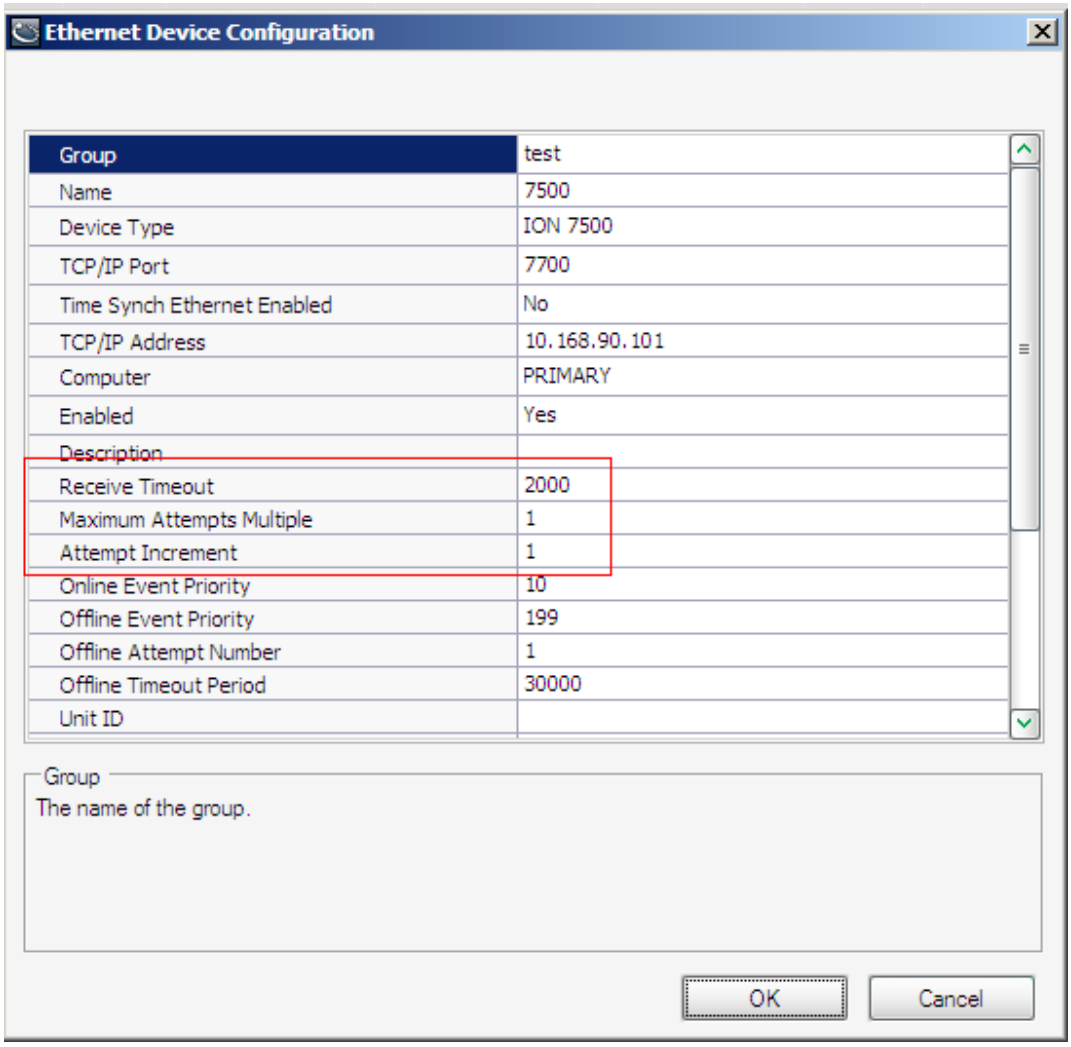
How to set up a Comms Loss Event Watcher for Report Subscriptions

It is possible to configure ION Enterprise to send an email notification when a device goes offline. Unfortunately, this is a somewhat convoluted process, thus this document.

