

Perforce Versioning Engine

Enterprise-grade version management for any size code, binaries, images and more

Perforce is an enterprise-grade version management system that enables your teams to build better products faster. It provides a repository that stores all assets in a shared facility, and keeps track of each change. It handles conflicts resulting from simultaneous changes and provides tools for managing your assets and their history. The result is a repeatable and reliable Continuous Delivery model that paves the way to higher productivity and lower costs.

Trusted by many of the largest, fastest-growing and most innovative global enterprises, Perforce is unique in its ability to manage all assets, not just code, and is optimized to support both traditional development models as well as more nimble Continuous Delivery environments producing multiple releases of product each day. As teams iterate on these assets, a system that enables fast, conflict-free collaboration is a must.

Version Everything

Perforce offers the only version management system that can handle all types of file formats regardless of their size. It was built from the ground-up to support any type of file—such as source code, documents, video, 3D graphics, images, sound files, and much more—and assets exceeding hundreds of megabytes in size.

Central and Distributed Modes

Perforce enables you to choose a usage model that best suits your development style (See Figure 1):

- Deploy the **Perforce Versioning Engine** centrally as a shared service to host the mainline on-premise and handle all your version management tasks from remote clients directly.
- Create a distributed version control environment with **Perforce Sandbox**: Fork a development branch from the mainline and work on new features in isolation on individual workstations; integrate your changes to the mainline when you are ready.
- Interoperate with Git-based DVCS environments via **Perforce Git Fusion**.

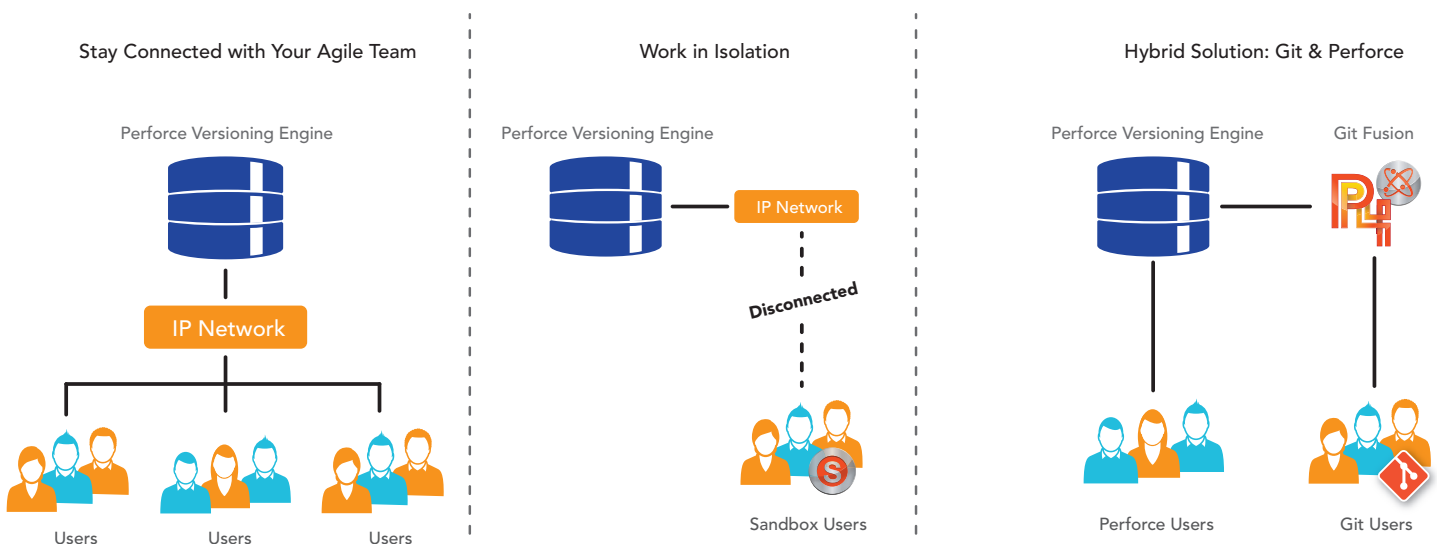


Figure 1: Perforce usage models

Flexible Branching and Task Management

Perforce branching is optimized for modern enterprise development. Developers have several ways to manage development tasks. Release engineers can automatically guide change flow through dozens of related product versions. DevOps can maintain a full audit trail and chain of custody for deployed artifacts.

