Transform legacy applications and processes in a modern way

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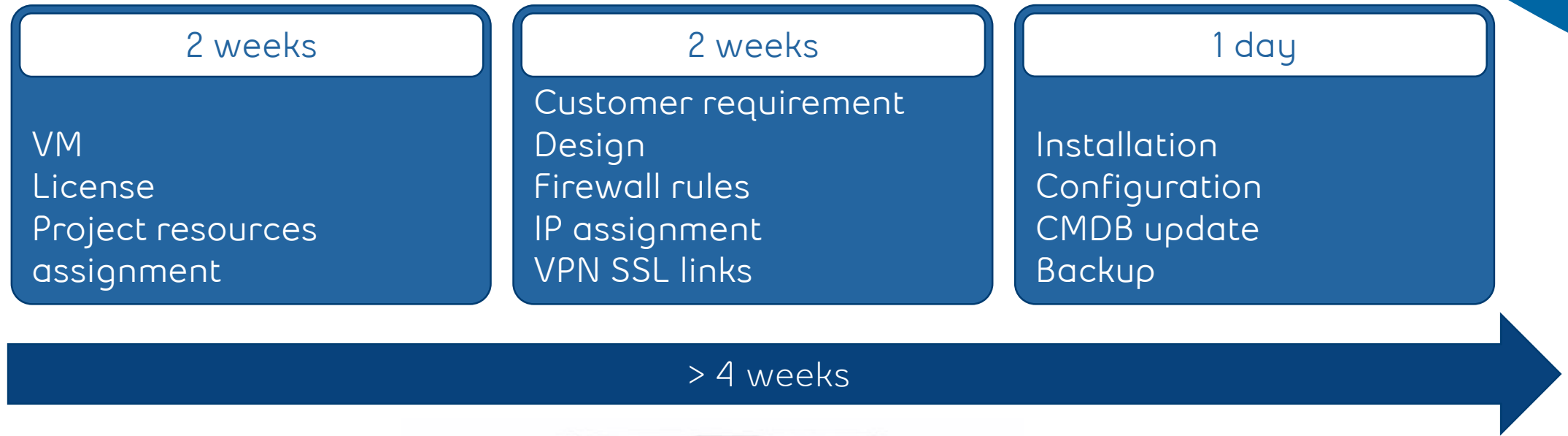
Bell Canada Best Network

Bell provides seamless customer experience anywhere at anytime

Legacy application use-case: Data Collector

2 weeks	2 weeks	1 day
VM License Project resources assignment	Customer requirement Design Firewall rules IP assignment VPN SSL links	Installation Configuration CMDB update Backup

> 4 weeks

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Legacy application use-case: Data Collector

Business drivers

- Faster service delivery

- Automated deployment

- Facilitate upgrade

- CI/CD adoption to maintain application version

- Decrease hardware footprint

- Decrease number of components to manage (VM/FW/patch)

- Increase ops efficiency (installation simplify, less documentation to maintain)

- Cut down client onboarding time (still in progress)

- Simplify tools MTTR and software update

- Simplify network client integration

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Legacy application use-case:
CA Technologies – Data Collector

Benefits

- Reduce management cost

- Reduce Infrastructure management (150 VM vs 4 Blade)

- Reduce deployment maintenance windows

- Reduce timeline delivery

- Provide better quality of services

- Reduce number of ops operation (150 VM vs Openshift Platform)

