

Ribbon Analytics - TDoSProtect

Stopping Floods of Malicious Calls



How do you know if you are protecting your real-time communication networks from unwanted calls coming in that appear to be valid, but in fact they are malicious attempts to tie up communication applications such as IVRs or PBX trunks with long call duration times?

Telephone Denial-of-Service (TDoS) attacks are increasing every day. They are often part of an extortion scheme where a bad actor demands payment, then launches a continuous stream of phantom calls that block normal calls in your business until payment is received. Usually, the attacks start and stop randomly until the ransom is paid. Frequent targets include hospitals, government offices and public-safety answering point offices.

Ribbon Analytics TDoSProtect application uses granular tracking algorithms to mitigate these attacks. Advanced policies are applied at the edge of the network to filter out these unwanted, disruptive calls from your communications networks and applications.

TDoSProtect

The Ribbon Analytics platform and virtual probes bring you out of the box applications specifically designed for mobile operators. The Ribbon Analytics solution collects, enriches and analyzes mobile usage and operationalizes a range of business improvement and new revenue opportunities across operator marketing / product, 3rd party data monetization, customer care and network organizations.

How it works

TDoSProtect tracks the number of SIP invites based on “Calling Number” patterns on a per-interval basis (for example, by 5 minute intervals). When the number of calling number invites exceeds the customer-defined threshold, then that calling number is tagged as “problematic” and escalated for investigation and/or mitigation.

It is possible to configure TDoSProtect to automatically initiate mitigation against that calling number(s) creating service disruptions. Blocking policies are promulgated throughout the entire communications network to block any additional calls from that calling number or calling number prefix, thus mitigating any loss in access by legitimate callers.

Moreover, administrators can create “whitelist” policies for specific Calling Numbers to always allow them to automatically bypass the TDoSProtect threat detection algorithms. Figure 1 below shows TDoSProtect functionality.

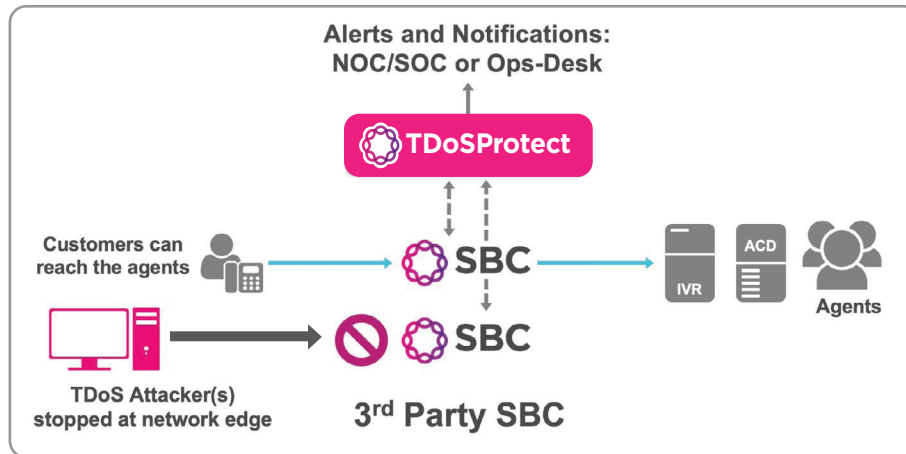


Figure 1. TDoSProtect functionality

TDoSProtect Features and Benefits:

- Advanced algorithms to filter out unwanted, disruptive calls from your communications networks and applications
- Detect calling anomalies based on metrics such as CAC by Calling number
- Automatically alerts on and blocks rogue calling patterns throughout the entire network

Ribbon Analytics Platform

TDoSProtect leverages Ribbon Analytics big data platform, to respond to real-time communications security and network quality incidents faster, more intelligently, and more efficiently.

The heart of the Analytics platform is its UC anomaly detection and policy mitigation capability. The anomaly detection module collects and analyzes data across the entire communications network that is then made available to Ribbon Analytics applications. With customer-defined policy management functionality, detected anomalies generate alerts (e.g. SMS, email) and can be mitigated with actions to the appropriate network elements in real-time.

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so your mission-critical communications remain SECURE and AVAILABLE.

About Ribbon

Ribbon Communications (Nasdaq: RBBN) delivers communications software, IP and optical networking solutions to service providers, enterprises and critical infrastructure sectors globally. We engage deeply with our customers, helping them modernize their networks for improved competitive positioning and business outcomes in today's smart, always-on and data-hungry world. Our innovative, end-to-end solutions portfolio delivers unparalleled scale, performance, and agility, including core to edge software-centric solutions, cloud-native offers, leading-edge security and analytics tools, along with IP and optical networking solutions for 5G. We maintain a keen focus on our commitments to Environmental, Social and Governance (ESG) matters, offering an annual Sustainability Report to our stakeholders. To learn more about Ribbon visit rbbn.com.

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