

A black-bordered box containing the text "Asia OSS Workshop" in a black, sans-serif font.

Open Source Software (OSS) Business in Fujitsu SSL and Business Cases

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Agenda

- **Introduction of Fujitsu SSL**
- **OSS Business Cases**
- **Solutions to Issues**

Introduction of Fujitsu SSL

Fujitsu Social Science Laboratory Limited

Established : July, 1972

Stakeholder : Fujitsu Ltd. 100%

Staff : 1,231 ppl. (As of April 1, 2009)

Revenue : 24.2 billion yen (260 million US dollars)(FY 2009)

Business Segment :

- **System Integration Services (56%)**
- **Solution Service Business (44%)**

Part of Software Services of the Fujitsu Group

Why are we focusing our efforts on OSS Business?

Accumulate Experience and Lead the OSS Business

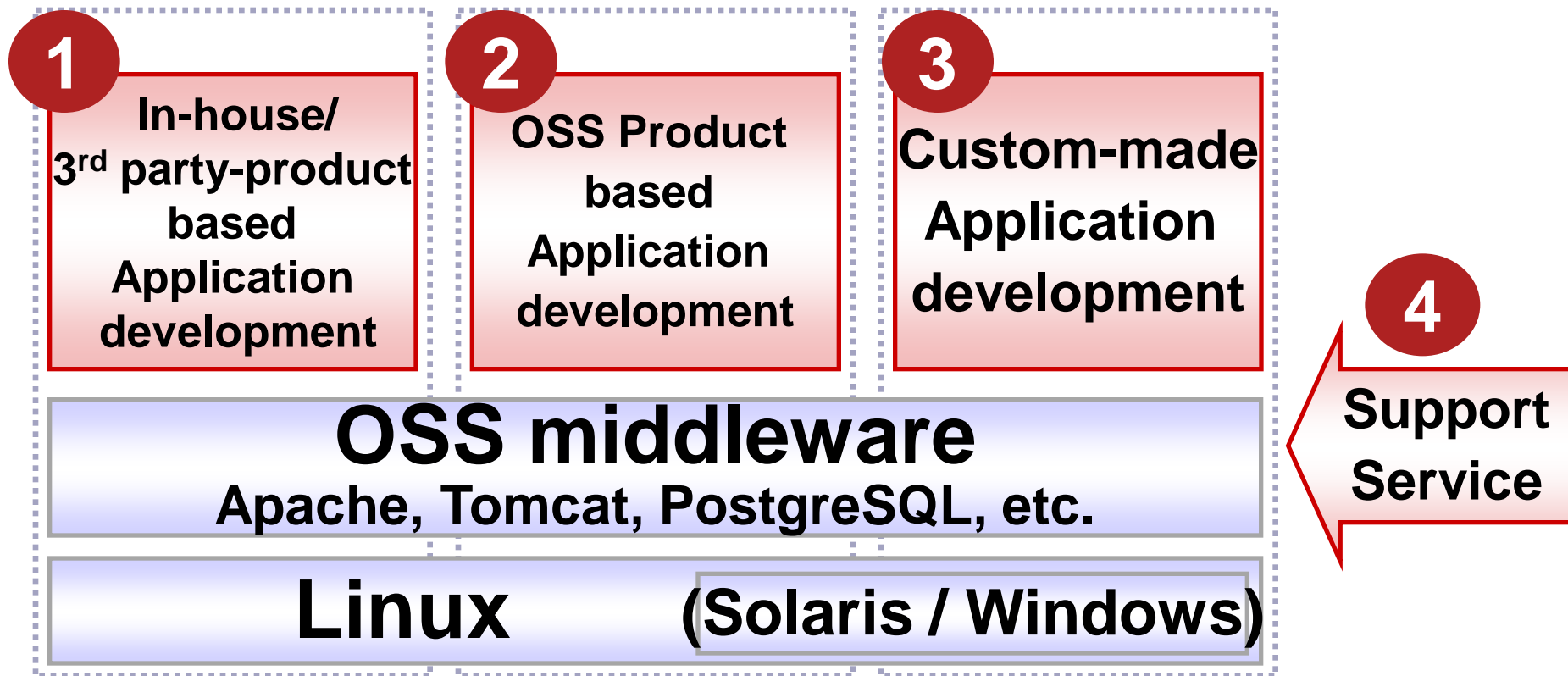
■ Rapid Spread of OSS for Enterprise Use

- **IT cost reduction and use of OSS as the standard**
- **Some OSS have reached the same level as commercial products**

