FUJITSU

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Status Update
- FOSS Evaluation System in Fujitsu-

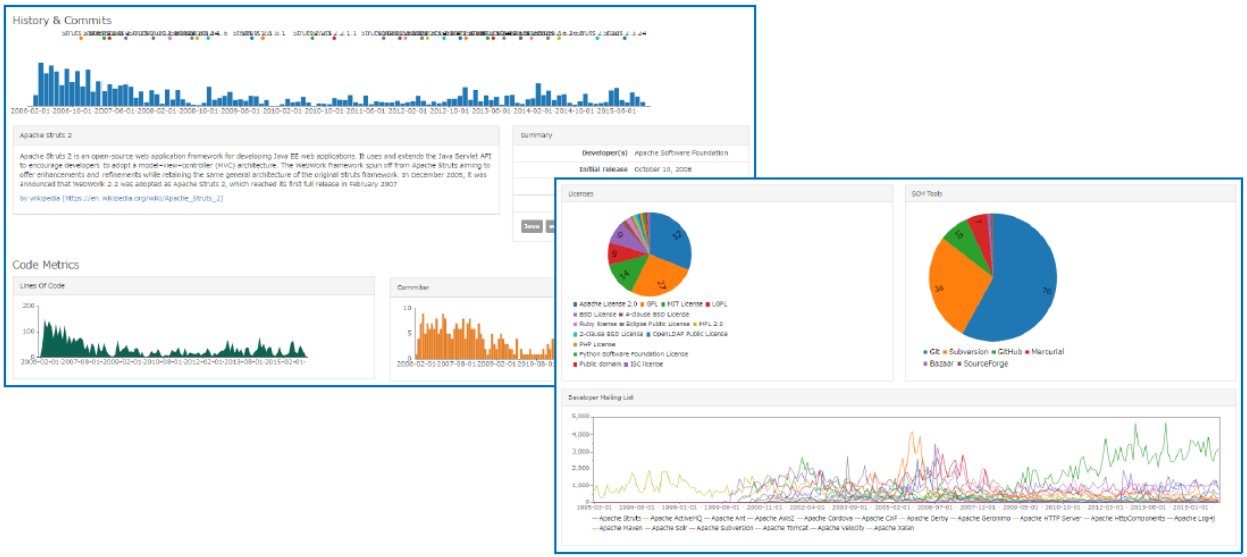
Jun 1, 2017

Overview

- Status update of the FOSS Evaluation System in Fujitsu（introduced in the WG3 meeting on July, 2016）

Overview

- FOSS Evaluation Report Management System
  - For Fujitsu, Ltd and some group companies.
  - 493 software are registered now.
  - Automatically update software information.

