**Analyzes DCS Event History to Help You Enhance Efficiency**

The Exaplog Event Analysis Package provides tools for managers, engineers and supervising operators to analyze DCS plant historical logs, and helps balance the process and enhance efficiency. Exaplog uses trend graphs to measure process request - operator action “balance”, and pie charts or tables to analyze event-type distributions, so helps you identify and reduce unimportant/consequential alarms, identify and improve inefficient operation sequences – and so balance the process and enhance efficiency.

**Enhance Process Stability: Balance Process Events and Operator Actions**

The Event Balance Trend (EBT) shows the numerical balance between process requests (events such as alarms and messages) and operator actions (such as tag mode and setpoint changes), and the relative timings of event and operation peaks – which are indicators of process stability and controllability.

**When, Where, What (3W) Filters Help You Narrow Focus of Analysis**

Filters allow you to set items to display, set 3W include/exclude conditions and scope – e.g. (time) span, station or event type – in order to deduce the cause of a process unbalance. Filter settings can be saved for reuse. You can sort tables by keys such as message type and station IDs.

- **Event Balance Trend Window (When)**
  Lack of balance between process requests (+ axis) and operator actions (- axis) can indicate timing of process problems (areas for improvement).

- **Category Sort Window (What)**
  Events sorted by category (e.g. alarm, process status change) can be displayed as a pie chart or table.

- **Message Summary Window**
  Displays time of events, type, and detail in order of event occurrence.

- **Point ID Sort Window (Where)**
  Displays events, sorted by frequency, with tag names/station IDs.
Synaptic Business Automation creates sustainable value by connecting everything in our customers’ organization. To realize this, Yokogawa integrates its business and domain knowledge with digital automation technologies, and co-innovates with customers to drive their business process transformation.

**Event Balance Trends Suggest Areas for Improvement**

<table>
<thead>
<tr>
<th>EBT Pattern</th>
<th>Pattern Type</th>
<th>Suspected Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>🟢</td>
<td>Balanced</td>
<td>No short term problem</td>
</tr>
<tr>
<td>🔴</td>
<td>Excessive Notification</td>
<td>Redundant alarms/messages Unimportant alarms/messages</td>
</tr>
<tr>
<td>🔴</td>
<td>Excessive Operation</td>
<td>Complex operation sequence Insufficient operator guidance</td>
</tr>
<tr>
<td>🔴</td>
<td>Operator Work Overflow</td>
<td>Insufficient operator capability Complex operation sequence</td>
</tr>
<tr>
<td>🔴</td>
<td>Inadequate Operation</td>
<td>Unstable process Complex operation sequence</td>
</tr>
</tbody>
</table>

**Continuous Improvement with Continuous Use**

Using the package continuously helps you to optimize alarm settings, continuously improve process quality, safety, and productivity – and reduce costs.

![Continuous Improvement Flowchart]

**Supported Platforms**

- CENTUM VP: R4.01 or later
- CENTUM CS 3000: R3.01 or later
- CENTUM CS: R2.05 or later
- Exaquantum R2.20 or later