MATLAB EXPO

Simulink 모델 및 코드 검증을 위한 CI/CD (Continuous Integration / Continuous Delivery) 적용

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MathWorks

Benefits of Continuous Integration

Consistent, repeatable environment

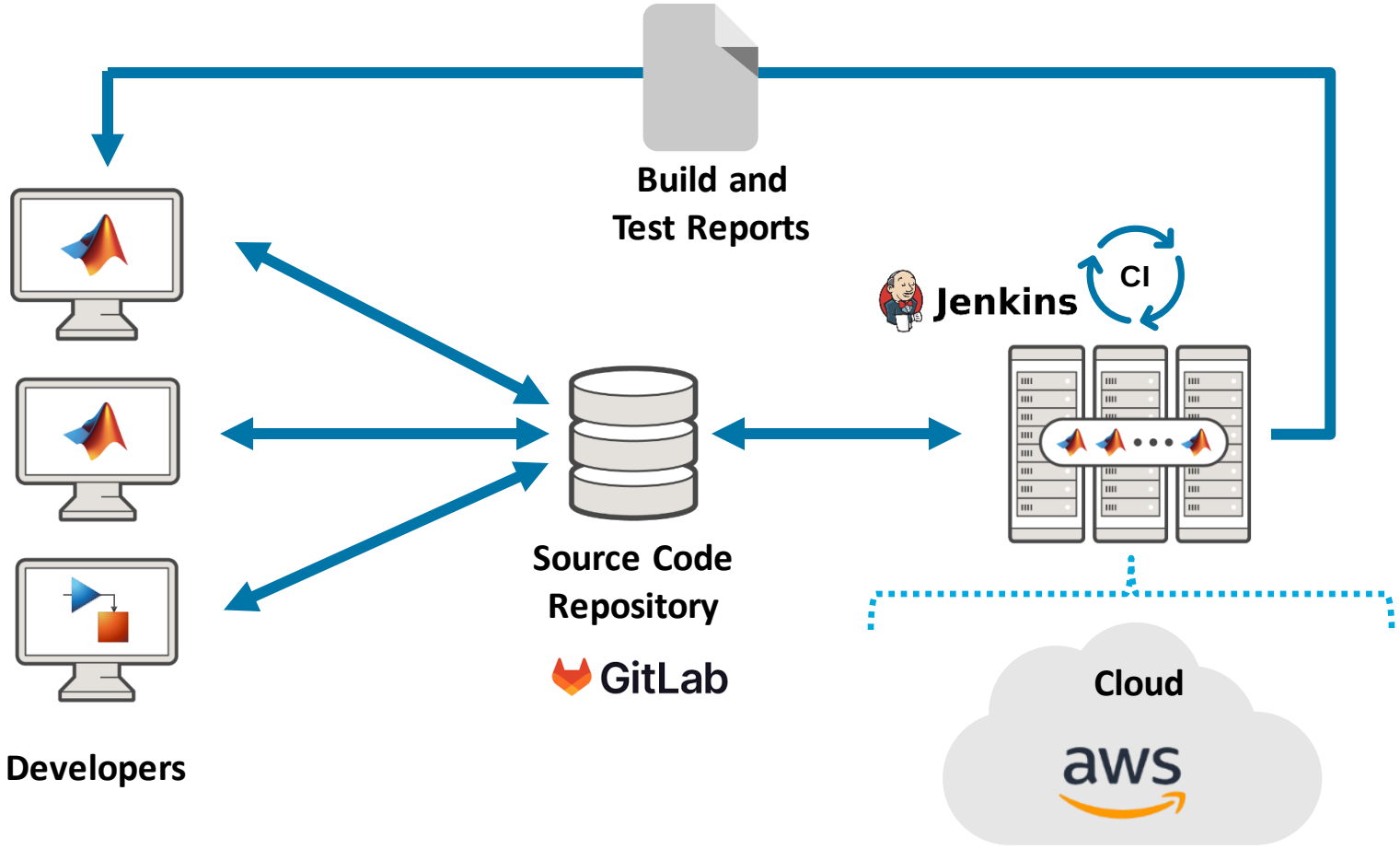
Automate Testing of the latest changes

Test early, test often

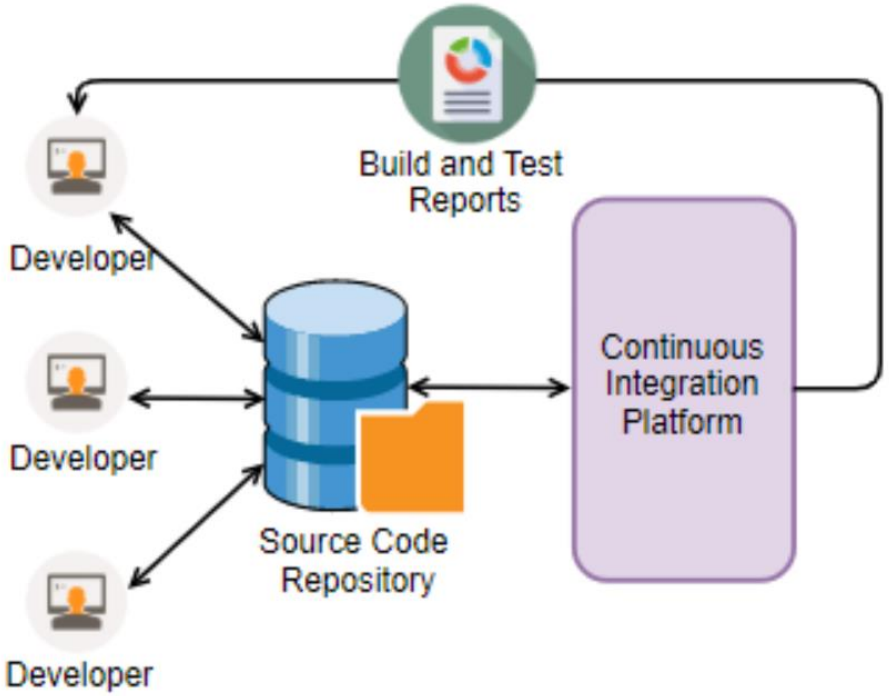
Identify integration issues quickly

Track and document changes

Overview of the demo on how to compose it (1)



Overview of the demo on how to compose it (2)



Phase 1: Develop and Qualify Feature in Local Repository

Create a Git feature branch → Make changes to the code → Commit the qualified changes

