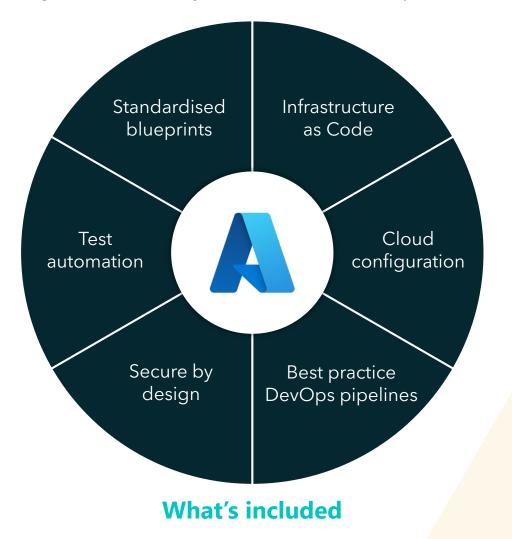


# Foundations by Version 1

Cloud-Native Acceleration on Microsoft Azure

#### **Foundations: Our Cloud Native Development Accelerator**

Why waste time building everything from scratch? Our Accelerator templates provide strong Foundations for your cloud native development on Microsoft Azure.



**Advanced starting point** for cloud native development

Focused on non-functional requirements

**Accelerate** modernisation by up to 91 days

**De-risk outcomes** by using a proven and secure approach

Allows you to focus more quickly on **delivering business value** 







#### What Is Foundations?

- Pre-configured solution templates which act as an advanced starting point to accelerate your Azure Enterprise Application Development
- Supports many common solution requirements including web applications, API development, data integration, reporting & more
- Includes reference implementation for many common Azure PaaS services
- Focuses on implementation of best practice Non-Functional Requirements (NFRs)
- Foundations represents our "toolkit" for cloud native development
- Enables us to deliver real business benefits for you more quickly





#### **Faster Delivery**

Accelerating delivery with automation and pre-built recipes for common workloads



#### **Reduced Risk**

Reduced risk using battle tested solutions and automation



Our Azure Application

Development Accelerator provides solution templates that will help deliver real benefits to you



#### **Increased Quality**

Increased quality through standardisation and automation



#### **Secure by Design**

System architecture that emphasizes the proactive integration of security measures



#### **Increased Agility**

Flexibility, scalability, competitive advantage, speed

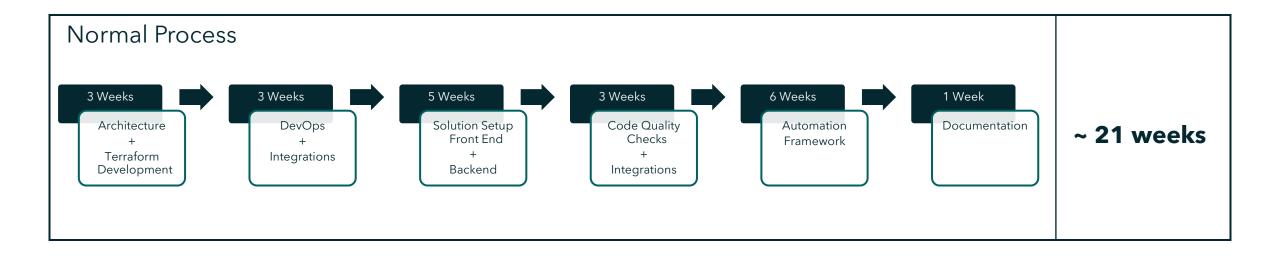


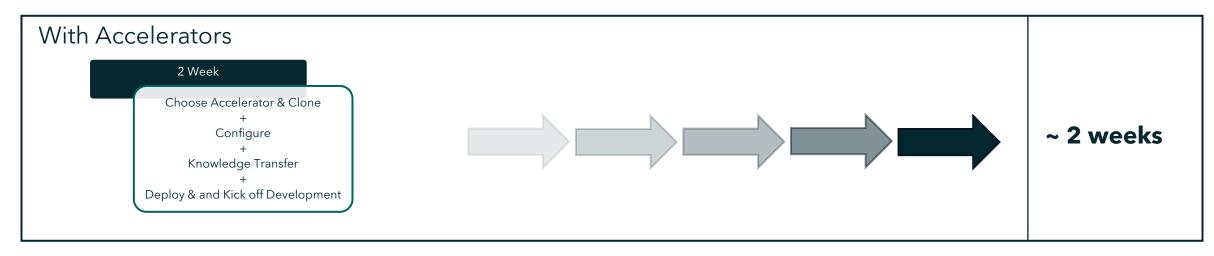
#### **Focus on what matters**

Aligning your efforts with your organization's strategic goals, user needs, and cost-efficiency



