

### **MOBILITY SERVICES**

# MOBILE SIGNALLING SECURITY

PROTECT YOUR SIGNALLING TRAFFIC



#### SIGNALLING THREAT ENVIRONMENT

It is relatively easy for organisations to get access to the Signalling network. Mobile Network Operators (MNOs) and roaming hubs are selling access at relatively low cost. Some MNOs re-sell access to their roaming agreements to 3<sup>rd</sup> parties, so once someone has access in one region or country, they have access to the global Signalling network.

Tata Communications' signalling security service addresses the security threats in SS7 and LTE/EPC Diameter based networks.

#### **BEST-IN-CLASS SIGNALLING SECURITY**

- Detect threats and prevent attacks in 5 critical areas: Tracking, Intercept, DoS, Fraud, SPAM
- Multiple policy enforcement rules. The signalling firewall executes complex tasks, with inbuilt signalling intelligence
- Full control over the network signalling protocols:
  - SS7 MTP3 through MAP
  - Diameter all messages, all Attribute Value Pairs (AVPs)
- Filtering lets you guard against signalling attacks while allowing valid messaging into the network
- Flexible architecture, so new modules can deployed in response to new threats
- TCAP de-duplication detects and removes looping messages
- Protection of subscriber IMSIs. SMS Router returns fake/masked details for IMSI/MSC addresses when external entities are querying for subscriber information
- SMS Router verifies roaming subscribers location before accepting messages from that location.

#### **Key Features**

- Message Screening any protocol, any layer, any message and any Diameter attribute value pair (AVP)
- Contextual Awareness a tool that determines whether otherwise valid messages are a threat to the network or subscribers based on their context
- Near Real-time Streaming analysis - Allows user defined triggers (GTT, Network, etc.) to be used to define a category for scoring. The resulting score is sent to message screening rules to affect incoming messages
- Reporting flexible reporting enables the definition of metrics, thresholds for alerting and publishing reports based on these criteria



#### TATA COMMUNICATIONS SIGNALLING SECURITY OVERVIEW

Signalling security is provided as an integral part of our signalling value add services. Malicious traffic is checked, and blocked as part of Tata Communications integral signalling security capability.



## Why Tata Communications as your Signalling Partner?

- Largest global reach, with extensive local network capabilities for mobile signalling
- #1 on-net mobile signalling footprint, built on our industry-leading global network, with ~200 direct connects and 800+ reachable destinations
- Largest ANSI/ITU conversion provider with signalling conversion, number portability, and direct termination support to North America
- Market-leading reliability and service availability, with dedicated 24x7 support
- Comprehensive signalling security to protect your network and your customers

#### **About Tata Communications**

Tata Communications Limited (CIN no: L64200MH1986PLC039266) along with its subsidiaries (Tata Communications) is a leading global provider of A New World of Communications™. With a leadership position in emerging markets, Tata Communications leverages its advanced solutions capabilities and domain expertise across its global network to deliver managed solutions to multinational enterprises, service providers and consumers.

The Tata Communications global network includes one of the most advanced and largest submarine cable networks and a Tier-1 IP network, as well as nearly 1.5 million square feet of data centre and collocation space worldwide.

Tata Communications Limited is listed on the Bombay Stock Exchange and the National Stock Exchange of India.

www.tatacommunications.com | > @tata\_comm http://tatacommunications-newworld.com | www.youtube.com/tatacomms

For more information, visit us at www.tatacommunications.com









