Tracking Accelerator Settings

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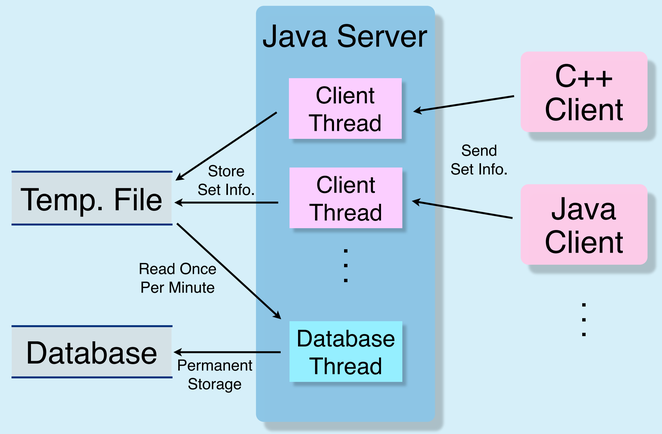
Primary Questions Answered

- A failure occurred at a specific time - what changed?
- A device setting has changed in an unknown way - how?
- How has a device setting changed over time?

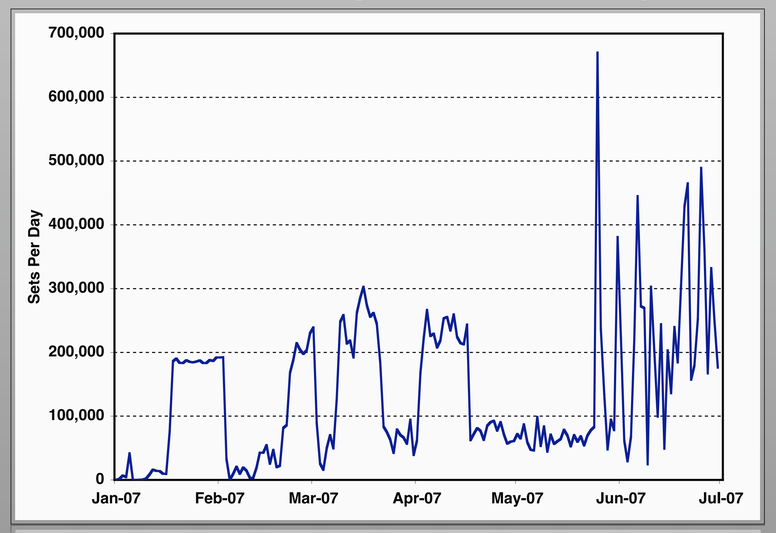
How Does the Set History System Work?

- Design - Store information about one million sets per day, searchable within a few minutes of the set, without a significant performance impact on applications or the database server.
- Clients - C++ and Java client applications use a separate thread to send device, user, machine, timestamp and application information to a central server.
- Server - A Java server uses a separate thread for each client connection. Data is written to a temporary file, then periodically stored in a database using a batch insertion method.
- Database - A commercial Sybase database management system is used to store all setting information. A specialized web query page is used to answer common questions.

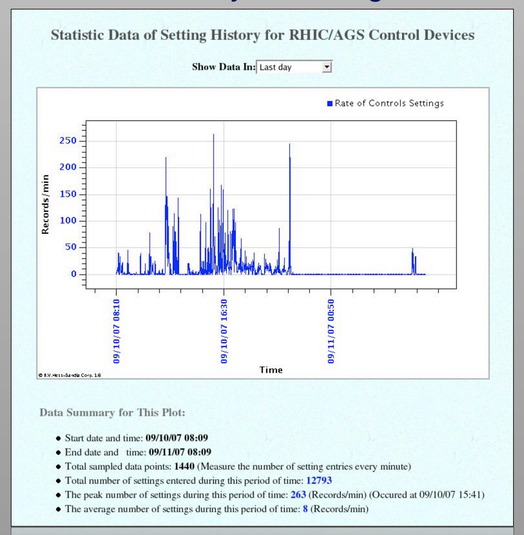
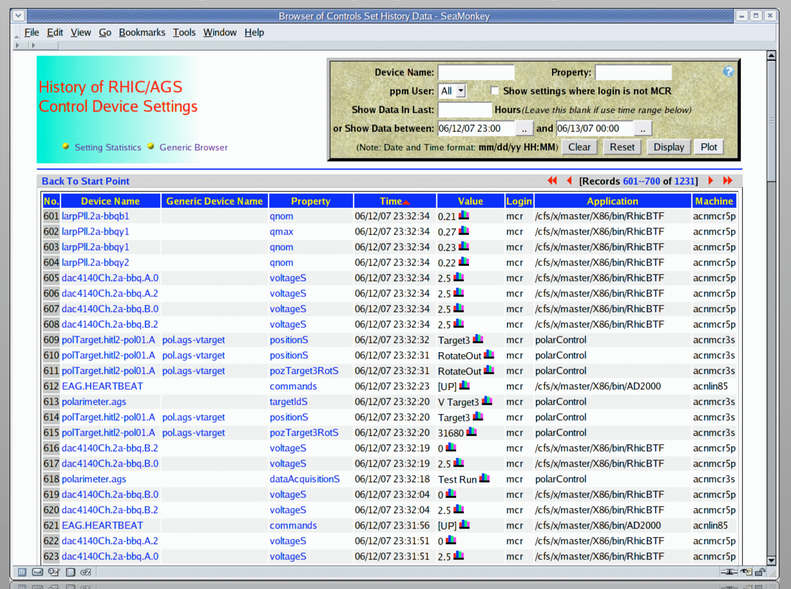
Diagram of the Set History System



Number of Settings Performed Per Day



One Day of Settings



Web Page for Querying the Setting Database