

# CY12-Q3

## Open Source IaaS Community Analysis

OpenStack vs OpenNebula vs Eucalyptus vs CloudStack

Qingye Jiang (John)  
[qjiang@ieee.org](mailto:qjiang@ieee.org)

Sina weibo: @qyjohn\_

# Data Source

- OpenStack
  - <https://lists.launchpad.net/openstack/>
  - <https://answers.launchpad.net/openstack/>
  - [http://lists.openstack.org/pipermail/\\*/](http://lists.openstack.org/pipermail/*/)
- OpenNebula
  - <http://lists.opennebula.org/pipermail/users-opennebula.org/>
  - <http://lists.opennebula.org/pipermail/ecosystem-opennebula.org/>
  - <http://lists.opennebula.org/pipermail/interoperability-opennebula.org/>
- Eucalyptus
  - <https://engage.eucalyptus.com/customer/portal/topics/215645-general-discussions/questions>
  - <http://lists.eucalyptus.com/pipermail/community/>
- CloudStack
  - [http://mail-archives.apache.org/mod\\_mbox/incubator-cloudstack-users/](http://mail-archives.apache.org/mod_mbox/incubator-cloudstack-users/)
  - [http://mail-archives.apache.org/mod\\_mbox/incubator-cloudstack-dev/](http://mail-archives.apache.org/mod_mbox/incubator-cloudstack-dev/)
  - <http://www.cloudstack.org/forum/index.html>

