Building a High Availability and Fault Tolerant Environment

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Agenda

What is High Availability?

What is Fault Tolerant?

What does this look like in FME?

Why would I want this?

What is High Availability?

What is High Availability?

And

What is Fault Tolerant?

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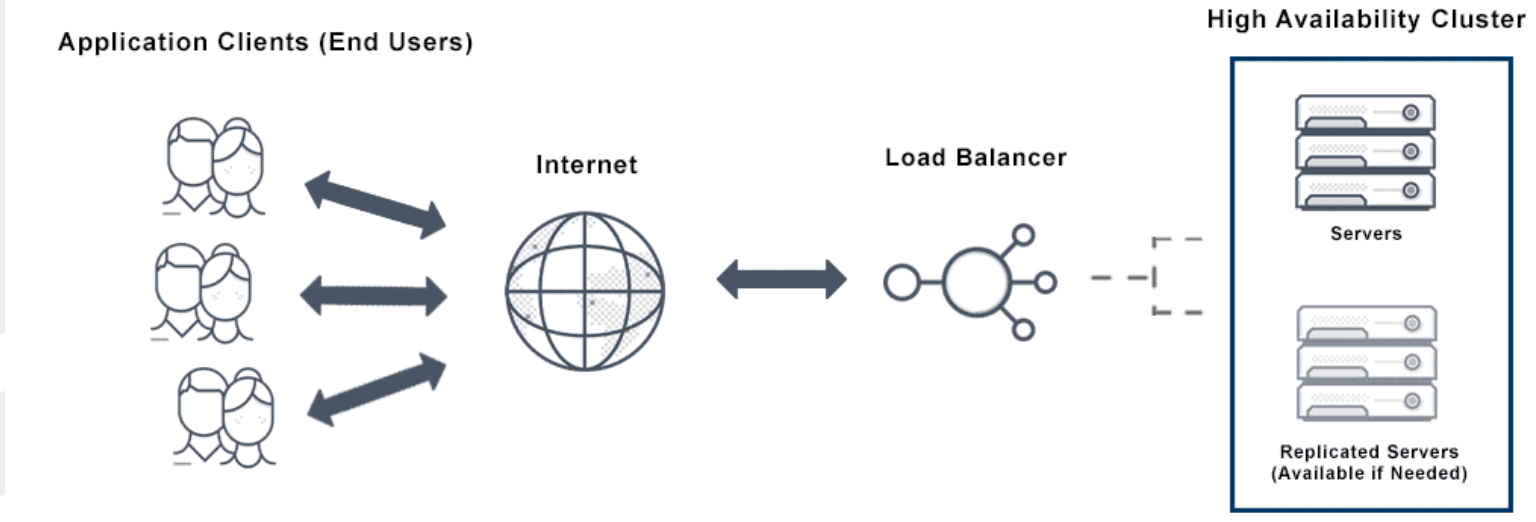
What are these?

- Similar
    - High Availability (HA) is a feature of an environment/system
    - Fault Tolerant is an implementation of HA
- Allows for system components to become unavailable
    - Focus on minimizing (removing) downtime
- Multiple ways to implement both
- Occurs at all levels of the system
    - Infrastructure, software, data


Application Clients (End Users)
Internet
Load Balancer
High Availability Cluster
Servers
Replicated Servers
(Available if Needed)

