

OSISOFT ASIA TECHNOLOGY CONFERENCE 2007



Universal Platform, Infinite Possibilities

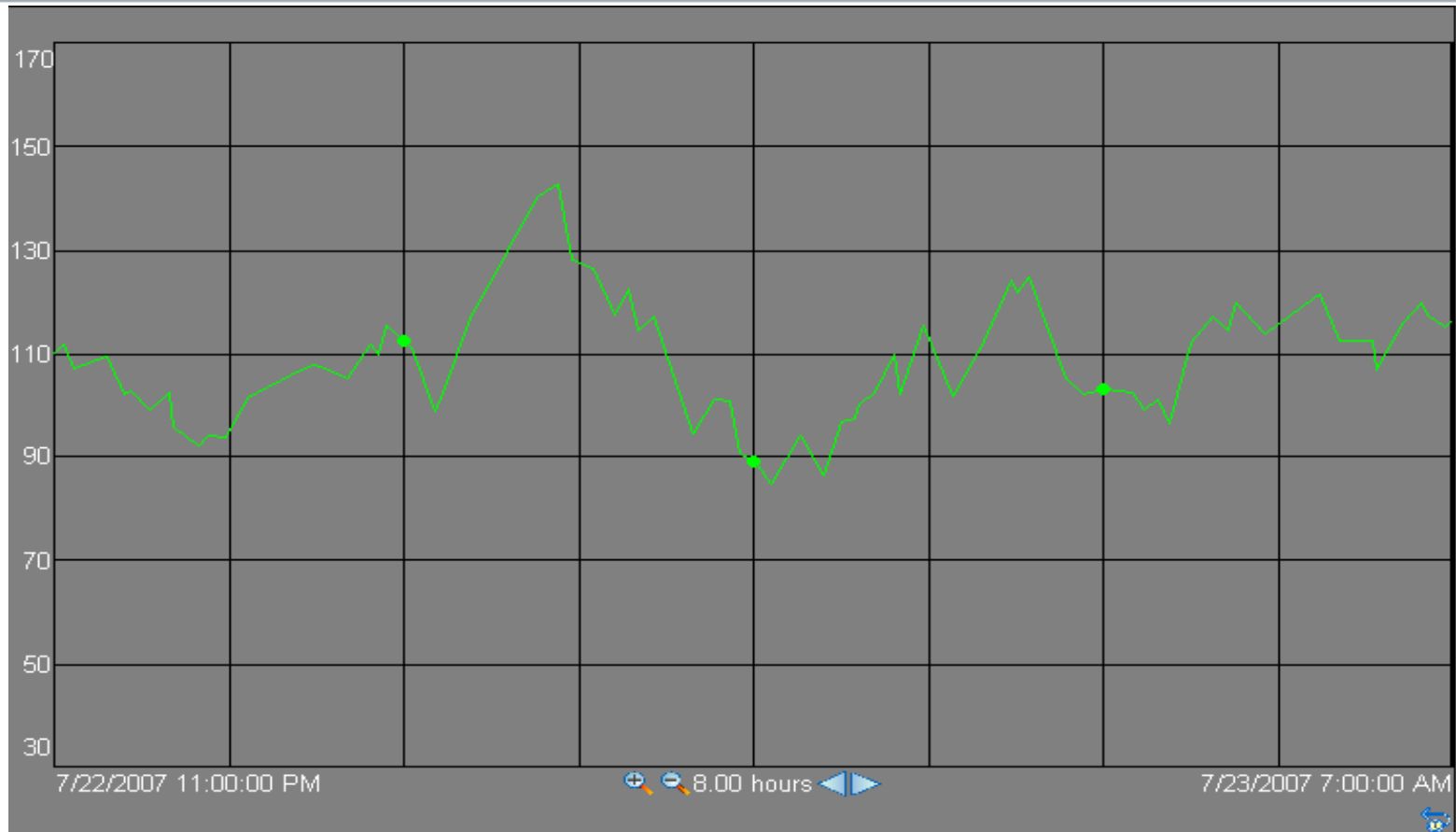
Event Framing Adding Context to Continuous data