Phase 2: Run Automated Pipeline on Continuous Integration Platform

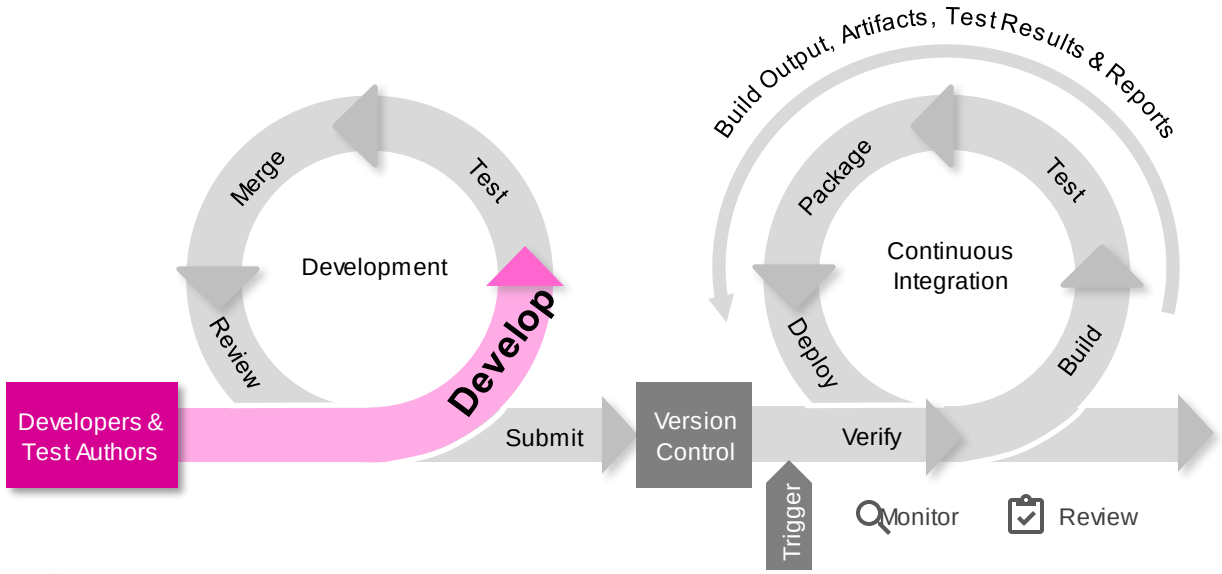
Push the committed changes to GitHub or make a pull request → Run the automated pipeline of tasks on the CI server

Phase 3: Investigate and Resolve Failures

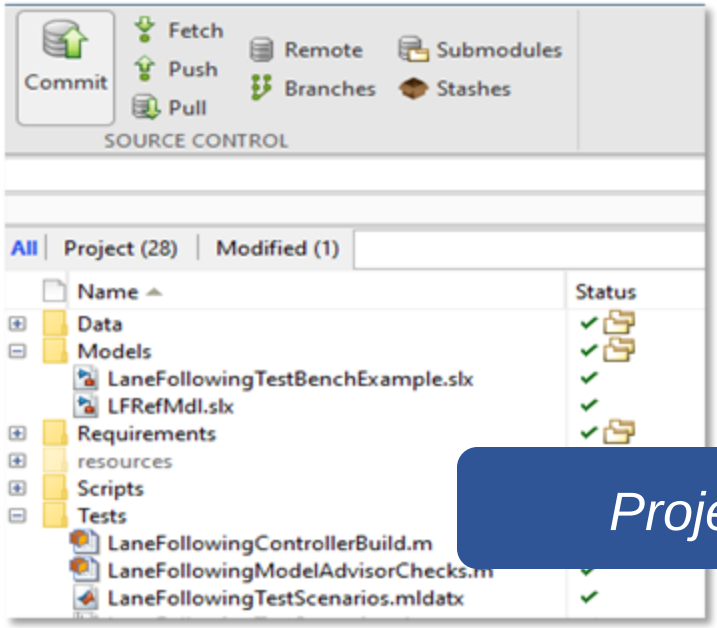
Inspect the test artifacts and resolve failures → Push the changes to GitHub or make a pull request (triggering a new pipeline)

https://www.mathworks.com/help/releases/R2024a/matlab/continuous-integration.html

