ICS 33.040.40
CCS M 32

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 44810.2-2024

Technical requirement for IPv6 network security equipment-Part 2: Web application firewall (WAF)

IPv6网络安全设备技术要求 第2部分：Web应用防护系统（WAF）

Issued on: October 26, 2024 **Implemented on: February 1, 2025**

Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC

Table of Contents

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting is required.

This document is part 2 of GB/T 44810 "Technical Requirements for IPv6 Network Security Equipment". GB/T 44810 has been published as follows part. Part 1: Firewall;- Part 2: Web Application Protection System (WAF);- Part 3: Intrusion Prevention Systems (IPS). - Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document was proposed by the Ministry of Industry and Information Technology.

This document is under the jurisdiction of the National Communications Standardization Technical Committee (SAC/TC 485).

This document was drafted by: China Academy of Information and Communications Technology, Beijing Shenzhou Green Alliance Technology Co., Ltd., Huawei Technologies Co., Ltd., Beijing Tian Rongxin Network Security Technology Co., Ltd., Zhengzhou Xindajiean Information Technology Co., Ltd., Beijing Haohan Deep Information Technology Co., Ltd.

China Telecom Corporation Limited, Tianyi Security Technology Co., Ltd., China Mobile China Mobile (Hangzhou) Information Technology Co., Ltd., Hangzhou DPtech Co., Ltd., Beijing Tonghe Shiyi Telecom Co., Ltd.

Xin Science and Technology Research Institute Co., Ltd., National Industrial Information Security Development Research Center, China Welfare Institute International Peace Maternity and Child Health Hospital, Xinhua Three Technology Co., Ltd., Beijing Trustworthy Huatai Information Technology Co., Ltd., and Hangzhou Anheng Information Technology Co., Ltd.

The main drafters of this document are: Dai Fangfang, Dong Yue, Jiang Jian, Hu Juntao, Wang Yuchen, Li Xiang, Huang Yajing, Kou Zengjie, Liu Weihua, Pang Shaomin, Cao Zheng, Shi Guixin, Wen Senhao, Kang He, Wang Jianmin, Fu Yanyong, Chen Dong, Liang Fang, Cheng Jinxue, Wu Qing, Zuo Hong, Han Juan, Liu Xinyong, Sun Jun, Wang Chonghua, Chen Changjie, Chen Lei, Wan Xiaolan, Du Jun, Duan Guna, Tian Lidan.

Introduction

According to the Notice on Accelerating the Large-Scale Deployment and Application of Internet Protocol Version 6 (IPv6), in order to better cope with the complex network environment, In order to promote the standardization of IPv6 network security work, China has formulated a series of IPv6 security Among them, GB/T 44810 "Technical Requirements for IPv6 Network Security Equipment" is to standardize the applicability of network security products in IPv6.

The technical standard is planned to consist of three parts.

Part 1: Firewall. The purpose is to ensure the effective application of firewalls in new network environments after IPv6 deployment. - Part 2: Web Application Firewall (WAF). The purpose is to protect the Web Application Firewall (WAF) after IPv6 deployment.

Effective application of (WAF) in the new network environment.

Part 3: Intrusion Prevention System (IPS). The purpose is to ensure that the Intrusion Prevention System (IPS) is used in the new network after IPv6 is deployed.

Effective application in network environment.

Technical requirements for IPv6 network security equipment Part 2: Web Application Firewall (WAF)

1 Scope

This document specifies the technical requirements for a Web Application Protection System (WAF) that supports IPv6.

This document applies to the design, development, deployment, use, maintenance and testing of Web application protection systems (WAF) that support IPv6.

2 Normative references

GB/T 20281-2020

GB/T 25069-2022

GB/T 44810.1-2024

3 Terms and definitions

The terms and definitions defined in GB/T 25069-2022, GB/T 20281-2020 and the following apply to this document.

3.1 Web application firewall

Deployed on the front end of the Web server, it parses the HTTP/HTTPS access and response data flowing through it, and has the access function of Web applications.

Network security products with comprehensive control and security protection functions.

Note. Web application protection system is also commonly referred to as "Web application firewall".

4 Abbreviations

The following abbreviations apply to this document. CC. Challenge Collapsar CSRF. Cross-site request forgery HTTP. Hypertext Transfer Protocol HTTPS. Hypertext Transfer Protocol Secure IP. Internet Protocol IPv6.Internet Protocol Version 6 SQL. Structured Query Language TCP. Transmission Control Protocol URL. Uniform Resource Locator WAF. Web Application Firewall XML. Extensible Markup Language XSS. Cross Site Scripting