



Syncsort Ironstream® MQ Monitor

Introduction

The Ironstream MQ Monitor dashboard has been supplied for you to add to your Splunk® installation. This dashboard includes some panels intended to give a flavor of what is possible with Ironstream and the data feed from your z/OS™ platform.

Note: These instructions are based on the current (at the time of writing) 6.5.1 version of Splunk. Steps may vary depending upon the version you are using and different steps may be required to achieve a successful deployment.

Dashboard Installation and Setup

Before beginning you should have installed a copy of the Ironstream software. If this is not the case, contact your Syncsort representative or request a demo of the product at:

<http://www.syncsort.com/en/Products/Mainframe/Ironstream>

Install the Dashboard

Sign in to Splunk as an administrative user and follow these steps to install the dashboard:

On the Splunk home page, click the **Manage Apps** cogwheel (top left, above the list of current apps):

1. On the **Apps** page, click **Install app from file**.
2. Click **Browse** or **Choose File** on the **Upload app** dialog and locate the downloaded **Syncsort_Ironstream_MQ_Monitor.spl** file. Select it and click **Open**.
3. Leave the **upgrade app** option unchecked.
4. Click **Upload**. The dashboard and its associated components will be installed into Splunk.
5. The installation file will be processed and you may be prompted for a Splunk restart.

Reference an Ironstream Index

The MQ Monitor dashboard processes SMF data. A Splunk index containing **SMF 116** (MQ) data is required.

The dashboard searches will need to be modified to reference the appropriate index name.
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Update the Search Indexes

Follow the steps in the **Customize the Dashboard** section to edit the dashboard source. Change the index references in the dashboard XML to the name of an appropriate index. Look for:

index=IRONSTREAM_SMF_INDEX_NAME

Change this to the name of your Ironstream-maintained Splunk index. For example: index=smfidx

MQ Monitor Dashboard Usage

The dashboard allows filtering of the MQ data by Connection, Base Queue, and Queue. The dropdown lists default to show all Connection Names, Base Queue Names and Queue Names.

When the Connection is changed, the Base Queue and Queue dropdown lists will be repopulated with the elements that are only associated with the specified connection. Additionally, if the Base Queue is changed, the Queue dropdown box will be repopulated with the Base Queue's associated queues.

There is also a list of radio options which indicate how you would like the data to be displayed. The data can be displayed from the view point of the Connection, the Base Queue or the Queue level.

The dashboard does not refresh with the current selection until the submit button has been clicked.

There is a time range picker that allows one to select the range of time from which to gather the data for the visualizations.

Notes

The MQ data can be voluminous and the best performance for this dashboard will be achieved with smaller ranges of times, typically at a granularity of minutes or hours.

The last selected value is shown in the dropdown box even when the contents have been repopulated. To see the repopulated values, you will have to open the dropdown. The Connection, Base Queue, and Queue values being used in the dashboard panels are always reflected in their titles.

Customize the Dashboard

The dashboard is just a basic sample of what can be achieved with Ironstream and Splunk. You are free to change any aspect of the dashboard to suit your own requirements.

You can add, remove or modify the dashboard panels and charts as follows:

1. Sign in to Splunk as an administrative user.
2. Click **Edit** to reveal the menu below and choose **Edit Panels**
3. You can now interact with the dashboard panels and charts:
 - a. Change their titles, size, location etc.
 - b. Make search and timescale changes.
 - c. Alter chart types and options.
4. Click **Done** to commit any changes.

Alternatively, you can modify the source XML of the dashboard. This is achieved as follows:

1. Sign in to Splunk as an administrative user. You should see an **Edit** button top, right of the dashboard.
2. Click **Edit** to reveal the menu below and choose **Edit Source XML**
3. The dashboard XML source is displayed.

You are advised to take a copy of the XML source before making any changes

4. Make your changes and click **Save**.

Dashboard Compatibility

The dashboard was created and tested with Splunk version 6.5.1. It may not be 100% compatible with earlier Splunk versions.

If you are running an earlier version of Splunk you may wish to unzip the package file (Syncsort_Ironstream_MQ_Monitor.spl) and extract the XML from the following view:

```
.\\etc\\apps\\Syncsort_Ironstream_MQ_Monitor\\default\\data\\ui\\views\\  
syncsort_ironstream_mq_monitor.xml
```

Ironstream Data

The dashboard requires Ironstream to forward certain z/OS messages and information in order for them to be processed and reported correctly. Ironstream is delivered with appropriate messages filters in place but we recommend the ASMFILTR job be run with the following messages specified for filtering in the SSDFFSMF step:

```
//SSDFFSMF EXEC ASMSSDF  
//ASM.SYSIN DD *  
SSDFFSMF TITLE '- IRONSTREAM MESSAGE SELECTION TABLE'  
*-----*  
THIS SAMPLE TURNS ON SOME OF THE SMF RECORD TYPES SUPPORTED IN *  
IRONSTREAM  
*-----*  
SSDFFSMF 00, 14, 15, 19, 30, 42, 60, 61, 62, 64, 65, 66,  
          70, 71, 72, 73, 75, 76, 77, 80, 100, 101, 102,  
          110, 113, 116, 117, 118, 119, 120, 208  END  
/*-----
```

SMF type **116** is required for the MQ Monitor dashboard to function.

Feedback, Questions, Problems

We welcome your questions, comments and feedback. Please do not hesitate to contact your Syncsort representative.