

Symphony Harmony/INFI 90 Services for Symphony Harmony/INFI 90 process control systems

These services can be purchased stand-alone or bundled with other offerings. Our Assured Performance AgreementSM (APA) service contract program offers cost-effective service bundles and complimentary service solutions to align with your specific service requirements.

Support and Remote Services

SupportLine Basic Complimentary With any APA service purchase*	ABB technical telephone support, SupportLine Basic, includes two telephone contact cases (maximum one hour of telephone support time) per year. Includes a 4-hour response time commitment.
SupportLine	ABB technical telephone support is available 24-hours a day. Each case is carefully tracked through resolution. Our global support network is available if escalation is required. A SupportLine subscription provides a cost-effective solution and elevated priority over non-subscription callers. Three Service Levels: SupportLine Bronze (10 Support hours), SupportLine Silver (20 Support hours), SupportLine Gold (35 Support hours).
SolutionsBank Basic Complimentary*	Subscription access to a sub-set of ABB SolutionsBank web-based technical product information, specifications and alerts. Visit http://SolutionsBank.abb.com for your complimentary subscription.
SolutionsBank	Web-based, self-service technical support for ABB technology via the Internet. Obtain technical information, auto-notification of information relevant to your installed ABB equipment, SupportLine case tracking, software revision downloads, up-to-date trouble-shooting guides, and more. For subscription details visit http://SolutionsBank.abb.com
Remote Diagnostics Services (RDS) (includes SupportLine Gold)	ABB process control system specialists, with access to historical and real-time data, provide site- and system-specific support. A secure, high-speed remote connection between your system and ABB experts significantly improves diagnosis and response time for on-demand and scheduled maintenance activities. For additional information visit www.abb.com/remotediagnostics Three Service Levels <ul style="list-style-type: none"> – RDS Troubleshooting – On-demand support connectivity to assist in diagnosing system problems via a secure, high-speed remote connection. Includes telephone technical support. – RDS Periodic Maintenance – Scheduled quarterly remote collection and analysis of control system data for evaluation of system asset health. Includes telephone technical support and Remote Troubleshooting. – RDS Continuous Monitoring – Continuous remote monitoring of control system assets provides alerts to system issues before they become a problem. Real-time notifications are automatically generated and sent to ABB's SupportLine queue for early warning and diagnosis. Includes telephone technical support, Remote Troubleshooting services and Periodic Maintenance.
Emergency On-Site Response	Support response-time is guaranteed based on your service requirement. Check with your service representative for availability in your area.
Maintenance and Field Service	
Requirements Assessment Complimentary*	The annual Requirements Assessment is part of the service needs-discovery process. Experienced ABB personnel, discuss business objectives, asset maintenance requirements, and maintenance goals to ensure that changes in business strategy or maintenance requirements are integrated into the service maintenance program.
Demand Service Preventive and Corrective	Knowledgeable and experienced ABB field engineers are supported by ABB's global systems, tools and specialists to provide service solutions for Symphony Harmony/INFI 90 specific preventive and corrective maintenance requirements.
Firmware Management Service	Firmware upgrades assure component compatibility and improved system maintainability. Subscription pricing is significantly below firmware list prices. This can also be purchased as an add-on to the Automation Sentinel control system software maintenance program.
BatRAM Management Services	Cost effective battery-backed random access memory (BatRAM) for critical control modules, reduces module replacement cost due to failed BatRAM incorrectly identifying module status as "failed". This service assures component compatibility, improves system reliability and eliminates failed BatRAM discovery upon restart after shutdown.
System Health Check	Improves system performance and efficiency by identifying system snarls through analysis of hardware, software, Ethernet/control system communications, and existing maintenance program effectiveness. Recommendations are provided based on findings.

