DevOps Case Study

Client Background

A postal services company in the United Kingdom. The company manages their mission critical services through

- 4 web sites
- 86 applications with over 200 interfaces
- 25 external systems, like Amazon etc.
- Ecosystem of 18 partners
- 7M registered users and 20M+ unique visitors per month
- 50,000 ecommerce orders per day
- 24x7x365 support
- Ability to scale to meet point demands – e.g. Olympic Stamps
- Agile delivery - ability to release new services every 4 weeks

Problem Statement

- Higher environment setup time.
- Business impact due to environment defects and downtime.
- Long development and release efforts.

Scope of Work

- CI CD Implementation.

Business Benefits

- Less Effort
  - Setup time: 4 days to 4 hours
  - Environment downtime: 8 hrs. to 4 hrs / month
  - Zero environment defects
- More Control
  - Single Click Provisioning
  - Faster adoption of best of breed technologies and tools
  - Zero down time for IT maintenance
- Better Speed
  - Release cycle time: 3 weeks to 1 week
  - Improved CR throughput by 50%
  - Reduced development efforts by 30%

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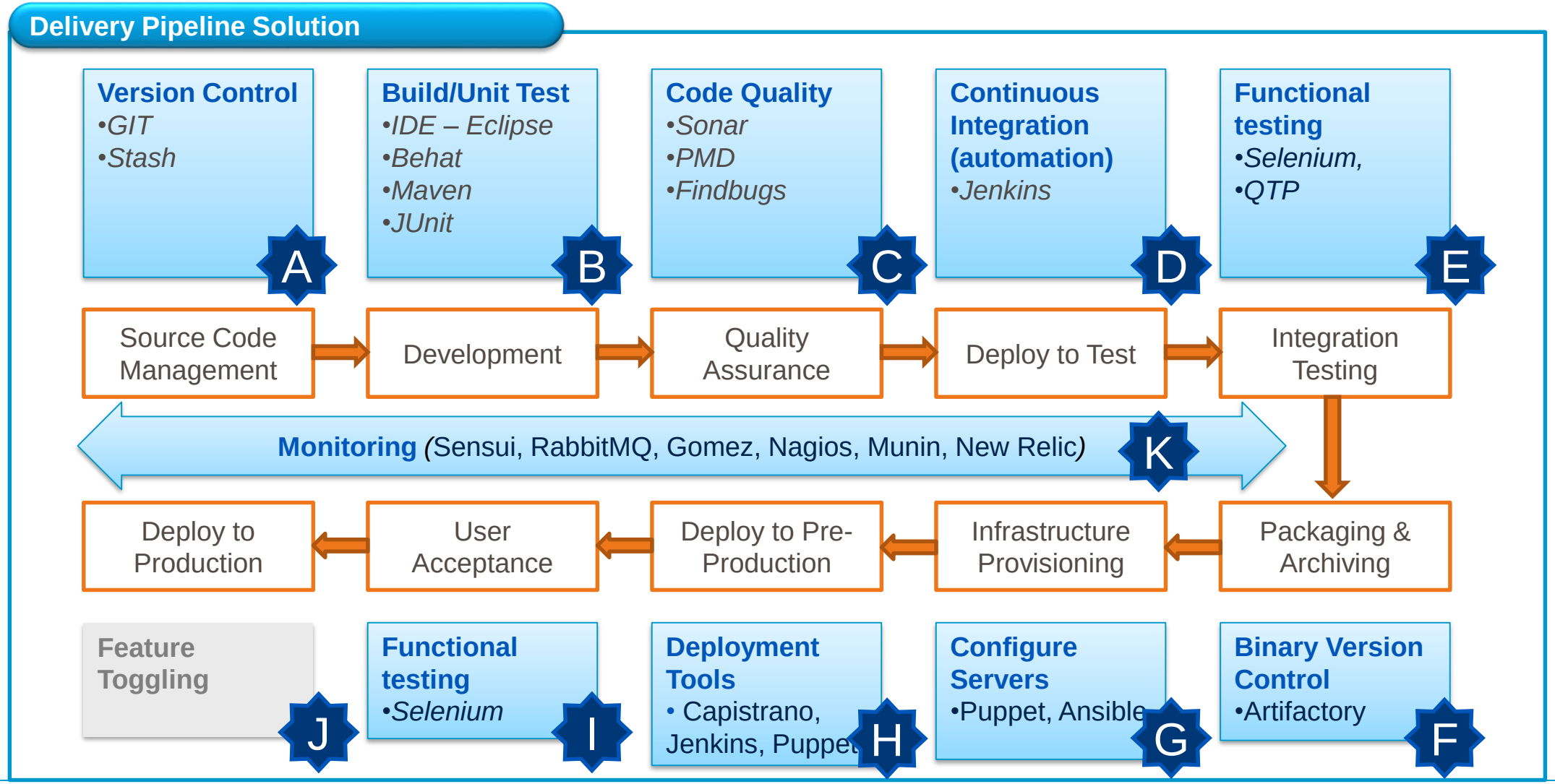
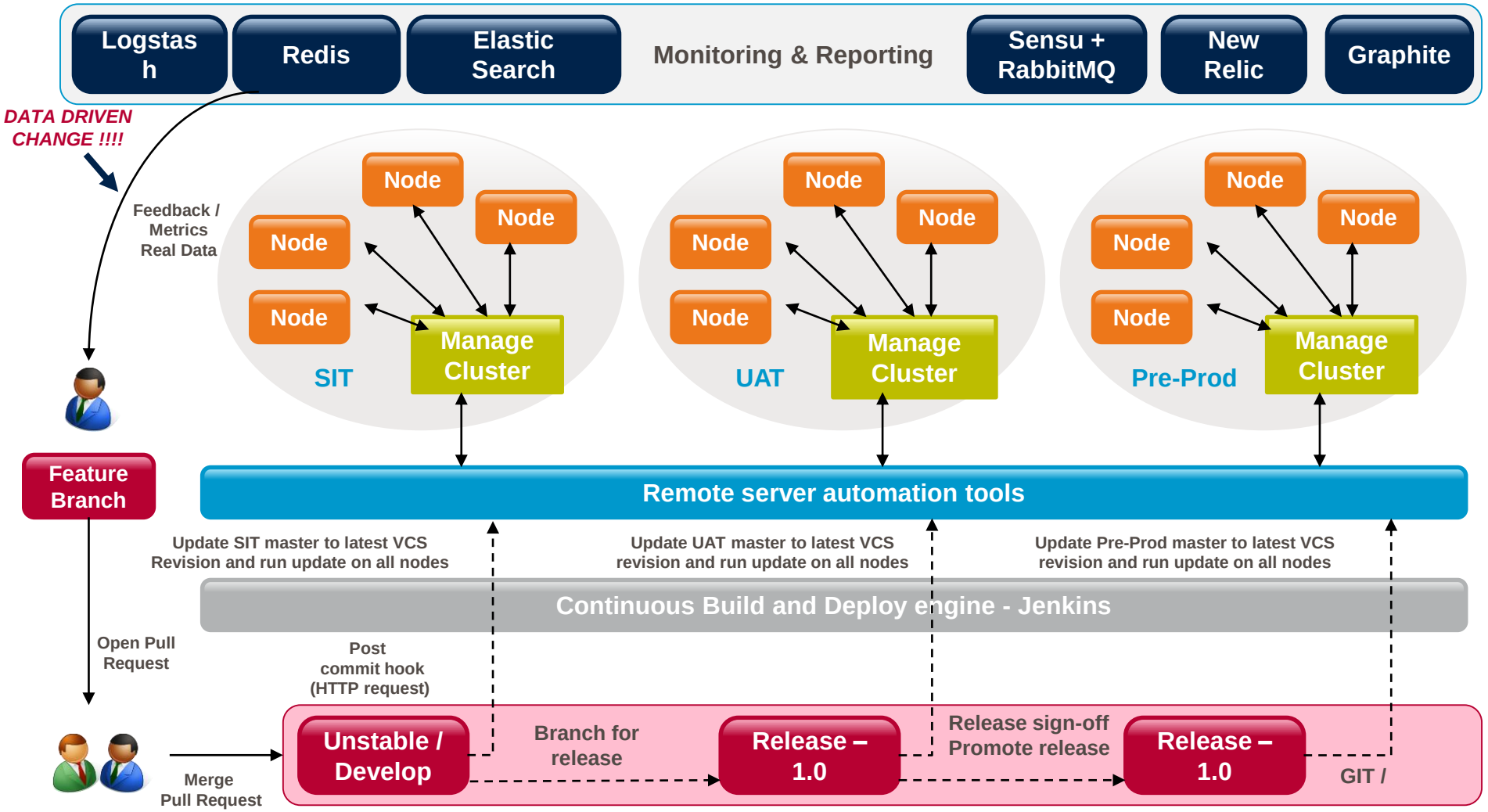
Agile Development : Automation of A-C
Continuous Integration : Automation of A–D
Continuous Testing : Automation of A-E
Continuous Delivery: Automation of A-H
Continuous Deployment : Automation of A-J

