

# Managing Your Assets with Status Enterprise

*How Information Modeling Can Enhance Your Asset Management System*



This document outlines some of the asset management capabilities built into your Status Enterprise HMI/SCADA system.

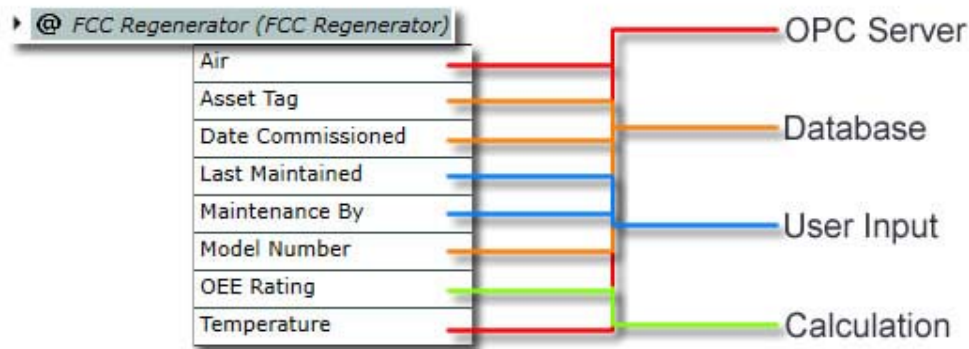
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## How Does Information Modeling Enable More Intelligent Asset Management?

Information modeling allows additional information to be added to your SCADA system and visualized alongside your process information. In your model, a particular asset can be associated with not only the usual real-time production data, but additional data like an Asset Tag, Model Number, or Manufacturer. This same asset can also be associated with related media like user manuals, troubleshooting documents, maintenance records, or web URLs. You can even include images or videos detailing particular maintenance procedures or safety guidelines for training purposes.

This additional information can be drawn from a number of different sources and included as properties of a particular asset in your data model. This asset data can include production data pulled from PLCs, business data from ODBC sources (SQL Server, Oracle databases, Access, etc.), device performance data pulled from HART-enabled devices, calculated values defined in your information model, data created by users in real time, or even data pulled from an integrated ERP or EAM system with some customization.



*Your information model provides the structure and organization needed to create context and add real value to your asset data.*

Assets in your information model can have any number of different properties of different types; properties are not limited to numerical values and strings. Create properties for user files like documents, images, or audio and video files. An information model is fully customizable and scalable, allowing you to easily add new assets and new properties at any time.

### OPC UA

Information Modeling in Status Enterprise is based on OPC Unified Architecture, a communication technology standard based on a cross-platform, business-optimized, Service-Oriented Architecture (SOA) that facilitates communication between numerous data sources.

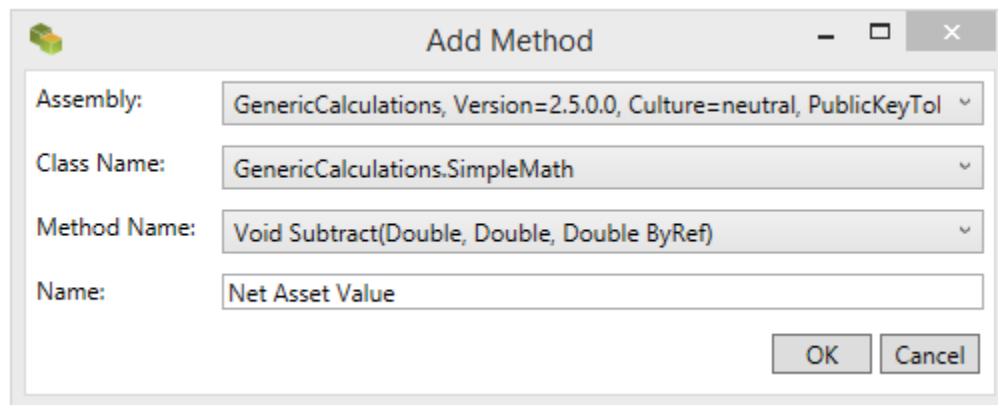
OPC UA defines standard specifications for data access, historical data access, alarms and events.

B-Scada is a member of the OPC Foundation.

## Calculations and Workflow

An optimal asset management system will include calculated values for things like efficiency or turnover ratios. Status Enterprise includes a calculation server that allows you to define the formulas and ratios involved in your asset management strategy, and returns those calculated values as properties of assets in your model. The types of calculations needed will vary from one organization to the next, and will be influenced by the type of assets being managed (Physical Assets, Financial Assets, Digital Assets, etc.), and new formulas may be devised or incorporated at any time.

