

10 REASONS WHY

HELIX CORE

**IS THE RIGHT
VCS**

PERFORCE



Table of Contents

INTRODUCTION

NO OTHER VCS SCALES AS WELL AS HELIX CORE

THE WORLD'S FASTEST VERSION CONTROL SYSTEM

THE MOST SECURABLE VCS

BRINGING SPEED AND SCALE TO GIT

VERSION TEXT AND BINARY FILES

INTELLIGENT BRANCHING AND MERGING

HELIX CORE IS THE INDUSTRY STANDARD for Game Developers, Embedded Systems Engineers and Enterprise Teams

WORK SEAMLESSLY WITH YOUR FAVORITE IDES

ROBUST INTEGRATIONS WITH THE DEVOPS TOOLCHAIN

NON-CODERS LOVE HELIX CORE

HAVE YOU HEARD OTHER OBJECTIONS?

Introduction

When we talk with customers at events, we get to hear from users who love Helix Core, the version control tool from Perforce. They tell us about servers crashing without losing any work in Perforce. About deployments that are 75% faster since migrating to Helix Core. About saving tens of thousands of dollars by improving developer productivity.

But we know there's another side to that story.

Team members not convinced? Here are 10 ways that Helix Core outperforms any other VCS. And some questions for your team to understand how it might be right for you.



1

No Other VCS Scales as Well as Helix Core

When teams grow, every aspect of the team and their work scales. Whether you have 50, 100, or 5,000 users, you benefit from a version control system that scales in all dimensions. Helix Core scales without limits to accommodate:

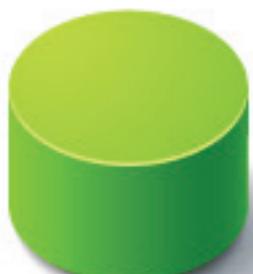
- More people on the team
- More geographically dispersed teams
- More files
- Larger file size
- More repos
- Larger repos

Having a version control platform that scales efficiently is critical to delivering software faster and with higher quality.

[Learn why customers describe us as the most scalable version control system >>](#)

Questions to Ask Your Team

Have you ever worked on a project that required managing a large number of repos? What if your codebase has 1,100 repos that need to be built together, like Android? (What if it only had 50 or 100 repos?) How would you do it? What if you had to create a release every four weeks? Who's going to write all those scripts?



2

The World's Fastest Version Control System

One of the key elements in achieving DevOps is Continuous Integration (or CI). Giving developers real-time feedback improves quality and empowers developers to own CI. But this can cause bottlenecks on the VCS server.

If your VCS isn't fast and high-performing, it won't be able to keep up with the demands of CI/CD. Then, you risk missing your ship dates. Or worse, shipping your product with major errors.

Developers have to wait for feedback from the build, tests, and reviews of their code before they can move on their next task. And if they start working on the next task while waiting for results, their productivity can be negatively impacted by context switching.

With Helix Core, you don't have to worry about your VCS being the source of bottlenecks with your builds. Perforce combines speed and performance with built-in code review applications to keep developers working, not waiting for feedback.

[**Learn more about our scalable code review >>**](#)

Questions to Ask Your Team

Why are most version control systems slow when distributed teams pull repos over a WAN? And why are most VCS slow when builds happen simultaneously? It's because they're single-threaded.

Helix Core is always fast because it's multi-threaded. Plus, you can spin up replicas and build-specific servers to make it even faster.



3

The Most Securable VCS

Helix Core makes it easy to secure your valuable assets and control what users can see and change. It has always been one of the most securable version control systems because of its fine-grained access controls, high-visibility audit logs, strong password security, and secure replication. With the addition of MFA and SAML 2.0, Helix Core offers 360-degree protection.

With the protections table, you can limit access to your intellectual property by a user name, the IP address they're coming from, and the server folders (or even a single file) they're entitled to access. With other VCS, all you can do is limit access from an IP address or limit access to a whole repo.

If you need it, **each** user could be assigned a security level for **each** file. The security levels are:

- List
- Read
- Open
- Write
- Super

[**Learn about secure IP management >>**](#)

Questions to Ask Your Team

Most of our revenue is based on our code. Do other VCS have the security we need to keep our most valuable IP safe? What would happen if a hacker broke in and distributed malware? Some VCS have 2FA on the web, but what about the command line?



