

## PLANTSCAPE RELEASE 400 – INTEGRATED SOLUTIONS TO OPTIMIZE YOUR PROCESS

Manufacturers are searching for new ways to leverage the performance advantages of distributed control architectures, “smart” field instrumentation, Web-based technologies, and other new developments. As the process automation supplier with the largest installed base of control systems in the world, Honeywell is recognized for delivering cost-effective, integrated solutions that reduce costs and improve productivity.

With PlantScape® Release 400, the PlantScape system continues to deliver the caliber of integrated solutions that you’ve come to expect from the most open control system available – solutions that improve your process and reduce your operating costs without sacrificing your automation investment. PlantScape Release 400 has attained a new level of system integration by adding technologies that provide:

- Complete, transparent integration of FOUNDATION\* fieldbus devices with the PlantScape system
- HMIWeb™ technology, Honeywell’s patented, integrated Web-based human-machine interface (HMI) that uses convenient

Web applications, such as Microsoft Internet Explorer

- Integration with @sset.MAX™ Alert Manager, Honeywell Hi-Spec Solutions’ application that provides predictive maintenance for your plant’s assets
- Migration to the Microsoft Windows 2000 operating system for increased reliability.

- More information for engineering, maintenance, and support functions, lower costs resulting from reduced field wiring and terminations, and reduced device software maintenance
- Improved asset management through remote equipment diagnostics.

The primary components of the PlantScape integrated fieldbus solution include the Fieldbus Interface Module (FIM) and the PlantScape Control Builder tool.

### Fast, Efficient PlantScape/Fieldbus Integration

PlantScape Release 400 completely unifies the PlantScape Hybrid Controller and fieldbus database, bringing all of the benefits of FOUNDATION fieldbus to your process—and your bottom-line. Significant benefits include:

- Faster implementation through decreased field device commissioning and system configuration times

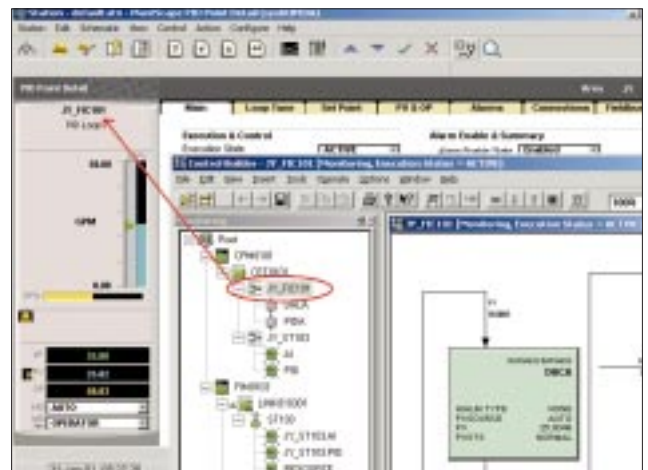


Figure 1 - FOUNDATION fieldbus data acquired through the PlantScape system becomes immediately accessible to operators via standard displays



## FIM Integrates Transparently with Fieldbus Devices

PlantScape offers complete and unmatched integration with FOUNDATION fieldbus devices through the FIM, a robust, chassis-based module with a high-performance, high-capacity design. The FIM delivers system-wide integration of data access, control connections, and alarms with the PlantScape system, as well as complete access to all device functions and parameters. The FIM provides integration of FOUNDATION fieldbus H1 networks with the Hybrid Controller. It installs easily in the PlantScape Hybrid Controller rack or in a remote I/O chassis rack.



Figure 2 - Fieldbus Interface Module (FIM) mounted in I/O rack

## A Single Tool Simplifies Engineering and Configuration

PlantScape FOUNDATION fieldbus integration features a completely unified database. All devices and functions are configured with ease and flexibility using Control Builder, a single, integrated tool. This graphical, object-oriented engineering tool configures the PlantScape controller and fieldbus devices, saving users both time and effort.