By Lee Han Yong, Service Engineer

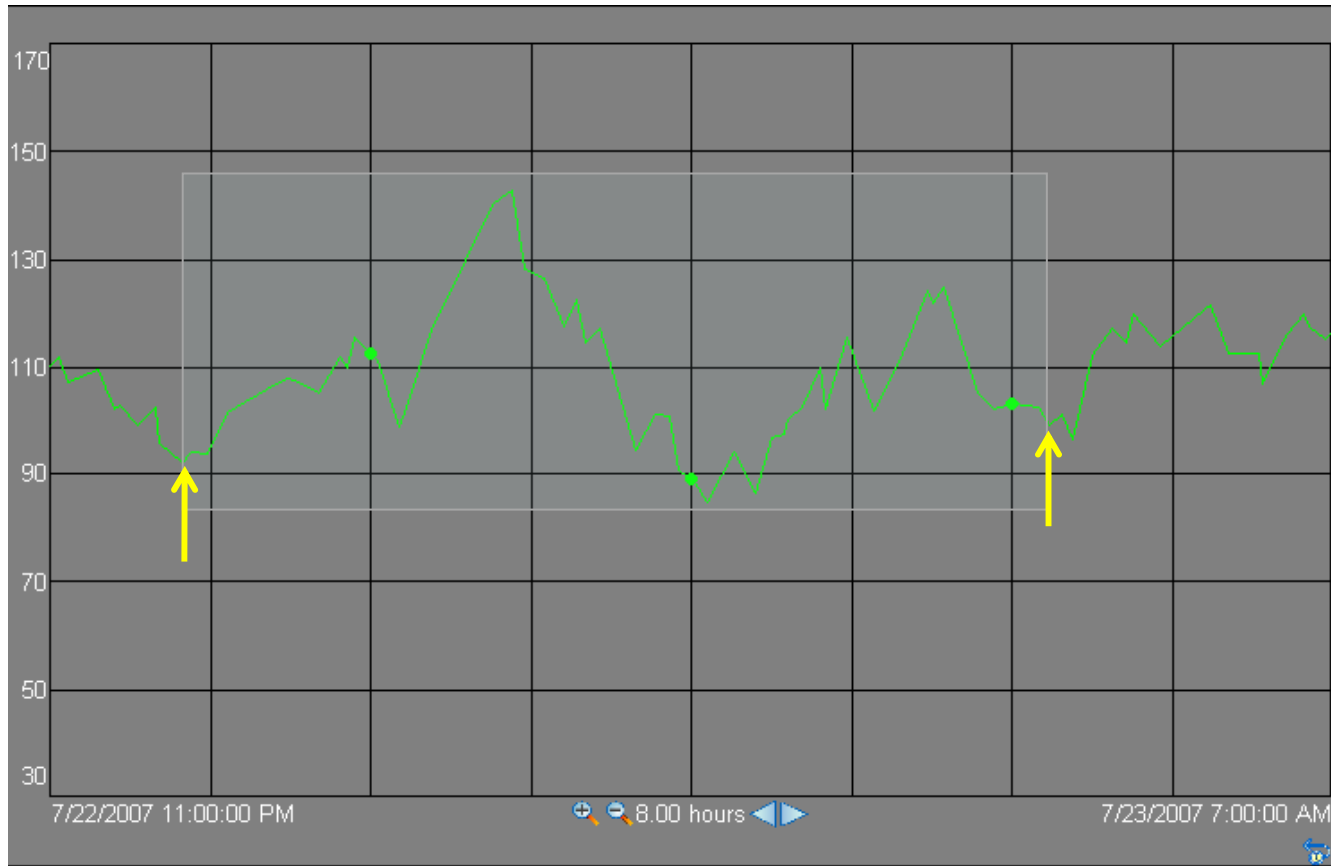
Objective

- What is Event Framing
- Framing Equipment startup or shutdown events
- Moving Forward

