Case Study

applied insight

BOEING

Accelerating Boeing's Cloud Software Development Capabilities

Boeing, a renowned leader in aviation and defense, recognized an opportunity to centralize and standardize a unified software development platform in the cloud—the Boeing Software Factory (BSF). The BSF streamlines and standardizes the software development process for both internal teams and external customers, bringing together diverse business units operating independently. By partnering with Applied Insight (AI), and utilizing the Altitude platform, Boeing was able to deploy the BSF and achieve a consistent, standardized development platform for The Boeing Company.

Challenges

Boeing's desire to migrate software development to AWS presented several challenges inherent in secure, scalable cloud software development.

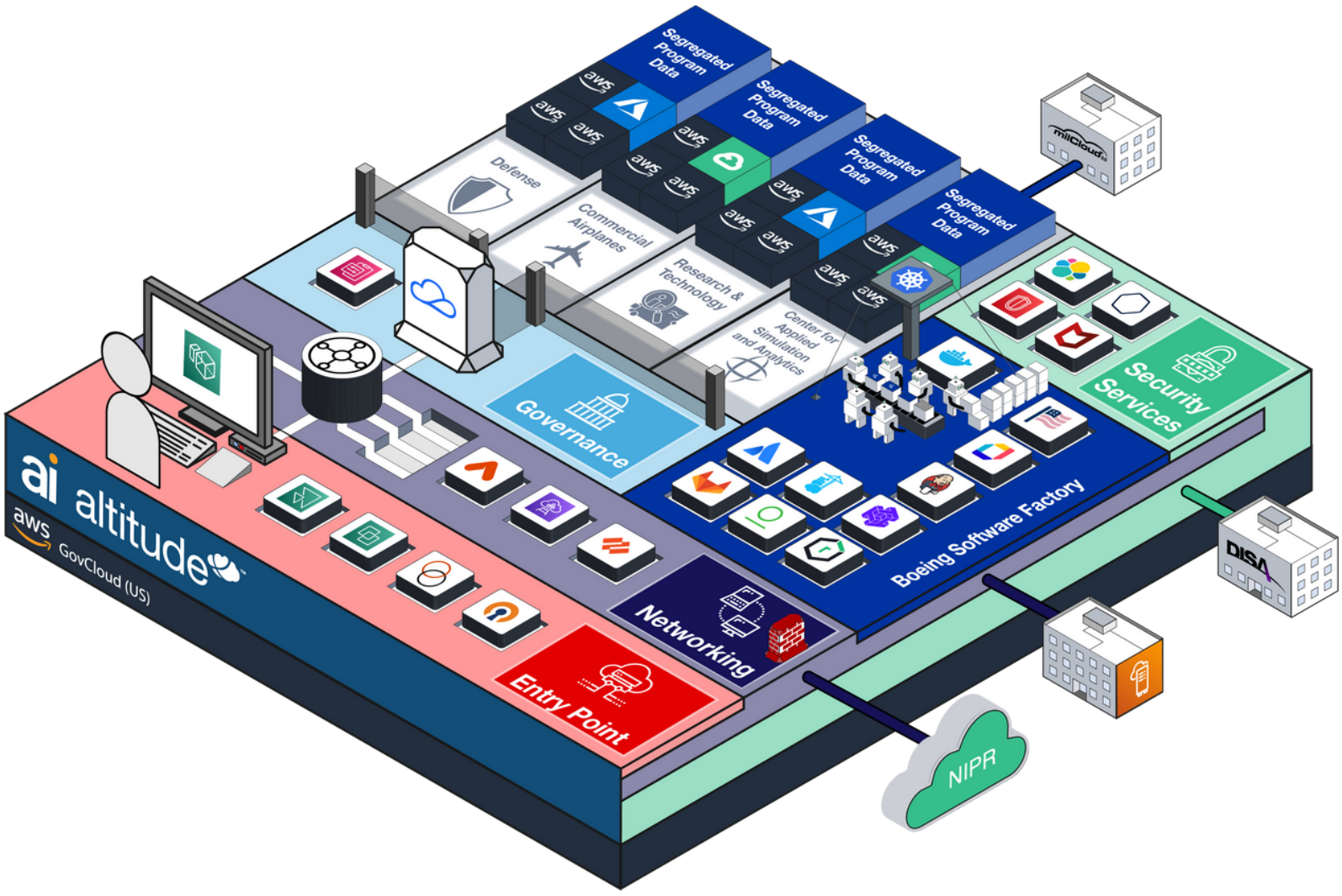
Integration with Business Units: Ensuring that all business units could smoothly adopt the standardized platform presented integration challenges.

Cost Control: Managing cloud costs amid diverse procurement and invoicing systems across divisions, subsidiaries, and joint ventures is more complex.

Compliance and Security: Implementing industry-specific regulations and maintaining robust security measures required proven experience managing compliance challenges.

Solution

Boeing partnered with AI to create a standardized AWS development capability, hosted on AI's Altitude platform, called the Boeing Software Factory (BSF). This decision allowed Boeing to leverage Altitude's capabilities in cloud infrastructure and automation, streamlining their software development processes.



Success Drivers

Streamlined Onboarding and Deployment: Boeing and AI worked to simplify the onboarding process from months to near real-time, allowing Boeing to rapidly bring in new programs, tenants, and users. In one month, they went from deploying two tenants to adding 26 new tenants and approximately 700 users.

Automation: Altitude's automation capabilities empowered Boeing to integrate easy and secure AWS project migration into its workflow, resulting in faster deployment and reduced manual effort.

Standardization: Altitude offered Boeing a standardized environment across business units, including avionics, commercial aviation, and defense. This uniformity eliminated silos, ensuring consistent metrics and compliance across the organization.

Integration: The Altitude engineering team created a number of APIs that allowed Boeing to seamlessly integrate existing Boeing back office systems as well as automation with the BSF.

Security/Compliance: Altitude provided the ability to emulate government-like compliance regimes such as IL-5, while also adhering to international compliance regimes – enabling each tenant to adhere to their own required security and compliance guidelines in a single cloud environment.

Efficiency: Boeing's software development teams could focus on delivering tools and solutions for customers without the burden of managing infrastructure, compliance, or security concerns.

Scalability: The platform accommodated a growing number of users and tenants, including international users from Australia, Canada, India, Poland, South Korea, Switzerland, the United Kingdom, and Ukraine.

Cost Management: Altitude offered the ability to separate out different cost items and allocate them individually to each tenant, enforcing programmatic budgets in accordance with each tenant's unique contract.

Outcome

Boeing's partnership with AI helped define its approach to software development in the cloud. By providing a standardized, automated, and scalable cloud environment, Altitude has enabled Boeing to concentrate on delivering innovative solutions to its customers and enhanced Boeing's positioning as a leader in cloud-based software development within the aerospace and defense industry. This is evidenced by Boeing's ability to spread adoption of the BSF capability to over 1,000 users across 9 countries in 8 weeks.