PERFORCE

Version Control in Virtual Production

4 Key Benefits According to Innovative Studios



Introduction

The Challenge for Virtual Production Teams

Virtual production has many moving parts. Between the dozens of content creation tools any given team uses, the number of people and teams working on a project, and the sheer number and size of digital files that go into a final production, there is a lot to manage.

Teams who work in silos tend to duplicate each other's efforts, get in each other's way, and misunderstand the final vision for a project. For a production to be completed on time and with the high level of quality expected, you need to have tight control of digital assets, teams, and workflows.

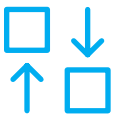
For that reason, virtual production teams are starting to take advantage of version control. A version control system (VCS) automates the process of tracking and managing changes to files over time. Perforce Helix Core goes beyond that. On top of storing every single version of all of your digital assets, it allows you to manage your team's contributions and get the right asset to the right place anytime, anywhere.

4 Key Benefits of Version Control, According to Innovative Studios

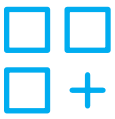
In this eBook, learn the key benefits of Helix Core version control, as told by innovative production studios: Dimension Studio, Silver Spoon, Final Pixel, and HaZ Film. Discover how they use Helix Core to streamline their virtual production pipelines and:



COLLABORATE SMARTER



MAKE QUICK CHANGES TO CREATIVE



SECURE THEIR CREATIVE ASSETS



TAKE MORE RISKS AND INNOVATE MORE

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Meet Four Innovative Virtual Production Studios

Who Use Helix Core Version Control to Streamline Workflows and Push the Limit on Virtual Production

dimension

DIMENSION STUDIO

Dimension is a pioneer in creating real-time content for VR games, sports broadcasts, fashion shows, and film. A leader in volumetric content capture and virtual production, they are continuously incorporating new technology and methods into their workflows.

silverspoon

SILVER SPOON

Silver Spoon is the studio behind some of today's most innovative augmented reality (AR) experiences. They were the first studio to fill empty stadiums with simulated crowds and the team behind the world's first AR singing competition. They live to push the limit on real-time virtual production.

FinalPixel

FINAL PIXEL

Final Pixel is a global creative studio founded by industry veterans. They specialize in virtual production for film, television, and advertising. They use Unreal Engine to create realistic virtual sets that they blend with physical sets, and they use in-camera VFX to film in real-time.

HAZ FILM

HAZ FILM

HaZ Film is a production company that specializes in film and television. They came onto the animation scene in 2020 and now produce original feature films, tv series, and video games powered by Unreal Engine.

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Benefit 1

Collaborate More Effectively on Digital Assets

Benefit 1

Collaborate More Effectively on Digital Assets

Helix Core has been a game-changer for virtual production studios when it comes to collaborating on creative and game engine files. For one it serves as a single source of truth for all digital assets. It is the one, secure location where all of your assets can be submitted and grabbed, so you always have quick access to the file you need.

Moreover, it helps you control the flow of changes to your files. With Helix Core, you can see when files are checked out, or you can automatically lock them, so your team doesn't waste effort. This is especially important when you are working with binary files, like art files, which can't be merged.

What This Means For Silver Spoon

Before they had Helix Core, "It took a lot of time and communication to make sure people weren't stepping on each other's toes with different files." — Peter Collazo, Director of Motion Capture & Real-Time Technology, Silver Spoon. Collazo says they were manually iterating files to make sure they weren't disrupting each other's work, and they were dealing with a lot of files, so their process was not efficient.

With Helix Core, the team at Silver Spoon now has a single source of truth for all digital assets, like binaries and other IP. There's no need to manually manage iterations of each file — all of that is done automatically with Helix Core. They can have multiple people working on the same project, and everyone can easily grab the latest version of a file.

