

CY12-Q4

Open Source IaaS Community Analysis

OpenStack vs OpenNebula vs Eucalyptus vs CloudStack

Qingye Jiang (John)
qjiang@ieee.org

Sina weibo: @qyjohn_

Data Source

- OpenStack
 - <https://lists.launchpad.net/openstack/>
 - <https://answers.launchpad.net/openstack/>
 - 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-dev/
 - <http://www.cloudstack.org/forum/index.html> (Until 2012-09)

Figure 1 - Monthly Number of Threads

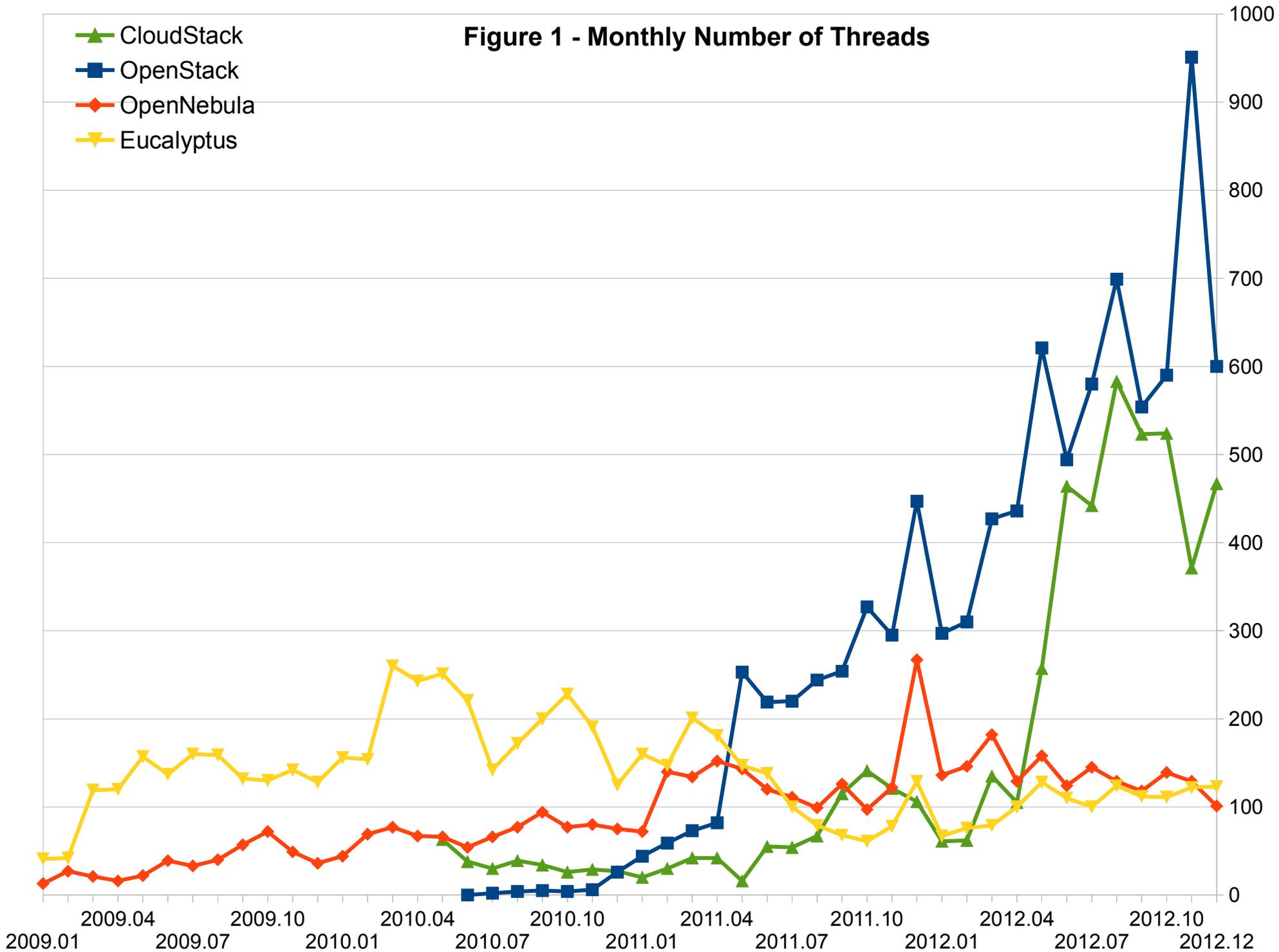


Figure 2 - Monthly Number of Messages

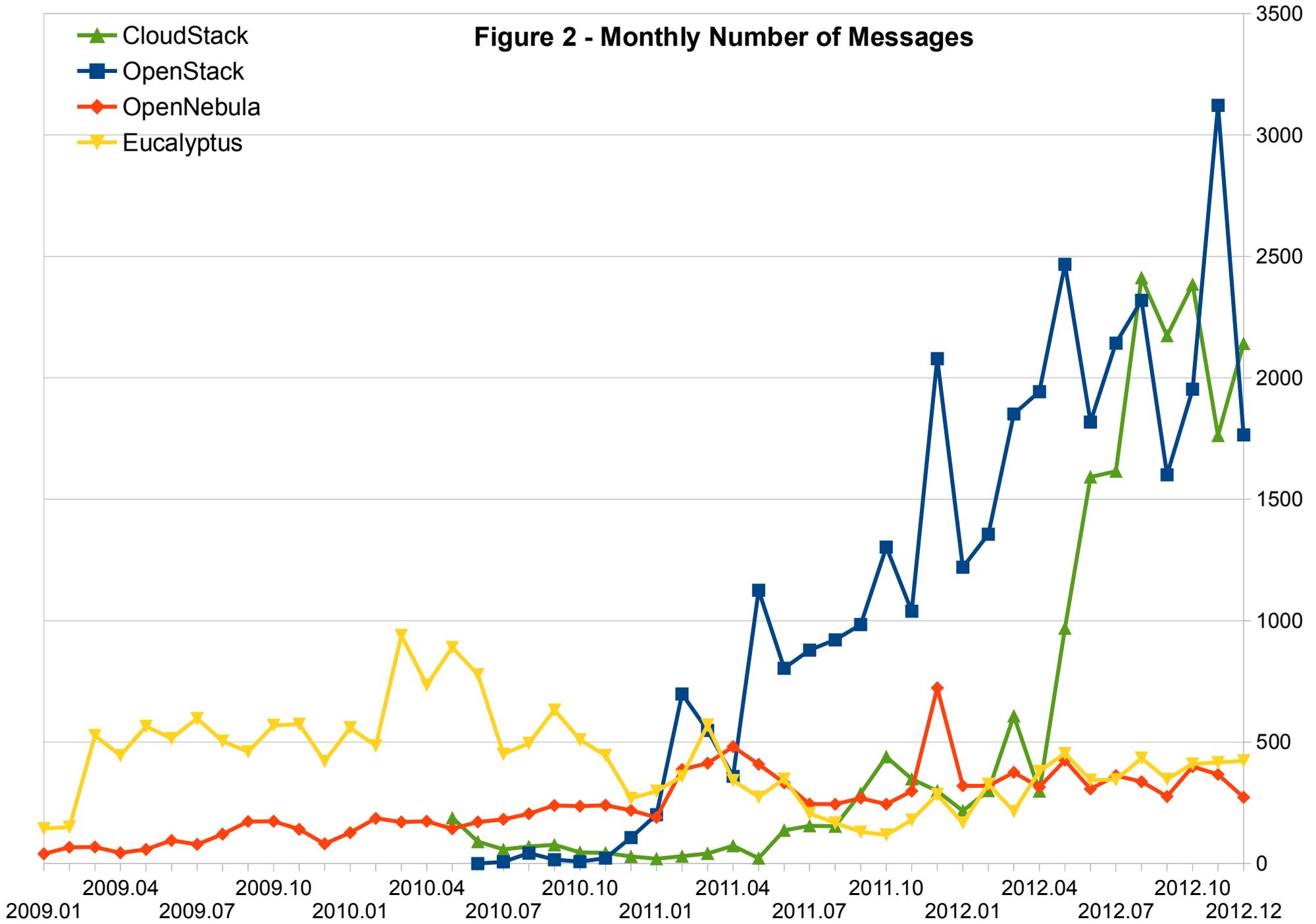


Figure 3 - Monthly Participation Ratio