Continuous Integration Workflow with Model-Based Design

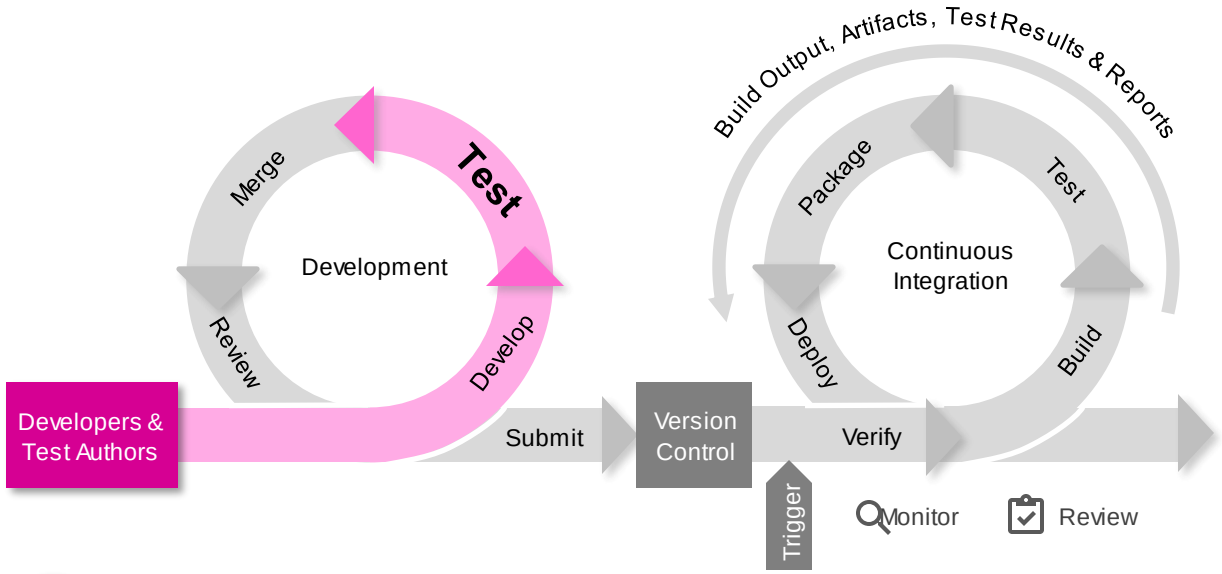


1 **Development**

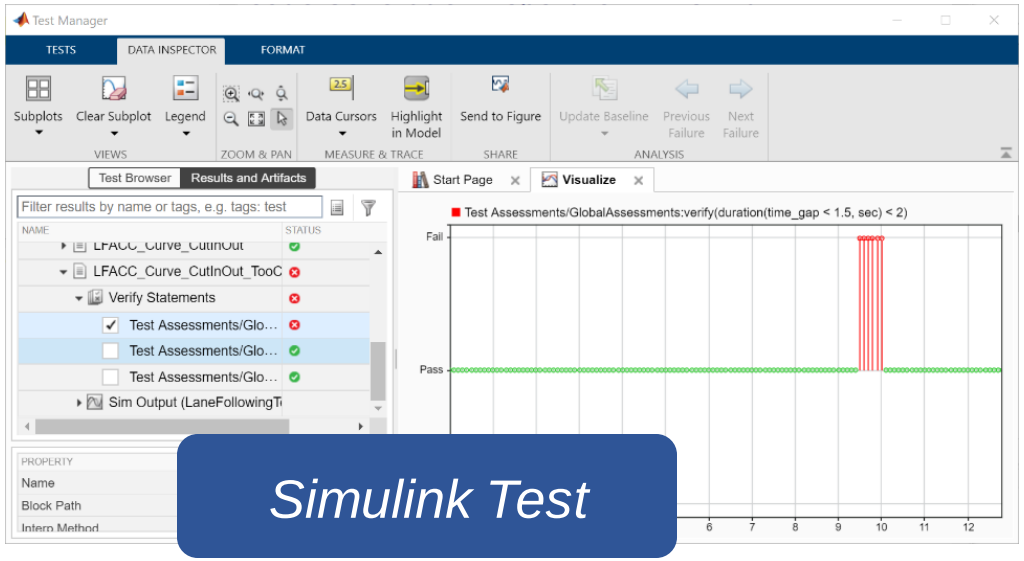


Projects

Continuous Integration Workflow with Model-Based Design

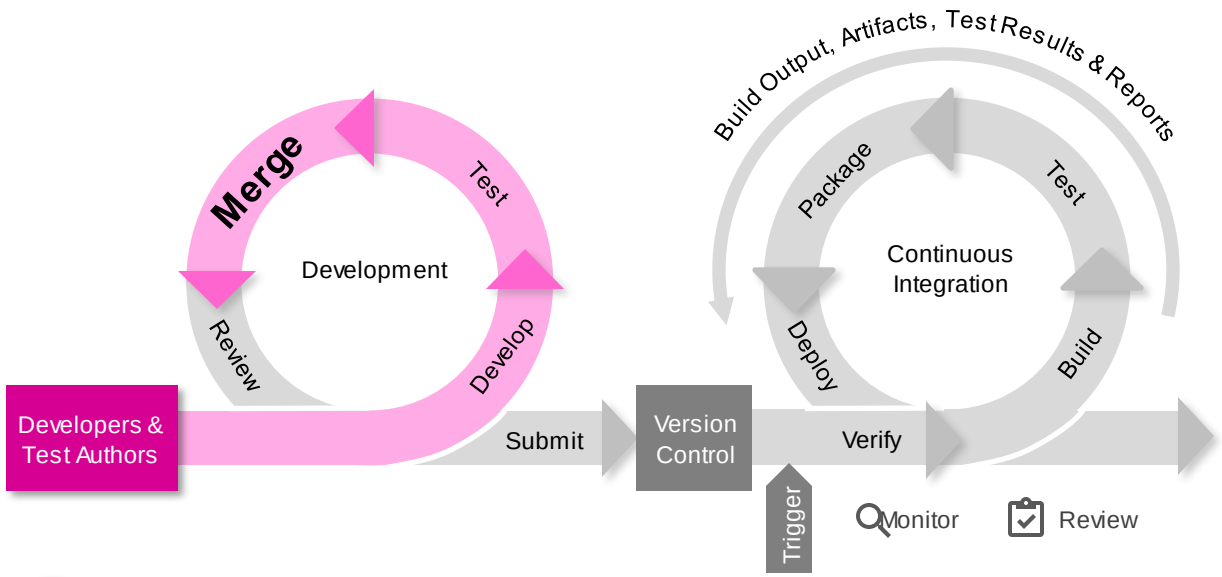


1 Development

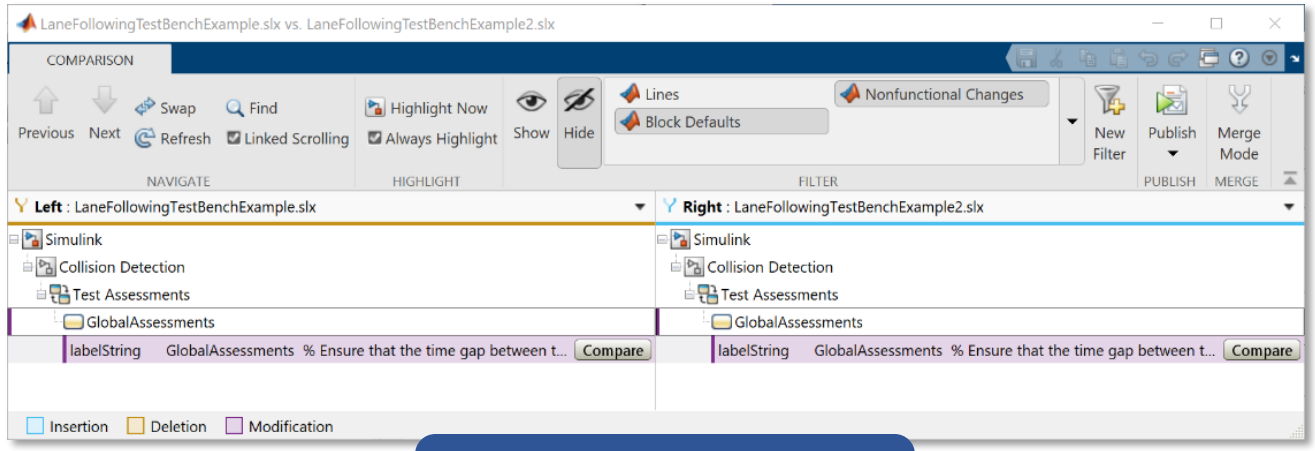


Simulink Test

Continuous Integration Workflow with Model-Based Design

