Experiment for large-scale operation of LibreOffice Online

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• Who am I?
• abstract
• Uses in Many Users
• Testing enviroment
• Solution(?)
• LOOL and nextcloud in Japan
Who am I?

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Tasks

Server administration and network administration

Marketing of “LibreBOX”

Integrated server of nextcloud and LOOL

New business development
LibreOffice Online has improved performance, etc., than before, but there are still things you need to consider when linking with Nextcloud, especially when you use it in an environment that many users use.

This time we will announce the knowledge gained through experiments using the environment constructed so far.
本題
Uses in Many Users

Improve software performance
Load balancing on multiple servers

This session I focus on load balancing
Load balancing using a load balancer

Testing environment

LAN

cloud Infrastructure

nextcloud

Calling Service

Responce

LB

LOOL Servar1

LOOL Server2

cloud Infrastructure
Results

- Session is evenly distributed among two servers
- Load balancing at round robin fails.
- It is necessary to have a mechanism for load balancing so that one server corresponds to one file.
  
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- Should I have a mechanism to hold sessions for a specific server?
Solution(?)

- Load balancer with TLS termination proxy and Cookie based load balancing
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- Fail
  - The reverse proxy used in LOOL may not be compatible with HTTPS communication.
Solution

• LOOL uses Websocket to manage sessions.
• It is necessary to adopt a load balancer that supports Websocket
  ex: AWS Elastic Load Balancing
  ex: F5 Big-IP
To be verified after construction of the environment
LOOL and Nextcloud in Japan

- Nextcloud and NEC tied up

Ex: Japan to add millions of new nodes to federated Nextcloud network

https://nextcloud.com/press/pr20180825-2/

- Since 1 Gbps broadband is connecting to many SOHO and medium offices in Japan, there is no performance problem at the present time for each household and small business to use.

- By further distributing processing technology etc., performance will be improved if high load processing is load-balanced by these servers.

- If LOOL is introduced to these servers, introduction of LibreOffice in Japan will accelerate.
Thanks!!