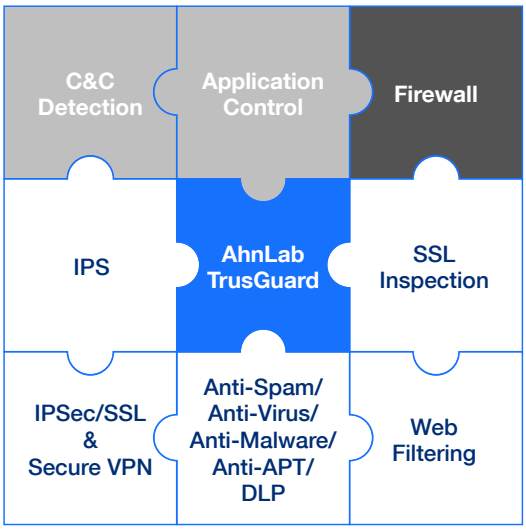
AhnLab TrusGuard

Next Generation Security Platform

TrusGuard is the next generation firewall to protect the organization from ever-evolving threats.

Overview

The NGFW TrusGuard has been acknowledged by a thorough market assessment for its technology, performance and stability. TrusGuard's firewall, IPS, application control, VPN, C&C detection & block, Anti-Virus/Anti-Spam and DLP protect the customers' business environment. TrusGuard has full lineup from the low-end to data center level models, allowing customers to flexibly choose the solution considering their network environment.



Differentiated NGFW Platform

- Thorough protection for the global/local applications
- User and device based policies settings/control
- SSL Inspection
- Interoperation with APT-exclusive MDS

Unmatched Threat Detection & Block Technology

- Multi-layered engine specialized for threat detection
- Security Intelligence based threat detection
- In-house threat analysis and infrastructure
- Reflecting a real-time threat information for fast response

High Firewall Throughput and Performance

- Advanced hardware platform
- High-performing multi-core distribution

User Interface with Accumulated Know-how

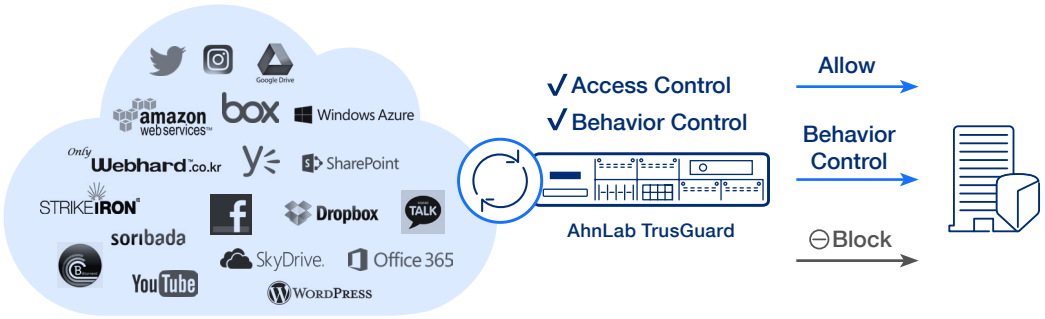
- Seamless flow of policies settings/control
- Flexible user interface with a drag & drop format

Volumounous Traffic Throughput High Performance Firewall	Differentiated Next Generation Security against Various Threats
User Interface Fully Reflecting Market Demand	Exclusive Threat Detection and Response