- Unified solution

- Reduce network client integration time and complexity

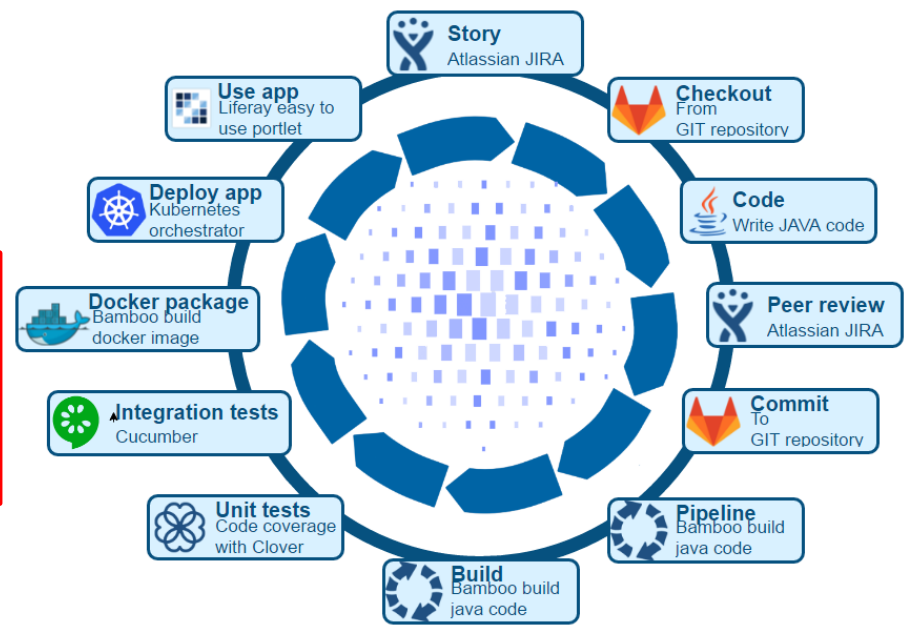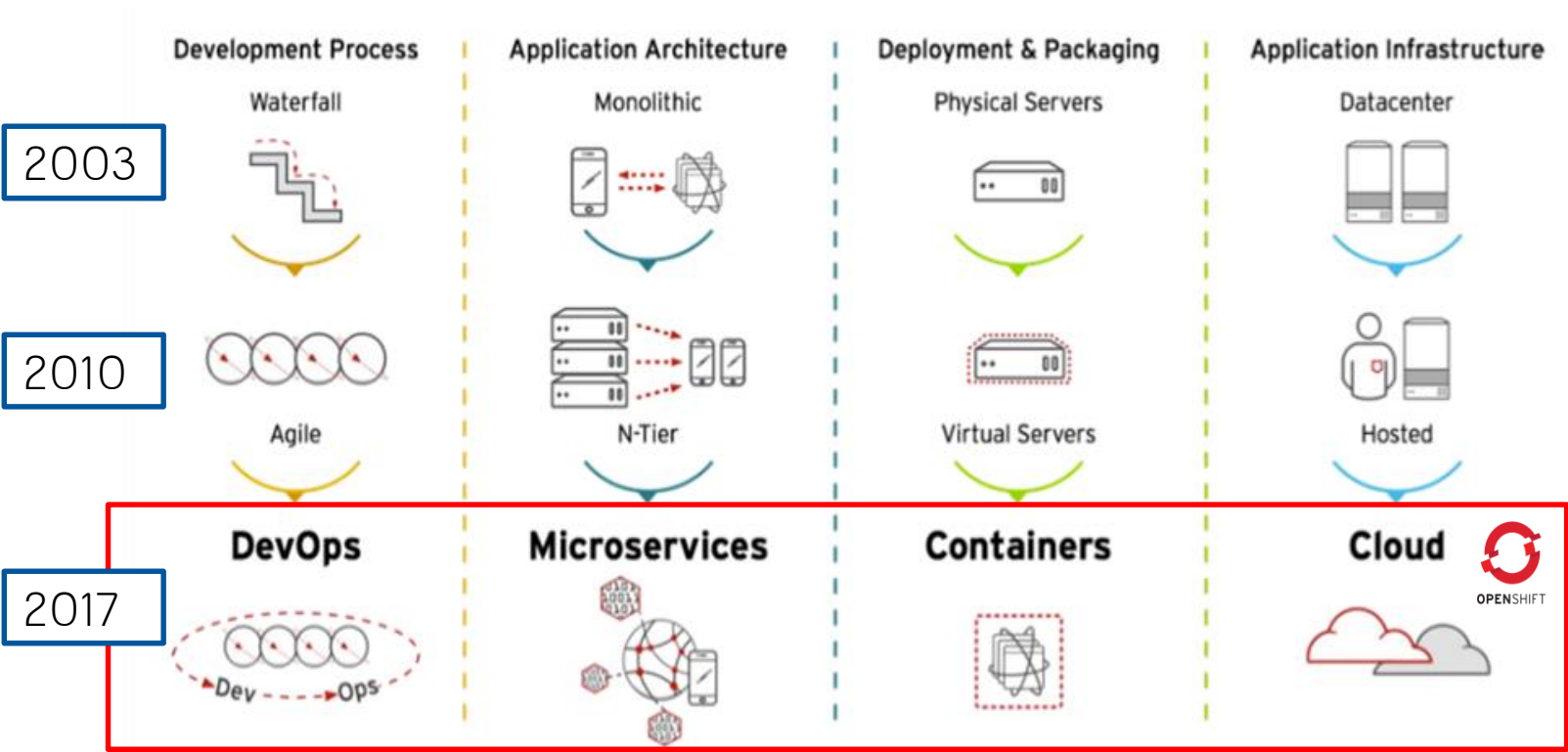- Reduce