

Communication

Part of your role is *communicator*

- Technology team
- Program/project management
- Stakeholders
- And posterity

Styles

- Hub
- Translator
- Shaman

On documentation

Documents don't drive your process,
they grow out of it.

Use documents to

- Capture information
- Present your thinking
- Identify areas to explore

Some Tools for Communicating

"Architect's Folder"


<https://gitlab.com/mtnygard/arch-folder-template>

 001-Planning

 100-Architecture


 200-Production-Pipeline


 300-Infrastructure


 400-Operations

 900-Deliverables

 997-Received

 998-Logistics-and-Access

 999-Standup-Notes

 setup

 styles

 README.org

 deliver.sh

"When can we remove this horrible hack?"

"Does anyone know why we format our HTML this way?"

"I don't know why we do that, so I'm afraid to remove it."

Architecture Decision Records

Michael Nygard, Inspired by Philippe Kruchten

ADR

- Point in time
- Explains the rationale for a Decision
- Immutable record
- May be superceded or overturned

ADR

- Context
- Decision
- Consequences

And status of the decision.

Sample ADRs

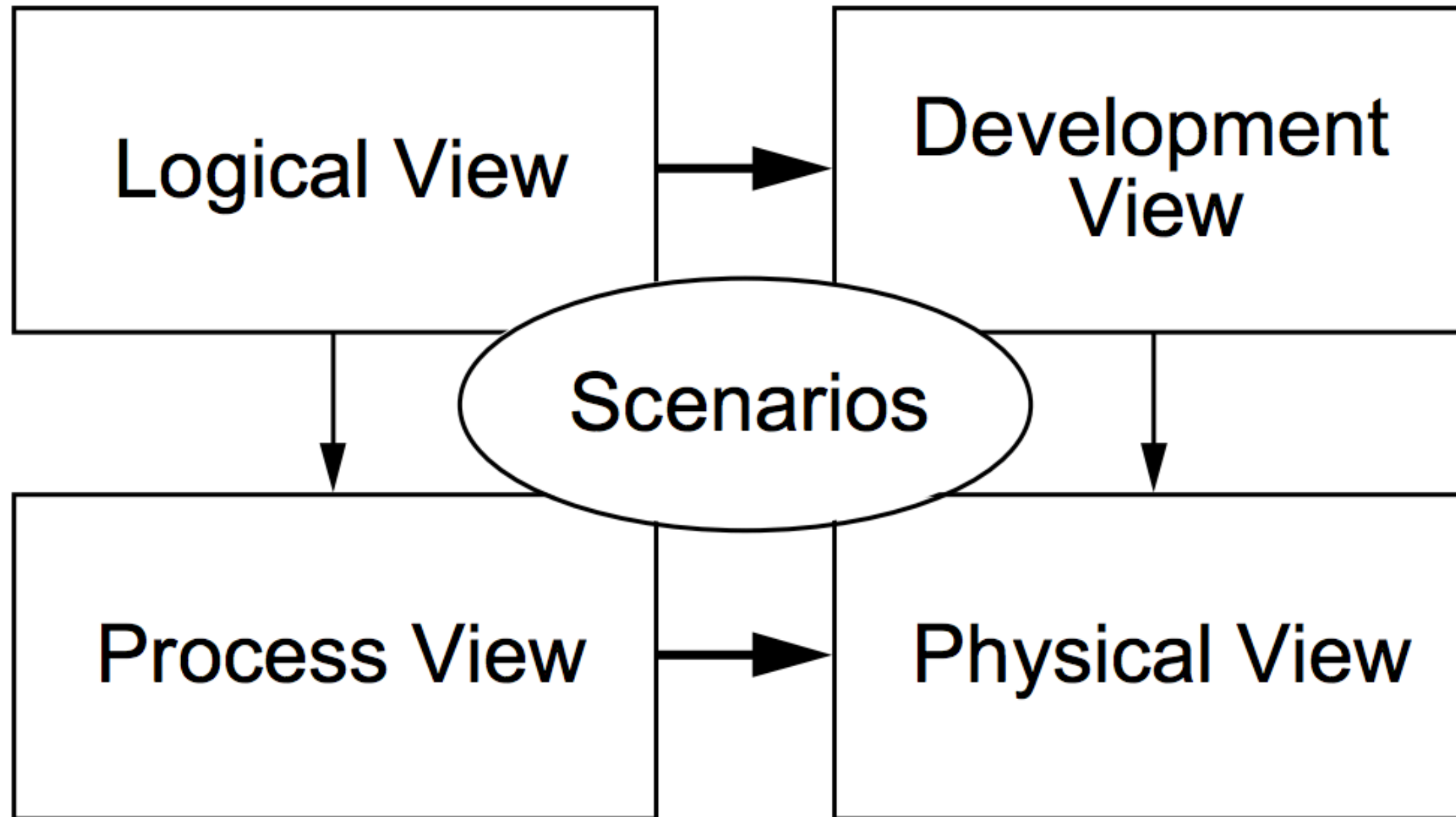
<https://github.com/arachne-framework/architecture>