4

Bringing Speed and Scale to Git

Git is a great resource for developers and small development teams. It's free and widely popular. Local operations are fast, and it works well for distributed teams.

However, once Git is adopted, some of its limitations become apparent.

Most Git servers can't keep up with CI workflows on an enterprise scale. And if developers are waiting for builds, it negatively impacts your team's productivity.

Enter Helix4Git. Helix4Git is a high-performance Git server inside Helix Core. It leverages the power and scale of the Helix Core server, and it lets you manage Git repos natively. Even better, Helix4Git is easy to implement without changing your current end user toolset — it looks just like a standard Git server to developers.

Use Helix4Git to deliver builds as much as 80% faster. Plus, you'll be able to simplify and accelerate multi-repo builds by consolidating your repo management.

[**Achieve 40-80% faster builds using Helix4Git >>**](#)

Questions to Ask Your Team

Does Git scale? How will it look as our team gets bigger? Imagine we have 2,000 developers and six global design centers. What's the topology that keeps our intellectual property safe, and still gives developers the fast access they need?



5

Version Text and Binary Files

Helix Core is known for its ability to handle large files. It's one of the main reasons we're the #1 version control system for AAA game studios and semiconductor companies.

Helix Core supports all file sizes and types — including binary files. It's a native feature, and it scales. Helix Core seamlessly handles large binary files from a single repository. Some of our customers manage hundreds of terabytes.

[Learn how Helix Core versions binary files >>](#)

USING GIT LFS FOR BINARY FILES AND LARGE ASSETS

Some teams are using Git LFS for smaller deployments. Our clients tell us that it works, but they also say that using Git LFS for large projects isn't manageable.

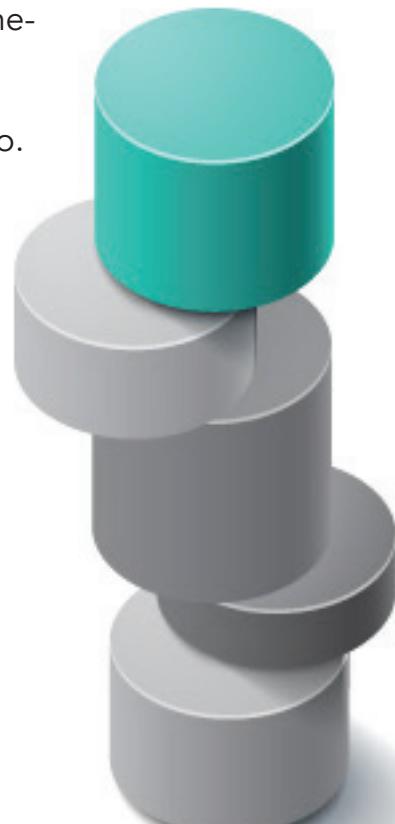
LFS needs to be installed on every workstation and/or repo. Once it's installed, there's no visibility and little control. And there are often added steps that need to be maintained with build runners, such as Jenkins. This adds time-consuming complexity at scale.

For teams that want to use Git LFS, Helix Core can support that too. You can store or mirror external Git LFS repos in Helix Core. This helps increase the speed of large file transfers and other server requests. Helix4Git supports parallel threads, which means it can handle large teams and large file transfers faster than Git LFS can do with open source servers.

[Store large files in Helix Core >>](#)

Questions to Ask Your Team

Have you tried other tools to manage your large files? Did it work? Will it work when there are 3x as many people on our team as there are now?



6

Intelligent Branching and Merging

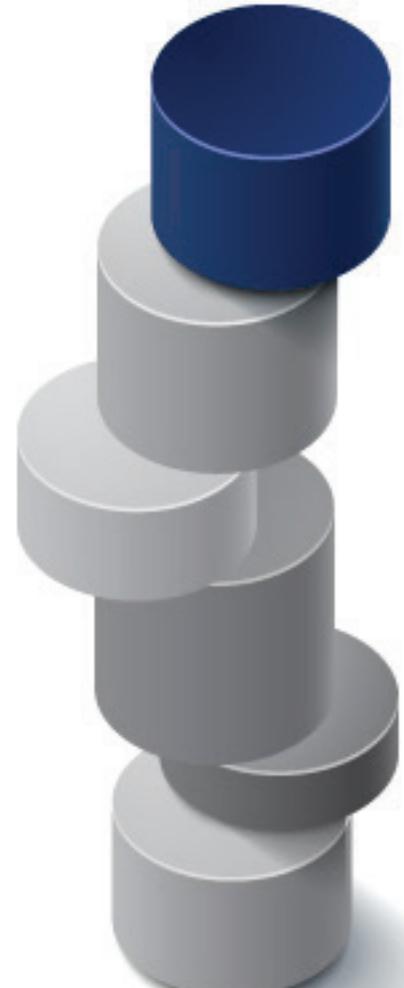
Codebases are getting bigger and more complex. Software release cycles are accelerating. But the one thing that consistently leads to broken builds and missed deadlines? Bad commits.