To do this as a training exercise, using an ethernet connected meter requires some manipulation of the communications settings in order for an Ethernet device to be marked off-line by simply unplugging the Ethernet cable. What worked for me:



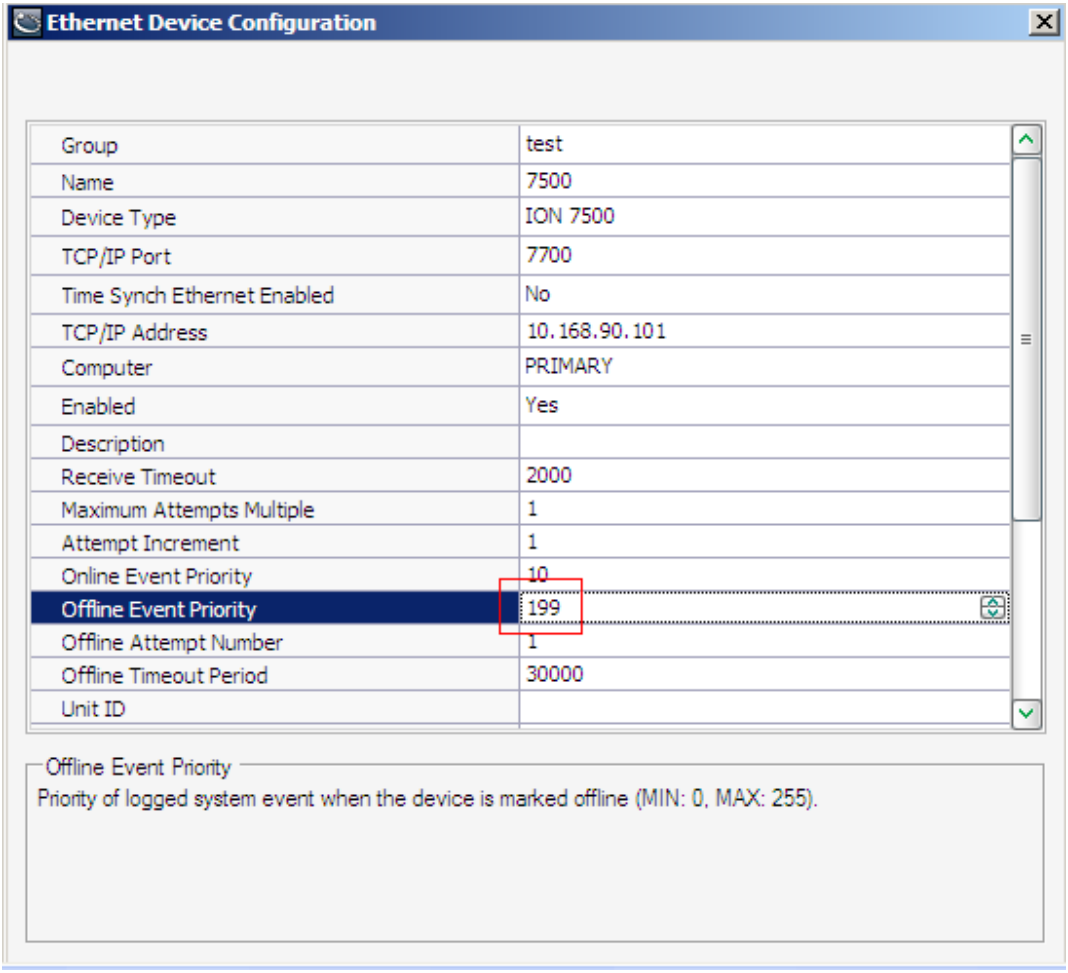
Notice that the Receive Timeout has been reduced to 2 seconds (2000 ms) from the 10 second default, and the Maximum Attempts Multiple and Attempt Increment have both been reduced from 3 to 1. Once these settings were changed, unplugging the Ethernet cable reliably resulted in a Device Offline event in the system log.

Step 1: Make required configuration changes so that offline events are written to ION_Data

Some background:

