

## Frequently Asked Questions

**Title:** 1553Px module [RT mode] How to set up Subaddresses and DataBlocks for Rx and Tx

**Date:** 22 May 17

**Card/Board/Module:** 1553Px family [ e.g., M4K1553Px module, UNET/Px ]

**Operating System:** All

### Question:

- (a) How can I set up one Remote Terminal (RT) with two different SubAddresses (SAs), such that one SA receives data, and another SA Transmits data ?
- (b) Where is the data stored on the RT side for each SA ?
- (c) How can I set up a SubAddress (SA) to return the data sent to it by the BC ? e.g., Set SA30 to be the **Wrap Around** buffer.

### Answer:

- (a) Set up your bus list to transmit a BC2RT (Receive) message to the Receive SA, followed by an RT2BC message to the Transmit SA. You can set this bus list to be transmitted one shot, multiple times (up to 255), or continuously.
- (b) On the RT side, data is stored in data blocks. You can assign a specific data block to a specified **RTid**, which is a designation of **RT number**, **SA number**, and **direction of data transmission** (Receive or Transmit, from the RT's perspective); using function `Assign_RT_Data_Px`.
- If you do not assign a data block to your RTid, then the default data block assigned is number 0. In this case, the last data received for a Receive (BC2RT) message will be the data that is transmitted for a Transmit (RT2BC) message.
- (c) Call the function `Assign_RT_Data_Px` twice, using the same data block number for the two RTid's, where the RTid's have the same RT & SA, but the direction of one is 0 (Receive) and the direction of the other is Transmit (1).