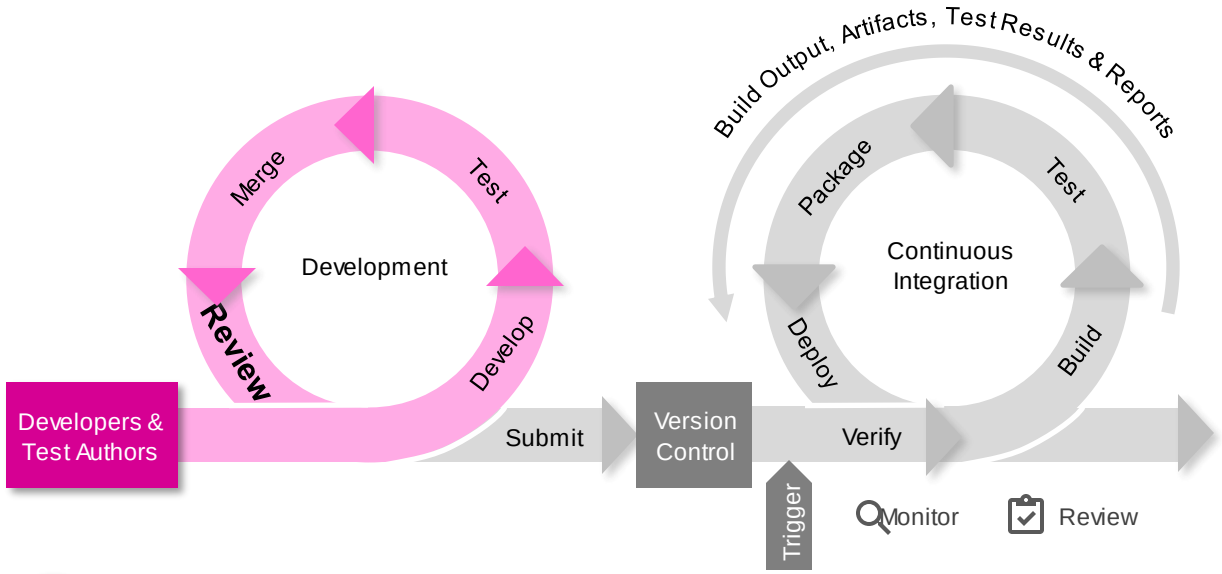


1 Development

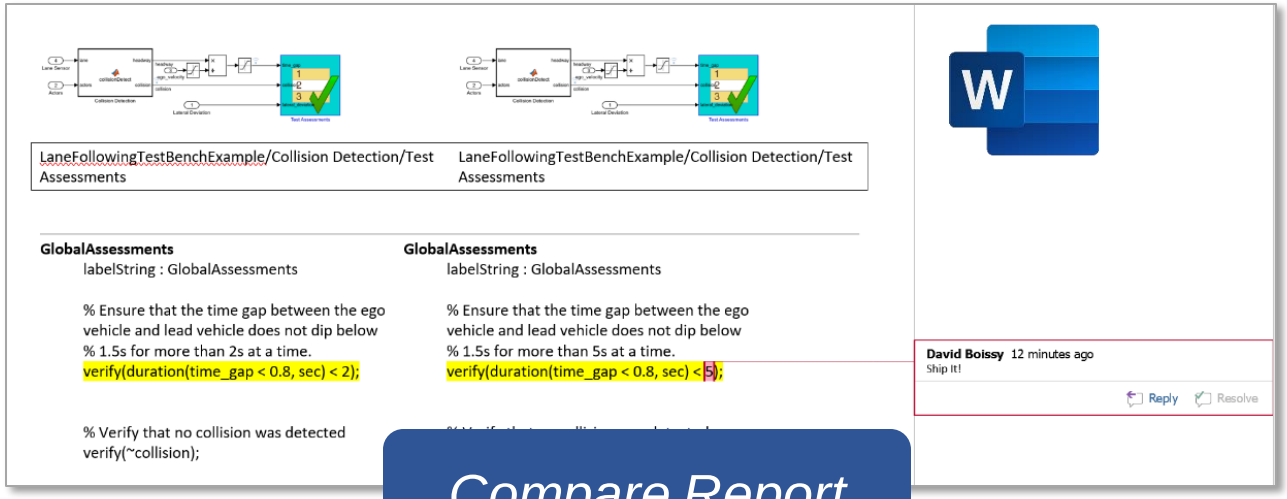


Model Compare

Continuous Integration Workflow with Model-Based Design

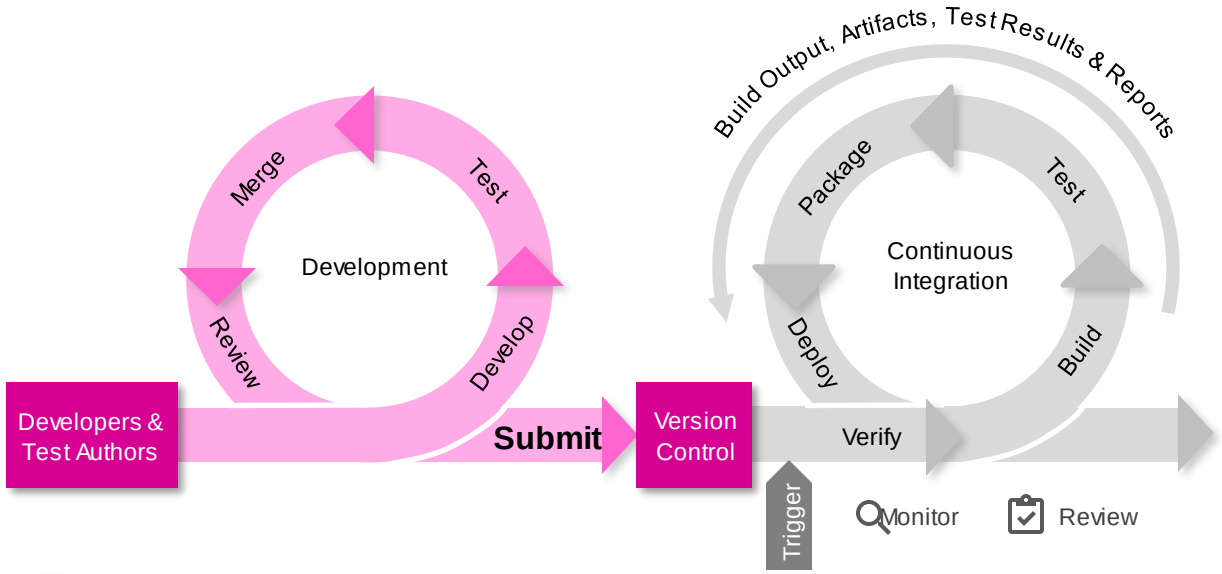


1 Development

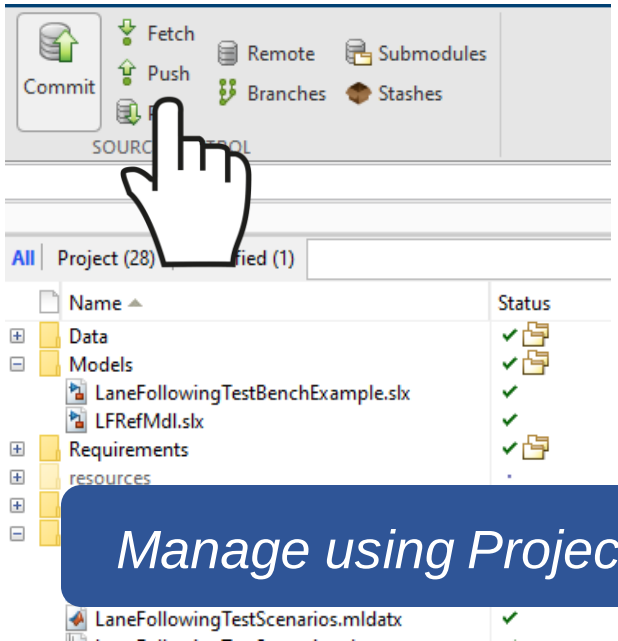


Compare Report

Continuous Integration Workflow with Model-Based Design

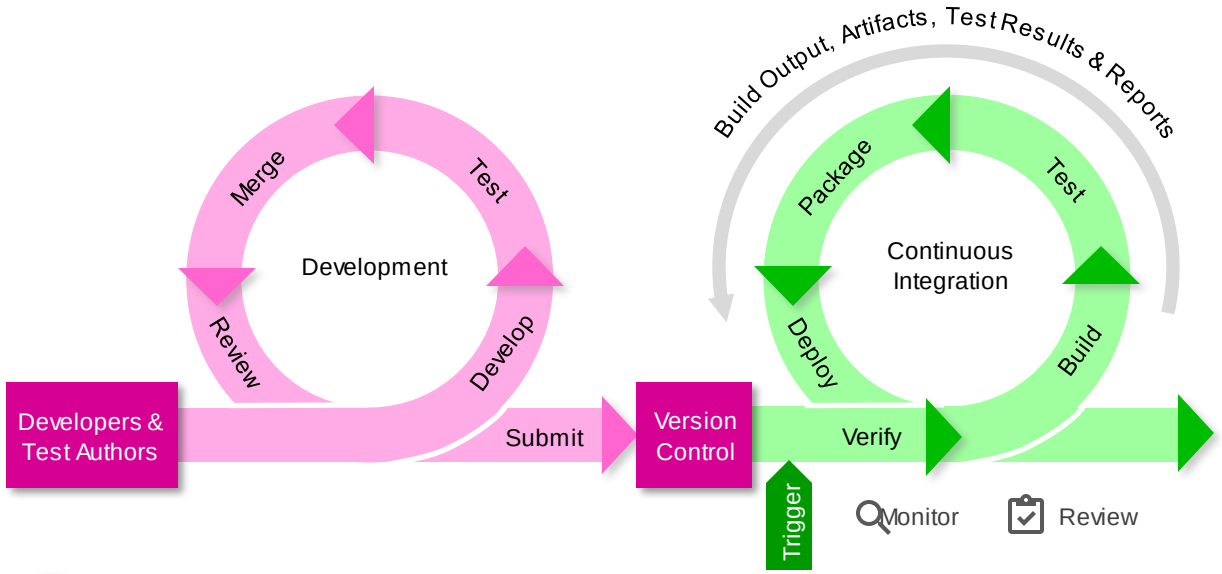


1 **Development**



Manage using Projects