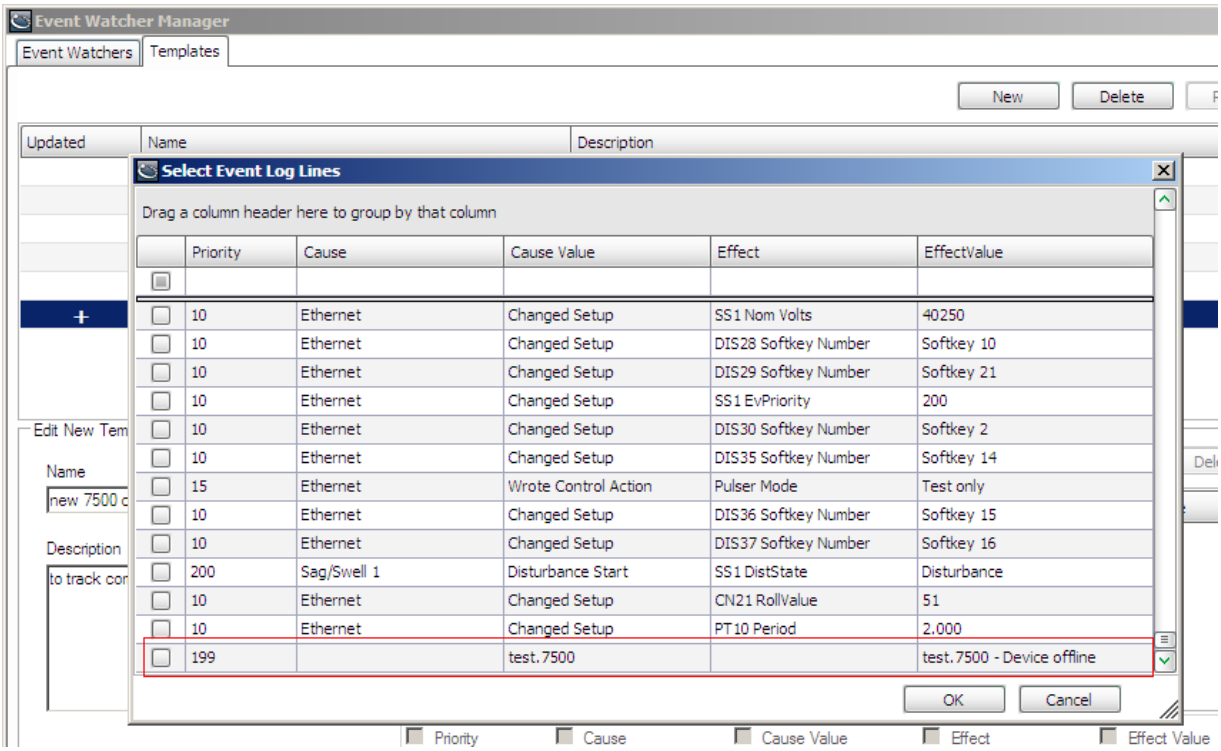
The Log Inserter includes an ION module called the System Log Controller, and this module includes a setup register called Cutoff (by default set to 192) that determines whether or not a system log event is written to ION _Data. In it's default configuration, the Log Inserter will only write to ION_Data system log events with a priority of greater than 192. In the Management Console, it is possible to define an Online and Offline event priority on a per-device basis. By default these values are 10 and 128 respectively, thus these events will only get written to ION_Data by either changing the Cutoff value in the Log Inserter, or modifying the priorities for a device use the Advanced Properties in the Management Console.

You need to make some configuration changes to ensure that the offline event written to the System Log gets written to the EventLog table in ION_Data. For this exercise, change the Offline Priority for your device from 128 to 199.



Step 2: Create the Event Watcher.

1. Start the Event Watcher Manager from the Management Console->Tools Menu
2. Click on the Templates tab – you will need to create a new Event Watcher template first. To do this click on 'New' in the upper pane. And provide a Name and Description – you'll type in this information in the lower pane. Now you have to define the conditions that the Event Watcher is looking for. If you click on 'Select From Event Log', you can choose the actual offline event that gets generated. Obviously this assumes that such an event exists.



3. Check the event from the list, choose OK, and you have created your new Event Watcher template. Alternatively, you could manually create an Event Watcher template where the Priority is whatever you assigned in Management Console, the Cause Value is the device name as it appears in the Management Console, and the Effect Value <device name – Device offline. (is this case sensitive? Is that why the sample comms loss doesn't work?)
4. To create an Event Watcher based on this template, select the template you created in the previous steps from the dropdown list in the lower pane.
5. Now comes the tricky part. You need to choose the Source of the events that the Event Watcher is looking for. In this case, the event was originally a system log event, so the source you need to choose is the Loginserter, not the device. It's the Log Inserter that writes the high priority system log events to ION_Data so it is considered the source of these events. Click OK to complete the

process. Now you have an Event Watcher set up that you can use when configuring your report subscription.