

BACnet Errata
ANSI/ASHRAE STANDARD 135-2020, Addendum CP
A Data Communication Protocol for Building Automation and Control Networks

February 9, 2025

This document lists all known *errata* to ANSI/ASHRAE Standard 135-2020 as of the above date. Each entry is cited first by clause, then page number, except where an erratum covers more than one clause. The back page marking identifying the electronic publication of Standard 135-2024 is "Product code: D-86950".

Changes to fix the errata are **highlighted in gray**. In these areas, text that is to be removed from the addendum is shown in ~~double-strikeout~~, and text that is to be added is shown with double underlines. This notation allows changes to the addendum to be indicated while preserving the traditional meaning of *italics* and ~~single-strikeout~~ to indicate changes to the standard.

1) Clause 21.2.5, the scope member of the token-request member of AuthRequest-Request should be optional.

```
AuthRequest-Request ::= CHOICE { -- CHOICE of the "sub service" allows future extensibility
    token-request [0] SEQUENCE {
        client      [0] Unsigned32, -- client device instance to bind the token to
        audience    [1] SEQUENCE OF Integer32, -- target device(s) and/or group(s).
        scope       [2] BACnetAuthorizationScope OPTIONAL, -- requested scope
    }
}
```

2) Clause 21, the host member of the BACnetAuthenticationPeer sequence should be context tagged 0.

```
BACnetAuthenticationPeer ::= SEQUENCE {
    Host          [0] BACnetHostNPort,
    device        Unsigned32, -- 4194303 if unknown
    auth-aware    Boolean,
    router        Boolean,
    hub           Boolean
}
```

3) Clause 21, Incomplete ASN.1 for BACnetAuthorizationDescription.

```
BACnetAuthorizationScopeDescription ::= SEQUENCE {
    name          CharacterString, -- usable as OAuth/JWT scope token
    description    CharacterString
}
```

4) Clause 17.3.3, Relaying Identity, correct option name

17.3.3 Relaying Identity

...

In BACnet/SC, the capability to relay identity is indicated by the 'identity relay' bit of the "Hello" ~~Data~~ Destination Option, and the permission to relay is provided by query parameters on the SAN in the certificate. If the datalink is part of a router, the query parameter "router" is appended, and if the datalink hosts a hub function, the parameter "hub" is appended. For example, "bacnet://1234?router", "bacnet://1234?hub", "bacnet://1234?router&hub", "bacnet://1234?hub&router".

...

5) Clause 17.1, fix incorrect clause reference.**17.1 Overview**

...

This clause defines mechanisms that can be used for a variety of situations that require a device to be authorized before it can perform a protected operation in another device. Performing a protected operation requires both authentication of the client device and the presence of policy that authorizes that client to perform the operation. See Clause 17.3.7.5 for a description of the variety of authentication options that are available for interactions among different capabilities of devices and networks.

...

6) Clause 17.4.6, Correct grammatical typo**17.4.6 Access Tokens**

...

An access token is an access policy wrapped with information that allows the target device to trust the authenticity and validity of the policy. An access token contains the following information:

- The device instance of the authorization server that generated the token, known as the 'issuer'.
- The date and time the token was issued.
- The "audience" of the token, i.e., the list of devices and groups that can be the target of the token.
- The identification of the client device that is authorized to use the token.
- ~~An~~ indication of what the client is authorized to do.
- A digital signature, signed by the authorization server, that ensures the authenticity of the preceding data.

...