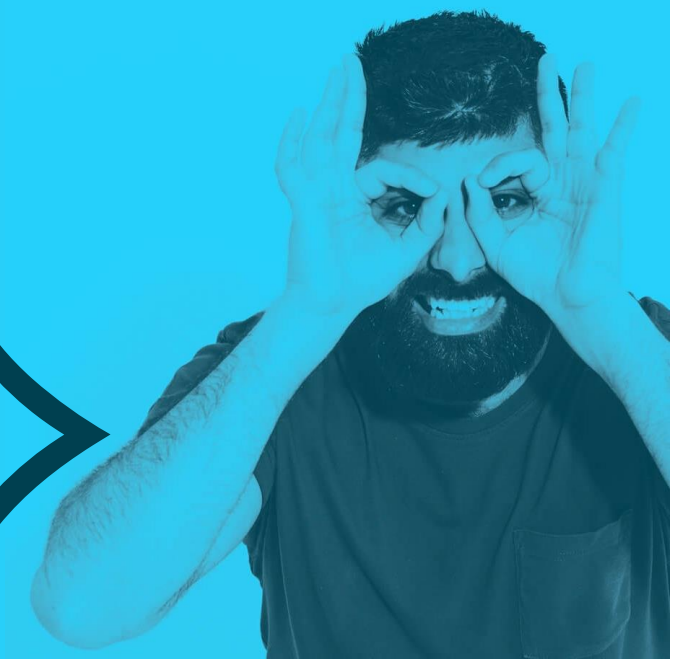
POWERING POTENTIAL

SOURCE CONTROL



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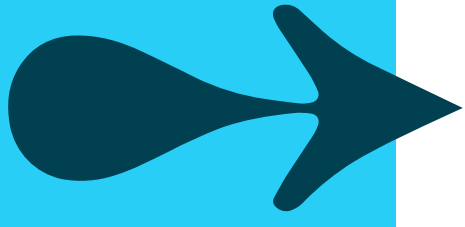
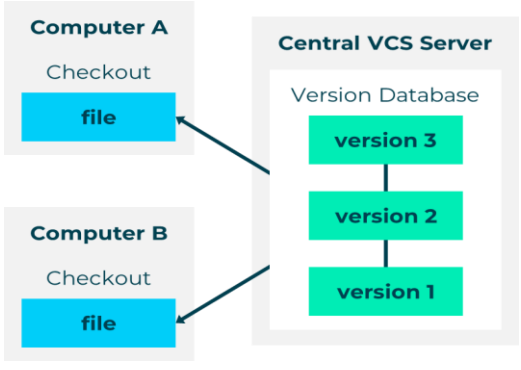
SOURCE CONTROL



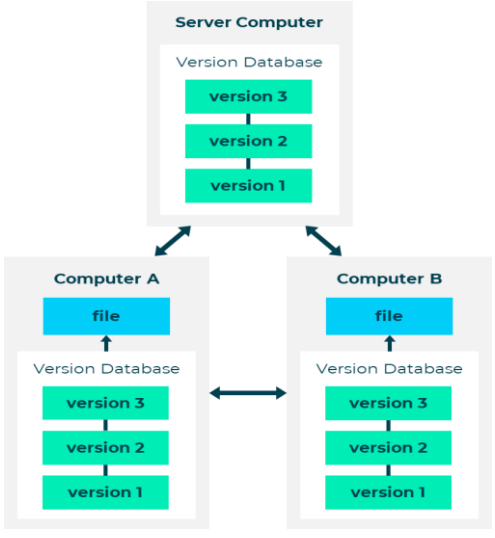
- Centralise all code changes and additions to one code repository
- Allow for simple and effective collaboration within development teams
- Control the integration of new code into the codebase
- Track changes from the entire team over the full lifetime of the project
- Revert code back to previous versions

Types of Version Control Systems

Centralised Version Control System (CVCS)



Distributed Version Control System (DVCS)



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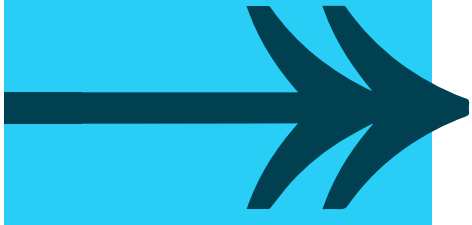
SCM TOOLS

- Git
- Mercurial
- Subversion (often abbreviated to SVN)
- CVS
- Perforce



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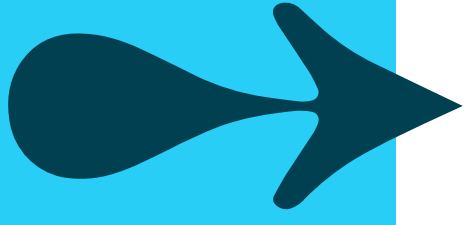
REPOSITORY HOSTING SERVICES



- GitHub
- GitLab
- Bitbucket
- SourceForge
- Launchpad
- AWS CodeCommit
- Azure Repos (as part of Azure DevOps)
- Google Cloud Source Repositories

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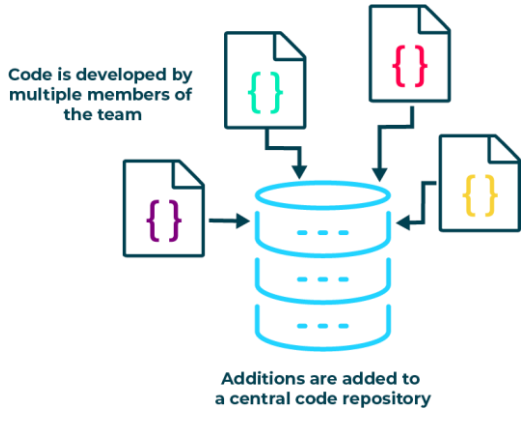
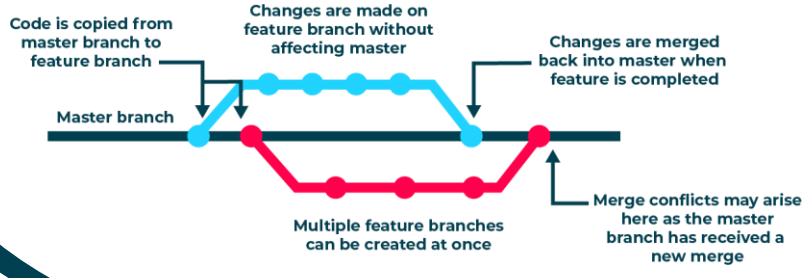
Continuous Delivery

- Store code in a central repository
- Track changes over time
- Create code branches so that additions are made in isolation from stable code
- Merge new code into a stable release branch, known as the master branch
- Integrate with CI/CD automation tools (such as Jenkins and CircleCI) such that code will be built and tested as it is generated and pushed to the repository



BRANCHING

- Several people working on the same code base causes problems
- Feature branch model



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CODE TRACKING

- Allows development teams to keep track of all changes made to a project over time
- Makes it easy to revert if necessary

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