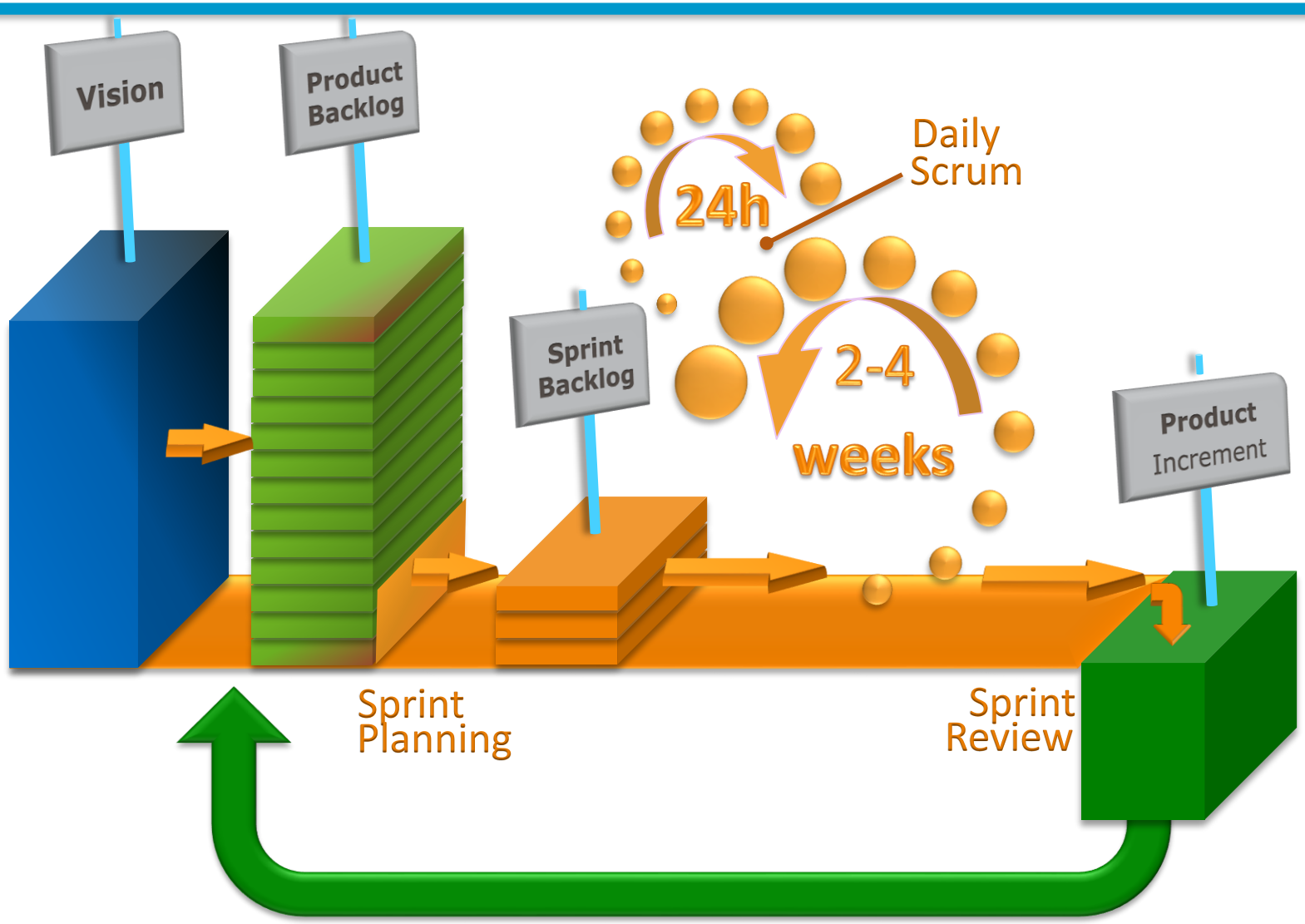
Dev Ops :
CI/CD + monitoring + server provisioning, etc. (ops functions included)



