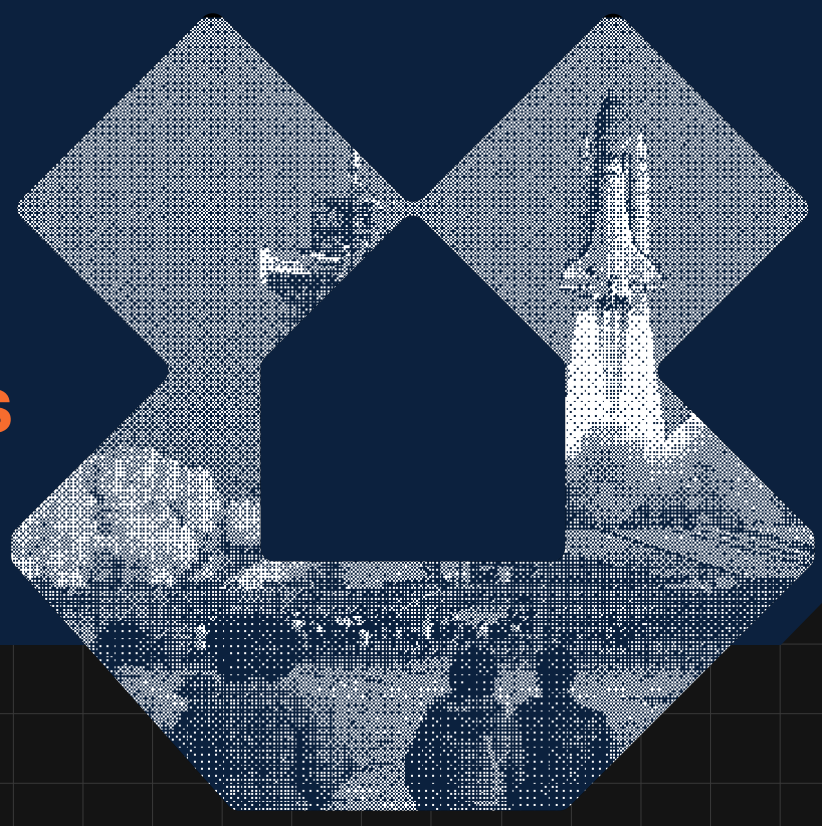
DEIMOS

The 7 R's of Cloud Migrations



STRATEGY	DESCRIPTION	BENEFITS	CONSIDERATIONS
Retire	Turn off unused or underperforming applications that do not contribute significant value to the business. This involves conducting a thorough assessment to identify which applications are obsolete or rarely used.	• **Cost Reduction:** Lower operational costs by eliminating unnecessary resources. • **Reduced Complexity:** Simplifies IT management by minimising the number of applications. • **Enhanced Security:** Decreases potential vulnerabilities from outdated systems.	• **Assessment Required:** A detailed review of application usage and value is needed. • **Stakeholder Buy-in:** Requires agreement from relevant stakeholders on the decision to retire applications.
Retain	Keep certain applications on-premises or in their current environment for the time being. This strategy is useful for applications that require more analysis or that have complex dependencies.	• **Risk Mitigation:** Avoids disruption by retaining critical applications while planning for future migration. • **Time for Evaluation:** Provides additional time to evaluate cloud readiness and options. • **Compliance:** Ensures that sensitive data remains within regulatory requirements during transition.	• **Potential for Obsolescence:** Risk of remaining on outdated platforms if not monitored. • **Resource Allocation:** Requires resources for continued support and maintenance.
Rehost	Also known as "lift and shift," this approach involves moving applications to the cloud with minimal changes. This method typically uses automated migration tools to quickly transfer workloads.	• **Quick Migration:** Reduces the time needed for migration compared to other methods. • **Immediate Cloud Benefits:** Leverages cloud infrastructure for scalability and availability without extensive redevelopment. • **Lower Initial Cost:** Minimal investment in application redesign or refactoring.	• **Limited Cloud Optimisation:** Applications may not take full advantage of cloud-native features. • **Performance Issues:** Potential for performance degradation if applications are not optimised for cloud environments.
Relocate	This strategy involves moving entire servers, including applications and data, to a cloud environment without significant alterations. It often involves rehosting virtual machines in the cloud.	• **Minimised Disruption:** Ensures continuity of operations during migration by keeping existing setups intact. • **Less Complexity:** Eases migration by avoiding extensive modifications. • **Faster Transition:** Allows organisations to quickly adopt cloud benefits while assessing future optimisation needs.	• **Cloud Incompatibility:** Some on-premise features may not work effectively in the cloud environment. • **Potential Vendor Lock-In:** Risks of becoming reliant on a specific cloud provider's infrastructure.
Repurchase	Replace existing applications with cloud-native alternatives, often referred to as "SaaSification." This may involve switching to a new vendor's platform that offers similar functionalities.	• **Access to Innovations:** Immediate access to updated features and functionalities offered by modern SaaS solutions. • **Cost-Effective:** Eliminates the need for maintenance and support for legacy systems. • **Scalability:** Simplifies scaling with subscription-based pricing models.	• **Data Migration Challenges:** Potential complexities in migrating data from legacy systems to new applications. • **Training Needs:** Requires user training and adjustment to new systems and processes.
Replatform	Migrate applications with slight modifications to optimise for cloud capabilities. This often involves refactoring code or changing the database layer to improve performance.	• **Enhanced Performance:** Takes advantage of cloud-native features, leading to better resource utilisation. • **Cost Savings:** Reduced operating costs over time through optimised application performance. • **Agility:** Enables faster development and deployment cycles with a modernised architecture.	• **Development Efforts Required:** Requires some level of coding and development expertise to make the necessary adjustments. • **Testing Needed:** Involves thorough testing to ensure that the replatformed application works as intended in the new environment.
Refactor	Overhaul applications for optimal performance and scalability in the cloud. This includes redesigning and rewriting portions of applications to fully leverage cloud capabilities, microservices, and serverless architectures.	• **Maximised Cloud Benefits:** Allows organisations to fully utilise cloud-native features, including auto-scaling and resilience. • **Long-Term Cost Savings:** Reduced operational costs through efficient resource use and improved performance. • **Future-Proofing:** Ensures applications remain relevant and capable of handling evolving business needs.	• **High Initial Investment:** Requires significant upfront investment in development and engineering resources. • **Longer Migration Timeline:** Can extend the timeline for migration due to the complexity of changes needed.