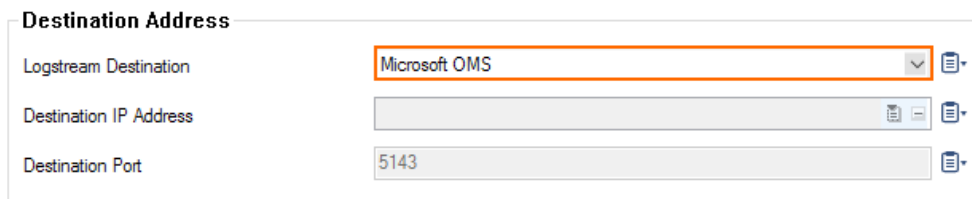


10. Click **Send Changes** and **Activate**.

## Step 5. Configure Microsoft OMS as the Logstream Destination

Configure the firewall to send the syslog stream to OMS.

1. Go to **CONFIGURATION > Full Configuration > Box > Infrastructure Services > Syslog Streaming**.
2. In the left menu, select **Logstream Destinations**.
3. Click **Lock**.
4. In the **Destinations** table, click + to add a new filter. The **Destinations** window opens.
5. Enter a **Name**.
6. Click **OK**.
7. From the **Logstream Destination** list, select **Microsoft OMS**.



8. Click **OK**.
9. Click **Send Changes** and **Activate**.

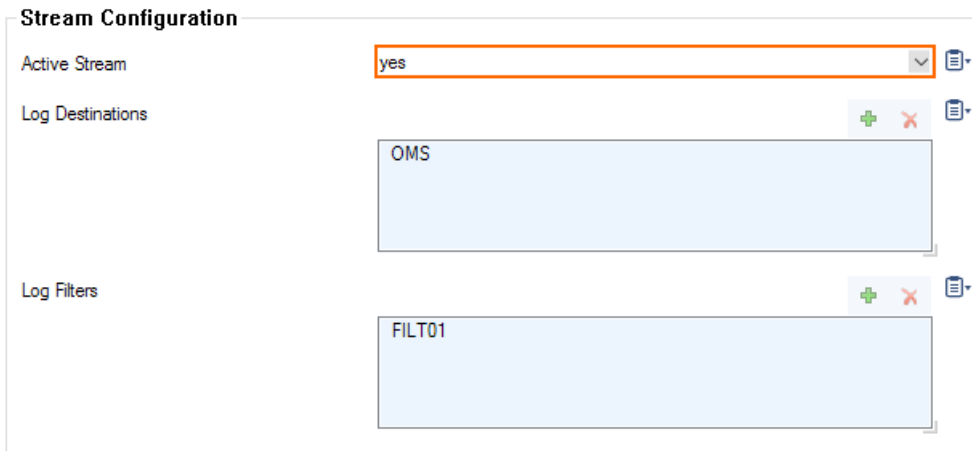
## Step 6. Configure the Logdata Streams to Microsoft OMS

Combine the logdata filters and logstream destination to a logdata stream.

1. Go to **CONFIGURATION > Full Configuration > Box > Infrastructure Services > Syslog**

**Streaming.**

- In the left menu, select **Logdata Streams**.
- Click **Lock**.
- In the **Streams** table, click **+** to add a new syslog stream. The **Streams** window opens.
- Enter a **Name**.
- Click **OK**.
- Set **Active Stream** to **yes**.
- In the **Log Destinations** table, click **+** and select the logstream destination configured in step 5.
- In the **Log Filters** table, click **+** and select the logdata filter configured in step 4.



The image shows a 'Stream Configuration' window with three sections: 'Active Stream', 'Log Destinations', and 'Log Filters'. The 'Active Stream' section has a dropdown menu set to 'yes'. The 'Log Destinations' section has a list with one item, 'OMS'. The 'Log Filters' section has a list with one item, 'FILT01'. Each list has a '+' icon to add and an 'X' icon to remove items. There are also document icons on the right side of each section.

- Click **OK**.
- Click **Send Changes** and **Activate**.

All logs covered by the logdata filter are now streamed to Azure OMS. It might take some time for logs to be displayed in the OMS portal.



## Figures

1. oms.png
2. oms\_01.png
3. oms\_02.png
4. oms\_03.png
5. oms\_04.png
6. oms\_05.png
7. oms\_06.png
8. oms\_07.png
9. oms\_08.png
10. oms\_09.png
11. oms\_10.png
12. oms\_11.png
13. oms\_12.png
14. oms\_13.png
15. oms\_14.png

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