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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

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Diameter base protocol for IP network

用于IP网络的Diameter基础协议

(English Translation)

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Table of Contents

Introduction

1 Scope

2 Normative references

3 Terms and definitions, abbreviations

3.1 Terms and definitions

3.2 Acronyms

Architecture 4 Diameter of

4.1 Diameter and overall framework agreement outlines

Function 4.2 Diameter base protocol Overview

4.3 Diameter concepts Interpretation

4.4 Diameter Transfer Protocol

4.5 Diameter encrypted message

4.6 Diameter 12 compliant applications

4.7 Diameter routing authorization

5 Diameter protocol format

5.1 DiameterHeader

5.2 DiameterAVP

6 Diameter peer communication mode

6.1 Connection established

6.2 Pairs of peer discovery mechanism

6.3 Capability exchange

6.4 Pairs peer connection Demolition

6.5 Transmission error detection

6.6 Pairs of peer state machine

7 Diameter protocol process

7.1 Diameter message processing

7.2 Diameter error handling

7.3 Diameter user session

8 Diameter accounting

8.1 Server is pointing to model

8.2 Protocol message

8.3 Pairs of extended application standard documentation requirements

62 8.4 Error Recovery

8.5 Billing records

Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules.

This revised standard adopts IETF RFC3588.2003 "Diameter base protocol." The main difference between this standard as follows.

- According to Chinese customs for some formatting modified; some of the statements apply to international standards to apply to our standard Quasi-expression;
- According to GB/T 1 series of requirements, an increase in Chapter 1, Chapter 2 and Chapter 3, in which 3.1 terms and definitions are from IETF RFC3588 1.3;
- The standard 4.3.1,4.3.2,4.3.3,4.3.4,4.3.5,4.5 and 4.6, respectively, equivalent to 2.4 IETF RFC3588, 2.5,2.8,2.6,2.7,2.2 and 2.3;
- The standard 4.4 From the technical content of 2.1 IETF RFC3588 maintain consistency;
- The standard 5.1 and 5.2, respectively, equivalent to IETF RFC3588 of Chapters 3 and 4;
- Chapter 6 of this standard is equivalent to IETF RFC3588 Chapter 5;
- The standard of 7.1, 7.2 and 7.3, respectively, equivalent to IETF RFC3588 Chapter 6, Chapter 7, Chapter 8;
- The standard of Chapters 8 and 9, respectively, equivalent to IETF RFC3588 Chapter 9 and Chapter 13;
- The standard of Appendices B and C, respectively, equivalent to IETF RFC3588 of Chapter 10 and Chapter 12;
- The standard Appendix D, Appendix E and F, respectively, equivalent to IETF RFC3588 of AppendixA, AppendixB, AppendixC;
- 4.1,4.2,4.7 this standard, Appendix A, according to China's actual situation of their own to write.

The standard proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

The standard by the China Communications Standards Association.

This standard was drafted. the Ministry of Industry and Information Technology and Telecommunications Research Institute.

1 Scope

This standard specifies the Diameter protocol architecture, the basic functions of Diameter, Diameter base protocol communication mode, Diameter base protocol signaling aspects of process and security requirements.

This standard applies to IP network AAA (authentication, authorization and accounting) systems and related equipment AAA.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

IETF RFC 2030 Simple Network Time Protocol (SNTP) Version 4
 (SimpleNetworkTimeProtocol (SNTP) Version4) IETF RFC 2234 extended BNF syntax specification. ABNF (AugmentedBNFforSyntaxSpecifications. ABNF) IETF RFC 2246 Transport Layer Security (TLS) protocol version 1 (TheTLSProtocolVersion1.0)
 IETF RFC 2279 UTF-8, ISO 10646 transformation formats (UTF-8, atransformationformatofISO 10646) IETF RFC 2284bis PPP Extensible Authentication Protocol (EAP) (PPPEExtensibleAuthenticationProtocol (EAP)) IETF RFC 2407 for ISAKMP IPsec domain of translation (IPsecDOI) (TheInternetIPSecurityDomain ofInterpretationforISAKMP) IETF RFC 2409 Internet Key Exchange (IKE) (TheInternetKeyExchange (IKE)) IETF RFC 2474 IPv4 IPv6 header Differentiated Services Field (DS Field) and the definition (Definitionofthe DifferentiatedServicesField (DSField) intheIPv4andIPv6Headers) IETF RFC 2486 Network Access Identifier (TheNetworkAccessIdentifier) IETF RFC 2865 remote authentication dial-user service (RADIUS) (RemoteAuthenticationDialInUser Service (RADIUS)) IETF RFC 2915 naming authority point DNS resource records (TheNamingAuthorityPointer (NAPTR) DNS ResourceRecord) IETF RFC 2960 Stream Control Transmission Protocol (StreamControlTransmissionProtocol) IETF RFC 3539 authentication, authorization, and accounting (AAA) - Transport Profile (Authentication, Authorizationand Accounting (AAA) TransportProfile) IEEE 754-1985 binary floating-point arithmetic (BinaryFloating-PointArithmetic) ISO/IEC IS10646-1 Information technology - Universal Multiple-octet (Multiple-Octet) coded character set (Information Technology-UniversalMultiple-OctetCodedCharacterSet)

3.1 Terms and Definitions

The following terms and definitions apply to this document.