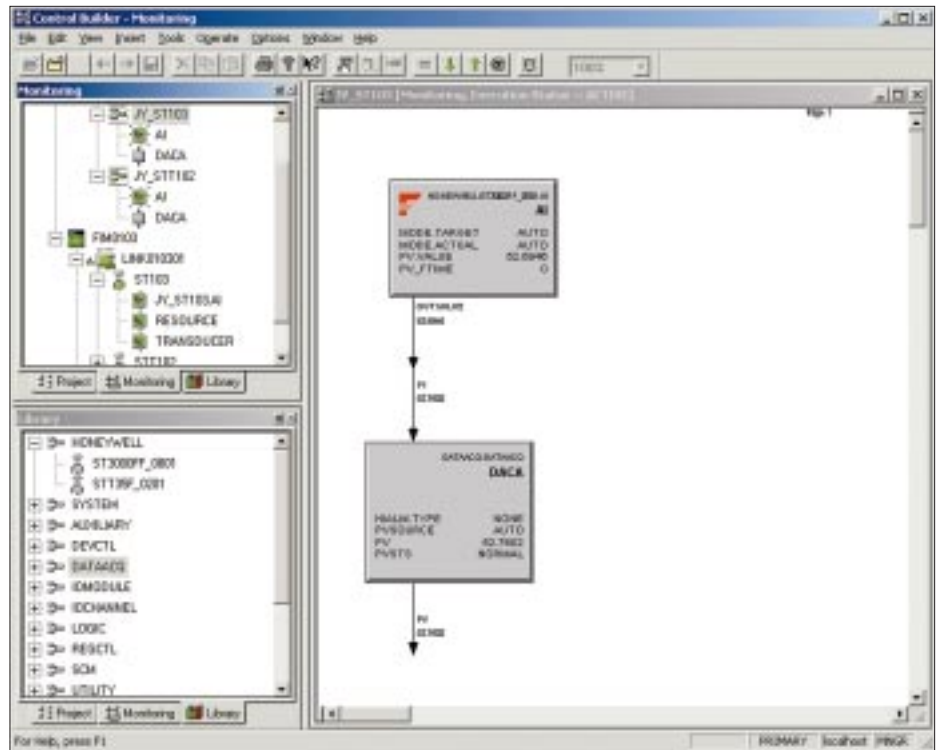


Figure 3 - Control Builder allows FOUNDATION fieldbus and Hybrid Controller functions to be in the same control strategy

Using Control Builder, PlantScape and fieldbus function blocks share a common database and appear on the same control strategies. Control using fieldbus devices is completely integrated with the Hybrid Controller, allowing conventional and fieldbus I/O to be easily and transparently mixed and matched.

The PlantScape fieldbus solution ensures control integrity and open access to provide:

- Maximum control integrity protection through full support of the Link Active Scheduler (LAS) and backup LAS (LAS allows a fieldbus and its devices to operate even when the system interface is unavailable, greatly increasing fieldbus uptime)
- Third-party application access to all system-wide information, including fieldbus device, diagnostic, and alarm data via Honeywell's Open Data Access

- Operator access via a unique Chart Visualization feature to detailed fieldbus and Hybrid Controller configuration information that is presented exactly as it was configured.

## HMIWeb Integrates Data Seamlessly

PlantScape Release 400 integrates Honeywell's patented HMIWeb technology, a Web-based architecture supporting integration of human-machine interfaces, application data, and business data. This advanced interface solution, which combines consistent and secure access, robustness, and performance with state-of-the-art, open web graphics, is based on Honeywell's "next-generation" HMI technology.

HMIWeb offers the benefit of fully integrated data delivery using standard Internet technologies such as HTML and XML. Unlike the typical “bolt-on” approach, HMIWeb supports casual access to process graphic displays from either the secure PlantScape Station environment or directly from Microsoft Internet Explorer without functionality-reducing “exports.” This framework ensures seamless, third-party integration through open Web standards.

### **Secure, Native Web Environment Increases Access and Reduces Training Costs**

HMIWeb merges process, application, and business data seamlessly, and is the most open, secure, and user-friendly control system interface available. The use of industry standards, such as Microsoft Windows 2000, Ethernet, HTML, and the Internet, minimize operator training by providing a familiar operating environment. Integrated with PlantScape R400, HMIWeb enables information from multiple systems to be viewed on a single operator interface display, saving time and money for small applications. This not only facilitates remote operation, but supports integration of foreign data sources and the various tiers of mission-critical plant systems.

### **Industry-Standard Technology Delivers Cost Savings**

HMIWeb integrates with standard, “value-added” Internet products, providing significant cost savings. It supports state-of-the-art graphics and achieves unmatched openness using Microsoft’s MSHTML rendering engine. By utilizing open, industry-standard file formats and third-party authoring tool options, HMIWeb enables users to take advantage of their existing knowledge, protect valuable intellectual property, and re-use displays between systems.

### **Toolkit Lets You Adopt New Technologies Easily**

Sustaining the benefits from your automation system investment is simple with HMIWeb. Packaged as a technology toolkit, this unique, component-based platform makes it easy to adopt new technologies. HMIWeb is closely coupled with industry standards and achieves maximum re-use by allowing existing HMIs to naturally migrate toward a single, next-generation technology, rather than “force-fitting” existing heterogeneous HMIs and systems. Users are also free to choose the framework/container that best suits their application.

### **@sset.MAX Alert Manager Increases Plant Uptime**

Honeywell Hi-Spec Solutions’ @sset.MAX Alert Manager is a plant operations and maintenance application designed for productive asset management. It is tailored to support a reliability-centered maintenance program that includes automated decision support for identification and repair of equipment problems. Fully integrated with PlantScape Release 400, Alert Manager is unique in its ability to interpret symptoms and faults and generate a recommended maintenance action based on a sound and comprehensive analysis of data. It also fully supports FOUNDATION fieldbus devices, providing access to all data contained in PlantScape Function Blocks when the Device Descriptors (DD) and Capability files correctly identify what is held in a device. Use of Alert Manager results in substantial asset management benefits, including:

- Increased plant availability and uptime
- Focused maintenance efforts
- Reduced equipment breakdown and shutdowns.

## **Windows 2000 Reduces Ownership Costs**

PlantScape Release 400 supports the robust, reliable Microsoft Windows 2000 operating system, delivering a lower cost of system ownership through:

- Improved administration of network users
- Native support for multiple monitors, eliminating the need for costly specialty video cards
- “Plug-and-play” connectivity for the hardware platform and peripherals
- Support for Virtual Private Networks (VPNs), allowing secure interconnection of servers, or clients and servers, across the Internet or Intranets.

## **Find Out More**

To explore how PlantScape can revolutionize your process while minimizing your costs, call 1-800-288-7491 in the U.S., or visit our Web site at [www.iac.honeywell.com/plantscape](http://www.iac.honeywell.com/plantscape).

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**Industrial Automation and Control**

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