EMA IMPACT BRIEF

Perforce P4 Signals Brings Engineering Intelligence to AI-Era Software Delivery

Summary

Perforce Software has announced a broader set of updates across Perforce P4, led by a preview of Perforce P4 Signals, a new engineering intelligence product planned for availability next year. P4 Signals will provide a native, queryable analytics layer for engineering leaders who use P4, with access through a web dashboard or protections-filtered GraphQL API. The product will deliver DORA metrics, hierarchical branch analysis, time-to-review, time-to-resolution, and project-level comparisons based on metadata and change history stored in P4. Perforce also announced the availability of P4 Cloud in the AWS Marketplace and the availability of P4 through Dev Stream Labs, where version control connects directly to automated build infrastructure. Together, the announcements extend P4 from version control into engineering measurement, managed delivery, and integrated build workflows.

Engineering Intelligence Moves Closer to the Source of Work

Engineering organizations have spent the last several years adding AI tools to development workflows, but many still struggle to show whether those tools improve productivity in a meaningful way. Perforce is addressing that challenge with P4 Signals by grounding engineering intelligence in the operational history already captured inside version control.

The product is designed to give engineering leaders a clearer view of developer efficiency and delivery performance. Rather than creating a separate reporting layer disconnected from engineering activity, P4 Signals will derive its analysis from P4 metadata and change history. The planned capabilities include DORA metrics, branch analysis, review and resolution timing, and comparisons across projects.

AI productivity claims can be difficult to evaluate when teams rely on anecdotal feedback or isolated tool metrics. Perforce is instead tying AI-era productivity questions to established engineering measures. The company specifically points to DORA metrics as an increasingly important benchmark for enterprise customers that want to compare productivity more broadly.

P4 Signals also fits Perforce's larger message around software delivery governance. Engineering leaders increasingly need to understand how AI changes code velocity, review quality, resolution speed, and delivery patterns. A native analytics layer inside P4 can give them a stronger basis for evaluating whether AI adoption improves engineering outcomes or simply increases activity.

The other P4 announcements reinforce that broader direction. P4 Cloud gives smaller and growing teams a managed deployment option through AWS Marketplace, while the Dev Stream Labs integration connects P4 repositories to automated build infrastructure and AI-assisted compilation diagnostics.

These additions extend P4 into more of the software delivery lifecycle without changing the core version control foundation.

Key Impacts

Perforce's announcement is significant because it links AI-era engineering measurement, managed version control, and automated build workflows around a common P4 foundation.

P4 Signals gives AI productivity a more disciplined measurement model.

Perforce is entering the engineering intelligence market with a product that measures software delivery through established operational metrics rather than broad productivity claims. DORA metrics, time-to-review, time-to-resolution, branch analysis, and project comparisons give engineering leaders a way to assess changes in performance over time. That becomes especially useful as teams introduce AI coding and development tools and need to separate increased activity from genuine delivery improvement.

Version control becomes a richer source of engineering intelligence.

P4 already stores metadata and change history from engineering work. P4 Signals will turn that existing information into a queryable analytics layer. This gives Perforce a natural advantage with customers that already rely on P4 for complex software, game development, and other high-stakes engineering environments. The intelligence comes from the system where change activity already occurs, which can reduce the disconnect between reporting and actual development behavior.

Managed P4 lowers operational overhead for smaller teams.

P4 Cloud extends Perforce's version control model to teams that want dedicated infrastructure without managing the underlying environment themselves. The AWS Marketplace availability adds another procurement path and gives teams a hosted option with automatic updates, backups, expandable storage, and centralized administration. That broadens P4's reach beyond organizations that want to operate the platform themselves.

Dev Stream Labs connects version control with automated build execution.

The Dev Stream Labs integration moves P4 repositories closer to the build pipeline. Teams can provision build machines, assemble code and large assets into release-ready packages, and use AI to diagnose compilation errors. For engineering organizations with large binaries, compiled software, or complex build requirements, that connection can reduce friction between version control and downstream build activity.

EMA Perspective

Perforce's most important move in this announcement is P4 Signals. Engineering leaders increasingly need credible ways to measure whether AI changes software delivery performance, and they need those measurements to reflect actual engineering work. By building analytics directly on P4 metadata and change history, Perforce can give customers a more grounded way to evaluate productivity, delivery speed, and workflow effectiveness.

EMA's 2026 observability research reinforces the shift toward outcome-based measurement. In the report, 48.3% of organizations said they measure observability ROI through reduction in mean time to resolution, making it the most common metric used to quantify value.[1] That finding aligns with Perforce's P4 Signals direction. As AI becomes part of software development, engineering leaders will need metrics that show whether AI improves delivery outcomes rather than simply increases activity. DORA metrics, time-to-review, time-to-resolution, and project-level comparisons give Perforce customers a more disciplined way to evaluate that impact.

P4 Signals also gives Perforce a stronger role in the broader AI governance discussion. AI coding tools may increase output, but organizations still need to know whether software moves through review, integration, testing, and resolution more effectively. Metrics such as time-to-review and time-to-resolution can help leaders test that assumption with evidence.

The P4 Cloud and Dev Stream Labs announcements strengthen the story by extending P4 into managed deployment and automated build execution. Those capabilities matter less as separate announcements

[1] EMA, *The Reality of Observability Unification in Modern IT Operations*, 2026.

than as part of a larger direction: Perforce is widening the operational scope around P4 while keeping version control at the center.

For enterprise engineering organizations, the opportunity is clear. As AI becomes part of everyday software development, the ability to measure its impact against established engineering standards will become increasingly important. P4 Signals gives Perforce a credible way to connect AI productivity claims with engineering evidence. P4 Cloud and Dev Stream Labs ensure that foundation reaches more teams, in more environments, with less overhead.

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