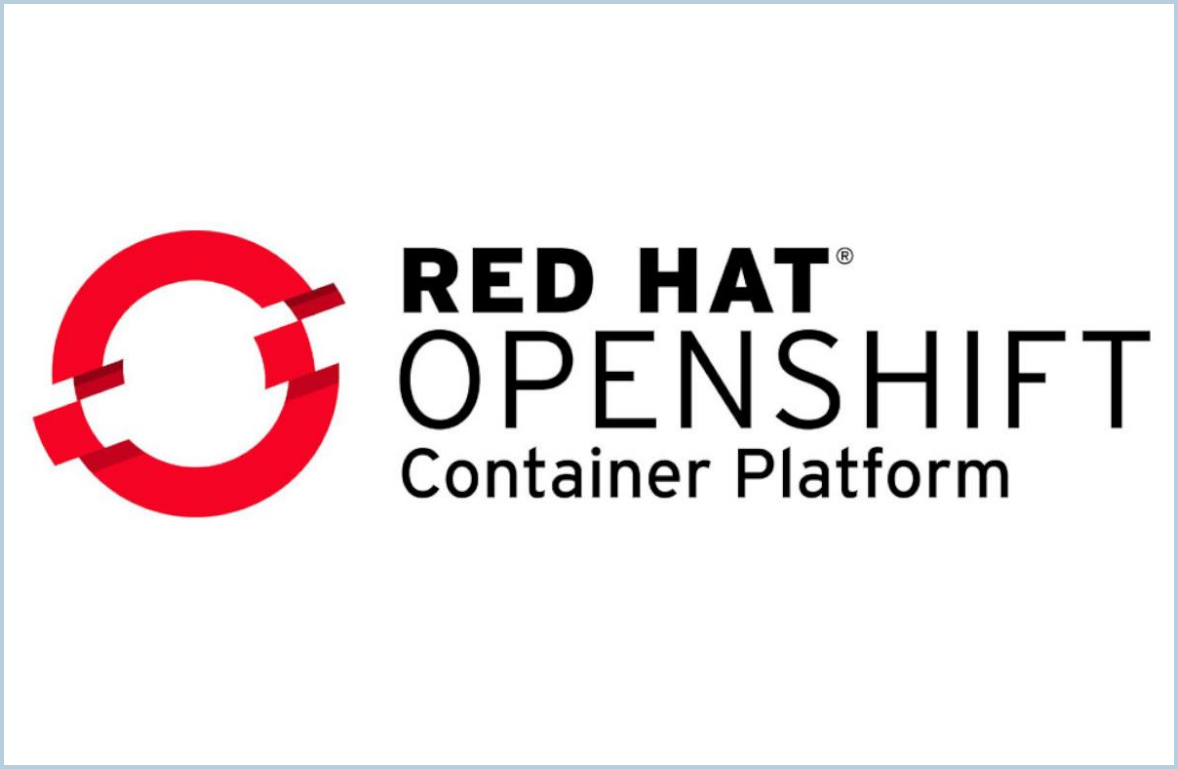
Industry use cases of Openshift



OpenShift is a cloud development Platform as a Service (PaaS) developed by Red Hat. It is an open source development platform, which enables the developers to develop and deploy their applications on cloud infrastructure. It is very helpful in developing cloud-enabled services. This tutorial will help you understand OpenShift and how it can be used in the existing infrastructure. All the examples and code snippets used in this tutorial are tested and working code, which can be simply used in any OpenShift setup by changing the current defined names and variables.

Advantages of Openshift:

1. Innovate and go to market faster

OpenShift enables your development team to focus on doing what they do best — designing and testing applications. When they are freed from spending excessive time managing and deploying containers, they can speed up the development process and get products to market more rapidly.

Consider the case of a company specializing in the design and sale of integrated circuits. The cycle of innovation in this industry is relentless; as new technologies arise, chipmakers who can most effectively design chips for these new uses will be the ones who gain market share. For example, the rapid rise of the smart phone has been a boon to companies that have designed chips to power it.