#### **Accelerating your application development**







#### **National Incident Liaison Officer (NILO) project for National Highways**

"NILO reporting is now a faster more comprehensive reporting service than ever before ensuring National Highways customers have a better experience, stress free journeys and improved journey times when travelling."

Tim Priest, National Operations Team Leader, National Highways

#### Challenge

To enhance communications and increase road safety, the customer sought to monitor and report occurrences more effectively. It was necessary to replace existing legacy systems and enable modernised processes with tight delivery deadlines, which called for an innovative approach.

#### **Solution**

Modernising a Mission Critical Incident Management and Road Safety system, essential to the smooth running of England's roads was a considerable undertaking.

We guickly scaled up a team and initiated a 3-month modernisation project. We used our Application Modernisation accelerator (Foundations), re-architecting the current legacy system, to build an Azure Cloud Native solution. Despite a tight deadline, we delivered on time, within budget, and with exceptional results by keeping the business need and value front and centre.

#### **Outcomes**

150% faster reporting.

50% faster incident creation.

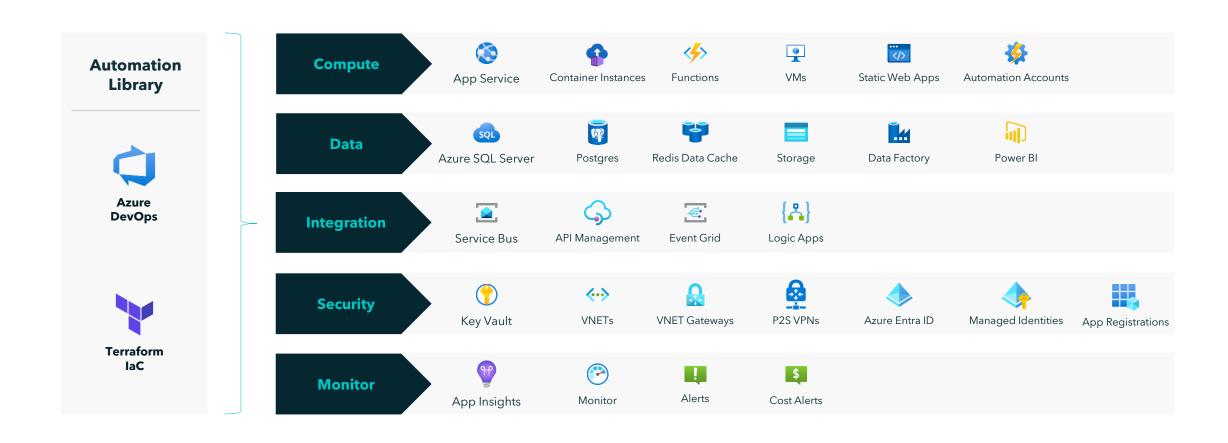
82% faster incident updates and closures.



