DevOps ¡= Dev + Ops

DevOps, in opposition to people usually know about, is more than a methodology that sum up the development and operations teams. Nowadays, the term DevOps had raised in popularity, and it is being used everywhere in the industry of technology. However, it is important to take into account that it is not only a fancy trend that is good to use in our own software developments because almost everyone is using it, but to know it is a backbone than has the crucial role of smoothly integrate two teams that usually have conflicts to agree what goal, practices or given value performance measure is better to use.

To mention what exactly DevOps is, it is a need to cover what the Dev team and Ops team are separately, and what they usually look for inside a project. To start, both teams search for generate value to the enterprise and stakeholders such as clients, employees, providers, community, partners, etc.; but these areas try to reach that goal in a different manner that can sometimes cause certain undesirable opposition between their goals with each other.

This happens due to the Dev team usually generates value to stakeholders by the agile (thus fast) deliver of new and / or improved features of the software solution the enterprise offers; while the Ops team most of the time searches to deliver that value through the increment of the stability the software solution has. Then, tough those goals have the common objective of increase the given value by the enterprise, the way they make things, frequently ends in a collision of interests.

It happens because a fast delivery tends to cause the apparition of the well-known bugs in software; then, too many new features or too many modified (usually to improved them) can provoke the already existent ones fail; in other words, the number of features added or refactored in a certain period could affect the quality of features made in that period and the involving existent features that are in some-way related to them.

In contrast, the quality and stability of the releases made carefully to prevent issues diminish the number of characteristics added or improved in a given time; that is the same to say that to ensure the quality of the produced value in each change, the time used to achieve that goal needs to increase necessarily.

Considering those two approaches or points of view that need to be attended in a well-cared balance, avoiding neglecting any of them; because if the software has a lot of bad working functionalities or if it has a really robust system but there is an absence of key features, then it cannot cover the needs of stakeholders and deliver enough worth value.

That is why the Dev team and Ops team need to be coupled through a third piece that it is known as the DevOps teams. DevOps provides the tools to the former mentioned teams to achieve their goals without block the adequate progress of the other side. DevOps not only introduce a third factor or element to this equation, but also allows to automate that merge process in a way the value can be increased in an agile and reliable way.

Continuous Integration and Continuous Delivery are two central practices that make possible to DevOps be what it is. The former consists in deliver advances in small pieces that are easy to integrate the current software solution without breaks and a way fast to test and fixed if needed. It helps to solve the common difficulty that appears in development teams in the moment to join the work made by different members of a team; problem that tends to get bigger as the team and project grows.

The latter practice consists in accelerate the time required by the added features to be implemented or released to production. With continuous delivery the feedback received by stakeholders is faster and,

similar to the continuous integration's main objective, it makes easier to revert breaking changes and solve the problems may occur since those small pieces of code are less prone to have conflicts and also it is easier and faster by far to identify issues and improvement opportunities.

In few words, DevOps is not to merge two separated pieces in one. DevOps manages and coordinates the flow of work of development and operations to supervise, couple, register, resolve and in general, gives the best of the fast iterations and the reliable ones. In addition, tools such as pipelines and jobs allow to ensure the "game rules" are always accomplished; then, the development team can reach its goal of speed deliver while the measures of quality defined by Ops are not affected, since automation makes the same a big team could do with a really higher need of time used.