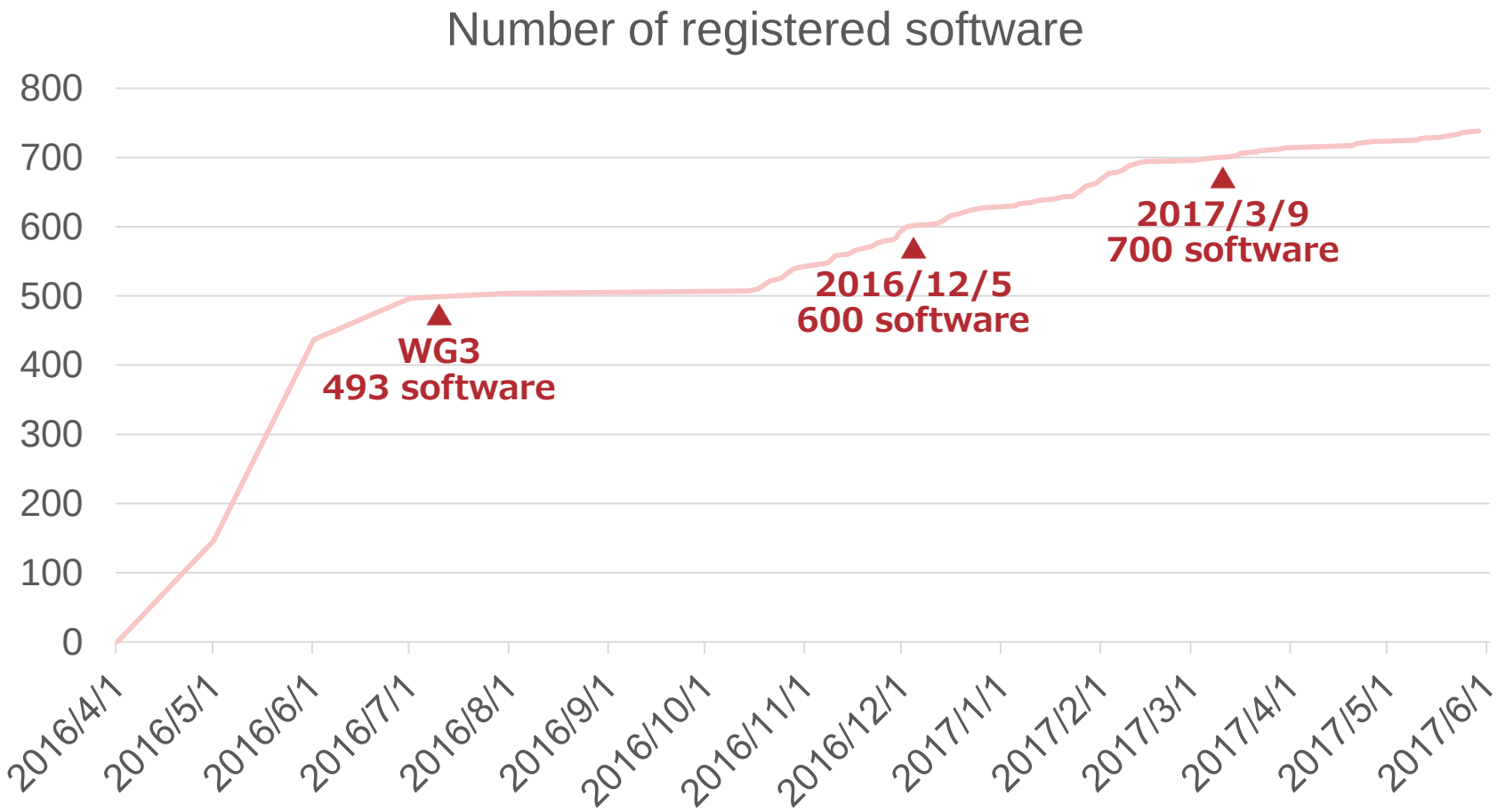


INTERNAL USE ONLY

4

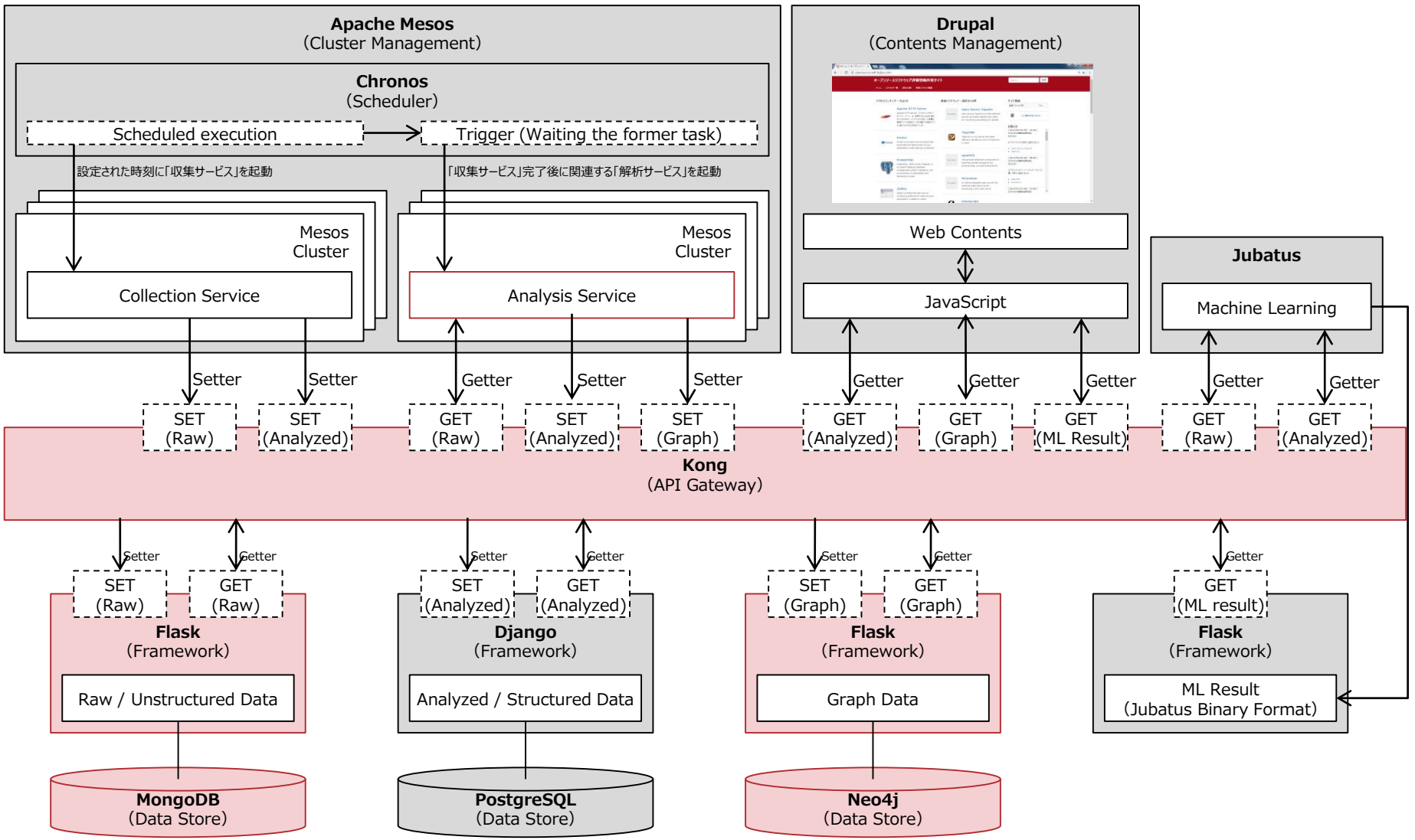
