stack8s

NVIDIA INCEPTION PROGRAM

Service - Cloud Native Migrations

1. Service description

Cloud Native Migrations provides end-to-end consultancy to move applications and data from legacy or on-premise environments to cloud-native architectures. The service covers discovery, design, migration execution, and post-migration optimisation for both general application workloads and specialist HPC environments. It includes application refactoring to containers and Kubernetes, automated infrastructure provisioning with IaC and GitOps, and CDC-based database migration patterns for low-downtime cutovers.

The service is aimed at public sector and regulated organisations that need to modernise legacy estates while controlling risk, cost, and disruption. Engagements are delivered by cloud and platform engineers who work closely with in-house teams to transfer knowledge and embed sustainable operating models.

2. Service features and benefits

2.1 Service features

- **Discovery and assessment of legacy estates** – Structured analysis of applications, platforms, integrations, and cloud readiness, including dependencies and risk identification.
- **Application refactoring to containers and Kubernetes** – Migration of applications from legacy runtimes into containerised workloads deployed on Kubernetes, enabling portability and modern DevOps practices.
- **HPC workload migration and Slurm design** – Support for moving HPC workloads from on-premise clusters to cloud-native platforms, including design and implementation of Slurm-based or Slurm-compatible scheduling.
- **Change Data Capture (CDC) setup and implementation** – Configuration of CDC pipelines to enable continuous database replication and low-downtime data migration.
- **Data migration planning and cutover runbooks** – Detailed plans covering data migration execution, validation, rollback options, and blue-green or phased cutover runbooks.

- **Automated infrastructure provisioning (IaC and GitOps)** – Use of Infrastructure as Code and GitOps to provision and manage cloud environments in a repeatable, auditable way.
- **Post-migration optimisation** – Tuning of cost, observability, reliability, and security baselines once workloads are running on cloud-native platforms.
- **Performance, scalability, and resilience testing** – Workload testing under load and failure scenarios to validate performance and recovery behaviour.
- **Knowledge transfer and enablement** – Hands-on coaching for in-house cloud and platform teams so they can operate and evolve the migrated environment.

2.2 Service benefits

- **Reduced migration risk** through structured discovery, planning, and controlled delivery with clear governance and runbooks.
- **Modern, portable applications** by refactoring legacy workloads into containers and microservices that are easier to operate and evolve.
- **Cloud elasticity for HPC** by moving constrained on-premise HPC workloads onto scalable, Slurm-orchestrated cloud compute.
- **Minimal downtime for critical systems** using CDC, rehearsed runbooks, blue-green deployments, and phased cutovers.
- **Enhanced security and compliance** via standardised, policy-driven cloud controls and consistent infrastructure baselines.
- **Optimised cloud spend** through right-sizing, automation, and financial governance practices applied as part of post-migration optimisation.
- **Greater team autonomy** as internal teams gain skills and confidence through embedded knowledge transfer and enablement.
- **Simplified operations and improved reliability** thanks to tested, resilient cloud-native architectures and standardised observability and deployment workflows.

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3. Service constraints

- Support and delivery are primarily remote; on-site engagements are available by agreement and may be scoped separately.
- Customer environments must meet agreed minimum network, security, and access requirements to allow safe and effective work.
- Migrations are scheduled within defined change windows agreed with the buyer to manage risk and business impact.
- Scope excludes unrelated application feature development that is not part of migration or modernisation activities.
- Successful delivery depends on timely access to customer subject-matter experts and key stakeholders for decisions and approvals.

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4. User support

- **Email and ticketing support:** Available with responses within four working hours during Monday–Friday, 9am–5pm GMT; outside these hours responses are best-effort and triaged next business day.
- **Phone support:** Available 9am–5pm UK time, Monday to Friday for active engagements.
- **Web chat support:** Available 9am–5pm, seven days a week with an AI chatbot, delivered on a platform designed to meet WCAG 2.2 AA accessibility standards.

Cloud Native Migrations includes a single standard support level for all engagements, delivered remotely by the consulting team and included within day-rate or fixed-price costs (no per-user or per-ticket fees). For larger programmes, an assigned technical account manager or lead cloud support engineer can be provided as a primary contact for planning, escalation, and service reviews, scoped and priced in the statement of work.