PARTICLE MEASURING SYSTEMS
www.pmeasuring.com
5475 Airport Boulevard, Boulder, Colorado 80301-2339
303.443.7100 1.800.238.1801 Fax: 303.546.7380
Customer Service Center 1.877.475.3317
Instrument Service 1.800.557.6363
BSI FM 40574

Facility Net and Pharmaceutical Net Network Stations/ RTS Communications

Network Stations need to communicate over a network with the Real Time Station (RTS) to receive updates. Real-time information is sent to the Network Station from the RTS via TCP/IP. This information includes instrument data, status and events. Historical data is retrieved from the database files that are located in the RTS network directory. This information is used when running jobs or opening any window that displays historical data such as historical tabular and the event log. Because this information is received in different ways you may have a situation where one is working and the other is not.

When added to the Network Station, an RTS must have a Static IP. The Network Station uses this IP Address to initiate the communication. The Network Station makes a connection to a well known port of 1562 to ping for the RTS IP Address and will then open a socket with the RTS. The Network Station and RTS communicate with Windows sockets that use the TCP/IP protocol. Also, the RTS and network stations check their socket connections every five minutes. If a socket is not valid, then the socket is removed. A new socket is then created and the communication is reinitiated.

Status of the RTS is show on the Network Stations Sensor Status Screen for Computers. When the RTS is shutdown, the sensor status screen will update to “Shutdown”. When the RTS is started up, the Network Station will update the sensor status screen “Connected.” Should you have a “No Response”, this is an indication that the IP address on the RTS has changed.

We need to be sure this ends up in our tech notes documents so we have it next time a customer needs to know about their communications. I’m thinking that I’ll add it into the FacnetMapping.doc document that shows how to map and set up a Network Stations and its RTSs.