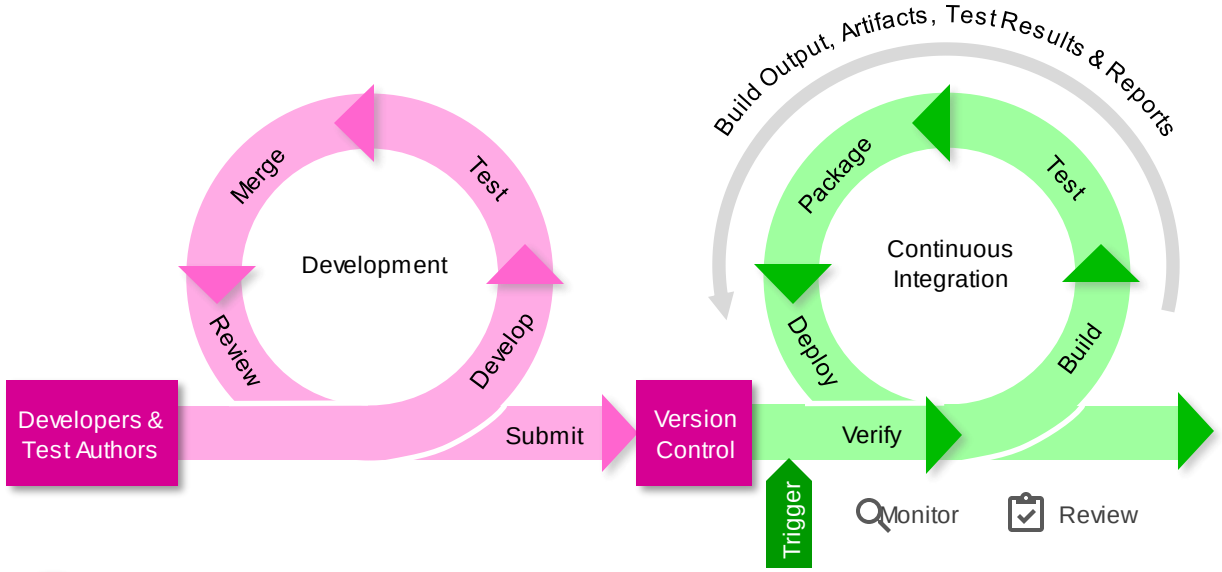
Continuous Integration Workflow with Model-Based Design



1 **Development**

2 **Continuous Integration**

Continuous Integration Workflow with Model-Based Design



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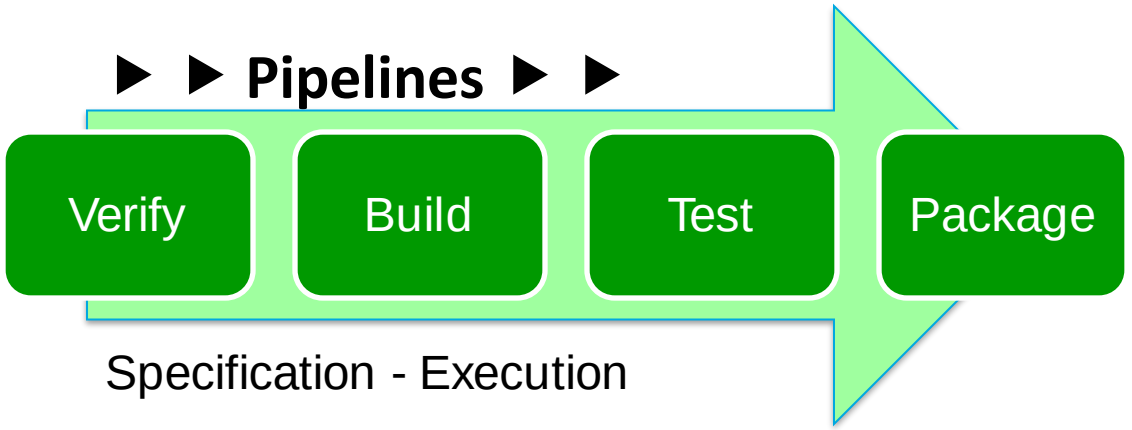
2 **Continuous Integration**



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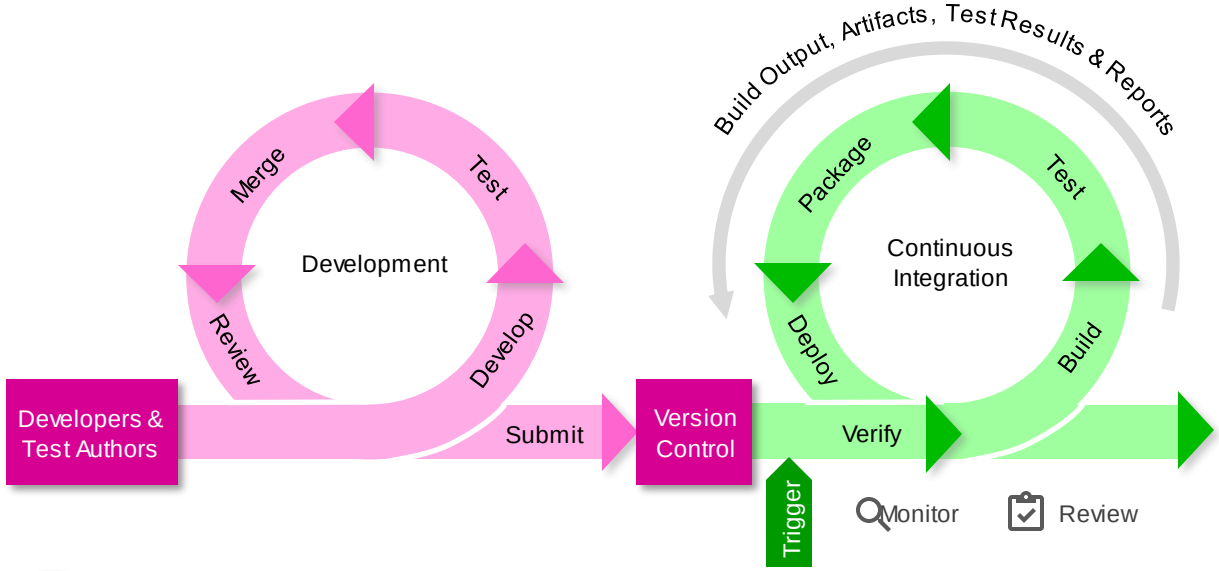