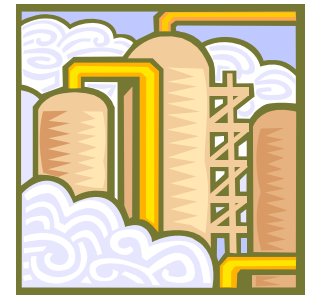
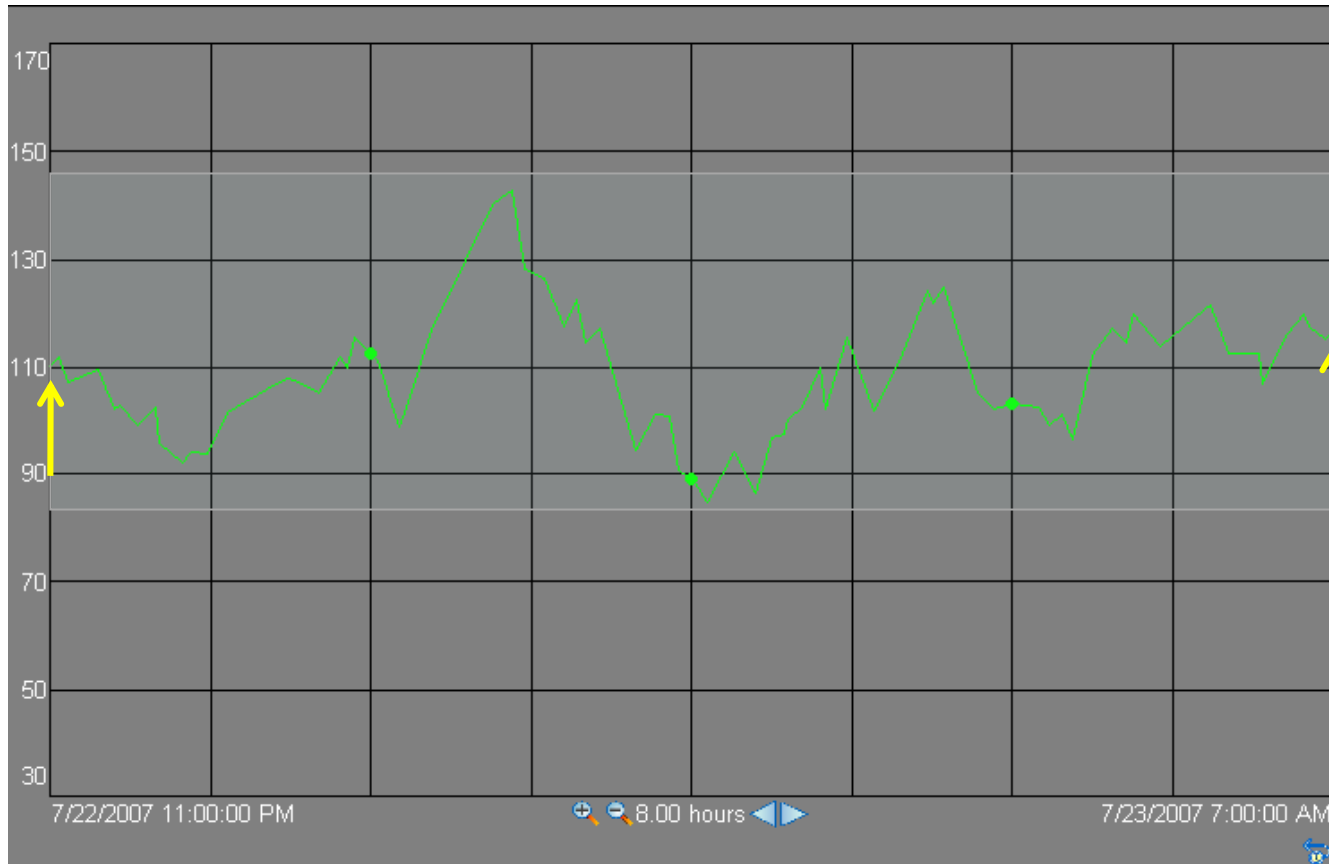
Continuous Data