Figure 1 - Monthly Number of Threads

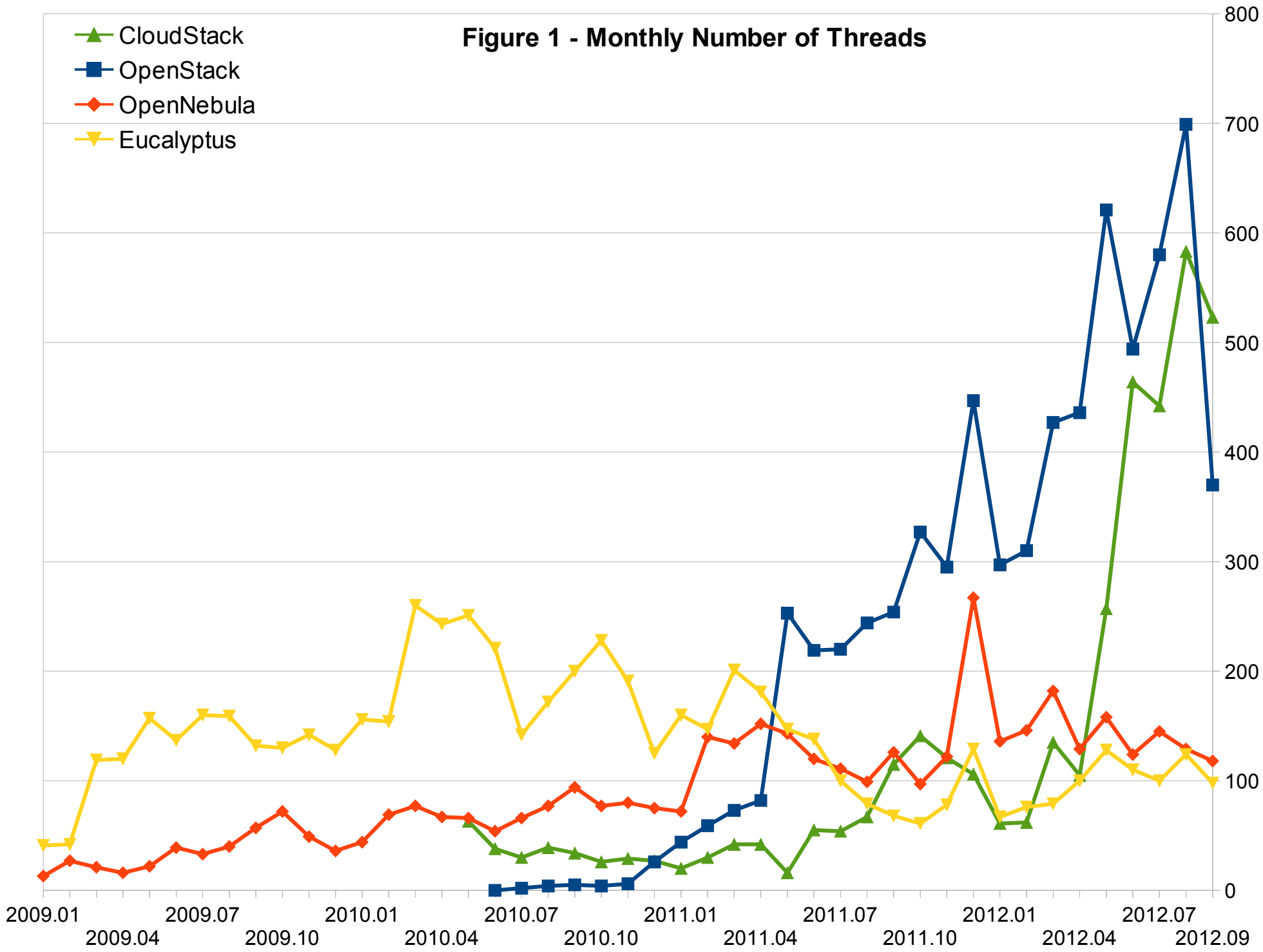


Figure 2 - Monthly Number of Messages

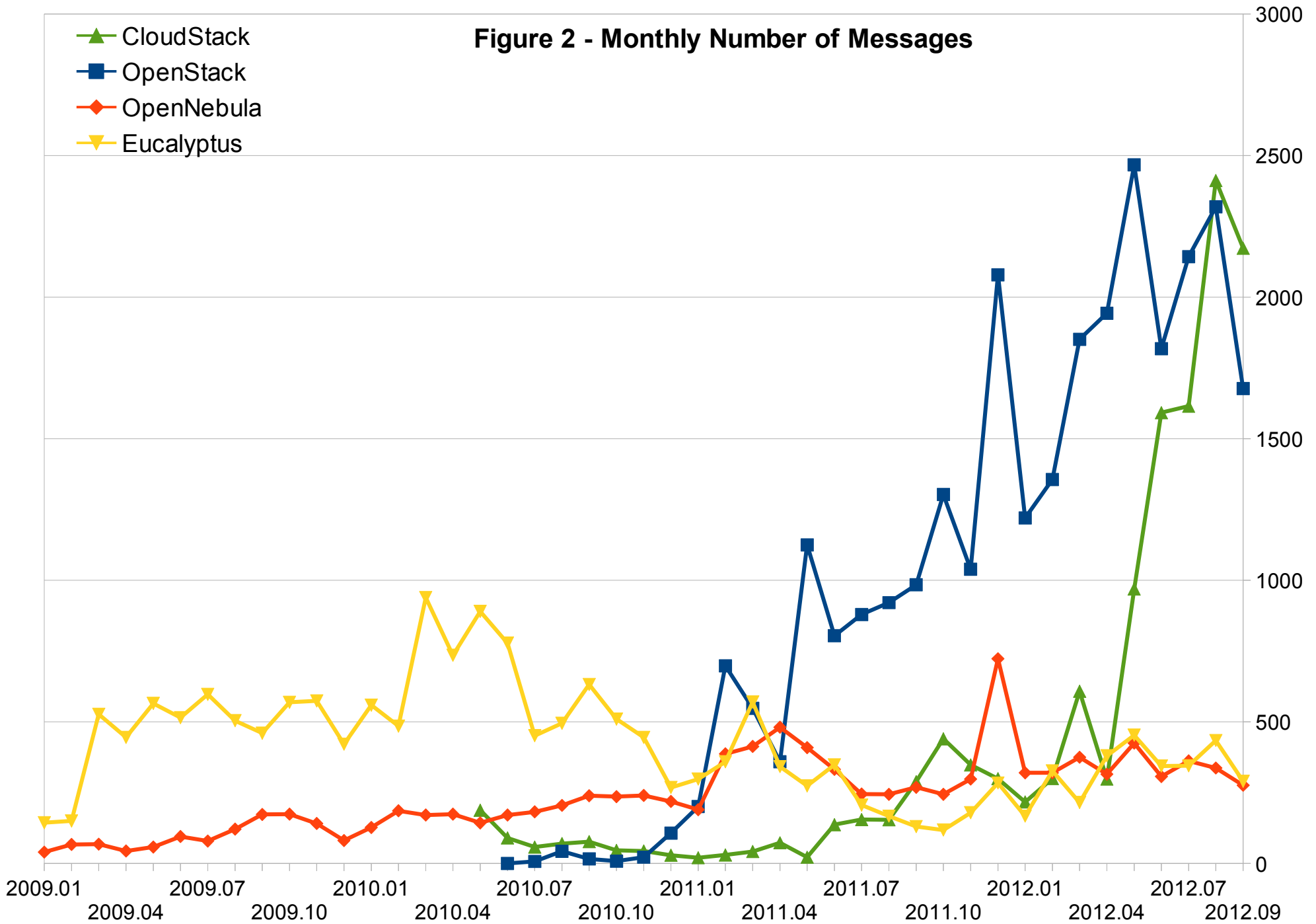


Figure 3 - Monthly Participation Ratio

