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IPv4/IPv6 network security protection technical specifications - Part 4: Content delivery network

IPv4/IPv6网络安全防护技术规范 第4部分：内容分发网络

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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.

GB/T 45279 "IPv4/IPv6 Network Security Protection Technical Specification" and GB/T 44810 "IPv6 Network Security Equipment Technical Requirements" Together they form a national standard system that supports IPv6 security.

This document is Part 4 of GB/T 45279 "IPv4/IPv6 Network Security Protection Technical Specification". GB/T 45279 has been published. The following parts.

- Part 1: IP bearer network;

- Part 2: Mobile communication network;

- Part 3: Internet Data Center;

- Part 4: Content delivery networks.

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 of the People's Republic of China.

This document is under the jurisdiction of the National Communications Standardization Technical Committee (SAC/TC485).

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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 complexity of the network, In order to promote the standardization of IPv6 network security work, China has formulated a series of IPv6 security Among them, GB/T 45279 "IPv4/IPv6 Network Security Protection Technical Specification" is to standardize the important network units of telecommunications networks and the Internet.

The security protection work carried out after the deployment of IPv6 is planned to be divided into the following parts.

- Part 1: IP bearer network. The purpose is to promote the security protection of IP bearer network after IPv6 is deployed.

- Part 2: Mobile communication network. The purpose is to promote the security protection of mobile communication networks after the deployment of IPv6.

- Part 3: Internet Data Center. The purpose is to promote the security protection of Internet data centers after the deployment of IPv6.

- Part 4: Content Distribution Network. The purpose is to promote the security protection of content distribution networks after the deployment of IPv6.

IPv4/IPv6 Network Security Protection Technical Specification Part 4: Content Delivery Networks

1 Scope

This document specifies the content delivery network (CDN) that provides content distribution services to third parties in IPv4, IPv6, and dual stack environments.

Security protection requirements and testing methods, including data security, business system security, host security, physical environment security, and management security. aspect.

This document is applicable to guiding the implementation and promotion of CDN security protection work that supports IPv4/IPv6 protocols.

2 Normative references

GB/T 22239-2019

GB/T 22240-2020

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 content delivery network content delivery network; CDN

An application layer network consisting of a group of interconnected and uniformly scheduled content cache or acceleration nodes.

3.2 CDN nodenodeofCDN

CDN manages servers distributed in different regions through unified resource management and scheduling.

Note. Hereinafter referred to as "node".

4 Abbreviations

The following abbreviations apply to this document. CDN. Content Delivery Network DDoS. Distributed Denial of Service DNS. Domain Name System IP. Internet Protocol IPv4.Internet Protocol Version 4 IPv6.Internet Protocol Version 6 SSL. Secure Socket Layer