■ Solve Issues related to OSS and Commercial Products Differences

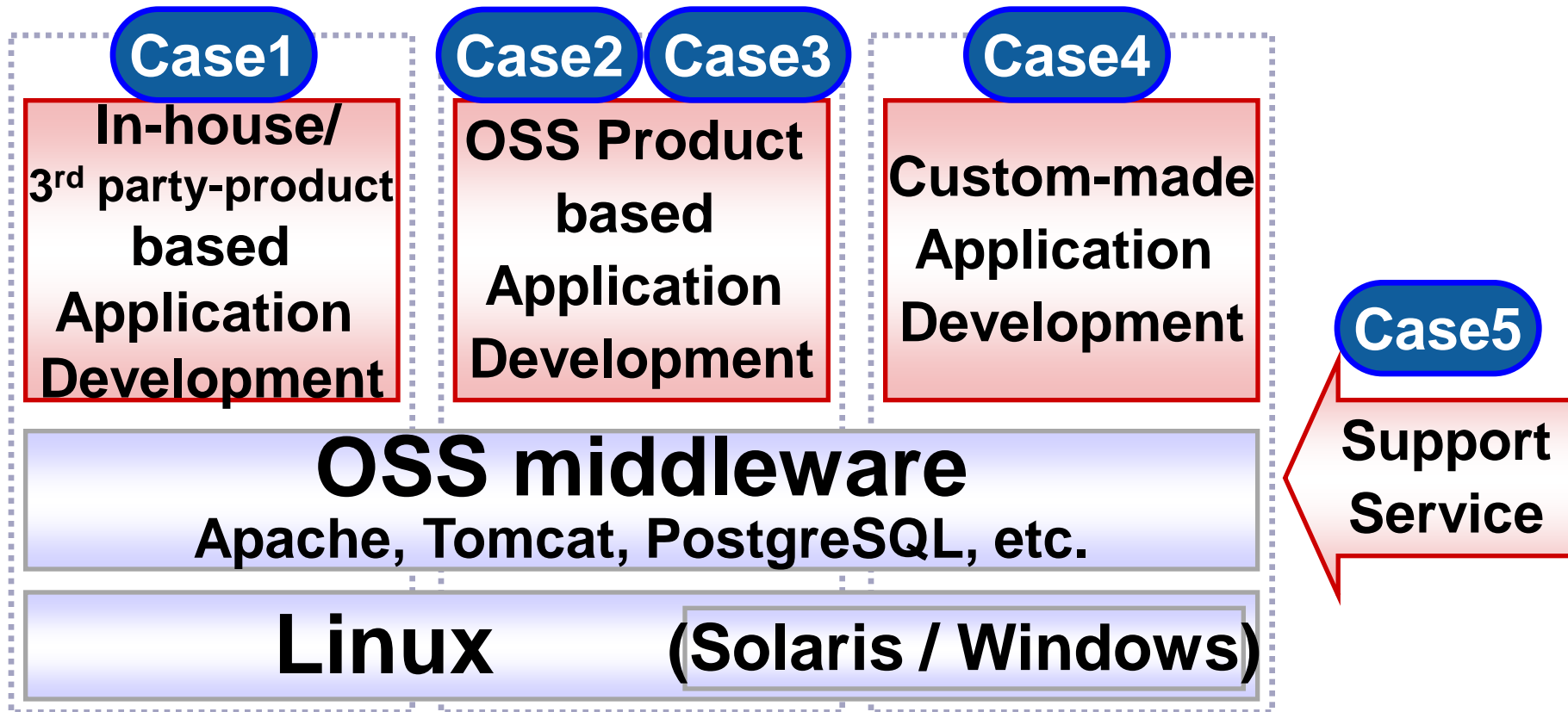
OSS Business at Fujitsu SSL

- Application Development on Linux and OSS middleware ①②③
- OSS middleware Support : ④



OSS Business Cases

OSS Business at Fujitsu SSL



In-house product based Application Development

TYPE: “Web Core Enterprise”

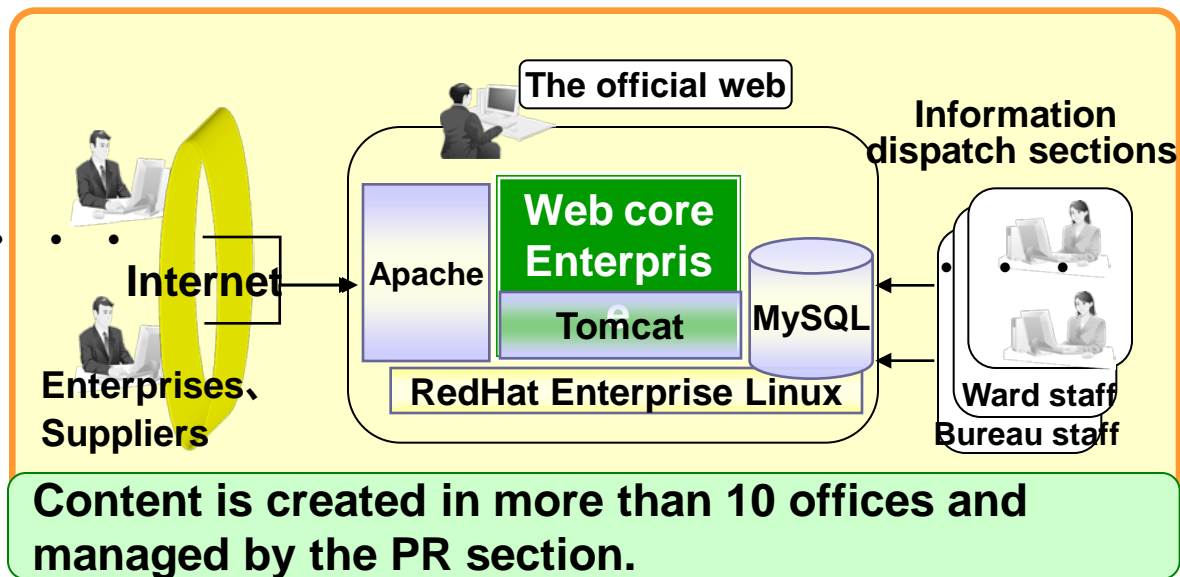
Contents Management System (CMS)

WHO: Municipality: population 3 million

REASONS:

- CMS “Web Core Enterprise” operated on **Linux**
- **Direct support** from product developer

- “Web Core Enterprise” can work with OSS middleware, as well as “Interstage” and “Symfoware” from Fujitsu products.



TYPE: “SugarCRM”

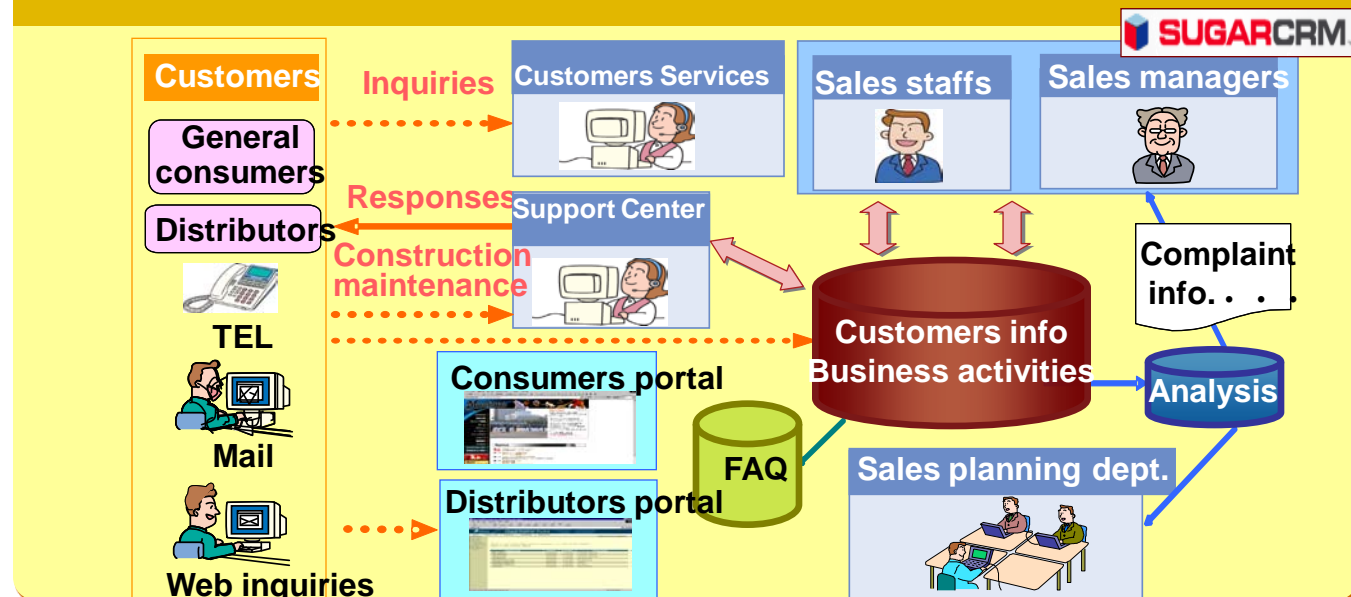
WHO: a Telecom Firm

REASONS:

- Initial investment cost reduction
- Reliable Life Cycle Support from planning to operations

- SugarCRM is an OSS based Customer Relationship Management Software

Work flow efficiency improvement for management and sales staff by sharing information in all companies.



