

ORCHESTRATION IN SDLC FOR DEVOPS



Gone are the days of shipping your product, clapping yourself on the back, and moving onto the next piece of software.

Customers expect regular updates with added functionality and increased ease of use that requires you to respond in near real-time to their demands to remain ahead of the competitors vying for their business. Bringing [together cross-discipline teams](#) into a cohesive and finely-tuned machine has proven to be a potent answer to the constant demand for software and service improvements.

As new terms come and go in the IT sector, it's important to stay on [top of the trends](#) and understand the reasoning behind them. Not every new trend is worth investing your enterprise's resources into—but missing the boat can mean being left behind in the dust by your competition.

No longer the new kid on the block, DevOps has firmly established itself as a powerful approach to adapting to today's quickly changing world. With the rise of widespread orchestration, though, you might be wondering if this fits into your DevOps environment.

The answer is yes. Orchestration can make a world of difference for application development. Let's take a look.

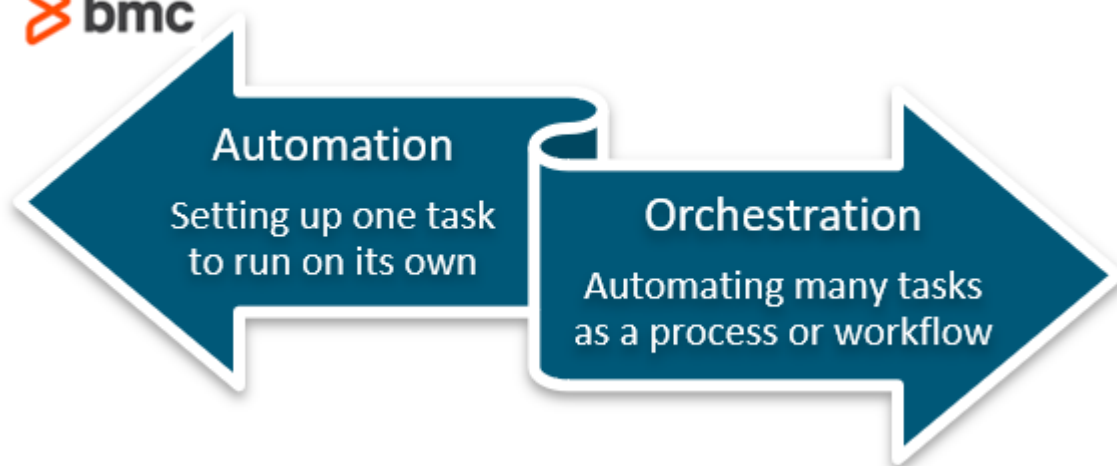
(This article is part of our [DevOps Guide](#). Use the right-hand menu to navigate.)

What is cloud/DevOps orchestration?

[Orchestration](#) is the automated coordination of automated activities. It's easiest to think of it like this:

- Automation covers individual, basic tasks that are programmatically performed through micro-level scripts.

- Orchestration is the large-scale coordination of these automated tasks.



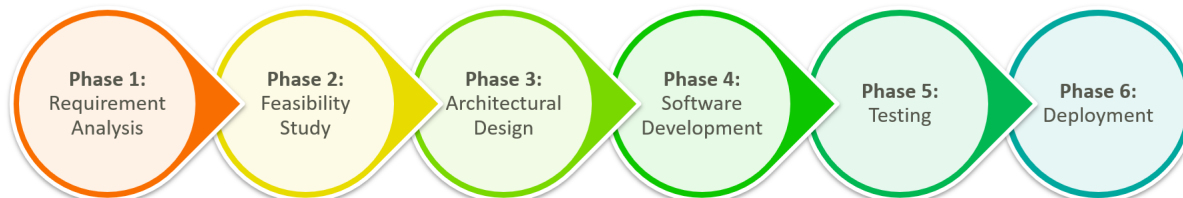
Cloud orchestration involves automating the workflow processes that occur to deliver resources [as a service](#). DevOps orchestration, on the other hand, is the coordination of your entire organization's DevOps practices and the automation tools you employ in pursuit of your goals.

