

What is a “Traffic Marker” in the context of Tessellation? Give example of two popular traffic-markers.

In order to identify and attribute other session blocks (with no OSN identifiers) that are likely to be generated by the same OSN users, HTTP cookies and other <key-value> strings in HTTP headers are leveraged. These are referred to as Traffic Markers. The traffic markers are generated and used by various Web services to bring together stateless HTTP request/reply messages and to keep track of the webpages users visited, user devices, or the users themselves.

Example: Any 2 from the table.

Traffic marker domain	Cate-gory	Where to find	Keywords
admob.com	Ad	HTTP: X-Admob-ISU	X-Admob-ISU
atdmt.com, msn.com, bing.com	Ad	HTTP:cookie	muid
doubleclick.net	Ad	HTTP:cookie	id
mydas.mobi	Ad	HTTP:cookie	mac-id
google.com	Sid	HTTP:cookie	sid
craigslist.org	Uid	HTTP:cookie	cl_b
yahoo.com	Uid	HTTP:cookie	c
scorecardresearch.com	Tid	HTTP:cookie	uid
quantserve.com	Tid	HTTP:cookie	mc
google-analytics.com	Tid	HTTP:cookie	utmcc

Table 3: The top-10 most commonly found traffic markers

What do you mean by activity fingerprint of a user?

Activity fingerprint of a user is a subset of services (e.g. the most frequently accessed services) used by a user that can “fingerprint” the user with high confidence. In other words, these services represent a distinct activity pattern that distinguishes the user from all other users.

Example of service: (Not Mandatory to mention)

Service class	Keywords	Service provider
Banking	bank	wellsfargo, morganstanley
Blog	blog, buzz	huffingtonpost, boingboing
Book	book	barnesandnoble, half.com
Chat	talk, chat, messenger	skype, mtalk.google, aim
Dating	personals, harmony, match	plentyoffish, date
E-commerce	warehouse, market, buy	amazon, ebay, blockbuster
Education	.edu, college, education	medexch.med.unc.edu
Email	smtp, imap, pop, exchange	google, hotmail, yahoo
File hosting	upload, download, ftp	megaupload, dropbox
Gaming	game, casino	zynga, farmville, xbox
Map	maps, virtualearth	maps.google, wikimapia
Music	music, radio, playlist	pandora, itunes, zune
News	news	msnbc, ew, cnn
P2P	tracker, torrent, mininova	No specific domain
Picture	picture, photo	flickr, picasa.google
Search	search	google, bing, yahoo
Social	social	OSN1, OSN2, ning
Sports	sports	espn, bleacherreport
Travel	travel, hotel, flight	expedia, kayak, southwest
Video	video	netflix, youtube
Weather	weather, forecast	No specific domain

Table 5: Samples of service classes and providers