

DevOps Technology

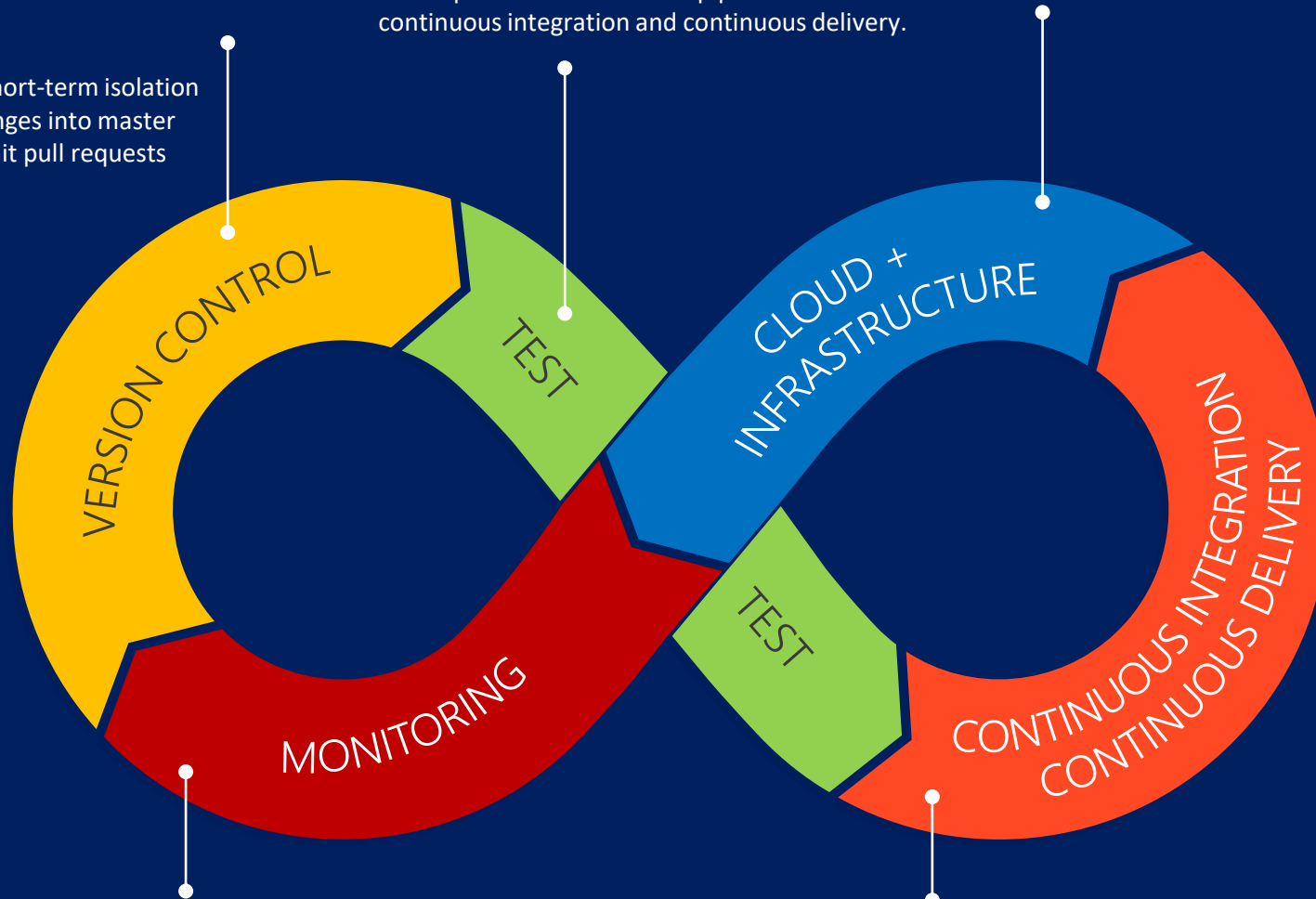
Version control enables teams located anywhere in the world to communicate effectively during daily development activities as well as to integrate with software development tools for monitoring activities such as deployments.

Top performers

- Use topic branches for short-term isolation
- Continuously merge changes into master
- Review and audit using Git pull requests
- Version everything

Testing used to be a slow, infrequent activity. So slow, that testing cadence would determine a team's ability to release. DevOps strives for testing as a continuous activity, embedded into both the developer workflow and the pipeline used for continuous integration and continuous delivery.

Teams can use the Public and Hybrid Clouds to gain capacity on demand. With a well-managed cloud, your teams can provision resources as needed and move as fast as they need.



Monitoring of running applications in production environments enables a DevOps team to detect issues as they occur, to mitigate the impact, and to understand the application health. Further monitoring of customer usage helps organizations form hypotheses and quickly validate or disprove experiments.

Continuous Integration (CI) refers to the practice of triggering an automated build and test sequence with every commit of code changes. Continuous Delivery (CD) extends this to trigger further testing and the deployment to production, with approval if necessary.

Top performers

- Enable teams to move features swiftly from idea into production
- Create and validate release without impediments or manual rework.

PRODUCTS

ALM

Jira, Mingle, Rally, Trello, VersionOne, VSTS

ARTEFACT MNGT.

Azure, Bower, DockerHub, Nexus, npm, nuget, VSTS

CI

AppVeyor, Bamboo, circleci, Jenkins, JFrog Artifactory, TeamCity, Travis CI, VSTS

CLOUD

AWS, Azure, Google Cloud

CONFIG MNGT.

Ansible, Chef, PowerShell DSC, puppet, Terraform, Vagrant

DATABASE

DBDeploy, DBmaestro, Redgate

DEPLOY

BuildMaster, ElasticBox, Juju, Octopus, servicenow, Spinnaker, VSTS

FEATURE FLAGS

Feature Switcher, Feature Toggle, FlipIt, LaunchDarkly, NFeature

KNOWLEDGE SHARE

Confluence, Markdown, Reddit, VSTS

MONITORING

Azure AI, Dynatrace, elasticsearch, Nagios, New Relic, splunk, ZABBIX

ORCHESTRATION

Docker Swarm, kubernetes, Mesosphere, Mesos

SECURITY

Whitesource

TESTING

BugZilla, Gradle, Jasmine, JUnit, Karma, QUnit, Redmine, Selenium, specflow, xUnit

VERSION CONTROL

BitBucket, git, GitHub, GitLab, source forge, TFVC