TECHNICAL NOTE TNOI37

Title: Online Data Viewers

Product(s): G3, Data Station Plus and Modular Controller series

ABSTRACT

This document describes how to use the online data viewers in Crimson 2.0 to monitor the data tags or the gateway blocks.

REQUIREMENTS

In order for Crimson to monitor the data tags in a product, the crimson version (build number) and database version have to match the ones respectively running in the product. In the event one of the two does not match, Crimson will return an error message informing you of the mismatch.

If you plan to use the online data viewer feature anyway, Red Lion advises to proceed as follows:

- First, upload the database from the target device so you have a backup of the running program.

- Open that database using the latest version of Crimson

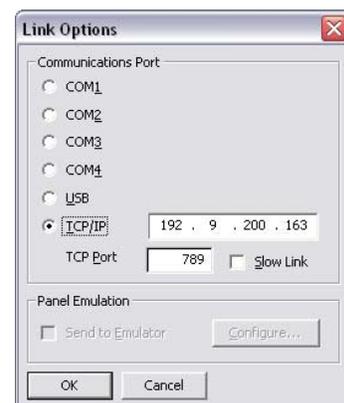- Download the database so Crimson updates the product firmware

If a database image is not available, "unable to upload the image", make sure the database you are about to download in the device corresponds to the currently running database.

SELECTING THE COMMUNICATION PORT

The data viewers can monitor data tags or gateway blocks using any of the programming ports: serial communication, USB or Ethernet.
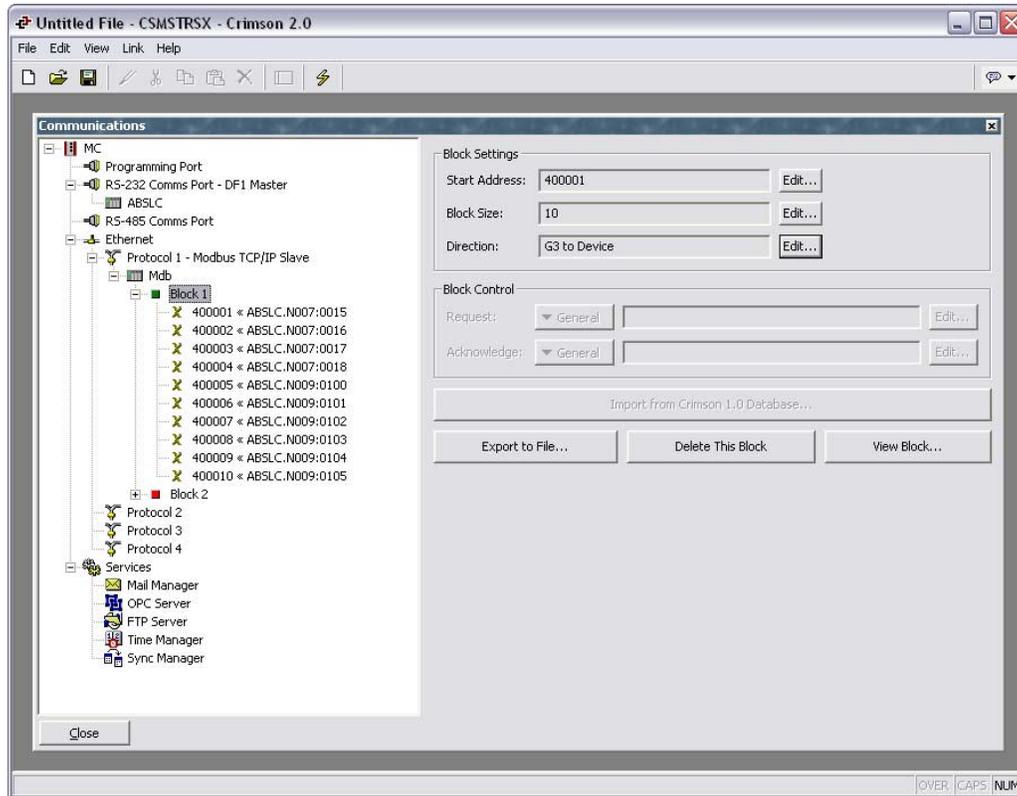
To select the communication port, click the menu Link > Options in Crimson. Then select the communication port to be used between the computer and Red Lion device.

