

Getting Started with Apache Ignite

INTRODUCTION



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Overview



Course Overview



Introduction to Apache Ignite

Cover the course project

Get up and running

Examine the architecture

Examine in-memory caching

Persisting cached data

Streaming and complex event processing

Distributed computing

Summary



Introduction



Apache Ignite

A high-performance, integrated and distributed in-memory platform for computing and transacting on large-scale data sets in real-time.



Apache Ignite



Our Software

Apache Ignite



What does this
platform provide?

Our Software

Apache Ignite



Data



Our Software

Hardware Clustering

In-Memory



Our Software

Data

Data at Rest

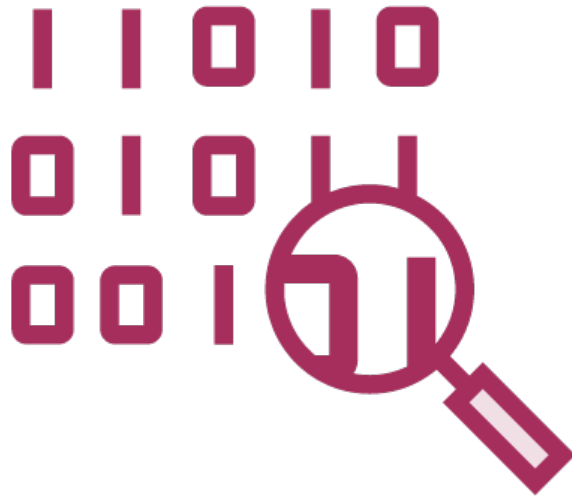
Data in Motion

Hardware Clustering

In-Memory



Ignite Queries



Cache Query
(Request – Result)

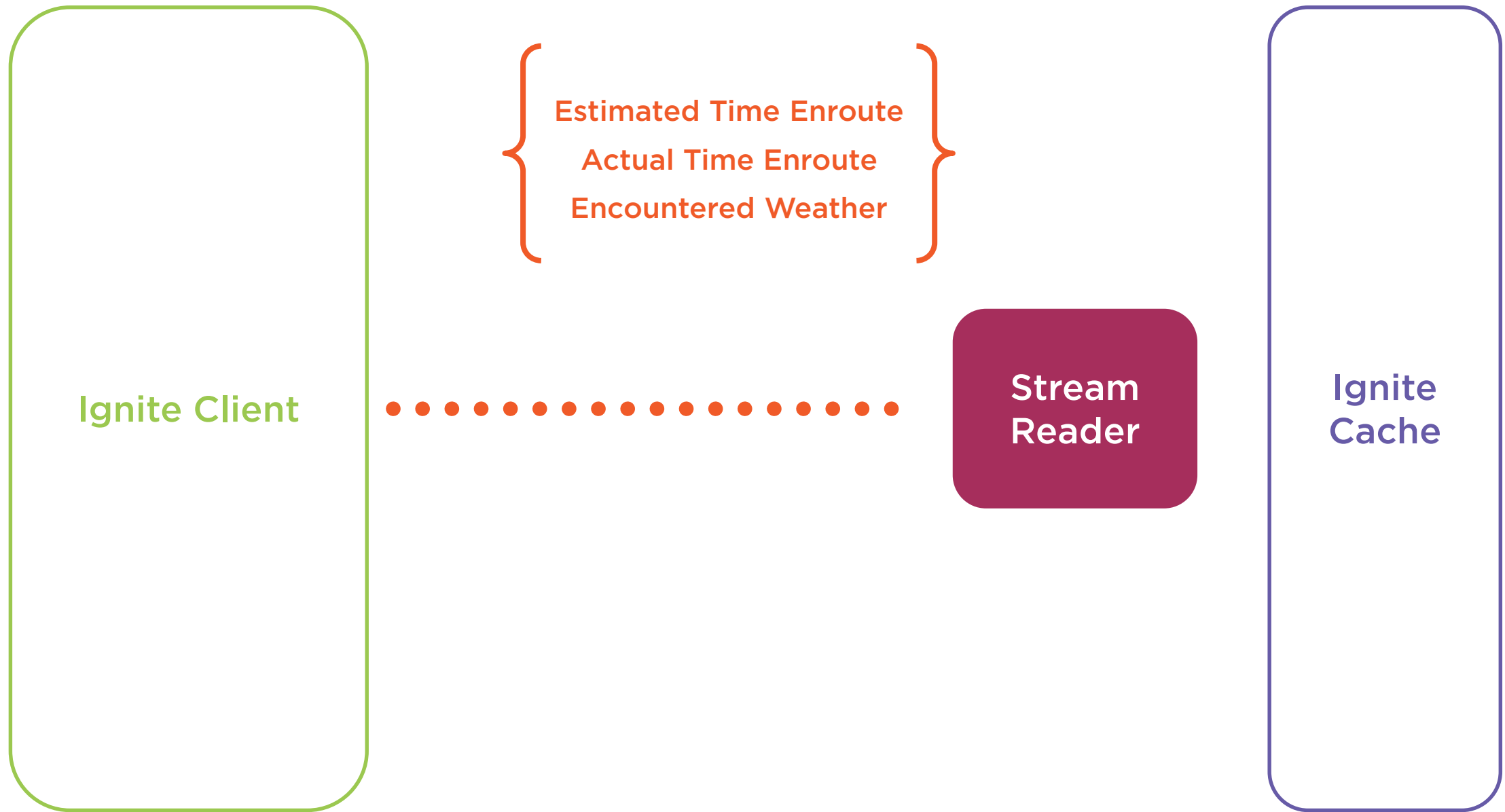


Continuous Query
(Publish – Subscribe)

