



Execution Environment:
Superdome X



Graph:
200 Million Vertices



Nodes:
16

Summary

Iteration: [100]



LSGi

61 sec



GraphLab

7700sec ↑



SpeedUp

126x



Convergence

92.5%

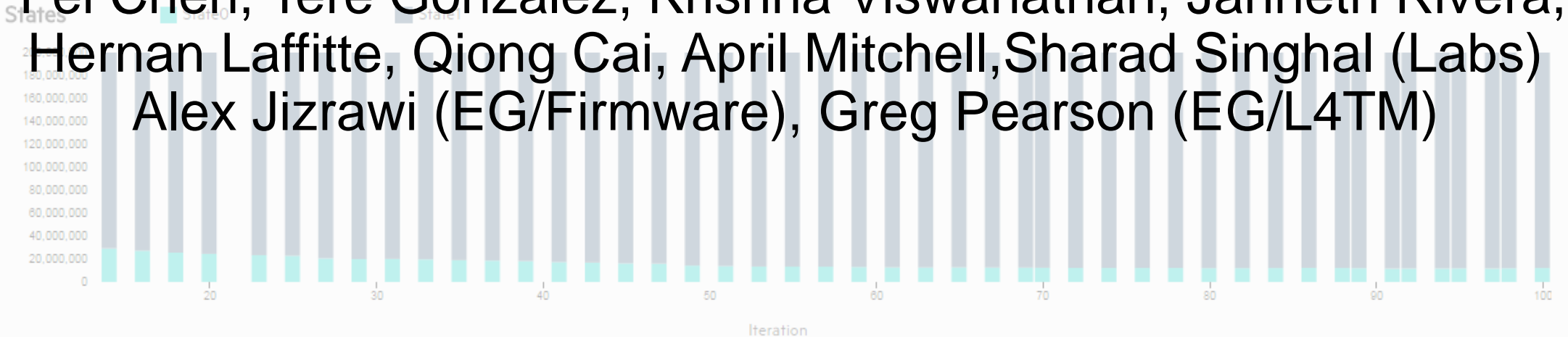


Inference
State0

6.1%

The Team!

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Massive Quantities of Data Represented as a Graph

An advantage for a class of analytics problems like:

Security



Website Reputation
Malware Detection

3.5 billion web pages
100s of millions of computers

Social Networks



Collective Knowledge
Link Prediction

1 billion People

Advertisement



Brand Reputation
Click Through Rate

100s of millions of people
millions of transactions/day

Internet Of Things



Car Road Accident Risk
Detection

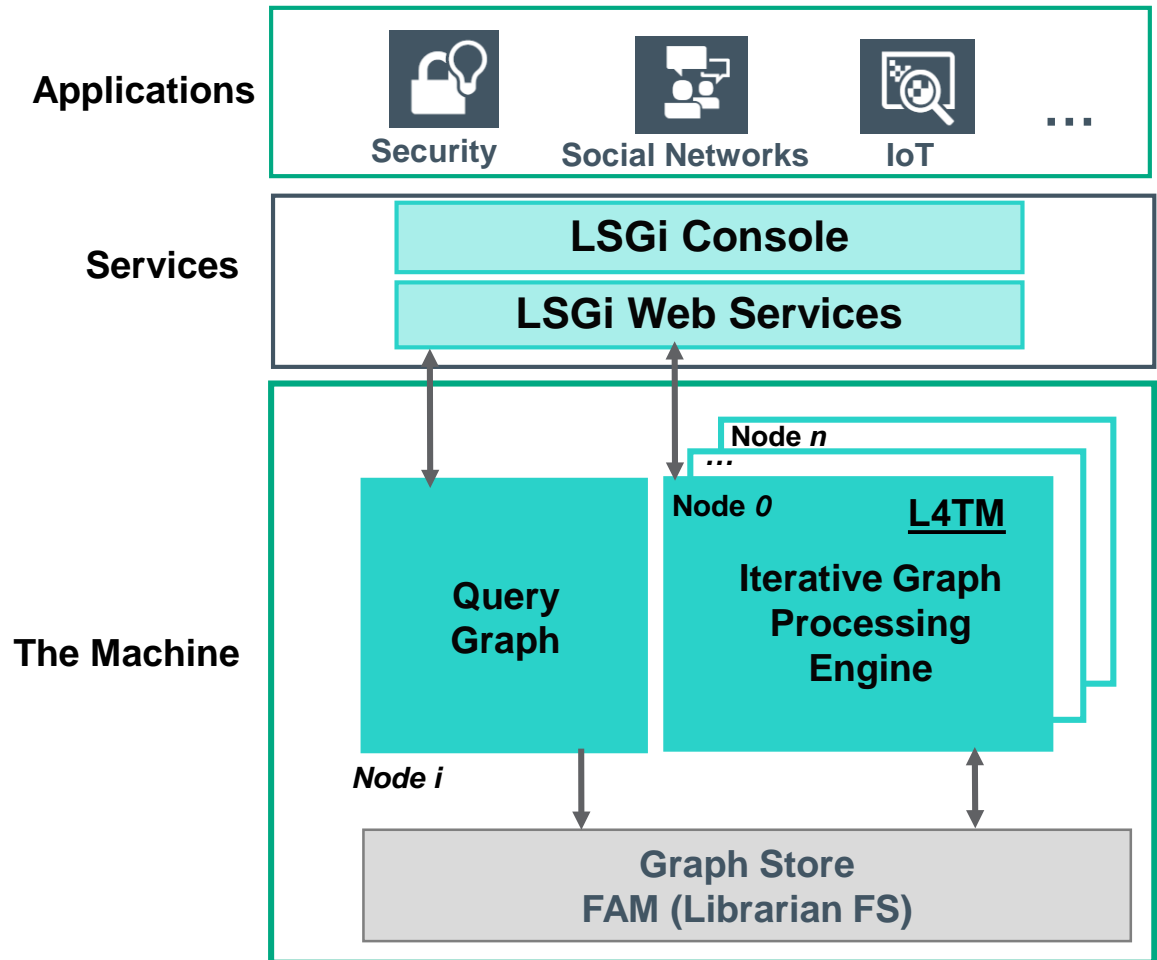
1.6 billion of connected
things in smart cities

LSGi Towards The Machine

System Features

1. Iterative Graph Processing Engine
 - Scalable multi-node processing
 - Fast communication mechanism via FAM
 - Efficient parallel In-memory computation
2. LSGi as a Service
 - Query Graph Service
Interactive access to query inference results
 - Web Services
Restful APIs to access inference statistics and predictions.
3. LSGi Console
Operational user-friendly interface to interact with the processing engine.

The LSGi Architecture



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