Next Generation Firewall

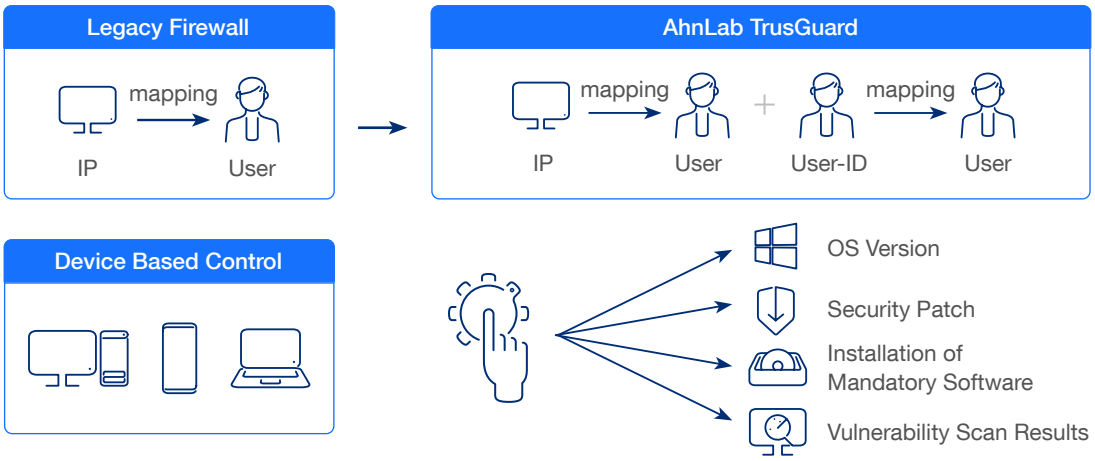
Application Control

TrusGuard is equipped with the application control feature, which is next-generation security technology. This enables real-time analysis, block, allow and control on thousands of global and local applications. By identifying the unknown application, TrusGuard enhances the security as it permits communication only with allowed applications.



User & Device Based Control

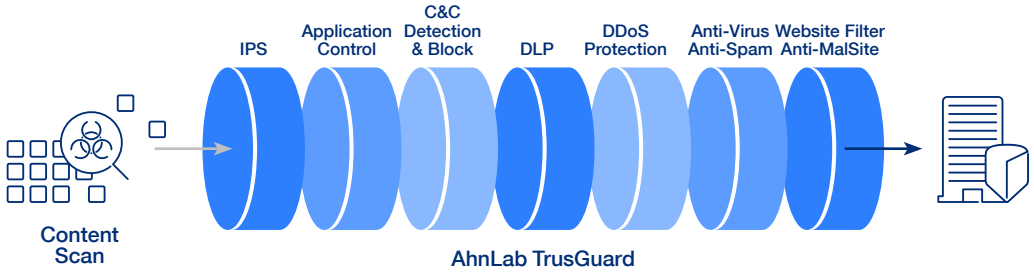
TrusGuard enables a quick threat response and efficient security management by identifying the user based on IP address, providing ID-based user identification and behavior control features.



Exclusive Threat Detection and Response

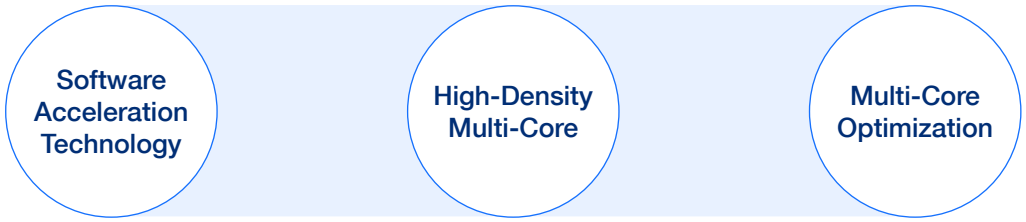
TrusGuard protects the customers from zero-day attacks and unknown threats by conducting a real-time inspection on contents inflowing to the network.

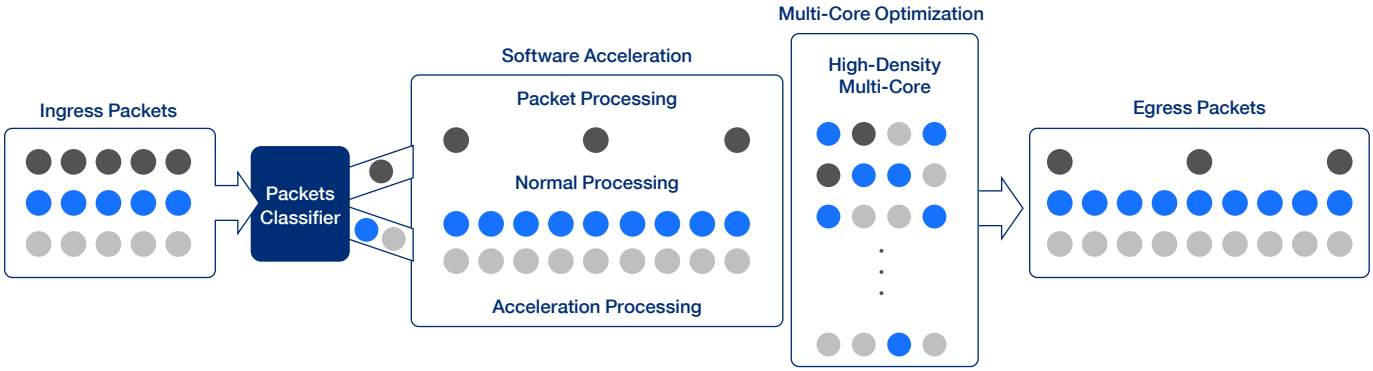
Multi-layered Engine Structure Specialized for Threat Detection	Real-time Threat Information for Fast Response
Security Intelligence (Detecting C&C and Mal-site/Threat Detection Filter)	Response to Zero-Day and Unknown Threats



