



AssetWise APM Online Data Collector (ODC) Connector

Capturing the Right Data at the Right Time from Online Sources to Prevent Asset Failure

Online data from SCADA systems, data historians, sensors, and other sources can provide valuable input for maintenance if it is captured in time before equipment fails. AssetWise APM Online Data Collector (ODC) Connector ensures the accurate capture of real-time data when it's needed for the purpose of maintenance. ODC polling rules trigger capture vital equipment condition degradation data at the right time to initiate proactive maintenance and avoid equipment failure goals within the asset's current operating context.

Leverage Real-time Data to Initiate Proactive Maintenance

Most asset-intensive companies are drowning in a massive sea of raw operational online data collected from sensors, control systems, data historians, etc. Volumes of data are difficult to sift through. Tools that capture, consolidate, interpret, and act on this data in a timely manner to prevent asset failure are few. The general accessibility and usefulness of online data for the purpose of maintenance has been limited until now. AssetWise APM ODC leverages this automation data to make decisions on proactive inspections and corrective maintenance. ODC converts this raw data into usable and timely information enabling engineers and managers to improve the asset performance process, and enhances efficiency and productivity.

Real-time access to usable information can address a variety of issues:

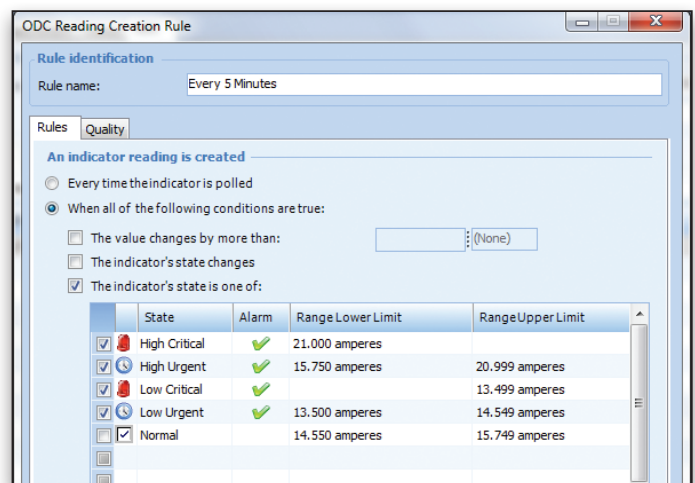
- Prevent the consequences of specific failure modes
- Detect partial and potential failures earlier
- Maximize investment in predictive technologies

Monitor Areas Difficult to Access

AssetWise APM Online Data Collection (ODC) Connector ensures you can monitor areas that are difficult or inconvenient to access, and in some cases, inaccessible to personnel. You can monitor information vital to efficient operation and quality; speed, temperature, pressure, and other key parameters can be automatically monitored, aggregated, and compared to alert operations and maintenance when outside of desired standards. Work orders are triggered and sent immediately to the work management system.

Trigger Work in Time to Prevent Asset Failure

Online systems and data historians can provide operators with real-time data on machine conditions. While the majority of automated systems integrate well for



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operations, but not maintenance. Automation systems update so frequently they often miss data and trends required by maintenance to avoid downtime and dangerous situations; and that information is usually not turned over to or accessible to maintenance in a timely manner. AssetWise APM takes that real-time data and turns it into useful, actionable information to ensure the performance and reliability of the asset; and AssetWise is directly connected to an enterprise asset management system so work is triggered in a timely fashion, before equipment fails.

Benefits

- Reduce risk
- Improve profitability
- Ensure safety
- Ensure predictable production
- Eliminate unexpected downtime
- Increase availability and asset utilization
- Reduce costs
- Meet quality targets
- Eliminate islands of data

System Requirements

Deployment Options

- Smart client three tier (LAN or WAN)
- Stand alone
- Client server (LAN)
- Citrix/Terminal Services (WAN)

Databases Supported

- Microsoft SQL Server and Oracle

Technical Architecture

- Microsoft.Net
- Winforms user interface components
- Load balancing, application server management, hosted under IIS
- Unified deployment and migration tools
- Source code: C++ (business objects), C# (user interface)
- Open database connectivity using Microsoft ODBC and ADO.net

Integrations

- Standard certified integrations to SAP EAM, IBM Maximo, and Oracle EAM, Isograph Availability Workbench

SAP® Certified
Powered by SAP NetWeaver®

IBM maximo™

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AssetWise APM Online Data Collector (ODC) Connector At-A-Glance

ODC Service Provider

- APM plug-in to monitor data readings provided by external data sources
- automatically collect data
- according to polling schedule

Online Data Collection Plug-ins

- Provide an interface between APM indicator readings and online condition-monitoring devices
- Data collected automatically using an online condition-monitoring device is stored in the APM database
- ODC service provider monitors data from the data source and records indicator readings in APM based on time and rule criteria

ODC Data Sources (real-time or historical) include:

- Distributed Control Systems (DCS)
- Programmable logic controllers (PLC)
- OLE Process Control
- Sensors
- Data historians including OSIsoft PI
- Predictive technology data such as oil analysis, vibration, thermography
- OPC plug-ins
- External ODBC Databases
- MS Excel
- Custom

OPC Plug-ins

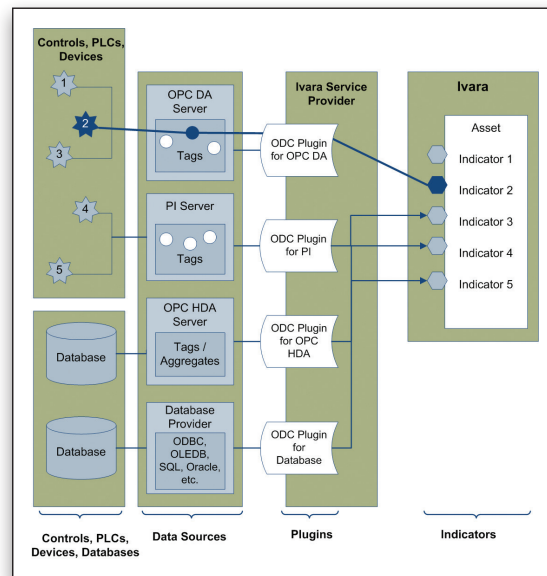
- OPC DA – Collects real-time data from an OPC server
- PI – Collects real-time data from an OSIsoft® PI server
- OPC HDA – Collects historical data from an OPC HDA server (typically used to record spikes in readings over a period of time, for example, excessive temperature); extracts raw or aggregate data based on parameters defined for a referenced data point or tag

APM Indicators

- Polling rules for an indicator determine when an ODC reading is created and stored in APM
- Check data every 30 minutes but do not record in APM unless data falls below acceptable threshold
- Normal readings do not clog up the system and are ignored
- Timestamps ensure accurate reflection of when readings were taken

Monitoring Service

- Administrators use the APM web monitor to view the status of APM services



AssetWise APM Online Data Collection (ODC) Framework