Streaming & Continuous Event Processing







Last 20 minutes

Evicted
Event

Incoming
Event



Distributed Computing



Our Software

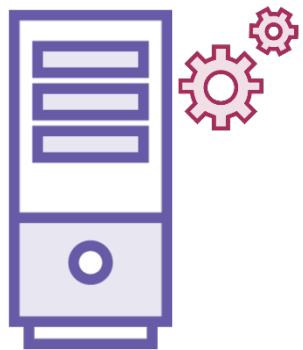
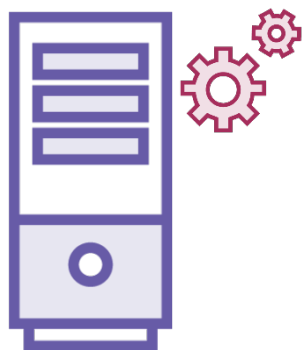
Hardware Clustering

In-Memory







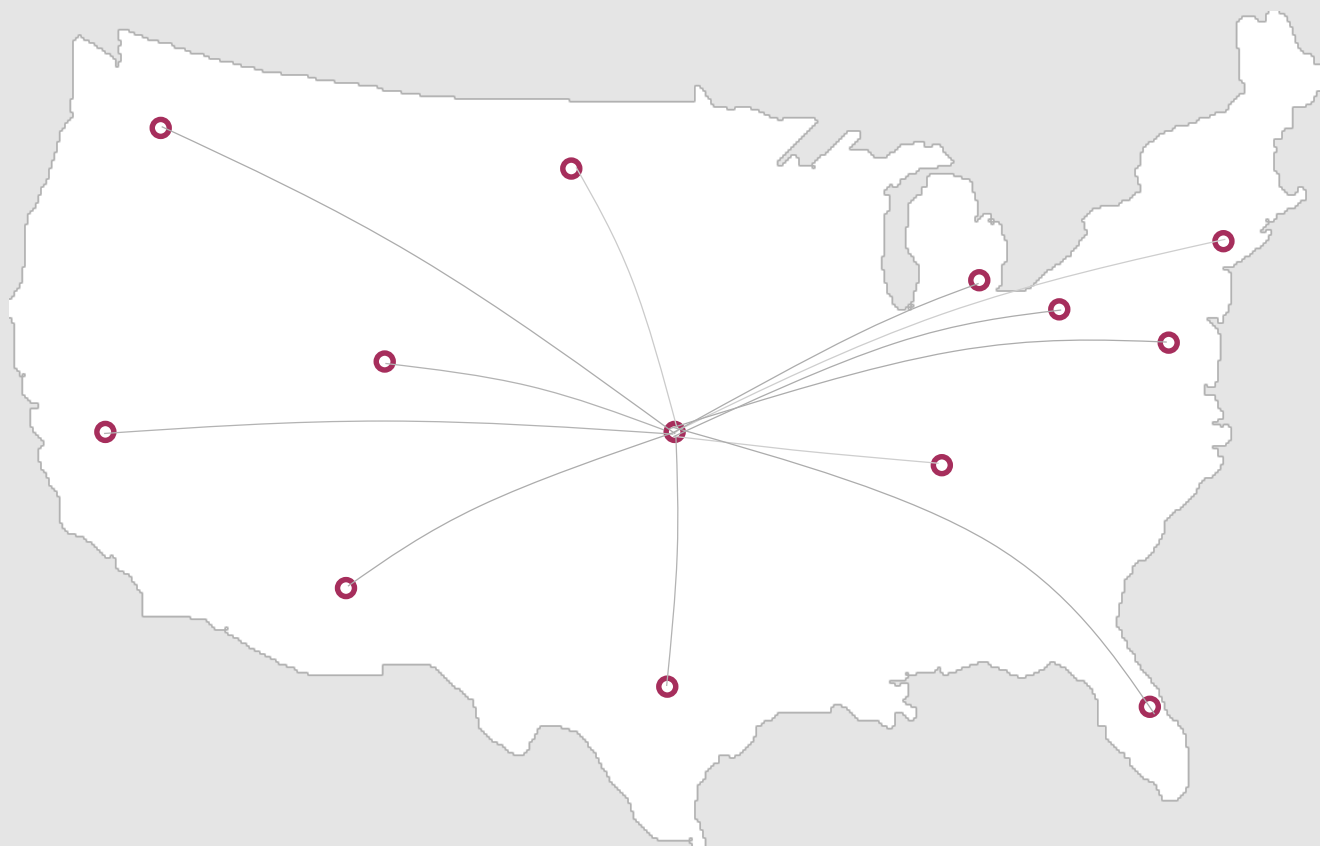




The Project









Security events

Mechanical trouble with the aircraft

Weather events

Air traffic control rerouting



ASMaR

Aircraft Systems Monitoring and Reporting

Avionics computer that is the monitoring and reporting center of an aircraft



Coming Up



Development environment setup

First application

