

User Experience Testing (UET) – Network Health Check for a leading Telecom Operator in India

A Pan India Telecom giant that happens to be the 3rd largest mobile services operator in India and has a subscriber base of over 93.75 million as on 31st May 2011. Armed with an integrated GSM POC for network health operator covering the entire telephony landscape of the country, the company has won license to offer 3G Test services in 11 service areas.

The Challenge

With saturated voice revenues, advent of services like 3G and popularity of economic & feature full mobile devices the focus has shifted to data services. More often than not, the user experience is measured from the internal systems at the operator's end rather than customer facing models. Also if the audits are done manually, then too possibility of error and capacity limitation is significant. Testing becomes crucial on the following grounds :

- How do you ensure that your network is performing to the optimum?
- Is your network helping you realize the true potential?

The Solution

Test Max User Experience Testing (UET) is a solution framework that allows you to track all consumer touch points, in terms of their accurate manner of working. The testing is done through physical latency probes located across different locations.

The Process

Network health check is done through the probes installed at various locations. The test case can be scheduled remotely. It processes the download request on scheduled time and automatically measures the response and network performance. The cases can be scheduled to download a particular file or different files at different locations as per the requirement.

TEST Max User Experience Testing helps you keep a track record of customer experiences at each and every customer touch point and the challenges that a customer faces while using services. Our scalable and integrated suite of testing product offers the following abilities:

- Proactive alarm on failure of service
- Identify the point of failure immediately
- Benchmarking the services offered by the client and the competitors

The Test Case

POC conducted for Idea for network health check:

- Focus points of the activity was to Test speeds on 2G and 3G network
- Testing Location – Nasik (Maharashtra)
- Testing conducted from March 2 to 7, 2011
- Sample Size:
- Network Tests – 188

Results

2G – File Size and Cell ID Mapping

File Size	Cell ID	Transfer Rate (KB/Sec)	Latency (ms)
1 MB	1341	9	184
	1342	24	95
	1611	2	338
2 MB	3223	25	81
	1342	29	60
3 MB	1611	2	369
	1342	28	61

3G – File Size and Cell ID Mapping

File Size	Cell ID	Transfer Rate (KB/Sec)	Latency (ms)
1 MB	6845782	124	24
	6845783	118	12
	6845901	48	77
	6846163	55	23
	6846212	107	32
	6846263	97	18
	6846611	123	25
	6846613	89	20
	6846662	23	71
	6845782	140	22
2 MB	6845783	109	15
	6846163	56	23
	6846212	144	12
	6846611	43	22
3 MB	6845782	137	18
	6845783	96	15
	6846163	37	44
	6846212	105	16
	6846611	48	24