## Reactive Solutions for the Real World



Russell Elledge
ENTERPRISE ARCHITECT

@MC2FTW mastercraftcoding.com



### Network Communications



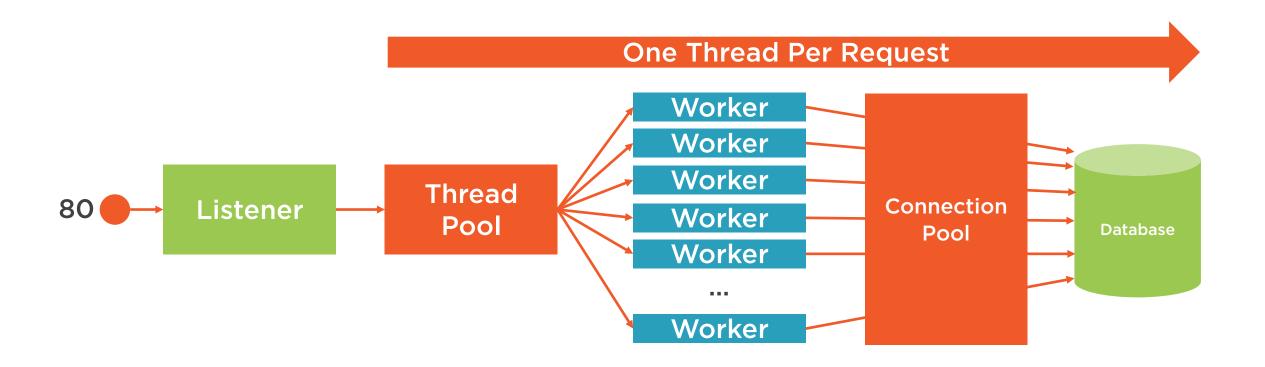
**Threading Paradigm Shift** 

**Asynchronous Network Calls** 

**Network Error Handling and Timeouts** 

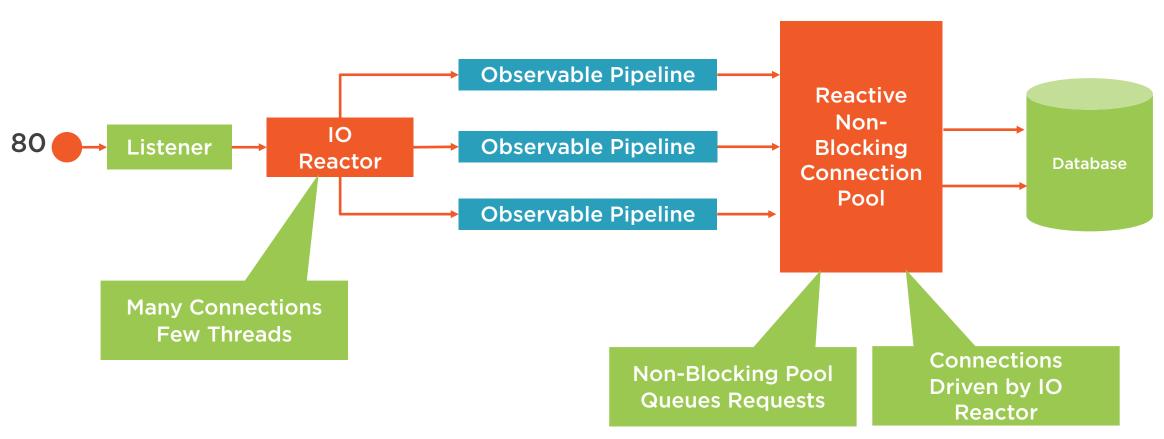


#### Traditional Server Thread Structure





#### Reactive Server Thread Structure





### Demo



Asynchronous Network Communication

Network Error Handling and Timeouts



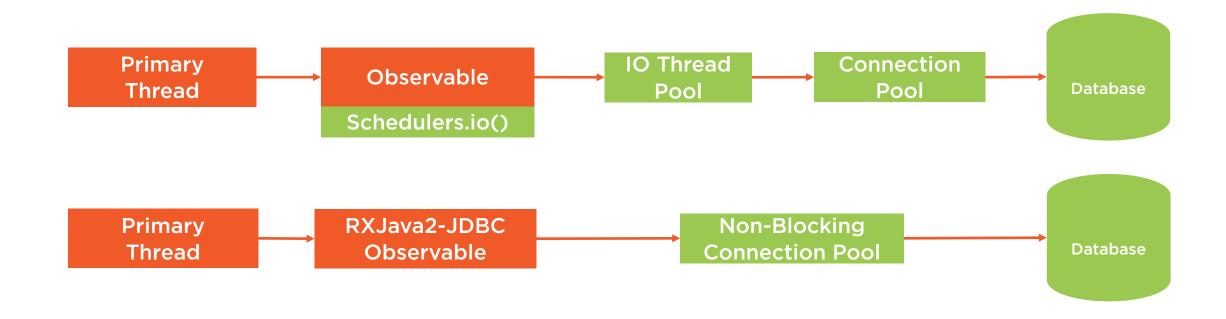
### Database Interaction



Asynchronous Database Access
Flow Control for Large Result Sets
Parallel Flowables