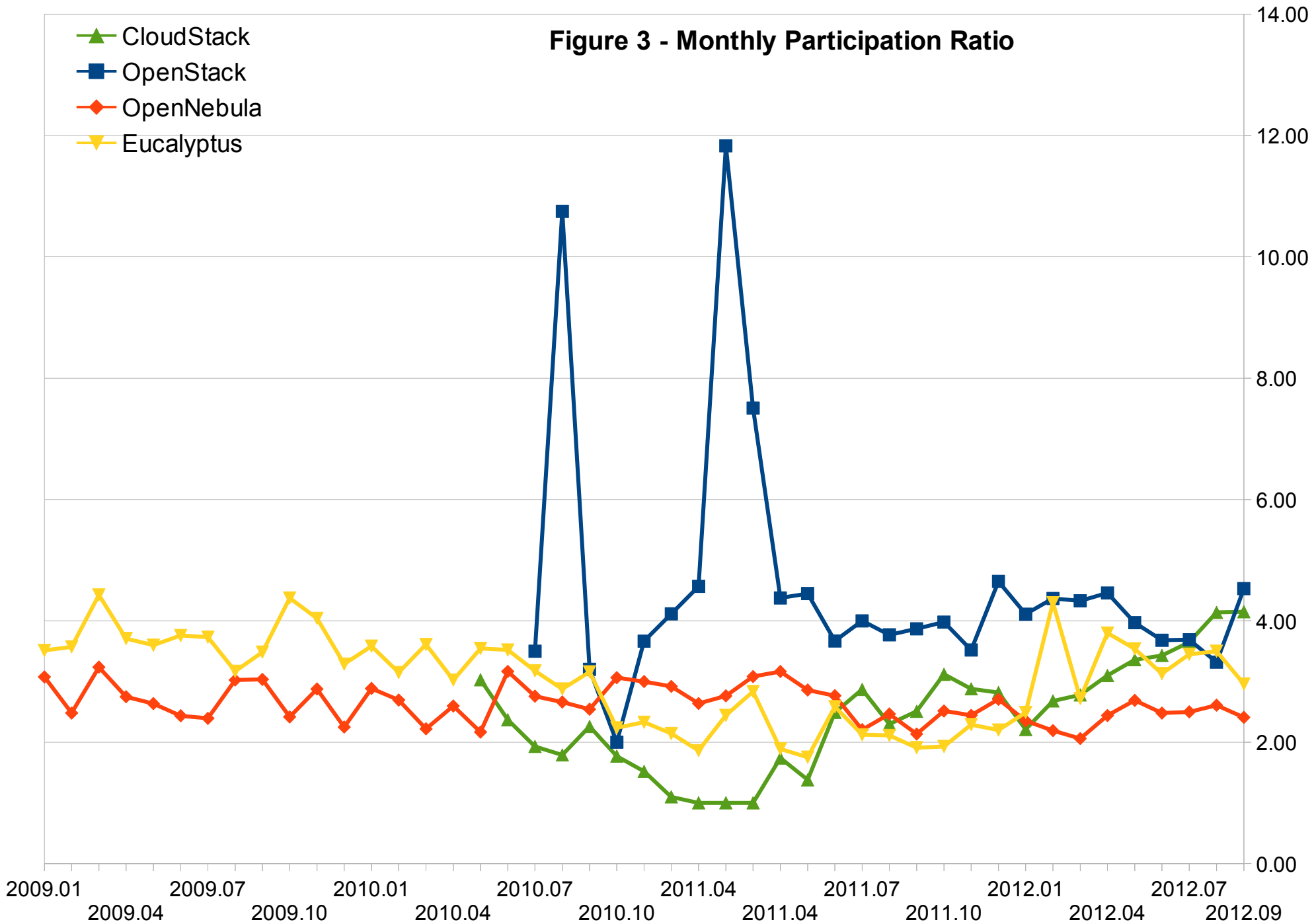


Figure 4 - Monthly Number of Participants

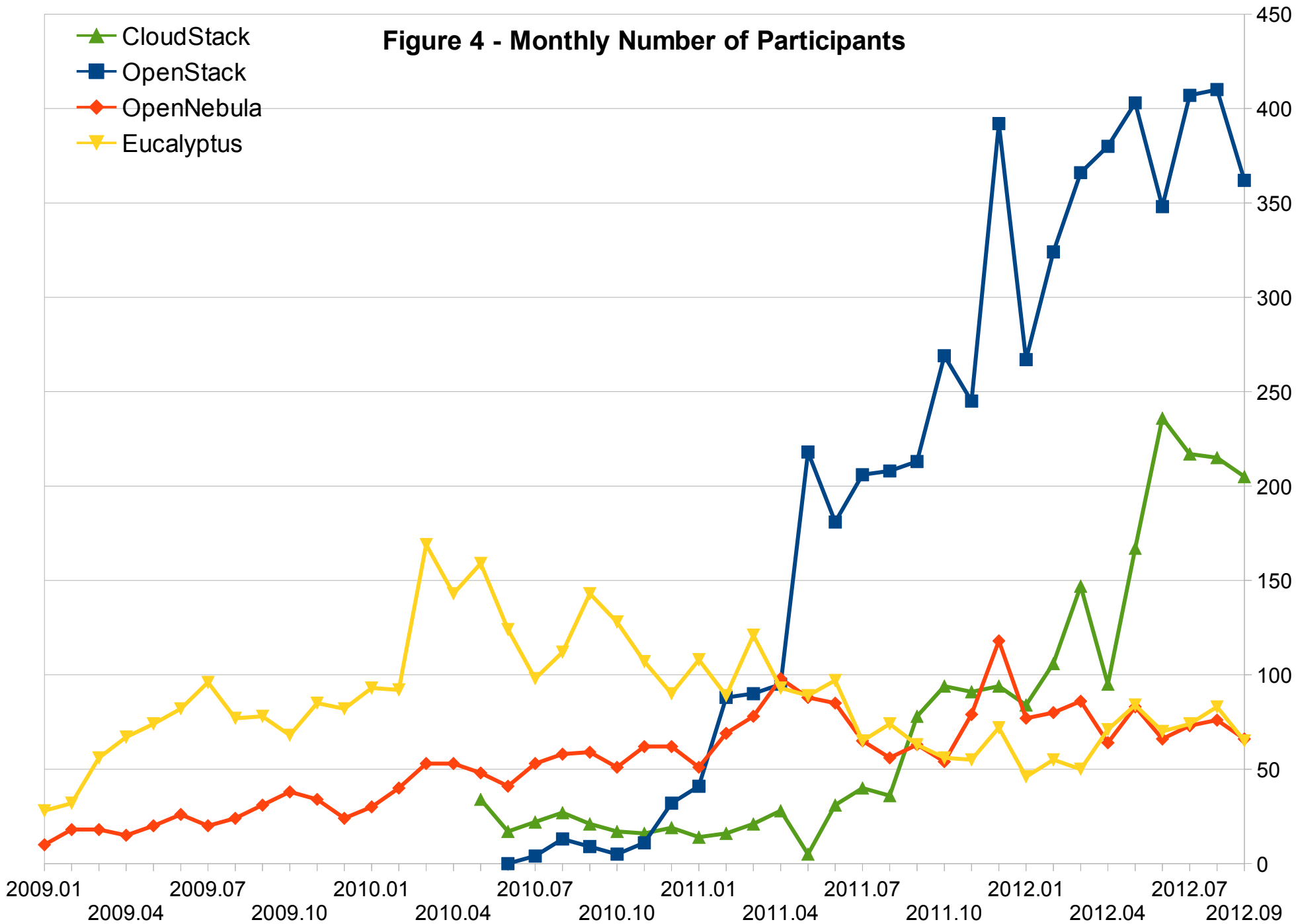


Figure 5 - Accumulated Community Population