High-performance

TrusGuard maximized its packet processing by applying ‘Advanced A-TEAM’ architecture solely developed by AhnLab. Advanced A-TEAM is the architecture technology that expedites packet processing severalfold. It is built with multi-core optimization and software acceleration technology.

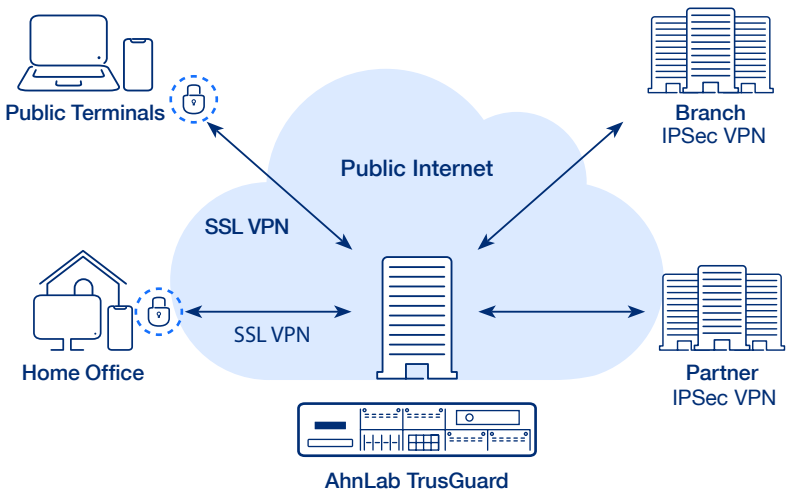




Advanced A-TEAM Architecture

VPN (Virtual Private Network)

TrusGuard realizes the safe network connection anytime, anywhere by simultaneously providing IPSec and SSL VPN features. Also, it strictly controls the spread of malware via VPN tunnel with its IPS and application control.