OSS based Application Development

TYPE: “GroundWork Monitor” Monitoring System Integration

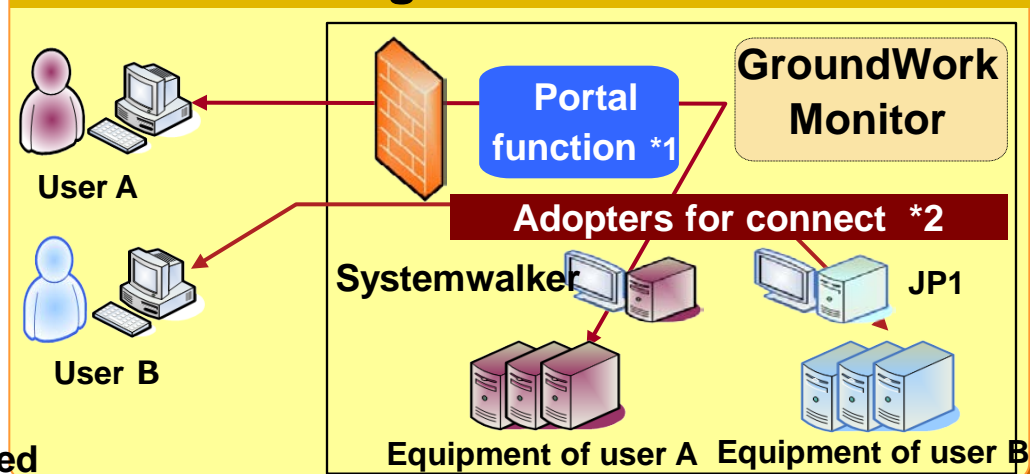
WHO: a Data Center

REASONS:

- Reduce monitoring operation cost for future hardware expansion
- Robust link-adapters with existing monitoring systems
- Custom portal functions

- “GroundWork Monitor” is an OSS based integrated network&system-monitoring system

Functions Strengthened for the data center



*1 : OSS language “Ruby” is used

*2 Linked object software: Fujitsu Systemwalker, Hitachi JP1, IBM Tivoli, HP OpenView

Custom-made Application Development

TYPE: Web services on OSS middleware

WHO: an Internet Service Provider

REASONS:

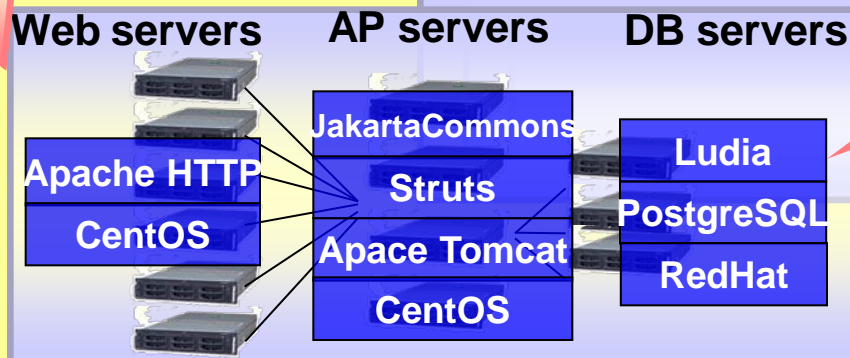
- Software expenses for about 3000 servers was greatly improved
- Ensure stable operation of a large amount of transaction processing
- New services can be continuously added using OSS
- The development environment is standardized

Operational environment

500 million PV/day

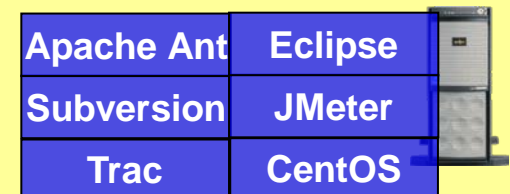
More than 1000 Web services

About 3000 servers



20 kinds of OSS

Development environment



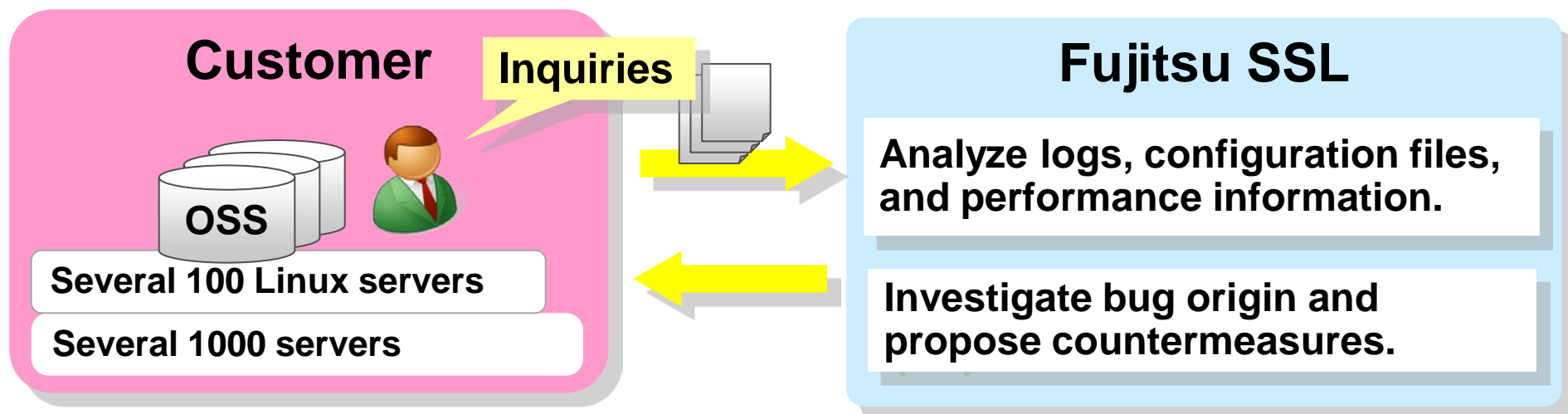
Library/Task/Incident Management

TYPE: Support Service for OSS in Mission-Critical System

WHO: Large Service Provider: several 1000 servers

REASONS:

- No other support service provider
- Our price is not dependent on the number of servers

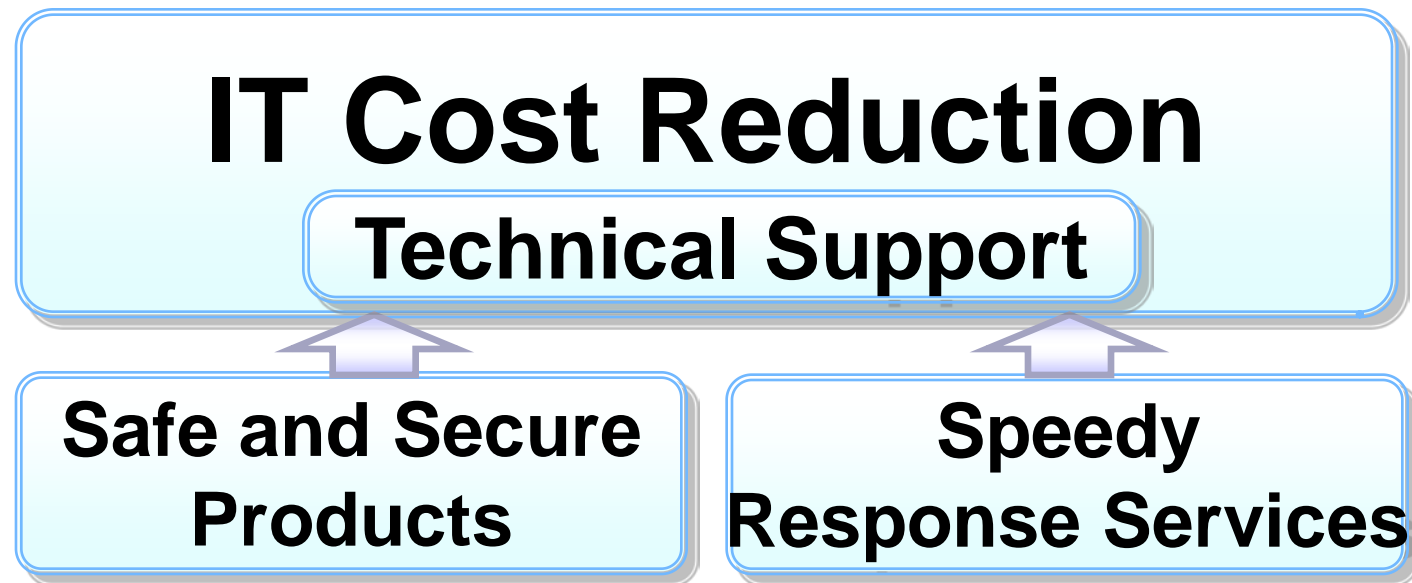


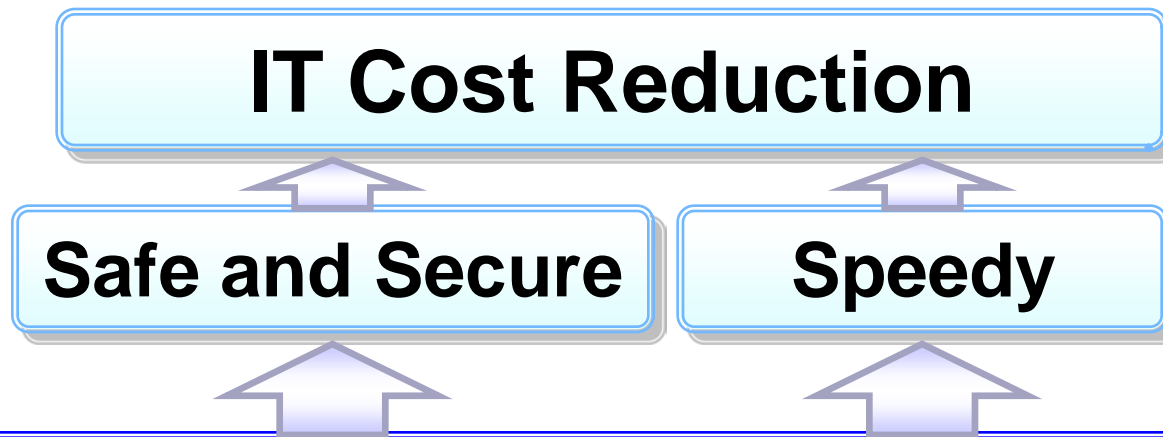
Solutions to Issues

Fujitsu SSL's OSS Business Policies

Supports safe, secure, and speedy OSS use

- **Customers' expectation: IT Cost Reduction**
- **Customers' concern: Reliable Technical Support**





- (1) High-Quality Support**
- (2) Intellectual Property Right (IP) Risk Management**
- (3) Improved Development Efficiency through Technology Sharing**
- (4) Promotion of OSS Usage**

Solutions to Issues in OSS Business

(1) High-Quality Support

■ Difficulties when OSS is introduced to enterprise use

- Mainly developed by communities
- Support service contracts are not provided usually



