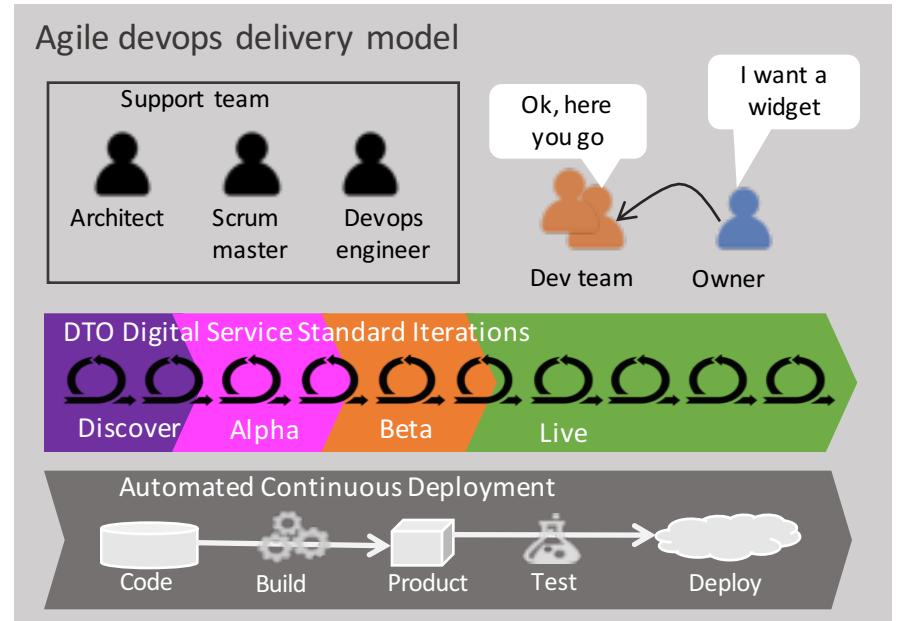
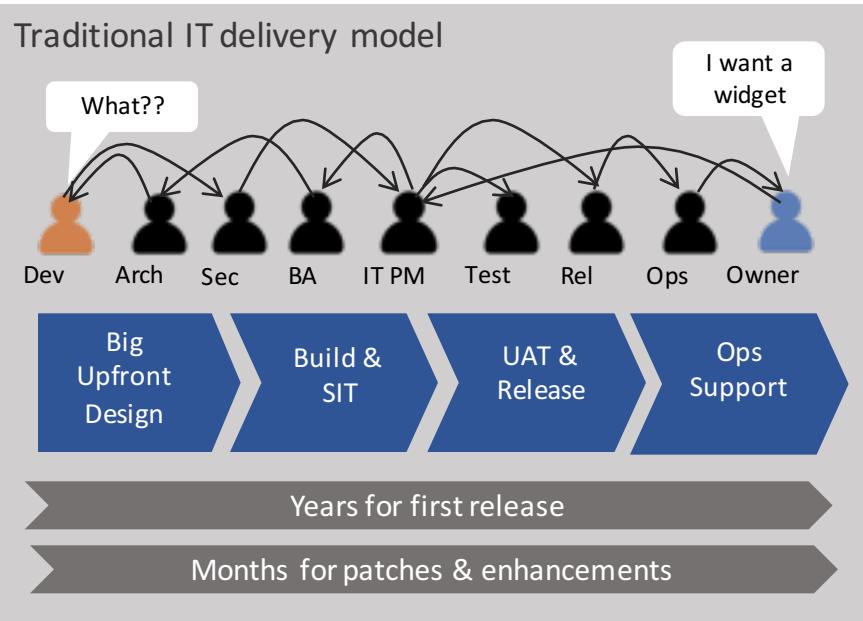
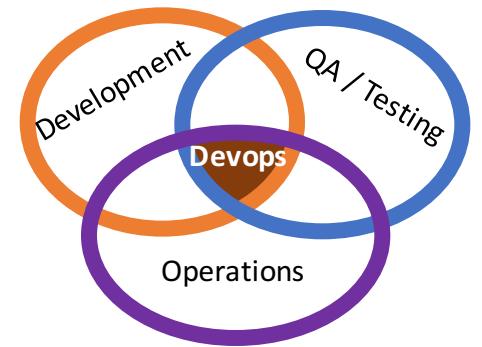


Devops is a practice that emphasizes the collaboration and communication of both software developers and other information-technology (IT) professionals while automating the process of software delivery and infrastructure changes.