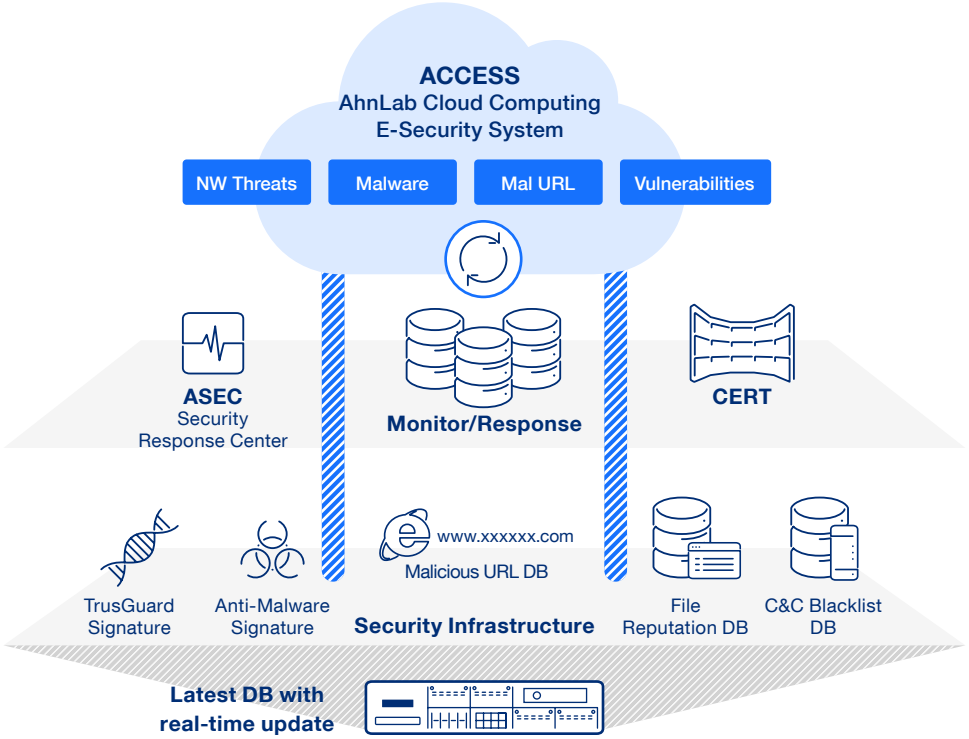
Stability **Security**

- Simultaneously Suppport IPSec/SSL VPN
- Mobile SSL VPN
- Supports multiple clients(Windows, Mac, Linux, and etc.)
- Strong Central Protection on HQ/Branches

Security Intelligence

AhnLab has the best and largest threat response organization and infrastructure in APAC. We offer a real-time monitoring and response capability against ever-evolving threats with our comprehensive cloud-based threat analysis system.

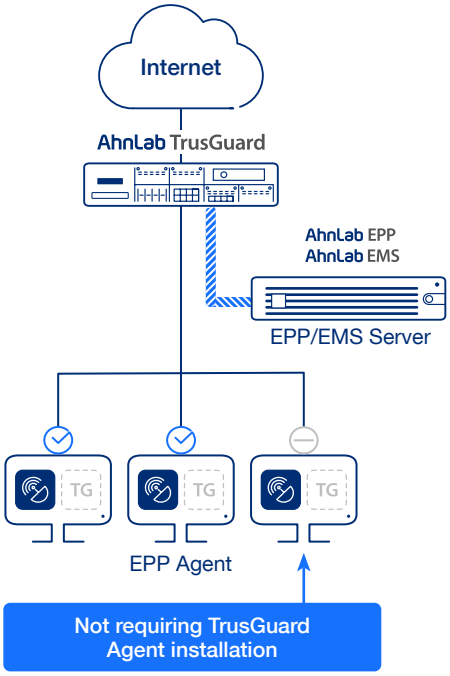
In particular, TrusGuard is equipped with C&C blacklist, DB of URL spreading malware, file reputation DB, and the latest vulnerability information. This unified security solution is optimized for enterprises in need of preventing advanced network threats.

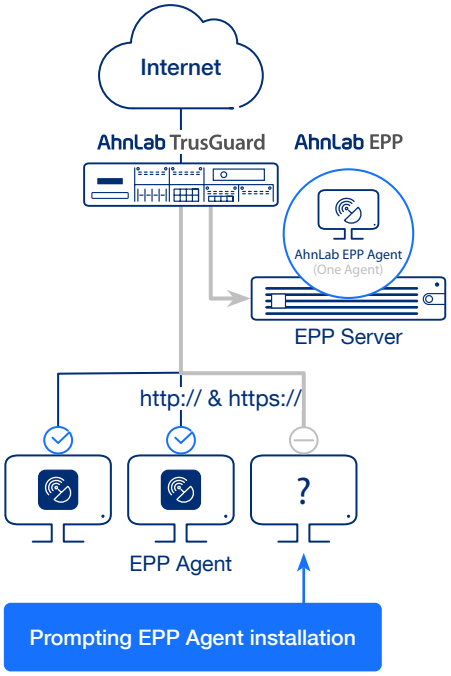


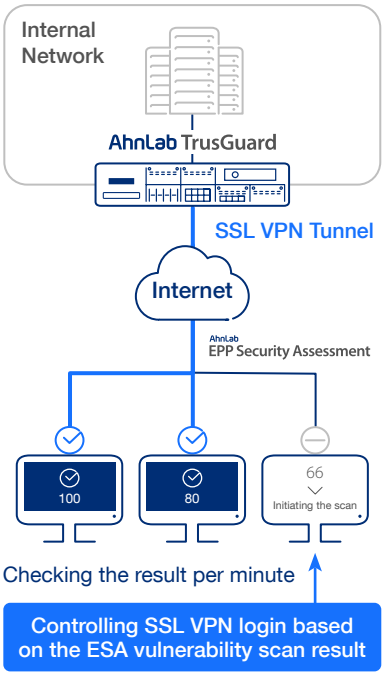
Interoperation with Endpoint Solution

AhnLab TrusGuard offers various features via the interoperation with our endpoint solutions.

