

Knowledge Base Article

Product Group: SKF Multilog On-Line Systems

Product: IMx

Version: N/A

Abstract

When live data requests from a SKF Multilog IMx On-Line System are slow to return data or the IMx Service window is always flashing busy, communication time interval settings may need to be adjusted. This article explains how to properly adjust the time settings for an IMx unit and what to take into consideration when installing an IMx system.

Overview

When installing an IMx system, there are a few things that need to be considered:

- The IMx initiates the communication with the host computer (whereas the LMU waited to be asked for data)
- How many IMx units are in the system (16-channel boards)
- How often post-processing alarms are processed
- How often a channel's BOV (Bias Output Voltage) is checked

Alarms that are post-processed are Envelope Alarms, Dead Bands, and Band alarms that exceed 4 bands/channel.

Since the IMx initiates communication with the IMx Service host computer, the traffic on the network is handled on a first-come, first-served basis. So during the initial installation of the IMx system - and any time additional IMx units are added - the timing of communications for the various data types must be evaluated.

Reference Time

The first timing that should be addressed is the “Reference Time”, or the time in which the IMx communicates with the IMx Service. This configuration should be done when the IMx is first added to the database.

To configure or change the Reference Time:

1. In @ptitude Analyst, select **Customize > Online Settings**.
2. From the available hardware devices drop-down list, select the IMx whose timing you wish to change.
3. Set the **Reference time**. [Figure 1]
 - It takes one and a half (1.5) to two (2) minutes for a fully-loaded IMx to transmit its data. If each IMx unit’s reference time is offset by two (2) minutes, that will prevent multiple IMx units from transmitting data at the same time.

Using this theory, a system with eight (8) IMx units would have reference times of:

```

IMx 1  00:00:00
IMx 2  00:02:00
IMx 3  00:04:00
IMx 4  00:06:00
IMx 5  00:08:00
IMx 6  00:10:00
IMx 7  00:12:00
IMx 8  00:14:00
  
```

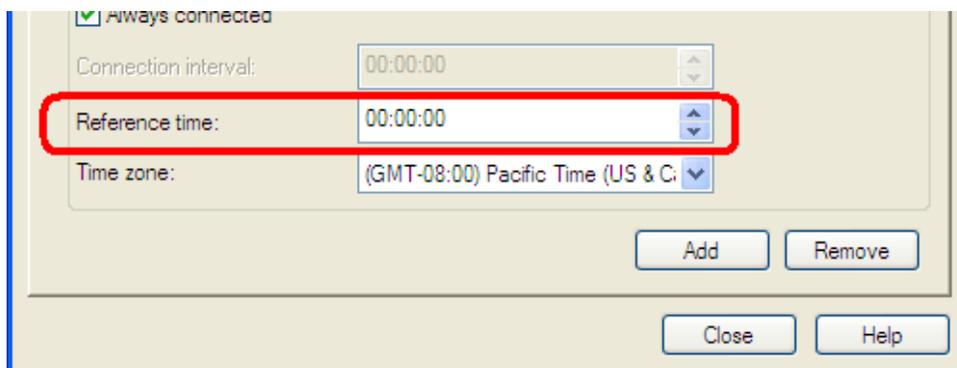


Figure 1. Reference time

BOV Check Interval

Next, the BOV Check Interval will need to be adjusted.

To change the BOV Check Interval:

1. Open Windows Explore and navigate to the <C:\Program Files\SKF-RS\SKF @ptitude Analyst> directory.
2. Locate the file "skflmxService.exe.config." [Figure 2]