Developers can't be relied on for
continual quick support

- Risk of malicious attack due to open source code



Necessary to know security / update
information promptly

**When OSS is adopted into business systems,
the consideration of support is indispensable**

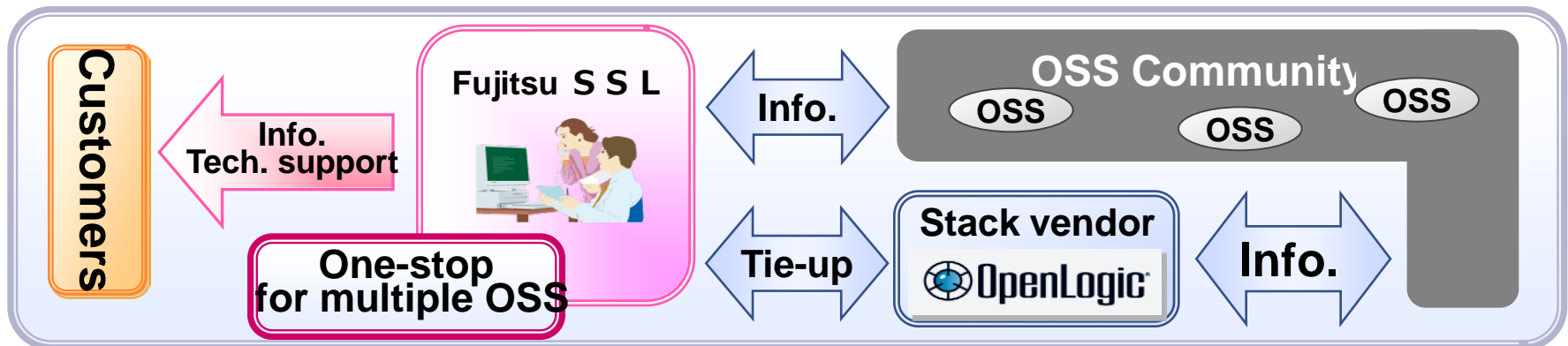
Solution to Issues in OSS Business

(1) High-Quality Support

Provides Reliable, Fast, One-Stop Support

- Expertise in Large-Size Systems
- Diverse support : OSS Combinations, Versions, Base Operation Systems
- **Quick Support** through cooperation with a Stack Vendor

Fujitsu SSL's "OSS Middleware Support Service"



Solution to Issues in OSS Business

(2) IP Risk Management



**Eliminates OSS Risks to Provide
Secure and Safe Program Product to customers**

Recent cases:

- **In Nov. 2009, a famous software vender apologized for inappropriate use of GPL OSS in its download tool**
- **In Dec. 2009, 14 consumer electronics companies named in a copyright infringement (GPL OSS usage) lawsuit by the Software Freedom Law Center**

Solution to Issues in OSS Business

(2) IP Risk Management

OSS Detection Service with a Tool to Eliminate Unintended OSS Inclusion

Fujitsu SSL's IP Risk Management

by OSS Guideline :

- License Check in Quality Management Process
- OSS License Education



Using an OSS check tool, we detect unintended OSS inclusion, through a more reliable method

Solution to Issues in OSS Business

(2) IP Risk Management

Sample Reports of Palamida

Analysis: Compliance Report

Audit Workspace

Workspace Name	TOMCAT
Report Generated	Mon Aug 11 19:18:56 JST 2008
Workspace Details	Settings and File Composition

Policy Unknown (6)

Confidence Index	3rd Party Product	License	Total Files
95	Apache Tomcat	Apache Software License Apache License V2.0	31
81	Apache Jakarta Commons	Apache Software License	20
80	Java Servlet		3
80	Eclipse Platform API	Eclipse Public License - v 1.0	3
80	Eclipse-JDT	Eclipse Public License - v 1.0	3
74	Apache Commons Logging	Apache License V2.0	16

Policy Blacklist (0)

Confidence Index	3rd Party Product	License	Total Files
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Policy Whitelist (0)

Confidence Index	3rd Party Product	License	Total Files
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Additional Test Evidence

Type	Items
Files with Source Code Snippet Matches	2
Files with Exact Matches	17
Copyright Matches	6
String Match Terms	0
Namespaces without Matches	3

The OSS products which are used are reported by names and license names

Source Snippet Matches

Your Source File: C:\Palamida\target\Java\200712_QRcode\qrcode\example\jmf\camStateHelper.java

3rd Party Filename: StateHelper.java | CodeRank: 84.9% | Coverage: 100.0% | Clustering: 81.0% | Uniqueness: 71.2% | Snippet Matches: 48

```

jmf-2_1_1e-scs1-src.zip
1 package jp.sourceforge
2
3 import javax.media
4
5 public class camState
6
7     Player player;
8     boolean configured = false;
9     boolean realized = false;
10    boolean prefetched = false;
11    boolean eom = false;
12    boolean failed = false;
13    boolean closed = false;
14
15    public camStateHelper(Player p) {
16        player = p;
17        p.addControllerListener(this);
18    }
19
20    public boolean configure(int timeoutMillis) {
21
22        long startTime = System.currentTimeMillis();
23        synchronized (this) {
24            if (player instanceof Processor)
25                ((Processor)player).configure();
26            else
27                return false;

```

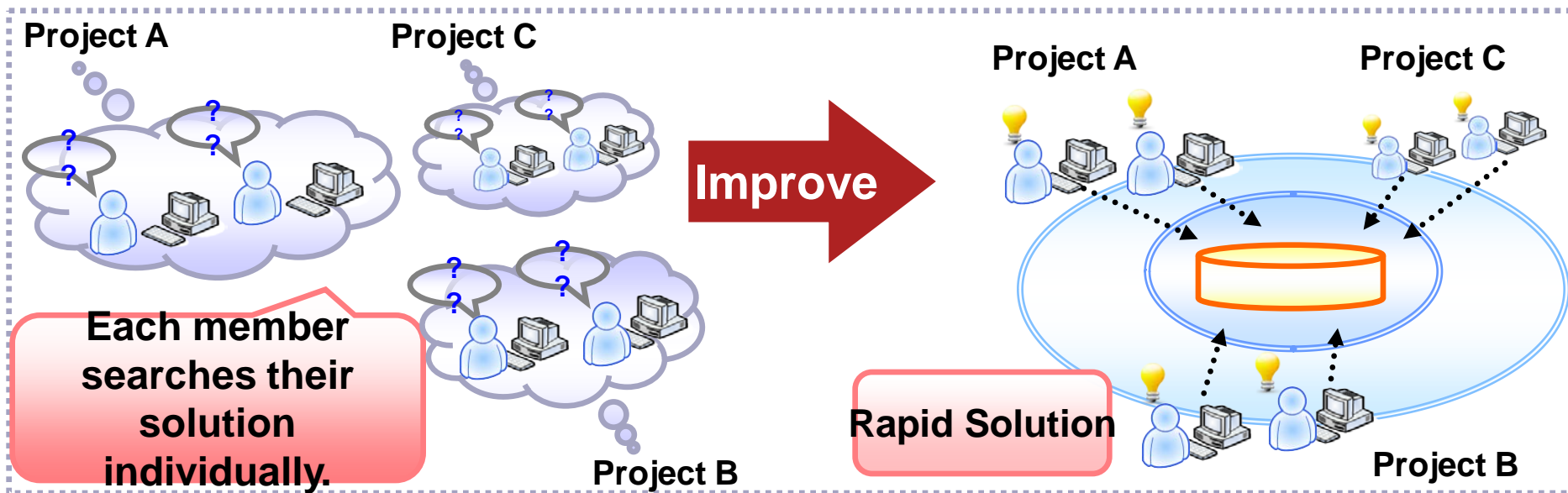
Parts which have possibility of being OSS code are highlighted