1) Allowing agentless device based control via the interoperation with AhnLab EPP and EMS.
2) Prompting the installation of AhnLab EPP Agent. (http, https)
3) Controlling TrusGuard's SSL VPN login based on the vulnerability scan result of AhnLab ESA.







Main Features

Network
Route/Bridge Mode
Static/Policy based Routing
Dynamic Routing (RIP/OSPF/BGP)
Multi-cast Routing (PIM-SM/ IGMP)
Port Aggregation/VLAN
DHCP Server/Client/Relay/SNMP
IPv4 & IPv6 Dual Stack/IPv6 Routing/Transition
VoIP (H.323/SIP)
IPS
Pre-defined Signatures (More than 6000)
Daily Signature Update
Zero-day Defense (ACCESS/MAPP)
Signature/Anomaly based
Vulnerability based Attack Prevention (Web/OS/Network/Application)
Malware based Attack Prevention (Worm/Bot/Trojan/Downloader)
Zone-based Policies
Application Control
Global/Local Application Detection and Block
Control Application Behavior Detail
Unknown Application Control
NAC
Anti-Virus(V3) Interoperation
Detect and Control the Installation of AV Agent for PC
Detect and Control the Infected PC
Device Based Control via EPP Interoperation(Agentless)
EPP Agent Redirection
Control SSL VPN Conection based on ESA Vulnerability Scan
SSL Inspection
Encrypted Traffic Inspection
Geo-Location Block
Country and Continent Block

Firewall
Stateful Inspection
HA (A-A/A-S without L4)
Policy/Sessions Synch
QoS (Min/Max)
Blacklist Filtering
Exceptions (Whitelist)
Duplicate Object/Policy Filtering
Policy Expiration Check
Various NAT (Static/Dynamic/Policy based NAT)
Auth Server User Authentication (LDAP etc.)
Proxy Control
Session Control per Policies
IP-Mac /IPv6 Filtering
User and Device Based Policy Settings/Control
Virtual System
Log-based Policy/Object Creation
Checking effectiveness of virtual packet policy
C&C Detection/Block
Cloud-based C&C Detection & Block
Unknown Suspicious File/PUP Detection
Anti-DDoS
UDP/ICMP/TCP Flooding
Spoofed TCP Attack
HTTP Vulnerabilities
CC Attack
Website Filtering
Korea Communications Standards Commission DB
AhnLab Anti-malsite DB
Global Categorized URL DB
Anti-Virus
AhnLab AV Engine (V3)
AhnLab Signature Team
Attached Compressed Files
Anti-Spam
Stream-based Detection

IPSec VPN
Hub&Spoke/Star/Mesh
Various Encryption and Hash Algorithm
Center VPN Dual (A-A/A-S)
Multi-line Load Balancing
DPD/PFS/Replay Defense
SSL VPN
Gateway-to-Client
2 Factor Authentication (ID/PW + Cert)
Endpoint Interoperation (PC Protection before and after)
Mobile SSL VPN (Android & iOS)
Client for Embedded
Multiple clients (Windows, Mac, Linux, and etc.)
Support FIDO
Provide Google Authenticator (OTP)
Anti-Spam
Exclusive Anti-Spam Engine
RBL/User-defined Filtering
Spam Quarantine
Anti-APT
Interoperate with AhnLab MDS
Suspicious File Behavior Analysis
Suspicious URL Prevention
Data Leak Prevention
Prevent Internal Information Loss
Block Content, Attachments, Exts.
Monitoring/Log
Internal HDD/Log
Widget-based Dashboard/Relation Analysis
Traffic Unified Log/Custom Report
Management
Multi-layer Admin Privilege
Web-based HTTPS
Open API