4+1 Views

Philippe Kruchten

End-user
Functionality

Programmers
Software management



Integrators
Performance
Scalability

System engineers
Topology
Communications

Logical View -> Class diagrams

Development View -> Library and source code structure

Process View -> Concurrency and synchronization

Physical View -> Mapping to hardware

Scenarios -> Use cases mapped through the other views

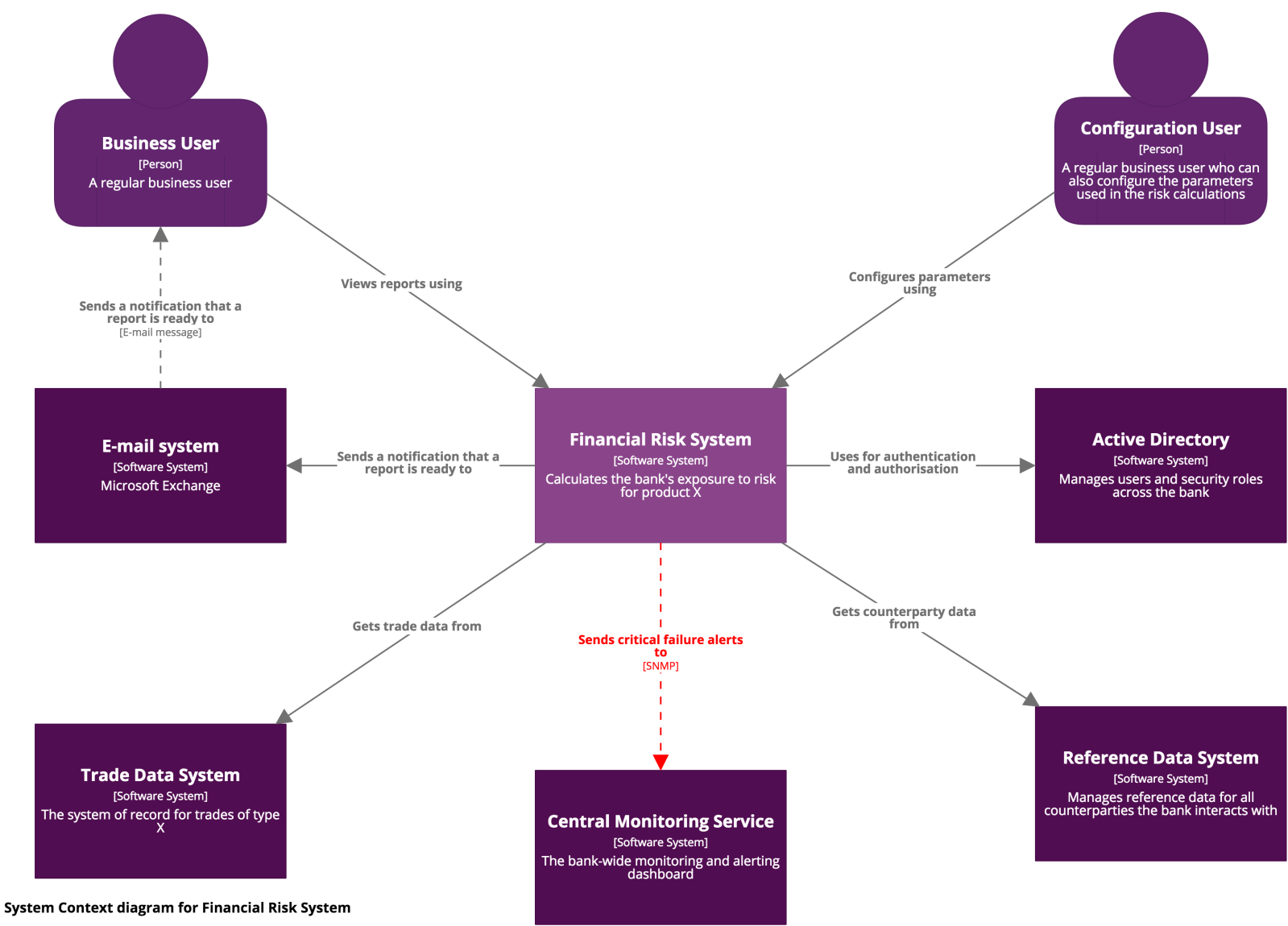
C4 Model

Simon Brown

1. Context
2. Containers
3. Components
4. Classes

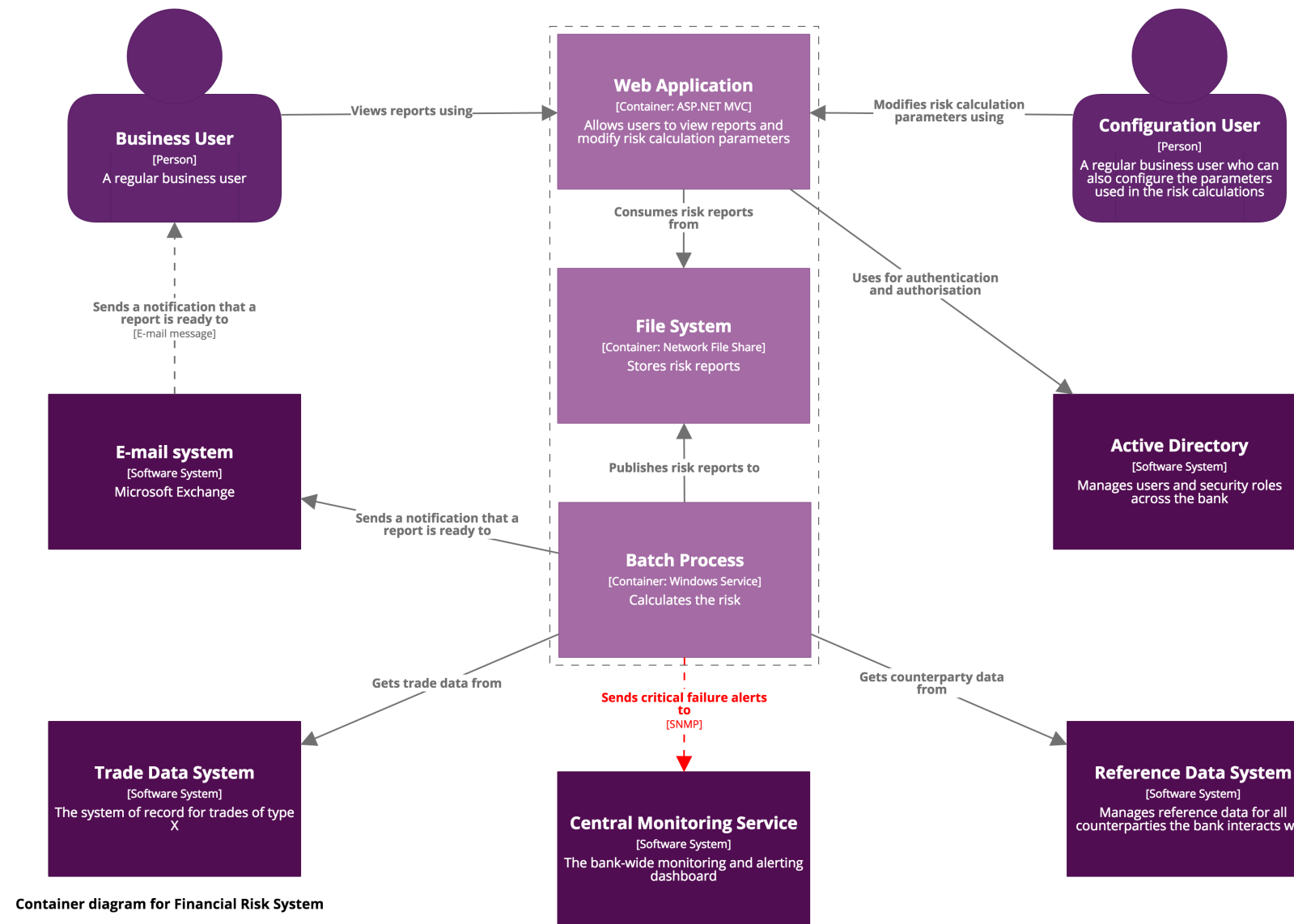
following diagrams courtesy of [Structurizr.com](https://structurizr.com)

