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US-IMS Cloud Migrations

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General Dynamics Mission Systems (GDMS) is seeking ways to improve the maintainability and scalability of its applications and IT infrastructure by leveraging emerging cloud technology and best practices. The cloud offers many advantages over traditional IT infrastructures including greater flexibility, reduced cost, improved backup solutions and faster deployment cycles.

GDMS cloud migration consist of moving new and existing application to a cloud-ready architecture, creating new cloud infrastructure and services and incorporating cloud solutions in backup plans. Cloud applications are developed as a collection of smaller services which are deployed as containerized services. Legacy monolith applications are refactored into a design that allows for containerization of individual services. Applications are then deployed and managed using container orchestration services. Kubernetes was chosen as the orchestration tool because of its maturity and flexibility. Finally, data and artifacts are stored in cloud databases and other cloud backup solutions for persistent, off-site and unlimited data storage capability.

Promotional text

GDMS migrates IT infrastructure to Cloud solutions to improve maintainability and scalability of applications and services. The migration consist of developing applications for the clouds, managing deployed applications using Kubernetes and leveraging cloud backup solutions.

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