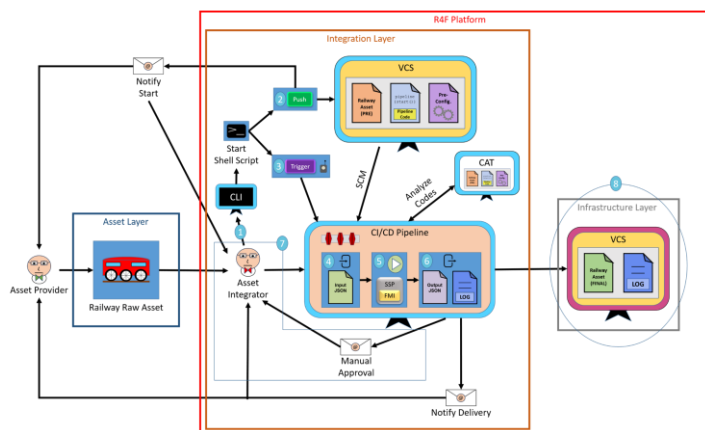
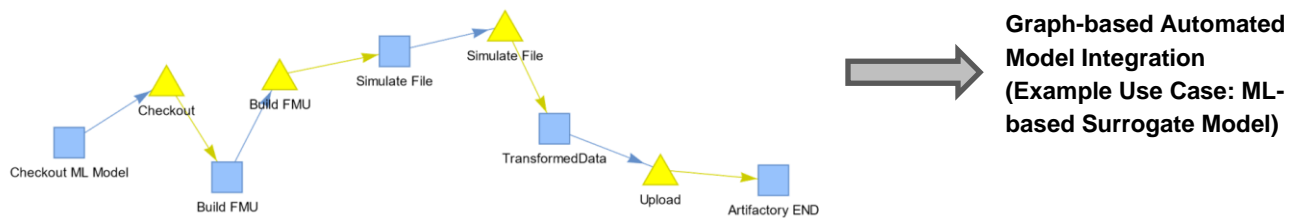




Rail4Future

Projekttitel:	Resilient Digital Railway Systems to enhance performance
Projektnummer:	882504
Deliverable:	Deliverable 1.3.6 Report – Automated Model Integration

In this deliverable, we show and describe how we designed and developed the methodology to automate and manage the entire asset integration and processing, based on different interface standards (e.g., FMI, SysML), by using different key technologies such as graph DB, CI/CD pipeline, artifactory repository management, VCS, CAT and CLI. This is enormously important to gain insights about automation techniques helping to reduce time effort and resource consumption. The assets (model + data) of different railway use cases, which are successfully implemented into the R4F Platform (see Deliverable D1.1.5 and D1.3.5), are automatically built, tested and then deployed to visualization in the platform for the Rail4Future project.



Mainly followed processes:

1. Start the Shell Script,
2. Push Pre-Assets and Notification
3. Remotely Trigger Pipeline
4. Provide Input for Simulation
5. Start the FMI-based SSP Simulation
6. Generate Results
7. Manually Approve the Deployment
8. Deliver Asset

Automation and Management of the Asset Integration and Processing

Figure: Automated model integration approaches followed for the Rail4Future project.