ABB Ability™ Loop Tuning Accelerator Service
Reduces the time between diagnosis and implementation

The ABB Ability™ Loop Tuning Accelerator Service reduces the time between diagnosing potential PID control loop issues and tuning the loops to address the issue. The Loop Tuning Accelerator Service uses control data already gathered, analyzed and stored to more quickly identify issues, so that corrective tuning can take place to ensure full utilization of the control system and high availability of the production process.

Overview

The Loop Tuning Accelerator Service uses data gathered and stored by the Loop Performance Monitoring Service to provide accurate information to identify potential control loop issues. The Loop Tuning Accelerator Service gives process engineers the ability to create accurate models to predict events, so they can reduce or eliminate potentially disruptive process bump tests in control loop tuning.

Features	Benefits
Link between Loop Performance Monitoring Service and Control Tuning Workbench Tool	Accelerates PID control loop tuning
Secure, remote diagnosis and proactive support from ABB experts	Helps identify issues faster
Historic loop data used to calculate potential issues	Eliminates need for time-consuming bump tests

Bump tests increase process risk
Improve control loop tuning with fewer process disturbances

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01 The Loop Tuning Accelerator Service provides users with a list of control loops where conditions similar to a bump test are detected (Figure 1). From this view, engineers can model and perform tune testing using the ABB LoopTune workbench tool.

Quickly diagnose control loop issues using existing data

The ABB Loop Tuning Accelerator Service draws on data previously collected by the ABB Loop Performance Monitoring Service, and uses this data as a basis for process modeling. Customer and/or ABB engineers use this data to create process models that greatly reduce the time and effort needed to identify and address control loop issues.
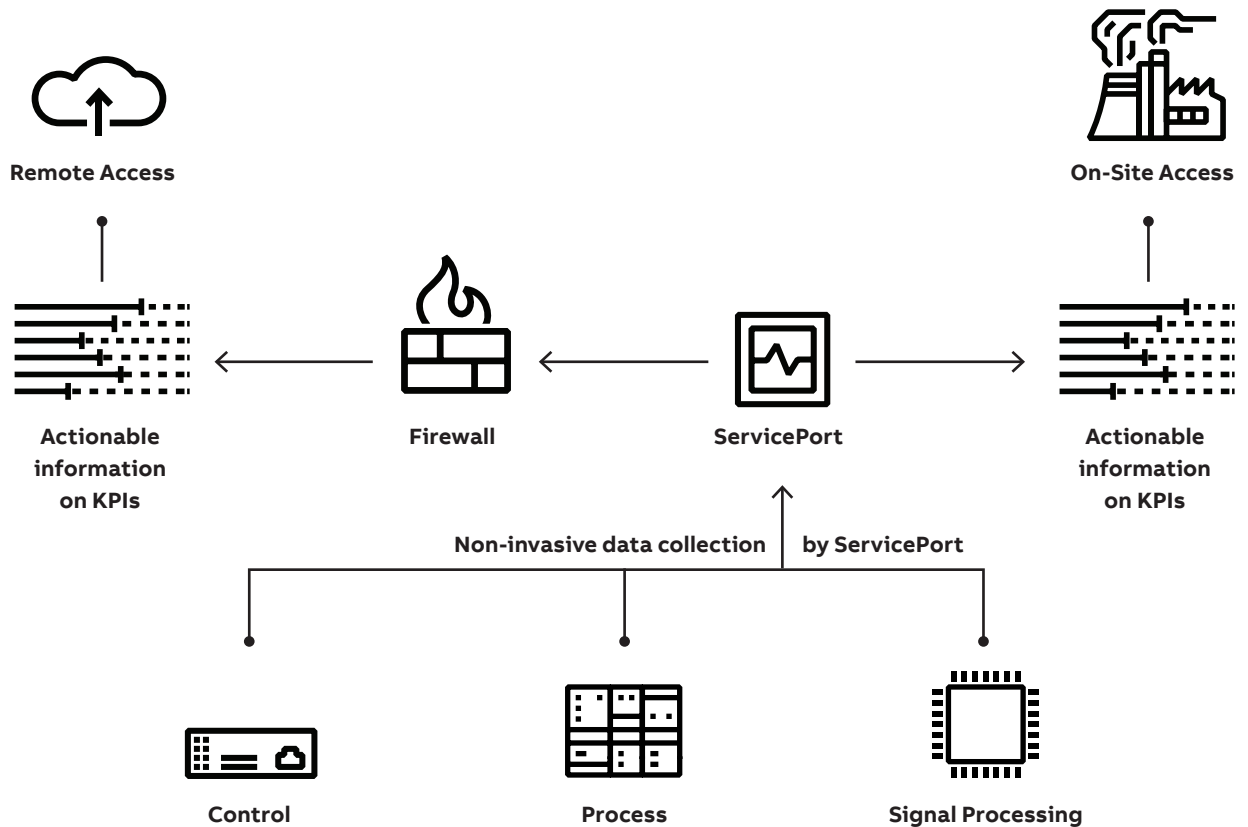
Data customized for your plant

The data that the Loop Tuning Accelerator Service employs has already been automatically gathered and classified based on specific Key Performance Indicators (KPIs) monitored by the ABB Loop Performance Monitoring Service. This data is used to identify issues that are then automatically prioritized based on severity, process area, criticality and/or financial impact. Issues are isolated, and disturbance sources, such as dead time, inverse response and outliers, are identified. This analysis helps find the root cause of issues, and trends performance history more accurately, leading to information that can be used by customer or ABB engineers to improve control loop tuning.

Improve equipment and process availability
Identify control loop issues faster

Remote Access

On-Site Access

Actionable information on KPIs

Firewall

ServicePort

Actionable information on KPIs

Non-invasive data collection **by ServicePort**

Control

Process

Signal Processing

Expert analysis helps predict potential issues

With the Loop Tuning Accelerator Service, engineers can model and perform tune testing using LoopTune, an ABB Workbench Tool. LoopTune is a stand-alone software package based on proprietary algorithms. For qualified users, LoopTune enables effective data analysis and control tuning.

ABB ServicePort

ABB ServicePort is a remote-enabled service delivery platform that provides a secure connection to ABB services and experts. Deployed at customer locations,

ServicePort enables delivery of local and remote services, and provides both customers and ABB service experts a real-time view of KPIs, and diagnostic and system data. Data collected through the Loop Tuning Accelerator Service is highly secure as it remains on-site and requires user identification to view.

Advanced Digital Services powered by ServicePort are available for:

• Control systems
• Cyber Security
• Drives
• Mine hoists
• Quality Control Systems (QCS)
• Rotating machines

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