Dear Readers,

I’m very happy to bring you edition four of our P13 news bulletin for all existing and new users of the ABB Procontrol P13 control system. I hope you have enjoyed our previous issues and openly welcome you to contact us at any time.

This edition provides breaking news from our point of view. We managed to gain access to essential state-of-the-art technology and therefore can secure a longer life cycle for P13 products. This is all thanks to the new OEM agreement with iMagic, a proven supplier of P13 compatible products. We trust that it will be good news for all.

Furthermore, the release of the new Modbus TCP coupler 70BK08b will strengthen and support the iMagic agreement – overall, a major step forward.

We have also included new articles about the upgrade works at PLGT Gilimanuk in Bali, Indonesia, and information on the new personalized customer information and service portal.

I hope you will find the information and insights valuable and that you will consider taking advantage of the ABB support services for your own operations. As always, we look forward to receiving your feedback and requests, and invite you to share your interests and comments with us.

We are always pleased to provide any additional information or advice you may need and truly appreciate hearing from our readers.

I wish you happy reading.

Kind regards

Matthias Bolliger
VP, Head of Global Execution
ABB Power Generation
The next generation of ABB’s Procontrol P13 platform

ABB signed a comprehensive OEM agreement with iMagic, securing the core portfolio of Procontrol P13 with state-of-the-art technology ensuring full life-cycle support well into the future. Following its “Evolution without Obsolescence” policy, ABB ensures full compatibility and seamless integration with existing P13 systems.

Beginning its fourth decade of providing safe and reliable power plant operation, ABB’s Procontrol P13 is about to make the next step in its long and successful evolution. Originally introduced to the power generation market in the 1980s, ABB’s Procontrol P13 automation platform has since demonstrated more than 30 years of safe and reliable power plant operation and is still installed in more than 400 units worldwide.

The core of the Procontrol P13 platform is currently in the “Classic” product life cycle phase, which means that it is actively supported and maintained and that all of these core P13 parts are in production and fully serviced. In addition to this, ABB is glad to inform that an important OEM agreement with the US based independent engineering company iMagic has been signed that effectively renews the core portfolio of Procontrol P13 with state-of-the-art technology.

Based in Newington, NH (USA), iMagic was founded by Joe Fortier and Moe Vincent in 1994 as an independent engineering company. In early 2002, in association with Alstom, iMagic commenced the design and manufacture of a new control system for Power Generation called “Alstom BlueLine”, which was designed from the beginning as a fully compatible replacement for ABB’s Procontrol P13 system.

Today, ABB and iMagic take the next step in bringing together this new iMagic control system with the classic ABB P13 portfolio under the new OEM agreement. With this, ABB will complement their business activities by supporting the service and maintenance of existing “BlueLine” installations and products, alongside their fleet of original P13 control systems.

The addition of this new state-of-the-art technology will also provide a means of resolving any P13 obsolescence issues and an excellent solution to reinforce the system solutions together with ABB’s flagship HMI solutions, especially Symphony Plus. It will also increase ABB’s competitiveness against independent third-party suppliers and operators. By maximizing synergies for production and maintenance together with iMagic, ABB ensures the full life cycle support and product guarantees required by its customers even beyond 2025.

The introduction of the new OEM-branded products into the market will happen during the next months in a well-orchestrated manner. ABB will ensure that these products are meeting the outmost quality standards as is expected from an ABB product and is currently undertaking all test and certification activities required for this.

The core of the classic P13 portfolio will be fully replaced with the new OEM-branded products. All existing functionality (and more) is also available in the new P13 portfolio making it even suitable as one-to-one replacements and spare parts for classic modules. At all times ABB guarantees that the essence of the P13 platform will remain and a seamless transition towards the new technology is ensured. ABB will continue to provide spare parts and other life cycle services for the classic portfolio on specific customer demand e.g. certified safety solutions.

To help our existing P13 customers with this transition, we will soon publish a detailed product guide about the new P13 core portfolio, which will provide a mapping guide from classic P13 modules to the new portfolio. It will also highlight new features and opportunities to maximize the benefits of renewing an existing P13 installation with the new products.

