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Best Practices for Model-Driven Approach to Application Release

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Overview

- The Evolution of Maturity
- Benefits
- Best Practices
- Getting Started

Maturity Level 1: Manual Approach

A person involved at every process stage

- Slower
- Human processes = Error-prone processes
- Inconsistent results
- Less visibility into what's really going on

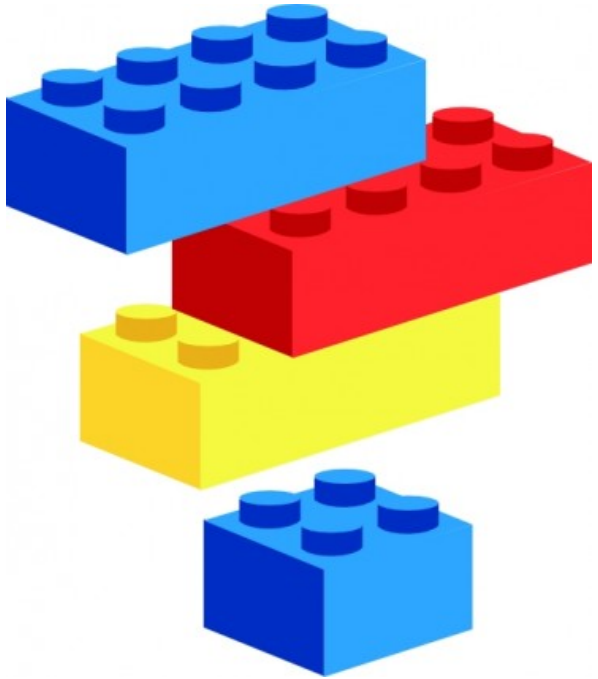
Maturity Level 2: Scripted Approach

- Difficult to maintain
- Brittle / Not flexible
- Not visual
- Not widely understood, documented, or transferred

Maturity Level 3: Model-Driven Approach

The next phase of the evolution:

- Model out pieces of release and process
- Hook up the models to build solution
- Add to or change out pieces as needed
- Reusable components
- Predictable outcomes