Status Enterprise allows you to easily configure calculations for Overall Equipment Efficiency (OEE), Asset Turnover, Capacity Utilization Rates, Defensive Interval Ratios, or any number of other ratios or formulas that are part of your asset management strategy.



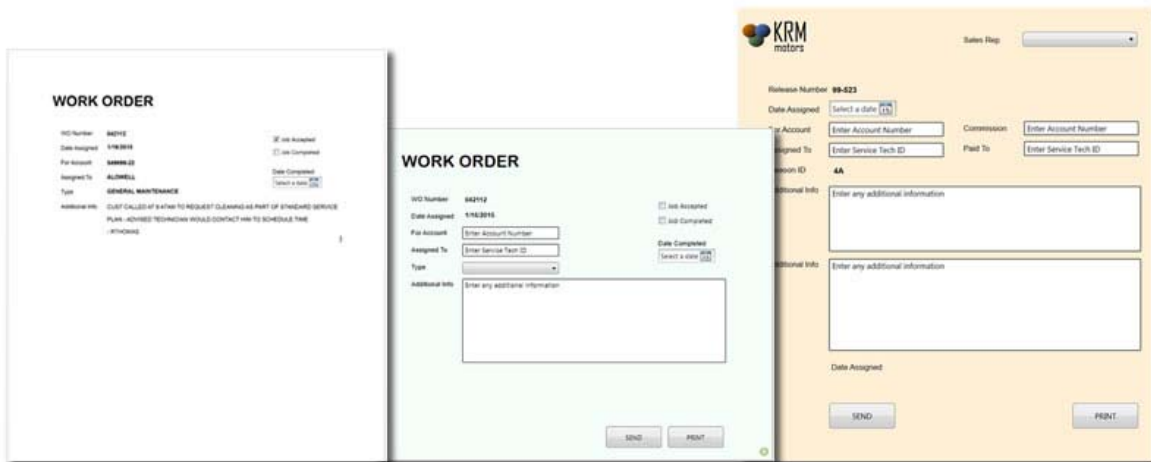
*Calculations are performed on existing properties of a particular asset. The calculated value that is returned will then be added as another property of that asset.*

Status Enterprise also includes a powerful workflow engine that allows you to define specific tasks to be performed when particular conditions are met. In addition to providing the tools needed to identify and define ideal asset usage, your workflow settings allow you to automate asset activity and ensure optimized performance.

*Optimizing business processes can improve production efficiency and quality, reduce operational and maintenance costs, and improve safety.*

## Documents, Forms and Reports

As mentioned above, your Status Enterprise information model allows you to include documents like safety manuals and troubleshooting guides. You are able to review collections of schedules, work orders, or maintenance records, but it is also possible to use mimics created in Status Enterprise to create new work orders, incident reports, or any other documents that may require user input. Because your information model allows you to create mimic templates for a particular “type” of asset and use the same template for all assets of that type, forms can be created in real time and automatically added to your model and associated with a particular asset.



*Work orders, incident reports, maintenance logs/checklists, and more can be created from your information model in real time and automatically associated with the particular asset in question.*

## Integration of Legacy Systems

Many enterprises are already using an asset management system of one type or another. These existing systems can include Enterprise Asset Management (EAM), Enterprise Resource Planning (ERP), Computerized Maintenance Management Systems (CMMS), or a number of other enterprise applications that facilitate a complete asset management system.

