



The Application of Water Resource Information Integration Management System in Taiwan

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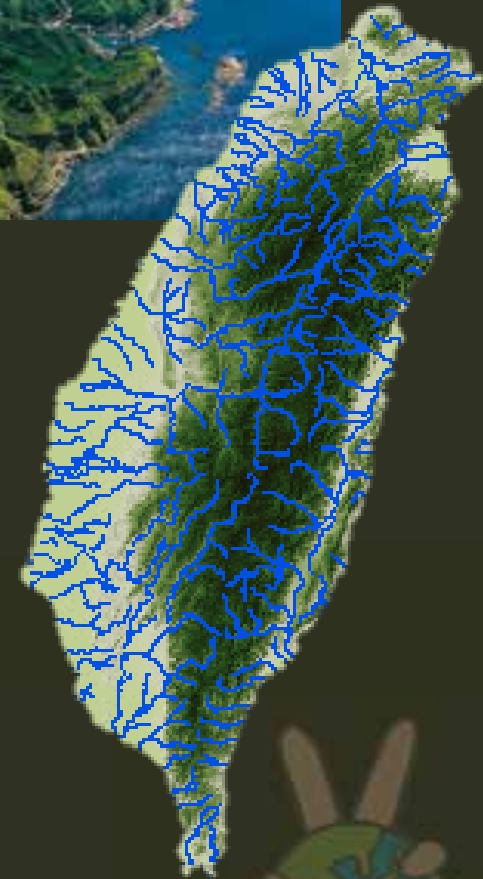


Introduction

- Imbalance rainfall
 - ▶ 2500 mm/year
 - ▶ 3/4 rainfall during May-October
- Short rivers (max. 186.4km)
- 70% mountain area, 31% over 1000m
- 18% river flow will be keep



Water resource management



Study Area

Taipei City

Fei-Tsui Reservoir

reservoir
watershed area:
717km²

Reservoir Watershed

The water quality influences 6
million people who live in Taipei



Study Object

Developed a hydrology and water quality monitoring system

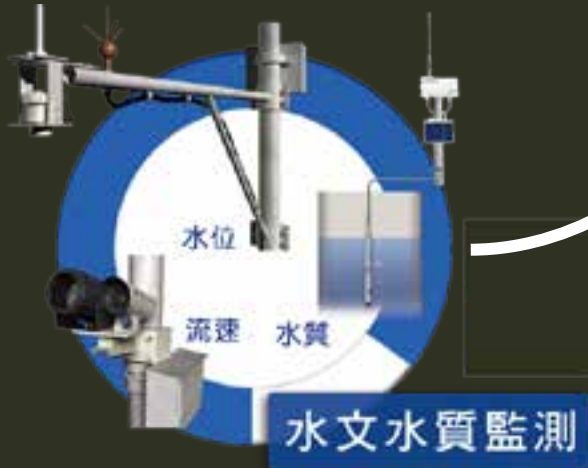
1. Get and reveal hydrological information on the map

2. A near realtime notification process for upstream flood warning

3. Collect various themes GIS on the map



Developed a hydrology and water quality monitoring system



- | water quality station(instrument)
- | rainfall station(instrument)
- | water level station(instrument)



