



AGCO CI DevOps Journey





AGCO

Who We Are

My Group and Responsibilities
Electronic Functional Group(EFG)

Business Drivers

Current Setup

Concerns Anticipated

Pilot Site Build Migrations

Still To Do



WHO WE ARE AGCO

AGCO is a global leader that is focused on the design, manufacture, and distribution of agricultural machinery.

As a company, we support increasing the efficiency of farming through a full line of tractors, combines, hay balers, sprayers, forage equipment, tillage, implements, grain storage, and protein production systems.

Our products are available in over 140 countries worldwide and are led by 5 core global brands

Challenger

FENDT



VALTRA



AGCO

Technology In Our

Vehicles



Electronic Functional Group(EFG) My Group

The EFG strives to organize global Electronic Engineering and Software development across all brands and sites. The main goal is to establish and maintain a suite of global technology platforms to reduce redundant work and leverage scale effects

Encompasses entire software development lifecycle

- Engineering Application Management Team
 - Responsible for managing technology that lets our engineers produce quality software
 - Develop custom enhancements for stock applications to meet the requirements of our engineering teams
 - Work towards establishing a common process/best practices for all teams

Essentially, tries to get everyone to follow best practices, first by establishing what those best practices are, then enforcing those practices.



Business Drivers

What we needed and why

- Common DevOps environment that can be centrally managed
- Common methods of quality feedback
- Visibility
- Productivity