Orchestrating container usage via the OpenShift platform provides a marked efficiency advantage to chipmakers who utilize containers for the next-generation virtualization benefits they offer. Deploying an increased number of apps on existing system resources enables a chipmaker to provide its developers with an expanded toolset to increase their ability to innovate. In an industry where a chipmaker's main products can become outdated — if not obsolete — within a year or less, the ability to innovate and bring a product to market rapidly is a significant competitive advantage.

2. Accelerate application development

Deploying and managing containers at scale is a complicated process. OpenShift enables efficient container orchestration, allowing rapid container provisioning, deploying, scaling, and management. The tool enhances the DevOps process by streamlining and automating the container management process. Cutting down on time that would otherwise be spent managing containers improves your company's productivity and speeds up application development.

Accelerated application development is especially valuable in enterprises where a company's IT system must accommodate rapidly evolving functions. An example of this is the cybersecurity industry. Companies in this industry face an arms race against hackers, who are continually looking for software flaws to exploit. When an exploit is found, cybersecurity firms are expected to respond with fixes as rapidly as possible — often in days, if not hours.

If the development team at such a firm is delayed by container management issues, it can mean missing out on developing a timely fix; if this happens often enough, it can erode a company's competitive position vis-à-vis its rivals. By streamlining and automating the container automation process, OpenShift enables cybersecurity developers to focus on accelerating application development, updates, and product distribution.

3. Enterprise-grade, container-based platform with no vendor lock-in

A company's IT needs can vary greatly from one period to the next. Selecting a proprietary container management platform subjects you to the possibility that your vendor won't be able to provide an acceptable solution if your company's IT focus changes. In such cases, the expense and time involved in moving from a proprietary vendor to a new platform can be considerable.

Consider the case of a company with worldwide manufacturing facilities that implements a proprietary container platform tool. If the company shifts its production approach to a process that requires it to change to a new operating system — one that isn't supported by its containerization platform — the company will face the expensive task of redoing its containerization orchestration on another platform.

With a vendor-agnostic open source platform, users can migrate their container processes to the new operating system quickly — while avoiding the extensive costs often involved in migrating from a proprietary operating framework.

4. Enable DevOps and department-wide collaboration

The DevOps process relies upon transparent communication between all involved parties. Containerization provides a

convenient means of enabling your IT operations staff to test instances of a new app. OpenShift assists this process by making it easy to test apps throughout your IT architecture without being impeded by framework conflicts, deployment issues, or language discrepancies.

One industry that can benefit from OpenShift's enablement of enhanced DevOps processes is the webhosting and development field. Companies competing in this industry are constantly racing to offer their customers enhanced functionality. For instance, as web commerce increases by leaps and bounds, companies and individuals progressively look to sell their products over the web. They can do this by adding web sales functionality to their own sites via widgets designed for this purpose, or by purchasing sites with built-in sales functionality.

A company operating in this field, which requires constantly updated functionality to stay competitive, needs to empower its employees to design and test applications as rapidly and effectively as possible. By enabling developer and operations staff to collaborate efficiently, OpenShift allows web hosting and design companies to link developers and operations staff together to effectively design, test, and deploy applications.

- **Innovate and go to market faster:** OpenShift enables your development team to focus on what they do best. Now, developers are free from spending excessive time managing and deploying containers. This helps them to speed up the

development process and get the product faster in the market.

- **Accelerate application development:** Deploying and managing containers at a scale is a complicated process. It cut down the time of managing the container. This improves the companies productivity and speeds up application development.
- **Enterprise-grade, container-based platform with no vendor lock:** Consider the case of a company with worldwide manufacturing facilities that implement a container platform tool. If the company shifts its production approach to a process that requires it to change to a new operating system — one that isn't supported by its containerization platform — the company will face the expensive task of redoing its containerization orchestration on another platform.With a vendor-agnostic open-source platform, users can migrate their container processes to the new operating system quickly — while avoiding the extensive costs often involved in migrating from a proprietary operating framework.
- **Self-service provisioning:** This self-service provisioning helps improve developer productivity by allowing your development team to work with the tools they are most comfortable using — speeding up the development process by enabling faster creation and deployment of applications. At the same time, OpenShift allows your operations staff to retain control over the environment as a whole.