ISO/IEC 16317:2011-10 (E)

Information technology - Telecommunications and information exchange between systems - proxZzzy for sleeping hosts

Contents

Page

Foreword v

Introduction vi

1 Scope 1

2 Conformance 1

3 Normative references 2

4 Terms and definitions 3

5 Proxy Usage of Protocols (informative) 3
5.1 Basic Architecture 3
5.2 Ethernet (IEEE 802.3) 3
5.3 Wireless LAN (IEEE 802.11) 4
5.4 Dynamic Host Configuration Protocol (DHCP) 4
5.5 Internet Protocol v4 Basic Framework (IPv4) 4
5.5.1 ARP - Address Resolution Protocol 4
5.5.2 Link Local Auto-IP Address Allocation 5
5.5.3 IPv4 Address Conflict Detection 5
5.5.4 IGMP - Internet Group Management Protocol 5
5.5.5 UDP - User Datagram Protocol 5
5.5.6 TCP - Transmission Control Protocol 5
5.5.7 DNS - Domain Name System 5
5.6 Internet Protocol v6 Basic Framework (IPv6) 5
5.6.1 MLD - Multicast Listener Discovery 6
5.7 Remote Access using SIP and IPv4 6
5.8 Remote Access using Teredo for IPv6 7
5.9 SNMP 7
5.10 Service Discovery using mDNS 7
5.11 Name Resolution with LLMNR 7
5.12 Wake Packets 7

6 Basic Framework Protocols 8
6.1 Ethernet 802.3 (Option) 8
6.1.1 Configuration Data 8
6.1.2 Behavioural Requirements 8
6.2 WiFi 802.11 (Option) 8
6.2.1 Configuration Data 8
6.2.2 Behavioural Requirements 9
6.3 ARP 10
6.3.1 Configuration Data 10
6.3.2 Behavioural Requirements 10
6.4 Neighbour Discovery 11
6.4.1 Configuration Data 11
6.4.2 Behavioural Requirements 11
6.5 Wake Packets 12
6.5.1 Configuration Data 12
6.5.2 Behavioural Requirements 12

7 Proxy Configuration and Management 12
7.1 Configuration Data 12
7.2 Behavioural Requirements 12
7.2.1 Returned Data (Option) 13

8 Options 13
8.1 IGMP Multicast (Option) 13
8.1.1 Configuration Data 13
8.1.2 Behavioural Requirements 13
8.2 DHCP Address Allocation (Option) 14
8.2.1 Configuration Data 14
8.2.2 Behavioural Requirements 14
8.3 Remote Access using SIP and IPv4 (Option) 14
8.3.1 Behavioural Requirements 15
8.4 Remote Access using Teredo for IPv6 15
8.4.1 Data Configuration 16
8.4.2 Behavioural Requirements 16
8.5 Simple Network Management Protocol (SNMP) 16
8.5.1 Configuration Data 16
8.5.2 Behavioural Requirements 17
8.6 Service Discovery using mDNS 17
8.6.1 Configuration Data 17
8.6.2 Behavioural Requirements 18
8.7 Name Resolution with LLMNR 20
8.7.1 Configuration Data 20
8.7.2 Behavioural Requirements 20

Annex A (informative) System Considerations 21

Annex B (informative) Protocols Considered but not included 23

Bibliography 24