Number of registered software

- 493（July, 2016）→ 739（June, 2017）
  - OSS powered by Fujitsu (ex. Open Service Catalog Manager)
  - Trend software (ex. Mastodon, Tensorflow, etc.)



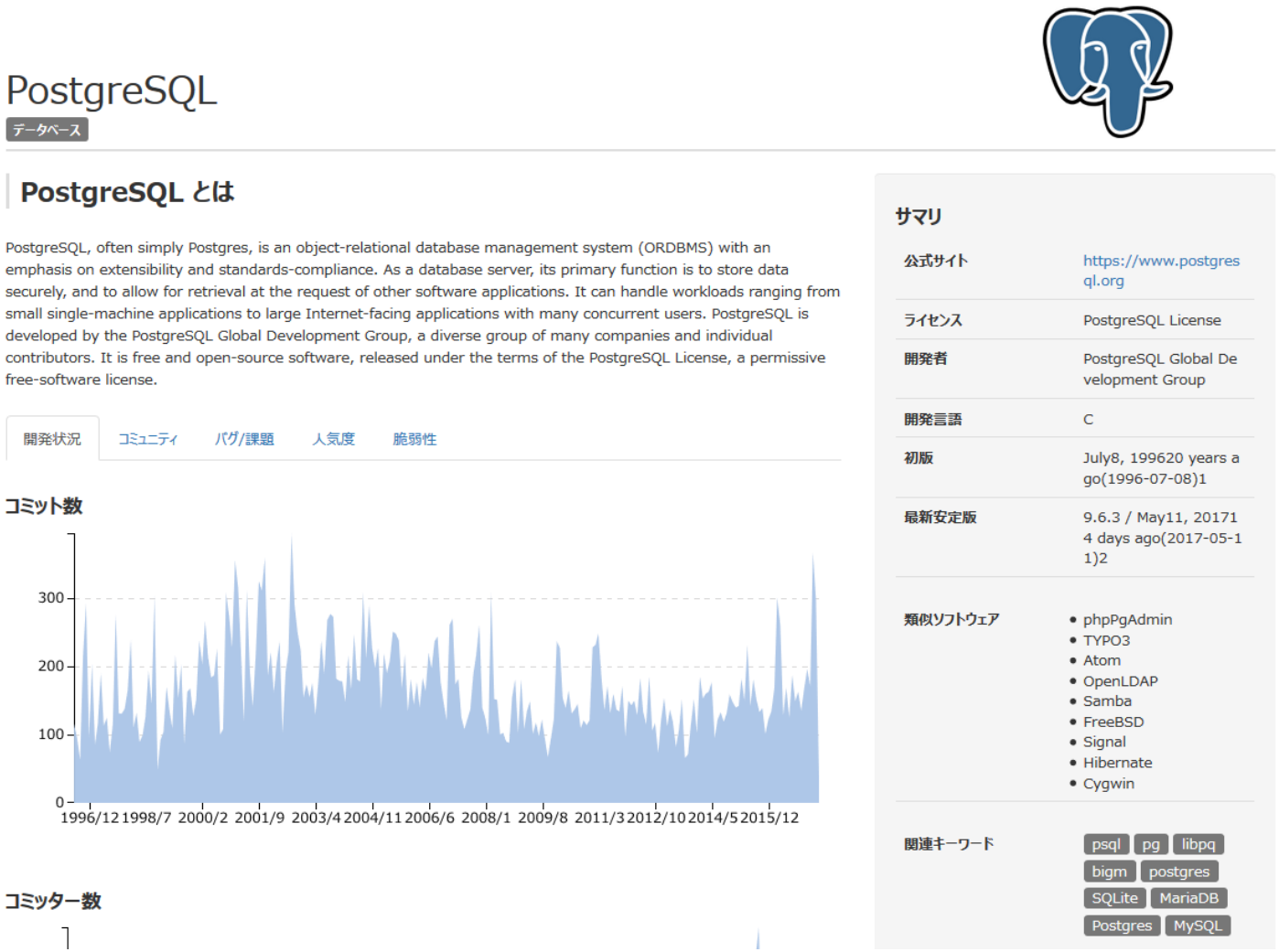
Architecture (updated)

