data**PARC**

BETTER DATA. BETTER DECISIONS.



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PARCview

Real-time Data Visualization Tools



ALL YOUR PLANT'S DATA IN A SINGLE VIEW

Widely considered the best trending application available, PARCview provides a combination of powerful features and ease of use. Features such as drag & drop, right-click menu, dragging time-axis, multi-trend templates, time syncing of Multi-Trends, and unlimited traces on each trend provide a potent tool for troubleshooting and analysis.

PARCview Architecture

Combine data from multiple sites and multiple data sources in a single view without double configuration of tags or double storing of data. "Data Series" connections include drivers to real-time historians built on vendor provided API/ SDK's and industry standard templates (SQL, Web Services, etc.) to connect other key sources of data".



Integrates With



INDUSTRY-LEADING TRENDING TOOLS

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240			
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TABULAR

HISTOGRAM

XY CHARTS

PARETO

CREATE SOPHISTICATED PROCESS GRAPHICS

Produce a graphical representation of your process, complete with real-time values, calculated variables, dynamic animations, blinking alarms, links to other PARCview displays, and a playback mode for historical analysis. Drag and drop tags from process graphics onto trends to hone in on key variables. Even import existing graphics from PI, IP.21, and more.



CUSTOM EXCEL PLUG-IN

PARCxla is an add-in for Microsoft Excel designed by engineers to empower decision making and understanding of data. Designed to automate common or tedious Excel tasks and make it easy to build reusable reports, PARCxla enables users to spend more time making important decisions and less time wrestling with data.



"At the end of the day, having quick and effective decision-making tools is what differentiates the winners from the losers, and for us, PARCview enables that shift in performance."

FASTER IS BETTER

Plants often face a performance vs. resolution dilemma with data. Infrastructure improvements have allowed plants to more easily capture and store high resolution data (1 second or lower sample rate). From a troubleshooting standpoint this is great, but there is a penalty paid when trying to access the data. Running reports or long-term trends of high resolution data is slow, hindering the problem solving process.

Aggregate Archive

PARCpde solves this problem by creating two Archives alongside your real-time archive. The Aggregate Archive works seamlessly with the PARCview trend, providing unmatched performance and accessibility to real-time data. Two-year trends can be recalled in seconds not hours and users can easily switch between real-time data and hourly/daily averages.

Rollup Archive

The Rollup Archive makes reporting on production based time periods easy. It creates statistics (Min, Max, Avg & Std Dev) for any user defined period, like Product Runs, Batches, Shifts and more.



PLANT MANAGEMENT

DASHBOARDS & KPI DISPLAYS

You don't always need large amounts of detailed, in-depth data. Many users just want the "big picture". dataPARC's built-in graphic designer can be used to create dynamic, highly-informative dashboards that give you an at-a-glance overview of the condition of major process flows and KPIs at your plant.

165

Energie

Production Cost

EASY TO USE DESIGN TOOLS

PARCgraphics is dataPARC's feature-rich design tool for creating sophisticated, animated and dynamic dashboards.

Industry Standard Graphics Library

PARCgraphics Designer offers a graphics library based on Microsoft® WPF and XAML, with over 5000 graphic objects and controls. Import existing dashboard graphics from PI, IP.21, and more.



ANYTIME ACCESS TO LIVE PLANT DATA

Get critical plant data into the hands of important decision-makers, no matter where they may be. We bring PARCview's powerful data visualization tools to mobile phones and tablets, making it easy for key personnel to respond to downtime events or simply monitor plant conditions, regardless if they're in meetings, travelling, or at home.

ROBUST REPORTING TOOLS

PARCview's highly configurable scripting and scheduling application can schedule and deliver recurring reports or other key data to management and other decision-makers.

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Dashboards Via Email

Automatically capture screenshots of trends or process displays and attach to reports for engineers & managers to have delivered while on-call or during key plant trials.

Event-triggered Reports

Reports can be configured to run in response to any number of triggers, including process-based events such as process values that are too high or too low.

Scheduled Reports

Build workflows that populate and send preconfigured reports. For instance, report hourly production averages and average quality parameters for the last 24 hours.