What the managers say – two statements by Joe Fortier and Matthias Bolliger

“We are excited about our new OEM agreement with ABB. Our technology coupled with ABB’s extends the Procontrol P13 architecture into the 21st century. This partnership will provide ABB Procontrol P13 and BlueLine® customers with modern sustainable control electronics, connectivity technologies and state-of-the-art visualizations.”

Joe Fortier, iMagic

“I’m absolutely delighted that we were able to successfully conclude the OEM agreement with iMagic. It secures the support of our P13 customer base in forthcoming years with essential state-of-the-art electronics. The open dialogue and exchange of information during negotiations makes me feel very confident that we can build on a reliable supplier’s products and services, with a win-win situation for everyone.”

Matthias Bolliger, ABB
Upgrading power plant controls in Bali

Bali is Indonesia’s largest tourist destination and has seen a surge of visitors in recent years, which makes a reliable electrical supply on the island essential.

The PLTG Gilimanuk gas power plant.

An Indonesian power customer needed a new human machine interface (HMI) upgrade that could protect its existing investment, and ensure the availability of spare parts. ABB responded with a solution to evolve the plant’s existing PMS HMI to the S+ Operations HMI, using the latest Windows 7/Windows Server 2008 platform.

The PLTG Gilimanuk gas power plant is one of PT. Indonesia Power generating assets, and provides electricity to the famous island of Bali, an Indonesian province. ABB originally delivered the plant’s 133.8 MW capacity gas turbine generator, a Procontrol P13 distributed control system (which also provides turbine control) and EDS-P3 Engineering Station on a turnkey basis in 1997.

The plant’s HMI and Engineering Station is an Alpha Unix-based PMS and EDS-P3, a programming, documentation and service tool used during the commissioning and subsequent maintenance of Procontrol P13 control systems.

Over the years, parts of the HMI became obsolete, creating problems in the form of reduced hardware performance and hardware defects. In addition, replacement components became increasingly difficult to find, and neither the hardware platform (Digital Alpha) nor the software platform (Unix) were supported by the OEM in the present HMI set-up.

The customer needed the upgrade to ensure HMI availability and redundancy and to guarantee the ABB PMS application software is compatible with the latest hardware. Also needed was a Windows-based system and engineering tool that can function through a Windows-based laptop.

To improve this system ABB is supplying S+ Operations with P13 Connect, redundant, serial coupling modules, an Engineering Tool upgrade, Windows-based server and workstations and parallel operation with the existing PMS, plus installation, testing and commissioning.

Evolution to ABB’s latest Symphony Plus HMI solution and Engineering Tool means the customer’s investment is protected, because the complete P13 system can be kept – no rip and replace is required.

The new Engineering Tool retains the same look and feel as the previous Engineering Tool, as do the P13-specific submodels. The Procontrol P13 control system is fully supported with spares and services from ABB.

ABB is committed to upgrading control system products with technological improvements and continuous enhancements. ABB’s strategy of evolution with system products with technological improvements and continuous enhancements. ABB’s strategy of evolution with the existing PMS, plus installation, testing and commissioning.

Optimization to ABB’s latest System Plus HMI solution and Engineering Tool means the customer’s investment is protected, because the complete P13 system can be kept – no rip and replace is required.

This customer self-service tool, available 24/7, offers you a single point of online access to information, services and support contacts for the ABB family of control systems and all ABB products. This secure site is easily accessible from anywhere, using an internet-connected device.

You’ll quickly find that the new MyABB/My Control System web portal is a great way to increase your productivity, minimize cost, and extend the useful life of your ABB control products and systems.

MyABB/My Control System will help you to optimize your control system performance and run your plant efficiently to meet production needs – all online, whenever it is most convenient for you.

Optimize your operation and reduce maintenance time and costs – keep your plant running and your ABB control system software up-to-date

− MyABB/My Control System offers a new, modern overall navigation concept and is ready for use on mobile touch devices (tablets).
− Protect your ABB control system against malware infection and cyber-attacks with the latest Microsoft® security updates and verified 3rd party Antivirus files – validated by ABB for relevance and system compatibility with ABB control system software.
− Stay updated with push e-mail notifications without spam – receive only relevant notifications for your installed control system or select other system families and products individually.
− Increase performance by continuously enhancing your control system with new system specific software updates and see the overall health of your system and equipment status.
− Check the software status of your installed control system, quickly access all safety reports, alerts or product documents relevant for your system.
− Lower your total support cost and reduce after-hours phone support or service calls by using My Control System to access pre-filtered information dedicated to your installed control system.
− Find training modules specific to your ABB DCS installation for improving competences.
− Contact information of your designated local ABB Service organization.