Network Service	Provides a complete network evaluation and upgrade. Network service specialists pinpoint sources of sluggish performance and optimize networks to minimize interruptions, improve data traffic flow, productivity and security.
Software Management Services	Provides assistance with new software and/or upgrade release implementation. Concordance checks between running configurations and off-line files are performed to assure that reliable back-ups are available. Computer operating system and software disaster recovery back-ups are also maintained.
Training Services	
AVIBank Complimentary*	An AVIBank (ABB Video Instruction Bank) subscription offers access to the ABB library of audio-visual instructions. These cover various topics. For example: "Display configuration and operation instructions for process control system user interfaces", "Basic Composer trending and loading controller firmware", and "How to combine device loop attributes in graphical elements". Visit http://SolutionsBank.abb.com for your complimentary subscription.
Gap Analysis	ABB University professionals interview maintenance supervisors to identify required skill sets and knowledge gaps for each employee. A documented analysis provides training availability and recommendations.
Coaching/Refresher Training	ABB University customized competence-building programs are designed to help on-site personnel to maintain efficiency in ABB equipment configuration, operation and maintenance. Delivered at plant site.
In-Center Courses	
– M101 Harmony Rack I/O with WinTools	The goal of this course is to familiarize students with the various hardware components found in the Harmony Control Unit and to understand the Symphony/INFI 90 Open System Architecture.
– M103 WinCAD Engineering Software Tools	The goal of this course is to teach students about the basic programming functions and features of the Engineering Work Station utilizing the software package, WinTools.
– M111 Harmony Rack I/O with Composer	The goal of this course is to familiarize students with the various hardware components found in the Harmony Control Unit and to understand the Symphony/INFI 90 Open System Architecture.
– M201 DCS Harmony Control Unit	The goal of this course is to teach students about the various components that comprise the Harmony Control Unit.
– M202 Composer Engineering Software Tools	The goal of this course is to teach students about the basic programming functions and features of the Engineering Work Station, utilizing the software package, Composer.
– M203 Conductor NT	The goal of this course is to teach students the configuration and operating characteristics of the Conductor NT Human System Interface (HSI). Students will also learn about the basic requirements of the Windows NT/2000 operating system.
– M205 Conductor VMS Eng with Composer	The goal of this course is to teach students the basic configuration of the Conductor VMS console using the Composer Database Browser to create an actual tag and trend tag database and Composers™ Graphical Display Configurator to create custom graphics and symbols.
– M211 Harmony Control Unit – S800 I/O with Composer	This course familiarizes students with the various hardware components found in the Harmony with S800 I/O architecture and also configuration and troubleshooting the system.
– M301 Power and Grounding for DCS	The goal of the course is to provide a basic understanding of Power and Grounding.
– M304 Configuration Strategies	This course is designed to familiarize students with programming Function Code applications as they apply to various control strategies that are common to many industries.
– T321 800xA for Harmony Connect	The goal of this course is to teach the installation, configuration and maintenance of the Extended Automation System 800xA for Harmony.
– T670 Configuring Process Portal B Part 1	Upon completion of Part 1 of the course, students will be able to implement standard Process Portal B configuration components related to video displays and alarm messages.
– T671 Configuring Process Portal B Part 2	Upon completion of Part 2 of the course, students will be able to implement standard Process Portal B configuration components related to history, reporting, trending, user management, and security.
– T672 Process Portal B Installation and Database Maintenance	The goal of the course is to provide students with the skills and knowledge required to maintain user configurations on the Process Portal B Human System Interface, and to upgrade user configuration data from selective ABB Human System Interfaces.
– E121 800xA Advanced Engineering with Bulk Data Manager	This workshop provides a full range of knowledge on Bulk Data Manager and advanced techniques including how to rapidly create, change and maintain large sets of configuration data. This can be accomplished through advanced engineering techniques with Bulk Data Manager.
– E123 800xA Engineering Methodology with Function Designer and Bulk Data Manager	This course teaches the student engineering methodologies and design decisions using Function Designer, and shows how to apply Bulk Data Manager to increase engineering efficiencies. The student will create a small project based on actual data to understand workflow optimization.
– E125 800xA PCDeviceLib	This course gives the student a comprehensive look at the suite of device objects included in the PCDeviceLib and how they can be applied. It studies faceplates, graphic elements, alarming and coherent strategy for priority commands and interlocks.
– E143 Troubleshooting 800xA Core System	This Expert Workshop provides in depth troubleshooting skills and abilities for the 800xA core system. It covers troubleshooting on domain controllers, networks, time synchronization, and Aspect Servers. It provides detail on alarm and event architecture, data flow to graphics, and the flow of history data.

– E160 IT Security and the System 800xA Security Model	This workshop provides an understanding of IT Security mechanisms and solutions for control systems. The workshop explores in depth the 800xA security model and its features. The student will be prepared to address control system security solutions.
– E170 Expert Workshop for Asset Management	The goal of this Expert Workshop is to provide 800xA asset management knowledge.