hydrology and water quality monitoring system

Website



App



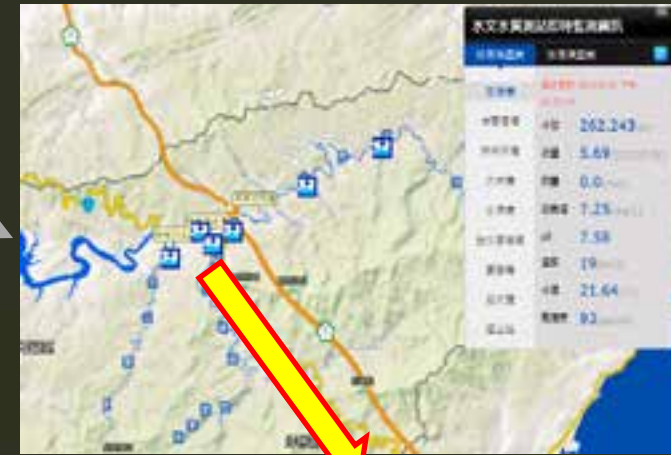
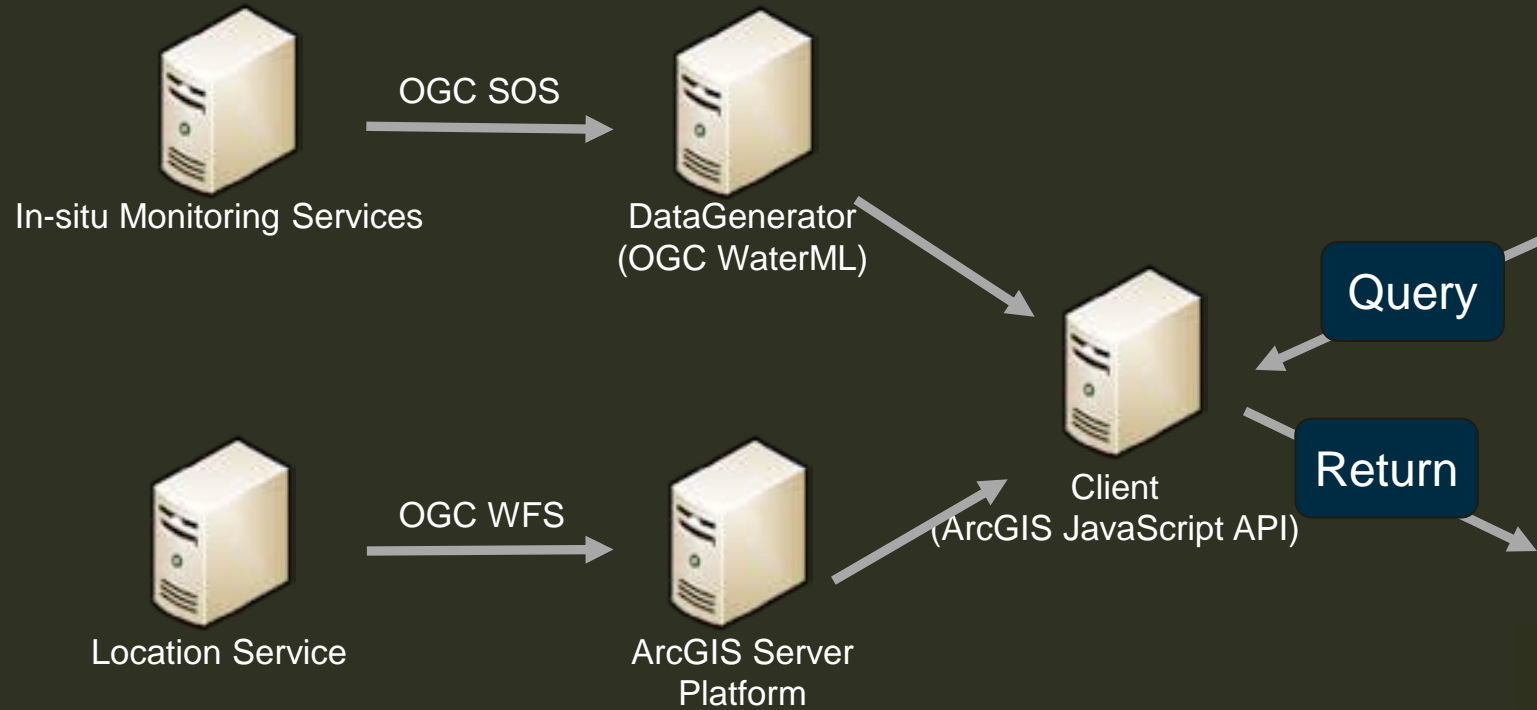
LCD Bulletin Board



1. Get and reveal hydrological information on the map (1/3)



Emergency Manager
Query stations, time period



1. Get and reveal hydrological information on the map (2/3)



Demo Website



1. Get and reveal hydrological information on the map (3/3)

Demo App



- 1. Ur cvkr'n's wgt { kpi "cpf "cpcr{ uku"
- 1. Rwuj" P qvkrlec vkqp "
- 1. O cpci go gpv"cpf " kpxgumki cvkqp "xgt ukqp "



2. A near realtime notification process for upstream flood warning (1/3)



Realtime notification warning

setting threshold of warning



	溫度	流量	電導	pH	濁度	
	上游/下游	(t/s/eq)	(µp/L)	上游/下游	NTU	
鹿寮橋	警戒值(上): 40	25	8000	7.5	5.5	1000
	行動值(上): 30	5	8000	7.5	5	1000
溪尾橋	警戒值(上): 40	25	8000	7.5	5.5	1000
	行動值(上): 30	5	8000	7.5	5	1000
乾寮橋	警戒值(上): 40	25	8000	7.5	5.5	1000
	行動值(上): 30	5	8000	7.5	5	1000