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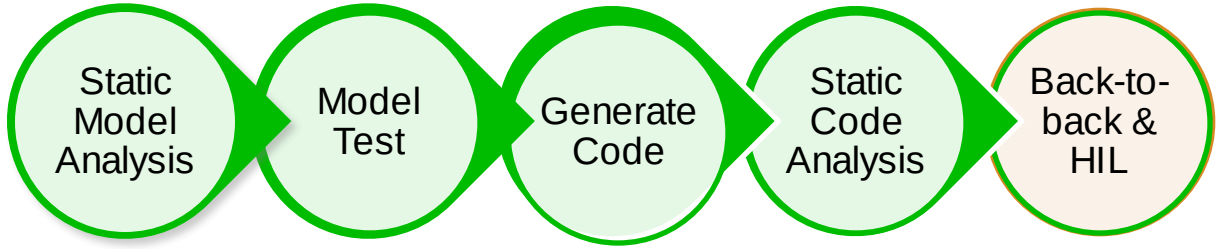
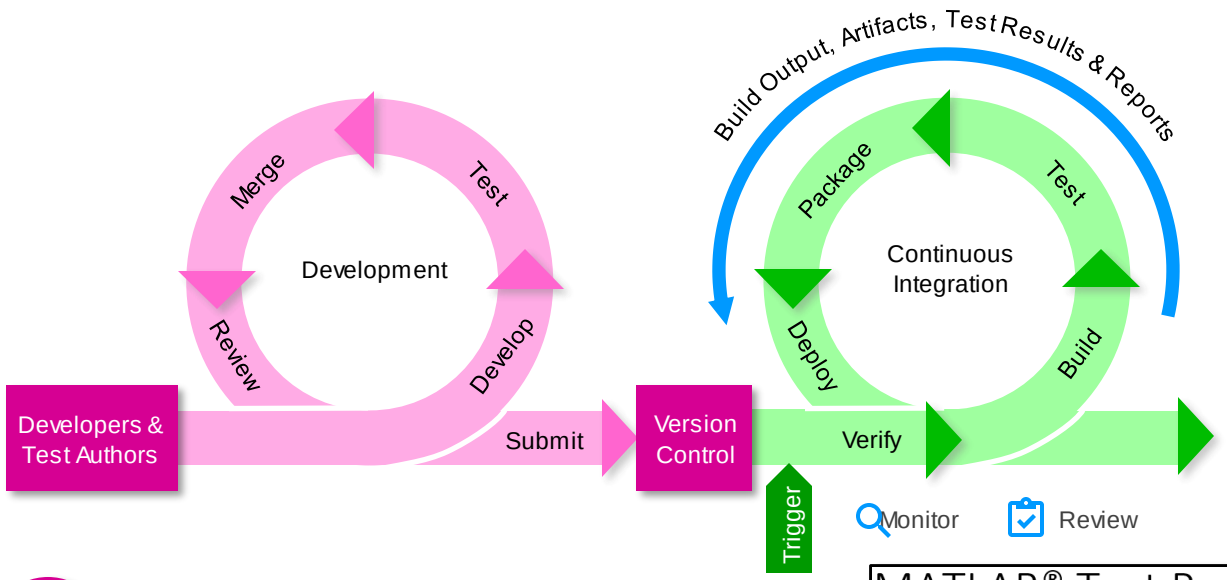


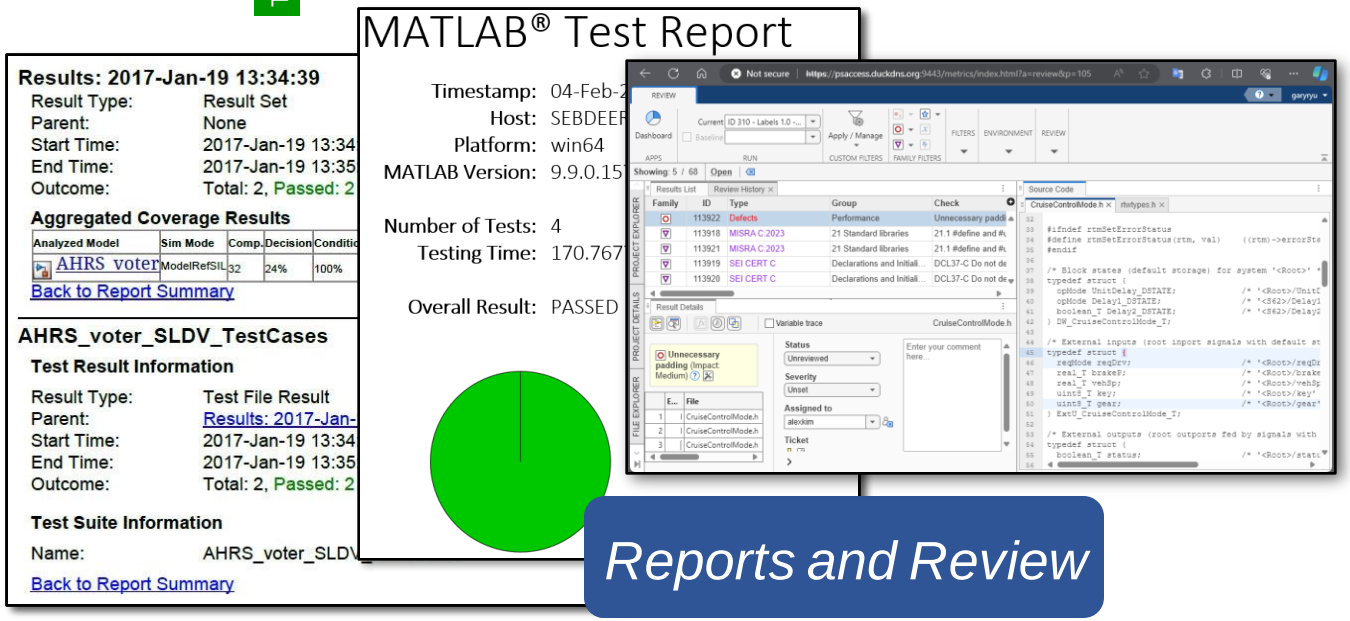
Reports, Build Logs, Test Results, Code Coverage

