Exploring RFC Standards



Introduction

In this exercise, you will become familiar with common Internet Standards formats. These standards are created and published by IETF. Most commonly they are documented as one or a set of RFCs.

Your task will be to explore the given RFCs and answer the questions below.

- 1. Open the RFC 1605, which is available at https://datatracker.ietf.org/doc/html/rfc1605. This RFC describes the SONET protocol to Sonnet translation. Browse through its content to determine how technical it is. Then, in the upper right corner, look for the name of the author of the document. Who is the author of the document?
 - a. Cisco Systems
 - b. Jacobs University Bremen
 - c. Novell, Inc.
 - d. William Shakespeare
- 2. Open the RFC definition https://datatracker.ietf.org/doc/html/rfc2131 for the DHCP protocol. In the 1.5 Terminology section of the RFC, you can find an explanation of the terms that are used throughout the document. Which terms are included in the section? (Choose four.)
 - a. Binding
 - b. BOOTP relay agent
 - c. DHCP agent
 - d. DHCP binding
 - e. DHCP client
 - f. DHCP server
- 3. Open the RFC definition https://datatracker.ietf.org/doc/html/rfc791 for the IP protocol. The document is split into three categories: Introduction, Overview, and Specifications. Find an overview definition for Gateways. Which section describes it?
 - a. 2.1
 - b. 2.2
 - c. 2.3
 - d. 2.4

- 4. Open the RFC definition https://datatracker.ietf.org/doc/html/rfc349 for Proposed Standard Socket Numbers. Proposed socket numbers are grouped in four ranges, with a different assignment. Which assignment belongs to Socket numbers in the range 64–127?
 - a. Any experimental function
 - b. Host-specific functions
 - c. Network wide standard functions
 - d. Reserved for future use
- 5. Open the RFC definition https://datatracker.ietf.org/doc/html/rfc1 for Host Software and find the date of this document creation. What is the correct date?
 - a. 13 July 1965
 - b. 7 April 1969
 - c. 9 May 1969
 - d. 11 June 1969

Answer Key

- 1. D
- 2. A, B, E, F
- 3. D
- 4. B
- 5. B

Answer Feedback:

- 1. The correct answer is **William Shakespeare**. Cisco Systems is the author of many RFCs, but not RFC 1605. The same is true of Novell, Inc. and Jacobs University Bremen.
- 2. The correct answers are **Binding**, **BOOTP** relay agent, **DHCP** client, and **DHCP** server. DHCP binding and DHCP agent are not mentioned in DHCP terminology.
- 3. The correct answer is **2.4**. Gateways are described in section 2.4. Section 2.1 describes Relation to Other Protocols, section 2.2 describes Model of Operation, and section 2.3 describes Function Overview.
- 4. The correct answer is **host specific functions**. Network wide standard functions use proposed socket numbers in the range 0–63, socket numbers that are reserved for future use have a range 128–239 reserved, and for any experimental function, the range 240–255 is reserved.
- 5. The correct answer is **7 April 1969**. The creation date of the RFC definition is found in the top-right corner of the RFC definition document.

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