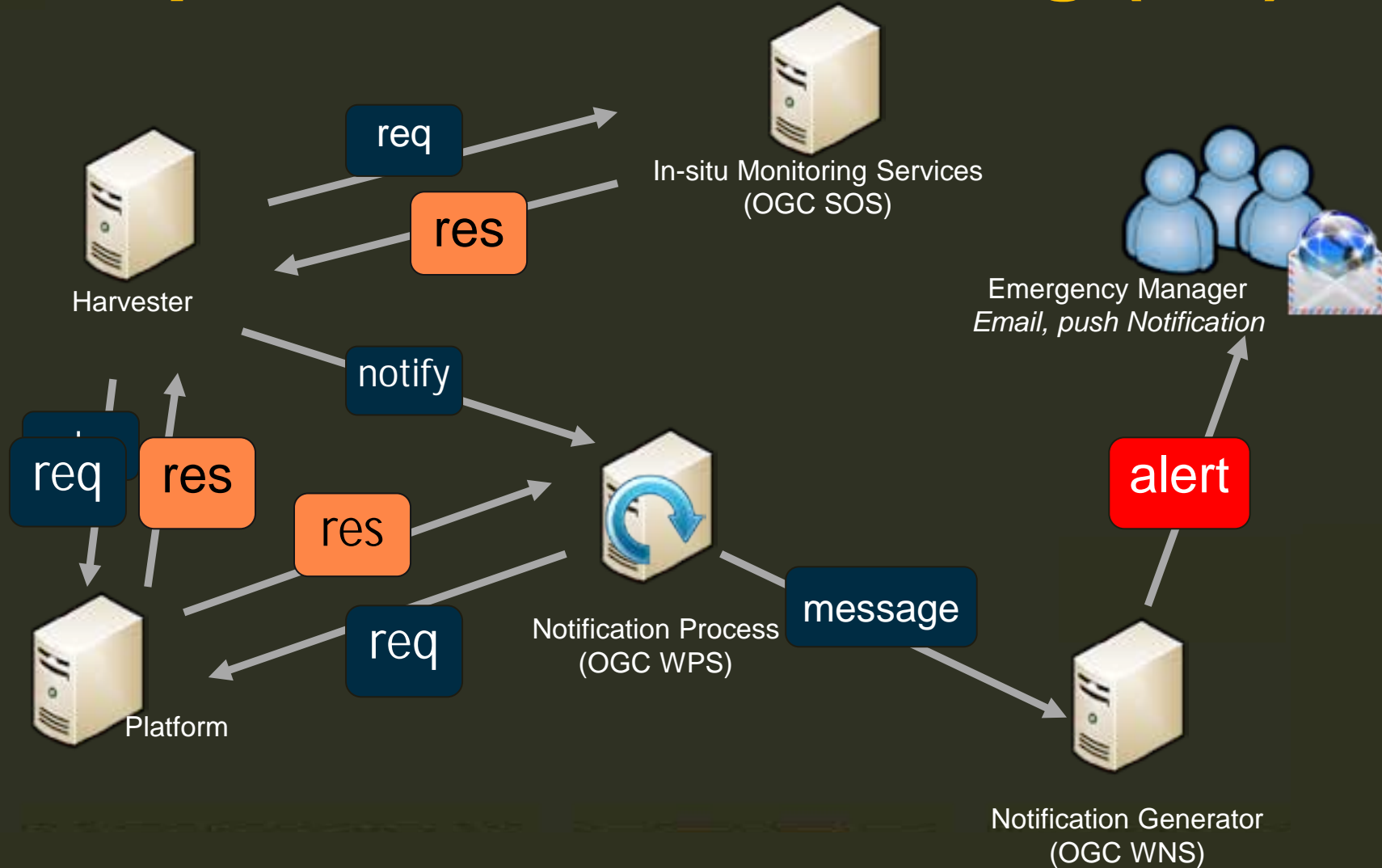
Configuration window for setting warning thresholds. It includes sections for "警戒值通知" (Warning Threshold Notification) and "警報通知" (Alarm Notification). The "警戒值通知" section has radio buttons for "警報中心顯示" and "警報中心顯示", and a dropdown menu for "警報通知". The "警報通知" section has radio buttons for "警報通知" and "警報通知", and a dropdown menu for "警報通知".



