IEC/IEEE 60802 Normative reference to DHCP

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Weber, Karl

Beckhoff Automation

Comment Type

TR

Comment Status A

DHCP (IETF RFC 2131), IPv4 (IETF RFC 791) and TCP (IETF RFC 793) are listed in a normative statement but not listed as normative reference.

SuggestedRemedy

Add DHCP (IETF RFC 2131), IPv4 (IETF RFC 791) and TCP (IETF RFC 793) as normative references in clause 2. Specify in this section which elements are mandatory out of this standard (e.g. connection establishment option of a server, MTU size, ...)

Response

Response Status W

ACCEPT IN PRINCIPLE. Eliminate the references to DHCP, IPv4 and TCP by rewording item b) as follows:

NETCONF over TLS with Mutual X.509 Authentication as described in IETF RFC 7589.

Motivation

 Assignment of IP addresses to newly deployed IA-stations is not the only use case of DHCP in the context of 60802.

 NETCONF call home functionality requires a transfer of parameters (IP address of the NETCONF client at the IA-station that contains the CNC entity) during the initial deployment o

Omission of DHCP from the requirements could cause interoperability issues.

Proposal

• Include DHCP client specification in the list of IA-station requirements.

 ... shall support DHCP client according to IETF RFC 2131, Clauses 4.1, 4.2 and 4.4.

- 4.1 Constructing and sending DHCP messages
- 4.2 DHCP server administrative controls
- 4.4 DHCP client behavior