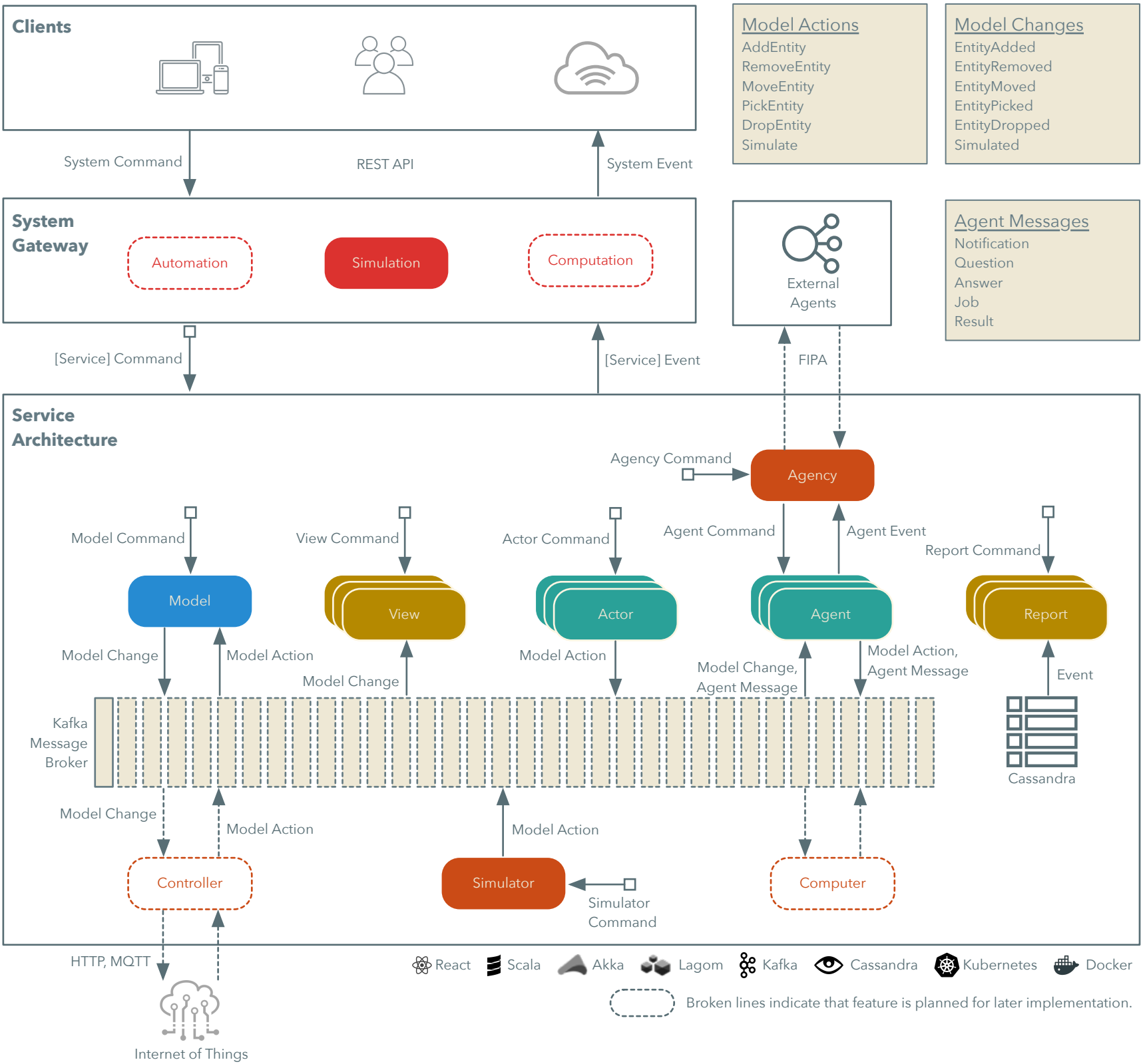## CRUD Commands
CreateXXX
ReadXXX
UpdateXXX
DestroyXXX

CRUD Events
XXXCreated
XXXRead
XXXUpdated
XXXDestroyed

Process Commands
StartXXX
StopXXX
RestartXXX
ReverseXXX

Process Events
XXXStarted
XXXStopped
XXXRestarted
XXXReversed

System Commands
CRUD[System]
Process[System]

System Events
CRUD[System]
Process[System]

Simulator Commands
CRUD[Simulator]
Process[Simulator]
AdvanceSimulator

Simulator Events
CRUD[Simulator]
Process[Simulator]
AdvanceSimulator

Agency Commands
CRUD[Agency]
Process[Agency]
AskAgent
ReplyAgent
TellAgent
FollowAgent
IgnoreAgent

Agency Events
CRUD[Agency]
Process[Agency]
AgentAsked
AgentReplied
AgentTold
AgentFollowed
AgentIgnored

Agent Commands
CRUD[Agent]
Process[Agent]

Agent Events
CRUD[Agent]
Process[Agent]

Actor Commands
CRUD[Actor]
Process[Actor]
DoAction

Actor Events
CRUD[Actor]
Process[Actor]
ActionDone

Model Commands
CRUD[Model]
PopulateModel

Model Events
CRUD[Model]
ModelPopulated

View Commands
CRUD[View]
AttachView
DetachView

View Events
CRUD[View]
ViewAttached
ViewDetached

Report Commands
CRUD[Report]

Report Events
CRUD[Report]

Model Actions
AddEntity
RemoveEntity
MoveEntity
PickEntity
DropEntity
Simulate

Model Changes
EntityAdded
EntityRemoved
EntityMoved
EntityPicked
EntityDropped
Simulated

Agent Messages
Notification
Question
Answer
Job
Result

Clients

System Command

REST API

System Event

System Gateway

Automation
Simulation
Computation

External Agents

[Service] Command

[Service] Event

FIPA

Service Architecture

Agency Command

Agency

Model Command

View Command

Actor Command

Agent Command

Agent Event

Report Command

Model

View

Actor

Agent

Report

Model Change

Model Action

Model Change

Model Action

Model Change, Agent Message

Model Action, Agent Message

Event

Kafka Message Broker

Cassandra

Model Change

Model Action

Model Action

Simulator

Simulator Command

Controller

Computer

HTTP, MQTT

Internet of Things

React   Scala   Akka   Lagom   Kafka   Cassandra   Kubernetes   Docker

Broken lines indicate that feature is planned for later implementation.

TITLE	CREATED BY	VERSION	DATE
Loudflow service architecture	Sinan Inel http://farsimple.com	1.0	Sep 16, 2019