Agile methods reduce project delivery risk by using rapid prototyping and continuous iterative releases to converge more quickly on the right solution. "Devops" supports agile methods by merging development, test, release, and infrastructure operations into a single highly automated pipeline.

Agile without DevOps is like a car without an engine. You can make it go but you have to push hard.



Seeks to reduce risk and cost by:

- Defining all requirements in advance.
- Rigorous change control.
- Carefully managing release processes.

But

- Scope changes are costly so changing requirements are often not met.
- Production deployments are costly so new features are slow to release.

Recommendation

- Use this method for legacy applications that are not amenable to automation and rate of change is very low.

Seeks to reduce risk and cost by:

- Embracing requirements uncertainty and iterating rapidly.
- Constant user research and feedback.
- Highly automated deployment models.

But

- Requires higher initial investment in automation.
- Requires an application that is designed for auto-scaling automated deployment
- Requires a cultural and organisational shift that can cross typical ITIL boundaries.

Recommendation

- Use this method for all digital transformation projects.

GoSource "CodeOnTap" is a set of devops conventions and tools built using best in class SaaS and open source tools and is hosted in AWS Sydney cloud. It lets your business areas focus on your product features while the IT department takes care of all the automation and continuous deployment.

Some FAQ

Q: What's included in my software factory?

A: Source control, build automation, test automation, deployment automation, project management, team collaboration, monitoring and alerts, analytics, telephone and online support.

Q: What does it cost?

A: We will host and manage your enterprise devops capability for \$5000 per month plus \$9 per user per month.

Q: Can I use it for both on-premise and AWS cloud deployments?

A: Generally, yes, however there will usually be less automation for an on-premise deployment.

Q: Who else is using it?

A: Several government agencies including Dept of environment and Dept of Immigration. Also several commercial organisations such as BlueScope Steel.