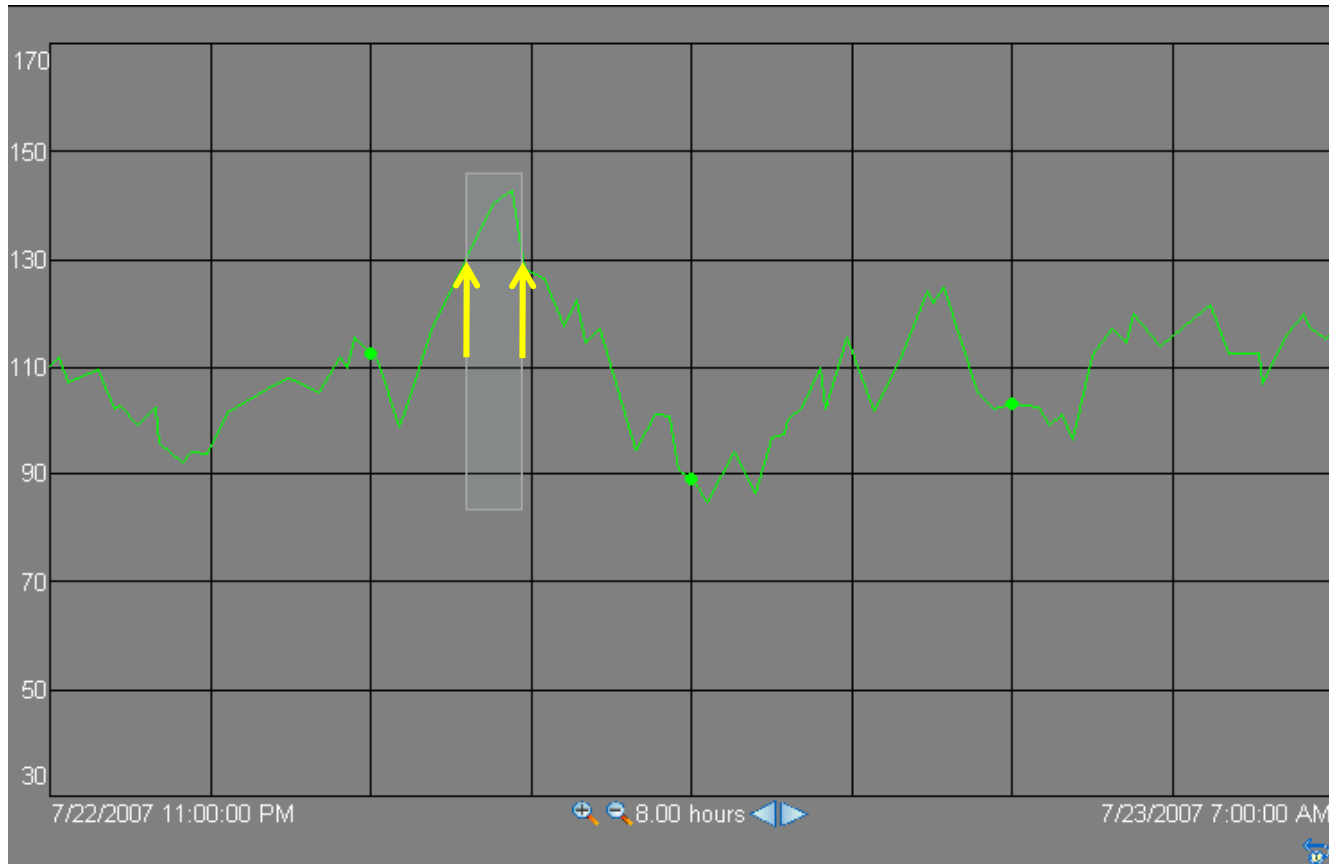
Batch



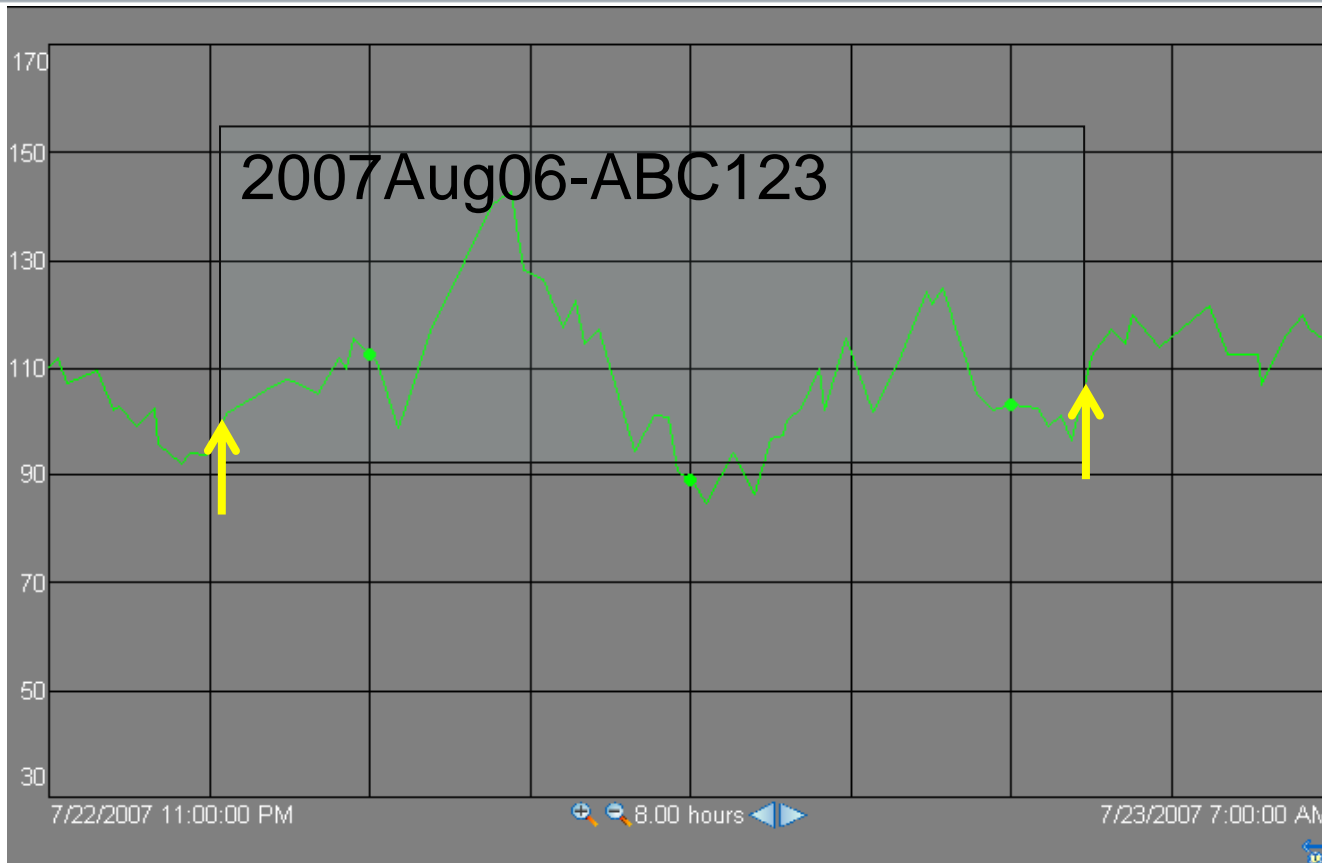