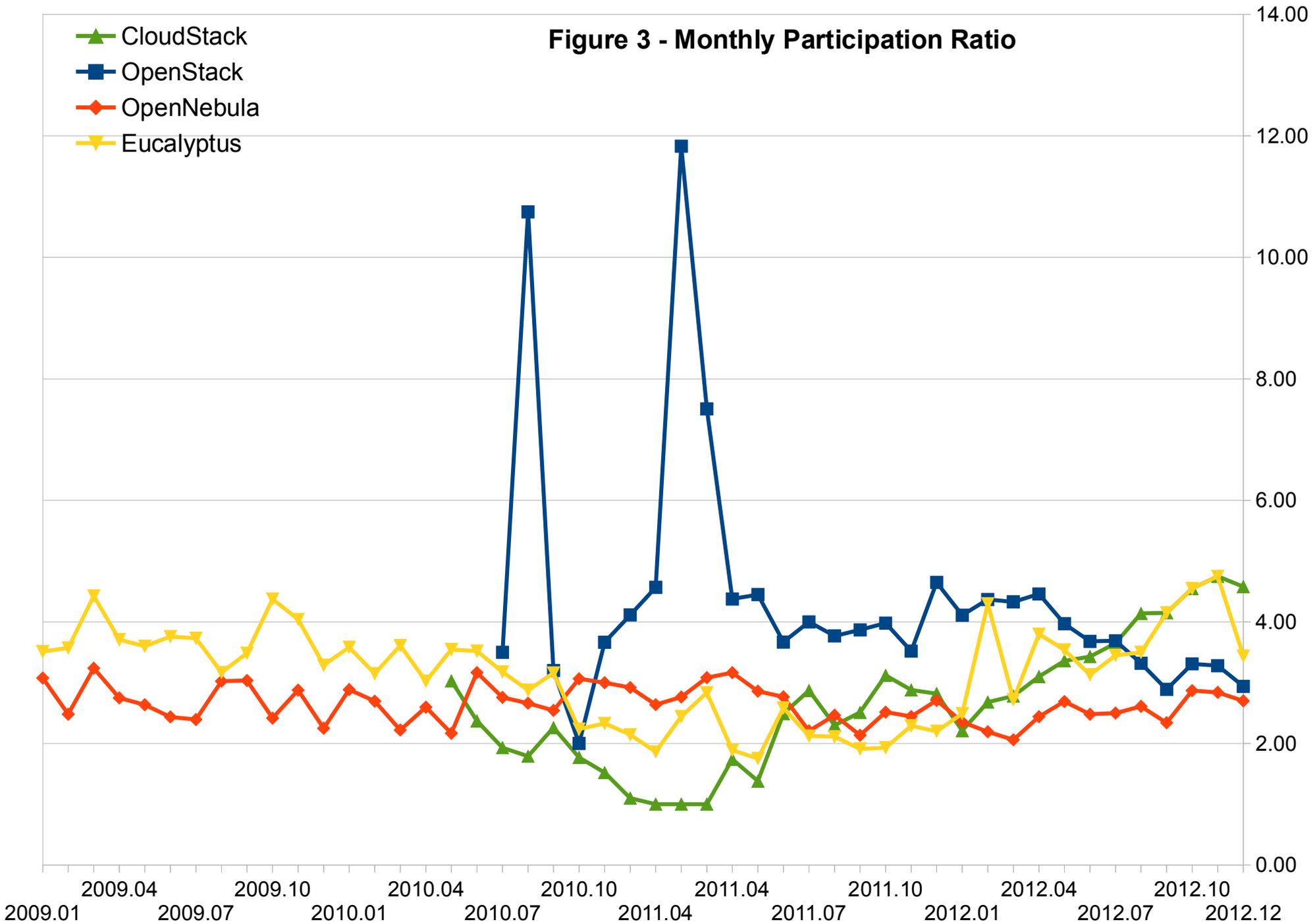


Figure 4 - Monthly Number of Participants

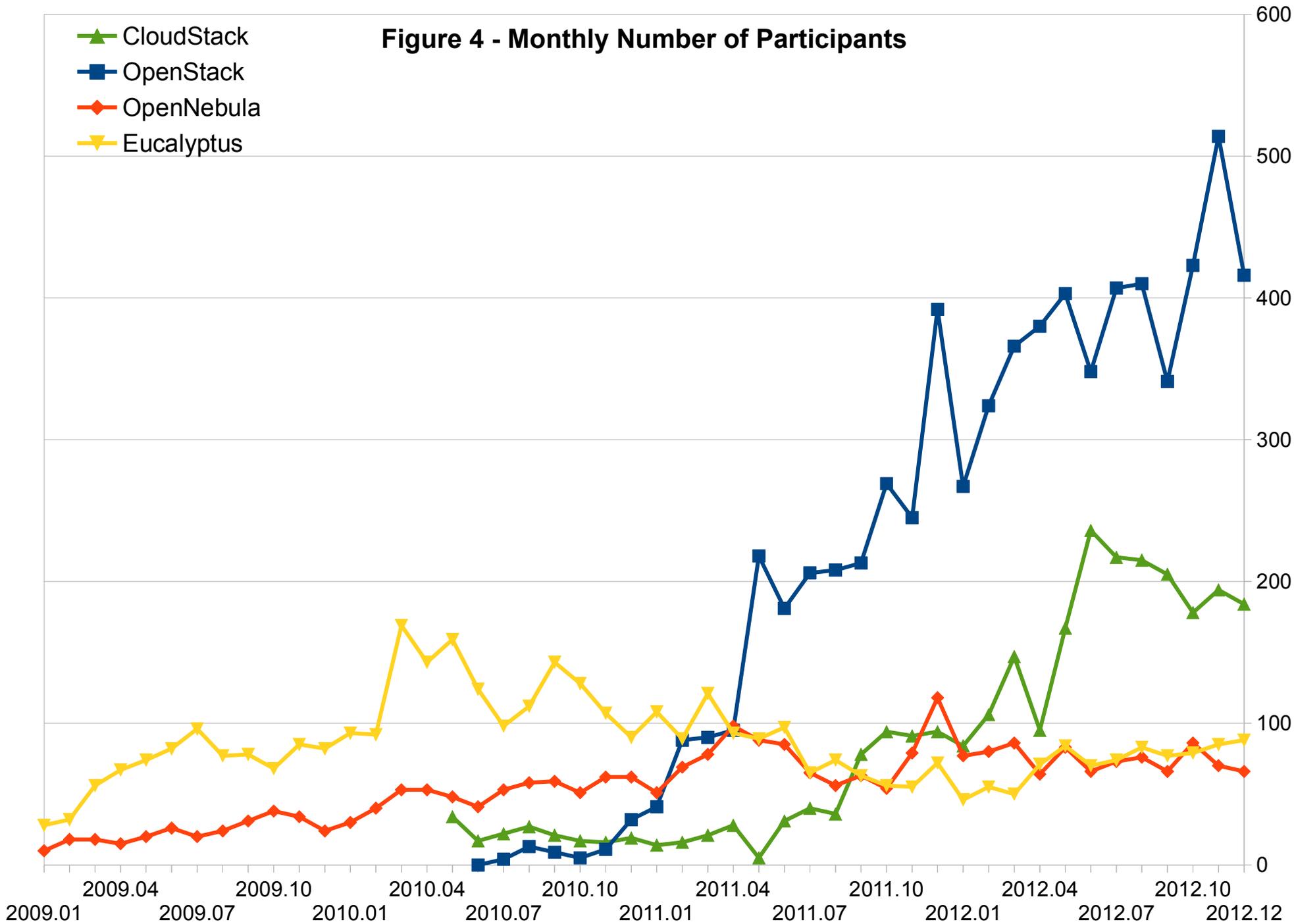


Figure 5 - Accumulated Community Population

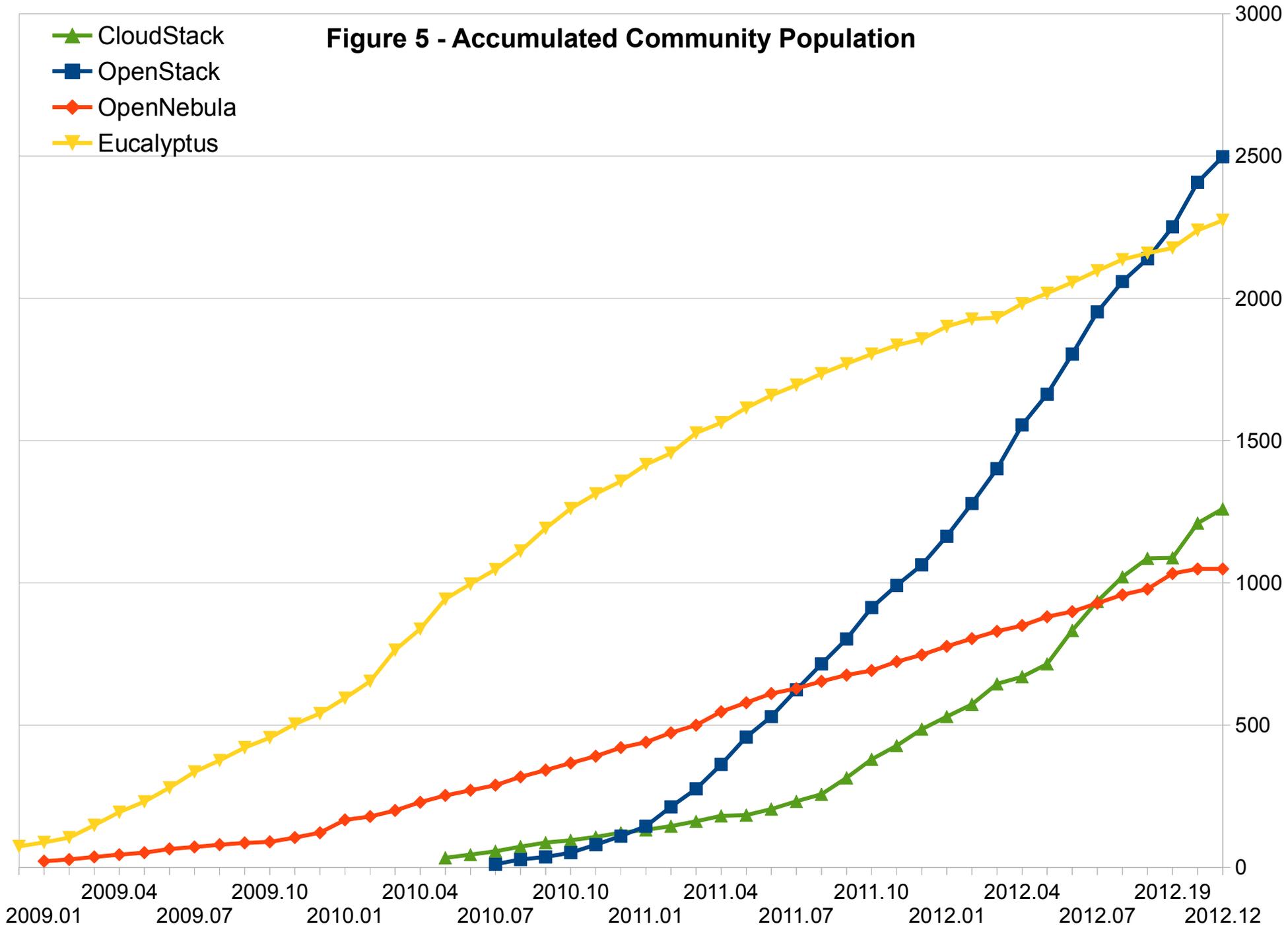


