

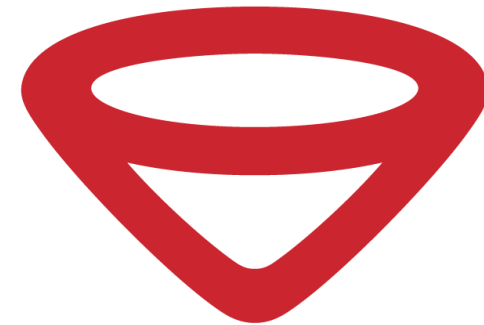
“Project for Nurturing New Industries in ASEAN and Japan”

“Investigate and verify issues and measures necessary to implement the cloud –based geographical information system (GIS)”

Magandang hapon

Informatix Inc.

- Founded in 1981.
- Nearly **40 years** in spatial information business in Japan.
- Developer of ***Spatial Information*** software & solutions. (GIS, CAD, VR/AR/MR)
- 3 offices, Head office in Kawasaki, Osaka, Nagoya.
- Business to the national government and LGUs in Japan. Started business in ASEAN.



informatix
SPACE-TIME DESIGNING




**Kawasaki HQ,
Kanagawa**

GIS Used in the Project

GEO CLOUD

空間情報クラウド コンピューティング

- Data Share
- High Performance
- Easy Operation
- Easy Maintenance

GEO CLOUD ジオクラウド 

GeoCloud is a Geographic Information System (GIS) middleware with a new concept. GeoCloud has outstanding functionality and operability with quick responses even on Cloud environment. GeoCloud can distribute map data in either vector or raster forms according to your system requirements.

■ Why GeoCloud is unique GIS?

- Easy management & Cost-efficiency, maintained in server only, just allocating application and data through network.
- Quick response by using highly compressed data.
- Works on multi-platforms, regardless of any OS for using Java.
- Easy, User friendly operability like MS office GUI.
- Rich functionality like high-end GIS even in cloud environment.



GC Planets GeoCloud Lineup for On-premise and Hybrid Cloud

Application Platform of GeoCloud

GC Planets Server	+	GC Planets Client	=	GC Planets Developer
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For Customizing

Informatix prepares GC Planets application platform which equips rich functions (the user interface and commands) for various business uses, even working in the Cloud Environment!

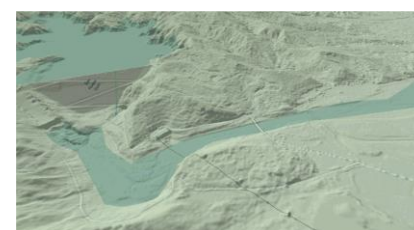
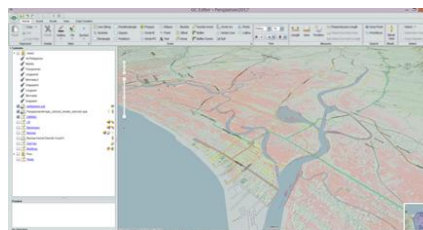
- Work with existing dataset
- Simple I/O for common GIS formats (SHP etc.)
- Overlay multiple projections and coordinate systems
- Georeferenced Excel data import
- Management and maintenance
- Management of users and their accessibilities
- Easy system update which requires only replacement on the server

