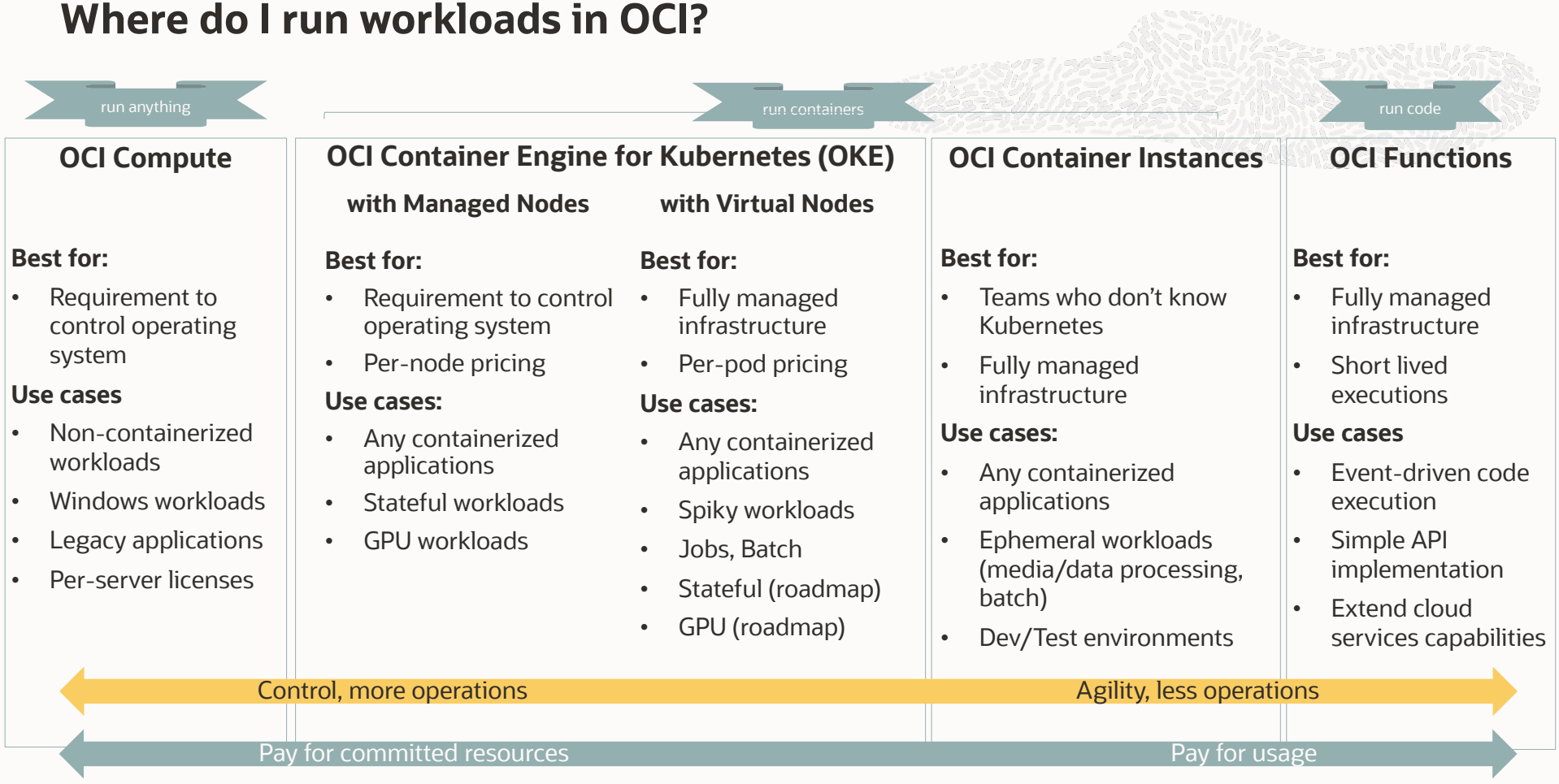
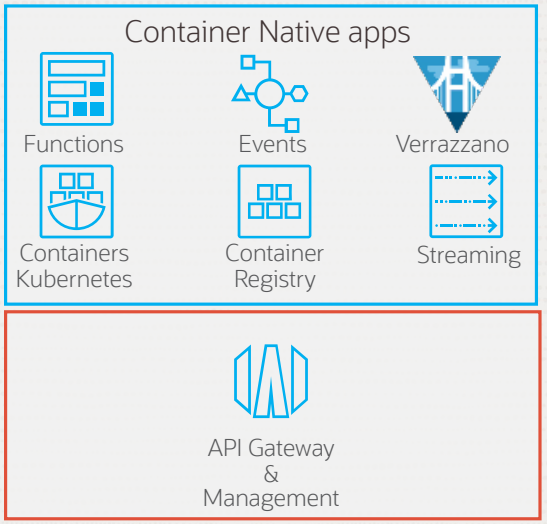
Where do I run workloads in OCI?



Cloud Native Application

Overview

- OCI is a robust backbone for running cloud-native applications efficiently.
- Development teams can rely on OCI and deploy cloud-native applications in a comfort zone of containers, Kubernetes, serverless infrastructure, streams, APIs, DevOps, and more.
- Oracle is dedicated to an open-source ecosystem under the CNCF umbrella, providing powerful automation capabilities within the cloud-native ecosystem.



Functions

What Is It?

- OCI Functions is a serverless platform that lets developers create, run, and scale applications without managing any infrastructure.
- Key features:
  - Just write and deploy your code. Oracle will automatically provision and scale resources.
  - Support various programming languages: Python, Go, Java, Node, and others.
  - Platform independent, built on open-source Fn Project, Docker and CloudEvents
  - Optimize cost, and pay for execution, not for idle time.
- Functions fit into cloud-native architecture, enabling different triggers to run your code and making magic of automation happen.

Functions

Why to Use It?

Glue Cloud Services, Event-driven with CloudEvents

Deploy Web, Mobile, IoT Backends

Real-time File transfers, Stream Processing

DevOps Integrations, Batch, Machine Learning

Functions

How It Works?

- A function is packaged as a container image and executed on a dedicated, transparent infrastructure, making a serverless experience.
- Function executes per client request, which might incur a cold start. To make it latency-efficient, you can use provisioned concurrency to overcome cold start latencies.
- Functions use FDK's in multiple languages: Python, Java, Go, Node, Ruby
- You can bring your image with Dockerfile leveraging various technologies to run as a serverless container (e.g., GraalVM Native Image).

Functions

Pre built functions

- catalog of ready-to-use functions that you can configure to run common tasks or actions across OCI services without writing any code..
- extension of OCI Functions that offers an easy-to-use serverless platform to all OCI users for automation, integration and extensibility. You can simply discover a prebuilt function, configure it, and deploy it to OCI Functions with a single click or using API. This function is then invoked by predefined triggers, based on an event or an API request to run a specific task or action for which it is built.

Functions

Coding Example

```
package com.example.fn;

public class HelloFunction {

   public String handleRequest(String input) {
      System.out.println("Value of input is " + input);
      String name = (input == null || input.isEmpty()) ? "world" : input;
      System.out.println("Value of name is " + name);
      return "Hello, " + name + "!";
  }
}
```


Functions

Ecosystem Example