What This Means For Dimension Studio

Dimension utilizes Perforce Streams to collaborate on production assets safely and efficiently. "Our content teams work within development streams, and the mainline is protected for the stage team, allowing simultaneous collaboration to take place without any risk of impacting the ongoing production. Changes can then be integrated when it is safe to do so." — Mark Holland, Head of Content Management, Dimension Studio



ABOUT PERFORCE STREAMS

In version control, branching is a key functionality that allows your team to work on individual files without risk of altering files that are already approved for use. Perforce Streams is the branching functionality within Helix Core. Streams was designed especially for large or complex projects and remote teams. It provides built-in visual support for complex branching and merging operations to ensure everyone understands the workflow and where to submit changes to keep the project on track.

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Benefit 2

Make Quick Changes to Creative

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Make Quick Changes to Creative

Every minute matters on set. If the director wants to make changes to the digital environment — for example, to move an object or change the color of a building — the clock is ticking from the time they make the request until the time it appears on the LED wall. You don't want to be waiting around for a long time while your artists transfer files slowly to the set crew and the updates are synced with your on-set equipment.

With Helix Core, your updated files are quickly available to the rest of your team. Your artists can work on creative without affecting what's on the LED volume, and your set crew can grab the latest project once it's approved. That means progress doesn't stop, whether you need to make changes for that day's shoot or you are preparing for tomorrow.

What This Means For Silver Spoon

"Helix Core has been great for us in terms of when projects reach those pinnacle bottlenecks when everyone is piling on to try to figure out a last-minute ask." — Mark McCallum, Virtual Production Supervisor, Silver Spoon.

Studios like Silver Spoon make a lot of changes in real-time. With Helix Core, changes to their creative can be committed quickly so a file can be handed off to the next person in line, getting the new final project out the door, fast.

On their live productions, they use a lot of render nodes and multiple computers. They might have anywhere from two to eight cameras for a production. They have Helix Core loaded onto each machine, and they've even developed custom tools that use the Perforce command line to automatically sync across all nodes. Having Helix Core means they don't have to manually go into each machine and pull down files they need. It also allows them to react quickly to fix any problems or add creative within minutes or hours, depending on the situation. Without Helix Core, the same change could take half a day or longer.

What This Means For Final Pixel

"Helix Core has dramatically improved our pipeline and efficiency in working on Unreal projects. It has changed the game for us completely." — Michael McKenna, CEO, Final Pixel

Helix Core allows Final Pixel to make real-time changes to their game engine files. An off-set artist can make the change to the file, sync the change to Helix Core, and then render it on the LED wall; and they can do it in minutes.

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Benefit 3

Collaborate Securely within Teams and with External Partners

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Collaborate Securely within Teams and with External Partners

Without a version control system, sharing assets between team members is a bottleneck at best and a security issue at worst. In the absence of a better option, many studios resort to transferring valuable IP via unsecured channels like file-sharing sites, messaging apps, or email.

With Helix Core, all of your IP is securely stored in one central location, and it is accessible only to those who need it. Permissions can be set all the way down to a single file and IP address, and outside contributors can be given access only to the files they need. On top of that, Helix Core allows you to review a full history of what was accessed and what was changed, when, and by whom.

What This Means For Dimension Studio

When working with multiple vendors, Dimension can use Perforce Streams to give outside resources access to a restricted group of files from their depot. They can even protect down to the individual file level for highly-sensitive projects. Everything is still versioned in one depot, ensuring assets remain protected.

"We're able to control access to projects, streams, and files by using built-in access control features for third parties and Active Directory integration for [their] staff. Having the ability to mix access control methods allows us to keep customer data/assets secure." — Maciej Zaremba, IT Manager, Dimension



TRUSTED PARTNER NETWORK

Perforce Software is a collaborative member of the Trusted Partner Network (TPN). This means our products meet the highest security standards of the global film and television industry, giving studios confidence that their work is always protected.

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Benefit 4

Take More Risks & Innovate More

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Take More Risks & Innovate More

The media & entertainment landscape is rapidly evolving, and so are the technologies and methods used to create content. Virtual production teams already know this; innovation is the heart of what they do. But many do not fully recognize that the manual processes involved in collaborating on and sharing assets is causing slowdowns — that their tools are holding them back.