Day or Shift



Event



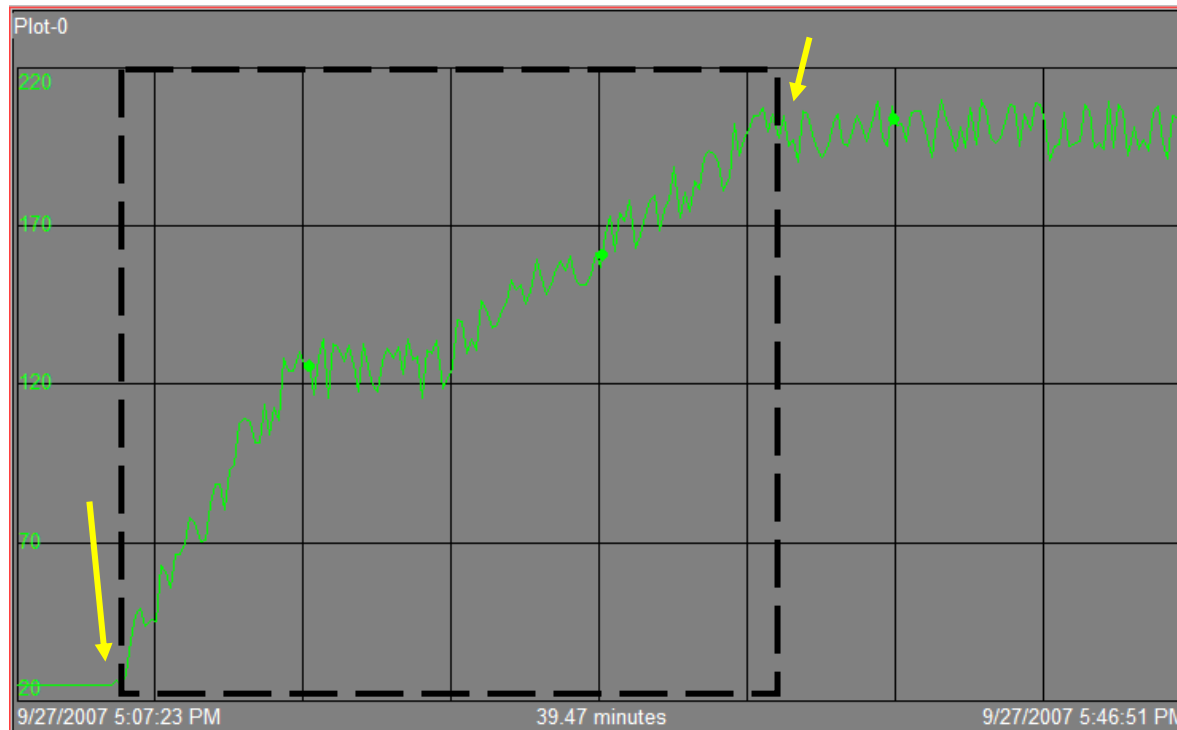
What is an Event Frame?