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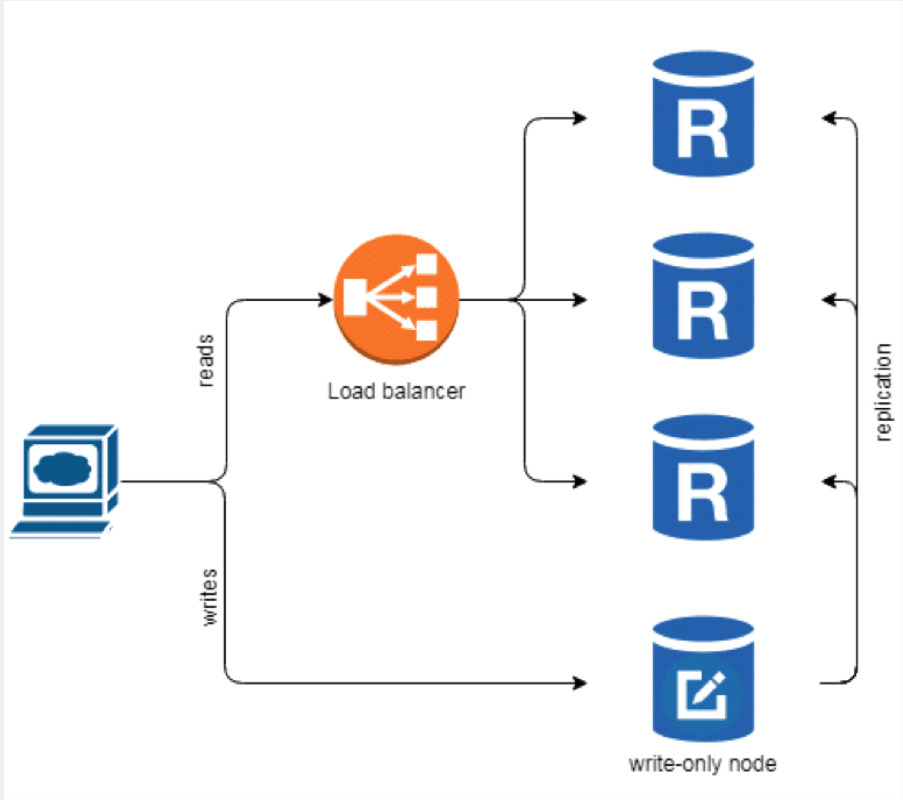
reads
writes
Load balancer
R
R
R
replication
write-only node

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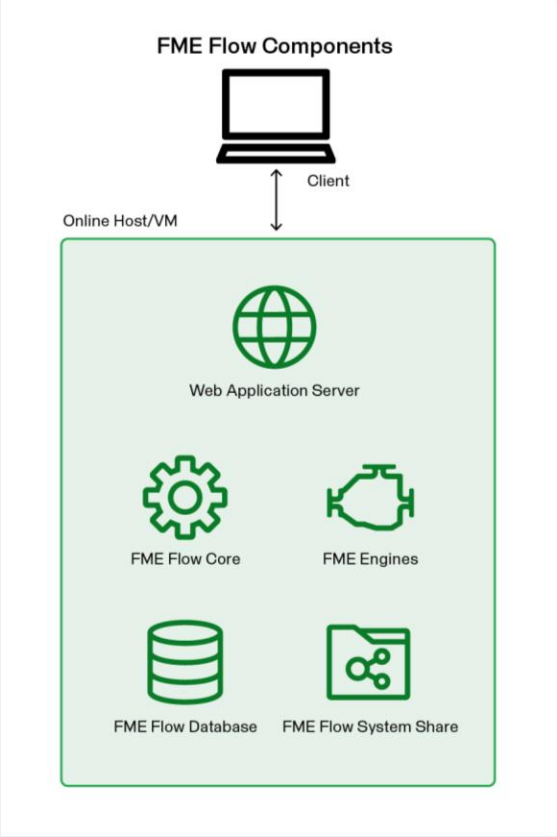
What does this look like in FME?


