

## DATASHEET

# Static Analysis and SAST Solutions

## Code Quality Tools for Delivering High Quality, Secure, and Compliant Code

### Overview

For over 30 years, Perforce static code analyzers — Helix QAC and Klocwork — have been the go-to quality tools for their ability to deliver the most accurate and precise results to mission-critical project teams across a variety of industries, including automotive, aerospace and defense, rail, and medical devices.

Perforce static analysis tools for C, C++, C#, Java, JavaScript, Python, and Kotlin programming languages offer the depth and accuracy of analysis to meet rigorous compliance requirements with coding standards — such as MISRA and AUTOSAR — and functional safety standards, such as ISO 26262. Our tools identify software security, quality, and reliability issues to help enforce standards compliance.

### Static Analysis Key Features

#### DEPTH OF COVERAGE

Perforce static analysis tools provide a depth of coverage that gives more complete coverage of the rules of the major coding standards for C, C++, C#, Java, JavaScript, Python, and Kotlin programming languages.

#### RISK PRIORITIZATION

Prioritize coding issues based on the severity of risk. Perforce static analysis helps you to target the most critical defects using filters, suppressions, and baselines, delivering accurate diagnostics and actionable results — enabling you to fix the most important issues first.

#### DEVOPS READY

Perforce static analysis tools are designed with Continuous Integration and Continuous Delivery foremost in our thinking, which makes it easy to include static analysis as part of your CI/CD pipelines. Differential Analysis: Using system context data from the Validate platform, it is possible to analyze only the files that changed while also providing differential analysis results as if the entire system had been analyzed. This provides you with the shortest possible analysis times.

#### FIND SECURITY VULNERABILITIES WITH SAST

Our security-focused static analysis engine identifies security vulnerabilities as they are introduced — helping to find and fix vulnerabilities early, and provide compliance to internationally and industry recognized security standards, as well as your own organizational requirements.

## Perforce Validate — Control, Collaboration, and Reporting

Perforce Validate is the Continuous Security and Code Compliance Platform. It provides functional safety, security, reliability, and quality assurance for embedded and mission-critical applications.

The Validate platform provides a centralized store of analysis data, trends, and configurations for codebases across your organization, providing a single pane of glass for all Perforce static analysis products.

## Validate Key Features

### DESIGNED FOR DEVELOPERS

Validate supports Perforce static analysis products and is highly customizable, enabling your developers, managers, and other stakeholders to:

- Define global or project-specific QA, security, and compliance rule configurations like CERT or MISRA.
  - Apply multiple rule set configurations per project
- Control access permissions and approval workflows.
- View trending data for project quality and compliance.
- Produce compliance and security reports for how well the code or project conforms to coding standards and industry best practices.
- Prioritize defects based on severity, location, and lifecycle.
- Manage defect suppressions, annotations, and citing details individually or in bulk.
  - Statuses are synchronized between tools and Validate-connected projects.
- Distinguish new issues from legacy code issues.
- Create Modules and Views to focus on results specific to your task.
- Push backlog issues to Change Control systems.

- Project Baseline support for latest build.
- Streams functionality provides management and efficient reporting of variants, branches, and release for a single code base.
- Web/REST API functionality for integration with other tools and processes across the SDLC.

### PROJECT STREAMS

Project Streams provides easy management of shared code bases that have multiple variants or branches by simplifying project rule configuration, issue management, defect citing, reporting, and efficient data storage of analysis data.

Creating streams provides the following benefits:

- Assign a single project rule configuration to all variants.
- Issues common to multiple variants are automatically kept in sync and only require citing once.
- Easily identify identical issues across multiple streams and issues unique to specific streams.
- Generate reports on individual streams for compliance, functional safety, or other evidential purposes.
- More convenient organization and efficient storage of analysis data.

## Try Perforce Static Analyzers for Free

Get started with your free trial today.

**TRY FREE**

[perforce.com/products/sca/free-static-code-analyzer-trial](https://perforce.com/products/sca/free-static-code-analyzer-trial)