Parts and Repair Service – Options

BusinessOnline Complimentary*	Subscription to web-based parts and repair services. Secure Internet tools provide access to price, availability, order acknowledgement, tracking, order history and more – for thousands of ABB products, parts and repair services. Visit www.online.abb.com for your complimentary subscription.
Emergency Parts	Emergency replacement parts ordering is available 24 hours a day. Once your order is received, our global logistics network uses standardized processes and tools that ensure the highest quality parts are efficiently delivered to your site.
System Support	Access to local and global parts inventories extends and facilitates the availability of new and refurbished parts for previous generations of ABB systems, as long as technically and commercially feasible.
Test and Inspection	ABB ISO 9002-certified testing centers utilize state-of-the-art automated test equipment. Component-level, multi-level, in-circuit and full-functional testing, and environmental stress testing is available for ABB and other manufacturers' parts.
Repair and Refurbishment	Provides an economical alternative to new part replacements. ABB ISO 9002-certified repair network provides repairs, reconditioning and version management that meet or exceed original equipment specifications. A full one-year warranty is included for ABB and qualified non-ABB repair and refurbishments.
Parts Inventory Management Programs	ABB parts programs help you to effectively plan for parts and repair expenditures, and provides a monthly payment schedule, based on historical usage or anticipated demand. <ul style="list-style-type: none"> – Smart Spares – Provides a secure parts location and barcode technology for inventory management assistance. Includes an auto-restocking feature, through the ABB parts logistics center via Internet connection. – Inventory Access – A monthly subscription provides site-specific compliment of spare parts, which is maintained locally or on-site. ABB retains ownership of parts until they are put into service.
Parts Inventory Analysis	Identifies over- or under-stock conditions, based on predicted requirements, lifecycle expectations and standard stocking levels. Assists in determining optimal on-site parts stock quantities.
Parts Advantage Program	This program, included in the Assured Performance Agreement contract program, offers several levels of participation based on anticipated parts and repair expenditures – for all technologies at the site. Benefits include parts usage reports, inventory audits, and after-hours transaction fee savings.

Migration and Upgrade Services

Evolution Plan Complimentary*	System evolution planning services over the life of the control system, provide a periodic review of installed systems status and recommendations for evolution planning. Considering system lifecycle status changes and new functionality, ABB will help to define a strategic evolution roadmap to optimize system functionality.
System Software Management	The Automation Sentinel software management program, provides new software versions for installed control system software, upgrades to newer software products for installed systems and evolution to ABB's latest system software technology, System 800xA. A subscription includes online access to download new software releases, software product documentation and access to technical telephone specialists for software installation and upgrade support.
Harmony Lifecycle Audit and Report	Provides an analysis of control system hardware, firmware and software levels and system maintenance and lifecycle management recommendations. A series of lifecycle management reports are generated. A program to leverage the latest system features, functionality, and technical advances for ABB control systems is provided.
Harmony Operator Station Evolution	ABB operator stations such as MCS, OIS20, OIS40, OS500, Conductor VMS, Conductor NT, PC View, Process Portal B can be evolved to System 800xA Process Portal Operator Stations. System 800xA Process Portal Operator Station software offers complete integration with all existing system platforms. Features include Operations, Asset Optimization, Information Management, and Batch Management. Existing graphic displays can be converted to the 800xA Process Portal format for minimal impact to operations personnel. System 800xA Software can be purchased directly or obtained at no charge as part of ABB's Automation Sentinel program.
Harmony Controller Evolution	ABB controllers such as COM, LMM, MFC, and MFP's can be evolved to Harmony Bridge Controllers (BRC). In most cases, the existing configuration files are re-used. BRC controllers include two options: 300 or 400. Both offer increased speed and capacity, enabling additional capability. The BRC400 offers the capacity of 30,000 function blocks for intensive control applications.
Engineering Tools Evolution	The Network 90 DOS Cadews Control Configuration Software introduced in the late 1980's, first evolved to Wintools and now to Composer. Composer is server/client based product that provides the current system engineering toolset. A service to import existing configuration files into Composer is available.
Plant Loop to INFINET Evolution	Plant Loop communications introduced with the Net90 system in the early 1980's evolved to a fast 10MBaud INFINET/C-Net system. The existing LIM and BIM modules can be evolved on a node by node basis to the new NIS and NPM C-Net modules, providing a stepwise evolution path. The C-Net communication system provides a 20x throughput increase for critical system information.
Analog Master Module Evolution	Due to limited component availability of ABB Network 90 Analog Master Modules (AMM) and associated analog input modules (ASM), these modules should be evolved to later technology Bridge Controller (BRC) and Analog Input modules (IMASI23). Repair of existing units is the only maintenance option.

