FESA3 Deployment Process and Rollout @GSI
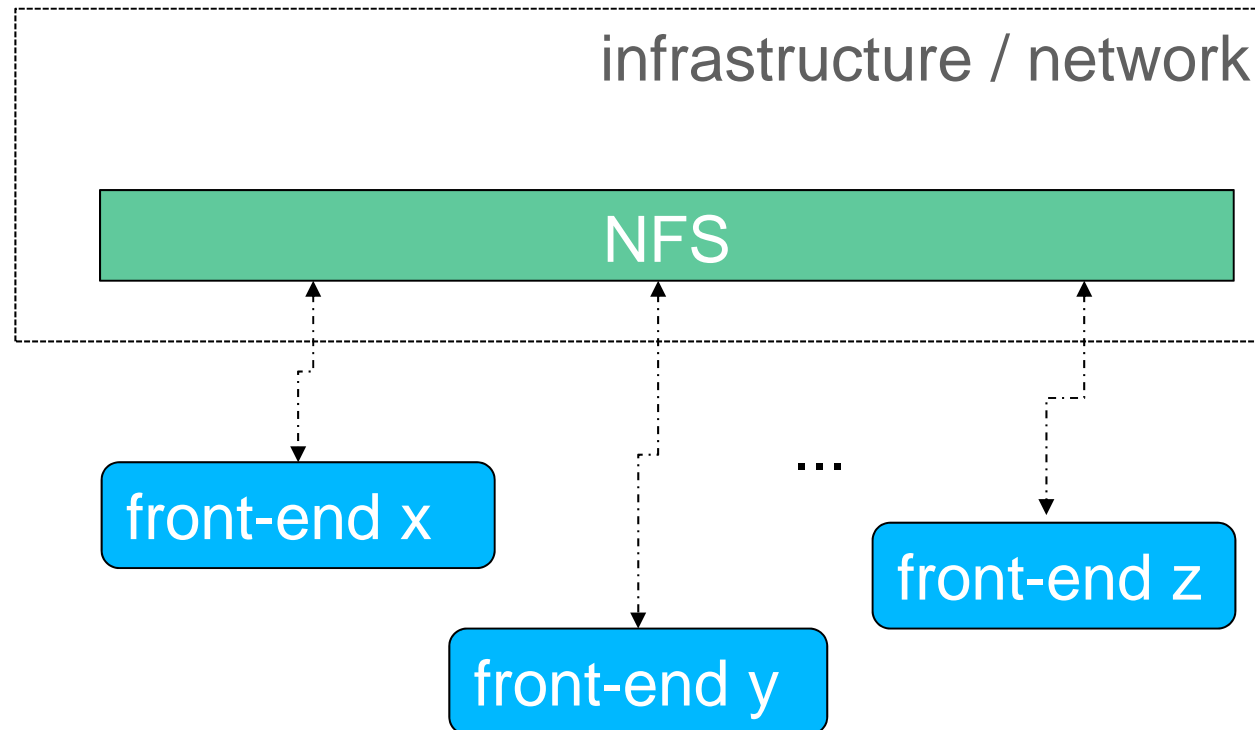
Motivation

- Deployment of **operational** FESA3 binaries (deploy-units consisting of FESA3-classes) must be possible and maintainable