the number of tool version to support (easier upgrade)
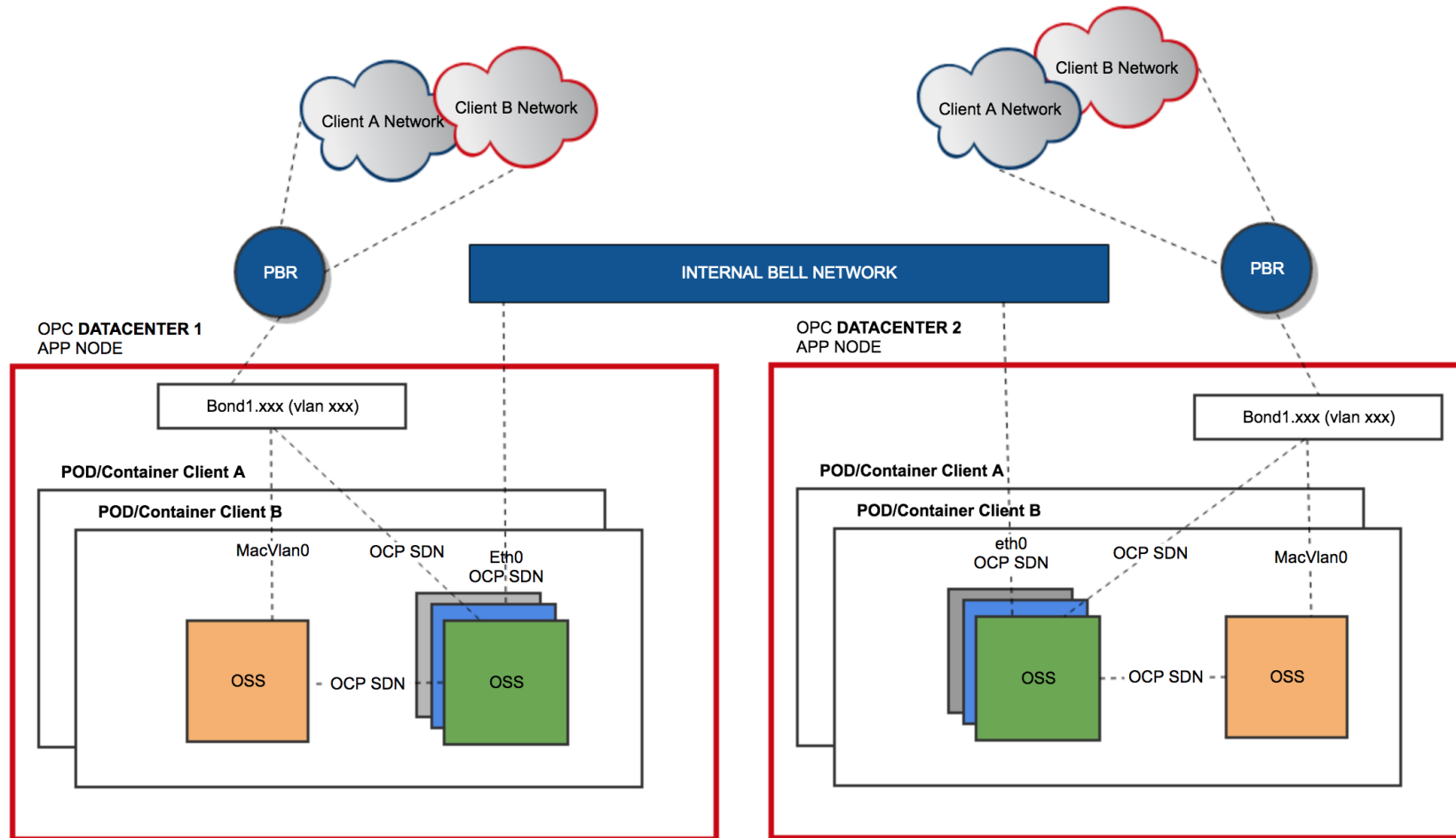
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OUR TARGET