When the measurement exceed threshold, the system will sent the message to Emergency Manager



2. A near realtime notification process for upstream flood warning (2/3)

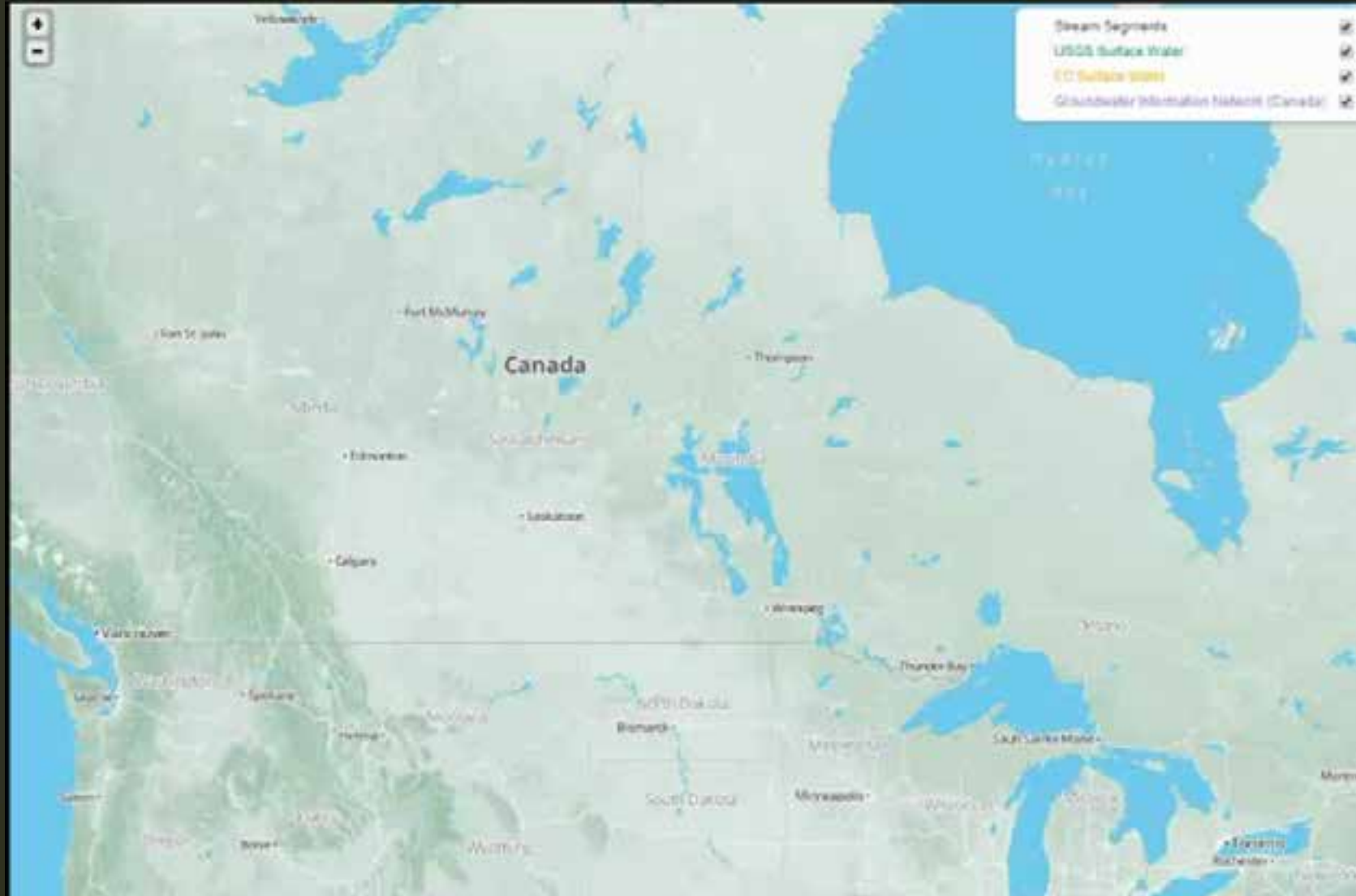


2.

A near realtime notification process for upstream flood warning (3/3)



Demo



3. Collect various themes GIS on the map (1/2)



3. Collect various themes GIS on the map (2/2)

Demo



Conclusion

C"htco gy qtmkpvgi tcvgf "khtqo cvkqp"vgej pqrqi {."
Y gdl KU"y kj "J { f tqrqi { "vj cv"ecp"ko r tqxg"vj g"
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ko r ngo gpvcvkqp"ecug0"
"

J { f tqrqi kecn"o qpkvqtkpi "f cvc"ku"cr r ngf "hqt"
f getgcukpi "vj g"ko r cev"qh"r qmwkqp"htqo "rcpf "wug."
y j lej "r tqvgev"uchg"cpf "engcp"y cvgt"tguqwteg"
gpxtqpo gpv"vj cv"uwr r r{ "f tkpmpi "y cvgt"hqt"o qtg"
vj cp"8"o kmkqp"r qr wrcvkqp0