- Synchronously it must be possible to test development equipment software not only locally
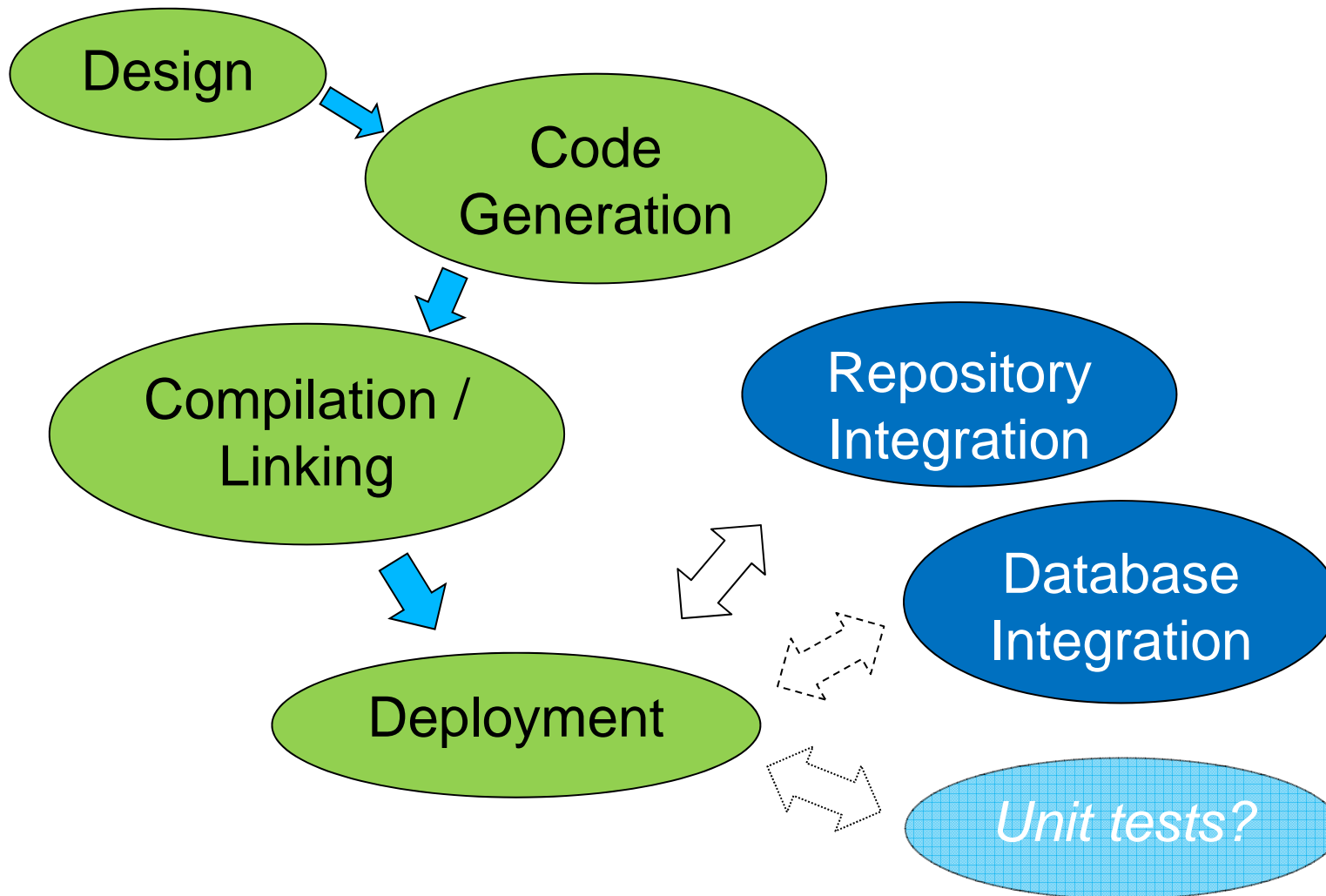
Environment

- Expected front-end integration @GSI

infrastructure / network

NFS

front-end x

...

front-end y

front-end z

- location of RAM disc for SCUs, deploy-units and instantiation files

- SCUs

Basic Steps in FESA3

Design

Code Generation

Compilation / Linking

Repository Integration

Database Integration

Deployment

Unit tests?

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GSI

Basic Steps in FESA3

- Code generation ("synchronization")   OK
- Compilation / Linking   OK
- Repository check (→ versioning / tagging) TEST
- *New idea: Run unit-tests per class if available? ???*
- Deploy binaries, instantiation and timing configuration file to desired location   OK
- *Update database entries (property names, fields, units of parameters, ...)*   *PLAN?*

Rollout for FAIR

- Up to 2000 front-ends are expected

- **Minimum requirements**:

  - releases / updates of operational software on a selection of devices only

    - Example: deploy a new version of Magnet-Software for devices with new hardware only, keep old version for old devices

  - roll-back of previously released software

  - operational front-end software may not be overwritten by accident, whereas desired updates or bug-fixes must be allowed

Rollout for FAIR

- Open Questions: how can this be maintained in a convenient and less error-prone manner?

  - database utilization in this case?

  - operational front-end software must be reproducible ($\rightarrow$ e.g. from source tags in repository)

  - How can all this achieved?

  - What is the part of FESA(3)?

• Questions?
• Ideas?