Solution to Issues in OSS Business

(3) Improved Development Efficiency

Requests from Developers:

- Share Information, Procedures, Components, Codes
- Eliminate Overlapped Work that Others already Done

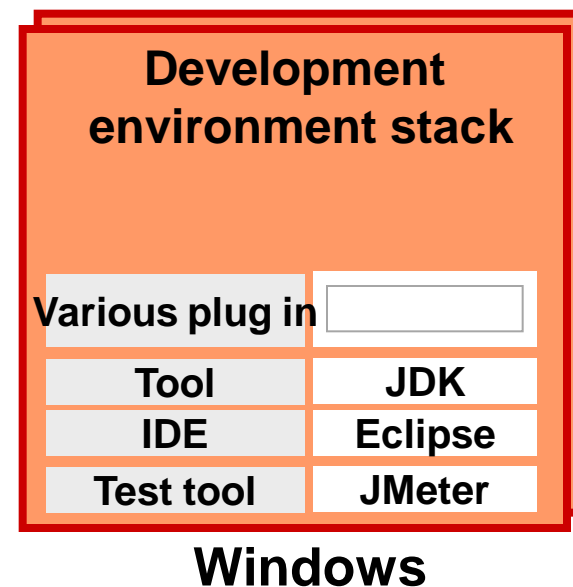
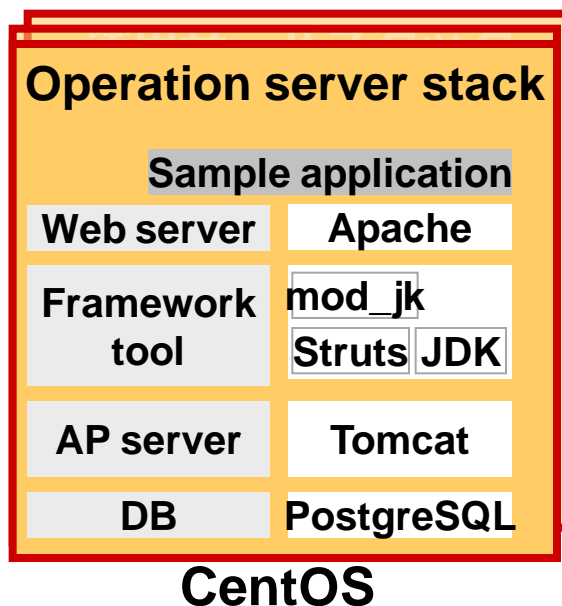


(3) Improved Development Efficiency

Provides safe, secure, and quick development service by “Fujitsu SSL Standard Stack”:

In-house Standard OSS Stack

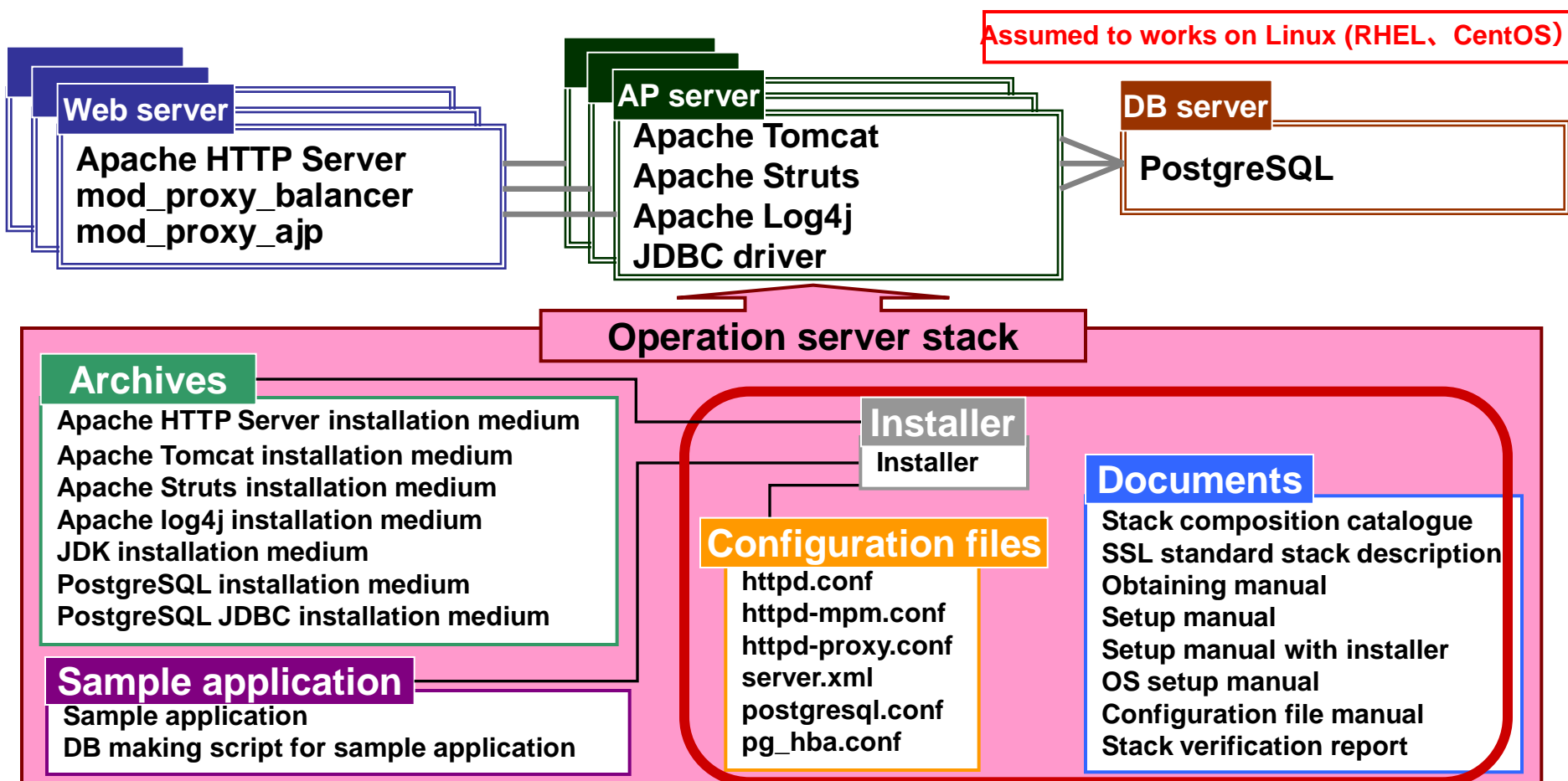
- OSS Set for Web Application Development
- Archives with Fine-tuned Components, Setup Files, Installers and Documents