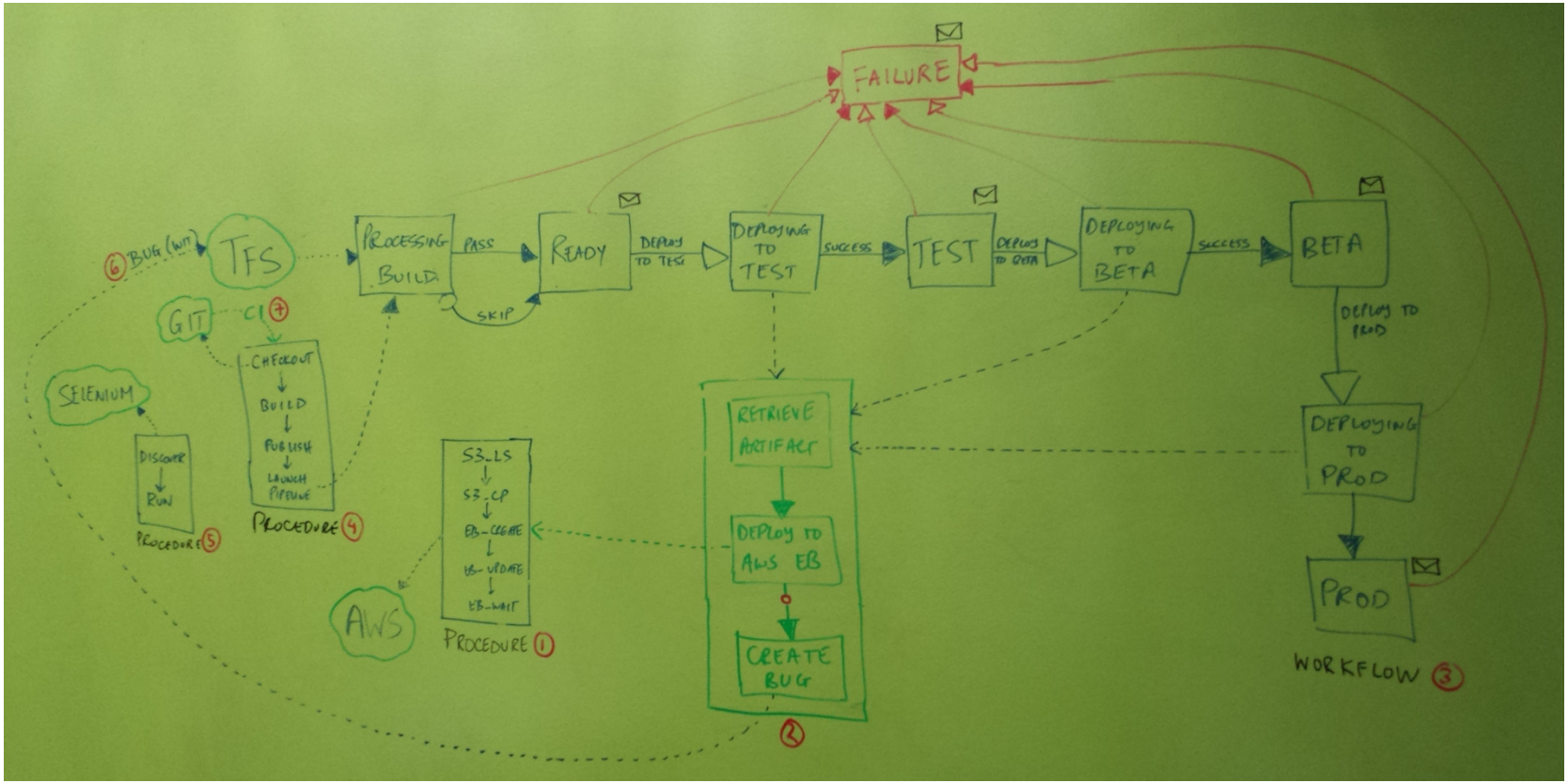


Benefits – The ‘-ilities’

Model-driven ARA benefits:

- Increased understanding
- Visibility
- Flexibility
- Consistency
- Quality
- Auditability
- Reusability
- Maintainability
- Reliability
- Simplicity
- Speed
- Control

Best Practices: Capture Existing Process



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Best Practices: Value Stream Mapping

Map your value stream and create models to visualize your process, achieve lean principles, enforce standardization (consistent quality), and control & improve the outcomes of your releases over time

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Best Practices: What to Model

What: The components that comprise your deployments

- **Applications**
- **Artifacts**
- **Dependencies**

Where: The environments to where you are deploying

- **On-Prem**
- **Virtual**
- **Cloud**
- **Containers**

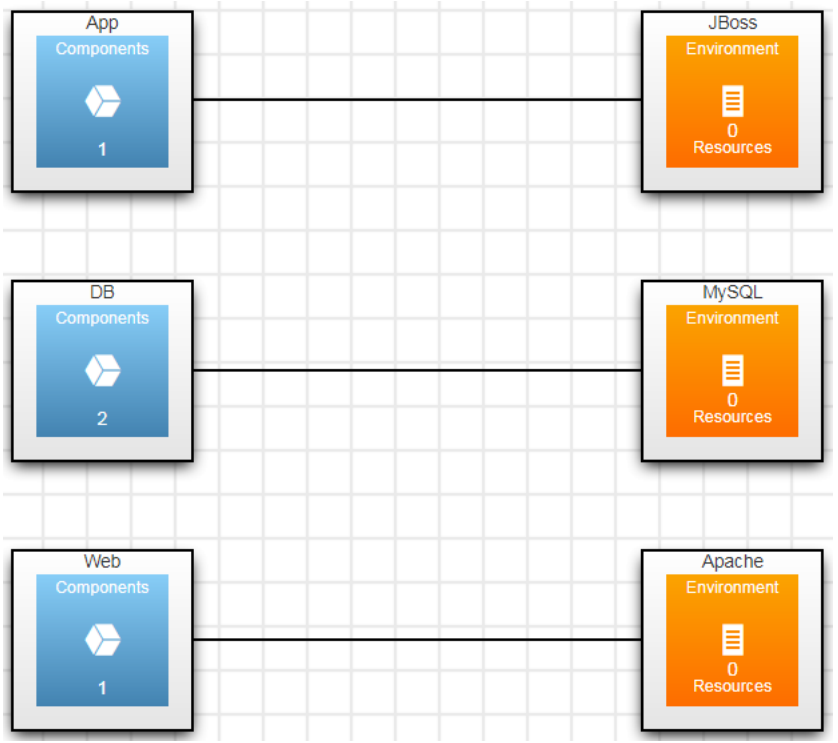
How: The process by which you deploy your components to environments, including gates, approvals, audit trail, etc.

