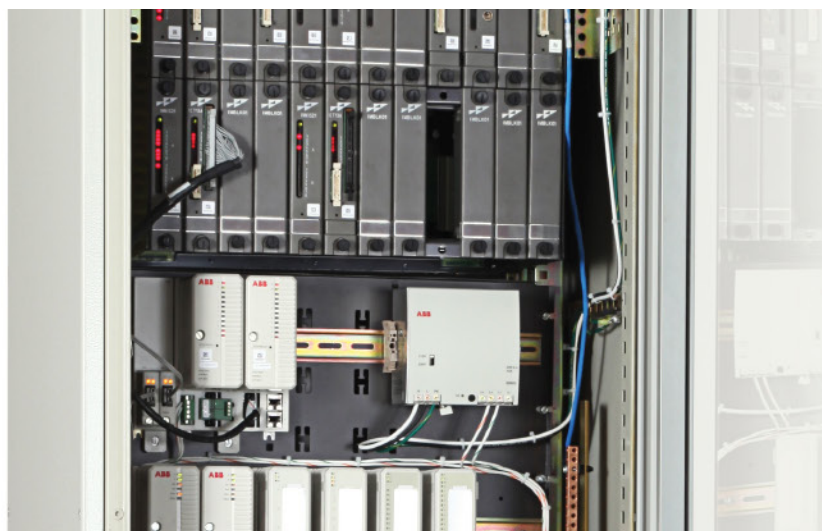


Harmony Performance Fingerprint

Identify opportunities for system reliability improvement



The Fingerprint diagnostic is a fixed-scope service that identifies system performance and reliability issues through data collection and analysis. It generates both a system benchmark and an improvement plan, and can be delivered on-site or remotely using Remote Access Link connectivity.

ABB proprietary data collection software tools are used to gain access to system performance data, including the following:

- Hardware and software version status
- Errors between modules
- File management and storage issues
- Parameters for exception reports
- Module firmware levels
- Redundant modules with conflicting firmware revisions
- Potential communication loop performance issues
- Situations that may cause temporary system performance degradation
- System settings that restrict maximum communication performance (e.g. Modulebus vs. Controlway mode)
- NIS communication poll rate settings
- Module reporting error codes

ABB experienced optimization engineers, who understand your system and configuration will analyze the

Issues we typically see

- Continual system overload
- Undocumented system changes
- Intermittent system problems
- Single points of failure
- Revisions not current
- Periodic reliability issues

data and use it to pinpoint issues and identify improvement activities to optimize system performance and reliability.

Improvement recommendations may include:

- Updating system revision levels
- Creating procedures for maintenance activities
- Upgrading key hardware components
- Adding continual monitoring to watch key parameters as the system is upgraded or expanded

Implementation planning

Once the Fingerprint has been completed, our engineers will meet with your team to review the findings and discuss improvement recommendations. A plan will be determined and scheduled to implement agreed upon recommendations to begin the improvement process.

Improvements may be completed all at once or scheduled to be completed incrementally over a period of time. In either case the implementation ensures that changes can be made and maintained with steady progress toward the performance goal.

Sustaining performance

Annual fingerprint, implementation and sustaining services are recommended as a component of your

service contract agreement, to achieve and continue the improvement process. These can be scheduled as part of a single- or multi-year service contract agreement.

The Harmony Performance Fingerprint is a unique service utilizing proprietary software tools and automated data collection directly from key modules, without a system shutdown. It provides details to verify installed equipment and associated maintenance tasks.

As the OEM, we are confident in our system optimization process and our system optimization engineers' ability to deliver the highest value in product-specific services and solutions.

Fingerprint report

The included fingerprint report, which contains collected system data and analysis as well as system performance improvement recommendations, is a valuable component of the fingerprint service.

Three step improvement process

- **Diagnose:** Extremely valuable diagnostic service to identify existing system reliability issues.
- **Implement:** Hands-on (or remote) delivery of identified improvement services to increase system reliability.
- **Sustain:** Manage and continue the improvement process through renewable services to monitor and deliver system reporting. This can be accomplished on-site or via remote connection.

HarmonyScan and HarmonyTrack sustaining services enable system data to be captured and analyzed on a periodic or continuous basis.

Contact your ABB service representative to obtain additional information or to schedule a Harmony Performance Fingerprint for your site.

The Harmony Performance fingerprint is the first step in a three step improvement process

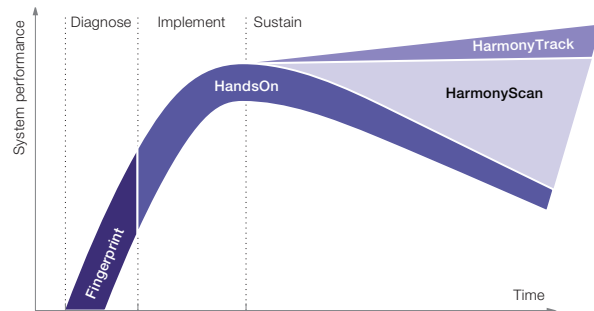


ABB
23000 Harvard Road
Cleveland OH 44122, USA
Tel: 1 800 HELP 365 (1 800 435 7365)
Fax: 1 919 666 1377
E-mail: contact.center@us.abb.com

abb.com/process-automation

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB.
Copyright© ABB. All rights reserved