

StratusLab Production Cloud Service

The Reference Cloud Service, built with the latest version of StratusLab distribution and deployed in GRNET's datacenter, provides public access to a cloud testbed both for evaluation and for production use.

Service Features

- 17 physical nodes (1 Frontend + 16 hosts)
- 256 CPU cores
- 768 GB total memory (48 GB per node)
- 3.6 TB shared storage over NFS
- Support for public IP and local IPs
- Currently running StratusLab v1.1 on Fedora 14.
- Uses OpenNebula 2.2 over kvm for VM management
- Integration with the Claudia Service Manager available

9 months of continuous operations

- More than 3600 VMs instantiated
- Longest running VM is 120 days without interruption
- Hosts the HG-07-StratusLab production grid site, exhibiting high availability and reliability (> 90%)
- 4 major upgrades with minor, limited service interruptions
- VM appliances for gLite grid services and various other applications available from the StratusLab Marketplace

How to access and use the service

- Send email to support@stratuslab.eu, providing your details and purpose of usage
- Connect using username/password or your grid certificate (preferable)
- Manage your VMs using the StratusLab command line interface (stratuslab-* tools)
- Prepared appliances and base images (ttxlinux, CentOS, Ubuntu, ...) available from public repository operated by TCD
- You can always create your own images and host them in your own repository!

Web Monitor
Nodes Instances Enable auto refresh

List of nodes

Id	IP	Total CPU	Allocated CPU	Used CPU	Free CPU	Total mem	Free mem	Used disk	Running VMs	State
0 fedora-1	1600	600	112.0	1488.0	49621572	42130732	26%	5	5	Monitored
1 fedora-2	1600	800	51.2	1548.8	49621572	40900264	26%	5	5	Monitored
2 fedora-3	1600	500	118.4	1481.6	49621572	47669176	26%	5	5	Monitored
3 fedora-4	1600	1100	43.2	1556.8	49621572	47297140	26%	5	5	Monitored
4 fedora-5	1600	700	3.2	1596.8	49621572	45723212	26%	4	4	Monitored
5 fedora-6	1600	900	40.0	1560.0	49621572	44508792	26%	5	5	Monitored
6 fedora-7	1600	900	40.0	1560.0	49621572	41800272	26%	5	5	Monitored
7 fedora-8	1600	1000	32.0	1568.0	49621572	40957108	26%	5	5	Monitored
8 fedora-9	1600	900	14.4	1585.6	41347692	34662580	26%	5	5	Monitored
9 fedora-10	1600	1000	64.0	1536.0	49621572	41921300	26%	5	5	Monitored
10 fedora-11	1600	1400	160.0	1440.0	49621572	43156860	26%	6	6	Monitored
11 fedora-12	1600	1100	110.4	1489.6	49621572	44694436	26%	5	5	Monitored
12 fedora-13	1600	1400	22.4	1577.6	49621572	36082532	26%	6	6	Monitored
13 fedora-14	1600	1300	27.2	1572.8	49621572	39216204	26%	5	5	Monitored
14 fedora-15	1600	1000	33.6	1566.4	49621572	41695872	26%	6	6	Monitored
15 fedora-16	1600	600	65.6	1534.4	49621572	44497552	26%	6	6	Monitored

Node detail

Host Information

Id	12
Name	fedora-13
State	Monitored
im_mad	im_kvm
vm_mad	vmm_kvm
tm_mad	tm_nfs

Host Shares

Max mem	49621572
Used mem (real)	13538260
Used mem (allocated)	13120516
Max CPU	1600
Used CPU (real)	48
Used CPU (allocated)	1400
Running VMs	6

Monitoring Information

Arch	x86_64
CPU speed	1596
Free CPU	1552.0
Free mem	
Hostname	fedora-13
Hypervisor	kvm
Model	Intel(R) Xeon(R) CPU E5520 @ 2.27GHz
Netrx	0
Nnettx	0
Total CPU	1600
Total mem	49621572
Used CPU	48.0
Used mem	13538260
Used Disk	26%

Instance detail

Virtual Machine Information

Id	2946
Deployment one-2946	
IP	
State	Running
Start time	Wed Jul 13 16:23:46 2011
End time	0
Name	fedora-16
PubKey	ssh-rsa AAAAB3NzaC1yc2EAAAABIwAAAQEAwYBGL2L8BxK2SH15vvg7h0hAcMhN746h8QEgbrA1XTyqD/Rg7Mbc9+gJL4+qBv9p9S@macrowe.lan
vCPUs	2
Memory	1048576
IP	62.217.122.183
Network	public
Disk	Source http://appliances.stratuslab.eu/marketplace/metadata/Ow0A0YD9y7uZu77DRuB3pc2
Disk Size	1024
Disk Driver	raw
Save Disk	no

Virtual Machine Monitoring

CPU	0
Mem RX	130311826
Net TX	100838450

Monitoring

Web monitor provides overview of hosting nodes and VMs currently running in the cloud.

Ganglia used for monitoring the physical infrastructure.

