Honeywell’s DOC4000 Solution
Asset Documentation Management
Industrial Automation Systems
Is your intellectual property retiring with him?
Reliability

- Minimize human error
- Increase system availability
- Implement best practices across the enterprise
Technical Risk Planning

- Identify integrity issues
- Reduce troubleshooting time and effort
- Avoid costly shutdowns

Restore Operations up to 7 Days Faster and avoid loss of Daily Profits
Protect and Optimize Intellectual Property

Capture tacit knowledge

Aggregate and contextualize critical data

Visualize and access key information

20-50% Productivity Improvement for Automation Professionals
DOC4000

- Reliability
- Technical Risk Planning
- Protect and Optimize Intellectual Property
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Industrial Automation Systems
Introduction

• In today’s competitive environment, proper automation system documentation and change tracking are essential for effective troubleshooting, faster problem resolution, and incident avoidance

• As the complexity of control system platforms continues to increase, systems and subsystems must be properly documented and tracked throughout their lifecycle

• With the retirement of experienced staff, it is critical to protect intellectual property
Challenges Facing Plants

• Industrial organizations recognize that efficient change control is the only way to ensure they can rapidly adjust systems and processes so as to stay competitive and continually improve effectiveness and quality.

• Managing changes will have a major impact on any company’s future success.

• Until now, there was no comprehensive solution available on the market to document and holistically manage change across the plant automation architecture.
What is Honeywell’s Approach?

• Honeywell’s DOC4000 software provides an innovative solution for automation lifecycle documentation and change management

• DOC4000 is intended for use with a wide range of automation platforms
  – Experion® Process Knowledge System (PKS)
  – TotalPlant™ Solution (TPS)
  – TDC3000 platform
  – Honeywell advanced solutions
  – Third-party DCS
  – Advanced solutions
  – Safety systems
  – Instrument databases
What is Honeywell’s Approach? (Cont’d)

• DOC4000 offers an automated way to help your organization assess, monitor, manage and control automation information and configuration data

• By enabling traceability, notification of changes and regulatory compliance, DOC4000 drives increased efficiency of your personnel, and as a result, your productivity

• DOC4000 offers a host of robust, best-in-class features for automation information management
  – Web-based Interface
  – Secure Data Access
  – Robust Data Collection
  – Flexible Licensing
What is Honeywell’s Approach? (Cont’d)

- DOC4000 aggregates and contextualizes configuration databases, programs and user interfaces, and simplifies visualization and management of information in plant control systems
  - Comprehensive documentation
  - Integrated change tracking
  - System-wide data audits
  - Lifecycle automation management
  - Integrity issue identification
  - Support for OSHA 1910.119 and FDA 21 CFR Part 11
What is Honeywell’s Approach? (Cont’d)

• DOC4000 provides a consistent method for documenting your automation environment, including greater cross-support of multiple systems
  – Reduces interpretation of complicated control schemes by providing a graphical representation of each control interconnection
  – Assists control engineers with system troubleshooting during critical process upsets
  – Provides immediate access to data needed to investigate and resolve situations
  – Reveals behind-the-scenes “gotchas” left behind by third-party contractors working on the system
What is Honeywell’s Approach? (Cont’d)

- DOC4000 significantly improves engineering productivity in the typical industrial plant
  - Verification and creation of system documentation
  - Tracking configuration changes to increase quality and reduce troubleshooting time
  - Efficiency improvements across the operation
How Does the Solution Work?

• DOC4000 enables closer collaboration of your plant operations, maintenance and safety staff to minimize human error and simplify work processes
  - Common access to the configuration information of disparate control systems, databases and advanced applications
  - Platform for capturing tacit knowledge, contextualizing it, and making it accessible from the operator console where plant personnel work
  - Captures experiential knowledge and makes it available to everyone who needs it
How Does the Solution Work? (Cont’d)

• DOC4000 allows users to add, edit, and contribute to plant knowledge
  – Provides the ability to incorporate electronic media files into the knowledge base and search for relevant plant information in external files such as spreadsheets, documents and e-mails
  – Unique mapping capabilities significantly reduce migration and systems integration project time, rework, and time spent on factory acceptance testing (FAT)
How Does the Solution Work? (Cont’d)

• DOC4000 generates accurate documentation of configured automation systems that can be automatically updated, tracked and accessed enterprise-wide to enable productive collaboration between operations, maintenance, and safety personnel.

• Cross-reference reports can be run to quickly identify relationships between various system components, and thus minimize engineering effort and avoid maintenance incidents.
How Does the Solution Work? (Cont’d)

• DOC4000 also meets today’s demanding requirements regarding regulatory compliance obligations by recording and tracking changes across automation systems
  – FDA 21 CFR Part 11 (Electronic Records and Signatures)
  – OSHA 1910.119 (PSM Management of Change)
How Does the Solution Work? (Cont’d)

• When paired with Honeywell’s integrated Management of Change (iMOC) solution, DOC4000 helps ensure effective management of change (MOC) across your entire operation.

• Unlike “homegrown” MOC tools, iMOC is an integrated add-on module that runs on top of DOC4000 to map the “automation genome” of industrial plants.
What are the Benefits to Customers?

• Supported through Honeywell’s Global Technical Assistance Center, the DOC4000 solution offers important benefits to Honeywell customers around the world

  – Improves day-to-day operations that can result in higher production and profitability
  – Increases the productivity of plant personnel, avoiding process upsets and plant shutdowns, and complying with laws, regulations, and international quality standards
  – Helps personnel spend less time on tedious, low-value work and devote greater effort to high-value work such as implementing new projects, maintaining equipment, and tuning regulatory control loops
• DOC4000 also reduces the time required for data gathering, investigating system databases and identifying automation integrity issues that could potentially lead to plant upsets or shutdowns
  – Enables system, process and control engineers to turn their automation data into action and more effectively troubleshoot, plan and optimize plant performance
  – Provides easy access through Web browsers, thus increasing the number of personnel who can benefit from information
  – Helps IT understand complex interactions in automation elements that may tie into the business level network
What are the Business Results?

- DOC4000 software solution can have a significant impact on your bottom line
  - Reduces costs by 10% the first year, and 70% each subsequent year, compared to a full-time staff member documenting and compiling automation system changes
  - Eliminates up to $1M per day of lost profit by helping to resolve incidents faster than a manual investigation
  - Provides savings of 10-30% of the typical cost of as-built configuration documentation
Conclusion

• With the DOC4000 solution, automation lifecycle information can be tracked and accessed enterprise-wide to allow collaboration between different personnel within an industrial organization – improving operational performance
  – Increased plant safety and reliability
  – Greater overall productivity
  – Improved regulatory compliance
  – Better project and maintenance planning
  – Expanded data visibility
  – Improved disaster recovery
  – Reduced time for system migrations