Ordering

Processing

Deployment

Serve

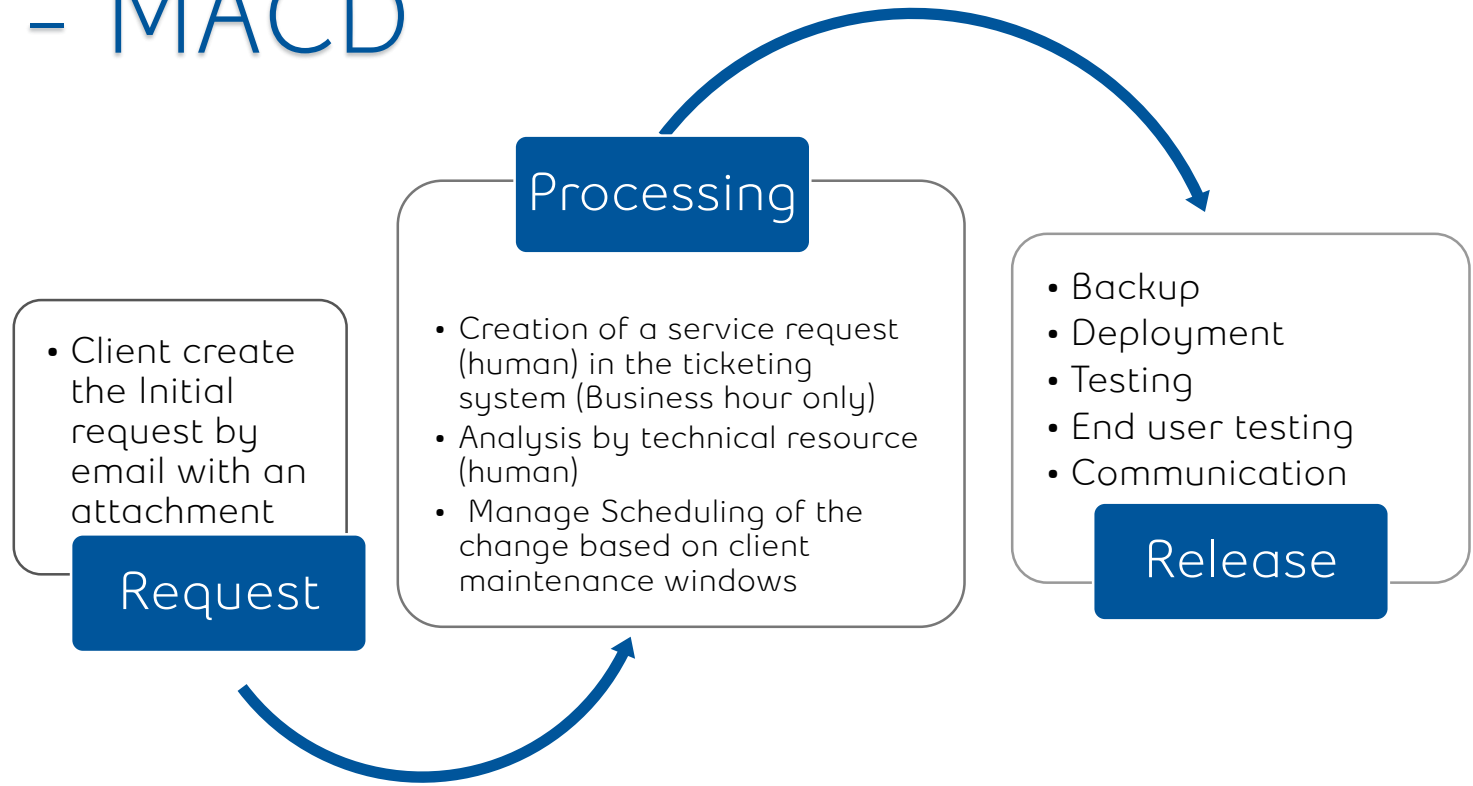**Bell**

LEGACY to MODERN

Network Architecture

Live demo #1

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LEGACY – MACD

Request

- Client create the Initial request by email with an attachment

Processing

- Creation of a service request (human) in the ticketing system (Business hour only)
- Analysis by technical resource (human)
- Manage Scheduling of the change based on client maintenance windows

Release

- Backup
- Deployment
- Testing
- End user testing
- Communication

TARGET– MACD

Client Request ▸ Automate & test configuration ▸ Automate Release

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BUSINESS DRIVER & BENEFIT

Driver :

➡ **Automate 3000** MACD (move, add, change, delete) Type 1 per year

Benefits

➡ **Time Saved:** 1h per MACD = 3000h

➡ **% Error:** unknown % need a complete year of data but expect to be lower

➡ **Decrease software License:** as an example HPNA

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Live demo #2

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A journey from Kubernetes to Openshift
Lesson learned

- Start your container image with the best practice (forget the dev setup)…this is not going to help you on the long run.
- Understand why there is security policies
- Understand the security policies & capabilities
- Start with the same production security policies in your dev environment
- Understand when, why and how to use service account
- Create template (Docker, with security compliant policy & Kubernetes)
- Dont relax security because of time constraint, it will bite you in the a… sooner than later

Ex: root vs non-root, change your app folder security for random uid, use entrypoint script for application that look up their own user ID.

https://docs.openshift.com/container-platform/3.9/creating_images/guidelines.html#openshift-container-platform-specific-guidelines

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For more information, visit http://bell.ca

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