Context



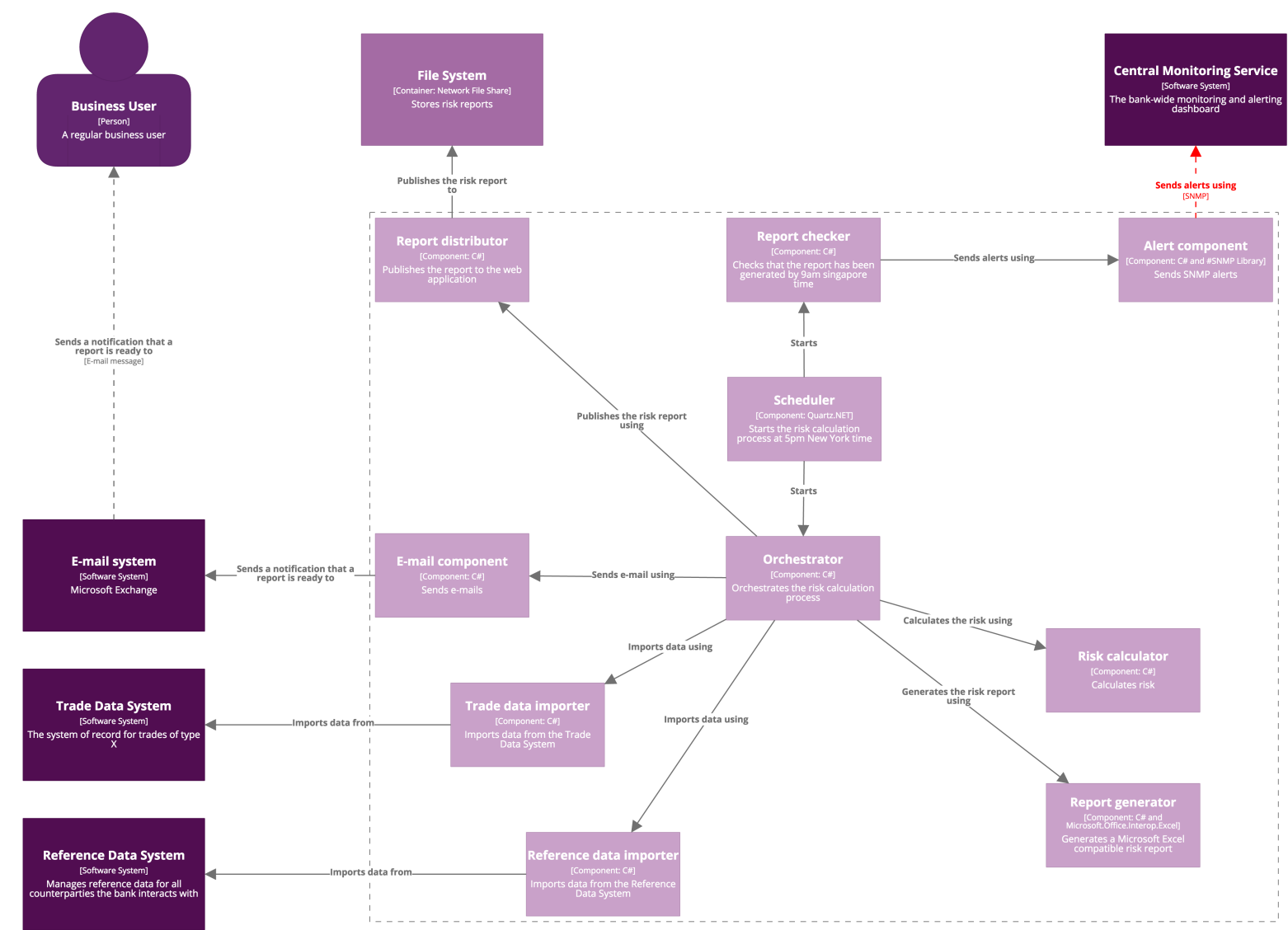
Thursday 30 June 2016 22:42 UTC

Containers



Thursday 30 June 2016 22:42 UTC

Components



Component diagram for Financial Risk System - Batch Process

Thursday 30 June 2016 22:42 UTC

Classes

In code.

