

Intelligent

WAPPLES

The Best Defense Against Web Application Attacks

Preventing the leak of confidential information
Securing web services



Intelligent Web Application Firewall



**How to secure your applications on the worldwide web?
WAPPLES is the No.1 proven solution!**

WAPPLES provides strong intrusion detection and attack protection for web applications. Its unique intelligent security engine detects even unknown attacks, performs precise and perfect detection, and delivers the best performance even in various types of network environments. With its wide array of security and performance features, its easy security policy setting, and the convenience of operation provided by management console, WAPPLES is leading the popularization of Web Application Firewalls and securing a broad range of customers.

- Perfect Detection,
High-level Security

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Logical analysis detection engine with built-in rules to detect over 26 different types of attacks

Detects unknown attacks by analyzing attack techniques

Near zero(0) false-positive attacks through a patent architecture for intrusion detection

- Delivers Consistent
High Performance

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Delivers high performance through optimized attack detection

Maintains high performance even in high-level security configuration

- Easy and Convenient
Deployment&Configuration

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Installation without changing existing network systems

Convenient and intuitive GUI based management console

- Supports for Various
Web Environments

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Supports various network configurations including inline, reverse proxy, High Availability(HA), and more

Available on a suite of hardware appliances designed to Satisfy the varying needs of small, medium, and large organizations

Item	Logical Analysis Method (WAPPLES)	Pattern Matching Method (Other WAFs)
Detection method	An embedded analytical engine uses Heuristic and Semantic algorithms to precisely detect attacks	Judges signs of attack by comparing whether or not they correspond to patterns registered by the Security Manager
Security policy setting	Uses pre-defined security policies or configures the 26 security rules supported by WAPPLES through convenient management console	Requires the Security Manager to register specific attack patterns
Detection performance	Continuous high performance in varying network environments without change in performance caused by changes in its security policy settings	Decreases system performance as the number of registered patterns increases
Response to unknown attacks	Immediately detects and blocks unknown attacks by leveraging attack forensics	Detects and blocks new unknown attacks only after registering new attack patterns

[Comparison of Web Application Firewall detection methods]

Security - Smart security that precisely defends against unknown attacks

Precise detection of web attacks on the web

- > Defends against various unknown attacks through intelligent logical analysis
- > Precise analysis of traffic based on an optimized set of 26 attack detection rules
- > Prevents false-positive detection through a combination of positive and negative security models

Protection of web servers

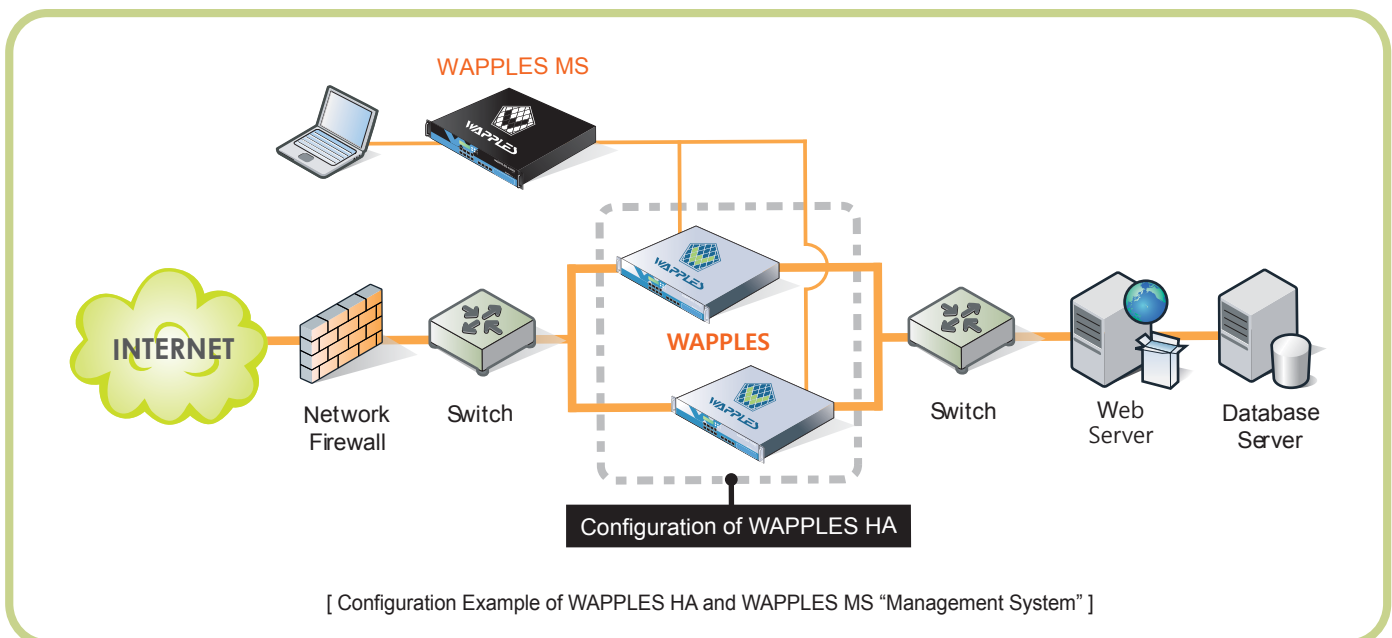
- > Prevents falsified and modified Cookies as well as Hidden Fields
- > Prevents web application-level DDoS attacks
- > Prevents the disclosure of web server-related information including error codes, directory lists, and etc.
- > Controls accesses from smartphones

