# DOD DEVSECOPS CLOUD MIGRATION

| **Problem:** | **Solution:** |
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| • Provide a cloud-based solution to allow internal technical teams to migrate their cloud-hosted software factory | • End User Access, Security, and Networking pillars of our AltitudeTM infrastructure platform solution met all the stated DoD customer requirements, with services, features and tools leveraged to create a complete cloud-based software development environment, built on an infrastructure that is both highly available and scalable.<br>• Our solution also served as a landing platform to host migrated cloud workloads, projects and systems within AWS. |

## The Customer Challenge

A Department of Defense (DoD) DevSecOps initiative needed to provide a cloud-based solution to allow internal developers to migrate their cloud-hosted software factory using Amazon Web Services (AWS). The Applied Insight designed, managed, and implemented solution harnessed the benefits of commercial cloud providers, while enforcing security, compliance, and control mechanisms to adhere to federal Government regulations and policy. Creating a positive migration experience was paramount, as the end-user base included software developers and analytic researchers sensitive to the responsiveness and performance of any remote access solution. This universal entry point solution became the gateway for end-users to access modern software development pipelines, and help the DoD minimize costs, increase security compliance, and reduce overall time-to-market. One of the biggest challenges in this endeavor was implementing a solution that featured significant Infrastructure-as-Code (IaC) to decrease manual interactions with sustainment processes while meeting these core requirements:

• Provide secure, managed end-user access points using AWS WorkSpaces and AppGate VPN technology that include Multi-Factor Authentication integration.

• Implement a robust end-to-end auditing and logging framework for security compliance.

• Interconnect numerous, disparate AWS accounts using a network mesh.

• Leverage IaC and Configuration-as-Code throughout to ensure repeatability and to remove manual

interactions.
• Leverage proven migration processes and procedures to assist end-users with migrating their workloads into AWS.

## The Applied Insight Solution

The End User Access, Security, and Networking pillars of our Altitude infrastructure platform solution met all the stated DoD customer requirements; therefore we used them to customize and implement the solution. We leveraged the services, features, and tools to create a complete cloud-based software development environment, built on a highly available and scaleable infrastructure. The Applied Insight solution, using our unique, proprietary Altitude cloud product, also served as a landing platform to host migrated cloud workloads, projects, and systems within AWS.

## Successful Results

The result of this migration effort was the instantiation of the Altitude platform within AWS which has been deemed the de facto unclassified cloud-based environment for our entire customer organization – required to be utilized by any end-users with a software development use case. This new secure, compliant, cloud-based DevSecOps environment can accommodate more than 1,000 users and over 100 unique project teams. Due to the sensitivity and proprietary nature of the data and content hosted within this environment, special consideration was required to ensure that the principle of "least privilege" was followed at every turn. The customer deemed our documented security strategy sufficient to protect proprietary data and ensure separation between different contractors / companies.