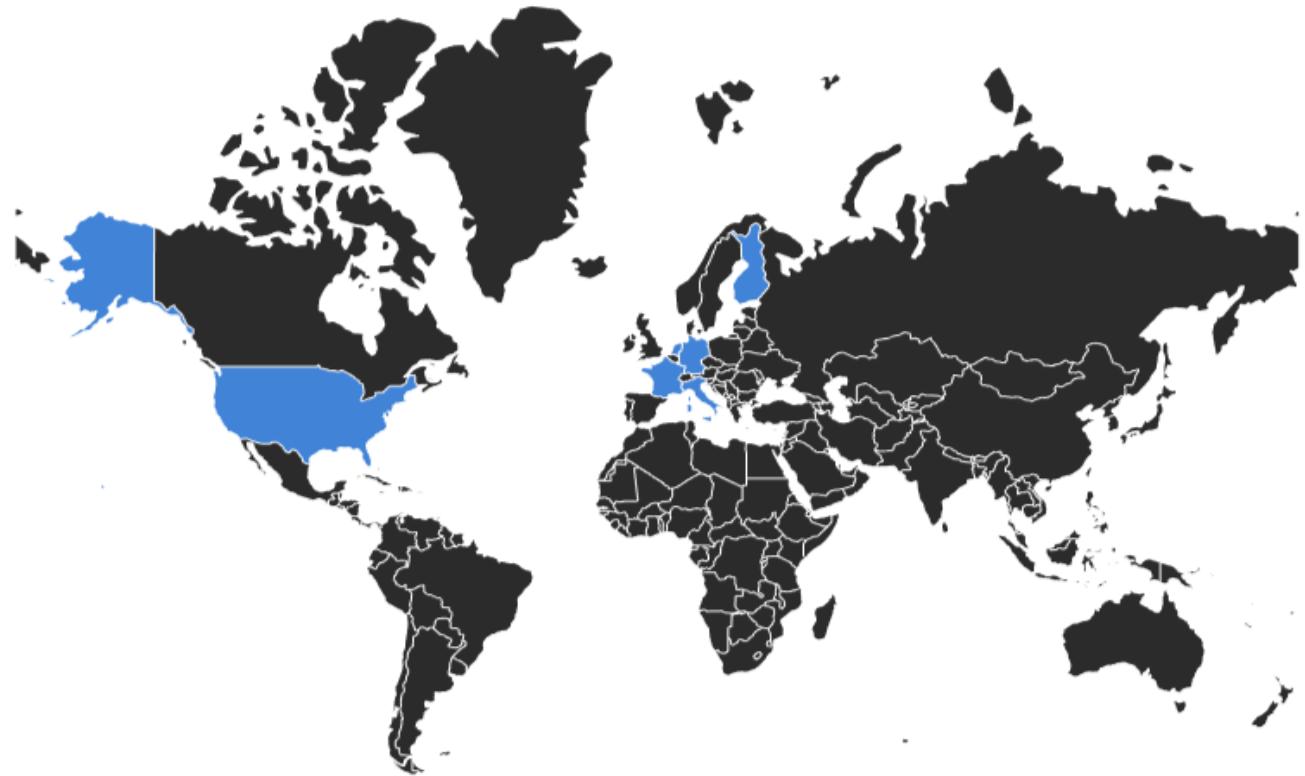
Current Setup

SW Development Sites

- Marktoberdorf , Germany
- Beauvais, France
- Suolahti, Finland
- Linnavuori, Finland
- Grubbenvorst, Netherlands
- Breganze, Italy
- Jackson MN, US