Helix Core uses a branching technology called Streams. This feature makes it easy to implement and enforce codeline policies across branches. You can have dedicated Streams for specific tasks – from release and innovation to back-end and front-end code.

Streams is often referred to as “branches with brains” because it automatically manages relationships between branches. It’s also easier to see the flow of change across enterprise environments.

Let your release engineers and senior developers focus on achieving DevOps, not fixing code errors and bad commits.

[Simplify codelines by branching with brains >>](#)



Questions to Ask Your Team

With branching and merging, which is worse:

- Keeping branches unnecessarily simple for a complex project, because otherwise it's too hard to manage?
- Making branches adequately complex, and investing a lot of time teaching newbies about your system? (Is it possible for new team members to be productive immediately?)

7

Helix Core Is the Industry Standard

for Game Developers, Embedded Systems Engineers, and Enterprise Teams

Perforce has been around for decades. Many senior engineers already know how to use it. Statistically, people who work at the top game dev or semiconductor companies are probably already familiar with it. After all, Perforce is used by 90-95% of the top game dev and semiconductor companies.

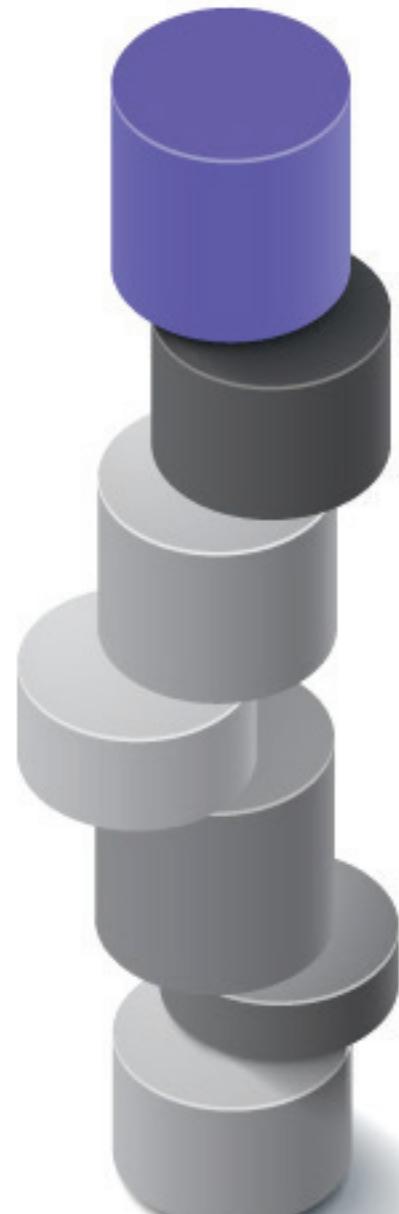
People who aspire to work at the biggest names in any industry should know Perforce. Some companies using Perforce include:

- Expedia
- NYSE Euronext
- Ubisoft
- Honda
- Salesforce.com
- Verizon
- NASA
- Samsung
- NVIDIA
- St. Jude Medical

As one game programming teacher said, "We use Perforce because it's a big tool in the industry. So we want to teach the students what they're most likely going to be using when they work in the industry. We dabbled in Git, and it just didn't work well for us."

[Learn why game dev teams use Helix Core >>](#)

[Learn why semiconductor teams use Perforce >>](#)



Questions to Ask Your Team

Think about the features you need in your version control system.
(Do you need traceability? Performance? Security? Scale? Ease of Use?
Customizing the toolchain?) How well does Git perform in every area
that's important to you?

