Term Project

Performance Testing and Analysis of Qpid-Dispatch Router

Bc. Jakub Stejskal

Faculty of Information Technology

18. ledna 2018

Motivation

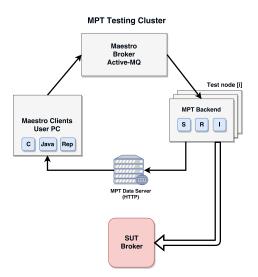
- $\bullet \ \mathsf{Good} \ \mathsf{Performance} \to \mathsf{Good} \ \mathsf{Quality}$
- Application improvements
- Bug revealing
- Customers satisfaction

Qpid-Dispatch

- Application layer router
- Message routing
- Communication with Messaging Broker and Messaging Clients
- Each router has configuration file
- Redundancy configuration

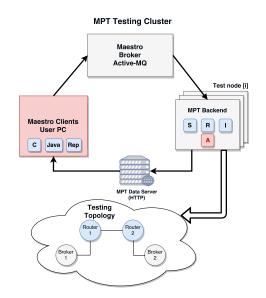
Messaging Performance Tool

- Cluster system
- Load \rightarrow Sender + Receiver
- Communication between back-end and Maestro Clients through Maestro Broker
- Measured data to data server



Messaging Performance Tool

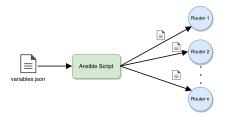
- Maestro Clients update (New Commands)
- New component: Agent
- Ability to change topology (Shut down router, etc.)



Topology Generator

- $\bullet \ \mathsf{Metadata} \to \mathsf{Configuration} \\ \mathsf{files}$
- Metadata are Inventory or Graph File
- Config based on Qpid-Dispatch version
- Auto deployment by Ansible





6 / 7

Summary

- Upgrade of Messaging Performance Tool
 - Add new commands to Maestro Clients
 - ► Implement Qpid-Dispatch Agent
- Improvements of Topology Generator
- Qpid-Dispatch performance measurements
- Experiments with Qpid-Dispatch recovery