- Hesston KS, US

Processes in Place

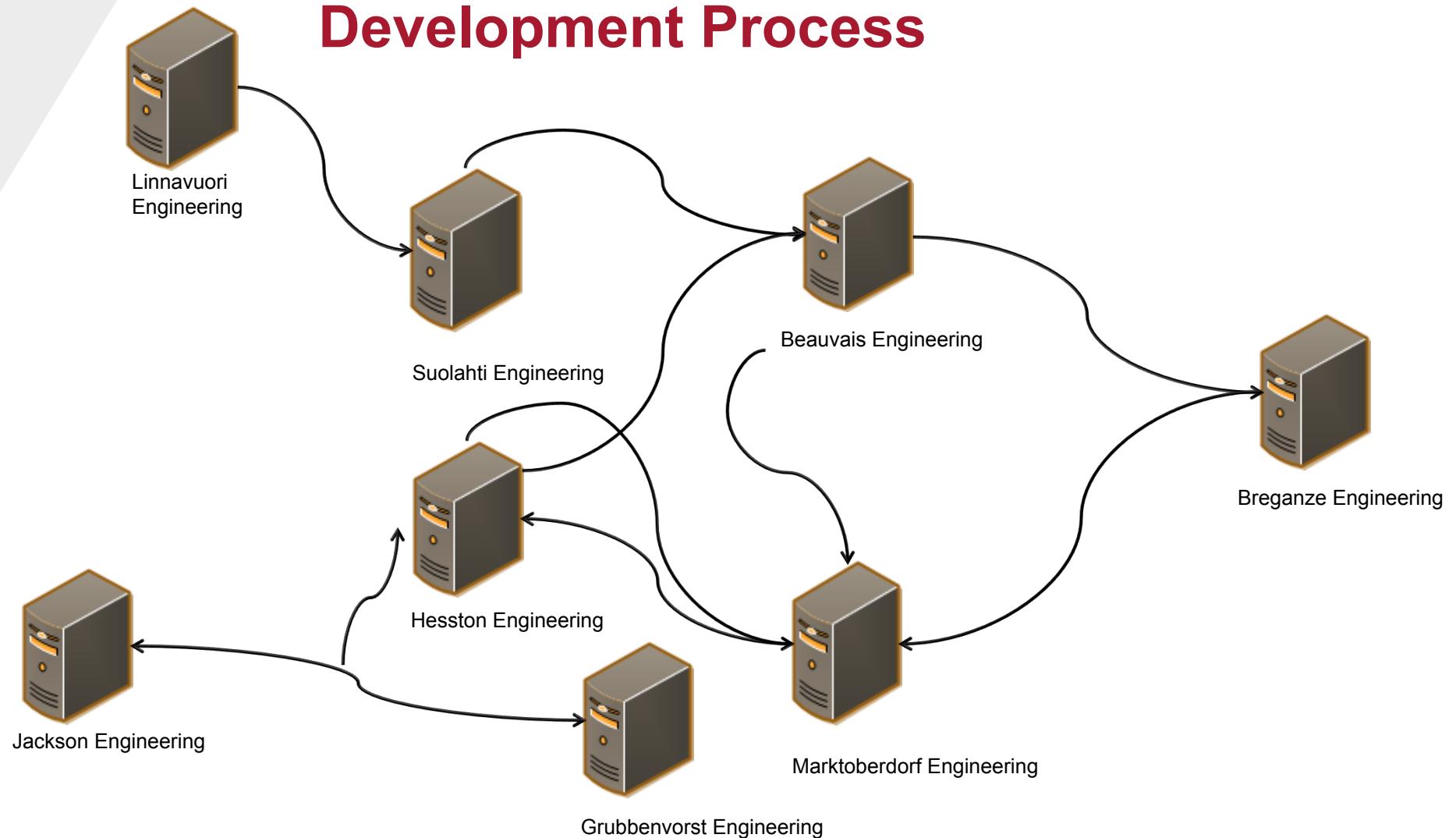
- ECU and component builds consist of various Windows batch files, Make files, python scripts
- Share builds with dependent systems via email



