CASE STUDY

Distribution Company Improves Server Deployment Process

Dev/Ops implementation improves and simplifies processes

THE COMPANY

The demand for building and deploying new servers at a leading distributor of electrical, communications and data networking products was beginning to strain its internal IT resources. The company was already discussing migration to the cloud and knew such a migration would only increase the demands on the IT staff.

THE NEED: Standardize server build and deployment process.

The distribution company had developed a variety of system images and VMware templates for building and deploying servers, which not only made deployment more cumbersome but also created issues for the support staff – Engineering, Operations, and System Administrators – which had to juggle numerous server configurations.

Shawn Snyder, Senior Account Executive for LRS IT Solutions, was making one of his routine visits to the company and learned about the issues it was having.

"The way they were deploying servers was straining the capability of the resources they had in their IT department," Shawn recalled. "They were trying to find a way to make their process lean."

THE SOLUTION: DevOps methodology and tools.

Shawn realized that the best way for a company to simplify a process and make it repeatable is to design and implement a DevOps methodology. He reached out to Charles Wilson, Cloud Solutions Advisor, and Scott Perkins, Cloud Architect, for input.

Charles and Scott assessed the company's situation and needs and designed a methodology for building and deploying servers consistently and in a shorter time frame.

"We delivered a methodology and a set of tools to go forward," Charles said. "We also provided training on the methodology to help them simplify their process."

Scott noted that the pair also gave the company a series of scripts to automate server deployment as well as deployment of other resources.

"What we were trying to guide them toward is Infrastructure as Code," Scott explained. "That's a concept that moves you beyond merely having a documented process to putting that process into a form of code that can be repeatable and persistent in building a starting point of a gold image for a system and applying custom config that suits their environment then applying the application."

As Scott concluded, "This results in moving them forward by enabling integrated testing of their configuration as code and performing code review as part of QA, which results in more efficient and predictable deployments."

For a company that had not implemented DevOps, the new methodology required not only process and workflow change but

ACCOMPLISHED DevOps GOALS

- Reduced strain on internal IT staff
- Created repeatable process for server deployment
- Positioned company for cloud migration
- Process Simplification
- Server Automation

also a culture change. According to one definition, DevOps is the combination of cultural philosophies, practices, and tools that increases an organization's ability to deliver applications and services at high velocity: evolving and improving products at a faster pace than organizations using traditional software development and infrastructure management processes.

If that's too much to grasp, just understand that the goal of DevOps is to continuously improve the quality of a business's processes. Allowing IT to move as fast as the business requires.

That's what Charles and Scott did for the distributor: They designed a way to automate the building and deploying of physical and virtual servers to lighten the load for the IT staff.

As Shawn noted, "It's a new way of thinking for them, completely different than anything they've done before."

THE RESULT: Improved deployment process and reduced strain on IT resources.

The DevOps solution implemented by LRS IT Solutions met the distributor's need – the company now has automated server deployment via dynamic business workflow.

Or, as Shawn phrased it, "The biggest result was an improved process for their IT server management environment."
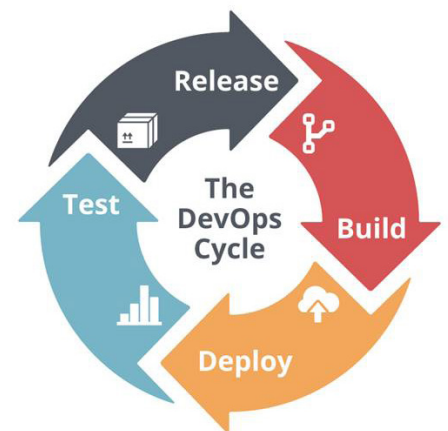
At the distribution company, server builds and deployments are no longer straining the IT staff and the company has no need to hire additional personnel. But there's more.

One aspect of DevOps that may not be obvious initially is its sustainability. Unlike buying a server rack or software, implementation of DevOps is not a one-off solution. The essence of DevOps, which is continuous improvement of IT process, is itself an ongoing process.

"Implementing the DevOps methodology lays the groundwork for additional savings in the future," Charles pointed out. "In fact, their goal is to simplify process to the point where a non-technical person will be able to initiate the server build and deployment process."

The DevOps Cycle

Release — Build — Deploy — Test