



[A NetApp DevOps Article](#)

The Five Phases of DevOps Maturity

To move faster and efficiently drive their business forward, many organizations are adopting DevOps cultures. Those who understand DevOps know that it's more than just implementing tools and processes and then sitting back and reaping the rewards; it's a framework and culture composed of varying levels of efficiency.

Like many of you, NetApp IT has embarked on our own DevOps journey, and in the process we've noticed trends in our evolution that

we've applied to an adopted DevOps maturity model. There are several different models that organizations follow, with slightly different wording depending on the source, but the steps to maturity are very similar across the board.

We find that using a maturity model to understand where our organization sits today helps us to identify gaps in our practice and opportunities for advancement to take us to the next level. Check out the characteristics of each level to see where your organization stands.

The Five Phases of DevOps Maturity

Level One

Ad Hoc (Chaos Reigns)

This is where your journey begins. You're manually testing, building, and deploying. You don't have consistent environments to rely on with a steady flow of workloads and data. You're reactive, not proactive, relying on so-called "tribal knowledge" and experts. Your team is siloed, with little accountability, and blame and finger pointing are the norm. The good news? There's nowhere to go but up.

Level Two

Repeatable (Continuous Integration)

You've moved toward automating builds and tests. Although it's painful, you can repeat your releases, but you haven't set standards. Process wise, you handle what you know and can repeat it, but you're not able to react to the unknowns. You still have silos, but you're starting to share knowledge and have managed communications. You've established processes – but they're still within those silos.

Level Three

Defined (Continuous Delivery)

You could call level three the turning point. You're collaborating across teams, sharing decisions and accountability. You've created organization-wide standards and automated processes across your software development lifecycle. Your build and test cycle for every commit, as well as your user and acceptance testing, is automated. And you've moved to push-button deployments.

Level Four

Measured (Continuous Deployment)

You've transitioned from being reactive to proactive. You're collecting metrics, analyzing them against business goals, and using them to collaborate and remove bottlenecks. Because you're proactively monitoring, you have visibility and can predict outcomes. Your deployments are orchestrated with automatic rollbacks and you're defining and measuring nonfunctional requirements.

Level Five

Optimized (Continuous Operations)

Finally, level five. Of course, the journey isn't over, but you've adopted a culture of continuous improvement that permeates your organization. You've optimized your risk and costs, and your team, which is experimenting on all fronts, is working with self-service automation. You have zero-downtime deployments and a solid, ideal infrastructure. And you're able to force failures to actively enforce resiliency.

Three years into NetApp's DevOps practice, we're at level three. Our IT team has become much more efficient, supporting more than 200 applications on a budget that's remained flat. While we test and expand our capabilities in this maturity model, we're also planning the next steps to advance our practice.

Where does your organization fall in this maturity model? Do you want to level up? [Learn how](#) to accelerate your DevOps journey.