



Case Study

Customized Azure DevOps Migration Solved Complex Challenges For a Software Development Company!

Industry: IT industry

Country or Region: Pune, INDIA Customer Size: 70 employees Number of Users: 25 employees Client Name: Accural Solution

Executive Summary:

Accural Solution, Pune based Software Development Company's migration from Microsoft Visual Source Safe to Microsoft Azure DevOps was far from straightforward. Standard methods couldn't achieve the desired end-state, so Codinix experts extended the functionality of open source tooling to overcome technical issues. We helped the business achieve a seamless transition and enabled software delivery acceleration with Continuous Integration / Continuous Delivery principles to facilitate Accural Solution's movement towards SaaS.

Challenges:

Codinix was appointed to migrate Accural Solution's flagship product from VSS to Azure DevOps. The objective was to facilitate better ways of working on the more modern, Azure DevOps platform thereby accelerating software delivery and helping the business move towards a SaaS model.

Following an inception day led by one of our consultants, it was clear that a customized migration would be required, due to the scale of the application's source code and the nature of Accural Solution's existing cloud-based estate. Our experts devised a customized approach using open source tools to ensure the migration could be orchestrated seamlessly, while quickly unlocking the benefits of the new environment. Ahead of the full migration, we held a dry run to test and validate the process. This took around four weeks. Investing time and effort upfront ensured the actual migration ran smoothly and efficiently, completing in 16 hours.

Standardised migration methods weren't up to the task

Migrating from VSS to Azure DevOps is a complex process. For Accural Solution, this was compounded by the fact that it had another application already running on Azure DevOps. Using the standard Microsoft database migration tools would have resulted in two separate 'organizations' which would hinder the Continuous Integration / Continuous Delivery (CI/CD) principles Accural Solution wanted to adopt.

Additional complications included the sheer number of Git repositories that had to be created. It would have been too time-consuming to validate each of these manually ahead of the migration, so Codinix had to develop a reliable alternative.

Bespoke heavy lifting tactics and estate insights cracked the challenge

At the outset, we worked closely with Accural Solution's in-house team to examine the source control of Product, as well as work item templates and customizations. This gave us the insights we needed to devise a frictionless migration, ensuring the right code was moved in the correct format, and any necessary customizations were applied in the new Azure DevOps environment.

Our core task was to transition the source code from VSS to Git-hosted in Azure DevOps. In total, 108 Git repositories had to be created and uploaded to the new platform.

Since Microsoft's supported database migration tools were not a viable option on this occasion, we used the open source Git-TFS to convert the source code. Then Azure DevOps Migration Tools were deployed to push the code into Accural Solution's existing Azure DevOps organisation.

To handle the 108 Git repositories quickly without compromising validation, we developed a PowerShell wrapper for Git-VSS. This performed a series of checks against the existing VSS repository ahead of the migration. Then it validated each Git repository post-migration to ensure the code's version history had been preserved. Automating this process enabled us to quickly identify any issues with the migrated repositories, so we could focus on fixing them.

We also migrated around 600 work items and removed unnecessary customizations. This involved mapping custom work item types and states into standard types and states. It enabled Accural Solution to make a fresh start and use the new work item model in Azure DevOps to apply any future customizations.

A seamless migration set the business up to embrace modern ways of working

Efficiency

The dry run took four weeks and the full migration was completed in 16 hours. Codinix has performed migrations of this nature many times, so consultants and engineers understand the issues they are likely to encounter and how to resolve them.

Reliability

A smooth transition meant Accural Solution's delivery teams got back up-to-speed quickly after the migration. Codinix provide upfront planning and post-migration support as part of our reliable migration service.

Cost-effectiveness

Migration is a one-off process, so handling it in-house introduces risk without any lasting benefits. With Codinix managing the entire process, interruption of Accural Solution's delivery and operations was kept to a minimum.

How Product Helped:

The Accural Solution's code base enjoyed a successful and frictionless transition to existing Azure DevOps organisation, despite the scale and complexity of the process. The IT team now has an enhanced ability to embed CI/CD principles and develop more adaptive working practices as it moves towards an SaaS offering. This, in turn, facilitates competitive differentiation and customer satisfaction, driving commercial advantage.