Prevention of personal information leakage

- > Accurate inspection and blocking of personal information leakage based on a verification mechanism (Luhn algorithm: ISO/IEC 7812, etc.)
- > Inspection and blocking of data leakage from attached files
- > Masks important information and automatic conversion of forbidden words

Able to detect encrypted attacks and encrypt credential information

- > Detects attacks utilizing encrypted traffic(HTTPS)
- > Provides application-level encryption functions for important parameters



* WAPPLES MS is a management system that enables integrated group management of multiple WAPPLES units remotely. (optional)

Performance - Consistent high performance leveraging its analytical attack detection engine

Logic-based attack detection engine

- > Optimizes attack-detecting performance through logical analysis
- > Delivers consistent performance while maintaining high-level security

Supports for enterprise web service environments

- > Supports 10Gbit broadband (WAPPLES-5000)
- > Supports various network environments (Ether Channel Multi-segment, VLAN, and more)

Convenience & Stability



[Screenshots of Management Console]

Convenience - Visual management dashboard for optimal management

Simple installation and application

- > No need for change to existing network and web applications for installation
- > Includes templates of recommended security policies verified in a variety of customer environments
- > Establishes optimized security policies with point and click (Windows-like GUI)

Supports for efficient operation

- > Supports use of varying configurations such as inline, reverse proxy, monitoring, and more
- > Allows management of multiple WAPPLES units with one integrated management console with WAPPLES MS(optional)

Flexible response to the web environment

- > URI access control through automatic learning mode
- > Smart IP access control based upon risk rate and frequency of attack

Visualization of detection information

- > Personalizes the Administrator's screen through tab and docking functions
- > Provides statistics on intrusion and graphical charts including web traffic
- > Supports the printout of reports and extraction of various forms of graphs

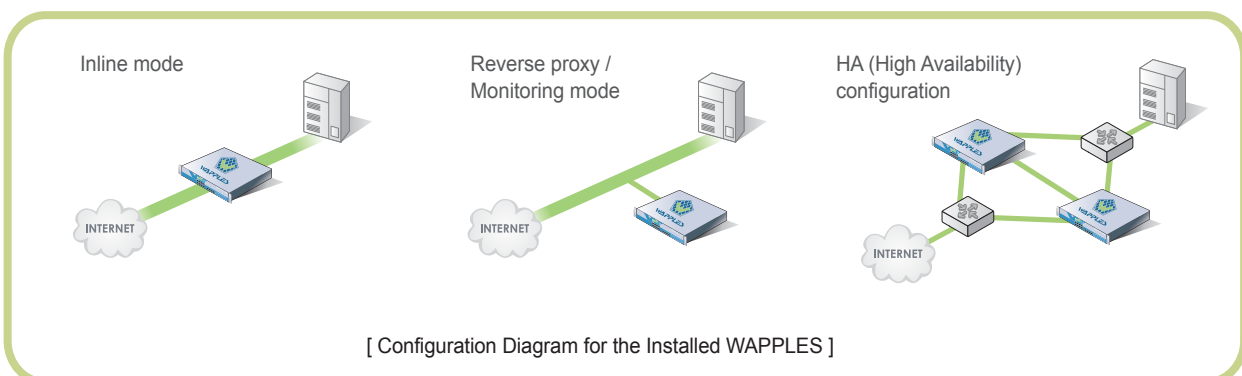
Stability - Uninterrupted service through real-time response

