ACCELERATING INNOVATION IN THE CLOUD
HPE Cloud-Native Software Development service

INNOVATING WITH CLOUD-NATIVE SOFTWARE DEVELOPMENT SERVICE

Software solutions that are built with a cloud-first approach can fully leverage what the cloud has to offer in agility, scale, and performance, providing value in today’s digital environment.

Modern application architectures employ microservices, containerization, multitenancy, cloud-native services, and other cloud features to fully leverage what the cloud offers in agility and scale.

Advantages of using cloud features and frameworks include higher performance, improved efficiency of underlying resources, increased cost savings, and access to auto-scaling and load-balancing for greater scalability.

The HPE Cloud-Native Software Development service follows a proven, cloud-first approach to software development that leverages all the cloud has to offer, meets business objectives, and speeds time to market. During the engagement, our team works collaboratively with your development teams to design the user experience, determine the appropriate application architecture and cloud infrastructure, and build the software solution using an agile approach, all while mentoring your teams on cloud-native best practices.

The HPE Cloud-Native Software Development service is tailored to a client’s specific needs and is based on the following proven approach to cloud-native software development:

Experience design: Workshops uncover what consumers really want by putting them at the center of the solution. Then, with an understanding of desired business outcomes and empathy for consumers, design sessions quickly turn ideas into interactive prototypes to drive creative solutions. Software requirements are produced as an outcome of the experience design process.
Architecture design: Evaluation of nonfunctional requirements drives the definition of an appropriate cloud infrastructure to support the software solution. Review of business, performance, and scalability goals help identify applicable cloud application architectures, such as microservices and cloud-native services, to incorporate into the solution.

Proof of Concept (POC): Rapid build-out of a POC validates technical decisions, demonstrates functionality to stakeholders, and prepares the foundational infrastructure and technical components for minimal viable product (MVP) development.

Planning and road map: Software requirements and architecture design are translated into high-level user stories to be decomposed into project backlog during development sprints. User stories are prioritized and the MVP is defined to accelerate time to value. A phased plan is developed that serves as a road map to how business value can be realized.

Cloud build-out: A new cloud environment is built out or an existing cloud infrastructure is modified as defined by the architecture design, leveraging the minimum viable cloud (MVC) methodology and automation framework from HPE. CI/CD tools and processes are established, including automated testing and code promotion, to speed development cycles.

MVP build: Delivered as a series of development sprints following the MVP road map, the software solution is developed and deployed for optimal cloud operation, using a lean, agile approach to drive time to market. The number of development sprints depends on the scope of the MVP.

Cloud can help scope the software solution development effort. HPE Managed Cloud Controls or HPE GreenLake Hybrid Cloud services can follow this service to provide support for ongoing operations.

FEATURES AND BENEFITS

There is huge value for organizations to create cloud-native software solutions:

- **Accelerates innovation:** Builds a secure, scalable, developer-ready cloud environment through the use of infrastructure as code for maintainability and through the deployment of the frameworks and tools your development teams need to accelerate innovation.

- **Increases efficiency and productivity:** Develops software solutions using cloud-native architectures and services that increase both application efficiency and developer productivity.

- **Provides application resiliency:** Speeds development cycles by deploying reliable release pipelines and infrastructure automation. Increases quality and resiliency through the introduction of automated testing and integrated monitoring.

CONCLUSION

The HPE Cloud-Native Software Development service follows a proven approach for building cloud-first solutions and leverages experience and IP curated through hundreds of successful cloud engagements. Whether you need us to build the software solution on our own or in collaboration with your development teams, this service can be tailored to meet your needs.

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