Fujitsu SSL Standard Stack

“Operation Server Stack”

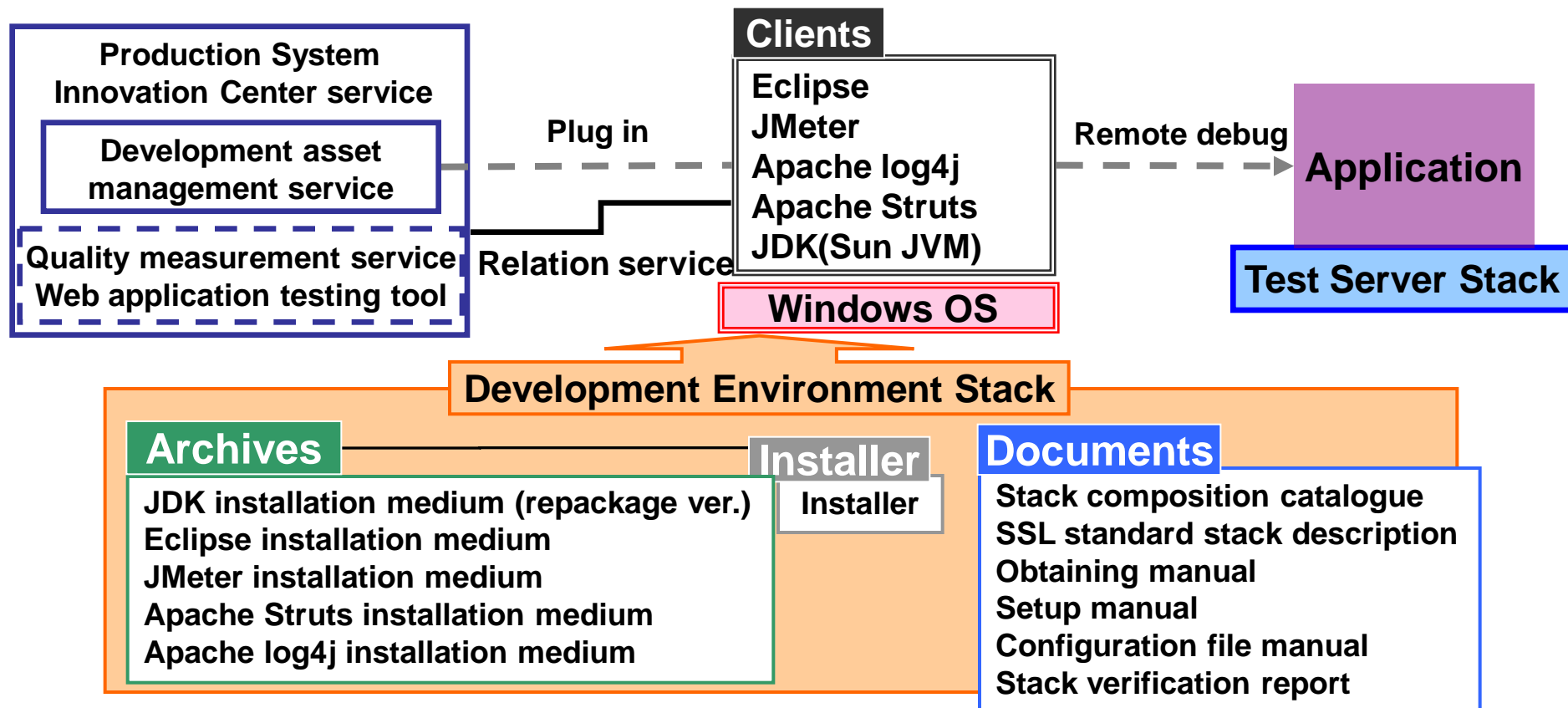
- Configurations for Web Application Operating Platforms
- Designed for setting up Web Servers, Application Servers and a Database Server onto Physical Servers
- Includes **an installer**



Fujitsu SSL Standard Stack Development Environment Stack



- Ready to use set for Web Application Development on Windows
- Eclipse as IDE, and JMeter as Load Testing



(4) Promotion of OSS Usage

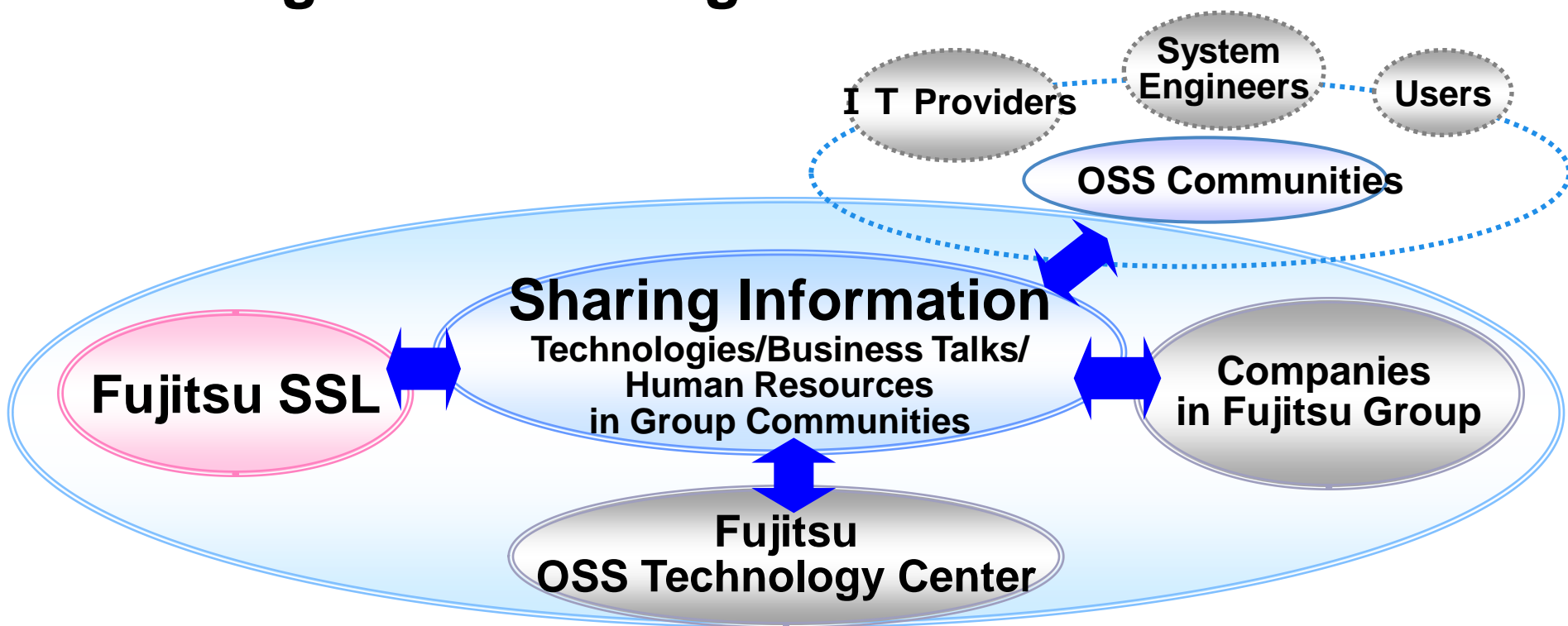
Improve awareness of high standard OSS is necessary