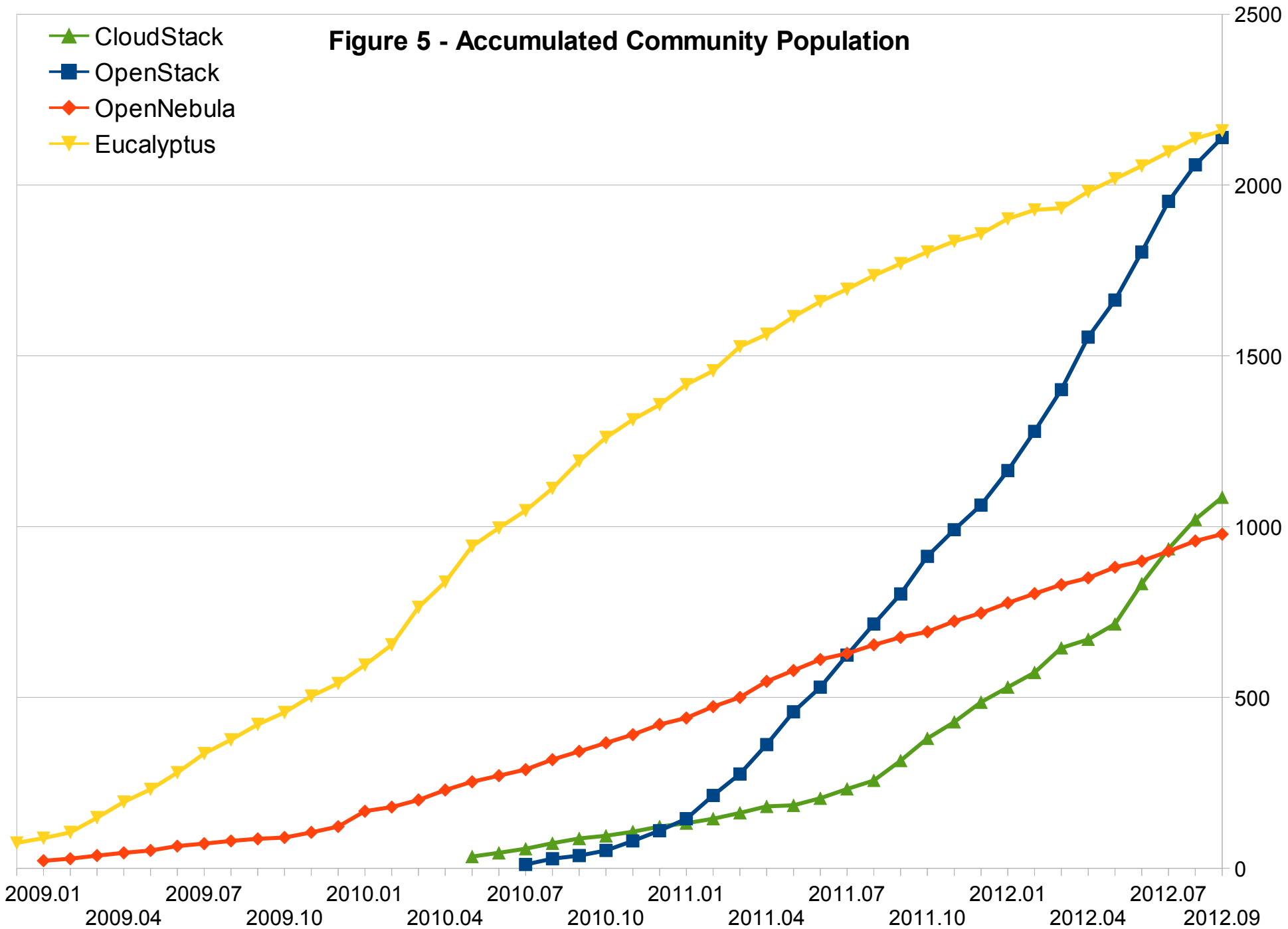


Figure 6 - Monthly Population Growth

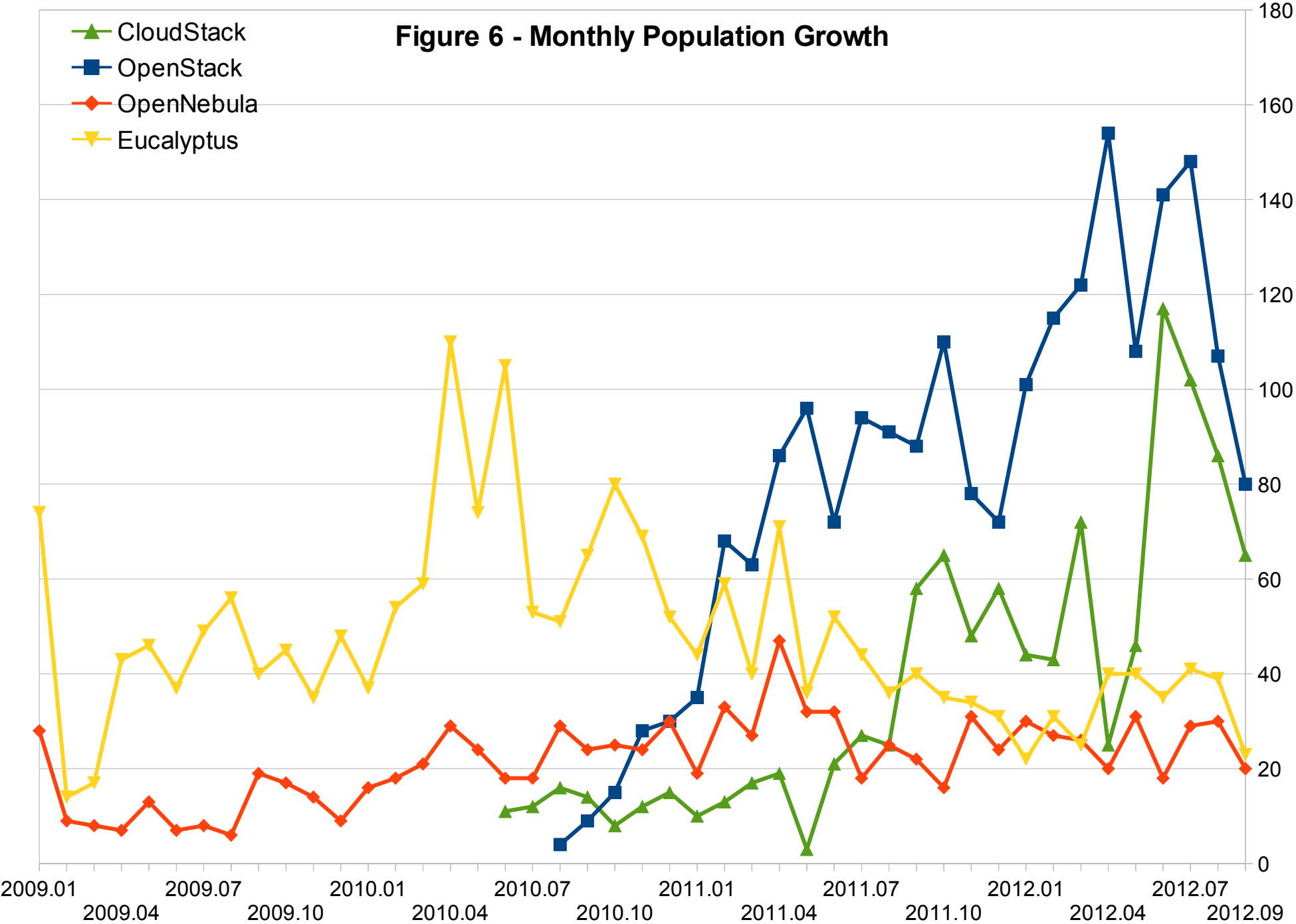
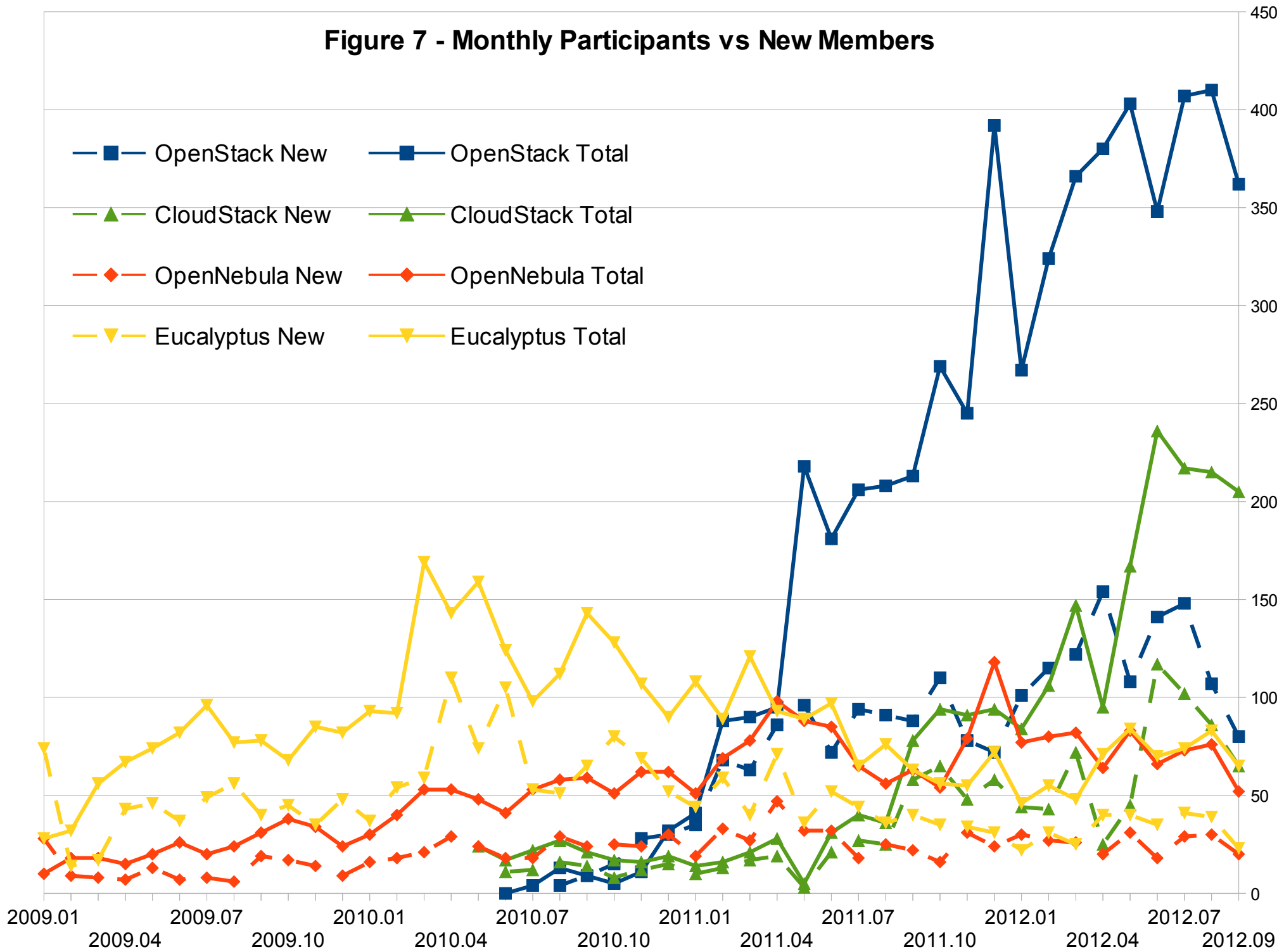
