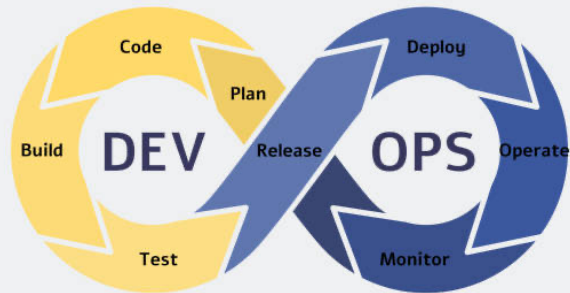


The background is a solid blue gradient. Overlaid on this are numerous thin, white, curved lines that flow from the left side towards the right, creating a sense of motion and depth. These lines are more densely packed in some areas, forming peaks and valleys, similar to a stylized landscape or a wave pattern.

# GETTING STARTED WITH CI/CD



# CONTINUOUS INTEGRATION/CONTINUOUS DEPLOYMENT(CI/CD)



## Continuous Integration

*The practice of merging all developers' working copies to a shared mainline several times a day. It's the process of "**Making**".*

## Continuous Deployment

*A software engineering approach in which the value is delivered frequently through automated deployments.*



- Less developer time on issues from new developer code
- Less bugs in production and less time in testing
- Prevent embarrassing or costly security holes
- Less human error, Faster deployments

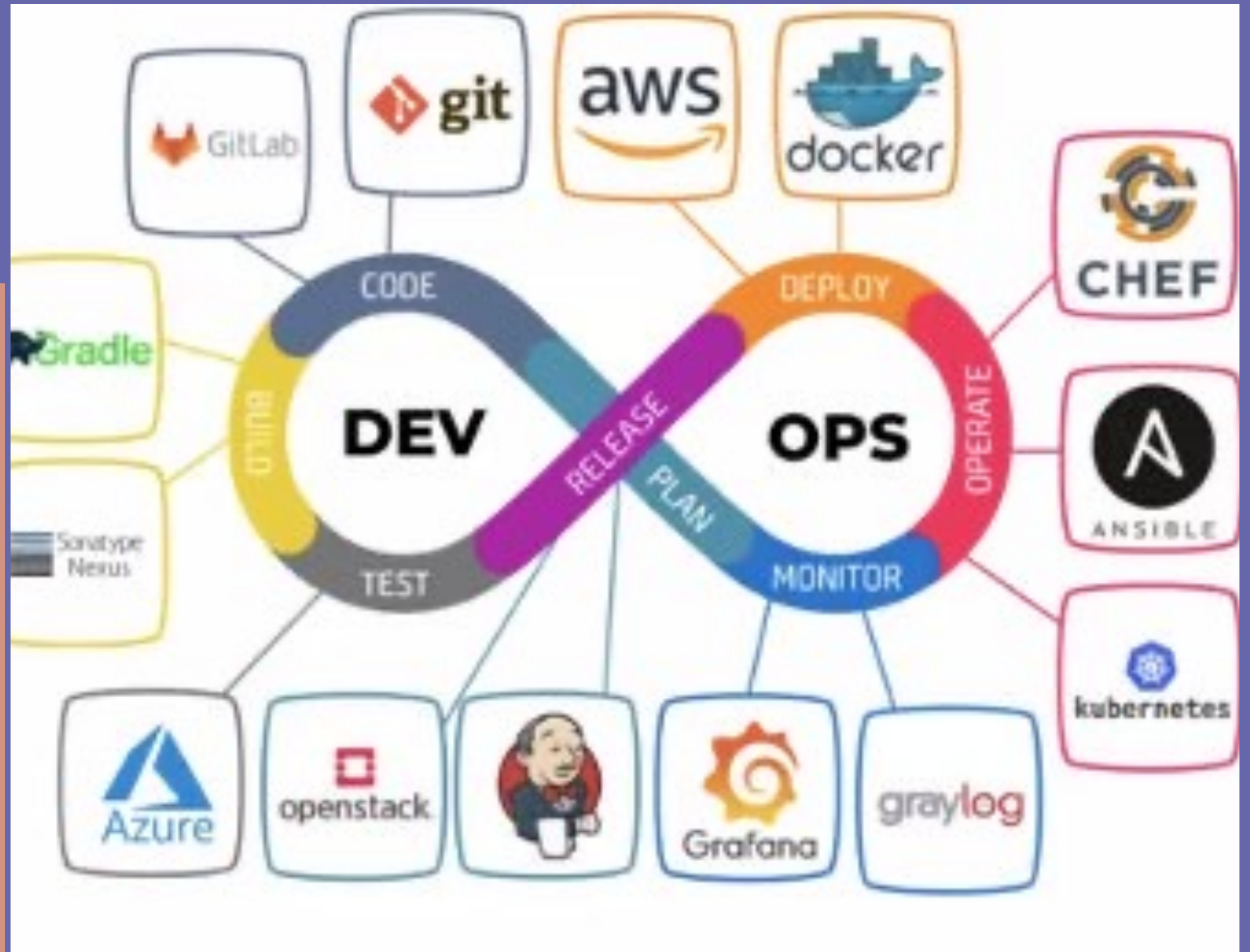
## WHY CI/CD?