Learn more: http://www.abb.com/myabb or http://new.abb.com/control-systems/service/offerings/my-control-system
The new Modbus RTU/TCP coupler 70BK08b is released

ABB is pleased to announce the general sales release of the 70BK08b-E Modbus RTU/TCP coupler module. Designed for maximum durability and low maintenance the module features no components requiring long-term service while offering the same reliability and quality as every of its predecessor modules within the Procontrol P13 product line.

The 70BK08b is also a full replacement (configuration and field-cabling) for the 70BK06a Modbus RTU coupler and can be used as simple spare part or easy upgrade path from serial communication towards Ethernet networks, enhanced diagnostic capabilities and remote engineering support.

The greatly enhanced service access via P13 local bus allows for enhanced module diagnostics and download of module configuration directly from the Progress 3 engineering tool. The flash-based configuration memory overcomes the tedious and time-consuming configuration of custom (E)EPROMs while retaining the same flexibility and ease-of-use when replacing modules for maintenance.

The complete module configuration can be stored on the SD card, managed by the Progress 3 engineering tools or completely without any additional tool.

The 70BK08b Modbus coupler module is compatible with any Procontrol P13 system and module. For usage of the advanced diagnostics and configuration download via local bus service access, a bus traffic director 70BV05a or later is mandatory.

For more information, please contact ABB sales in your country or the global P13 execution center in Switzerland (see Contacts page for details).

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<tr>
<th>Property</th>
<th>Characteristic/Value</th>
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<tbody>
<tr>
<td>Protocol Support</td>
<td>Modbus RTU/TCP in Master/Slave configuration</td>
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<tr>
<td>Configuration Storage</td>
<td>- Internal flash-memory for user configuration (serial parameters, TCP/IP parameters, data transfer definitions)</td>
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<td>- SD card slot for backup and loading of user configuration</td>
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<td>Service Access</td>
<td>Service access via P13 local bus and SD card:</td>
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<td></td>
<td>- Enhanced diagnostics</td>
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<td>- Configuration download</td>
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<tr>
<td>Redundancy Support</td>
<td>Fully transparent redundancy support (peer-to-peer &amp; with P13 OPC server)</td>
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<tr>
<td>Communication Ports</td>
<td>- Fast-Ethernet interface (100 Mbit/s), front</td>
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<td></td>
<td>- RS232, front/back, max. 30m, point-to-point</td>
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<td></td>
<td>- RS485, back, max. 1200m, multi-drop</td>
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<tr>
<td>Capacity</td>
<td>Master: up to 15 slaves for RTU (RS485) and 32 slaves for TCP</td>
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<td></td>
<td>Slave: single Master access only</td>
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<td>Performance</td>
<td>Transmission of a complete local bus address range in real-time (with Modbus TCP)</td>
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<td>- Up to 115200 kbit/s transfer rate on the serial interfaces (Modbus RTU)</td>
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<td>Power Requirements</td>
<td>90 mA @ 24 VDC; 2.2 W</td>
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<tr>
<td></td>
<td>100 mA @ 19.5 VDC; 2.5 W (max.)</td>
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<tr>
<td>Dimensions</td>
<td>Procontrol P13 standard card; 2T wide</td>
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Feature Highlights
- New high-speed Ethernet-based connectivity (Modbus TCP)
- Flash-based configuration memory (on-board and SD-card)
- Configuration download via SD-card or local bus service access
- Fully supported by the Procontrol P13 OPC Server (incl. enhanced redundancy)
- Seamlessly integrated into the Progress 3 engineering tools
- Designed for high-performance, low-maintenance, and outmost reliability
- Extended diagnostic capabilities via local bus
- Backward-compatible to the 70BK06a-E coupler (cabling and configuration)
Procontrol P13 presence worldwide
We are here to support you