8

Work Seamlessly With Your Favorite IDEs

Helix Core works seamlessly with your team's favorite IDEs, including Visual Studio, Eclipse, and IntelliJ.

VISUAL STUDIO

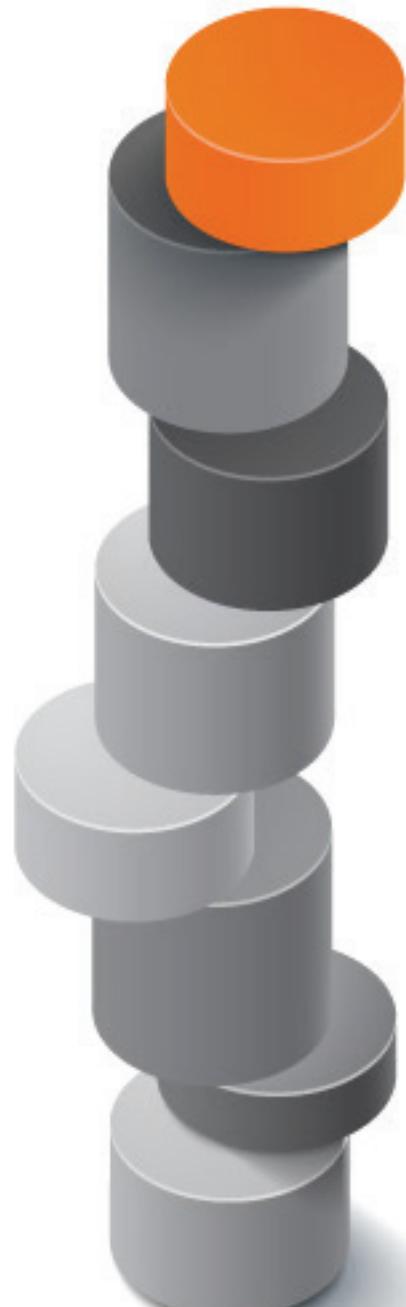
The Helix Plugin for Visual Studio (P4VS) brings developers the enterprise-class version control features they need — without leaving the comfort of the Visual Studio IDEs. P4VS empowers teams to collaborate on files of all sizes and types from the comfort of the Visual Studio interface.

[Integrate with Visual Studio >>](#)

ECLIPSE

The Helix Plugin for Eclipse (P4Eclipse) brings the most important features from Helix Core into Eclipse. And it features a task-focused interface that puts everything at the developer's fingertips.

[Integrate with Eclipse >>](#)



Questions to Ask Your Team

How many people do you know who love doing code reviews?
What if you could seamlessly integrate code reviews into the tools you're already working in? Would it be more bearable?

9

Robust Integrations With the DevOps Toolchain

No matter what you're working on — from code to Photoshop files — it's easy for users to work in the tools they prefer. Helix Core has robust integrations with the full DevOps toolchain. And because industry standard tools are designed to work together, integrations work out-of-the-box, with little effort on your part.

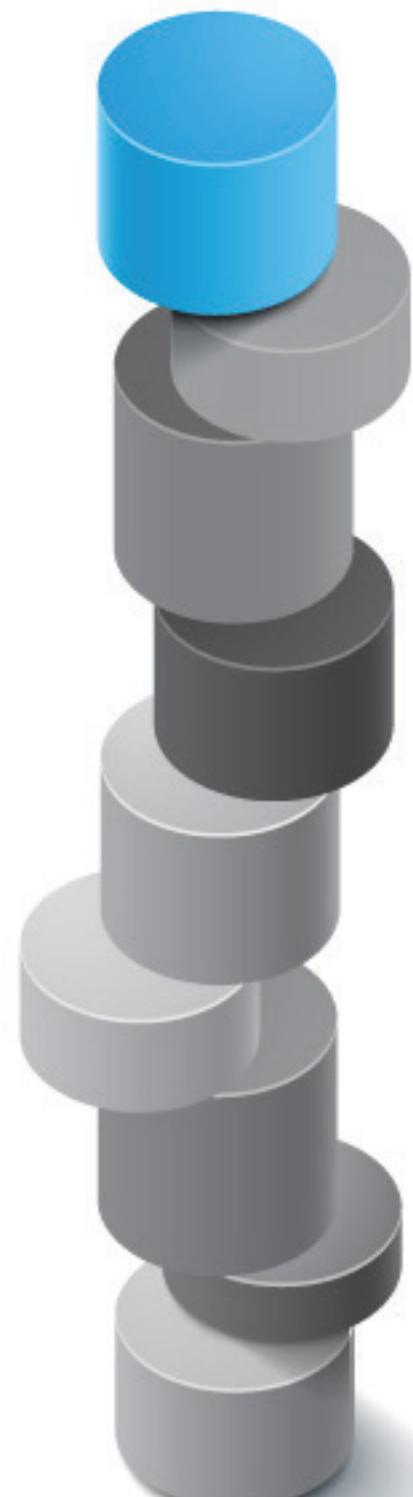
Integrations with the DevOps toolchain include:

- Jenkins
- TeamCity
- Electric Cloud
- Bamboo

APIs and SDKs for:

- .net
- Java
- Python

[Seamlessly add to your DevOps toolchain >>](#)



Questions to Ask Your Team

When you were using other VCS, did you notice that as the number of developers on your team grew, people were waiting longer for their builds and code reviews to get into the queue? How many people could you add before it became intolerable?

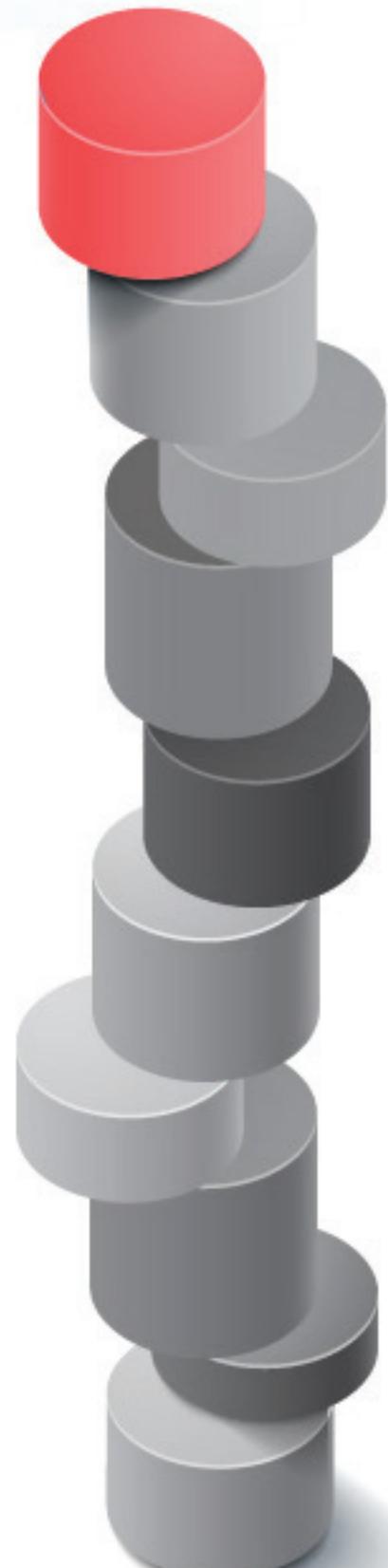
10

Non-Coders Love Helix Core

Artists and designers love Helix Core because there are OS and graphic tool integrations, such as 3DS Max, Maya, Photoshop, and Windows File Explorer. Helix Core doesn't force designers to learn command line or another UI. They can work from the comfort and familiarity of their favorite work environments using the Helix Plugin for Graphical Tools (P4GT).

The check-out process is explicit, and they know exactly which files they have and who else is working on them. This helps avoid many coordination issues.

[**Version digital assets with the Helix Plugin for Graphical Tools >>**](#)



Questions to Ask Your Team

Have you ever met a designer who knows Git and is well-practiced at branching and merging? Have you ever met a designer who wants to learn these things? No, us either.

Have You Heard Other Objections?

Helix Core is the industry standard for game developers, embedded systems engineers, and other enterprise organizations with mixed assets. In those industries, it became the standard because it consistently solves the problems DevOps professionals face. Whether it's performing at scale, passing security regulations, or integrating with other tools, Helix Core is capable.

Are you getting objections from your team that we haven't addressed here? Let us know what it is, so we can support you. We're here to help.

Email us at info@perforce.com.

