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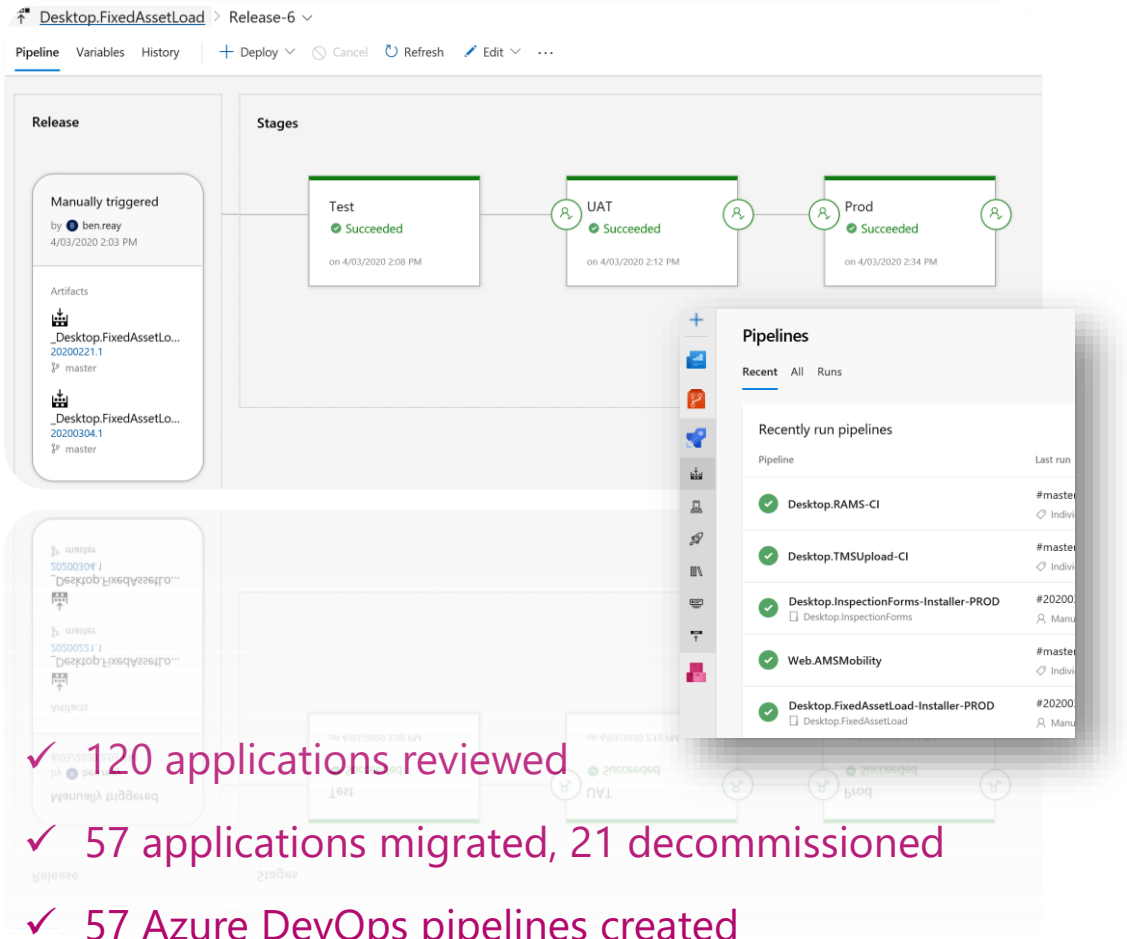
Case Study

Taming a 100+ App legacy with Azure DevOps

arc infrastructure



- ✓ 120 applications reviewed
- ✓ 57 applications migrated, 21 decommissioned
- ✓ 57 Azure DevOps pipelines created
- ✓ Pipelines deploy .Net, VBA and Access, standalone .exe, Web and Desktop applications & installers
- ✓ 185 change requests & 192 deployments executed

Overview

- Arc Infrastructure Technology engaged Interfuze to manage the **migration** of their internally developed applications to **new SQL Server** and **Application server** instances, using this as an opportunity to;
  - Set up governance and agility through **Azure DevOps**
  - Decommission unused applications
  - Create high level test plans and consistently document all applications

The Client

Arc Infrastructure (formerly Brookfield Rail) is operator of West Australia's south west rail network, covering approximately 5,500 km of rail infrastructure.

The network is vital to providing access to the eastern states of Australia and overseas markets through the region's six government-owned ports.

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The Challenge

- **Scale**. Arc have over 120 internally developed applications listed in their applications register, entries are not always correct.
- **Complexity** Applications are interdependent, multiple versions of code exist, the version in production was not always documented.
- **Diversity** Applications written in .Net, VBA, Access, desktop, web and standalone .exes. Installers required for desktop applications which didn't exist.
- **Legacy issues**. Test plans did not exist, functionality not clear. Original authors no longer at Arc. Hard coded configuration.

The Approach

- **Identification** of all applications potentially dependent on the existing SQL Server & Application server based on review of applications register and all known code.
- Migration process architected to **minimize risk,** balancing risk and time spent
- Interdependencies between applications identified to define cutover **migration plans.**

The Solution

- **Azure DevOps pipeline** created for each application with automated build & deploys. Code cleaned to remove hard coded configurations and enable deployments to multiple environments.
- **3 step migration to reduce risk**; 1st of current code to ensure a known version was in production, 2nd deploy of the cleaned code, 3rd migrated to new SQL server
- **Detailed run plans and design/tool improvements** for interdependent applications to ensure clean cutover. Largest was 31 applications in one deploy.

The Results

- **Seamless migration** to new SQL Server & Application Server instances. All applications now in a HA environment.
- All 57 applications in Azure DevOps with 1 click deploys and high level test plans.
- Application register up to date, all code in production known

In the past this project was always added to the "too hard" basket. Through careful planning and using correct DevOps practices, Interfuze was able to assist and guide Arc Infrastructure in delivering a successful outcome, which removed significant risk to the company.

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Think we can help solve your problem?

Reach out to Branden or Tim

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