Perforce Streams

Streams depicts the relationship between a branch and its parent, and let you switch from one branch to another so you can work on multiple tasks in parallel. Stream Graph (see Figure 2) visually informs you when there are updates in the mainline that affect your task branch, or when you have pending updates to push back up.

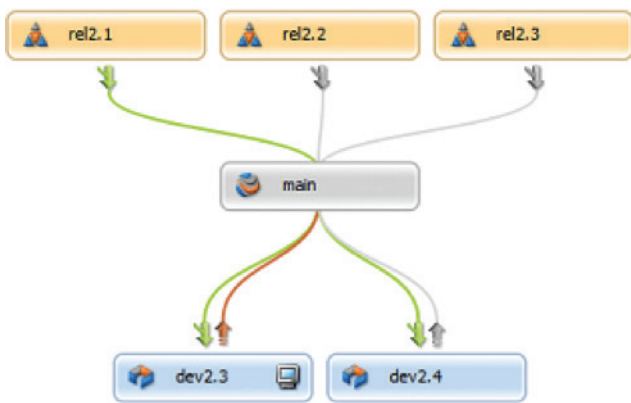


Figure 2: Visualize pending updates in the Perforce Stream Graph

Task Streams

Perforce allows you to create lighter branches off the mainline. Known as Task Streams, these specialized branches significantly reduce the load on the server by creating a branch where most files (except those you add/change) are “symbolic links” off their native branches.

Shelving

Perforce lets you shelve the changes you’ve made to a task branch to enable reviews, temporary commits, or to let you context switch and work on a different task.

Frustration-free Merge

Perforce makes it easy to collaborate on product development. It facilitates easy merges across large changelists using tools such as P4Merge. Not only can you visualize differences on file, you can also view changes that took place on an entire folder between two points in time, significantly reducing the time it takes to resolve integration bugs (see Figure 3). Merge capabilities support both text and binary data, and let you compare source code, documents, and images such as JPEG, GIF, TIFF, BMP, etc.

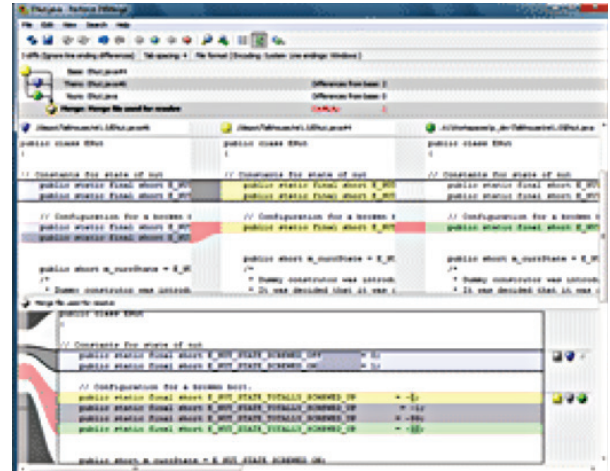


Figure 3: P4Merge, a powerful 3-way visual merge tool

Massively Scalable

Perforce is the industry’s most scalable version management system. Perforce can support thousands of users working anywhere, while managing terabytes of data in development assets, with no limits on the size of each file. Perforce is proven to serve high-volume environments running thousands of builds and millions of integration tests a day so that enterprises can ship quality features faster than ever before.

Integrates with a Continuous Delivery Ecosystem

Perforce provides a comprehensive, well-documented and fully supported programmatic interface for integrating with your test, build, and deployment toolchain:

- Integrates with Perforce Swarm for code review and collaboration.
- Integrates with Jenkins, Maven, Puppet, Chef, JIRA and other tools for powering Continuous Delivery within the enterprise.
- Choose from numerous user-contributed open source plugins and extensions to Perforce contributed by a broad community of users.