- Start time
- End time
- Name
- Associated data
 - Equipment
 - Tags
 - Comments
 - Event Frames

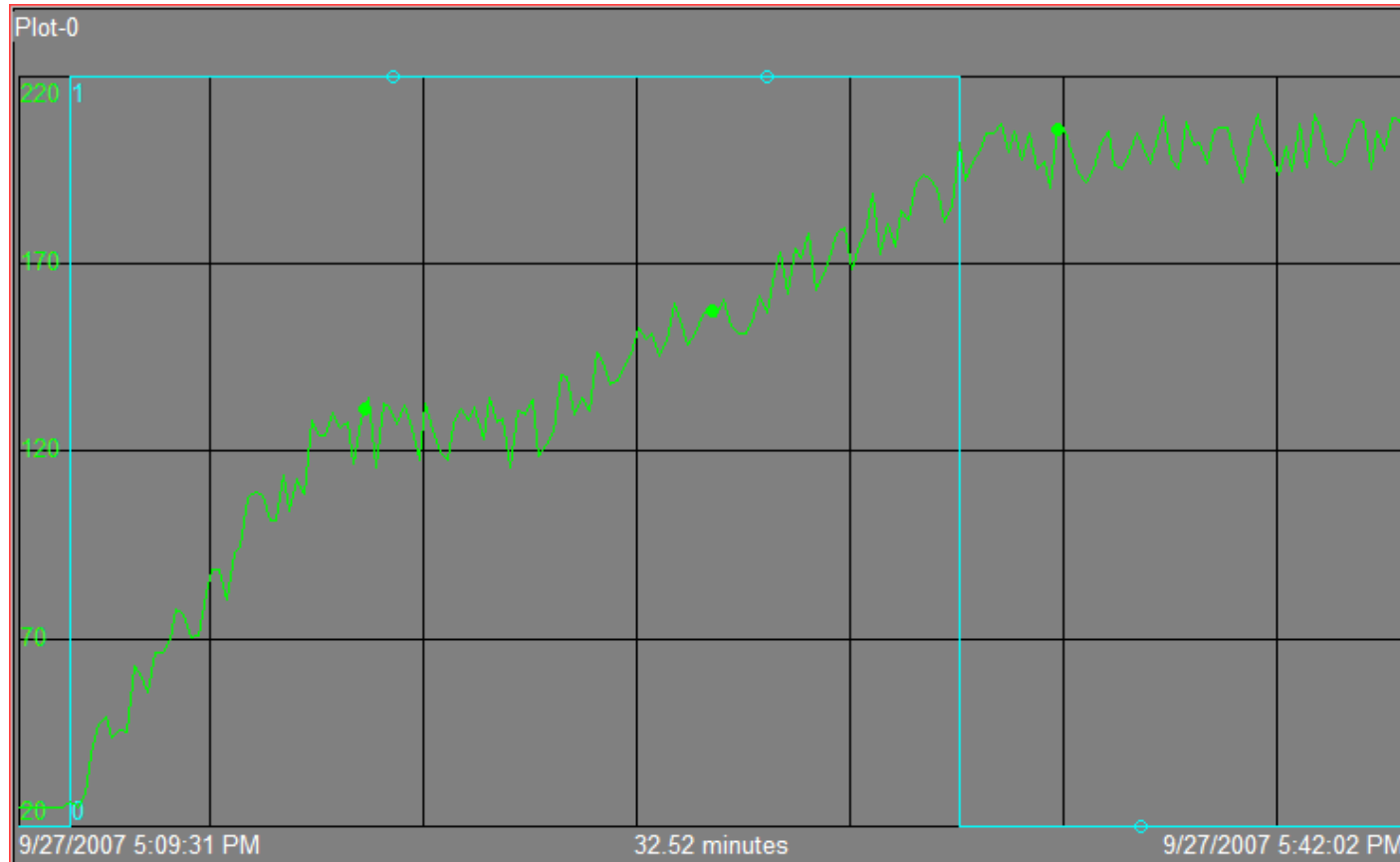
Example

- Capture Temperature Profile of Equipment start-up



Example

Start: Temp > 25 End: Temp Stabilizes at 200



Configuration

Configure Plunit in MDB for the unit



Configuration

The screenshot shows the configuration window for PIUnit. The 'Active Point' field is set to 'UC:Startup' and is circled in red. The 'Unit Batch ID Point' field is set to 'UC:EventName' and is also circled in red. The 'ActivePoint Behavior' section has 'Pulse' selected. The 'Evaluation Delay' is set to 10 seconds. The 'Recovery Options' section has 'Recover only PIBatches and PIUnitBatches' selected. The 'Merge Consecutive' section has 'Off' selected. The 'PIUnit Debug messages' section has 'Off' selected.