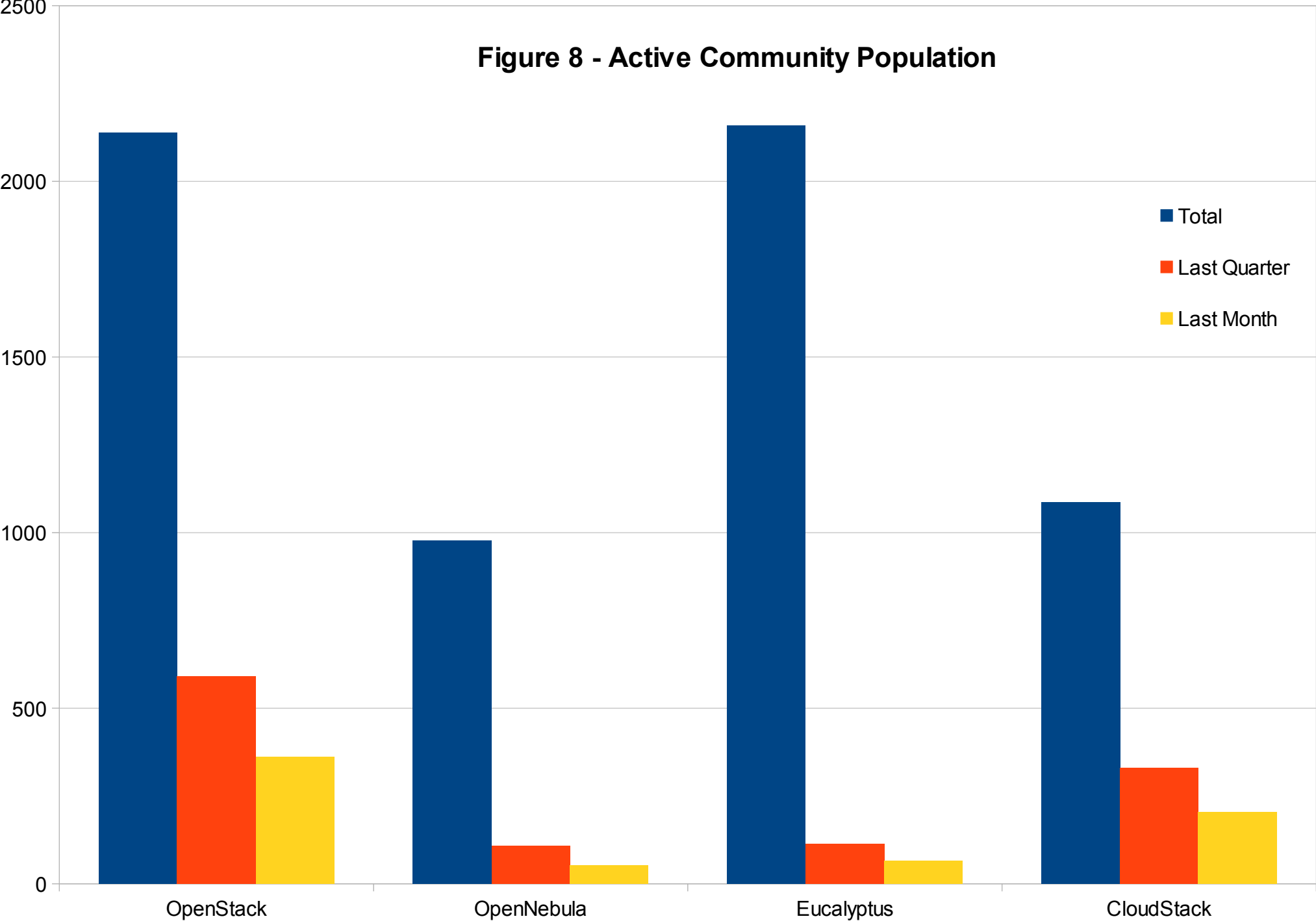




Figure 7 - Monthly Participants vs New Members



**Figure 8 - Active Community Population**



**Figure 9 – Community Activeness Index**

**Computing the Reference Data Set**

	OpenStack	OpenNebula	Eucalyptus	CloudStack	Average
Monthly Messages	1677	200	290	2173	1085
Participation Ratio	4.53	2.41	2.96	4.15	3.51
Quarterly Population	590	109	116	330	286
Monthly Population	362	52	65	205	171

**Computing the Activeness Index**

	Relative Monthly Messages	Relative Participation Ratio	Relative Quarter Population	Relative Monthly Population	Activeness Index
OpenStack	1.55	1.29	2.06	2.12	7.02
OpenNebula	0.18	0.69	0.38	0.30	1.55
Eucalyptus	0.27	0.84	0.41	0.38	1.90
CloudStack	2.00	1.18	1.15	1.20	5.53