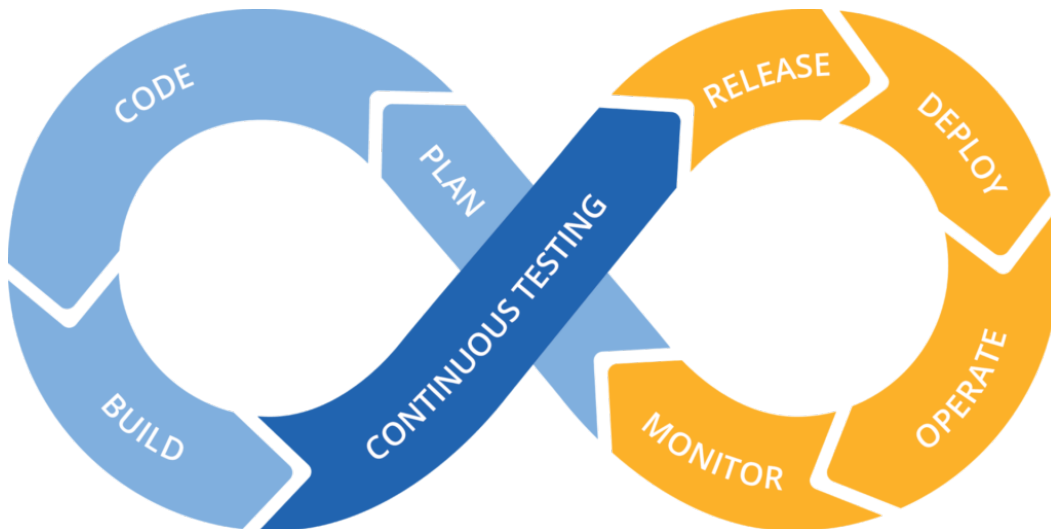


DevOps in a Nutshell

What is DevOps?