In general, teams rely on sharing builds via email

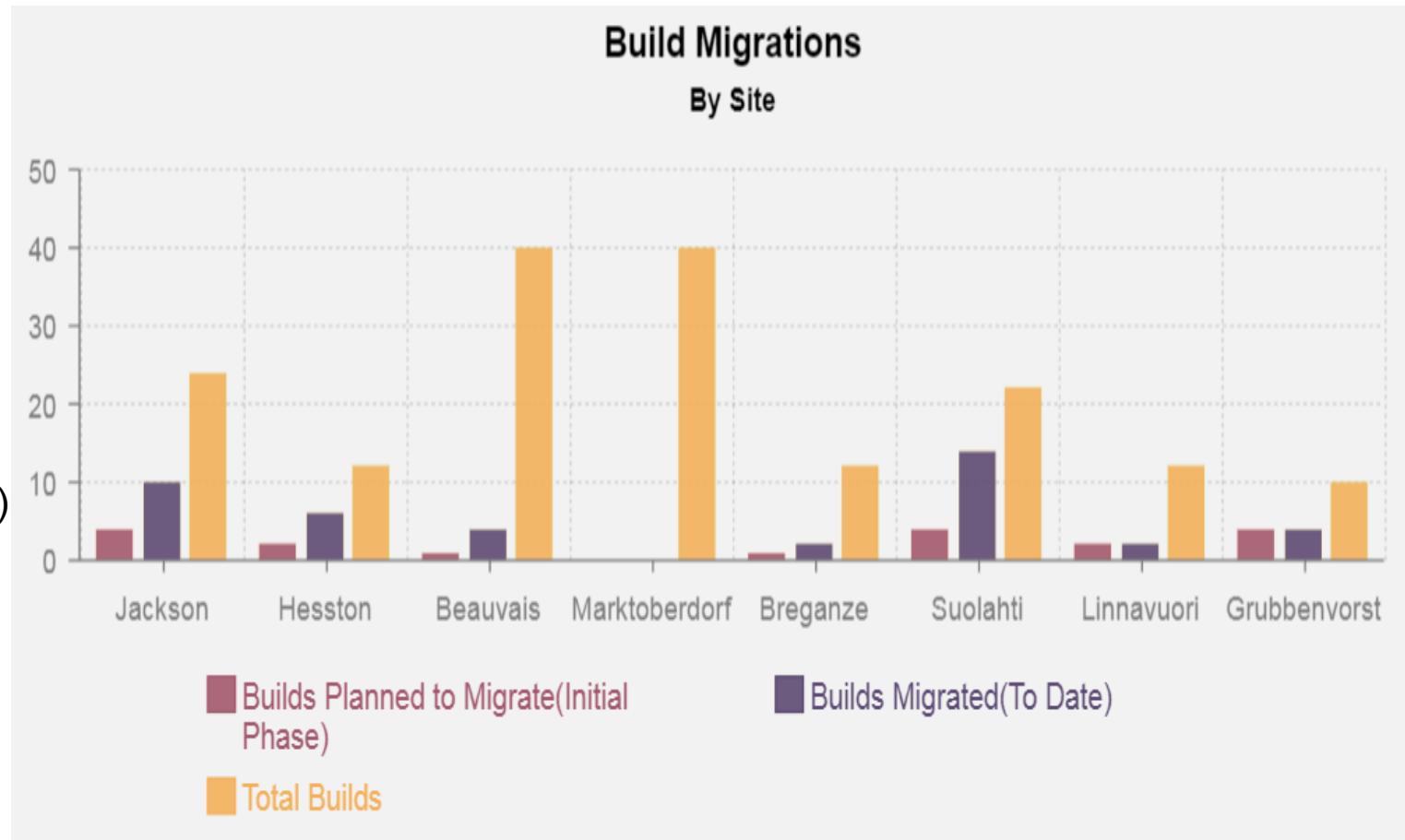
Relies on manual intervention from users to complete and transfer builds