- **Unite with Fujitsu-Group companies**
- **“OSS Integrated Monitoring Tool Promotion Conference”**
- **Task Force: “Ruby” Standardization**

(4) Promotion of OSS Usage Unite with Fujitsu-Group Companies

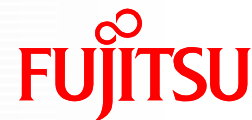
OSS information sharing in Fujitsu group

- Awareness Improvement of OSS Products and Technologies
- Sharing for Technologies and Business



(4) Promotion of OSS Usage

“OSS Integrated Monitoring Tool Promotion Conference”



“Towards the Era of High-Quality, OSS Based System Monitoring”

- We established the
“OSS Integrated Monitoring Tool Promotion
Conference” (Jan. 2009)
 - Fujitsu SSL: [GroundWork Monitor](#)
 - NTT Data : [Hinemos®](#)
 - Sun Microsystems: [MySQL Enterprise Monitor](#)
 - Miracle Linux: [ZABBIX](#)

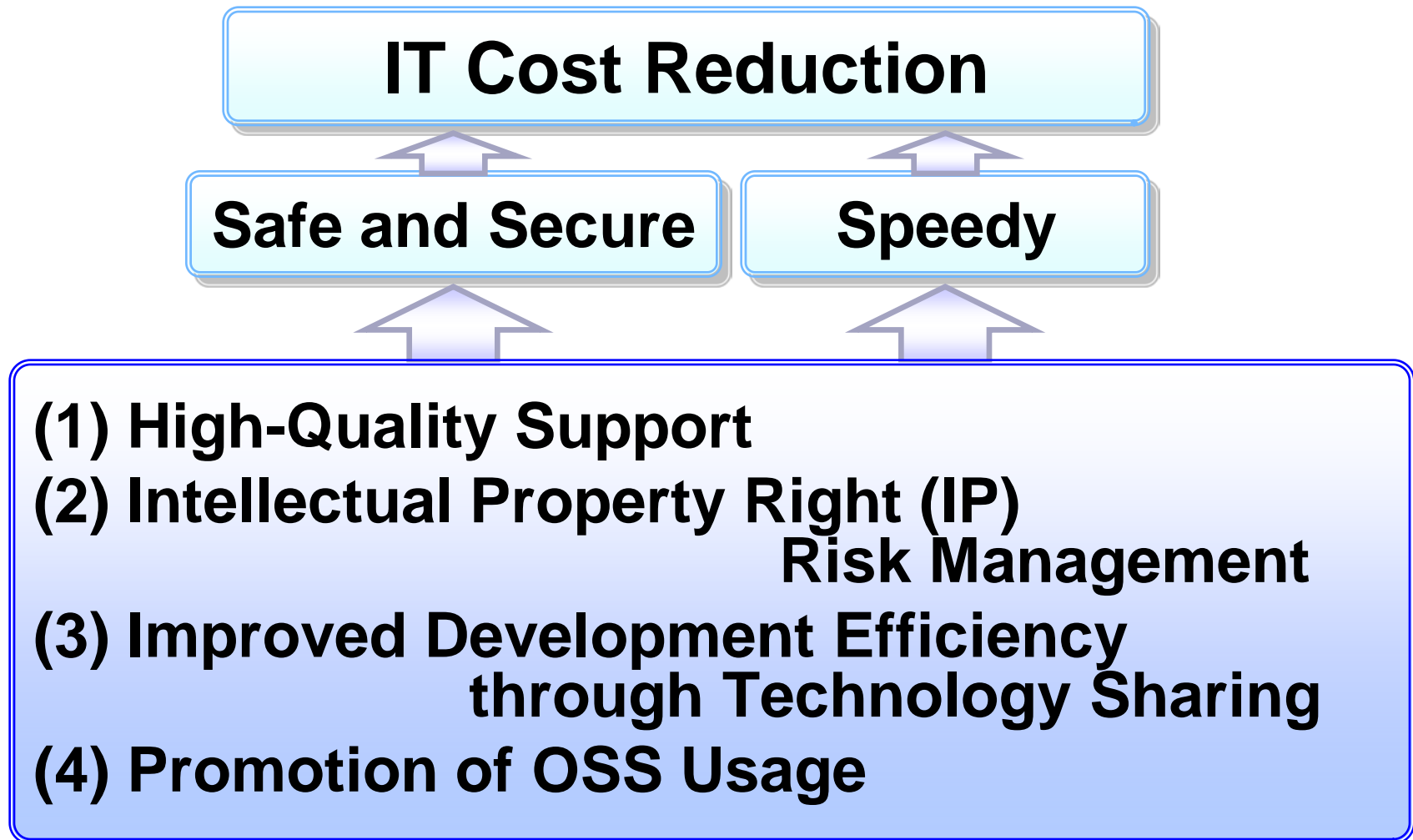
(4) Promotion of OSS Usage Programming Language “Ruby” Standardization




**Participate in “Ruby Standardization Committee”
managed by Open Software Center of IPA**
(Independent administrative agency / Information-technology Promotion Agency, Japan)

- **Participate in the Ruby international
standardization Working Group** (since Oct. 2008)
- **Our staff participated in the
“Ruby World Conference 2009”
as a panelist**
(Sep. 2009)

Expand the OSS advantages to the customers' IT system





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