Specifications

SMB/Branch Office

		TrusGuard 40B	TrusGuard 50B	TrusGuard 70B	TrusGuard 100B	TrusGuard 400C
CPU		2 Core	4 Core	4 Core	8 Core	4 Core
RAM		4GB	8GB	8GB	8GB	8GB
System Storage		4GB	4GB	4GB	4GB	SSD 64GB
Log Storage		-	SATADOM 120GB (Option)	SATADOM 120GB (Option)	HDD 1TB or SSD 240GB/1TB	HDD 2TB/4TB or SSD 960GB/1.92TB
NIC	**1GC**	8	8	8	8	8
	1GF	-	-	-	2 (Max 6)	8
	10GF	-	-	-	-	-
FW		4G	6G	8G	10G	20G
IPS		-	1.5G	2.5G	3.5G	8G
VPN		1G	1.2G	1.4G	1.6G	4G
VPN Tunnel		2,500	5,000	5,000	10,000	30,000
Concurrent Session		1,000,000	1,500,000	2,000,000	3,000,000	5,000,000
Size(WxHxD)		220x44x194.5	430x44x193	430x44x193	430x44x340	430x44x460
Power		Single	Single	Single	Single	Redundant

* TrusGuard 40B model supports only firewall/IPSec VPN.

Enterprise/Data Center and for Headquarter

		TrusGuard 500C	TrusGuard 2000B	TrusGuard 5000B	TrusGuard 10000B	TrusGuard 20000B
CPU		6 Core	8 Core	20 Core	32 Core	48 Core
RAM		16GB	16GB	64GB	64GB	256GB
System Storage		SSD 64GB	SSD 64GB	SSD 64GB	SSD 64GB	SSD 64GB
Log Storage		HDD 2TB/4TB or SSD 960GB/1.92TB	HDD 2TB/4TB or SSD 1TB/2TB (RAID-1/0)	HDD 2TB/4TB or SSD 1TB/2TB (RAID-1/0)	HDD 2TB/4TB or SSD 1TB/2TB (RAID-1/0)	HDD 2TB/4TB or SSD 1TB/2TB (RAID-1/0)
NIC	1GC	8	10 (Max 34)	10 (Max 50)	10 (Max 50)	10 (Max 50)
	1GF	8	8 (Max 32)	8 (Max 48)	8 (Max 48)	8 (Max 48)
	10GF	0 (Max 4)	0 (Max 12)	4 (Max 28)	4 (Max 28)	4 (Max 28)
	40GF	-	-	0 (Max 8)	0 (Max 12)	0 (Max 12)
	100GF	-	-	-	0 (Max 2)	0 (Max 4)
FW		30G	60G	120G	200G	240G
IPS		12G	20G	30G	50G	70G
VPN		6G	10G	13G	19G	19G
VPN Tunnel		40,000	40,000	50,000	60,000	60,000
Concurrent Session		8,000,000	10,000,000	30,000,000	40,000,000	60,000,000
Size(WxHxD)		430x44x460	438x88x571	438x88x571	438x88x571	438x88x571
Power		Redundant	Redundant	Redundant	Redundant	Redundant

Q-VPN

		TrusGuard 2000BQ	TrusGuard 5000BQ	TrusGuard 10000BQ	TrusGuard 20000BQ
CPU		8 Core	20 Core	32 Core	48 Core
RAM		16GB	64GB	64GB	256GB
System Storage		SSD 64GB	SSD 64GB	SSD 64GB	SSD 64GB
Log Storage		HDD 2TB/4TB or SSD 1TB/2TB (RAID-1/0)	HDD 2TB/4TB or SSD 1TB/2TB (RAID-1/0)	HDD 2TB/4TB or SSD 1TB/2TB (RAID-1/0)	HDD 2TB/4TB or SSD 1TB/2TB (RAID-1/0)
NIC	1GC	10 (Max 34)	10 (Max 50)	10 (Max 50)	10 (Max 50)
	1GF	8 (Max 32)	8 (Max 48)	8 (Max 48)	8 (Max 48)
	10GF	0 (Max 12)	4 (Max 28)	4 (Max 28)	4 (Max 28)
	40GF	-	0 (Max 8)	0 (Max 12)	0 (Max 12)
	100GF	-	-	0 (Max 2)	0 (Max 4)
FW		60G	120G	200G	240G
IPS		20G	30G	50G	70G
VPN		Upon a separte request			
QRNG		USB	USB	USB	USB
VPN Tunnel		40,000	50,000	60,000	60,000
Concurrent Session		10,000,000	30,000,000	40,000,000	60,000,000
Size(WxHxD)		438x88x571	438x88x571	438x88x571	438x88x571
Power		Redundant	Redundant	Redundant	Redundant

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