GC Maps GeoCloud Lineup for Public Cloud

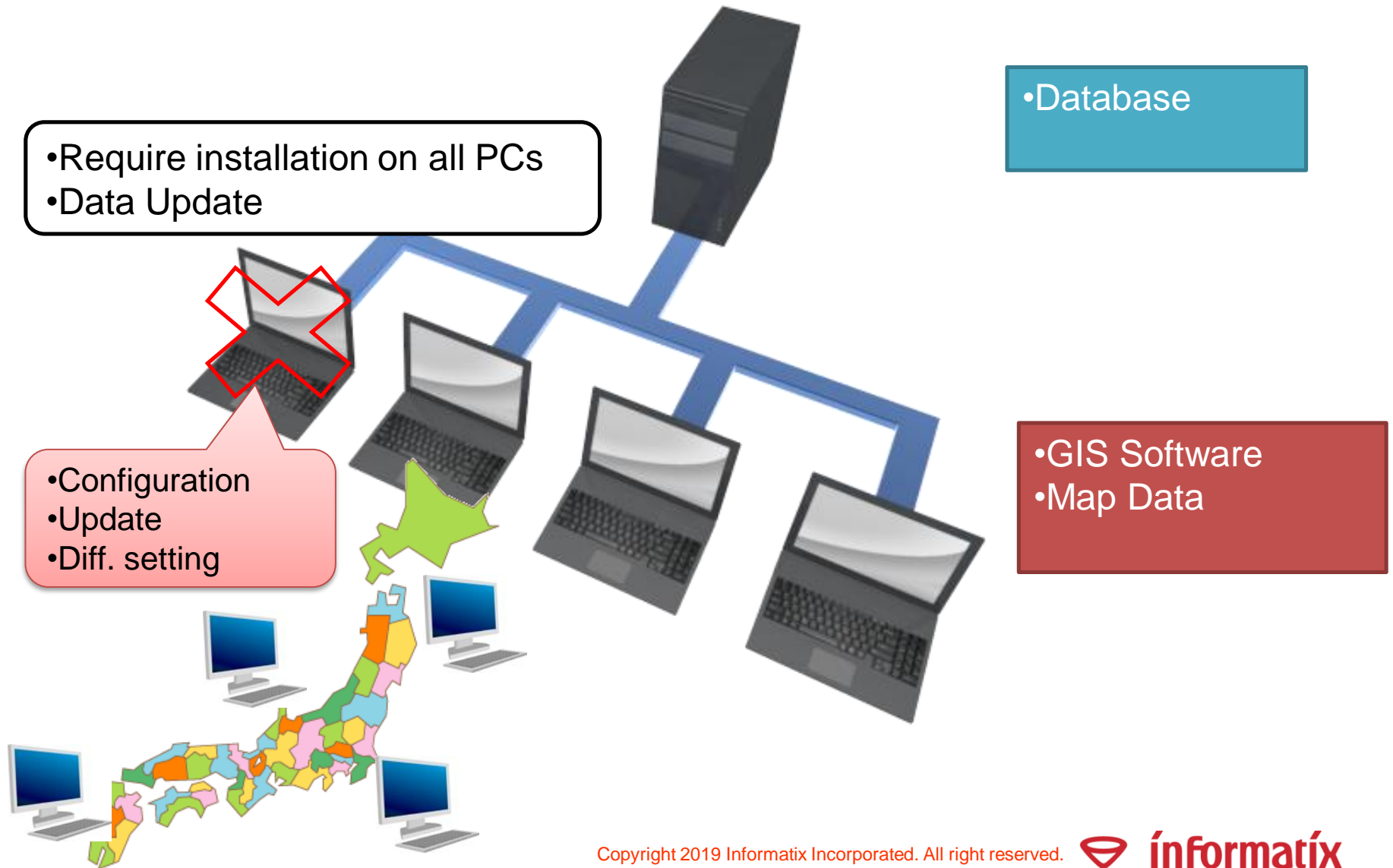
In addition to GC Planets, Informatix prepares GC Maps service which equips DATA SHARING functions among multiple divisions locating on remote places. It works well with GC Planets to create data for sharing, then enables you to share and access to the data easily among your organization. If you have any scattered data, which should be reviewed, about your branch offices, GeoCloud could help your accessibility to them. Just you access to GC maps.



Product of Japan



Advantage of Cloud GIS



Advantage of Cloud GIS

• Simultaneous server
License

• Database
• GIS Software
• Map Data

• No setting required

Nothing in Client
Devices required

KEY WORD = "SHARING"

Project Summary

◆ Project Title:

“The Verification for Introducing GIS services in cloud computing.”

◆ Summary:

Term of Project

November 2017 to January 2019

Basic Policies

1. Establishment of useful service for the Philippines.
2. Verification of Cloud GIS service to upgrade our presence.

What we try to do

1. To build Cloud GIS service environment.
2. To make survey - Demonstration in 2 monitoring organizations.
3. Researching - availability of digital maps, ICT/ Mapping rules, network, web-adds., competitors.
4. Business Planning.

