

# Federated Cloud Status @KISTI

Jun 23 2015

Sangwan Kim <sangwan@kisti.re.kr>

Soonwook Hwang <hwang@kisti.re.r>

# Hardware

(1 controller node, 2 hypervisor nodes)



Dell R815 (2U)  
fccomp2.kisti.re.kr (hypervisor node)

Next Server 1120 (1U)  
fccont.kisti.re.kr (controller)

Dell R815 (2U)  
fccomp1.kisti.re.kr (hypervisor node)

Controller node  
Next Server 1120 (1U)  
2 x Intel Xeon E5-2660v2  
96GB (6x16GB) DDR3 RAM  
- 3TB SATA3 for OS  
- 2TB SATA2 for cinder (block storage)  
- Gigabit Ethernet

Hypervisor nodes  
Dell PowerEdge R815 (2U) x 2  
- 4 x AMD Opteron 6378 2.4GHz 16C : 64cores/node  
- 256GB DDR3 1333MHz / node  
- 6x1TB NL SAS 72K RPM  
- Gigabit Ethernet

# Work History

- Feb 2014: subscribe to Fedcloud-tf mailing list
- Feb, Mar 2014 : hardware purchase and OS install (1 controller and 1 hypervisor node)
- ~May 2014 : Study. OpenStack(havana) test install, keystone-voms
- May 2014 : Attend EGI Community Forum 2014 @Finland
- Jun 2014 : purchase another 1 hypervisor node
- Jun ~ Jul : other business
- Sep 2014 : OCCI/APEL/SSM study and test and install
- Oct 2014 : GOC registration, BDII setup
  - Add new site "KR-KISTI-CLOUD" @GOCDB NGI:AsiaPacific (via Academia Sinica)
- Nov 2014 ~ Feb 2014 : other business
- Mar 2015 : Fedcloud web-interface tool development
- Apr~Jun 2015 : Re-install new version OpenStack
  - CentOS 6.5/Havana -> CentOS 7.1/Juno
  - source code review partially
  - New accounting system CASO study

# Site: KR-KISTI-CLOUD

https://goc.egi.eu/portal/index.php?Page\_Type=Site&id=1204

## GOCD 5.3.1

**Browse**

- My Sites
- Projects
- NGIs
- Sites
- Service Groups
- Services

**Add**

- Add Site
- Add Service Group
- Add Service
- Add Downtime

**Downtimes**

- Active & Imminent

**About GOCD 5**

- Doc, Help & Support

## Site: KR-KISTI-CLOUD

Korea Institute of Science and Technology Information Federated Cloud Resources for EGI.eu

[Edit](#)

### Contact

E-Mail	fedcloud-list@kisti.re.kr
Telephone	+82-42-869-0647
Emergency Telephone	+82-42-869-0647
CSIRT Telephone	+82-42-869-0647
CSIRT E-Mail	fedcloud-list@kisti.re.kr
Emergency E-Mail	
Helpdesk E-Mail	fedcloud-list@kisti.re.kr

### Project Data

NGI/ROC	AsiaPacific
Infrastructure	Production
Certification Status	Candidate <a href="#">Change</a>
Scope(s)	EGI

### Networking

Home URL	http://www.kisti.re.kr
GIIS URL	ldap://fccont.kisti.re.kr:2170/mds-vo-name=KR-KISTI-CLOUD,o=grid
IP Range	
IP v6 Range	
Domain	kisti.re.kr

### Location


Country	South Korea
Latitude	36.36
Longitude	127.35
Time Zone	Asia/Seoul
Location	Daejeon, Korea




### User Status

Registered as:  
Sangwan Kim

[View Details](#)  
[Manage Roles](#)