Development Process



Concerns Anticipated

- Multiple, distinct sites/applications
 - Located in different countries, with different work cultures, acquired independently and merged under AGCO
 - Do things their own way and can be resistant to change
 - Existing processes hard to break apart
 - Platform strategy requires collaboration
- Can't migrate everyone(or entire project/site) at once
- Biggest is selling teams on the advantages of joining the global environment

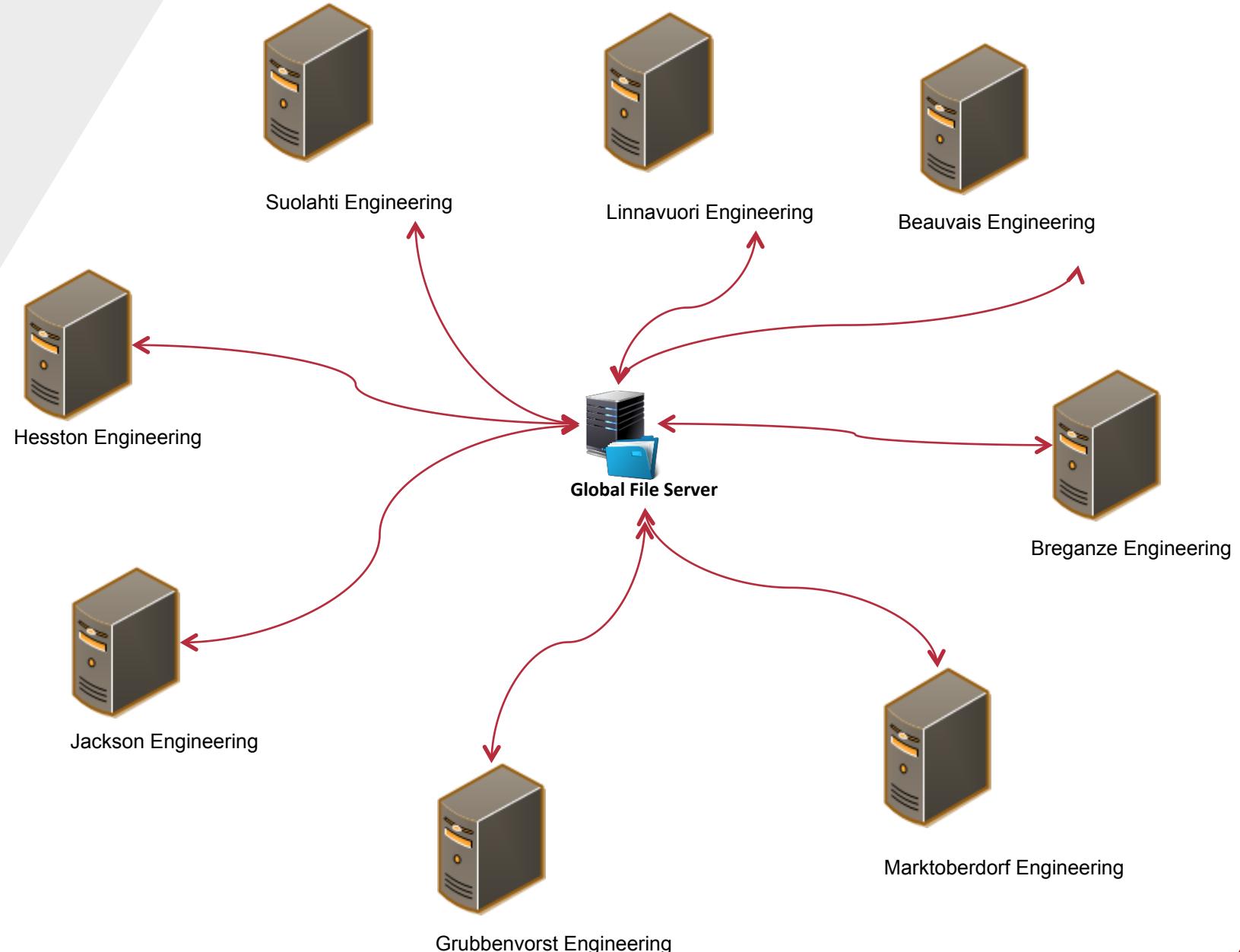


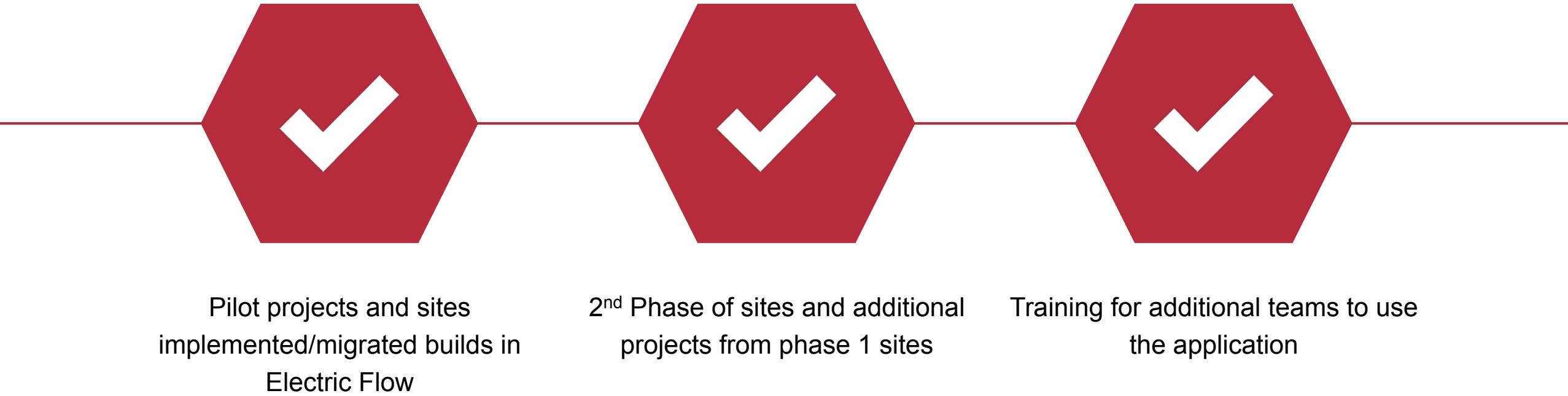
Pilot Site Build Migrations

- Mess of scripts, no documentation on process(someone sort of knew all the steps(but not all))
- Determining difference between builds as they remembered what would be needed to parameterize builds
- Learning differences between Electric Flow and existing setups