Verification, Build and Test

Continuous Integration Workflow with Model-Based Design

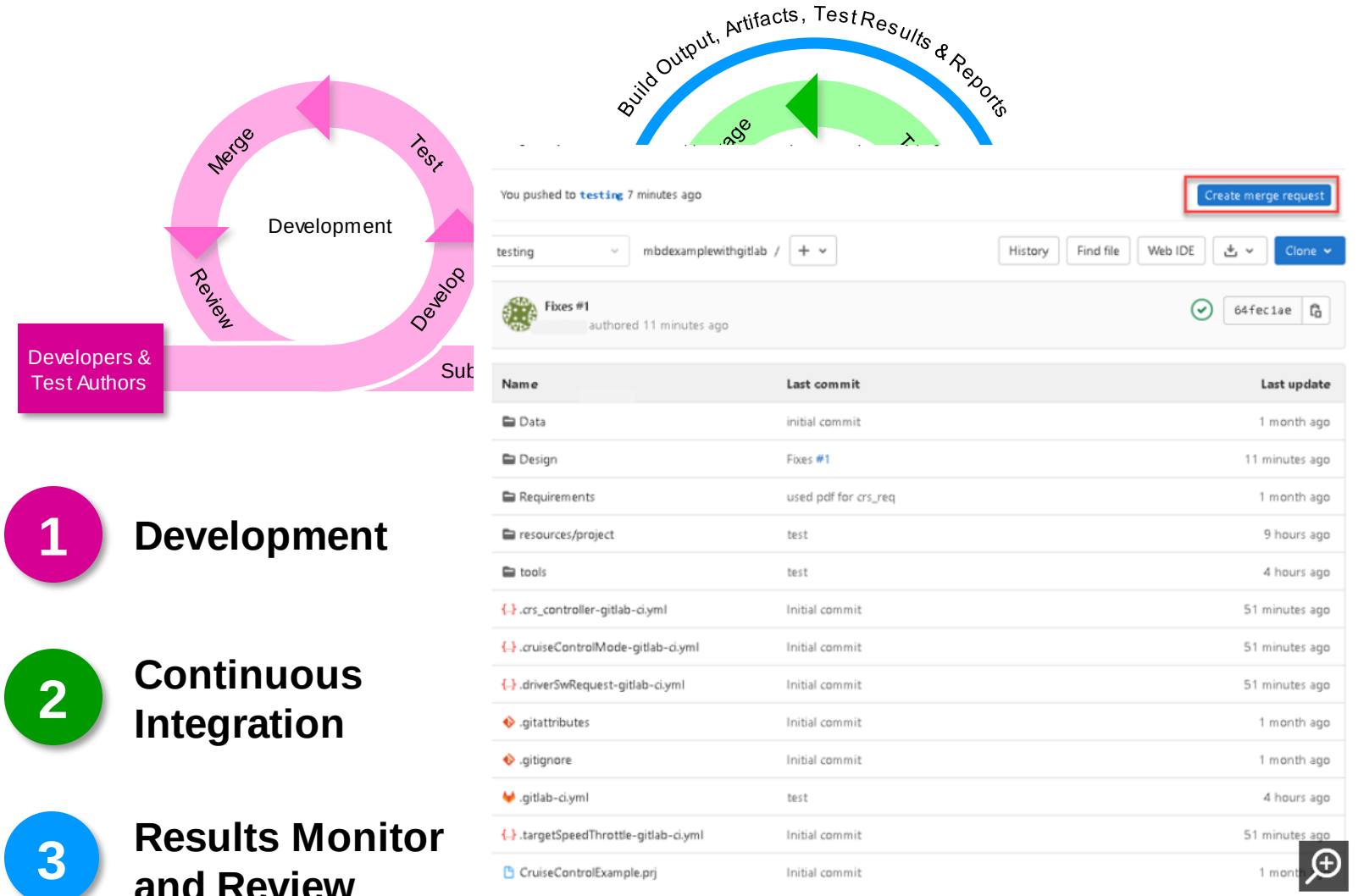


1. **Development**
2. **Continuous Integration**
3. **Results Monitor and Review**



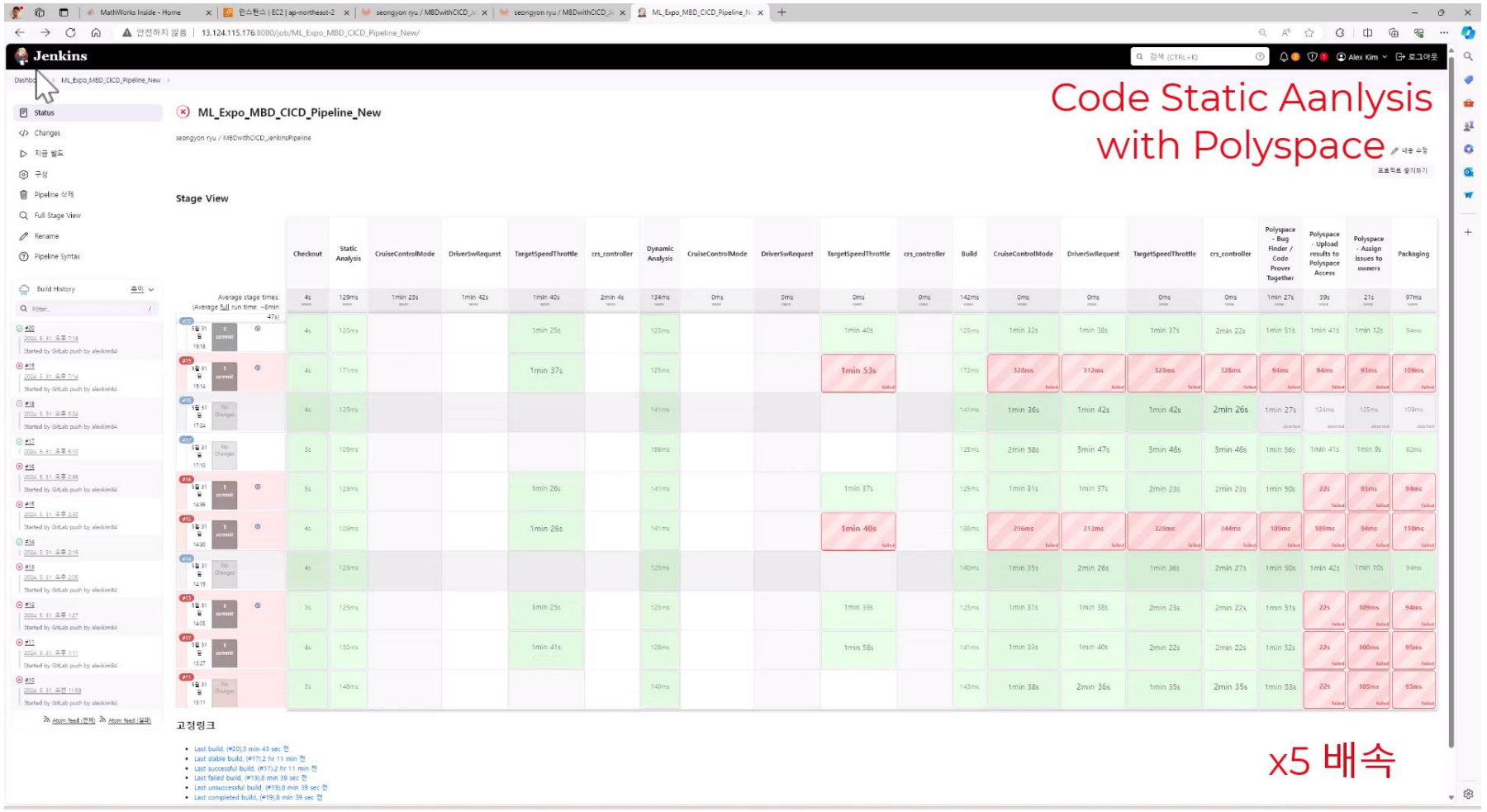
Reports and Review

Continuous Integration Workflow with Model-Based Design



1. **Development**
2. **Continuous Integration**
3. **Results Monitor and Review**
4. **Merge**

