



Optimization, Predictive Analytics, & Real-Time Process Models

OptiRamp Critical Archive
ORCA

Critical Archiving Challenges

- Critical events
 - Any situation that causes shutdown
 - No input points that tell exactly what happened
- Archiving challenges
 - Space limitations
 - System performance
 - Reliability

Economic Opportunity

❖ 3% to 5% savings based on current operating conditions

- Goals

- Reliably save usable data
- Understand what happened before, during, and after critical event
- Analyze parameter responses

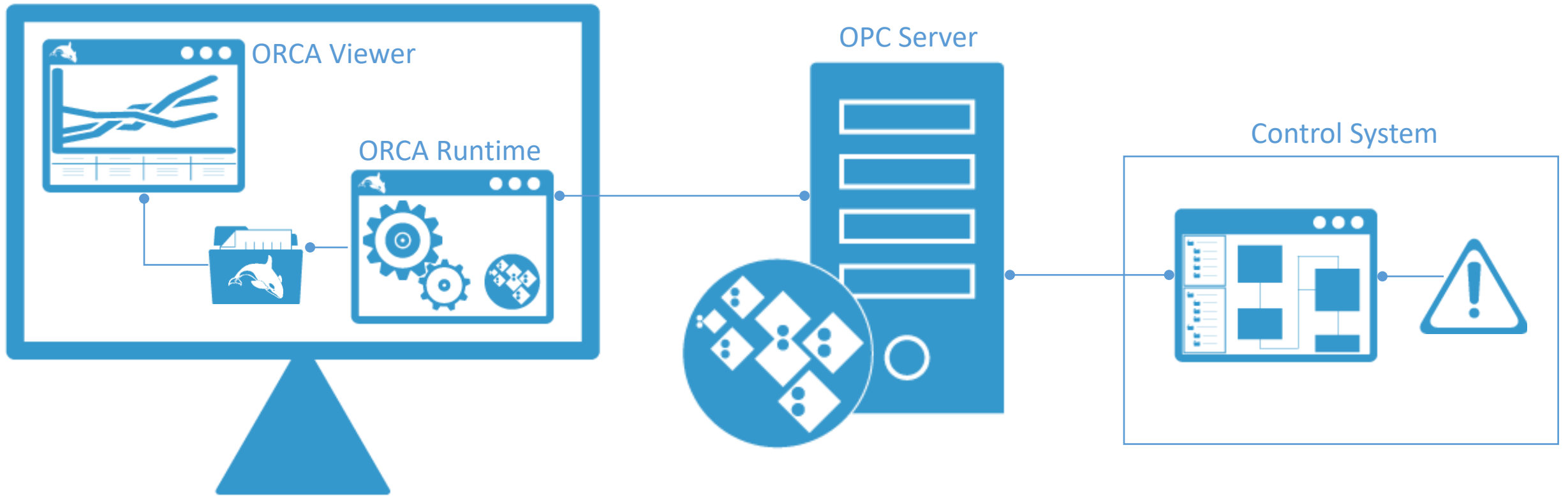
- How

- ORCA

Benefits

- Tool to analyze critical events
- Continuously collect data, including before, during, and after critical event
- Data available as CSV file and as trend
- Understand why shutdown situations occur

Solution Overview



Solution Overview (continued)