- Add data store (MongoDB, Neo4j) and API Gateway (Kong)



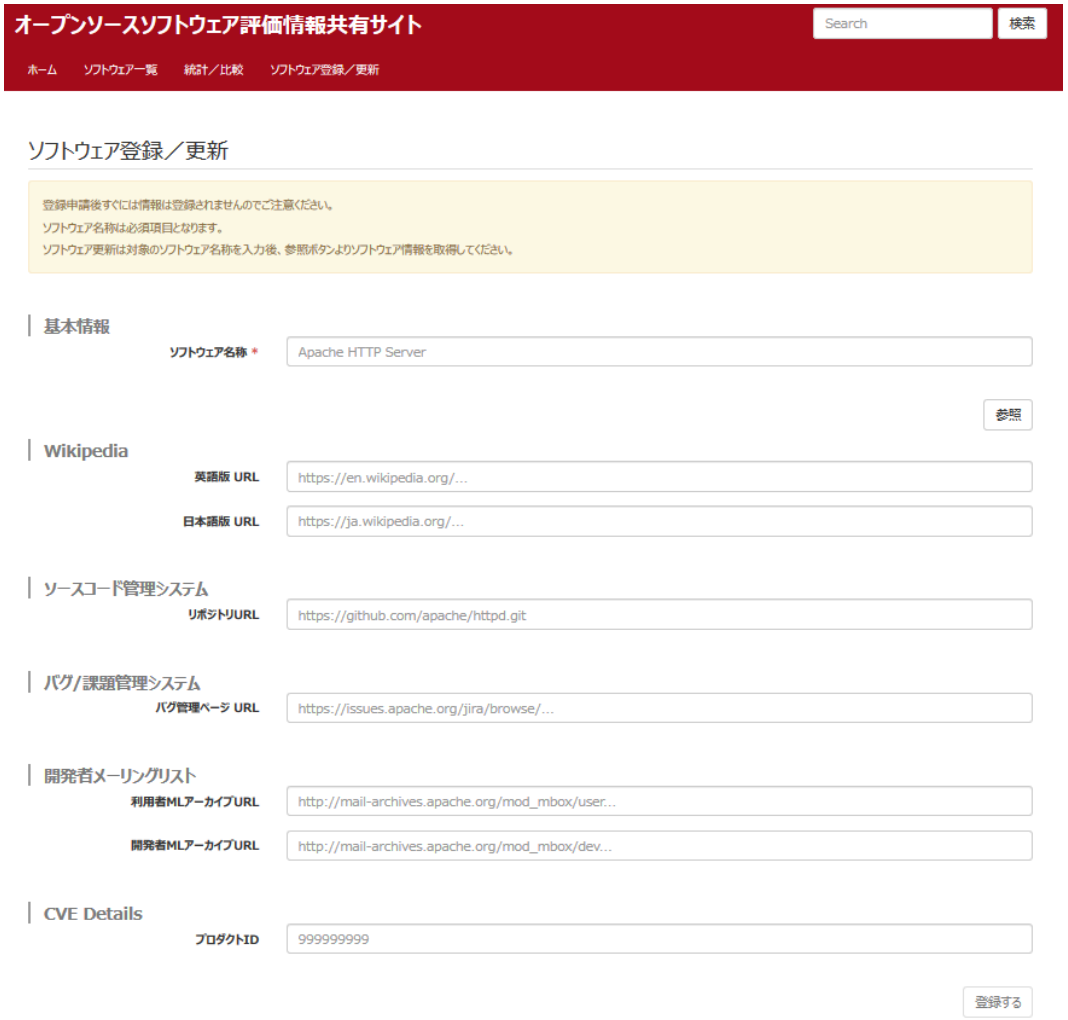
Updated Features

- Description and Summary page
  - Data from Website (Wikipedia / GitHub / SlideShare / etc…)



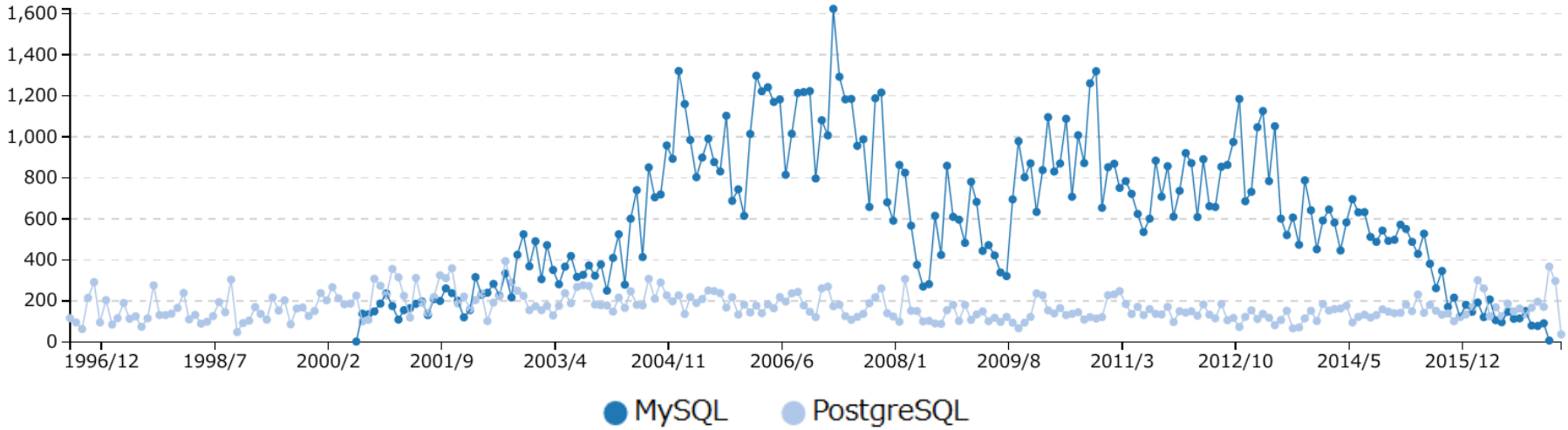
Updated Features

- Register software (Specify the URL of data source)
  - Wikipedia / GitHub / Bug Tracker / Mailing List / CVE Details