Demo: Continuous Integration Workflow with Model-Based Design



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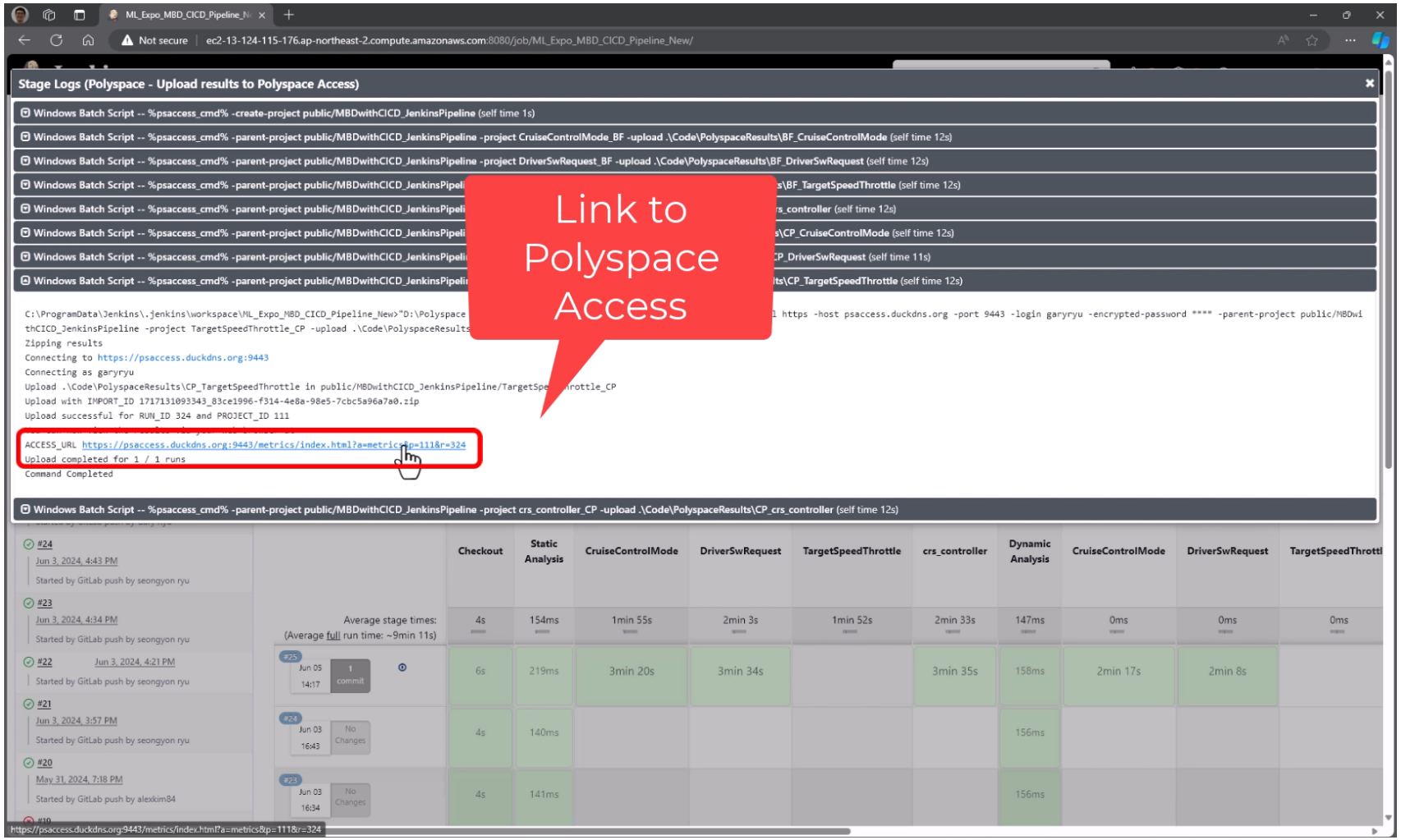

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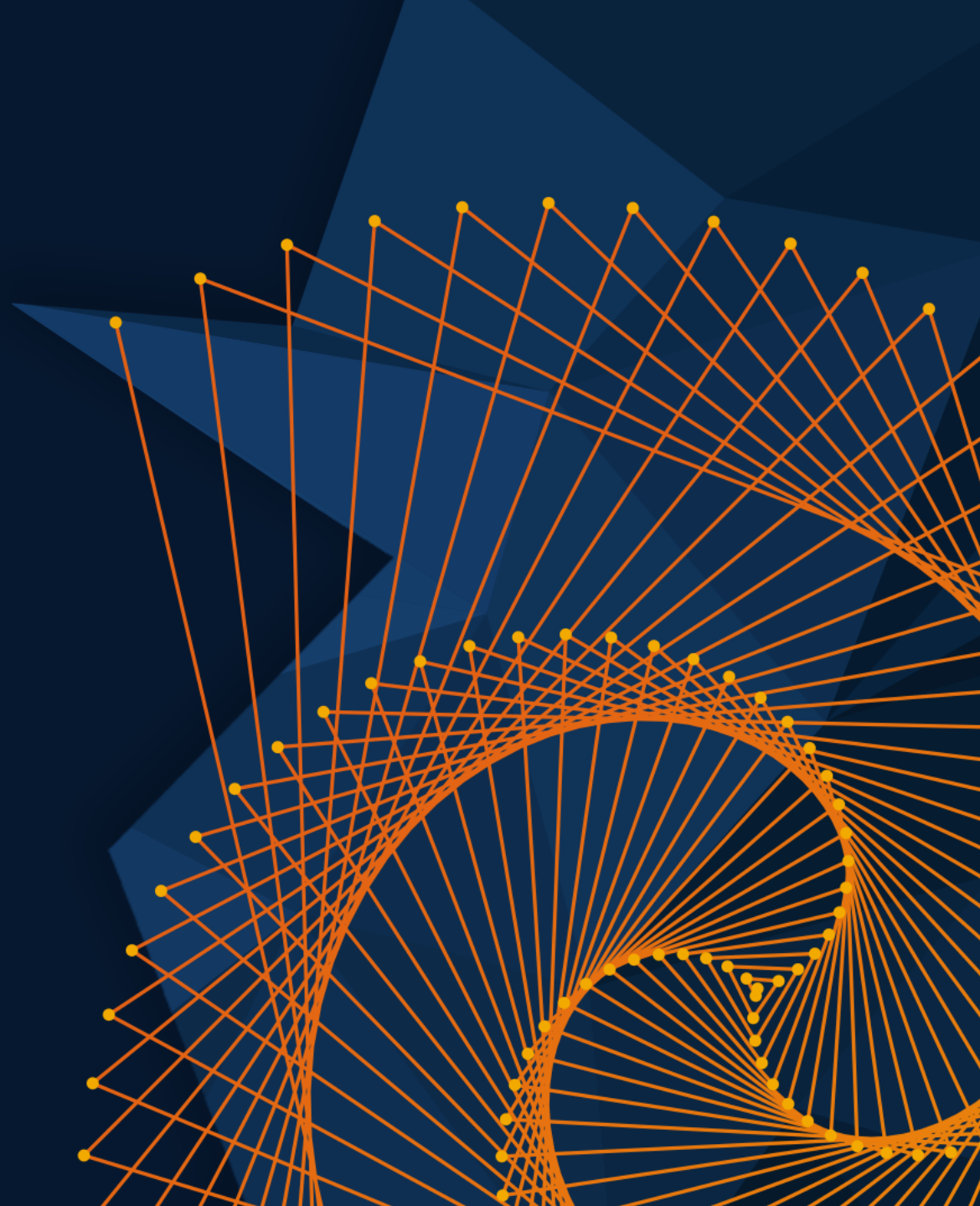

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