

The Government Shared Platform on Cloud Computing Technology

Published On: 09 September 2015

Organisation: Administrative Management Bureau, Japan Ministry of Internal Affairs and Communications (MIC)

Country: Japan

Level of government: Central government

Sector: General public services

Type: Digital, Organisational Design, Public Service

Launched in: 2013

Overall development time: 1 year(s)

Like this innovation

0 persons like this innovation

Description

“Government Shared Platform” (GSP) is a type of “PaaS” (platform as a service). Utilizing cloud computing technology for consolidating government information systems, GSP started its operation in March 2013. 23 information systems have been consolidated and transferred onto GSP by March 2015. Each of these systems consolidated on GSP was originally constructed, operated and managed separately. By gradually integrating and consolidating these systems, GSP aims to reduce the total cost of operation and strengthen security of the government information systems coming to GSP.

Providing platform services (including data center, facilities, network, hardware (virtual server, etc.), software (OS, middleware, etc.), information security measures, operation monitoring, etc.) for the systems both for back office functions and for providing services for the general public, GSP helps optimize the entire government information systems.

The “Roadmap” for Renovating Government Information Systems (RRGIS) of the government envisages that a total of about 1300 government information systems at the end of FY2013 will be integrated and consolidated to about 850 systems by FY2021. Of the 850 systems, 300 information systems will be streamlined and migrated to GSP. GSP is an indispensable tool for realising the goal of the “Roadmap” of the government.

Why the innovation was developed

- Recent years have seen the increase in the total costs of government information systems and the growing threats concerning cyber security. Under such circumstances surrounding government information systems, cost reduction and strengthening security of information systems of the entire government have been all the more necessary.
- Integration and consolidation of the infrastructure of government information systems have thus been deemed a “must” for the government.

Objectives

Improve effectiveness, Improve efficiency

- A total of 1300 government information systems as of the end of FY2013 will be integrated and consolidated to about 850 by FY2021 in accordance with the “Roadmap”, about 300 information systems out of 850 are scheduled to be streamlined and migrated to GSP by FY 2021.
- Reducing operation cost of government information systems and strengthening security of about 300 government information systems to be migrated to GSP.

Main beneficiaries

Businesses, Government bodies, Government staff

- Citizens and government employees: users of the government information systems migrated to GS
- Organizations in charge of operating the government information systems migrated to GSP.

Results

Results not available yet

- 23 information systems have been consolidated and transferred onto GSP by March 2015.
- No serious security incidents have been reported since the start of GSP operation and transition to GSP has been smooth.
- As of 2015, GSP is expected to reduce 24% of total cost (i.e., for renewal, maintenance and operation of both hardware and software) of the systems transferred to GSP.
- The savings will be 6.3 billion yen (about 47 million euro) per year in 2022 when developing of GSP will have finished, compared with the case without GSP. These figures will be confirmed in FY2021 IT budget.

Development

Design

GSP is based upon the idea envisaged as “KASUMIGASEKI Cloud”, originally proposed in a “New Strategy for Digital New Era – a Three-year Emergency Plan-” adopted in April 2009 by the IT Strategic Headquarters of the government.

Testing

- GSP started its operation in March 2013. Since then, GSP has been expanded gradually year by year with government information systems being migrated to GSP one by one.
 - Size and functions of GSP therefore gradually grow while making sure of the security and stable operation of GSP starting from a very limited number of information systems, to ultimately 300 systems targeted by FY2021.
-

Implementation

Tools used:

- Utilising cloud computing technology, GSP provides platform services (including datacenter, facilities, network, hardware, software, information security measures, operation monitoring, and so on) for government information systems.
- “Government Shared Platform Development Plan” was adopted by the Government Chief Information Officers’ (CIOs’) Council in November 2011.

Resources used:

- The number of staffers directly engaging in developing this GSP innovation for the Government are 18 as of April FY2015.
 - Budget: about 5.1 billion yen (corresponds to about 38 million euro) as of FY2014.
-

Challenges and solutions

- The costs of government information systems have been increasing year after year.
 - The cyber threats to government information systems have also been growing year after year.
 - Reducing operation costs of government information systems through sharing various resources, by utilizing cloud computing technology, among those systems migrated to GSP.
 - Utilising cloud computing technology, GSP provides strengthened security measures for each system migrated to GSP.
-

Partnerships

Japanese government ministries

Other Public Sector

A working group was established with the participation of other relevant governmental ministries in Japan. This working group took an approach that allowed its members to decide various details of policies relating to GSP, while making thorough consultation among the members and reaching agreement on various issues. This approach has enabled the Ministry of Internal Affairs and Communications to develop and build GSP efficiently.

Lessons Learned

Lessons Learned

- Our approach has emphasized consultation and reaching an agreement between relevant government ministries in deciding GSP policies, and has contributed to the smooth transition, running, and coordination of GSP innovation.
 - Building trust in GSP scheme among the parties is indispensable and key to this innovation.
-

Conditions for success

- Understand the current situation surrounding government information systems and choose the right way to move forward.
 - Cooperate and consult with interested parties including the ministries.
 - Utilising effective new technology such as cloud computing.
-

Copyright OECD. All rights reserved.