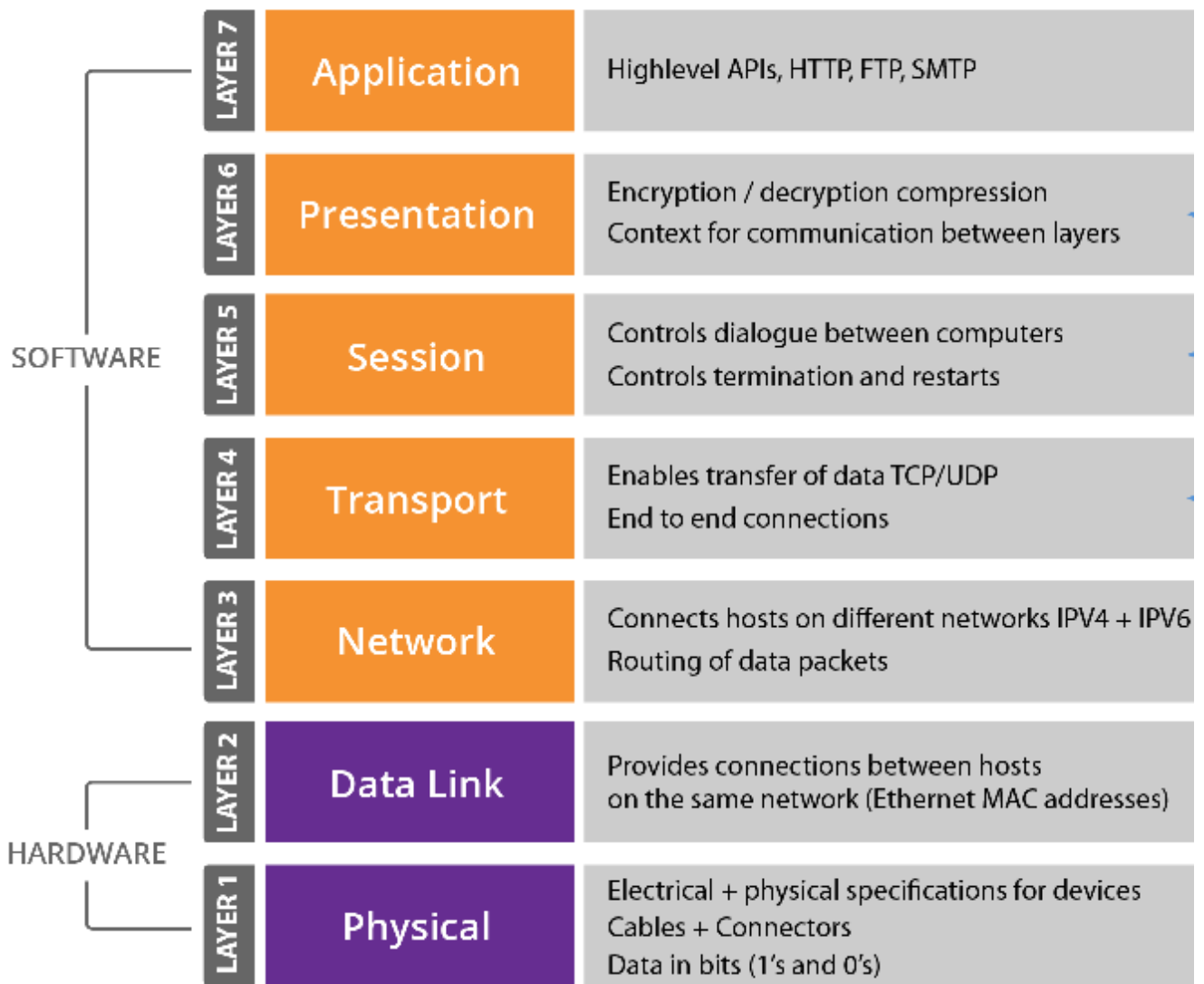


DevOps is the application of the Development life cycle to your Infrastructure Operations, Datacentre and Cloud computing environments beneath.

Yes, the Developers are coming over the hill and are taking the SysOps jobs! Everything will be managed a single grand unified way. Sysadmins look out! They'll automate you out of existence with self-serve apps!

Now that servers run in VMWare and in Containers of isolated UNIX and Linux software stacks sharing a common underlying kernel, servers that were once hardware, are more often-than-not, now software entities or “microservices”.

As such, development processes can be applied to the management of their lifecycle, coining the term “Infrastructure As Code” and not just to the upper Application Layer in the OSI Model.



Processes

DevOps means doing better and proper processes. The first thing to know is what processes exist and then to check if and how you implement them in your organisation/IT department.

- Development Process
- Requirements Engineering
- Testing and QA
- System Integration
- Release Management
- Change Management
- Deployment
- Configuration Management
- Update Management

- Incident Management
- System Provisioning
- Installation Automation
- Security Policies
- Monitoring
- Learning and Training

Solutions per Process

Development Process: Scrum, Kanban, IBM Rational Suite ...

Testing: QA Jenkins, Selenium, ...

System Integration: Mozilla Tinderbox, ...

Release Management: Redmine, Trac, SourceForge, Bugzilla...

Change Management: idoit, itop, project-open

Deployment: Fabric, Garnison, YADT, ..

Configuration Management: Trebutchet, ...

Update Management: lpvs, debsecan

Incident Management: idoit, itop, ...

Installation Automation: puppet, chef, cfengine, ansible

Security Policies: FIXME

Monitoring: Nagios & Co, Munin, Cacti, NewRelic, Splunk, Netflow, ...

Learning and Training: any spreadsheet

Commercial Solutions

Documentation

- Atlassian Confluence: Good for startups due to small user licensing, but beware the 30 and 100 user steps!

Ticketing

- Atlassian Jira: Classical ticketing, same licensing advantages and disadvantages as Confluence
- Jira Greenhopper Plugin: Scrum Board for Jira

Suites

- [IBM Rational CLM](#) “Collaborative Lifecycle Management”