Figure 6 - Monthly Population Growth

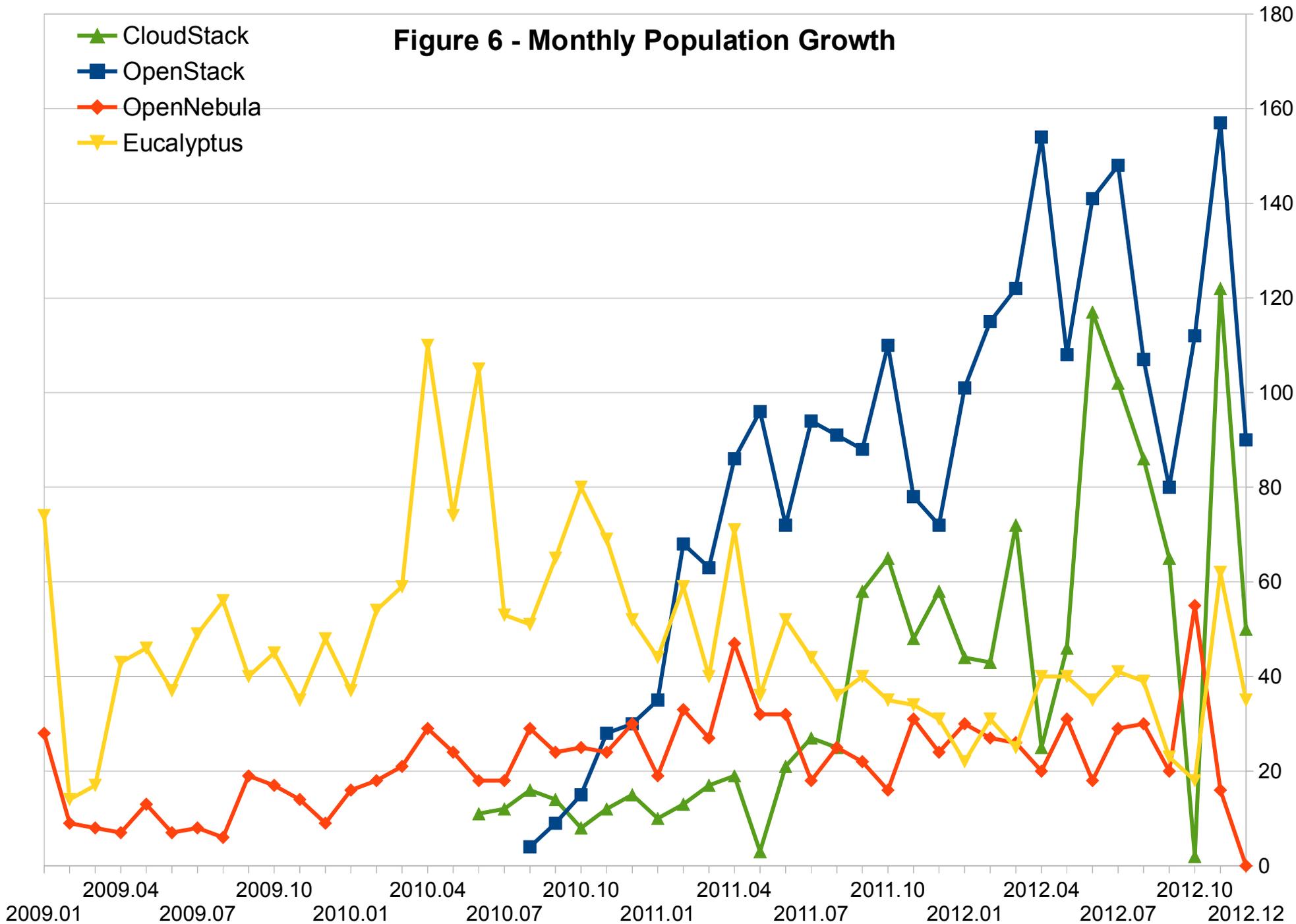


Figure 7 - Monthly Participants vs New Members

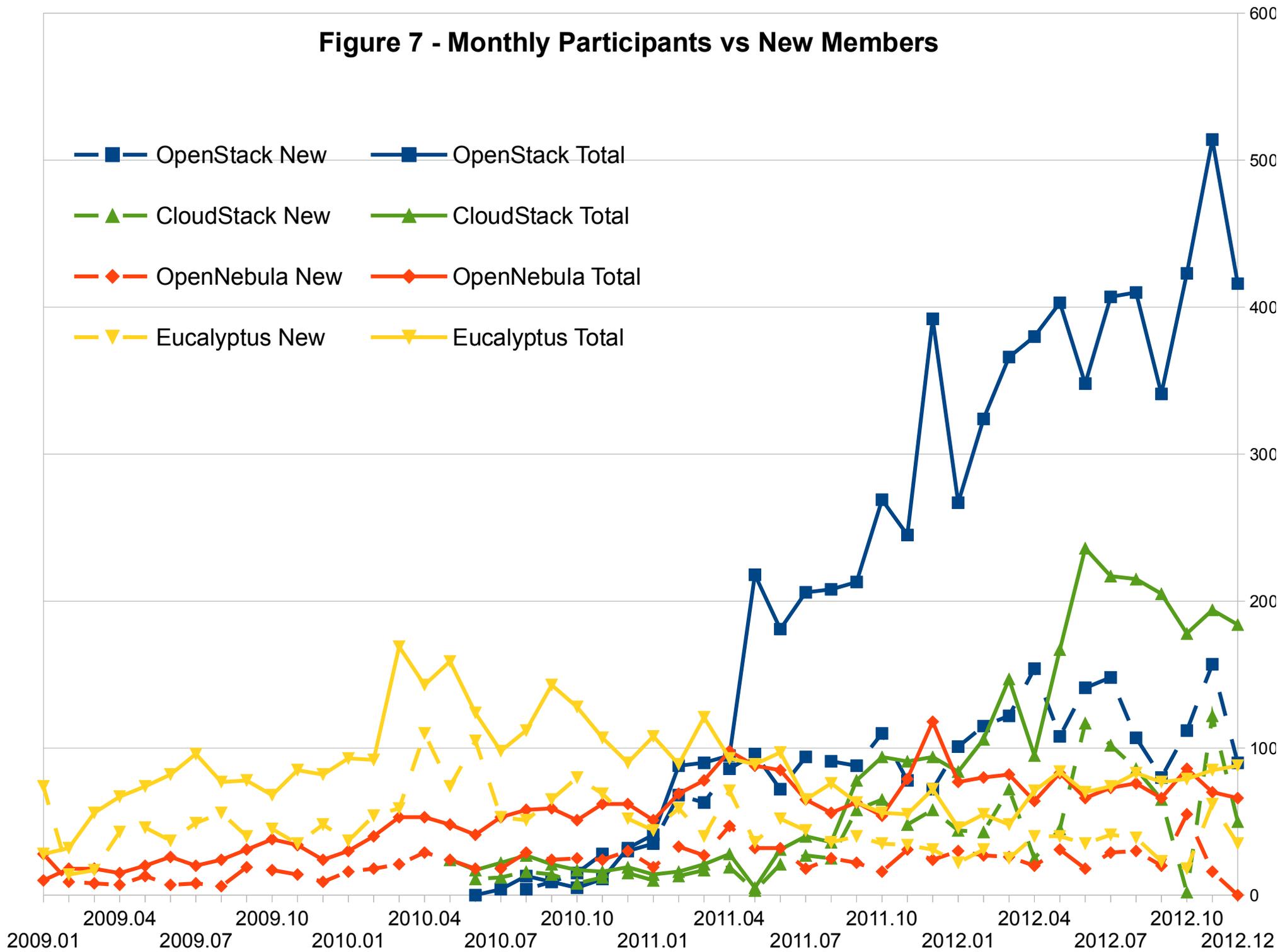


Figure 8 - Active Community Population