Project Members

Partner: PhilNITS Corporation

Role

- Local technical support
- Localization (customization) and data arrangement
- System and data setup
- Training to testers
- Survey about local rules
- Crosslink between Informatix and testers

Academic and Public Support:

Department of Agriculture

City of Angeles

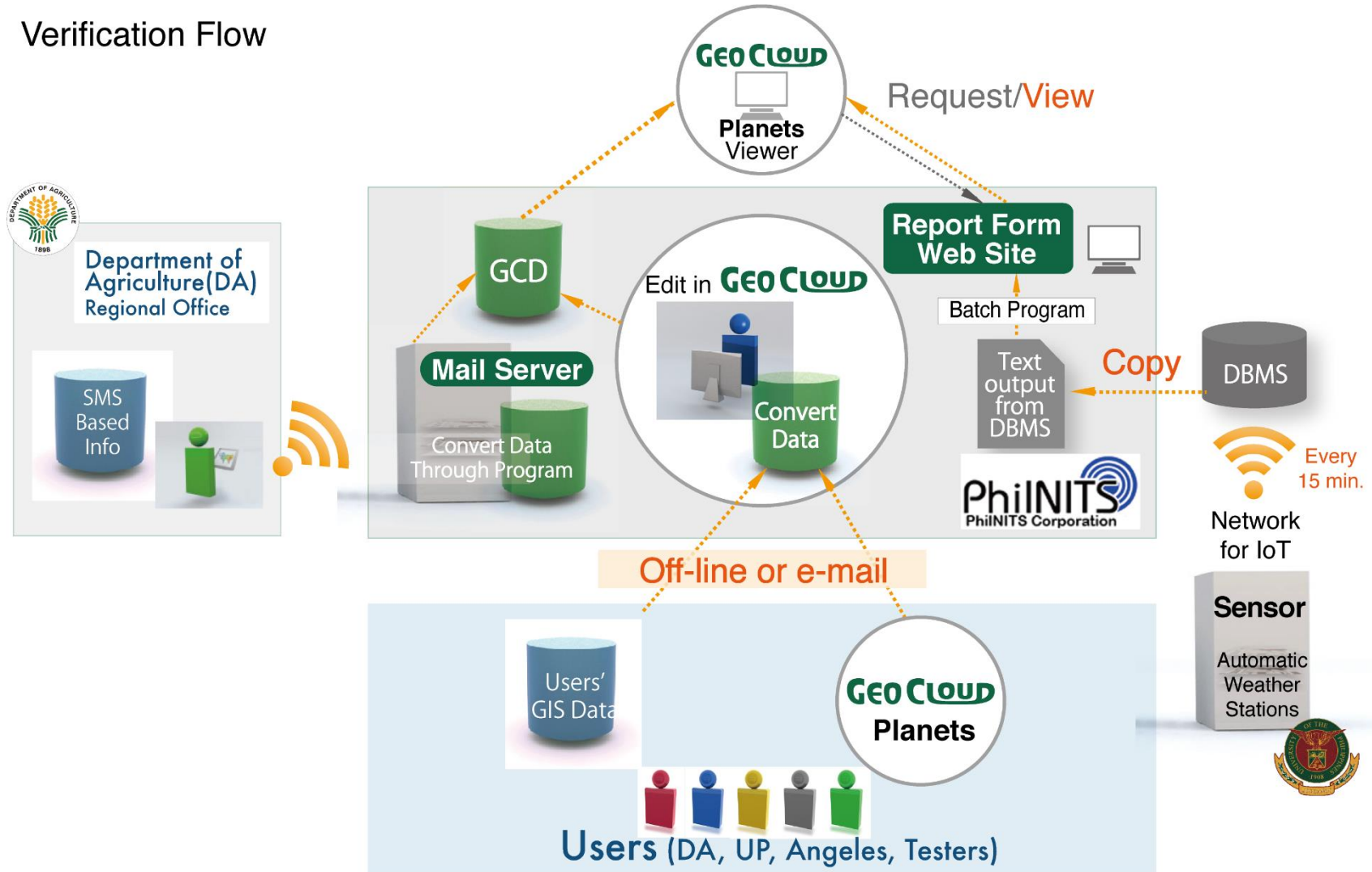
University of the Philippines Los Baños

NAMRIA, DICT, DOST

Consulting: CTI Engineering International

Verification

Verification Flow



Gained Outcome

Gained outcome through verification

- Network in the Philippines and iDC test
- Optimization of GIS
 - High-performance and Viewer GIS
- Topography map and thematic maps of the Philippines

Gained Outcome

Network in the Philippines and iDC test

- **No restriction** for cloud service **currently**, but for personal information or disclosed data.
- We settled GIS servers at **3 places** to learn performance of network.
- The main network speed in **Metro Manila and the suburb area** seems to be sufficient enough to work both high-performance and viewer version.
- Local regions seems to be less network performance, **suitable to use Viewer ver.**
- However, **end point network capacity** (office Wi-Fi contract) impacts to system performance the most.