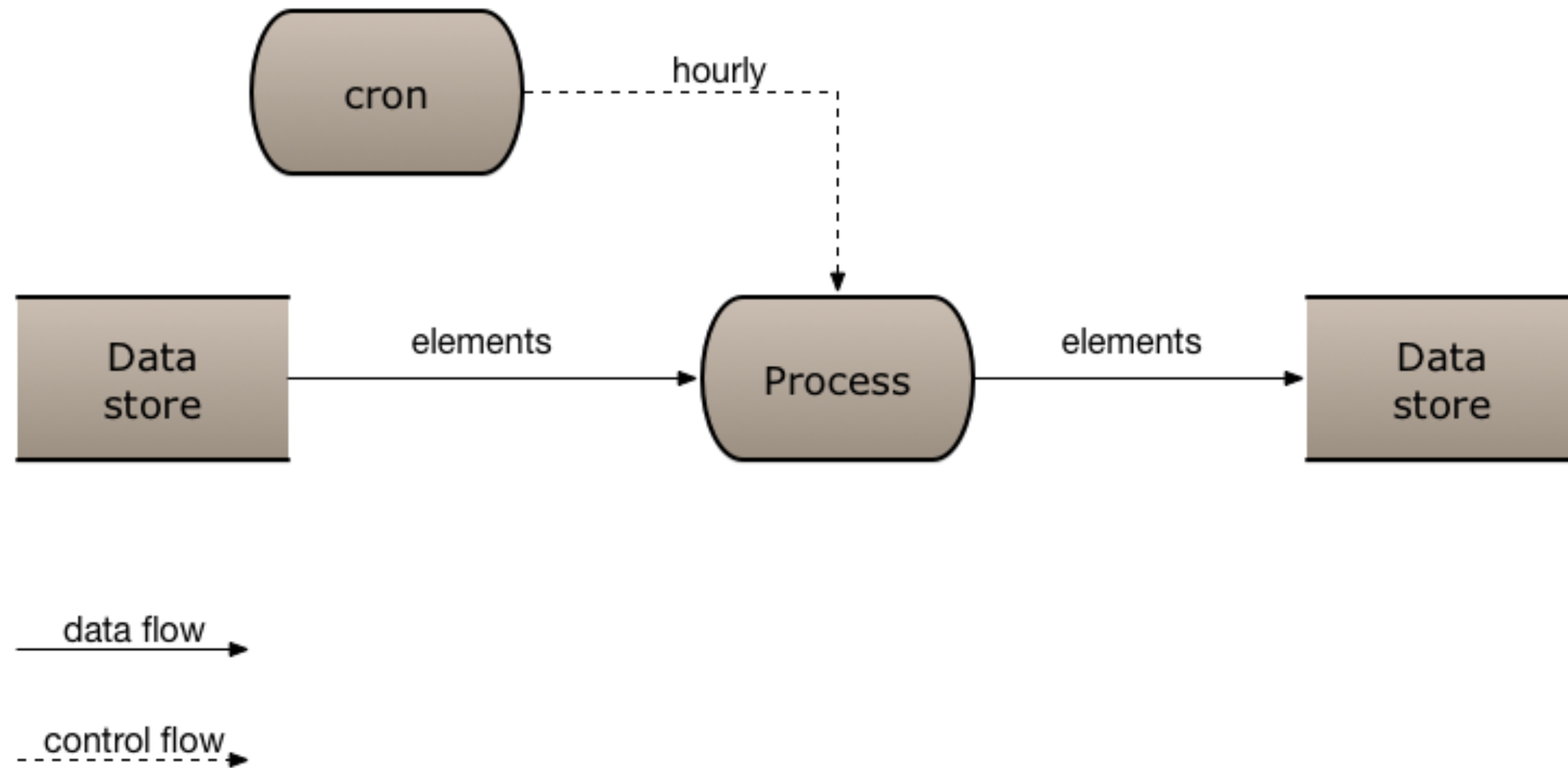
(Were you expecting model-driven development?)

