

Mass Call Onset Detection for GeoProbe®

Network Assurance for Fixed Core



When tickets for a popular sporting event or concert go on sale during a busy weekday morning, service providers are usually prepared to handle the hundreds of calls that will be made at the same time without compromising the network's overall Quality of Service (QoS) or its revenue-generating capabilities. But what happens when surges in call volumes are unexpected?

While carriers can take precautionary measures by applying traffic control schemes prior to an event's onset, the prevalence of VoIP in modern networks can complicate efforts with increased risks for Spam over Internet Telephony, misrouted INVITES, call loops and message flooding. As a result, carriers must remain vigilant in proactively identifying mass call events in the network in order to minimize the potential negative effects.

Detect Mass Call Events Instantaneously

Network events are detected within seconds of the onset.

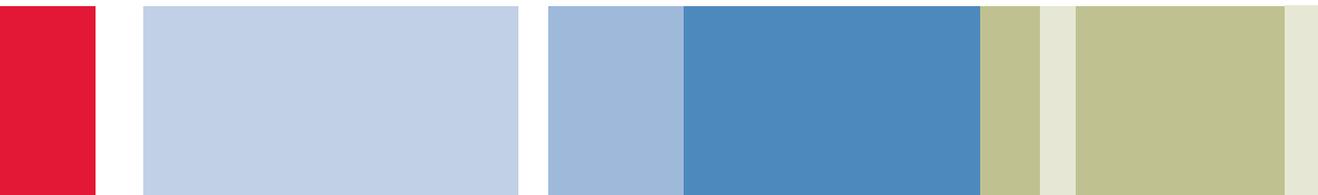
- Configure custom alarm profiles to detect events based on excessive call attempts to a single destination or a common prefix.
- Detect a mass call event anywhere in your network using "wildcards".

Destination	Total	Origination	Count
Las_Vegas 007-001-004 9725786100	63	Seattle_BSP 007-001-003	47
		ElPaso_BSP 007-001-006	9
		SanDiego_BSP 007-001-005	7
ElPaso_BSP 007-001-006 9725786208	61	Seattle_BSP 007-001-003	48
		SanDiego_BSP 007-001-005	13
ElPaso_BSP 007-001-006 9725786127	61	Seattle_BSP 007-001-003	50
		SanDiego_BSP 007-001-005	11
Total Calls		903	

A part of Tektronix' GeoProbe offering, the Mass Call application reconstructs every call that passes through the monitored network in real time in order to deliver the following mass call mitigation capabilities:

- Detect excessive call attempts to or from the same number or range of numbers during a specific time period.
- Take defensive action to throttle network traffic before the network quality of service is affected by congestion.
- Identify and minimize the fallout from potential fraudulent activity.
- Prioritize the actions needed to minimize the impact of a mass call event based on alarm details with affected network element information.
- Identify top destinations in your network using wildcards for traffic analysis and ongoing capacity planning.
- Extend visibility to mass call events in converged networks where calls cross both PSTN and IP networks.

The status window displays the destination and origination of each monitored call.



Take Control of Mass Call Events

While early detection of mass call events is imperative to daily operations, it is equally important to understand the next and best steps to take once an event occurs. The customized alarm details of the Mass Call application provide the information to prioritize necessary actions.

- Efficiently and effectively minimize the network and financial impact of a mass call event.
- View destination endpoint details and call attempt counts for the most active originating endpoints.
- Quickly identify call looping scenarios caused by incorrect routing tables or misconfigured redirect servers.

Identify Top Destinations

Employ the mass call wildcard option to identify calls funneled to a terminating end office, point code or end number and then, count and display the calls from each origination point in descending order.

- Pinpoint the most popular destinations in your network.
- Investigate offending destinations and correct switch routing tables that cause call looping, and thereby trigger mass call events.
- Identify areas requiring additional capacity.

Application Highlights

Multiple User-defined Profiles

- Specify destination/origination numbers or common prefixes
- Wildcard destination for a full network view
- Sampling period to measure traffic load

Onset and Abatement Thresholds

- Real-time alarming within seconds of onset
- Configure alarms as self-clearing with abatement, or require manual intervention

Flexible Display Options

- Mass Call Status Window and Customizable Alarm Bullseye

Mass Call Information

- Destination addresses
- Dialed number or routing number
- Highest volume origination points

Supported Protocols

- ISUP, INAP, AIN, SIP (Invite call type), H.248 for call control (Context call type), ISUP over M3UA (Circuit-related call type), ISDN DSS1 over IUA (Setup call type), DPNSS over DUA (Setup call type)

About Tektronix:

Tektronix has more than 60 years of experience in providing network operators and equipment manufacturers a comprehensive and unparalleled suite of network diagnostics and management solutions for fixed, mobile, IP and converged multi-service networks.

These solutions support such architectures and applications as fixed mobile convergence, IMS, broadband wireless access, WiMAX, VoIP and triple play, including IPTV.

For Further Information:

Tektronix maintains a comprehensive, constantly expanding collection of application notes, technical briefs and other resources to help engineers working on the cutting edge of technology.

Please visit www.tektronix.com/communications

Contact Tektronix:

Please visit www.tektronix.com/communications

Phone:
1-800-833-9200 option 1
+1-469-330-4000

Locate your nearest Tektronix representative at www.tektronix.com/contactus