What is DevOps?

DevOps is a combination of the two words “development” and “operations.” Patrick Debois, a DevOps expert, came up with the term “DevOps” in 2009 and it stuck ever since. Some people say that it was around this time that there was a shift in IT culture, and DevOps represents this shift. DevOps is an umbrella term that describes the operation of a team collaborating throughout an entire programming production process - from the design through the development stages. It’s a combination of tools and philosophies that increase a team’s capability to produce results at high efficiency.

DevOps programmers typically use conventional infrastructure management and software development processes. When it comes to software development, DevOps tends to take an Agile approach.

The Core of DevOps

Although the definition of DevOps is essentially an evolution in IT culture, it’s also essential to know about the technical backbone of DevOps. As mentioned above, agile development is one significant part of DevOps and was a significant influence in its creation. These days, it’s uncommon and not recommended to practice Agile without DevOps. It’s possible, but not efficient at all.

System administrators were another vital part of the creation of DevOps. Since then, DevOps has encompassed some of the best enterprise systems management (ESM) practices. Some of these practices include essentials like automation and system monitoring — just some of the many things that are vital for efficient software development.

Next, let us get into the Depths to know more about DevOps and understand what is DevOps.

DevOps in Depth

While there is no single definition of DevOps, some of the general principles behind the practice can be found in[The Agile Manifesto](http://agilemanifesto.org/principles.html).  Moreover, at the core of any successful strategy, is what is known as the “DevOps Trinity”:

* People and Culture – This means breaking down the traditional silos between teams in the organization and working together towards a common goal. The goal is to get quality software to the customer as quickly as possible.
* Processes and Practices – Agile and DevOps go hand in hand. By adopting Agile, Scrum or Kanban, plus automation, organizations can streamline processes in predictable and repeatable ways.
* Tools and Technologies – Without the right tools and technologies in place, DevOps is not a sustainable model. These enable automation, continuous integration, configuration management, testing, packaging, releasing, and monitoring.

Next, in our learning on what is DevOps, let us look into what it is like to work with DevOps.

What It’s Like to Work With DevOps

If you’ve never worked in DevOps before, you may be curious as to what a typical programming process is like using a DevOps approach.

Automation is a critical component of DevOps. DevOps users depend on various tools for different tasks and operations throughout the software development process. But DevOps is more than just a collection tool; this is only a part of how the DevOps process works.

Since DevOps uses an Agile approach, DevOps users will be integrating their work with the work of other programmers very frequently. This is often continuous and can help reveal any problems earlier in the process. DevOps users are also continuously testing their code to avoid unnecessarily long and drawn out QA sessions with various automation tools. Doing so helps cut down on project time tremendously.

As a DevOps user, it’s also important to realize that working entirely on your own and without fully embracing teamwork goes against what DevOps is all about. The success of DevOps relies heavily on collaboration between all team members involved in a particular project.

After coming so far in our understanding on what is DevOps, let us now see why to go for DevOps.

Why DevOps?

Teams who take on a DevOps approach tend to finish their projects faster. There are often fewer miscommunications, and improvements and other needed changes are done quickly. The DevOps approach encourages more collaboration between the operations and development teams, and everyone’s objectives are more aligned. By not using a DevOps approach, teams may find that projects end up late more often, and they are just not as efficient overall.

Lastly, let us find out who uses DevOps to complete our understanding on what is DevOps.

Who Uses DevOps?

DevOps is not just for software developers and operators; others end up in the DevOps process in some way. Project managers, test engineers, and system administrators are some of the many professionals who may find themselves involved in the DevOps process. Even executives may be involved in the DevOps process somehow, or at the very least, fully embrace this approach due to the efficient results that are delivered.