

Socket Station™

Your network contains many sources of data: hardware I/O ports, log files, databases, SNMP, etc. Socket Station mediates data streams, and replicates them for downstream applications.

How do you make live data available to more than one application?

You can't always just add more connections to the data source. A software application can bog down when you add more clients to its event stream. A hardware device has physical I/O port limitations.

Instead, attach Socket Station. Then each data source is represented by a *channel* that **replicates** and **buffers** data for any number of downstream listeners.

How do you deal with multiple I/O protocols?

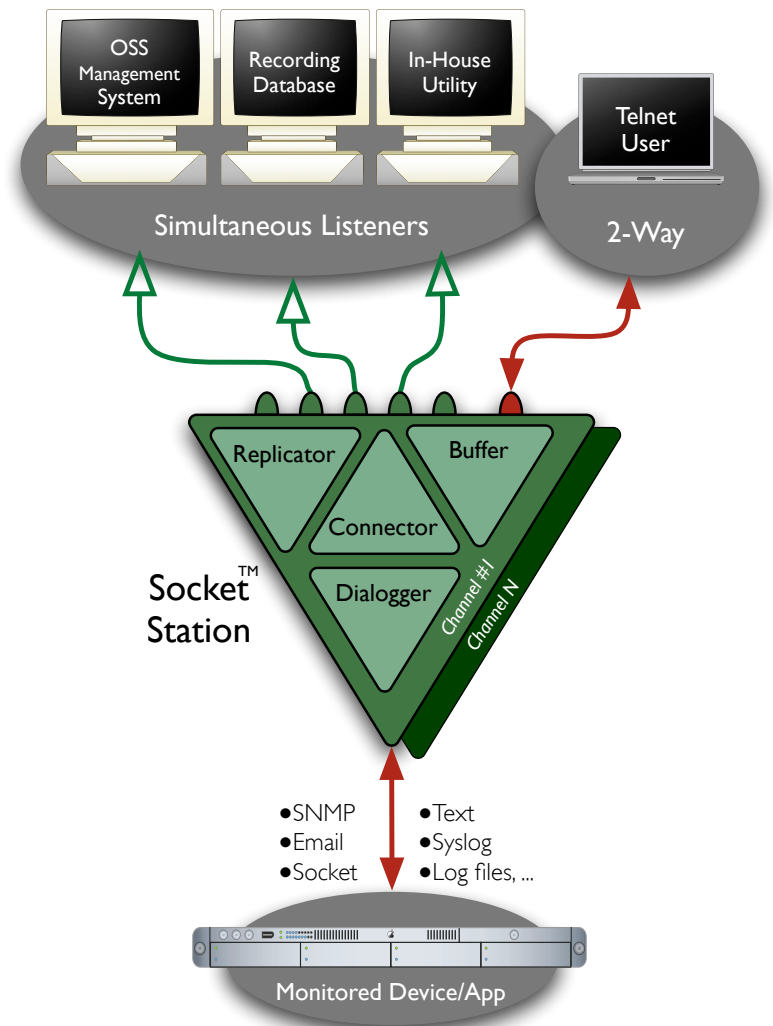
If you have more than one type of data source, then you probably have more than one type of communications interface: sockets, SNMP, database queries, telnet/login/command, etc. As for log files, you may need a way to transmit their real-time changes to a remote machine. Your downstream applications may not be easily configured to handle all the possibilities you face.

Socket Station uses **plug-in** connectors. Each specializes in one protocol. All common protocol connectors are included. Custom plug-ins address special needs, e.g. CORBA, RMI, proprietary APIs, etc.

Downstream, Socket Station provides a consistent interface for you, regardless of the underlying protocols required to collect the data. You just open a socket to Socket Station to start receiving data.

How do you reconnect everything after an outage?

Socket Station channels isolate your listeners from your data sources. If a data source fails, the channel periodically tries to reconnect. Meanwhile, the listeners stay connected to the channel, unaware of the disruption, and therefore avoiding a domino effect of restarts. Socket Station logs these events, so you can monitor the status if you want.



Login Sessions

Socket Station can support interactive (two-way) sessions too. You can configure any channel with an optional two-way socket, in addition to the pool of one-way listener sockets. If you connect to the two-way socket (e.g. via telnet) you get the same experience as connecting directly to the device. At the same time, your one-way clients monitor the session, and Socket Station can log the session.

Security

Socket Station's integrated RADIUS supports enterprise-class authentication, authorization, and accounting. You can also configure IP access lists to add another level of protection, customized per channel if necessary.

Common Plug-in Connectors

Socket Station is a hub for your data stream traffic, so it supports many data collection options. The plug-in API ensures that Socket Station can adapt to your custom needs too.

Socket	Connect to an application or terminal server port.
Telnet	Socket Station can telnet, login, and run a command via Socket Station Dialogger™.
TCP Socket Server	An application, such as a home-grown tool, can connect directly to Socket Station.
UDP Socket Server	Socket Station can be configured as a Syslog or generic UDP server, with forwarding.
SNMP Traps	Socket Station translates SNMP traps into XML, and optionally forwards the original traps.
SNMP Polling	Socket Station polls SNMP OIDs, presenting the results in XML format.
Tail (Log Files)	Socket Station can trace a pipe or log file, including rolling archive files.
Command	Socket Station can execute a shell command and process the I/O.
STDIN	Socket Station can read STDIN, when used in a command pipeline.
POP3	Socket Station can poll a POP3 email account and process new messages.

Administration

Your systems are mission-critical, so Socket Station's administrative operations are designed to eliminate downtime. Additional considerations include self-maintenance of disk usage, and informative log files that are easily monitored by management systems, (e.g. Augur®). Socket Station can be reconfigured on-the-fly, with changes committed via the console command interface.

The network-accessible console interface shows the status of all channels, and all connected listeners. You can arbitrarily disconnect any listener or temporarily stop a channel.

While a channel is stopped, all listeners remain connected, so there's no need to restart any downstream managers after making configuration changes or after resolving data source hiccups.

All features of the console interface are also available via command line. Commands can be issued locally or remotely to network-accessible Socket Station installations.

Buffering

Configurable buffers protect the broadcast rate of data streams so that temporarily busy listener clients do not miss data, and they do not impact the real-time performance of other listeners.

Dialogger™

Socket Station supports a scripting language to automatically issue interactive commands to a data source. Example: 1) login and run a command; 2) poll a database; 3) logout.

Performance & Requirements

Socket Station is a cross-platform Java™ application that supports all modern operating systems. Hundreds of simultaneous channels can be supported because Socket Station's multi-threaded design takes full advantage of the processor power of multi-CPU/core systems.