

Shoal - a dynamic squid cache publishing and advertising tool

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Shoal is a squid cache publishing and advertising tool designed to work in fast changing environments, consistent of three components - the shoal-server, the shoal-agent, and the shoal-client.

The purpose of shoal is to have a continually updated list of squid caches. Each squid runs shoal-agent which uses AMQP messages to publish its existence and the load of the squid to the central shoal-server. The shoal-server keeps a list of squids in memory and removes any squid which has not sent it a message recently. The IPs of all squid servers are geo-referenced. Clients contact the squid server using a REST interface to retrieve an ordered list of the nearest squids. While the initial version was based on Python2, we updated the code to be compatible with Python3. We also used the opportunity to make large improvements on the functionality of the different components, especially testing of squids to be used and using an ordering of squids not only based on geo-location but also on the accessibility of the squids; the nearest squid may not be the best squid to use. In addition we also simplified the configuration of the shoal-client and shoal-agent which will largely configure itself now.

Speaker release

Yes

Desired slot length

20min

Primary authors: Dr EBERT, Marcus (University of Victoria); DRIEMEL, Colson (University of Victoria); SOBIE, Randall (University of Victoria (CA)); Ms MENG, Da (University of Victoria)

Presenter: Dr EBERT, Marcus (University of Victoria)

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