

StarGazer:

Data-Driven Insights in StarCraft II

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StarCraft II

Real-time strategy game, developed by Blizzard Entertainment

~40 sponsored tournaments in 2014, prize pool ranging from \$25,000 to \$250,000

Tournaments are televised (Twitch, Korean TV networks, ESPN)

300,000 active players

Most games are 1v1 matches

Motivation

GAME DEVELOPER:

Provide interesting/useful analytics for users

Monitor user activities

Perform real-time analyses in televised matches

GAMER:

Improve skills by learning from previous games

See real-time predictions

Example Queries

AGGREGATION:

Comparing win ratios for different starting position for a given race on a given map.

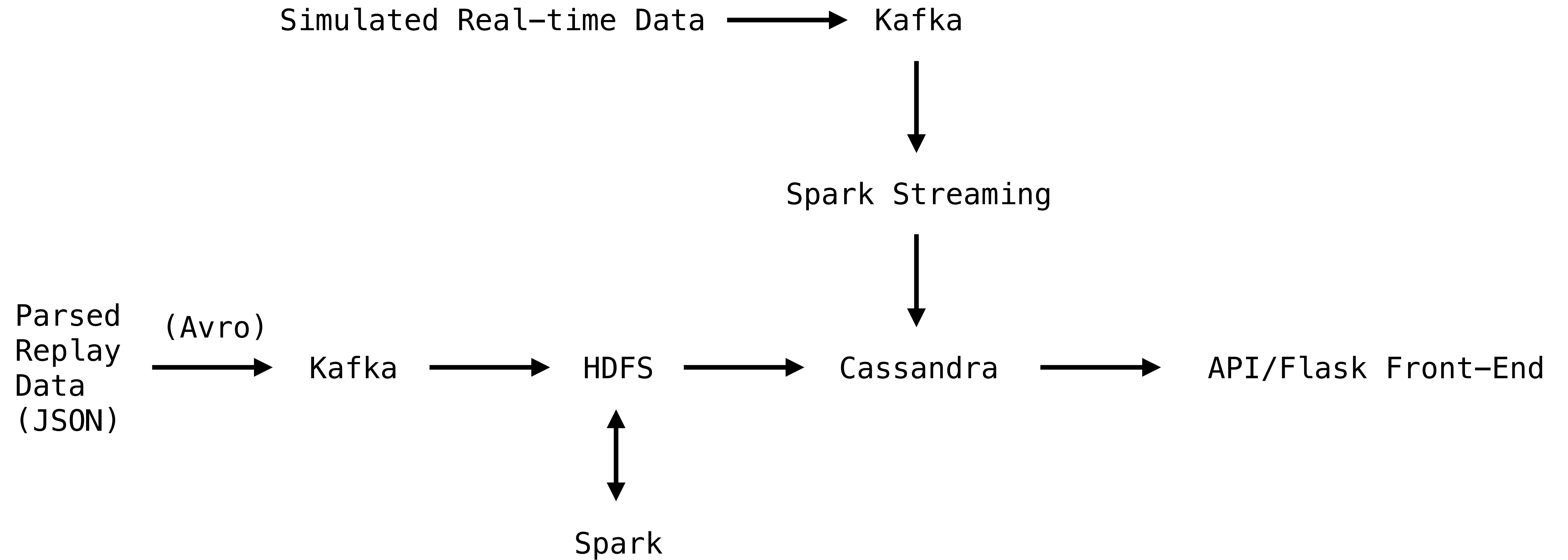
Visualizing the change in APM for a player over the past 50 games

Visualizing win ratios for a given matchup (i.e. Terran vs Zerg) as a function of game length

REAL-TIME:

Predicting win probability for ongoing games based on set metrics (APM, Resources, Map)

Tentative Pipeline



Current Pipeline

Parse Replay Data
Put On HDFS



???



Profit!

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