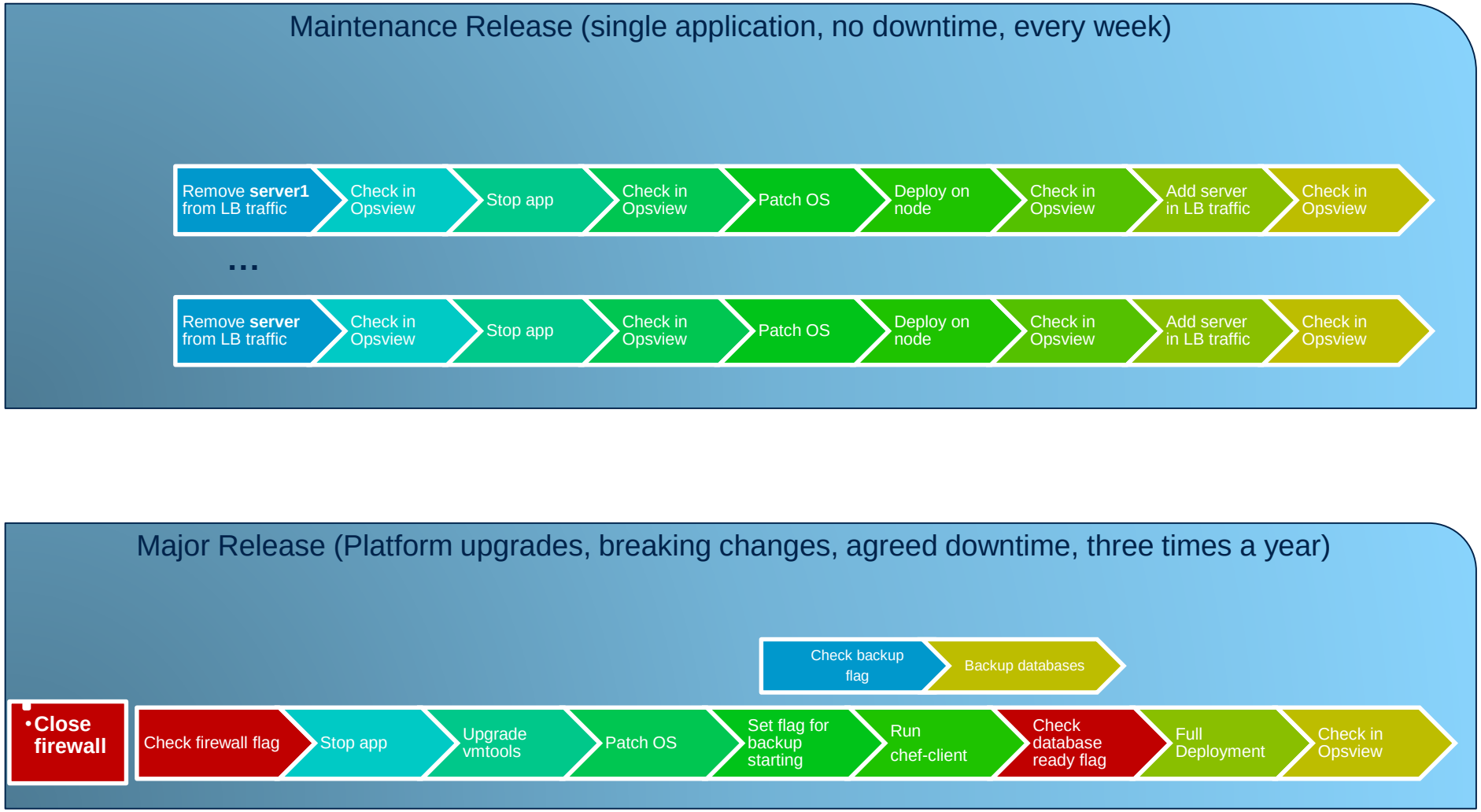
Continuous Integration/Delivery Technology Model



Scrum Process



Example: Automated release processes



DevOps – Unexpected Side Effects

Configuration Management

- Everything is version controlled
- Subversion becomes your pragmatic CMDB
- CMDB is just another view on the configuration code
- CMBD is version controlled, has transport mechanism between different environments and is code

Security

- A new era for technical security
- Weekly admin account changes
- Secret per machine service-accounts instead of public shared ones
- Easy to roll-out new services like centralized log management
- Pragmatic Enterprise Patch Management

Infrastructure

- Radical change of backup-strategy possible
  - 70% reduction in backup scope -> Massive savings
- Faster to re-provision than to restore
- Automation of a lot of clean-up tasks (storage clean-up, VMWare Tools Upgrades)

Totally unexpected

- Ops/Infra Heroes are a dying out species!
- Massive license savings (backup, VMware SRM licenses, etc.)
- Re-platforming is now a possibility and not a dream