Департамент образования и науки города Москвы
Государственное автономное образовательное учреждение
высшего образования города Москвы
«Московский городской педагогический университет»
Институт цифрового образования
Департамент информатики, управления и технологий

ДИСЦИПЛИНА: «Распределенные системы»

Отчет по практической работе №4 Тема:

«Failure detection»

Преподаватель: Босенко Т.М.

Выполнил: Макаревич Д.Е.

группа: ТП-191

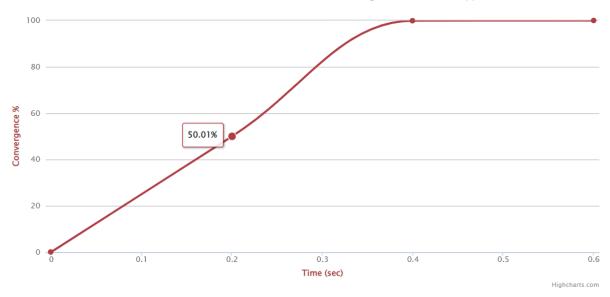
Москва

# 1 вариант - 50%

# Serf Convergence Simulator

The graph below shows the expected time to reach various states of convergence depending on the settings which are tunable below the graph. Below the graph, the estimated maximum bandwidth usage is shown per node in *kilobits* per second.

The default values in the boxes are also the default values that Serf is configured with, where applicable.



Estimated max bandwidth: 2734.4 kbps/node

### **GOSSIP INTERVAL**

The gossip interval controls how often messages are gossiped to other nodes

0.2 seconds

#### NODES

This controls how many simulated nodes are in the cluster

1130

### **NODE FAILURES**

This controls what percent of simulated nodes are failed

25 % failed

# **GOSSIP FANOUT**

The gossip fanout controls how many nodes we gossip with

25 nodes

## **PACKET LOSS**

This controls the amount of simulated packet loss [0, 100)

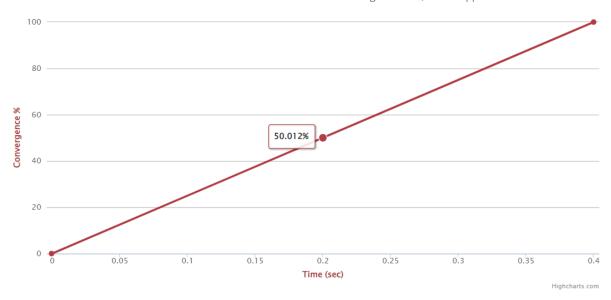
25 % lost packets

2 вариант - 50%

# Serf Convergence Simulator

The graph below shows the expected time to reach various states of convergence depending on the settings which are tunable below the graph. Below the graph, the estimated maximum bandwidth usage is shown per node in *kilobits* per second.

The default values in the boxes are also the default values that Serf is configured with, where applicable.



Estimated max bandwidth: 10937.5 kbps/node

## GOSSIP INTERVAL

The gossip interval controls how often messages are gossiped to other nodes

0.2 seconds

#### NODES

This controls how many simulated nodes are in the cluster

15130

## **NODE FAILURES**

This controls what percent of simulated nodes are failed

65 % failed

# **GOSSIP FANOUT**

The gossip fanout controls how many nodes we gossip with

100 nodes

### **PACKET LOSS**

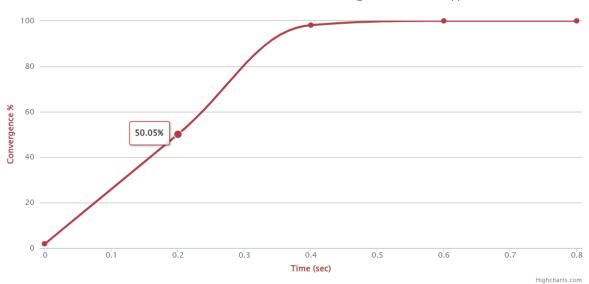
This controls the amount of simulated packet loss [0, 100)

45 % lost packets

# Serf Convergence Simulator

The graph below shows the expected time to reach various states of convergence depending on the settings which are tunable below the graph. Below the graph, the estimated maximum bandwidth usage is shown per node in *kilobits* per second.

The default values in the boxes are also the default values that Serf is configured with, where applicable.



Estimated max bandwidth: 1093.8 kbps/node

## **GOSSIP INTERVAL**

The gossip interval controls how often messages are gossiped to other nodes

0.2 seconds

### **NODES**

This controls how many simulated nodes are in the cluster

51

# **NODE FAILURES**

This controls what percent of simulated nodes are failed

10 % failed

# **GOSSIP FANOUT**

The gossip fanout controls how many nodes we gossip with

10 nodes

### **PACKET LOSS**

This controls the amount of simulated packet loss [0, 100)

12.15 % lost packets