### Site Extension Properties

Name	Value	Edit	Remove
 Add Properties			



# Accounting records

## Sites publishing new cloud accounting records (SSM 2.0)

Page last updated: 2015-06-23 03:30:20.826598

Site	NumberOfMachines	CloudType	LastUpdated
100IT	14737	OpenStack	2015-06-22 23:08:18
BIFI	179264	OpenStack	2015-06-22 17:19:50
CERN-PROD	327415	OpenStack	2015-06-22 21:48:23
CESGA	40764	OpenNebula	2015-06-23 01:00:07
CESNET-MetaCloud	52411	OpenNebula	2015-06-23 01:15:09
CETA-GRID	10642	OpenStack	2015-06-22 23:00:13
CYFRONET-CLOUD	4720	Openstack	2015-06-23 02:00:11
FZJ	71594	OpenStack	2015-06-15 11:05:08
GoeGrid	48607	OpenNebula	2015-05-21 05:15:04
GRIF	47	StratusLab	2013-09-10 09:27:05
HG-09-Okeanos-Cloud	3781	Synnefo	2015-06-23 02:00:11
IFCA-LCG2	25044	OpenStack	2015-06-19 16:30:08
IISAS-Bratislava	46	Openstack	2013-04-09 12:23:19
IISAS-FedCloud	32612	OpenStack	2015-06-23 02:18:02
IN2P3-CC	11	Openstack	2013-03-19 13:47:58
IN2P3-IRES	2852	OpenStack	2015-06-22 22:30:22
INFN-CATANIA-NEBULA	11598	OpenNebula	2015-06-23 02:02:27
INFN-CATANIA-STACK	6005	OpenStack	2015-06-23 01:16:59
INFN-PADOVA-STACK	86817	OpenStack	2015-06-22 22:30:22
KISTI	43	Openstack	2015-04-29 10:00:07
KR-KISTI-CLOUD	27	OpenStack	2015-06-19 08:43:14
KTH-CLOUD	14198	OpenNebula	2015-02-03 21:59:47
MK-04-FINKICLOUD	11155	OpenNebula	2015-05-05 15:14:10
NCG-INGRID-PT	5444	OpenStack	2015-06-22 07:20:06
PRISMA-INFN-BARI	23555	Openstack	2015-06-22 16:00:04
SZTAKI	9186	OpenNebula	2015-03-02 07:30:38
TR-FC1-ULAKBIM	7066	OpenStack	2015-06-03 07:10:06
TW-EMI-PPS	213	OpenStack	2013-09-12 14:11:42
UPV-GRyCAP	4466	OpenNebula	2015-06-23 01:15:03

# FedCloud Web Interface

FedCloud Web Welcome sangwan [logout] proxy time left : 0 secs

**Proxy Info** Create VM Manage VM curl client Management

- **Generate Proxy Certificate**
  - **Certificate Subject**  
Certificate: /C=KR/O=KISTI/O=GRID/O=KISTI/CN=80864141 Sangwan Kim
  - **Generate Proxy Certificate**  
Your identity: /C=KR/O=KISTI/O=GRID/O=KISTI/CN=80864141 Sangwan Kim  
Creating temporary proxy Done  
Contacting: voms1.egee.cesnet.cz:15002 [/DC=org/DC=terena/DC=tcs/OU=Domain Control Validated/CN=voms1.egee.cesnet.cz] "fedcloud.egee.cesnet.cz"  
Creating proxy Done

Your proxy is valid until Tue Jun 23 22:59:58 2015

**proxy generated**

- **Proxy Information**  
subject : /C=KR/O=KISTI/O=GRID/O=KISTI/CN=80864141 Sangwan Kim/CN=257044764  
issuer : /C=KR/O=KISTI/O=GRID/O=KISTI/CN=80864141 Sangwan Kim  
identity : /C=KR/O=KISTI/O=GRID/O=KISTI/CN=80864141 Sangwan Kim  
type : RFC compliant proxy  
strength : 1024 bits  
path : /www/proxy/sangwan/proxy.pem  
timeleft : 12:00:00  
key usage : Digital Signature, Key Encipherment, Data Encipherment  
=== VO fedcloud.egi.eu extension information ===  
VO : fedcloud.egi.eu  
subject : /C=KR/O=KISTI/O=GRID/O=KISTI/CN=80864141 Sangwan Kim  
issuer : /DC=org/DC=terena/DC=tcs/OU=Domain Control Validated/CN=voms1.egee.cesnet.cz  
attribute : /fedcloud.egi.eu/Role=NULL/Capability=NULL  
timeleft : 11:57:49  
uri : voms1.egee.cesnet.cz:15002

Generate proxy using voms-proxy-init





# FedCloud Web Interface

FedCloud Web Welcome sangwan [logout] proxy time left : 11 hours

Proxy Info **Create VM** Manage VM curl client Management

▪ Create a VM

Select a site [KR] (OpenStack) KISTI - KISTI OK

▪ Site Detail

◦ Site: [KR] (OpenStack) KISTI - KISTI

- Affiliation: KISTI
- CC: KR
- Contact:
- Deputies:
- Host Site: KISTI
- CMF: OpenStack
- OCC: <https://fccont.kisti.re.kr:8787/>
- CDME:
- Size:
- Max VM:

◦ OS Templates

<http://schemas.openstack.org/template/os#9eabafdb-b223-4144...> Show

◦ Resource Templates

<http://schemas.openstack.org/template/resou...> Show

VM Name: sangwan\_20150618165346a

Title: [KR] (OpenStack) KISTI - KISTI\_9eabafdb-b223-4144-aff5-a1279b53e

Launch VM

Select a site

OS template

Resource template

# FedCloud Web Interface

FedCloud Web Welcome sangwan [logout] proxy time left : 11 hours

Proxy Info      Create VM      **Manage VM**      curl client      Management

■ VM Management

#	Site	CC	Name	CMF	Resource	core	memory	state	ip	Create	Show	Delete
1	KISTI	KR	<b>sangwan_20150618165346a</b>	OpenStack	m1-medium	unknown	unknown	unknown	unknown	31 secs ago	<a href="#">show</a>	<a href="#">delete</a>
2	KISTI	KR	<b>sangwan_20150618165346</b>	OpenStack	m1-medium	unknown	unknown	unknown	unknown	3 mins ago	<a href="#">show</a>	<a href="#">delete</a>
3	KISTI	KR	<b>sangwan_20150618165346</b>	OpenStack	m1-large	4	8.0	deleted	10.2.0.2	10 mins ago	<a href="#">show</a>	
4	KISTI	KR	<b>sangwan_20150413174220</b>	OpenStack	m1-small	unknown	unknown	not found	unknown	65 days ago	<a href="#">show</a>	
5	KISTI	KR	<b>sangwan_20150413173945</b>	OpenStack	m1-small	unknown	unknown	not found	unknown	65 days ago	<a href="#">show</a>	
6	CESNET	CZ	<b>sangwan_20150408152410</b>	OpenNebula	small	1	2	not found	147.228.242.43	71 days ago	<a href="#">show</a>	
7	FCTSG	ES	<b>sangwan_20150331175612</b>	OpenNebula	small	1	2	inactive		78 days ago	<a href="#">show</a>	<a href="#">delete</a>
8	INFN - Catania	IT	<b>sangwan_20150331174829</b>	OpenNebula	medium	2	4	not found	90.147.74.88	78 days ago	<a href="#">show</a>	
9	INFN - Catania	IT	<b>sangwan_20150331114604</b>	OpenNebula	small	1	2	not found	90.147.74.102	79 days ago	<a href="#">show</a>	
10	Cyfronet (NGI PL)	PL	<b>test_20150331104537</b>	OpenStack	m1-xlarge	8	16.0	not found	test-20150331104537	79 days ago	<a href="#">show</a>	
11	INFN - Catania	IT	<b>[IT] (OpenNebula) INFN - Catania - INFN-CATANIA-NEBULA_uuid_generic_www_35_medium</b>	OpenNebula	medium	2	4	deleted	90.147.74.99	79 days ago	<a href="#">show</a>	
12	GWDG	DE	<b>[DE] (OpenNebula) GWDG - GoeGrid_uuid_fctf_nagios_49_large</b>	OpenNebula	large	4	8	active	141.5.96.70	80 days ago	<a href="#">show</a>	<a href="#">delete</a>
13	INFN - Catania	IT	<b>[IT] (OpenNebula) INFN - Catania - INFN-CATANIA-NEBULA_uuid_scientificlinux_65_minimal_67_medium</b>	OpenNebula	medium	2	4	deleted	90.147.74.97	80 days ago	<a href="#">show</a>	
14	INFN - Catania	IT	<b>INFN generic vm19 medium 3</b>	OpenNebula	medium	2	4	deleted	90.147.74.93	80 days ago	<a href="#">show</a>	

Select a VM to view detail info



# To Do

- Image management
  - Newbie at vmcatcher / AppDB
- OpenStack Network
  - public network (150.xxx.250.0/24) is shared with other services in KISTI.
  - Public IP addresses are not sufficient for large service.
- Tenant for service
  - working on 'admin' tenant until now. We should make a new tenant for service.
- Etc.
  - Exclusive block storage node is needed for production service. Currently cinder is also running on controller node.
  - Site certification and tests