

# Serverless Architecture

## Cloud-native application development embraces continual integration and continual deployment

Building modern software functionality directly for advanced public cloud platforms is rapidly disrupting entire industries. Developers are driving this disruption by freeing themselves of the traditional server infrastructure while continually integrating, developing, improving, and deploying new functionality instantaneously in the cloud.

Cloud-native software and applications can provide a strategic competitive advantage by allowing the release of key capabilities much faster than your rivals. Also, by moving to a serverless computing model, organizations operate at a fraction of the cost of managing a traditional server-based environment.

### Serverless Computing | Function PaaS | Event Driven Computing

Serverless computing and fPaaS enable developers to spend their time writing code rather than having to shift their focus periodically to maintain or update the platform running their software and applications. Setup, capacity planning, and server management are all invisible, with automated scaling to meet real-time workload demands based on tasks that are short-lived and stateless.

Developers can provision and consume the exact resources for each event-driven task. Also, by using a programming model based on triggers and requests, they can enable serverless applications to respond immediately and connect to other microservices seamlessly.

Because organizations pay for only the resources they use during the time the code is running, in many cases milliseconds each, the cost is reduced dramatically to support the environment.

*By 2021, 90% of enterprises using IaaS will also use some serverless PaaS in production, up from 10% at YE17. – Gartner*

## Event Driven Computing: Benefits and expected outcomes

- Entire development and testing environments can be up and running in minutes.
- Scale automatically on demand and ensure high availability.
- Pay only for compute resources while your function code is running.
- No server maintenance, management, or patching of operating systems.
- Developers focus 100% of their time on code and driving new capabilities to market faster.

## CBTS Application Development with Serverless Computing

CBTS can help you understand what your current environment looks like today and will provide recommendations on where your business can benefit the most from modernizing the applications with the most significant impact to your bottom line.

Our certified experts will work with your team to source the right cloud platform for your serverless environment and configure the microservices required for the highest levels of performance and availability, at the lowest cost.

- Application assessments determine what resources will perform optimally in a serverless environment versus containerized.
- Custom cloud-native application development based on business outcomes and goals.
- Application architecture designed for containerized or serverless environment.
- Setup of Function Platform as a Service (fPaas) cloud environment with microservices for massive scale and automation.
- Ongoing monitoring, management, and reporting with 24x7x365 visibility and support for developers.

### How it Works:



#### Assess

- Understand current application environment.
- Determine business objectives and goals.
- Map to optimal cloud platform with recommendations.



#### Modernize

- Refactor existing applications or develop cloud-native.
- Deploy function Platform as a Service with microservices.



#### Automate

- 100% automates the infrastructure scalability.
- Billing is based on real-time demand in milliseconds.
- Customized with microservices dramatically reduces cost.