

Meet the Ovation™ Loop Performance Monitor Agent

The **Ovation Loop Performance Monitoring Agent** continuously monitors control loop performance, identifies issues early, and recommends actions to improve process stability and efficiency.



The Challenge

Finding the right control loops to tune is often time-consuming and manual.

- Engineers manually sift through hundreds of control loops to identify the few that require attention.
- Process disturbances, loop interactions, and instrumentation issues are often mistaken for tuning problems.
- Tuning recommendations often lack supporting evidence, making changes difficult to justify, validate, and sustain.



The Solution

The Ovation Loop Performance Monitoring Agent acts as a continuous control loop health analyst for your plant.

What It Does

- Analyzes PV, SP, and CV histories to detect oscillation, offset, sluggishness, saturation, and hunting
- Computes loop health scores and ranks candidates by severity, recurrence, and operational impact
- Evaluates loop dependencies and flags when the real driver is upstream, external, or an instrumentation fault
- Automatically generates first-level guidance explaining the issue, likely cause, and recommended next steps.
- Produces recommendation packages with proposed PID adjustments, prerequisites, and caution notes



How It Delivers Value

Prioritize Performance

- Identifies the highest-impact loops driving process variability
- Prioritizes engineering effort on the loops that matter most

Reduce Alarm Burden

- Identifies poor loop performance that contributes to nuisance alarms
- Guides systematic retuning to reduce alarm burden over time

Accelerate Response

- Generates evidence packages ready for engineering review—no manual investigation required
- Provides dependency-aware guidance to prevent counterproductive tuning sequences

Capture Knowledge

- Captures loop outcomes in a searchable advisory history
- Validates tuning effectiveness with before-and-after performance metrics

Ovation Loop Performance Monitor Agent



Why It Stands Out

- Ranks every loop by severity and operational impact, removing the need for manual hunting
- Identifies whether an issue is a local tuning problem or caused by an upstream disturbance or sensor fault
- Recommendation packages include dependency-aware tuning sequencing
- Advisory-only by design, with no writes to the controller



Product Snapshot

- Requires Ovation 4.0 with Ovation Virtual Advisor
- On-prem GPU infrastructure powering proprietary Large Language Models (LLMs)
- Operates within the security of Ovation highways' closed networks
- Subscription licensing available in 1, 3, and 5-year plans



Customer Inputs

- Control philosophy (Required)
- Design data / PG test data (Required)

**Are You Ready to
Start Your AI Journey?**

We are.

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