PIUnitBatches | PISubBatches | PIBatches | Interface

Active Point: UC:Startup

ActivePoint Behavior

Pulse

Step

Include zeroth state (Continuous)

Strings indicating zeroth state (example: Inactive,Stop,Off)

Unit Batch ID Point: UC:EventName

Product Name Point: Enter the Product Name Point

Procedure Name Point: Enter the Procedure Name Point

Evaluation Delay: 10 seconds Evaluate at the end of each UnitBatch

Recovery Options

Do not recover anything

Recover all PI Batch Objects

Recover only PIBatches and PIUnitBatches

Recovery time (in days): 4

Merge Consecutive

Off

On

PIUnit Debug messages

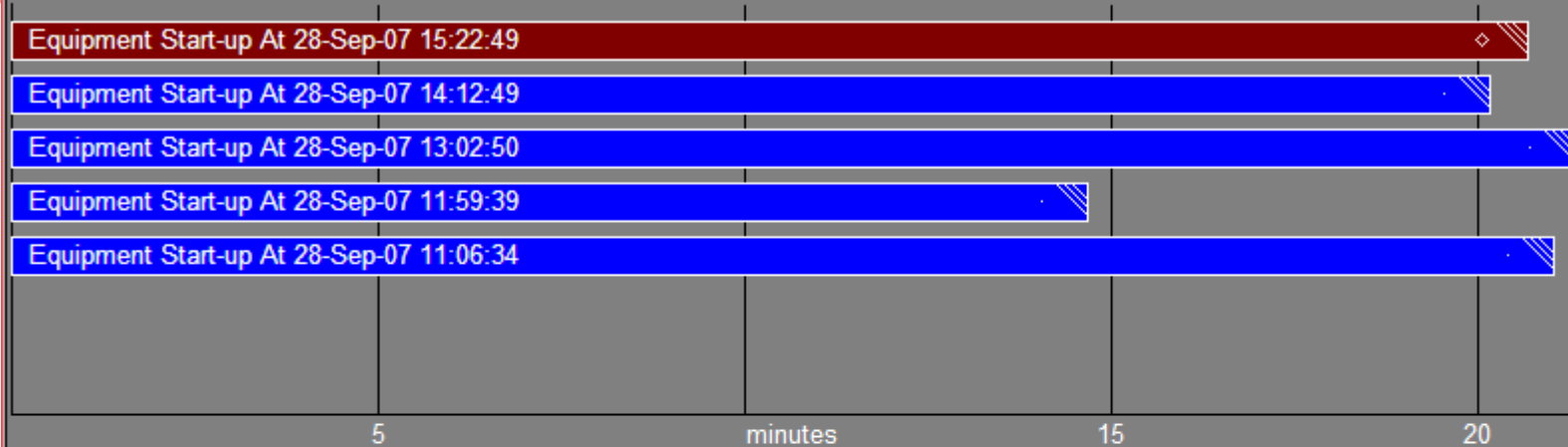
Off

On

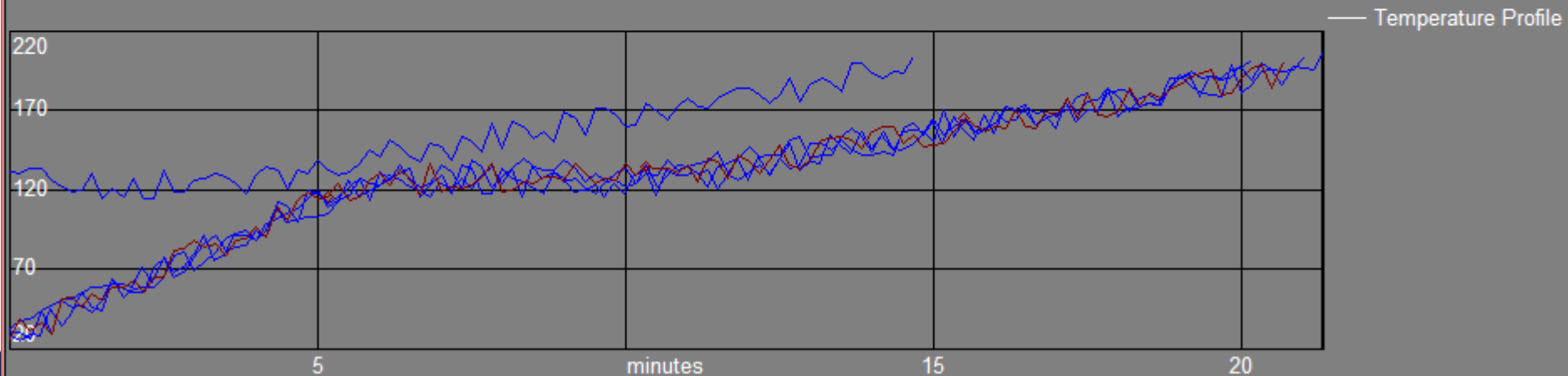
- Configure PIBaGen to capture the Start-up event