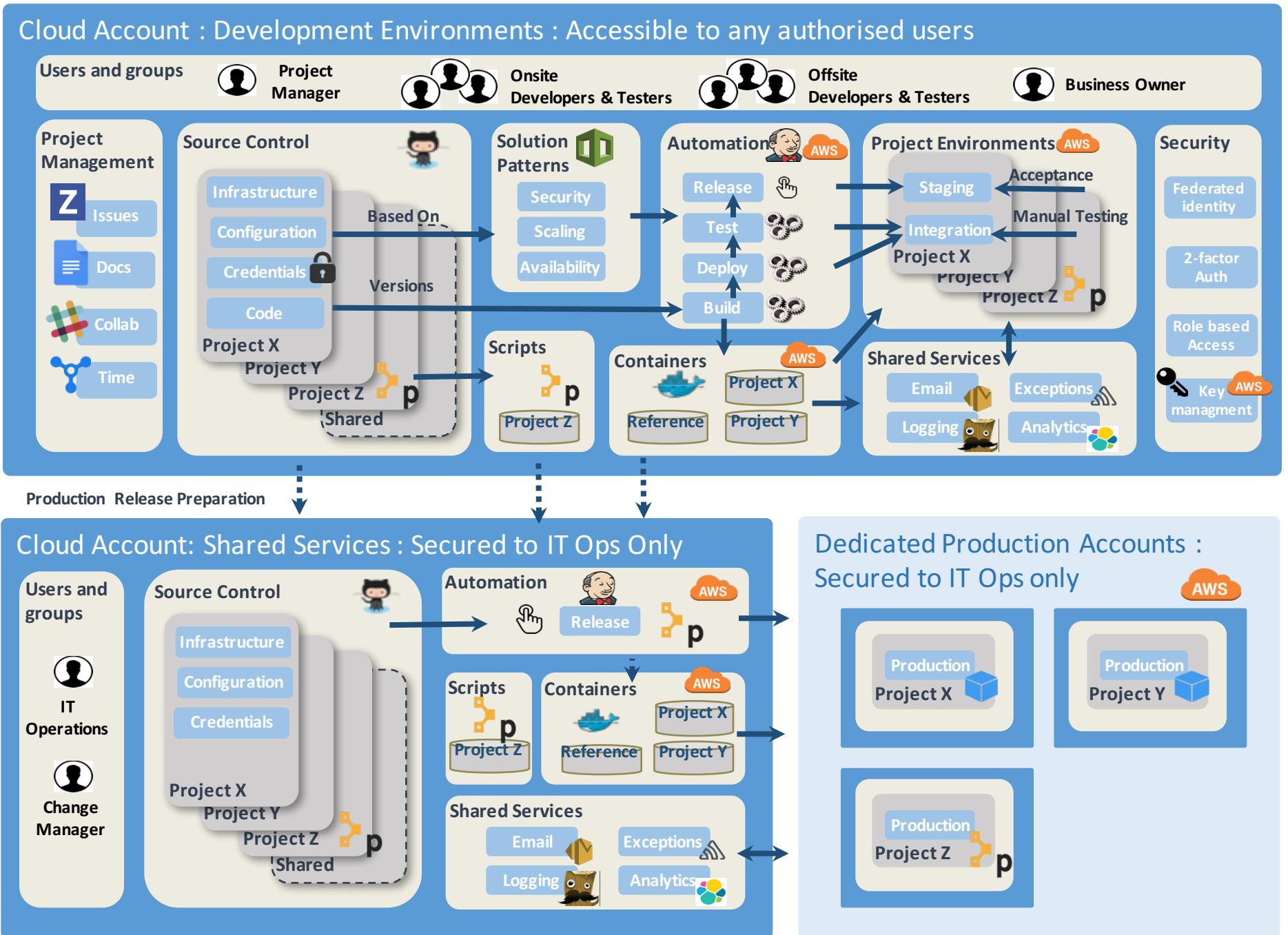
Q: Can I host it myself and use the tools and conventions without GoSource support?

A: Yes, the framework is released under GPL3 at codeontap.io

Q: How do I buy it?

A: Send a request to us via the Department of Finance Cloud Services Panel.

GoSource has developed a very deep expertise in cloud based continuous development and deployment platforms. CodeOnTap is essentially a set of conventions built on AWS cloud and Open Source tools. Our model is in successful use at several Australian Government agencies, is often referenced by Amazon themselves, and is released under an open source license.



Some key features of the CodeOnTap devops model are

- **Strong separation:** between production and lower environments, allowing external contractors to access lower environments without risk of exposure to production systems or data.
- **Infrastructure as code.** All network environments (up to host OS level) are built from Cloud Formation scripts and so are completely consistent and repeatable.
- **Containerisation.** All application code and dependencies are built into docker containers which are the unit of deployment. This ensures that, when something is tested and working in staging, it can be deployed to production confidently because it's the same container with the same code and dependencies.
- **Convention over configuration.** The devops model is an "opinionated" framework that applies a number of conventions consistently to all projects. This minimises start-up costs for new projects that use the same conventions.
- **Security.** All system passwords are maintained in separate repositories and are encrypted using Amazon key management.
- **Automation:** The deployment pipeline is highly automated (with appropriate human controls prior to production release). This allows for very low levels of technical debt and happy end users because requests are satisfied very quickly.
- **Versioning.** All containers are tagged with the GitHub commit version from which they are built, providing traceability back to code.
- **Availability:** builds are delivered to an auto-scaling multi-zone production environment that is highly fault tolerant.
- **Logging & monitoring:** All projects include advanced monitoring and rich analytics over activity logs, providing key business and technical performance metrics in real time.

All code, configuration, documentation, and cloud infrastructure, are managed in dedicated accounts for each customer. This means that handover and disengagement is very simple because all the deliverables will already be in customer owned provider accounts.