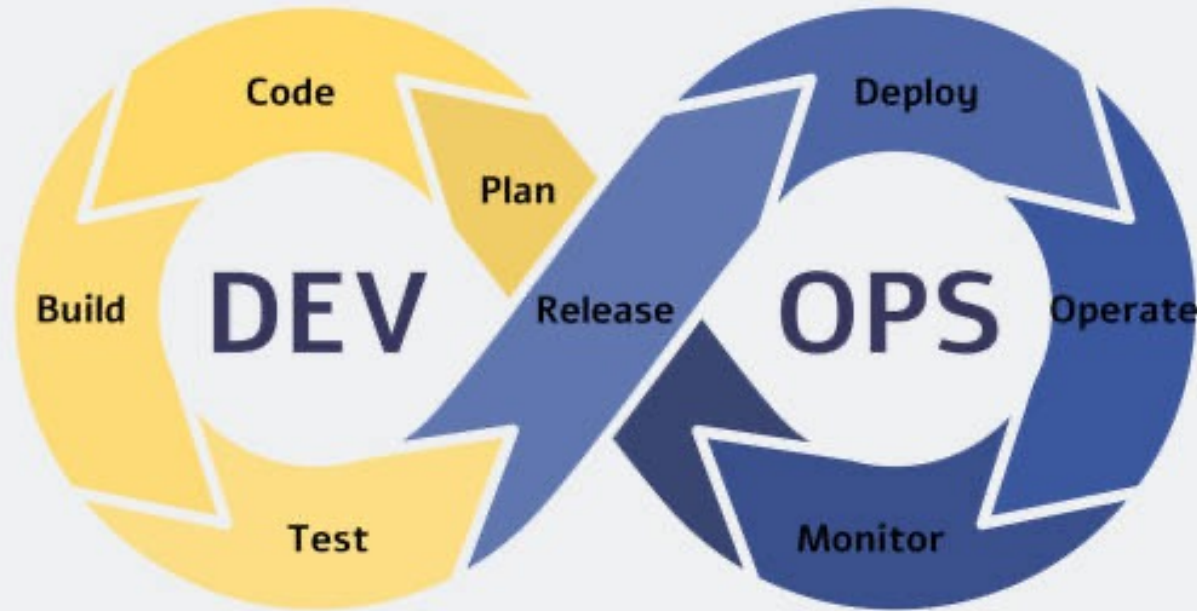
- Less infrastructure costs from unused resources
- New value-generating features released more quickly
- Less time to market
- Reduced downtime from a deploy-related crash or major bug
- Quick undo to return production to working state



# CI/CD TOOLS

CI/CD tools typically support a marketplace of plugins. For example, Jenkins lists more than 1,800 plugins that support integration with third-party platforms, user interface, administration, source code management, and build management.





## CONCLUSION

- To recap, *continuous integration* packages and tests software builds and alerts developers if their changes fail any unit tests. *Continuous delivery* is the automation that delivers applications, services, and other technology deployments to the runtime infrastructure and may execute additional tests.
- Developing a CI/CD pipeline is a standard practice for businesses that frequently improve applications and require a reliable delivery process.
- Getting started with CI/CD requires devops teams to collaborate on technologies, practices, and priorities. Teams need to develop consensus on the right approach for their business and technologies. Once a pipeline is in place, the team should follow CI/CD practices consistently.