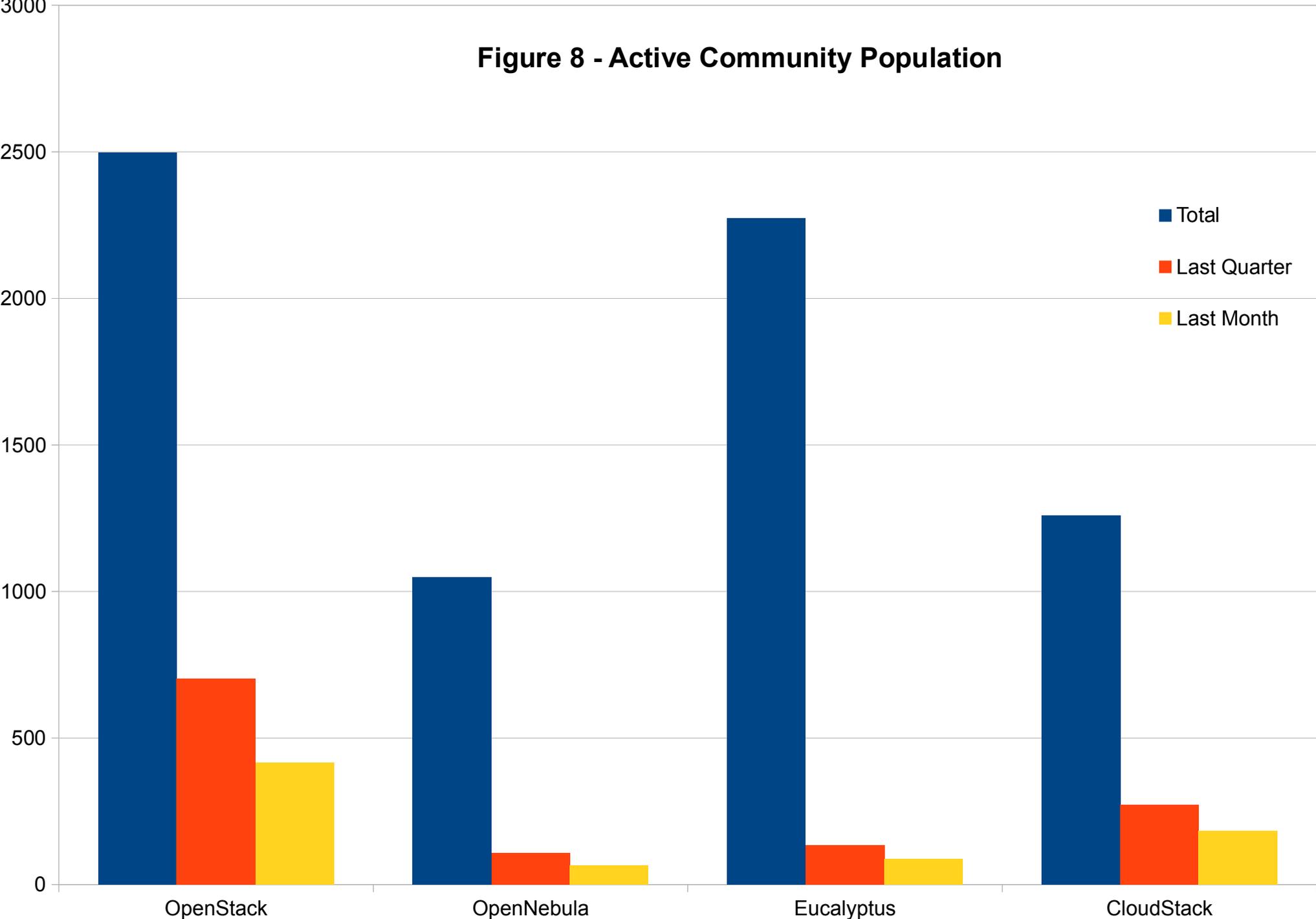


Figure 9 – Community Activeness Index

Computing the Reference Data Set

	OpenStack	OpenNebula	Eucalyptus	CloudStack	Average
Monthly Messages	1765	273	423	2141	1150
Participation Ratio	2.94	2.70	3.44	4.58	3.42
Quarterly Population	703	107	133	271	304
Monthly Population	416	66	88	184	189

Computing the Activeness Index

	Relative Monthly Messages	Relative Participation Ratio	Relative Quarter Population	Relative Monthly Population	Activeness Index
OpenStack	1.53	0.86	2.32	2.21	6.92
OpenNebula	0.24	0.79	0.35	0.35	1.73
Eucalyptus	0.37	1.01	0.44	0.47	2.28
CloudStack	1.86	1.34	0.89	0.98	5.07