A blurred screenshot of a table, likely representing network performance data. The table has multiple columns and rows, with several cells highlighted in yellow. The text is illegible due to blurring.

Gained Outcome

Optimization of GIS deployment

High-performance and Viewer GIS

- We tested 2 types of Cloud GIS system High-performance and Viewer
 - High-performance
 - Suitable for data arrangement, maintenance, and dealing with confidential data.
 - Could be settled servers at anywhere you like even On-premises environment.
 - Unfit for the network vulnerable or narrow effective speed.
 - Viewer
 - Suitable for confirmation, data sharing, and mobile use, work in weak network env.
 - No need to think about server, it uses AWS cloud middleware.
 - Unfit for high-performance user, and for being prohibited to store data (confidential or personal data) in AWS U.S., Japan, or Singapore regions.

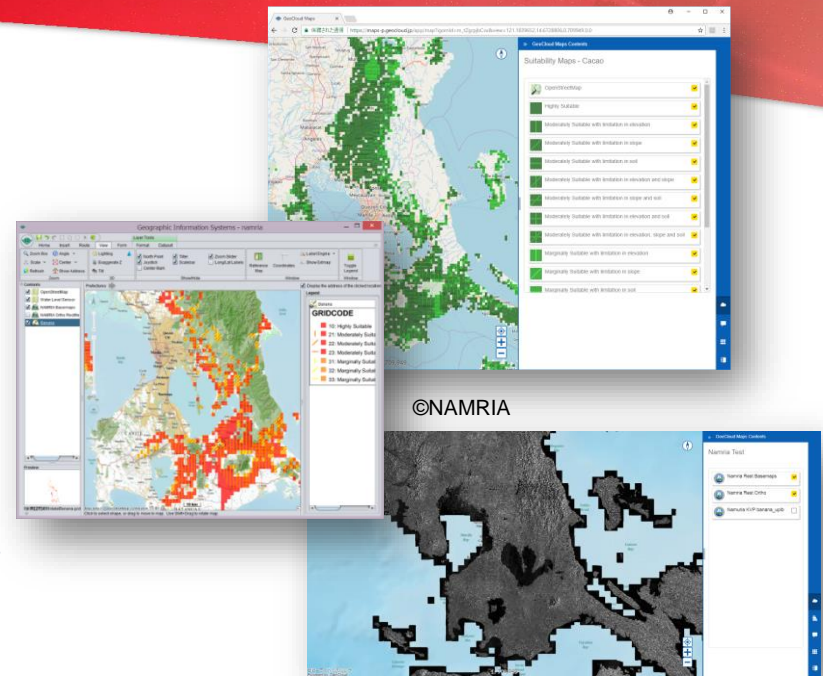
Best configuration

- Head office - **High-performance version** in Hybrid cloud
- Branch office - **Viewer version** in Public cloud (w/o confidential data)

Gained Outcome

Topography map and thematic maps of the Philippines

- Thanks to cooperation of NAMRIA, we could verify connection to GEOPORTAL service. It provides WMTS background **Topography maps** and WMS thematic maps collected from domestic departments and organizations.
- Also we surveyed that NAMRIA maps other than GEOPORTAL service still can be used for public sectors (governmental org. and LGUs) by written applications. Otherwise, it would be charged.



(C)OpenStreetMap Contributors, CC BY-SA

Next Step

Continuous use

- Continuous use in tester organization
- Additional GIS service (panoramic viewing system, drone mapping)

New Project

- New project in the Philippines
- New project in ASEAN countries (started F/S in some countries)

Temporary use at the time of disaster

- Temporary use for sharing disaster information

Thank you!

We work for your business needs!

Informatix Inc.

info@informatix.co.jp

1310 Omiya-Cho Saiwai-Ku Kawasaki

Kanagawa, Japan

212-0014

Tel: +81-44-520-0850 Fax: +81-44-520-0845