Polaris Alpha enables DevOps with the proven performance and reliability of FlexPod® Datacenter with NetApp® All Flash FAS (AFF).

Better Agility for DevOps Helps Polaris Alpha Accelerate Time to Market

Polaris Alpha provides custom software solutions that allow government agencies such as the Department of Defense and Department of Homeland Security to quickly evaluate potential threats and make smarter decisions. To provide responsive, reliable support for customers’ mission-critical operations, Polaris Alpha built a flexible foundation for DevOps using FlexPod with AFF.

Provided
46:1 data efficiency

Cut provisioning time from
6 weeks ➔ 15 mins.

Another NetApp solution delivered by:
“Being able to iterate and adjust on the fly is invaluable. We are not trapped into decisions we made three months ago.”

David Coker
Senior VP of Information Systems, Polaris Alpha

“I took this job because this is a company that actually makes an impact,” says David Coker, senior VP of information systems at Polaris Alpha. “Our systems are used for air, sea, ground, cyber, and space operations globally. We help analysts and operators visualize and share massive amounts of data in support of making critical decisions for national security.”

Customers trust Polaris Alpha to support their mission-critical operations. Polaris Alpha’s business and reputation depend on its ability to consistently deliver solutions on time and within budget. Behind the scenes, more than 400 software developers provide continual support and services for customers’ unique deployments.

“Change can be disruptive, so in some cases, we may continue to support systems that are more than 10 years old,” explains Coker. “To keep everything moving forward, we adopted a multimodal approach that applies DevOps and agile methodologies to even our oldest legacy systems.”

**ENABLING DEVOPS FOR THE ENTERPRISE**

To embrace a multimodal approach, Coker and his team had to modernize every aspect of IT. They quickly began transitioning from monolithic applications to cloud-native containerized technologies. Rapid IT changes resulted in 10% monthly growth in storage requirements, which increased latency and hampered developer productivity.

“We didn’t have the budget to buy reliable storage for the back office and separate high-performance storage for our developer community. The solution had to be able to serve the entire spectrum of needs. That’s why we chose FlexPod with AFF,” says Coker.

Working with Flair Data Systems, Polaris Alpha moved its virtualized production and development systems to FlexPod Datacenter with AFF. Polaris Alpha’s FlexPod environment combines Cisco UCS servers and Cisco Nexus switches with high-performance NetApp AFF8080 storage systems in a prevalidated, pretested configuration that integrated seamlessly with its multiprotocol VMware environment.

“The speed of FlexPod with AFF fits nicely into the DevOps model,” says Brad Stoddard, DevOps engineer at Polaris Alpha. “Moving to FlexPod has enhanced our ability to leverage virtualization and IT automation with the speed of all-flash storage.”

**BUSINESS BENEFITS**

- Lowered operational costs
- Higher data efficiency
- Ease of management
- Seamless scalability
- Faster provisioning and latency

**FASTER IT SERVICE DELIVERY ENABLES FASTER TIME TO MARKET**

FlexPod integration with VMware simplifies provisioning, accelerating
deployment of containerized technologies, such as Docker and Jenkins, from six weeks to just 15 minutes. “Containers are new and exciting, but there is also risk because we don’t have established best practices yet,” adds Coker. “Being able to iterate and adjust on the fly is invaluable. We are not trapped into decisions we made three months ago.”

With faster provisioning and sub-millisecond latency, Polaris Alpha can support its 400 developers with access to the resources they need when they need them. The system now can surge to more than 100 concurrent builds with no impact on performance. Developers can test and deliver solutions to customers more quickly and more reliably than ever before.

“That’s had a huge impact on our business,” explains Coker. “Our credibility is our competitive advantage. Being able to deliver when we say we will makes a big difference to our credibility and relationships with our customers.”

**OPERATIONAL EFFICIENCIES ACCELERATE TIME TO VALUE**

FlexPod ease of management and seamless scalability have allowed Coker’s IT team to remain small as IT requirements have grown. Even though the company expects to double headcount over the next three to five years, Coker does not anticipate needing to grow his 12-person team. “FlexPod will let us get more value out of our current infrastructure by simply adding more NetApp shelves or Cisco UCS blades as we need them,” he says.

Coker has been able to lower operational costs through storage efficiency technologies such as deduplication, compression, Snapshot® copies, and clones, which have resulted in 46:1 data efficiency. FlexPod with AFF’s compact footprint takes up 75% less data center space than the previous solution, which helped Polaris Alpha avoid a costly data center upgrade.

“The speed and reliability of FlexPod with AFF have freed up about 20 hours of my work week,” says Randy Johnson, storage administrator at Polaris Alpha. “With all the time I’m saving, I am able to expand my knowledge and help in our infrastructure environment.”

Randy Johnson
Storage Administrator, Polaris Alpha
strongest hearts have been NetApp and Cisco,” he adds. “We recently had a multivendor problem, and it was NetApp that stepped up to get it resolved.”

DEVOPS AGILITY CREATES CULTURE OF COLLABORATION
With an agile foundation in place to support multimodal IT and DevOps, Coker and his team have transformed the culture at Polaris Alpha.

“Everybody on the IT team feels like they’re part of the future, which has changed our relationship with our internal customers,” says Coker. “Our users now see us as part of the solution and think of us as part of their teams. That, to me, is really important.”

SOLUTION COMPONENTS

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