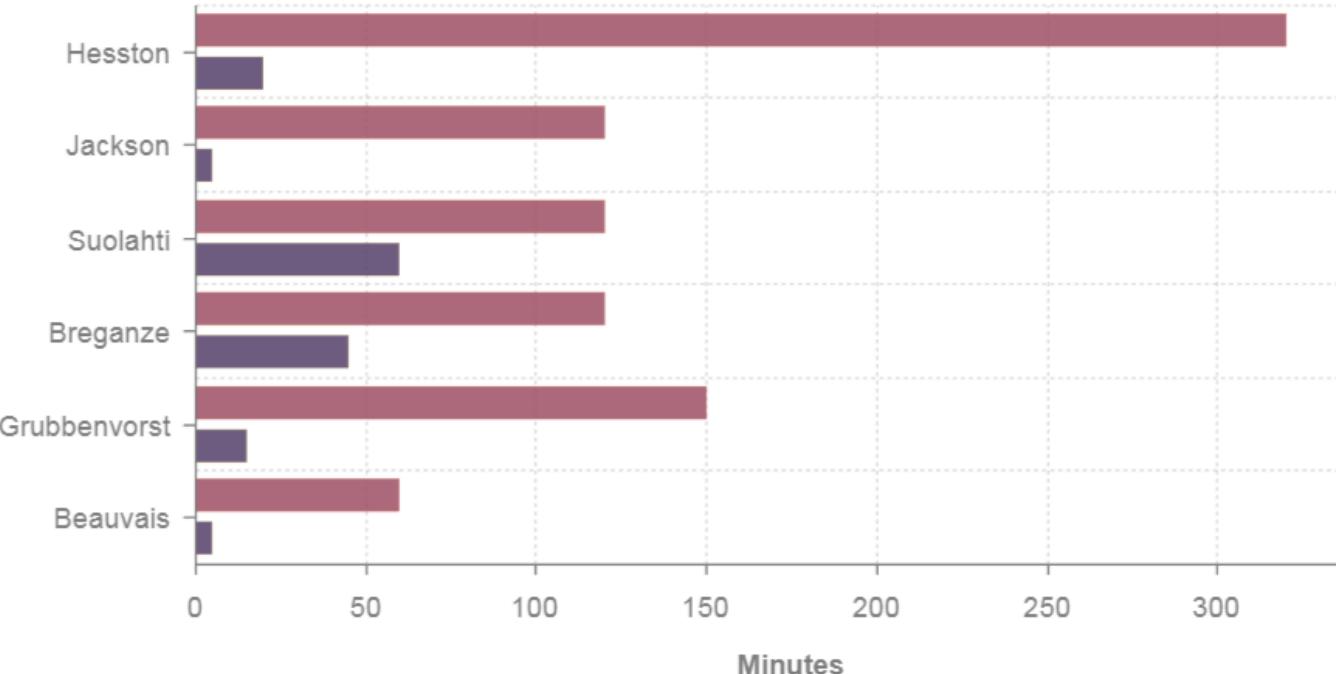
Pilot Site Build Migrations



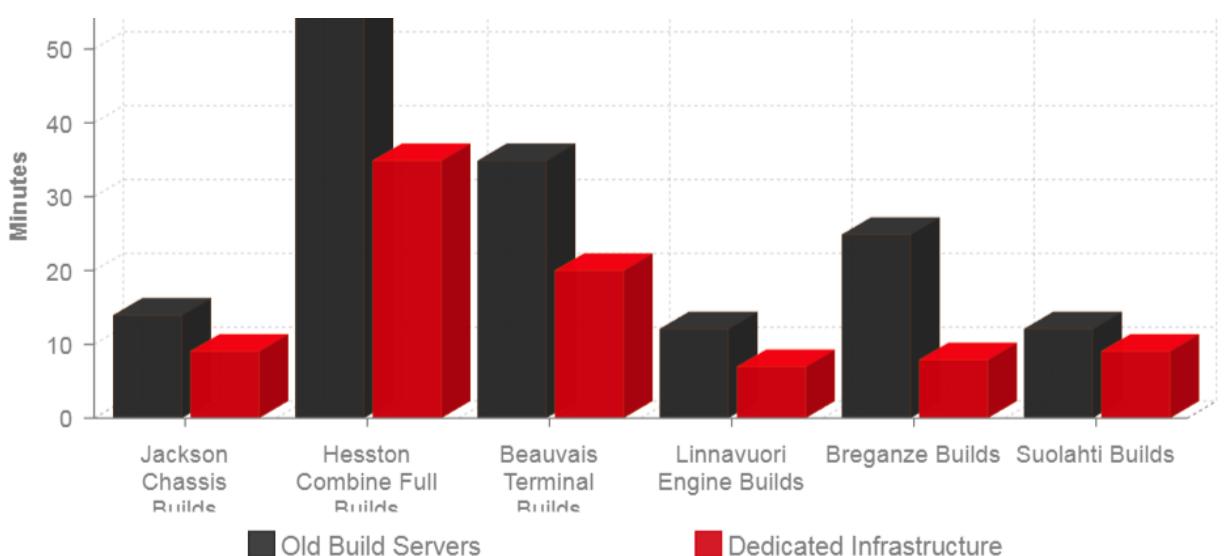


Survey of Time Spent Preparing Builds

- Informal survey before and after of specific project build prep times



- Switching from local build solutions to centrally located build manager with dedicated build machines



Still To Do

- Finish migrating away from homebrew setups
- Training and onboarding process for new sites/projects/acquisitions
- Deployment pipeline and how to integrate with existing processes

