

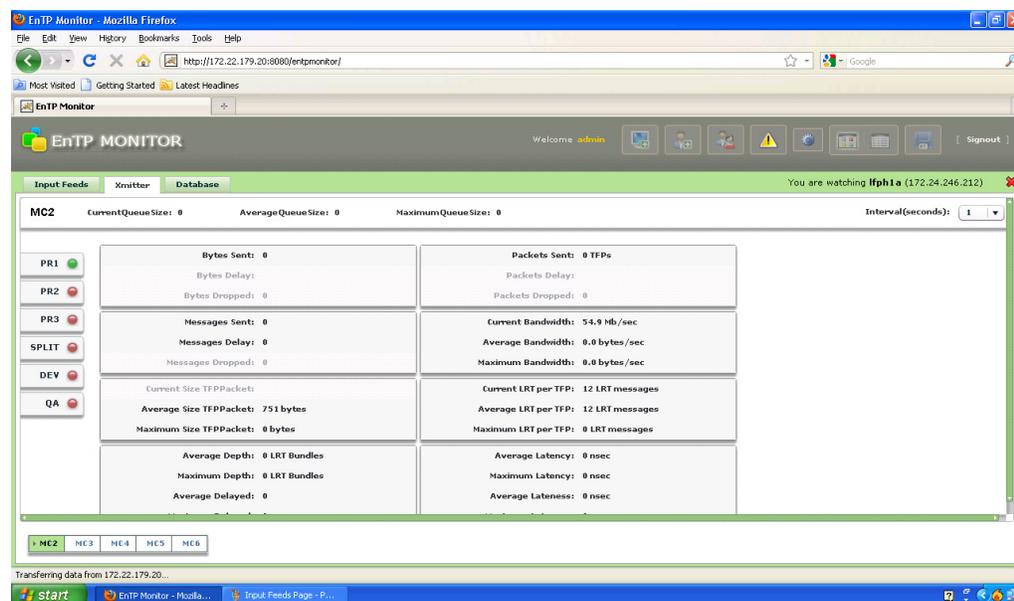
Enterprise Ticker Plant monitoring tool

The Enterprise Ticker Plant Monitor (EnTP Monitor) is a centralized web application that monitors the Fnet EnTP systems deployed at various co-locations in the large financial firm network, using Simple Network Management Protocol (SNMP) polls and traps.

Each Fnet EnTP system is provided with one entpwatch, snmp agent which is built on top of an entpwatch manager that allows for the various entp statistics as well as run time status information populated in their shared memory sections to be queried using SNMP. EnTP monitor works with those entpwatch SNMP modules and presents statistics related to system level, receiver specific, xmitter specific and database specific information in a more organized way by implementing the server push technology by using BlazeDS module. This BlazeDS module acts as a backend infrastructure to the EnTPMonitor collecting the various data objects like Line Info, Receiver Info, Xmit Info and DB Info and pushes them to the User Interface.

Key Design Features:

- High Reliability and uptime (web server tuned to perform the best).
- Easy to operate, maintain and administer.
- Less bandwidth usage by the SNMP module, entpwatch.
- Runs under a commercially supported Linux distribution on commodity hardware.
- Easy to configure both at the web server side and the EnTP monitor instance side.
- Well defined Management Information Base (MIBs) which define all the EnTP parameters to be maintained, with proper (Object Identifier) OID hierarchy.
- Well defined management information base (MIBs) which define all the EnTP parameters to be maintained, with proper OID hierarchy.
- Uses the centralized MySQL database for holding the receiver specific, xmitter specific and database specific data.
- Implements spring-MVC (Model View Controller) framework as the Java backend for the web server and SNMP4J API in order to get the response polled by the EnTPWatch module.
- Implements BlaseDS server side component that enables to easily connect to the backend distributed data and push data in real-time to the Flex UI.
- Implements a more sophisticated, flexible and rich user interface using Adobe Flex and pureMVC framework.



EnTPMonitor is a powerful network monitoring tool. This application helps the network administrators at the Network Operation Centers monitor the different machines that runs one of our client's lfnet application.

Using the EnTPMonitor we can;

- Monitor the data received in the Input Feeds
- Monitor the data transmitted by the Xmitter and the xmitter details
- View different database segments' details
- View the alarm conditions;
 - Receives regular alerts regarding the status of the different vital stats of the systems monitored.
- Analyze Logs: View the logs related with EnTPMonitor using EnTPLogAnalyzer.
- Query the different database segments of the monitored hosts using the DB Query Tool
- Edit the prices or flags of a particular record of a db segment
- Export the records of a particular db segment.

Input Feeds

Input feeds tab includes the different regions, countries, exchanges, receivers and their respective input feed lines that are receiving the data on the left hand side. Details about the data received like current sequence number, high sequence number, packets in order and packets out of order, etc can be viewed in the detailed input feeds tab. Data respective to the receivers can be viewed in the line for the receiver like, BytesRead, RecordsPerSecond and RecordsProcessed and the Run, Watch and Log bits.

Xmitter

The xmitter details can be viewed in the xmitter tab. These details include the xmitter feeds per xmitter, the channels per feed and the detail xmitter channel parameters.

Database

This tab shows the different exchanges that are monitored and the total number of records that each exchange has and the number of records used by the data in that exchange. The percentage of records used is also shown for each exchange.

The monitoring tool application is divided into three different modules:

1. **EnTPWatch Module:** This is modeled along the mWatchDog legacy tool application of eSignal. The main function of this module is to watch the network traffic from the lfnet application and push it to the client side to be displayed in the GUI.
2. **Java Backend – BlazeDS:** Spring Integration Module. This module makes use of BlazeDS powerful remoting and messaging facilities in combination with the familiar spring programming model to provide support to the application.
3. **Application Front-End GUI Module:** This module implements the GUI required for the monitoring tool application in Flex.

