

HEXWARE

TFS to GitHub Migration for an American Financial Services Giant

Case study



Client

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- Summary

An American Financial Services Giant

The client is a leading financial services company with a global presence. They manage large-scale software development projects for their enterprise-grade applications, utilizing legacy tools like Team Foundation Server (TFS) for version control, build pipelines, and work item management. To modernize their infrastructure and improve productivity, the client aimed to migrate to GitHub Enterprise and Jira SaaS while leveraging Azure for cloud-based scalability.



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Managing the Migration of Complex Legacy Systems

The client faced significant challenges in transitioning from TFS to GitHub Enterprise and Jira SaaS due to the scale and complexity of their existing environment:

- **Migration Scope:** The environment included 12 collections, 183 projects, 1,740 repositories, 236,573 work items, 369 teams, 1,290 areas, and 1,257 pipelines, most of which were active and critical to business operations.
- **Comprehensive Planning:** A detailed migration plan was required to transfer TFS objects (repositories, CI pipelines, and work items) to the new platforms while ensuring minimal downtime.
- **Repository and Pipeline Migration:** All repositories, including branches, histories, and tags, were to be transferred to GitHub Enterprise SaaS, alongside CI pipelines converted to GitHub Actions workflows.

- **Work Item Migration:** Jira migration to be facilitated for 209,562 active work items without data loss or time limitations.
- **Dependency Management:** TFS build server dependencies and libraries needed to be migrated to their Artifact Store, and strategies for handling large files were needed.
- **Access and Validation:** Standard user access had to be restricted during migration to ensure data integrity, followed by rigorous validation of migrated data and CI/CD pipelines.



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Streamlined Migration with a Phased Approach

A comprehensive, multi-phase strategy was implemented to address the challenges and ensure a seamless migration:

- **Pre-Migration Checklist:** Prepared detailed migration readiness checklists for project teams, including phase details, dependencies, repository owners, notification processes, and technical script debts. This ensured all teams were prepared for the transition.
- **Repository Migration:** Transferred all repositories, including branches, commit histories, and tags, to GitHub Enterprise SaaS, while restructuring repositories as needed for optimized storage and access.
- **Pipeline Migration:** Converted selected TFS pipelines into GitHub Actions workflows, enabling better CI/CD automation practices.
- **Work Item Migration:** Migrated all project work items to Jira SaaS, preserving relationships, attachments, and metadata without any time limitations to ensure continuity.
- **Access Management:** Restricted standard user access to TFS projects during migration, allowing only the migrated projects (GitHub and Jira) to remain active.
- **Post-Migration Validation:** Conducted data validation against pre-migration checklists and tested all migrated CI/CD pipelines to ensure functionality in the new environment.



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A Modernized, Scalable, and Collaborative DevOps Platform

The successful TFS to GitHub migration provided the client with a future-ready infrastructure and numerous operational advantages:

- **Scalability:** The transition to Azure and GitHub Enterprise SaaS enabled the client to scale operations with a modern, cloud-based platform.
- **Improved DevOps Practices:** Automation and CI/CD workflows using GitHub Actions streamlined software delivery processes, boosting efficiency.
- **Enhanced Collaboration:** Leveraging GitHub for version control and Jira for work item management improved team collaboration and project visibility.
- **Future-Ready Infrastructure:** The new infrastructure prepared the organization for growth, ensuring resilience and adaptability for evolving business needs.



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Improved DevOps Practices

Hexaware successfully facilitated the migration of an American financial services giant from TFS to GitHub Enterprise and Jira SaaS. By developing a comprehensive migration strategy, we addressed the complexities of the client's legacy systems, ensuring a smooth transition with minimal downtime. The result was a modernized infrastructure that significantly enhanced collaboration, improved DevOps practices, and provided a scalable cloud-based solution tailored to the client's needs.



About Hexaware

Hexaware is a global technology and business process services company. Every day, Hexawarians wake up with a singular purpose: to create smiles through great people and technology. With this purpose gaining momentum, we are well on our way to realizing our vision of being the most loved digital transformation partner in the world. We also seek to protect the planet and build a better tomorrow for our customers, employees, partners, investors, and the communities in which we operate. With offices across the world, we empower enterprises to realize digital transformation at scale and speed by partnering with them to build, transform, run, and optimize their technology and business processes.

Learn more about Hexaware at www.hexaware.com.

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