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Technical requirement for IPv6 network security equipment-Part 1: Firewall

IPv6网络安全设备技术要求 第1部分：防火墙

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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 1 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 is proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

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

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Introduction

According to the Notice on Accelerating the Scale Deployment and Application of Internet Protocol Version 6 (IPv6), in order to better cope with the complex network environment, In order to meet the security challenges brought by the proliferation of IPv6 and the expansion of user scale, China has developed a series of IPv6 security standards.

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 the new network environment after IPv6 deployment.

Part 2: Web Application Protection System (WAF). The purpose is to protect the Web application protection system 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 1: Firewall

1 Scope

This document specifies the security technical requirements for firewall devices that support IPv6.

This document applies to the design, development, deployment, use, maintenance, and testing of firewall devices that support IPv6.

2 Normative references

GB/T 20281-2020

GB/T 25069-2022

GB 42250-2022

GB/T 44810.3-2024

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 firewall

A network security product that parses passing data streams and implements access control and security protection functions.

Note. In this document, firewall refers only to "network firewall".

[Source. GB/T 20281-2020, 3.1]

3.2 authorized administrator

Users with firewall management permissions can obtain different management permissions based on their roles.

Note. Such as system administrator, security administrator and security auditor.

4 Abbreviations

The following abbreviations apply to this document.

ALG. Application Layer Gateway BGP4.Border Gateway Protocol Version 4 DHCPv6.Dynamic Host Configuration Protocol for IPv6 DMZ. Demilitarized Zone DNS. Domain Name System DNSv6.Domain Name System for IPv6 FTP. File Transfer Protocol