**CLOUD SOFTWARE**

**GOGRID**

**GoGrid** is a [cloud infrastructure](http://en.wikipedia.org/wiki/Cloud_infrastructure) service, hosting [Linux](http://en.wikipedia.org/wiki/Linux) and [Windows](http://en.wikipedia.org/wiki/Microsoft_Windows) [virtual machines](http://en.wikipedia.org/wiki/Virtual_machine) managed by a multi-server [control panel](http://en.wikipedia.org/wiki/Control_panel_%28computer%29) and a [RESTful](http://en.wikipedia.org/wiki/RESTful) [API](http://en.wikipedia.org/wiki/API).

GoGrid is a Global Leader in Hybrid & Cloud Infrastructure hosting. GoGrid enables sysadmins, developers, and IT professionals to create, deploy, and control dynamic load balanced cloud infrastructures and complex hosted virtual server networks with full root access/administrative server control.

GoGrid physical and virtual server instances maintain industry standard specifications with no requirement to learn proprietary standards. Deploying GoGrid infrastructure takes minutes via a web control panel or GoGrid’s API. GoGrid gives users the control of a familiar datacenter environment with the flexibility and immediate scalability of the cloud.

As a [cloud pioneer](http://www.informationweek.com/cloud/infrastructure-as-a-service/9-more-cloud-computing-pioneers/d/d-id/1109120?page_number=8), Keagy has seen IaaS move from an experimental service on the network to an industry powered by massive, 300,000-square-foot data centers pursuing huge economies of scale, combined with a steady fall in infrastructure service prices.

**GoGrid Cloud Storage**

GoGrid Cloud Storage is mountable network-attached storage (NAS) that provides instantly scalable and reliable file-level backup service for Windows and Linux Cloud Servers running in the GoGrid cloud.

* Simple pricing plus 10 GB per month free
* Easy-to-use web-based management console
* Free 24x7 Support and strong SLAs

## Installation steps:

## Set up the first GoGrid virtual machine

1. Create a new GoGrid virtual machine.
2. Remember to take your first steps with a brand new Ubuntu virtual machine
3. Create a test page. Use the nanoeditor nano /var/www/hello.txt
4. Put the name of the virtual machine in it. *Hello from im01*
5. Save the file.
6. Make a URL from your VM's IP address and the file name. http://173.1.25.34/hello.txt
7. Point your web browser at your test URL. A simple page appears.

## Set up the second machine

1. Create a second GoGrid virtual machine.
2. Create a test page containing the second VM's name.
3. Check with a web browser.

## Create a load balancer

You must configure these building blocks of a load balancer.

* **Real IPs** - IP addresses of all web servers.
* **Health Checker** - Software that monitors web servers. The load balancer sends requests to the healthy servers.
* **VIP** - IP address that clients will send requests to
* **Listener** - software that waits for requests

1. Return to the gridpage of the management console.
2. Click add*.* An Add a New Object window opens.
3. Select Network *>* Dynamic Load Balancer*.* The Add a New Object window closes and an Add/Edit VIP form appears. You can also get here using Grid *>* Networking *>* VIP*.*
4. Don't fill in the VIPform yet - Go to the Real IPs section. Click theAdd a Real IPlink. AnAdd/Edit Real IP form appears.

## Add Real IPs

1. Fill in the Add/Edit Real IP form. Grid *>* Networking *>* Real IP
   * Data Center: **US-West-1** (this is the default)
   * GoGrid IP Addresses: **im01 (173.1.25.34)** This fills in the rest of the form with your first VM's details.
   * Name: **im1**
   * Description: **Nick's first GoGrid machine**
   * Weight: **100**
   * Status: **Enabled** (default)
2. Save your work. A Successfully Addedbanner appears briefly. Your machine's IP address is added to the Real IP table.
3. Fill in the Add/Edit Real IP form again. This time it's for your second GoGrid VM im02.

## Add a Health Checker

1. Fill in the Add/Edit Health Checker *form.* Grid *>* Networking *>* Health Checker
   * Data Center: **US-West-1** (default)
   * Name: **hc1**
   * Description: **Nick's first GoGrid health checker**
   * Health Checker Type: **HTTP**
   * URI: **/**
   * Virtual Host Name: (empty)
   * Interval: **10 seconds**
   * Timeout: **5 seconds**
   * Response String: (empty)
2. Save your work.

## Add a VIP

1. Fill in the VIP form. Grid > Networking > VIP
   * Data Center: **US-West-1**
   * Name: **vip1**
   * Description: **Nick's first GoGrid VIP**
   * Status: **Enabled**
2. Find the dropdown box labeled Assign a real IP.
3. Select im01 (173.1.25.34).
4. Click Assign. A new line is added to the Real IP List table.
5. Repeat these Assign a real IP steps for im02 (173.1.25.346)
6. Save your work. A warning appears about spending money.
7. Acknowledge the warning. Click yes. A new line is added to the VIP table.

## Add a listener

1. Fill in the Listener form. Grid > Networking > Listener
   * Data Center: **US-West-1**
   * Name: **lis1**
   * Description: **Nick's first GoGrid listener**
   * VIP: **vip1 (216.121.28.164)**
   * Protocol: **HTTP**
   * Listener Port: **80**
   * Real Port: **80**
   * Health Checker: **hc1 (HTTP)**
   * Persistence: **None**
   * Cookie Name: (empty)
   * Algorithm: **Weighted Round Robin**
2. Save your work.

## Check your work

1. Open a CLI using an SSH client.
2. Connect and login to your first GoGrid VM.
3. Watch the web server's activity log:

Every ten seconds a new line is written to the log, showing the Health Checker in action.

1. Repeat this activity log check on your second GoGrid VM.
2. Leave these two running. You can see what happens when you perform this next check with a web browser.
3. Return to your web browser.
4. Make a URL from the VIP and your new hello page. http://216.121.28.164/hello.txt
5. Point your web browser at the new URL. The name of one of the VMs appears: Hello from im02
6. Reload the page a few times. Eventually the name of the other VM appears: Hello from im01
7. Check the CLI again. Find your requests in the logs.

## Clean up

1. Log out of the VMs.
2. Close the CLIs.
3. Use the GoGrid console to delete the VMs and the load balancer.
4. Log out of the console.
5. Close the web browser.