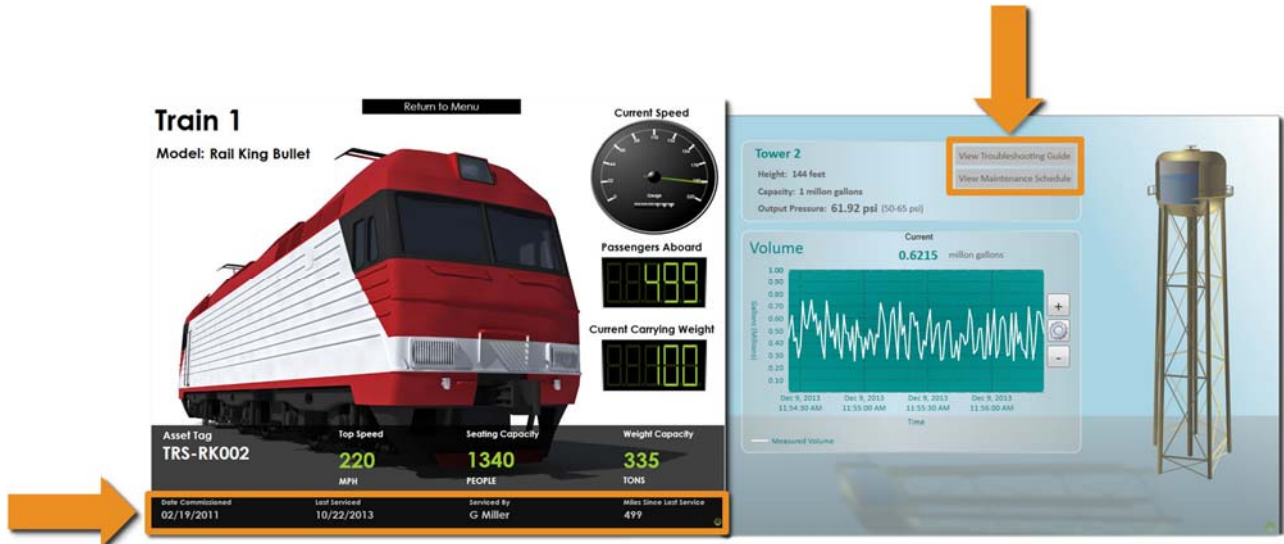
These applications frequently employ a database that can be quickly and easily linked to the Status Server through ODBC drivers. In other situations, this may not be the case.

Status Enterprise was designed to be fully customizable and extensible to meet the evolving needs of today’s industrial enterprises. To that end, a Status Enterprise System includes an Object Model that allows you to programmatically access the Status Server with higher-level classes. This Object Model is useful for creating custom applications that communicate with the Status Server, and it allows for the creation of custom data sources that can permit data from these pre-existing systems to be included in your Status Enterprise Information Model.

In this way, Status Enterprise can not only enhance your existing asset management system, but can provide a means of creating a unified view of all pertinent asset data, regardless of the data’s source.

## Intelligent Visualization

By allowing data from separate systems to be included on your mimics alongside any other data involved in your information model, Status Enterprise enables the creation of more intelligent mimics with more relevant information.



Create mimics that include additional asset data, including: maintenance information, availability, operating cost, efficiency, life expectancy, or any other relevant information.

## HART Communication Protocol

The HART (Highway Addressable Remote Transducer) and WirelessHART protocols are used as a means of sending and receiving data between intelligent field devices and control or monitoring systems. The majority of intelligent devices installed worldwide today are HART-enabled. In most applications, HART communication is used for the calibration of smart devices, and for continuous online diagnostics.

HART has become the global standard for smart device management, providing an ideal means for:

- ❖ Device Configuration or Re-configuration
- ❖ Device Diagnostics
- ❖ Device Troubleshooting
- ❖ Reading Additional Measurement Values Provided by the Device
- ❖ Device Health and Status

By including HART data in your information model, you are able to create a comprehensive real-time virtual representation of your plant floor or field devices that includes any and all available information. This can provide valuable insight that not only enhances maintenance operations, but allows for a program of continuous improvement and optimization.

## Why Status Enterprise?

Status Enterprise is not an asset management system. While it provides or emulates many of the capabilities of a typical asset management system, it is actually much more than that. As a management-level SCADA system, Status Enterprise combines the latest data acquisition and visualization technology with information modeling to create a unified data visualization system for today's information-driven industrial enterprise.

Status Enterprise allows you to visualize your real-time data and alarms, manage and organize your assets, integrate with other enterprise systems, collaborate, analyze and archive data. By bringing together and organizing plant floor data with other enterprise information, Status Enterprise empowers you to improve the efficiency and quality of your operations by making faster, better-informed decisions.

Status Enterprise provides the following benefits to your asset management plan:

- ◆ The ability to monitor large numbers of assets at multiple locations
- ◆ Integration of production data, maintenance data, financial data, and more
- ◆ Mimic templates for reduced development time and easier system maintenance
- ◆ The ability to add new assets at runtime without taking the process down
- ◆ The ability to access your data visualizations from anywhere on any device – including mobile devices

*B-Scada specializes in the development of high quality HMI and SCADA software solutions for industrial process control, enterprise data management, and anywhere there is a need for compelling, high performance visualization of real-time operational and business data.*

**Visit us on the web:**

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