REAL-TIME PROCESS MONITORING & NOTIFICATION

Capture key process variable excursions and send automatic notifications via email or SMS when events occur.

Easy to Configure

Create alarms from many predefined templates, including alarms based on Western Electric rules (SQC/QPC), conditional rules, noise filtering, and more. Assign a priority and categories to alarms, or take advantage of sophisticated deadbanding.

Timely Notifications

Configure email and SMS notifications to alert individuals when an alarm is triggered. Define message templates to include tag values, the assigned cause, custom instructions, and links to trends, enabling engineers and managers to respond without needing to be at the plant.

Incident Tracking

Store event information in a centralized database that can be accessed by other dataPARC applications. Alarm events can be viewed from Trends, Graphics, Centerlines, Logbook, Pareto Charts, Excel, and SQL reports.



HIGH-PERFORMANCE PLANT MANAGEMENT

Our plant visualization tools will give you the insights needed to quickly optimize your manufacturing processes.

Batch Analysis

PARCview's dynamic Trend control provides a flexible and intuitive platform for both historical and real-time analysis of batch processes.

Production Loss Tracking & OEE

Improve your process by calculating, reporting and analyzing production loss from down time, lost opportunities, and process slowdowns.

LIMS

dataPARC's Manual Data Entry (MDE) system allows seamless management for data acquisition, processing, and analysis of lab and quality data.

Environmental Monitoring

dataPARC enables front line operations to have a clear understanding of environmental expectations and process compliance states.

Operating Envelopes

Operating envelopes provide instant visualization of the plant's operating state. Current conditions are displayed relative to a series of ranges centered around the optimum point.

SPC/SQC

Easily implement online SPC/SQC utilizing dataPARC's integrated limit management tools and alarm/event engine.

KPI Management

Improve plant operations by closely monitoring selected Key Performance Indicators (KPIs) using dataPARC's robust suite of management tools.

Production Cost Monitoring

Apply PARCview's visualization tools to production cost information to draw correlations between process operations and financial performance.

Grade Troubleshooting

Identify the impact process changes have on equipment that produce multiple grades or product types.

Soft Sensors

The PARCmodel component of dataPARC's product group predicts plant quality variables in real-time, allowing for estimation of properties that are impractical or impossible to measure online. "We were trying to optimize the largest facility in our company and PARCview allowed us to overlay data—both lab and process—to break down perceptive barriers and make data-driven decisions."

PARCserver

High-Speed Process Data Historian

THE FOUNDATION FOR YOUR PLANT INFORMATION MANAGEMENT SYSTEM (PIMS)

dataPARC's PARCserver offers everything you expect from a mission-critical plant data historian product, including essential accessibility performance and security. Scalable and flexible, it enables users from every level of the plant to rely on the data by ensuring the highest levels of system uptime and data integrity.

Performance



PARCserver's proprietary archiving technology provides blazing fast retrieval that does not degrade as database grows. Maintain a small disk footprint with optimized storage based on exception with option for deadbanding. Daily/Hourly averages are automatically calculated for each tag, delivering optimized retrieval of long term data. PARCserver ensures data validity by storing quality flag and optionally configured absolute cutoffs. Capstone's OPCHDA data portal optimizes data sent from the server to the client, minimizing network load -- a bottleneck in many scenarios.



3rd Party Connectivity

dataPARC takes advantage of open protocols (ODBC and OPC, et al.) to provide easy access to a broad range of data sources. PARCserver is capable of acquiring high frequency data from hundreds of data systems and sources such as DCS, PLC, SCADA, MES, Advanced Metering, PLC, Batch, database, IT assets and others.



Reliability

PARCserver's data collectors utilize "store and forward" technology to buffer data, ensuring maximum integrity by preventing data loss during network failures. Options for historian redundancy and failover tolerance provide consistent access to data. The PARCwatch performance monitoring service is the watchdog for the entire PARCserver application space.



Scalability

Suitable for systems with 100 tags or 1,000,000 tags, PARCserver's architecture can accommodate small operations as well as multi-location corporations. Additional data sources and storage capacity can be incorporated seamlessly.

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CAPSTONE TECHNOLOGY