FME Flow Components
Client
Online Host/VM
Web Application Server
FME Flow Core
FME Engines
FME Flow Database
FME Flow System Share

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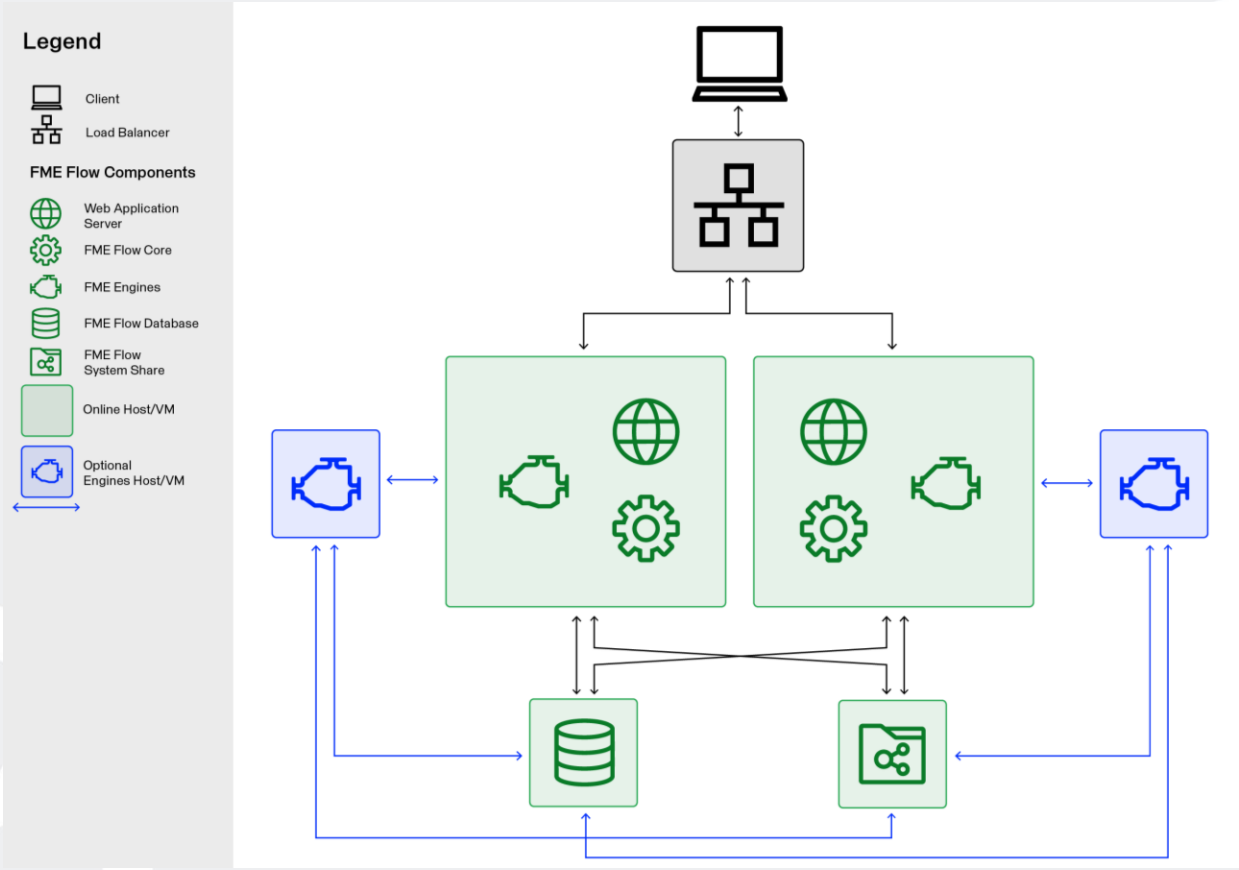
Legend
Client
Load Balancer
FME Flow Components
Web Application Server
FME Flow Core
FME Engines
FME Flow Database
FME Flow System Share
Online Host/VM
Optional Engines Host/VM

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Why would I want this?

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Why would I want this?

- Reliable and flexible
    - Spread your system over multiple locations
- Improved performance
    - Multiple machines running concurrent tasks
- Have machines close to data
    - Distributed engines

Considerations

- Where is my data?
- Are other components in the system also HA?
    - Database
    - File system
- Supports business disaster recovery

Thank you!

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