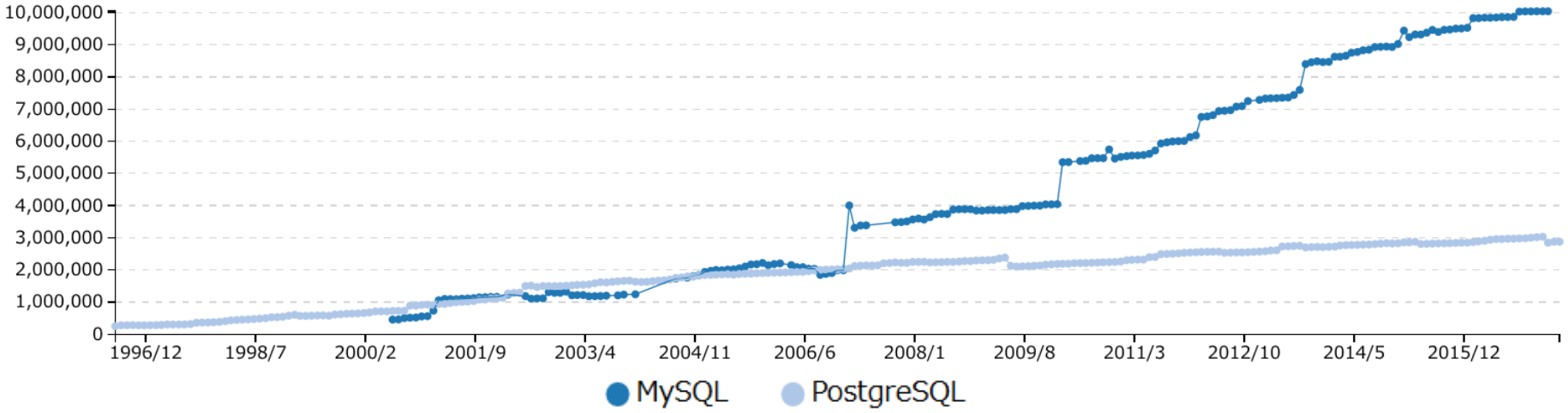


Updated Features

- Compare software with collected data
  - Ex1: Number of commits



  - Ex2: Lines of code



Updated Features

- Attach Documents
  - Using Alfresco (OSS : Contents Management System)

Docker

docker

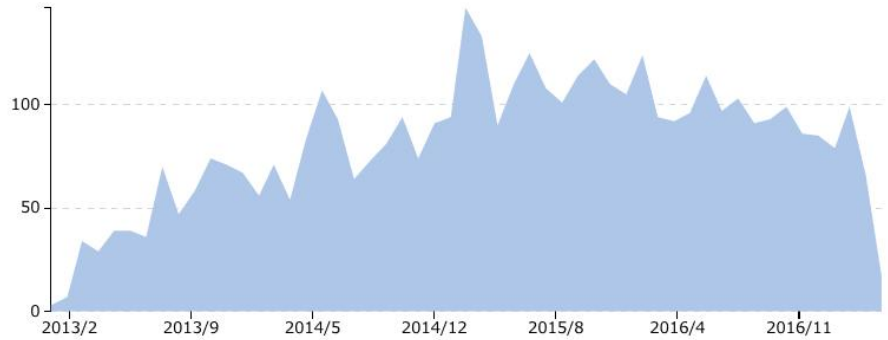
Docker とは

Docker is an open-source project that automates the deployment of Linux applications inside software containers.
Quote of features from Docker web pages:
Docker containers wrap up a piece of software in a complete filesystem that contains everything it needs to run: code, runtime, system tools, system libraries – anything you can install on a server. This guarantees that it will always run the same, regardless of the environment it is running in.
Docker provides an additional layer of abstraction and automation of operating-system-level virtualization on Linux. Docker uses the resource isolation features of the Linux kernel such as cgroups and kernel namespaces, and a union-capable file system such as aufs and others to allow independent "containers" to run within a single Linux instance, avoiding the overhead of starting and maintaining virtual machines.