Compare Batches

Batch Gantt

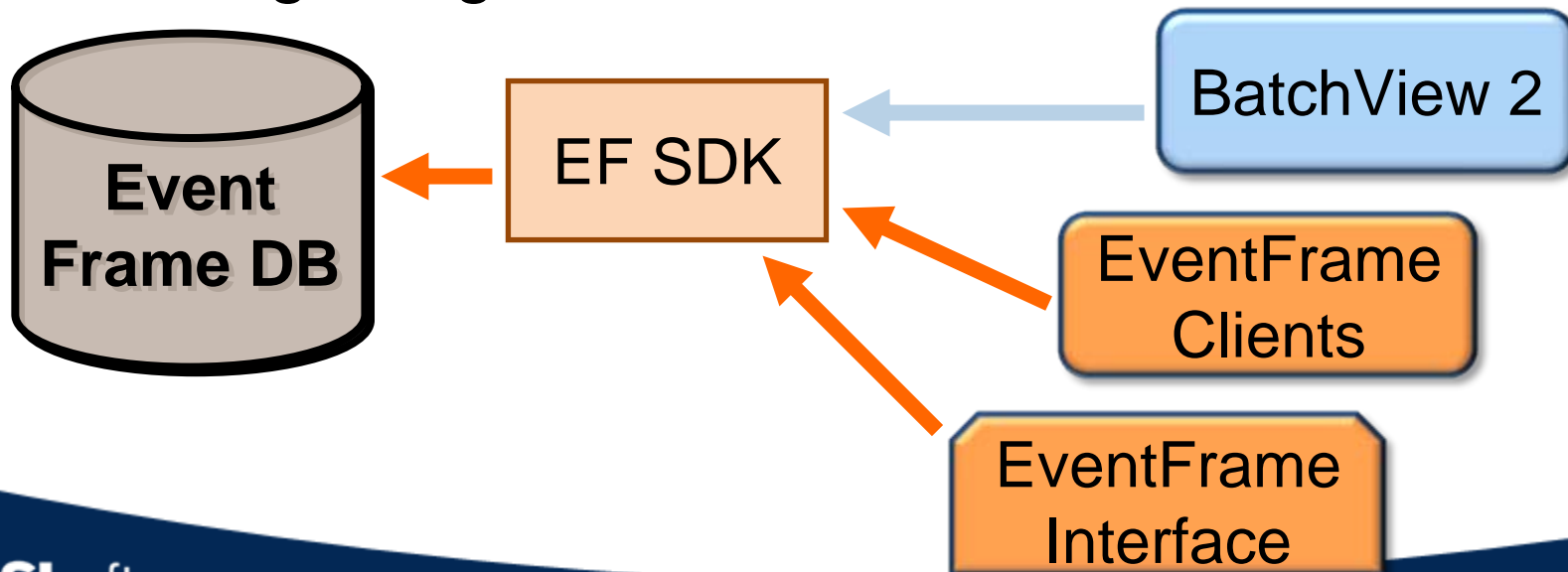


Batch Trend



Moving Forward

- Event Frame Interface & Database
 - Batch generation
 - Other schema for different use case
 - Migrating from MDB to AF2.0



Moving forward

- Tighter integration with PI Analytics
- Importing Event Frames from External Sources
- Additional product feature
 - PI Notifications
 - RtReports Reporting Properties
 - BatchView Webpart

EF Business Use Cases

- Downtime\Incident\Accident\Excursion
- Discrete Manufacturing
- Transfer Records
- Semi-continuous processes
- Equipment Startup and Shutdowns
- Preconfigured Time Ranges
- Batch

Batch Customer Advantages

- More usability
 - S88 supported
 - Other schemas relax restrictions of Batch Database
 - Multiple active UnitBatches on a Unit
- Increase database performance
- Tighter integration with all products

All Customer Advantages

- Model more types of processes and meet data storage demands
- Customer defined vocabulary
- Segregate Event Frame types
- Historize Event Frames from external systems
- Ad-hoc Event Frames

Conclusion