It's difficult to overstate the importance that automation plays in the successful implementation of DevOps practices. [Software development lifecycle \(SDLC\)](#) is a relatively self-explanatory term that simply refers to the loop of software development in the software as a service (SaaS) industry. The SDLC generally revolves around six stages:



Software Development Lifecycle

The 6 Phases in the SDLC Pipeline



Automation

drastically speeds up your SDLC, without dimming the quality. The next step, orchestrating your automated tasks, sees more benefits:

- Helps maximize the potential (and ROI) of your automation tools
- Increases the return on your DevOps investment

Impact of automation & orchestration

Not every aspect of development can be automated. But heaps of activities can—and should—be automated in search of increasing DevOps optimization and overall speed and reliability of development.

Here are some areas where automation is practically a no-brainer:

Data centers

Data centers are a prime location to begin automating routine due to how many recurring tasks tend to take place there. Servers, networks, and databases all require regular maintenance and [security](#)

tasks that can be automated to save man hours in the long run while also ensuring fewer things slip through the gaps. Automating your data centers can:

- Improve IT efficiency
- Reduce deployment failures
- Offer more manageable complexity across environments

Job scheduling & workload automation

[Job scheduling](#) and [workload automation](#) can also drastically improve efficiency by simplifying application delivery and managing the data required by batch jobs. Automating application workflows helps to:

- Reduce downtime
- Curb expenses caused by business interruptions
- Enhance scalability thanks to its flexibility that simplifies even the most complex of systems

Overwhelming tasks can be broken into smaller, automatable processes that are tackled programmatically and without the need to keep constant tabs on them.

IT processes

The automation of [IT processes](#) improves collaboration by supporting built-in and audited annotation for crystal clear communication. Automation tools also give you the ability to handle Big Data with your existing enterprise skills and best practices. The customization available through automation platforms enables you to setup orchestration across your organization that works in the way you need it to. The deep functionality and standardization available through automation tools and their enterprise-wide user interface makes for more simplified management of even the most complex systems.

These tools also support self-servicing which allows business users the freedom they need to manage workloads and submit queries at any time with a user-friendly and web-based mobile tool that doesn't require a workload automation expert to leverage.

Orchestration compounds the benefits

DevOps orchestration coordinates all of these automated tasks to provide enhanced optimization and oversight. Orchestrating automated IT processes can:

- Accelerate your service delivery speeds
- Lower the cost of service delivery
- Increase the reliability of deployments

Orchestration tools customized for your organization's needs can help you make the most of your automation efforts and DevOps implementation.

There is no silver bullet solution or a blueprint that can be followed verbatim that will enhance your enterprise overnight, but DevOps is a mentality that encourages a culture of collaboration as well as a suite of tools that aid collaboration by enhancing communication across the organization.

DevOps: Solutions for You

DevOps sounds like a good fit for your organization? Get it right the first time with BMC, the IT solution partner you need. Read more about how orchestration, automation, and DevOps systems can help increase the rate at which you deploy stable products with BMC's free eBook: *Automate Cloud and DevOps Initiatives*. To learn more about automating the software delivery lifecycle, check out BMC's eBook *Automate Cloud & DevOps Initiatives Across All Phases*.

BMC expert consultants are available to work with you to bring their knowledge and expertise to your organization. In addition to education and consultation, BMC provides custom-tailored [Deployment Services](#) for your organization to tackle the unique challenges you face. When partnering with BMC, you get:

- **Faster service delivery:** Agile releases that keep up with rapid demand
- **Visibility across data:** Ensure compliance and data accuracy
- **Cost-effective service:** Increased productivity and performance
- **Experienced DevOps professionals:** Equip you with the tools you need for success
- **Conversion or upgrade:** Seamless modernization or total replacement
- **All tailored for the specific needs of your organization.**

Related reading

- [BMC DevOps Blog](#)
- [State of DevOps: A Report Roundup](#)
- [How Workflow Orchestration Improves Application Development and Monitoring](#)
- [DevOps for Enterprises](#)
- [How & Why To Become a Software Factory](#)