- **Deployment processes**
- **Pipelines**
- **Releases**

Best Practices: How to Model

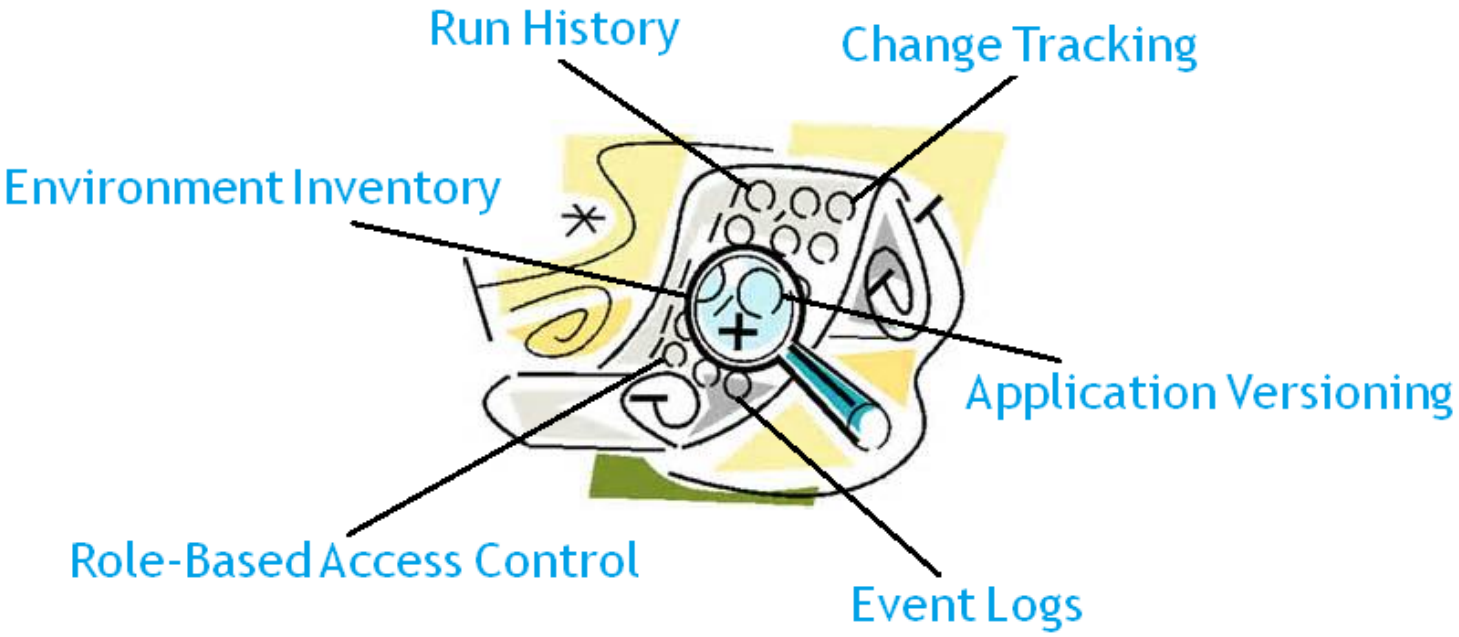
Modeling exists in many forms, from documents and spreadsheets to modeling tools, but are not practical because they are **not runnable**.

Application Release Automation (ARA) platforms are the best method for modeling the **What**, **Where**, and **How**, as well as incorporating the **Who** and **When**.



Best Practices: Bring in Compliance & Governance

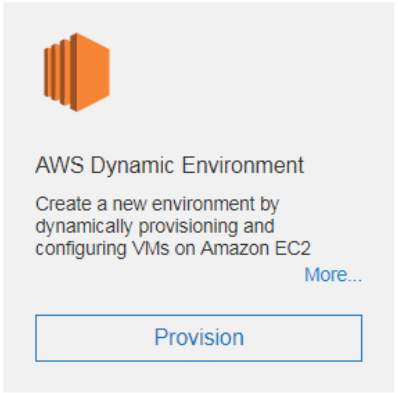
Use models to show intent. Run them to show built-in governance and audit trails.