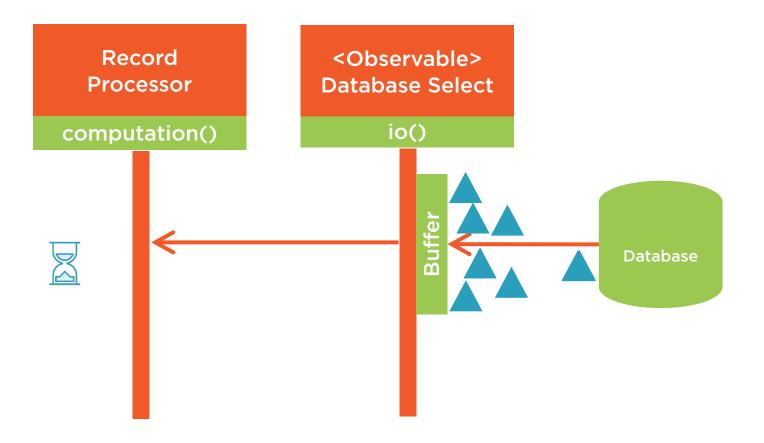


## Asynchronous Database Access



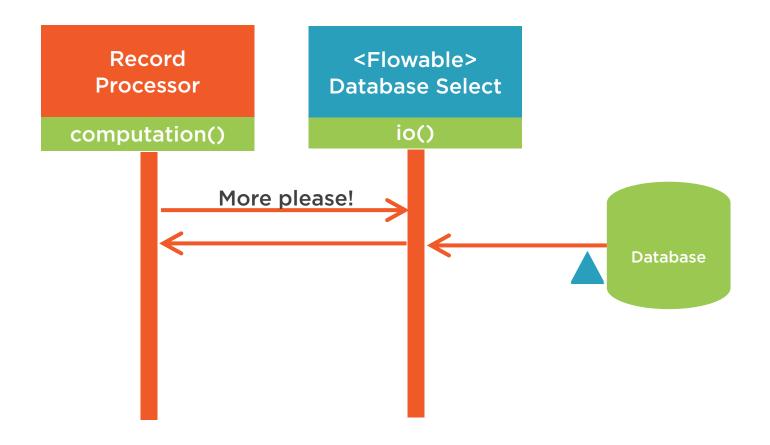


# Flow Control for Large Result Sets



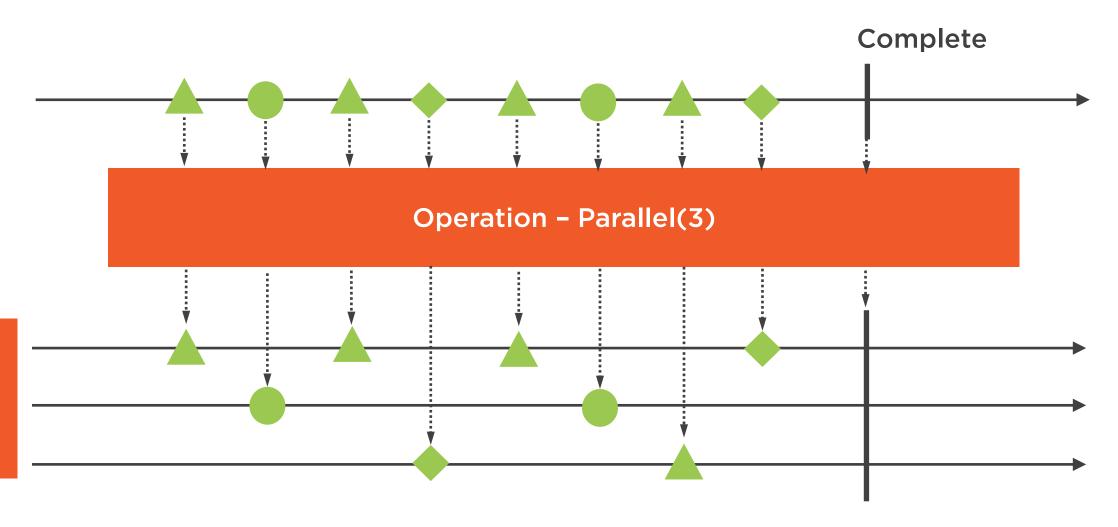


# Flow Control for Large Result Sets





### Parallel Flowables





### Demo



Asynchronous Database Access
Flow Control for Large Result Sets
Parallel Flowables



### Database Interaction

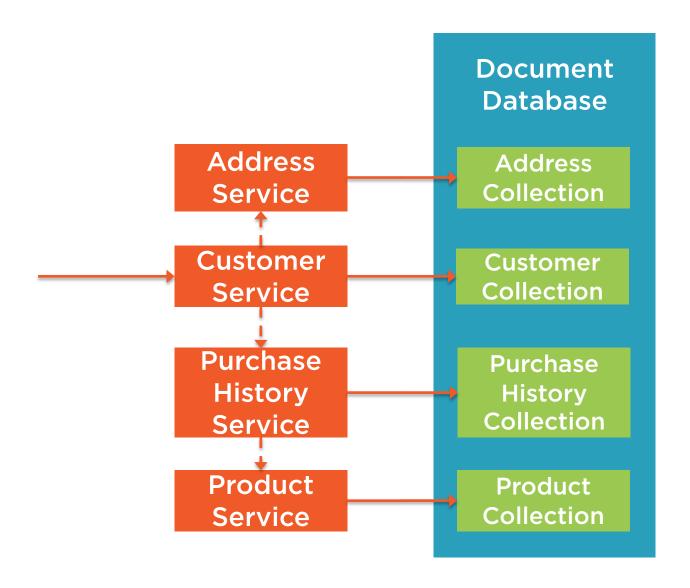


**Data Aggregation** 

**Concurrent Data Processing** 



### Data Aggregation





## Demo



Data Aggregation

Concurrent Processing