サマリ

公式サイト	https://www.docker.com/
ライセンス	Apache License 2.0
開発者	Docker, Inc.
開発言語	Go
初版	13March 2013 4 years ago(2013-03-13)

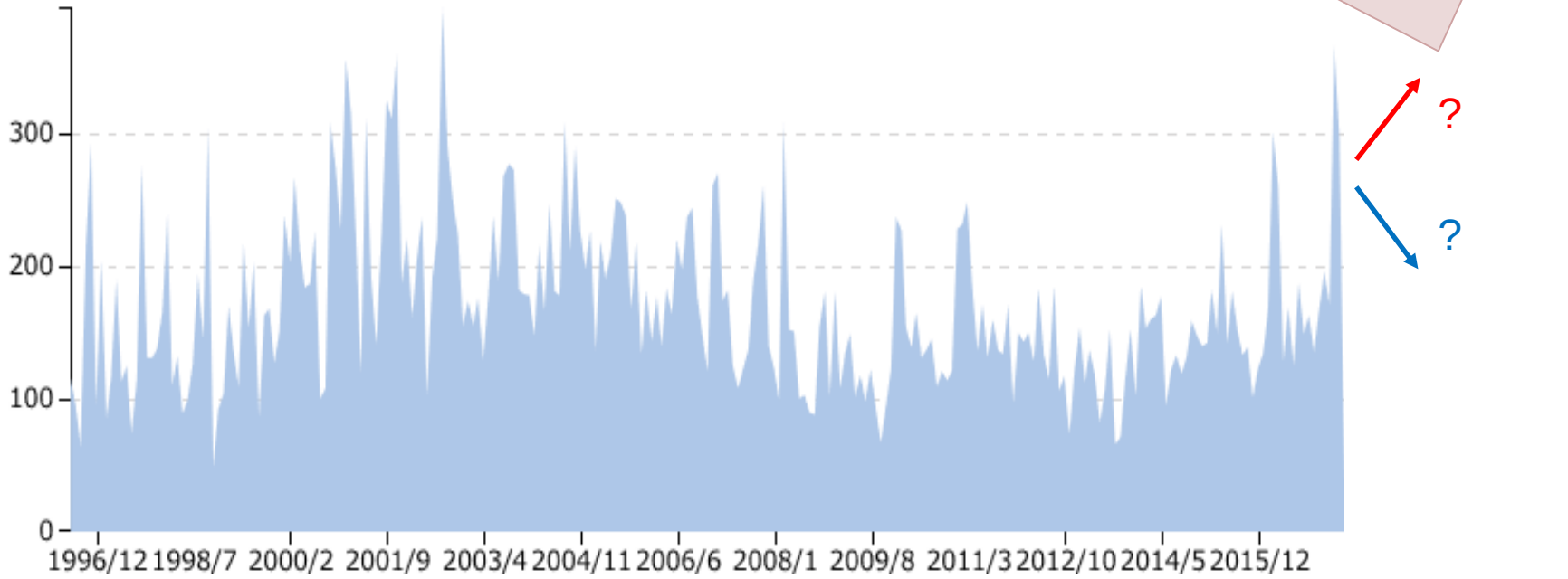
コミッター数



関連資料

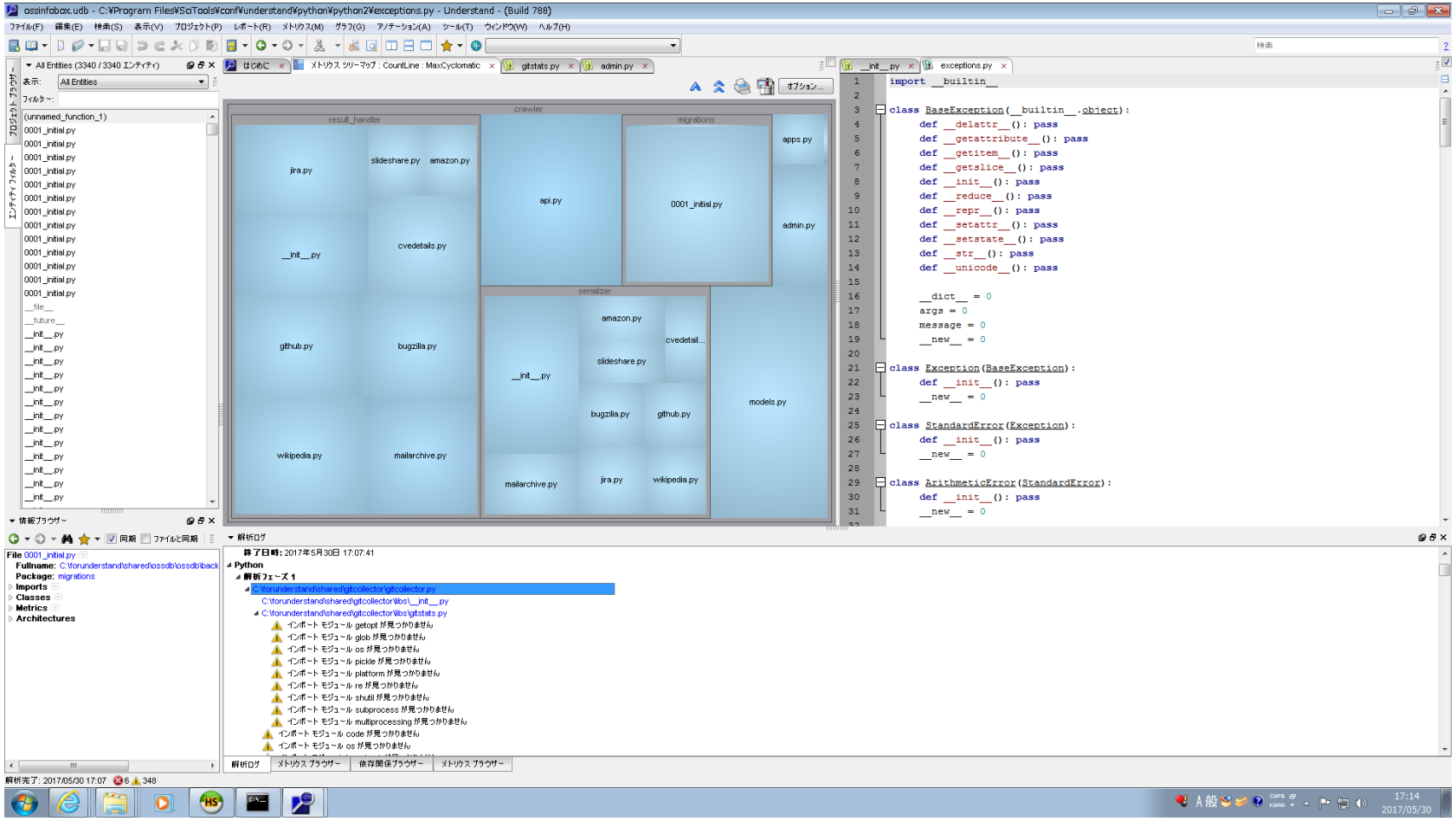
Updated Features

- Machine Learning + Web API
  - Predict the tendency of time series data (Positive/Negative)
    - Number of commits
    - Number of committers
    - Lines of code
- Get the results via REST API
  - Ex: number of commits in PostgreSQL



Future work

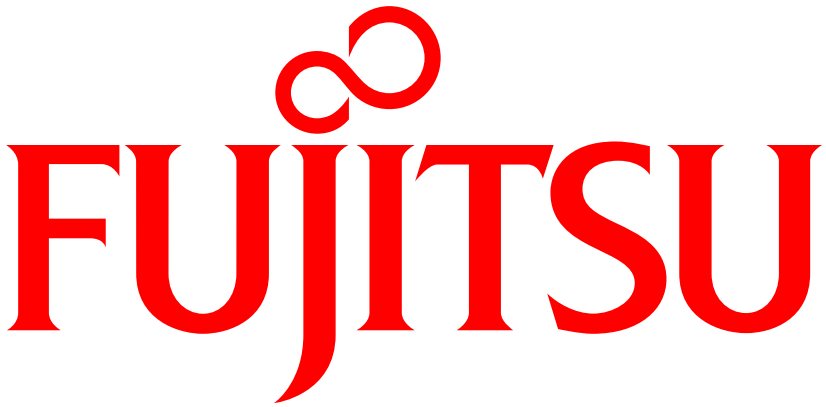
- Software metrics analysis（using Understand）
  - Test coverage
  - Cyclomatic Complexity　　etc…



Summary

FUJITSU

- Updated features
  - Refine Architecture and UI
  - Compare Software
  - Attach Documents
  - Machine Learning + Web API
- Future work
  - Software Metrics Analysis
    - Test coverage
    - Cyclomatic complexity　　etc …
  - Data Analyze
    - Categorize software (using Machine Learning)
  - Quality Analysis
    - Bug fix prediction (using Bug Tracker Data / Machine Learning)



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