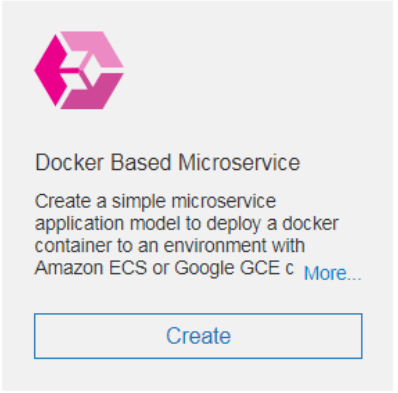


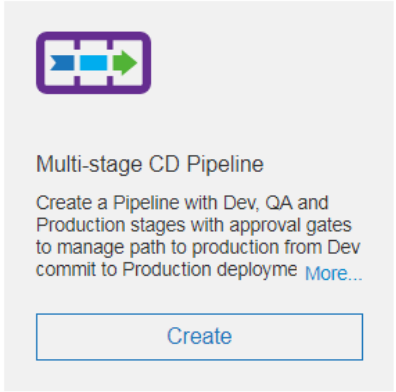
Best Practices: Build for Reusability

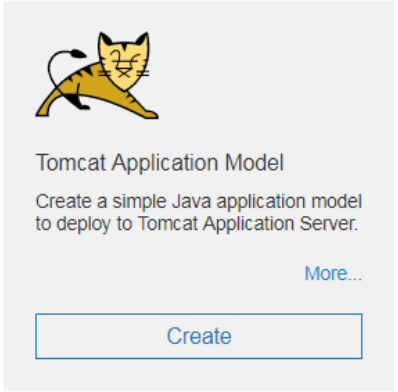
Model the components of your release process for maximum practical reusability

- Runtime Parameters
- Metadata References
- Component Templates
- Self-Service Catalog Items









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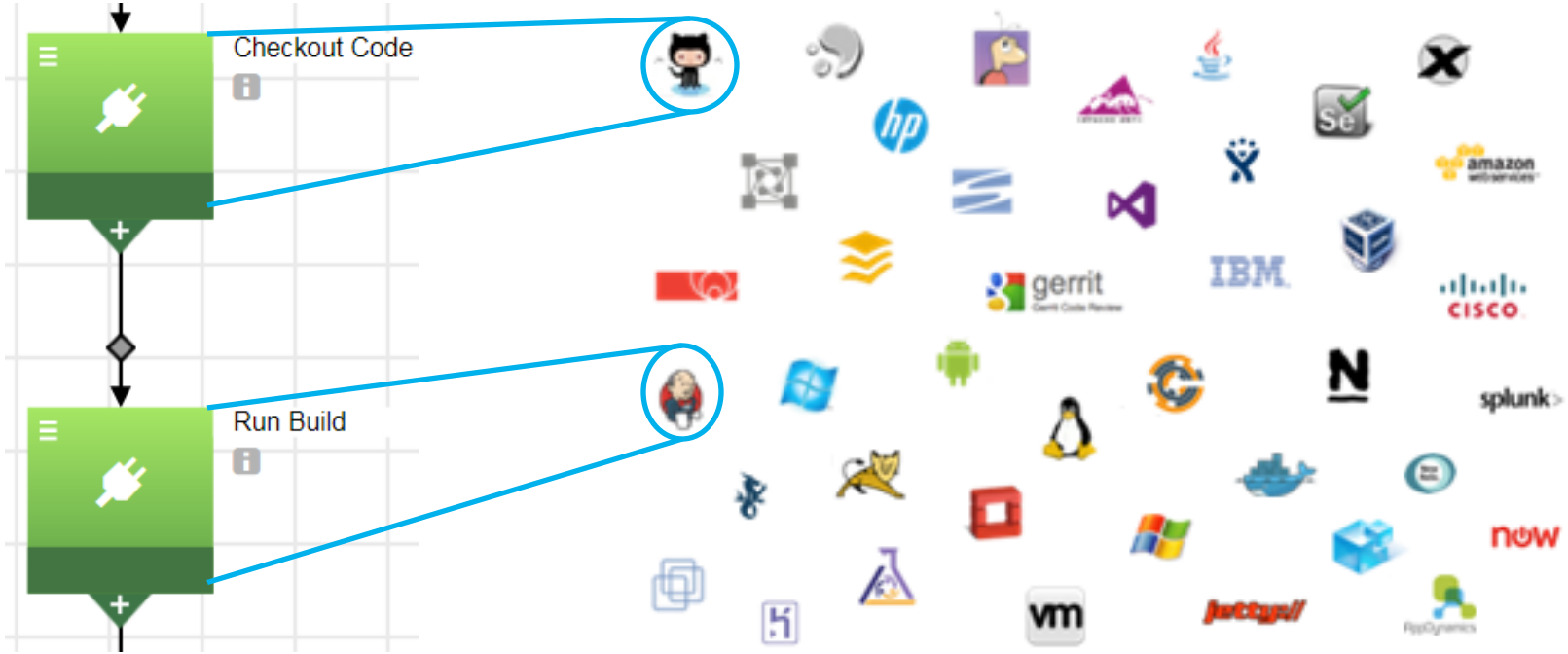
Best Practices: Using Existing Tools

Integrate and orchestrate existing tools into modeled approach



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Best Practices: Where to Start?

- Have a vision and set of goals first, instead of doing it just because others are doing it
- Begin with a real use case
  - Specifically, where the pain is greatest
  - Show value and expand
- Don’t underestimate the culture challenge

I want ‘Boring’!

A model-driven approach to application release automation translates to boring outcomes.

Boring outcomes translate to ability to focus on what matters…your business!


Thank You!