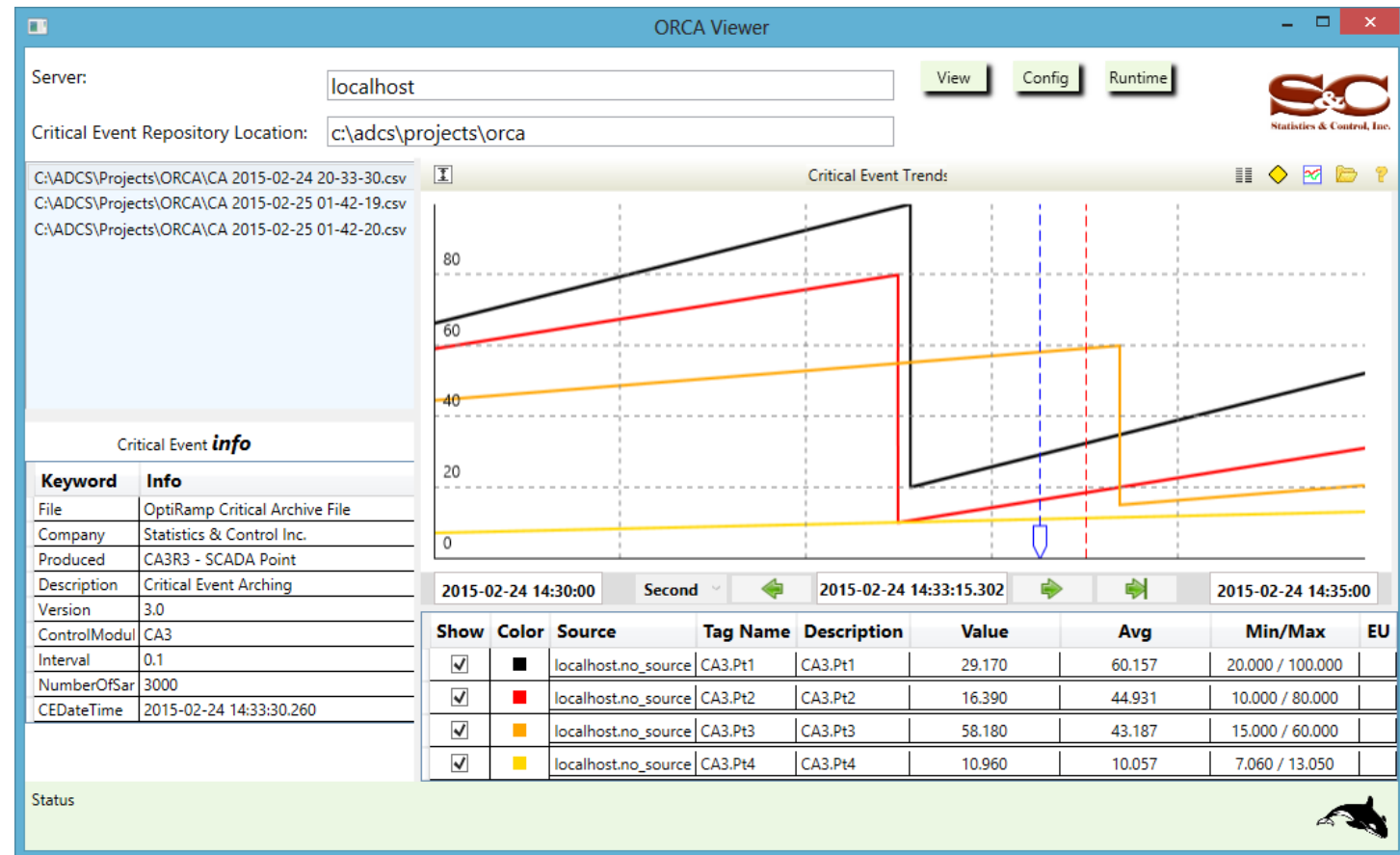
- ORCA starts in the control system
 - The Critical Archive Control module is installed inside the controller and continuously collects data in tables.
 - When critical event occurs, data before and after the event are available for trending and viewing.
- Components of ORCA – Windows Service
 - Windows Service – includes an OPC client and monitors data from the OPC Server for critical events
 - When a critical event happens the Windows service creates a CSV file and stores the critical archive file in a designated folder on your operator station.
- Components of ORCA – The Viewer
 - The Viewer component decrypts the data and presents it in a usable form.
 - High-resolution trends
 - Data table to analyze point by point

ORCA Details

- Critical Archive Control Module
 - Features custom algorithm block (CAB)
 - Continuously collects data
 - Provides critical event data to OPC Server
- ORCA Runtime
 - Includes OPC client, monitors OPC Server for critical events
 - Creates CSV file for each critical event, stores in folder

ORCA Details (continued)

- ORCA Viewer
 - Presents data as trend and as data table
 - Analyze each point
 - Configure OPC signals monitored by Runtime



Conclusion

- Understand why shutdown situations occur
- Collect necessary data to analyze situation but solve space limitation, system performance, and reliability challenges
- Use with Honeywell control system