Digital I/O (DSM05) Evolution	Due to limited component availability of the ABB Network 90 Digital Slave Module (DSM05), these modules should now be evolved to current technology digital input and output modules. Repair of existing units is the only maintenance option.
Cabinet Power Supply Upgrades to MPS III	Existing power supply systems including Network 90, MPS I, and MPS II systems can be evolved to the latest MPS III power system. The MPS III power system offers redundancy and COTS technology.
Block I/O Evolution to S800 I/O	Harmony Block I/O module evolution to ABB standard S800 I/O technology utilizes prefabricated cables and reuses the Block I/O termination base to eliminate disturbance to existing field wires and disruption to plant operation.
CRT to LCD Console Monitor Upgrade	Replacement LCD Monitor kits for INFI 90, Net90, and Symphony/Harmony operator workstations, including upper and lower resistive and capacitive models are available. Kits include required mounting hardware and cabling.

System Application Engineering Services

Requirements Assessment Complimentary*	The annual Requirements Assessment is part of a needs-discovery process to identify application engineering requirements and determine project scope and availability of service.
Display Building Service	An ABB application engineer will work with your operation and engineering staff to modify purchased video display packages. ABB can further work with your staff to develop new video display packages necessary to meet operational requirements.
Configuration and Commissioning Service	ABB installation, configuration, and commissioning services include but are not limited to: on-site coordination and installation scheduling, coordination of installation of additional hardware and software, control loop services, process analysis and troubleshooting, and implementation of engineering change notices.
Performance Evaluation Reporting	ABB, in cooperation with your management team, will develop a system performance report that meets site and ABB requirements. The report will be completed and periodically distributed by the ABB application engineer.
On-site Training	ABB application engineers are available to deliver high-level, specific, on-site training focused on equipment operation and control utilization. On-the-job training focused on technical understanding of ABB equipment is available.

Engineering and Consulting/Optimization Services

Requirements Assessment Complimentary*	The annual Requirements Assessment is part of service needs-discovery process to identify and recommend Optimization Services to compliment your site maintenance strategy.
PID Loop Tuning Services	<p>Loop Tuning Services deliver loop performance excellence, providing significant manufacturing cost savings through improved product quality, reduced waste, and increased uptime.</p> <ul style="list-style-type: none"> – Software Installation and Configuration includes Loop Performance Manager (LPM)** software installation and verification of communications to the control system, configuration service, on-site introductory software training. – Loop Tuning and Auditing of a pre-determined number of loops and report of as-left tuning parameters. – Loop Evaluation and Re-tuning includes periodic service visits to examine performance and re-tune loops if required and a detailed report of findings.
Small Boiler Controls Upgrade	State-of-the-art renewal for aging boiler controls provides simplification of boiler start-up and operation, efficient fuel consumption, maximum boiler efficiency and reduced cost.
Security Validation Services	When applying security policies to your ABB process control systems, it is important to verify that the policies are compatible with the functionality of the systems. ABB service has the expertise to test for compatibility and to apply your security policies to your ABB systems and products.
Power Quality and Grounding Audit	Provides a detailed analysis of incoming power quality and grounding grid integrity and its effects on connected devices and internal power systems. Survey findings pinpoint specific problem areas and provide fixes.
Boiler Fingerprint	Boiler benchmarking establishes current performance and provides a basis for evaluating and identifying improvement opportunities. The resulting diagnostic report provides improvement recommendations and associated estimated ROI. For boilers up to 50 MW.
Process Fingerprint	A process benchmark establishes current process and control performance and provides recommendations for improvement. The resulting implementation recommendations support product stability and overall process performance improvement.

*No purchase required.

**Loop Performance Manager (LPM) software is proprietary PID loop tuning and auditing software developed and distributed by ABB.

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