

## Arvados - Task #4580

Feature # 4138 (Resolved): [Node Manager] Support Google Cloud Platform in node manager

### Review 4138-node-manager-google-cloud

11/18/2014 10:43 PM - Tim Pierce

<b>Status:</b> Closed	<b>Start date:</b> 11/17/2014
<b>Priority:</b> Normal	<b>Due date:</b>
<b>Assigned To:</b> Brett Smith	<b>% Done:</b> 0%
<b>Category:</b>	<b>Estimated time:</b> 0.00 hour
<b>Target version:</b> 2015-02-18 sprint	

**Description**

Ready to review at [ab8acfe](#)

Some implementation notes:

- This code has not been tested against a live GCE account. We can test when we get GCE credentials that allow us to spin nodes up and down.
- GCE does not permit filtering instances on tags the way AWS does, so filtering has not been implemented. Clients will need to list all instances and do their own filtering.
- GCE does implement a 'tag' concept, but it is a flat keyword list rather than a key/value structure. When a node is synced, the Arvados hostname is updated on the node by setting a tag 'hostname-arvados.fqdn.name'.
  - The underlying GCE library supports a setMetadata call that should allow us to use metadata to track this in a cleaner way, but the libcloud API doesn't support this call yet.
- GCE node access is controlled with "service accounts" rather than security groups. These can be defined in gce.example.cfg by setting the service\_account setting to a JSON string with the desired service account list.

For reviewing: the GCE drivers and tests were developed by ripping out everything in the EC2 drivers that doesn't look like GCE. Accordingly, I strongly recommend:

```
diff services/nodemanager/arvnodeman/computenode/driver/ec2.py services/nodemanager/arvnodeman/computenode/driver/gce.py
diff services/nodemanager/tests/test_computenode_driver_ec2.py services/nodemanager/tests/test_computenode_driver_gce.py
diff services/nodemanager/doc/ec2.example.cfg services/nodemanager/doc/gce.example.cfg
```

### History

#### #1 - 11/19/2014 07:17 PM - Brett Smith

- Status changed from New to In Progress
- Assigned To set to Brett Smith

#### #2 - 11/19/2014 10:18 PM - Brett Smith

- Assigned To changed from Brett Smith to Tim Pierce

#### #3 - 01/23/2015 10:46 PM - Tim Pierce

- Assigned To changed from Tim Pierce to Ward Vandewege

#### #4 - 01/23/2015 10:51 PM - Tim Pierce

- Assigned To changed from Ward Vandewege to Brett Smith

#### #5 - 01/29/2015 07:39 PM - Brett Smith

- Status changed from In Progress to Closed
- Remaining (hours) set to 0.0