Supports with uninterrupted service

- > Active-Active or Active-Standby High Availability(HA)
- > HA configuration does not require a separate switching device
- > Bypass function allows uninterrupted web service

Real-time check on operational status

- > Monitors its own integrity using embedded monitoring system
- > Auditing and external notification by logging operation state
- > Remote event notification capabilities through a central control system (optional)



[Configuration Diagram for the Installed WAPPLES]

Product Specifications

Class	Model	Package Design	Max. Throughput	Form Factor	Network Interface	Power Supply	Memory	CPU
Value	WAPPLES -50		100Mbps	1U Rack Type	2 x 10/100/1000 BaseTX 4 x 10/100/1000 BaseTX Bypass	AC100~240V 50/60Hz 200W	2GB	Intel Dual Core 2.5GHz x 1
	WAPPLES -100 eco		300Mbps	1U Rack Type	2 x 10/100/1000 BaseTX 8 x 10/100/1000 BaseTX Bypass	AC100~240V 50/60Hz 200W	4GB	Intel Quad Core 2.66GHz x 1
Performance	WAPPLES -500		500Mbps	1U Rack Type	6 x 10/100/1000 BaseTX Bypass OR 2 x 1000 Base Optical Bypass 2 x 10/100/1000 BaseTX Bypass	AC100~240V 50/60Hz 300W	8GB	Intel Quad Core Xeon 2.66GHz x 1
	WAPPLES -1000 type2		2Gbps	2U Rack Type	8 x 10/100/1000 BaseTX Bypass 2 x 1000 BaseSFP ▪ Optional 2 x 1000 Base Optical Bypass	AC100~240V 50/60Hz 400W Redundant Power Supply	8GB	Intel Quad Core Xeon 2.33GHz x 2
High-End	WAPPLES -2000		4Gbps	2U Rack Type	2 x 10/100/1000 BaseTX 8 x 10/100/1000 BaseTX Bypass 4 x 1000 BaseSFP ▪ Optional 2 x 1000 Base Optical Bypass	AC100~240V 50/60Hz 400W Redundant Power Supply	16GB	Intel Quad Core Xeon 2.66 GHz x 2
	WAPPLES -5000		6Gbps	2U Rack Type	2 x 10/100/1000 BaseTX 8 x 10/100/1000 BaseTX Bypass 4 x 1000 BaseSFP ▪ Optional 4 x 1000 Base Optical Bypass 2 x 10G Base Optical Bypass	AC 100~240V 50/60Hz 500W Redundant Power Supply	24GB	Intel Westmere 2.53GHz x 2

Awards and Certifications



Awards

- > Grand Prize in Intelligence Awards from Korea's Intelligent Information System Society (November, 2008)
- > Grand Prize in New Software Product Awards from the Ministry of Knowledge and Economy (April, 2009)
- > Prime Minister's Award for Commercialization of New Technology (November, 2009)
- > Grand Prize at the 9th Korea Software Competitiveness Award (February, 2010)

Certification

- > Common Criteria(CC) Certificate (EAL4)
- > PCI-DSS Compliance Certification
- > Telecommunications Technology Association (TTA) Good Software(GS) Certification
- > IPv6-Ready

Intelligent WAPPLES

The Best Defense Against Web Application Attacks

- Perfect attack detection, high-level security
- Delivers consistent high performance
- Easy and convenient deployment & configuration
- Supports for various network configurations

Verified Quality and Competitiveness

- No.1 Web Application Firewall in Korea
- Grand Prize in New Software Product Award from the Ministry of Knowledge and Economy
- Grand Prize in Intelligence Award from the Korea Intelligent System Society
- Common Criteria(CC) Certification (EAL 4)
- Good Software(GS) Certification from the Information Technology Association
- PCI-DSS Compliance Certification

PentaSECURITY

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