Once a studio takes on a larger project with hundreds or thousands of 3D, game engine, or art assets, managing files and workflows with a version control system becomes a necessity.

Helix Core has made the difference for studios who were taking on bigger, more complex projects. It has given them the stability and speed to experiment with new workflows and virtual production methods.

What This Means For Dimension Studio

Helix Core gives Dimension the confidence to test new solutions to streamline their workflows. "One of the best features we find with Perforce is the ability to safely back up the server with almost zero downtime, which then allows us to rapidly create near exact replicas of our production servers within a virtual test environment. This gives us the capability to quickly test and ratify new features and workflows in an accurate mock production environment before pushing the changes to our production servers, so we can implement changes that we know will only benefit our users." — Tom Ayre, Systems Administration, Dimension

What This Means For Silver Spoon

Knowing Helix Core has every iteration backed up, and that they can quickly make changes and revert them if they don't work out, Silver Spoon has been able to take on more risk than they previously could. They have been able to push the envelope on real-time virtual production and say yes to complicated projects with clients because they aren't limited by their technology. They can be the studio clients turn to for groundbreaking experiences and are better prepared for the future of entertainment. "Our mission is to continually expand the boundaries of what can be made in real-time. Helix Core helps us do that faster." — Laura Herzing, Executive Producer, Silver Spoon

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Bonus Benefits

In addition to enabling teams to collaborate smarter, make changes in real-time, secure their IP, and innovate more, Perforce Helix Core has had the following key benefits for studios:



Easy Cloud Deployment

Helix Core can be deployed on your cloud solution of choice. The free Enhanced Studio Pack, which includes Helix Core plus project management and code review tools, is a turnkey cloud solution available on the AWS Marketplace. "Helix Core [on AWS] worked really well… We downloaded the demo and in couple of clicks, we had source control. And it changed our lives forever. When we look back to how we were working before using Perforce, we all cringe!" — HaZ Dulull, Director/ Producer, HaZFilm



Simplified Asset Reuse

For HaZ Film, having multiple versions of assets available to the team in Helix Core meant an asset could be created once and used across various mediums. This extended the longevity of an asset, allowing it to be used simultaneously across productions.



Speed for Global Teams

Final Pixel's team of remote contributors uses Helix Core to work with the on-set team, making it feel like everyone is in the same room. An off-set artist can make changes to a file, sync the change to the Helix Core server, and then render it on the LED wall — all in minutes. This quick change on a large digital asset by someone overseas is possible because Helix Core allows virtual production studios to deploy anywhere. Thanks to advanced replication, changes can be synced quickly from anywhere around the globe.

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Conclusion

Perforce Helix Core is the leading version control system for teams who use game engines and work with many large digital assets.

Streamline and accelerate your virtual production pipeline with a version control system that:

GIVES YOU A SINGLE SOURCE OF TRUTH FOR ALL DIGITAL ASSETS.

SECURES YOUR VALUABLE CREATIVE IP.

GIVES YOU THE SECURITY AND SPEED TO EXPERIMENT AND INNOVATE.

ENABLES SMARTER COLLABORATION WITH LARGE, GLOBAL, AND EXTERNAL TEAMS.

INTEGRATES SEAMLESSLY WITH YOUR EXISTING TOOLSET.

SCALES WITH YOU.

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Get Perforce Virtual Production Tools for Free

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Perforce Helix Core is free for up to five users, with no limits on functionality.

HelixCore Hansoft HelixSwarm

FREE VIRTUAL PRODUCTION TOOLS: ENHANCED STUDIO PACK

Get version control, code review, and project management for free. Deploy in a few clicks on AWS or Azure.

GET THE FREE PACK

HelixDAM

FIND, TRACK, AND REVIEW YOUR ART ASSETS: HELIX DAM

Find every art asset at a glance, track its evolution across versions, and simplify the feedback & revision process with Helix DAM.

TEST DRIVE HELIX DAM

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