

Trust Boundary Appliance

An easy to introduce, media adapted, security and management point for any IP media network



The 40 G IP Media Trust Boundary Appliance provides a cost-effective way of moving IP media across network boundaries with High-capacity interfaces with line-rate packet performance for IP media.

It is possible to make changes without disrupting other active IP media flows and preserving the integrity of established flows and prevents outages. Media adapted security is provided rather than traditional firewall because IP media flows pass through a RTP media proxy. Streams can be protected using 2022-7 or 1+1 failover on any side of the proxy.

You can effectively terminate media flows at the network boundary and re-establish the flow in the destination network which prevents spoofing / hijacking. It is possible to monitor and assure the IP media payload as it passes between networks. Supported monitoring includes ETR 101/290 P1 performance metrics, frozen frames and audio silence.

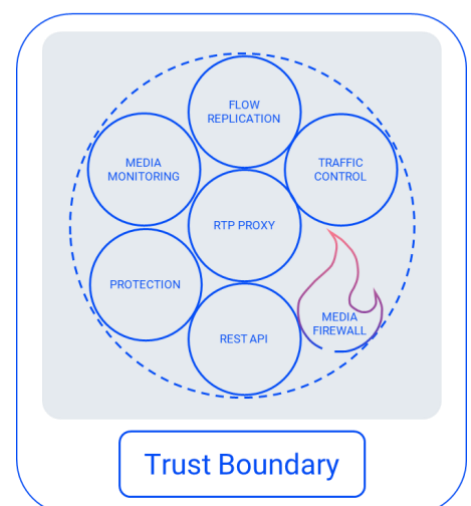
The Net Insight Trust boundary concept includes all recommended practices included in SMPTE RP 2129 as well as adding other valuable features for a complete control experience. Trust boundary is optimized for Media interconnect between IP Networks by:

- “Fit for purpose” dedicated set of features relevant to Media
- All features run concurrently in the same app
- Each function is solving media specific concerns with IP network interconnect.
- Removes the excessive complexity inherently associated with non-media specific solutions
- Easy to use logical GUI

40G IP Media Trust Boundary Appliance includes features to handle:

- Media Firewall and NAT – Transform the media to meet the requirements of the destination network
- Media Protection – Use 1+1, or hitless 2022-7 for any RTP flow
- Media Traffic Control – Know with confidence that the media you are sending or receiving is present, compliant and complete
- Media Flow Replication – Make duplicates when multicast is not available.
- Media Monitoring – Proactively monitor video/audio signals as they enter and leave a network to quickly identify what type of problem has occurred
- REST API – control all media related control and management in integrated systems

IP GATEWAY



It is possible to implement a 40G IP Media Trust Boundary Appliance, in combination with any enterprise firewall. This way it is possible to add a media appliance in combination with the IT controlled environments.

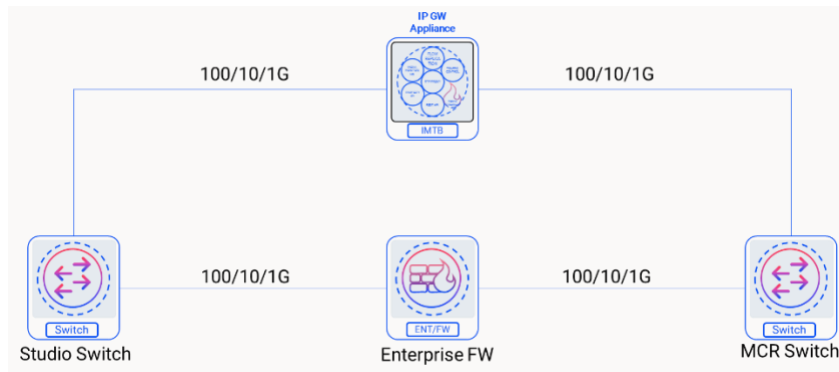
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Main Benefits of the 40G IP Media Trust Boundary Appliance:

- In stream monitoring of each media flow for quality assurance
- Each flow can be managed without impact to other flows.
- Bandwidth oversubscription is prevented at the time of flow creation.
- Changes to the Enterprise firewall will not impact media flows
- Broadcast Engineers can manage and configure the IMTB
- Enterprise IT can manage the firewall
- Cost saving on the Enterprise firewall cost as heavy media traffic can be routed through Trust Boundary Appliance

Technical specifications

Dimensions:

6.5" x 12.8" x 1.7" (165W x 326D x 43H mm)
[1RU]
Weight (with 1 micro servers): 6 lb. (2.7 kg)

Physical Connections:

Front: 2x SFP+ 10GbE
2x SFP 1/2.5GbE
2 x **RJ45** GbE
1x SDMP-4S micro server slot
1x RS232 console
1x USB Type-C console

Rear: 2x USB type-C (power only)

System Performance:
Non-blocking switching throughput: over 94Gbps

Agency Compliance:

EMC: FCC Part 15 Class A
EN 55022 Class A

Safety: UL 60950-1E N 6 0 9 5 0 -1
CSA-C22.2 No. 60950-1

Environmental:
RoHS 2002/95/EC

Media management:

Two IP Media Trust Boundary Apps alternatives:
App 1: Up to 192 ST2022-2 flows
App 2: 96/24/12 ST2022-2/6 (SD/HD/FHD) flows
Up to 40 Gbps of IP media throughput
2 x 10 Gbps FDx
Media protection 2022-7, 1+1 failover
Flow replication 1:3, 1:6
Traffic control on single flows and aggregate

Operating Environment:

0° to 50° ambient temperature
-40° to 85° storage temperature
Relative humidity: 5% to 90%

Power Specifications:

Maximum power: 100W
2x USB Type-C inputs: 20V – 5A each
Included adapter: Input voltage: 100–240 V (AC).
Input frequency: 50–60 Hz

Additional Features Layer 2:

100BASE-T, 1, 2.5, 10 GbE
Jumbo frames (9,216 Bytes)
Static MAC Filtering
802.1D Spanning Tree (STP), 802.1w Rapid STP,
802.1s Multiple STP
802.3ad Link Aggregation, 16 ports/channel,
64 groups/system
802.1as Timing and synchronization

VLAN:

802.1Q/802.1ac VLAN (4K); 802.1ad Q-in-Q
Port mirroring
IGMP snooping v1/v2/v3
MLD snooping/querier
Protected ports
Protocol, IP subnet, and MAC-based VLANs

Standards Compliance

SMPTE RP 2129