Note: Monitoring live data using a TCP/IP connection can only be achieved if the currently running database has the Remote Update option enabled in the Ethernet configuration.
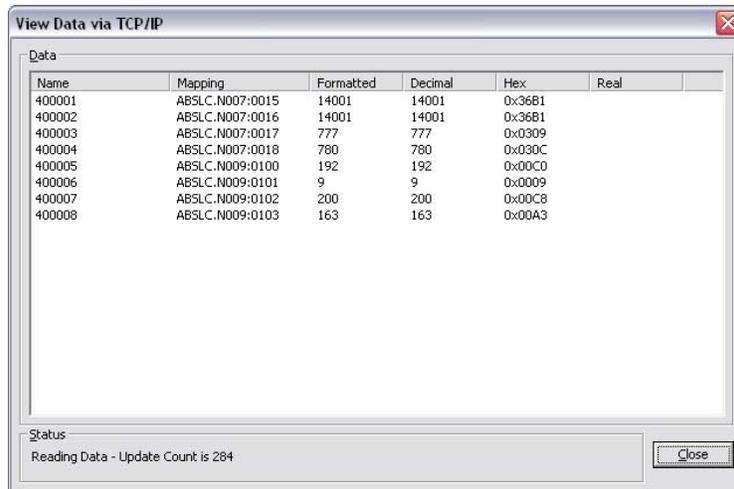
MONITORING GATEWAY BLOCKS

In the communication window, select the gateway block you wish to monitor, then click on the button "View Block…" available in the right hand side pane.

The View Data window pops up to display the value in each block addresses.

The View Data window will only display block addresses linked to a tag or other device address. Empty addresses will be disregarded.
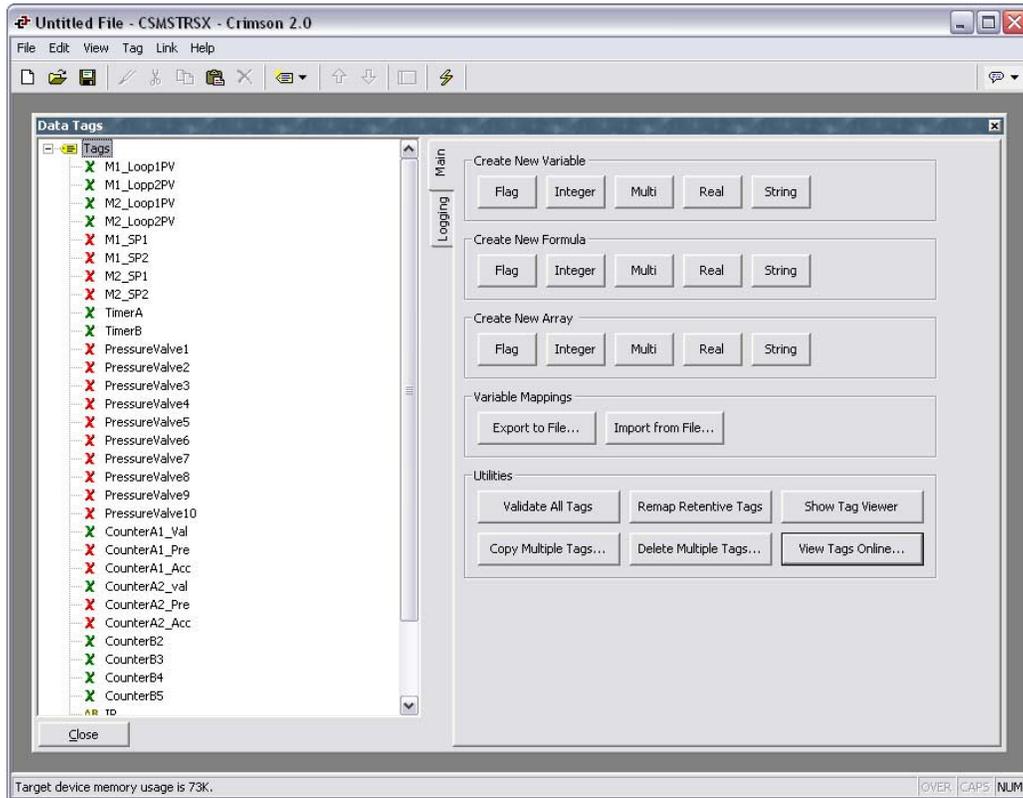
The View Data Window columns correspond to the following:

- Name – Block address name (Driver dependent)

- Mapping – Device address the block address is linked to (Driver dependent or tag)

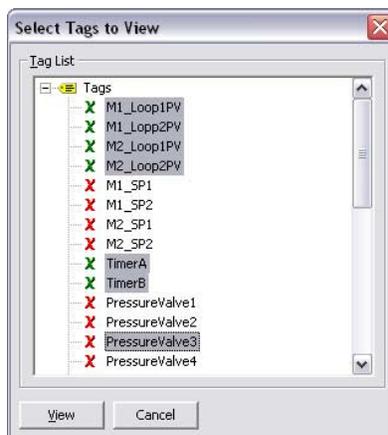- Formatted – Formatted data as per tag format when the mapped object is a data tag

- Decimal – Raw value as an Integer

- Hex – Raw value in hexadecimal

- Real – Value shown as a floating point

MONITORING DATA TAGS

In the data tags window, select the tag root, then click on the button "View Tags Online…" available in the bottom right hand side pane.
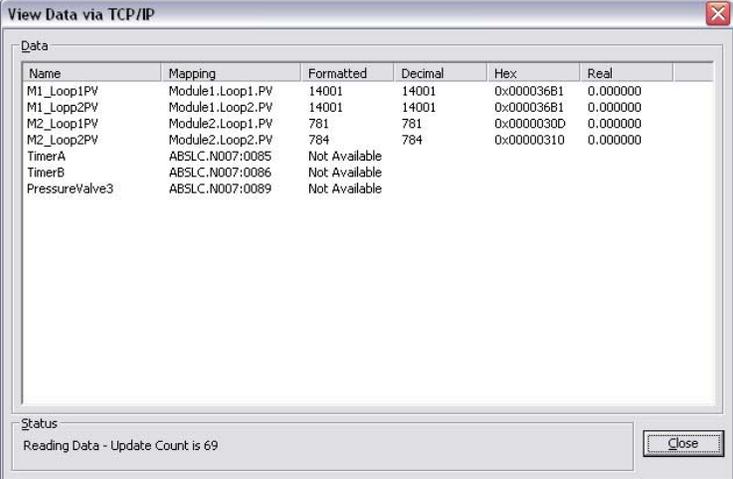

The Select Tags to View window pops up. This window is provided to select the tag the user wishes to display.

There are multiple ways to select the tags:

- For a single tag – Click on a tag so it is highlighted.

- For consecutive tags – Click on the first tag, press and hold the SHIFT key and click on the last tag. Selected tags are highlighted.

- For multiple individual tags – Press and hold the CTRL key while clicking on each tags.

Click View to display the View Data window. Only selected tags are displayed.

The View Data Window columns correspond to the following:

- Name – Tag name.

- Mapping – Device address the tag is linked to. Mapping will display Internal if the tag is not mapped.

- Formatted – Formatted data as per tag format.

- Decimal – Raw value as an Integer.

- Hex – Raw value in hexadecimal.

- Real – Value shown as a floating point.

Note: In the event a mapped tag is unable to pull the data from a connected device, the View Data window displays "Not Available" in the formatted column. This means that the communication between the Red Lion product and the connected device is not working.