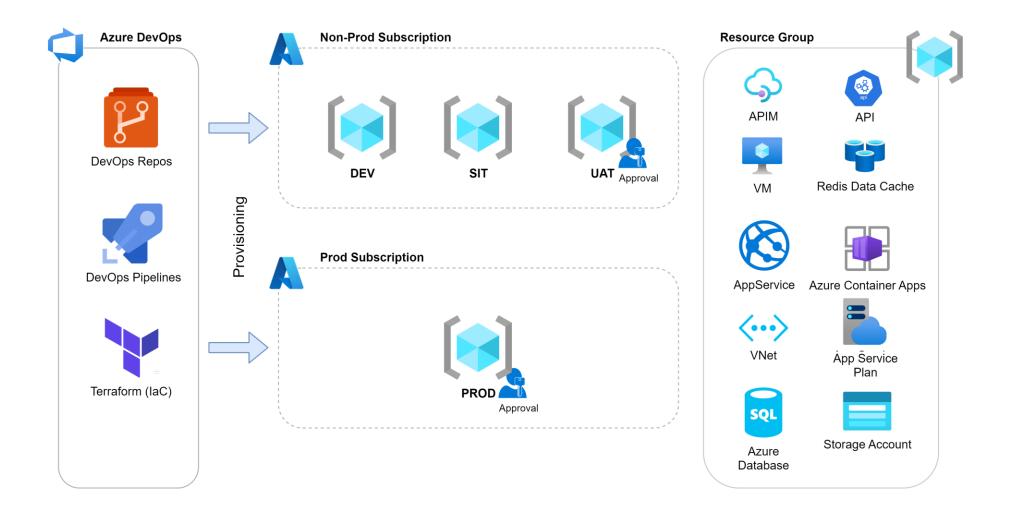


#### **Our Library of Preconfigured and Automated Azure Services**

We can automatically provision and configure the most common services required for your needs

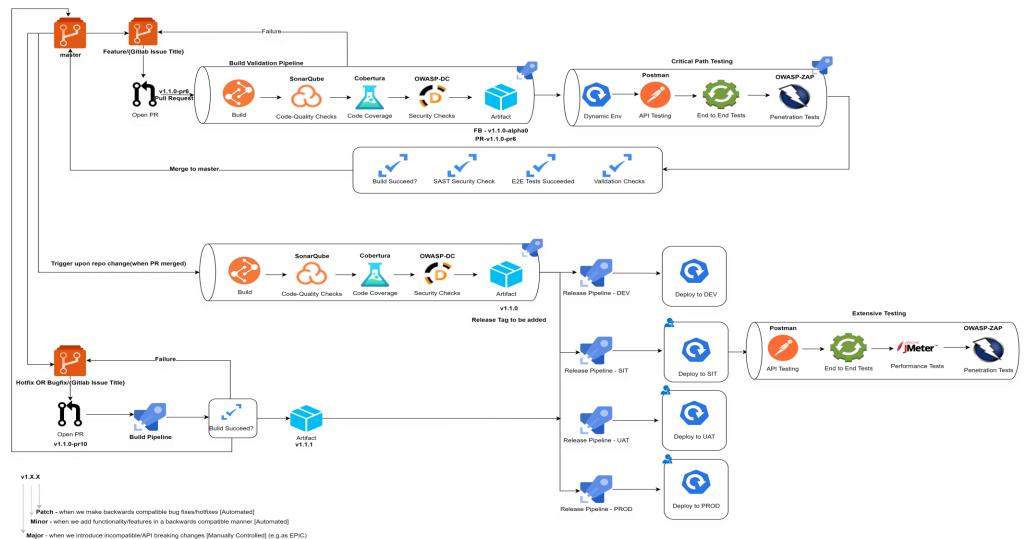


#### Infrastructure as Code to automate environment creation



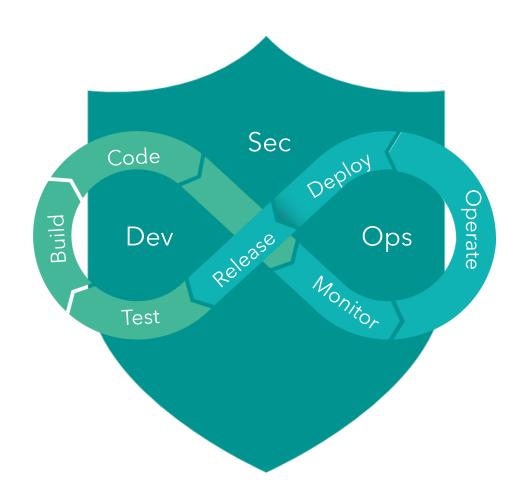


#### **Best Practice DevSecOps pipelines**





#### **Secure by Design**



















Principle of Least Privilege via Infrastructure as Code

#### **Multiple Frontends to choose from**



#### Angular

- ✓ Angular + Nx structure with mono repo micro front-end capabilities.
- ✓ Built on top of Angular Material.
- ✓ Syntactically Awesome Style Sheets(SASS).
- ✓ Follows Block Element Modifier(BEM) naming convention.
- ✓ Customisable theme format.
- ✓ Azure Static WebApp to deploy an Angular solution.
- Unit Testing with Jest, Karma, and Jasmine.