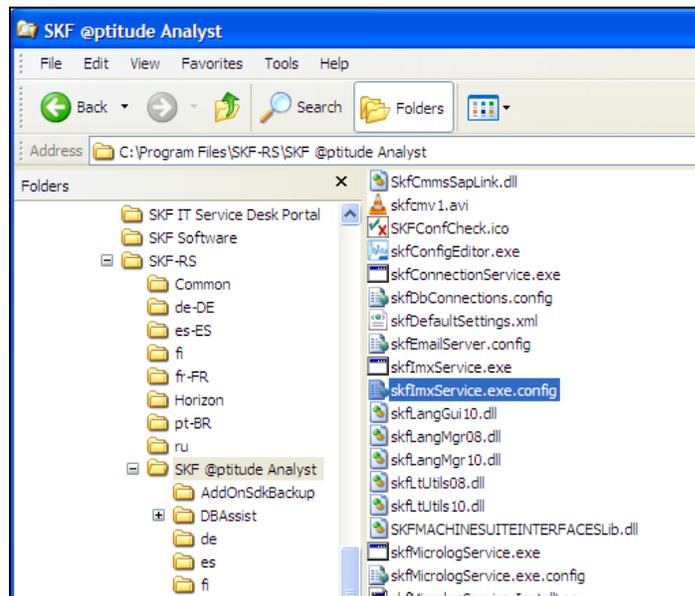


Figure 2. Locate skflmxService.exe.config file

3. Open the file for editing. To do this, right-click on the file and select **Open with > Notepad**. Add the following line to the code, as shown in Figure 3, then save and exit:

```
<add key="BovCheckMinutes" value="30" />
```

```
<ImxService_default>
  <add key="ServiceName" value="" />
  <add key="ServicePort" value="1000" />
  <add key="DbConnectName" value="sql_skfuser" />
  <add key="Hostname" value="USREMCNU1401RN1" />
  <add key="SendEmail" value="0" />
  <add key="EmailAddress" value="" />
  <add key="BovCheckMinutes" value="30" />
  <!--This value is used to instruct the service to write
```

Figure 3. Edit the configuration file

Post-Processing Time

Finally, adjust the post-processing time if needed. By default, post-processing alarms are checked every 15 minutes, and BOVs are checked every five (5) minutes. This checking requires that all points be uploaded and evaluated at the specified interval. By default, an IMx will try to communicate at the top of the hour, so if no changes are made to the default setting, all IMx units in a system will attempt to send data for all points to the database at once.

To change the post-processing interval:

1. In @ptitude Analyst, select **Customize > Preferences** and click on the **Global** tab.
2. Select **IMx post-processing interval in minutes** to edit the value. [Figure 4]

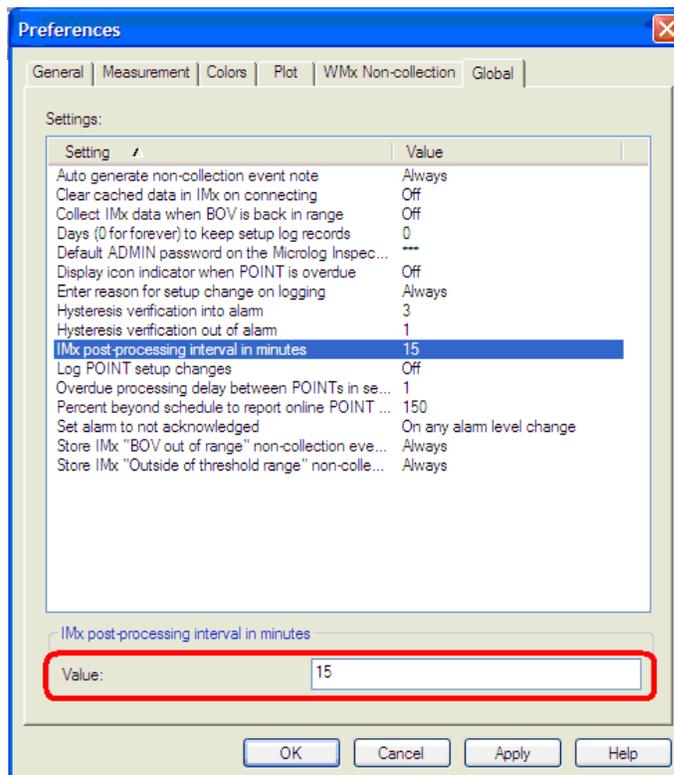


Figure 4. IMx post-processing interval in minutes setting

For further assistance, please contact the Technical Support Group by phone at 1-800-523-7514 option 8, or by email at TSG-Americas@skf.com.