Support Global Multisite Teams

Whether they are building a cutting-edge enterprise application, a killer game, a ground-breaking mobile device or the next cloud platform, businesses depend on teams of people working together on important digital assets like software code, documents, spreadsheets, images, designs, and other electronic files.

Perforce's architecture has built-in replication capabilities to serve global multisite teams (see Figure 4) and enables organizations to:

- Create a multisite versioning environment without sacrificing project transparency, process management, or security.
- Support a global workforce using configurations such as Proxy, Replica and Edge services.
- Administer Perforce easily and tailor it to their specific needs.

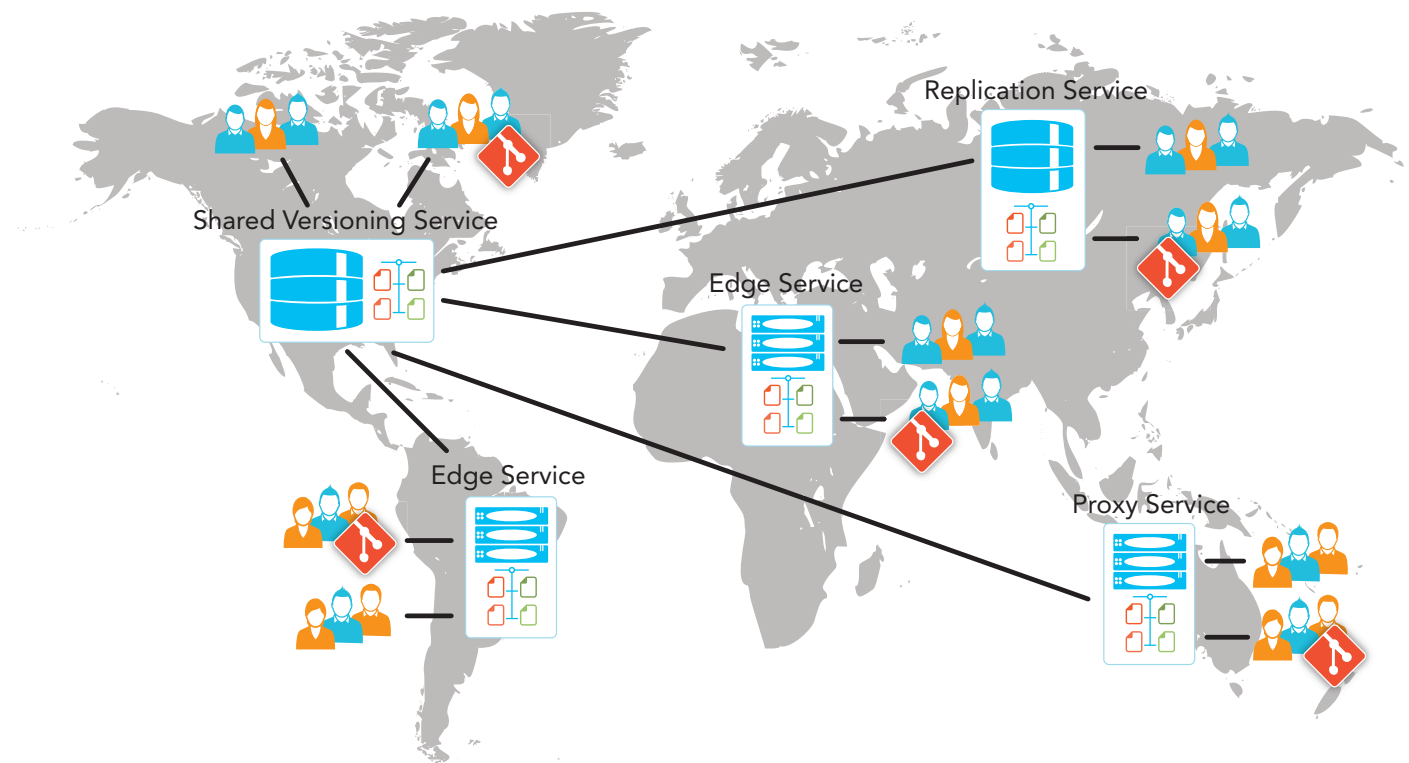


Figure 4: Perforce's architecture supports global multisite teams

