Challenges of Traditional Stream Processing Systems

Fast Failure and Straggler Recovery

Failure and Recovery

- There are chances of a node failures
- The system must automatically recover from failures
- Traditional systems makes recovery from failures difficult

Load Balancing

Load Balancing

- Uneven distribution of workload
- Occurs in a large cluster and varied workloads
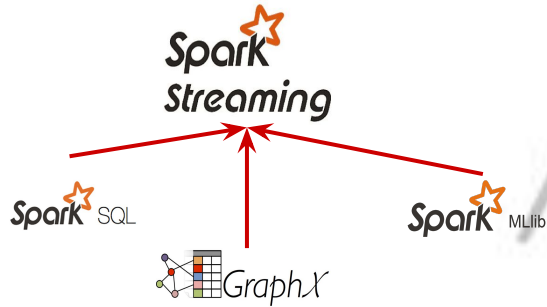- Traditional systems find it difficult to adapt to varying workloads

Unification of Various Workloads

Combining
Streaming
Data with static
datasets

- It is fascinating to see the unification of streaming, batch and interactive workloads
- Traditional systems do not support ad-hoc queries
- Requires a single engine

Advanced Analytics

Integration of advanced libraries

- Advanced analytics like machine Learning and SQL queries
- Have Common abstraction

Thank You