

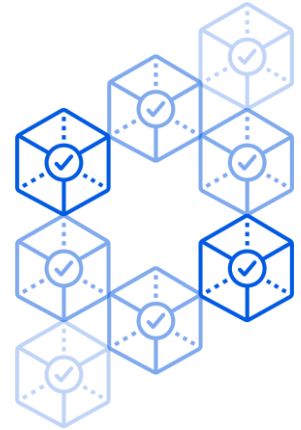
TECH DATASHEET

Enterprise Container Platform. Accelerator pack.



PROBLEM

Developers are embracing the agility of containers and cloud-native services, but operations teams often struggle to build and support platforms that can run these applications efficiently and reliably.



We have developed our Enterprise Container Platform accelerator based on years of experience of designing and running Kubernetes on Azure, providing a springboard for new adopters or established cloud-native consumers to quickly onboard cloud-native environments. These environments meet best practices and offer production-ready solutions that can be deployed consistently at scale.

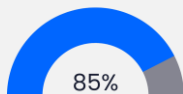
SOLUTION OVERVIEW

Our ECP accelerator provides an entirely code-based deployment model that deploys Azure Kubernetes Service (AKS) into an existing Azure environment, adhering to current architectural, operational and security best practices.

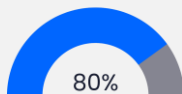
The configuration of the accelerator can be modified based on workload or environmental requirements, without writing any additional code.

As part of the ECP accelerator, we would typically work with you to build and deploy an initial ECP configuration, after which we would look to handover all code artifacts from which you can compose additional environments as required.

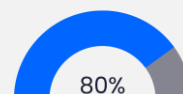
- **Bootstrapping:** As an extension to the AKS deployment, the clusters are bootstrapped with GitOps controllers and standard Kubernetes packages are loaded onto each cluster. Cluster addons are pre-configured, accurately scaled and integrated into your CI/CD process.
- **Monitoring:** Observability stacks can be fully defined within the accelerator to ensure that your Kubernetes environment is fully monitored from point of deployment.
- **Security:** Policy-based guardrails ensure that your clusters remain secure and consistently configured once they host application workloads.



80-90% acceleration in Azure platform delivery through enhanced automation



80% reduction in time to produce secure, private, governed AKS clusters



80% reduction in time to enable GitOps managed clusters using our GitOps packages and bootstrapping

*All estimates are an approximate based on experience to date.

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SOLUTION DELIVERABLES

Configuration and Deployment

AKS: Configuration-as-Code (CAC)	All AKS configuration is managed via code using Terraform and YAML-format configuration metadata
Architectural best practice	Deployment of AKS into existing or new Azure environments based on Microsoft best practices augmented with real-world production experience from the BlakYaks team
Private and air-gapped cluster support	Options to deploy fully private clusters within the corporate network boundary
Private edge integration	Flexible network integration options that support Azure Virtual WAN or custom NVA deployments

Security and Compliance

CIS Ready	All code has been tuned to meet CIS security standards (v1.4 at time of release)
Secure RBAC model	Automated configuration of user or system managed identities to integrate with other Azure services such as Azure Container Registry and Azure Key Vault
Policy-as-Code	Aligned with secure Kubernetes policies, enforced using Kyverno or OPA Gatekeeper

GitOps and Automation

GitOps embedded	Bootstrap of FluxCD v2 controllers to facilitate GitOps-based deployments of application and user workloads
Flux package library	Using our bespoke Flux integration, select from a range of pre-configured, pre-tested packages to accelerate your Kubernetes adoption, such as Istio Service Mesh, External Secrets Operator (ESO), and Prometheus stack

Networking and Connectivity

Flexible CNI options	Support for all current Container Network Interface configurations, including Azure CNI and Cilium with overlay networks
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Observability and Documentation

Observability-ready	Multiple observability options and baselines can be deployed that report to greenfield or existing reporting stacks
Documentation library	Full documentation set covering design and operation of the ECP environment

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HOW TO GET STARTED

We start with a video call with our expert team to understand more about your existing environment, needs and aspirations. Some customers will be more advanced in their cloud-native journey whilst others may be starting out with relatively greenfield deployments.

Once we understand your use case, we will agree next steps to configure and plan the rapid deployment of your ECP environment that will support your production workloads.

WHAT TO EXPECT

We will work closely with your team to agree and build an initial ECP environment based on your business requirements. We can assist with Azure environment and CI/CD integration to ensure a positive outcome.

All code and artifacts will be handed over to you once the initial deployment has been completed and signed off.

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“BlakYaks enterprise container solution has given us the upmost confidence to accelerate our application delivery on Azure.”

HEAD OF ENGINEERING AND ARCHITECTURE
SaaS Provider

GET IN TOUCH

You can reach the team by:

Calling on 020 4551 9237

Emailing on solutions@blakyaks.com

Learn more:



Our team prides itself on being easy to work with, responsive and flexible. From turning around quotes to firing up our engagement squads, you can count on us to give the rapid and professional response you need.

BlakYaks.