#### React

- √ React + NextJS structure
- ✓ Build on material design
- ✓ Customisable theme format
- ✓ Dark theme enabled
- ✓ Responsive Web Design
- ✓ Azure Active Directory (AAD)
- ✓ Azure Static WebApp to deploy an React solution



#### Blazor

- ✓ Blazor Server App
- ✓ Build on Radzen with 70+ open source Blazor UI Controls
- ✓ Responsive Web Design
- ✓ A component model for building composable UI
- ✓ Live reloading in the browser during development



Angular + Nx









**Best Practices** 



Entra ID



**ADO Pipelines** 



App Insights



**Unit Testing** 









#### **Multiple Backends to choose from**

.NET 7.0

#### .NET

- ✓ Clean Architecture design using Mediatr and Dependency Injection Patterns
- ✓ with loosely coupled layers
- ✓ .NET 7 Framework with Minimal API
- ✓ Solution connected to Azure SQL Database using Dapper
- ✓ Solution connected to Azure SQL database using **Entity Framework Core**
- √ Redis Cache Implementation
- ✓ Fluent Validations
- ✓ Integrated with Swagger UI for APIs for easy collaboration



#### Java

- ✓ MVC-based architecture
- ✓ Java 11 framework Sprint Boot with JPA + Hibernate
- √ Lombok used to replace boilerplate code
- ✓ Logging with SLF4j (Java)
- ✓ Integrated with Swagger UI for APIs for easy collaboration
- ✓ Unit Testing with Junit5 (Java)







**Unit Testing** 







**Best Practices** 



Entra ID



Azure SQL



App Insights



Key Vault



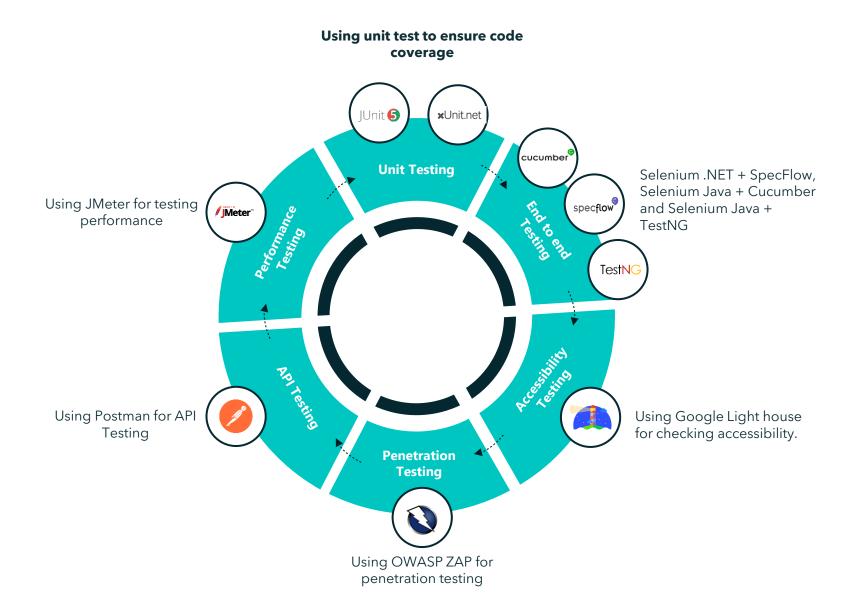


Swagger UI

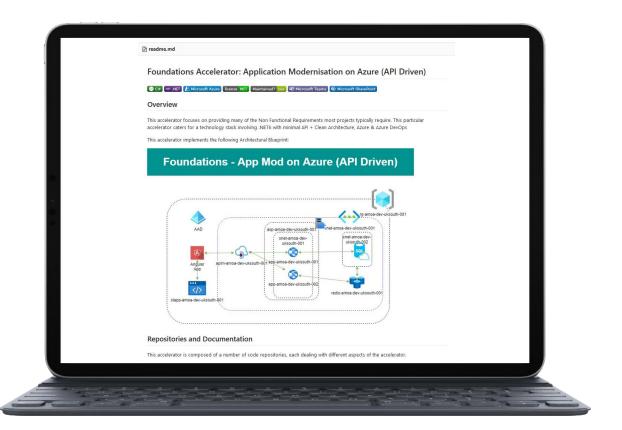




#### **Comprehensive Test Automation pack**







### **Extensive Developer Documentation**

Documentation as Code approach with detailed guides on installation, getting started, and extending the solution.





## Thank you For more information, please visit version1.com