

**PRODUCT BRIEF** 

# For Git at Scale

Helix4Git is a new way to store and manage Git. It stores your Git repos in the Helix Core high-performance server and helps you gain control over distributed, multi-repo projects. Helix4Git lets you mirror, cache, or replicate Git repositories on a global scale. Remote teams can develop and build faster without changing their existing workflows.



With Helix4Git, you can achieve 40-80% faster builds that take up 18 percent less storage. It also integrates with your favorite build runners, like Jenkins, right out-of-the-box. Finally, a reliable way to close the feedback loop to developers more quickly.

## **MULTI-REPO MANAGEMENT**

Helix4Git combines your repos into a single project. Your team can synchronize commits across multiple repos to keep changes aligned. Helix4Git is also available with a front-end code review and collaboration tool, Helix TeamHub.

#### ACCELERATED GLOBAL COLLABORATION

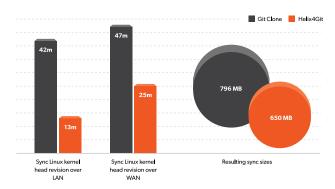
Helix4Git leverages Perforce's advanced replication technology to intelligently sync your Git repos. This guarantees your team is always working with the latest version. Global teams experience faster operations using their same Git workflows.

## **BETTER ALTERNATIVE TO GIT LFS**

When Helix4Git and Helix Core are combined, you can manage your source code alongside large digital assets for a single source of truth. This powerful duo scales without limits making it less timeconsuming and complex to administer. You can:

- Manage large binary files with ease.
- Support tens of thousands of concurrent users.
- Scale globally without hindering performance.
- Integrate with your existing CI/CD tools.

With this solution, Git users get greater scale, speed, and flexibility. Plus, Perforce adopters benefit from file-locking and exclusive-check out features. Whatever tool your team prefers, they are set up to win.



All tests performed with shallow clone of Linux kernel on a 1 Gbps link, and four parallel threads of p4 sync.
For WAN test, a 200 ms round trip latency was added between client and server.

### **SEE IT IN ACTION**

See how Helix4Git can accelerate your Git development pipeline. Sign up for a <u>live demo</u> at http://perforce.com/helix-core-demo.

# Configuration Options for Helix4Git

# PERFORCE

Helix4Git is a high-performance Git server. It can be added to any Git environment, without changes to existing tooling. Developers can continue using their familiar Git commands, while admins can complete builds 40-80% faster. This is because of the parallel processing power of the Helix Core server, which also supports enhanced build automation.

# USE THE HELIX CORE P4 COMMANDS WITH GIT REPOS

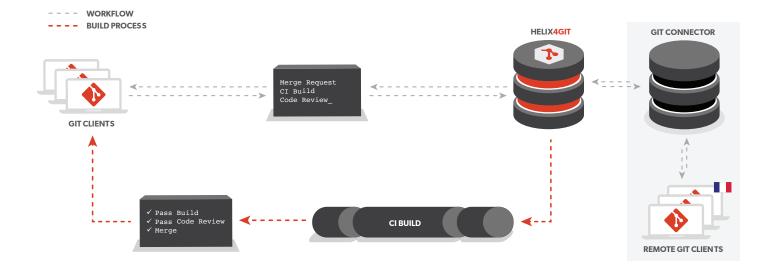
While developers are enjoying familiar Git commands and workflows, admins and build engineers will be driving productivity improvements with automation. Use P4 commands to add multiple Git repos to a single Helix Core workspace. Then sync assets, prep your pipeline, and complete builds in a fraction of the time.

#### **GIT CONNECTOR**

The Git Connector is a software package that you install on a server to start using Helix4Git. It allows the Helix Core server to accept Git commands and intelligently caches Git assets for better performance. You can have multiple Git Connectors linked to a single Helix Core server. The Git Connector works over WAN or LAN connections, delivering faster performance for local and remote Git users.

## MIGRATE GIT USERS AND ASSETS INTO HELIX4GIT

Give your teams a more powerful Git server with faster file-sharing capabilities and builds. If you have remote offices, Helix4Git provides intelligent caching that lets them work locally. Developers experience faster local operations - such as clone, commit, and push - using their same Git workflows.



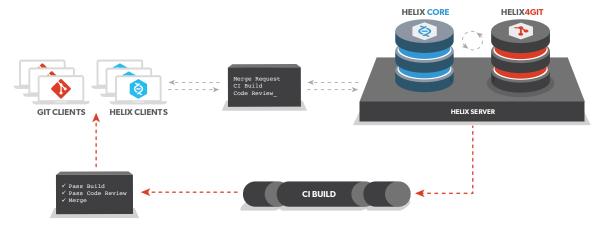


### INTEGRATE HELIX CORE AND HELIX4GIT

The combination of Helix Core and Helix4Git easily scales and creates a single source of truth across your enterprise. You can:

- Leverage Perforce's Federated Architecture with its advanced replication technology.
- Manage and store large binary files, with added support for Git LFS repos.
- Support tens of thousands of concurrent users.
- Integrate with your favorite build runners, like Jenkins, for high-performance CI/CD.
- Improve security of your valuable IP with better access controls and HA/DR built in.

This scenario allows you to scale Git by leveraging the power of the Helix Core mono-repo. No more worrying about cross-repo dependencies and administration headaches.



## **MIRROR EXISTING GIT HOSTS AND SERVERS**

Keep existing Git hosts and servers, but mirror assets into Helix4Git. This gives you speed and greater control over your builds with simple backup protection.