Component Communication

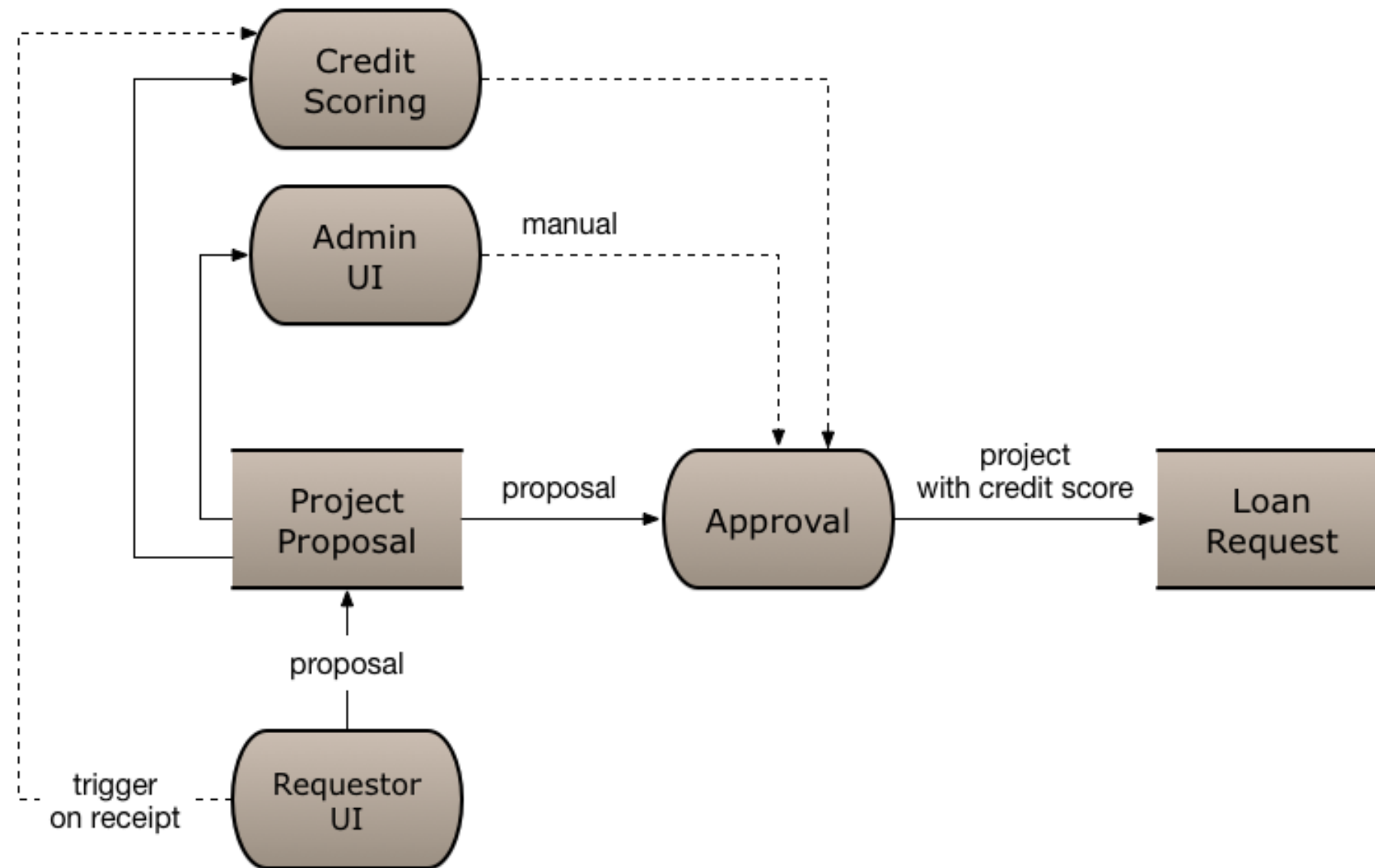
- Within bounded context
- Across contexts
- Think about architectural styles
 - Request/reply
 - Pub/sub
 - Queues

Static diagrams emphasize the static structure.

Data Flow Diagram



Data Flow Diagram



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