

**INTERPRETATION IC 135-2024-2 OF
ANSI/ASHRAE STANDARD 135-2024 BACnet® -
A Data Communication Protocol for Building
Automation and Control Networks**

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Reference: This request for interpretation refers to ANSI/ASHRAE Standard 135-2024, Clause 12.31 and pertains to the interrelationship of the Authentication_Status and Authorization_Mode properties in the Access Point object.

Background:

12.31.9 Authentication_Status

This property, of type BACnetAuthenticationStatus, shall indicate the current status of the authentication process. This is an enumeration with the following status values:

NOT_READY	The authentication process is not ready to perform a new authentication. This indicates a temporary condition due to processing of the current authentication factor, initialization during startup or other internal processing.
READY	The authentication process is ready to start a new authentication
DISABLED	The authentication process has been disabled. The property shall take on this status when the Out_Of_Service property is TRUE.
WAITING_FOR_AUTHENTICATION_FACTOR	The authentication process is waiting for an additional authentication factor for a multi-factor authentication.
WAITING_FOR_ACCOMPANIMENT	The authentication process is waiting for the authentication of the accompanying credential.
WAITING_FOR_VERIFICATION	The authentication process is waiting for the verification of the credential by an external process.
IN_PROGRESS	The authentication process is currently performing an authentication.

12.31.14 Authorization_Mode

This property, of type BACnetAuthorizationMode, determines how authorization is performed at the Access Point. An Access Point object is not required to support all of these authorization modes but is required to support at least AUTHORIZE.

AUTHORIZE	The access rights of an active credential are evaluated, in addition to other possible authorization checks. If a credential has the value ACCESS_RIGHTS in the Authorization_Exemptions property, then access is granted unless other authorizations checks fail.
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GRANT_ACTIVE	An active credential is granted access without evaluating the access rights assigned to the credential. Other authorization checks can still lead to denying access.
DENY_ALL	All credentials are denied access and the Access_Event property is set to DENIED_DENY_ALL. If a credential has the value DENY in the Authorization_Exemptions property, then access is granted unless other authorizations checks fail.
VERIFICATION_REQUIRED	<p>The access rights of an active credential are evaluated, unless an ACCESS_RIGHTS exemption exists for this credential, in addition to other possible authorization checks. Granting access requires external verification. In this case the Access_Event property is set to VERIFICATION_REQUIRED and the access point waits for the external verification. The external verification process and the mechanism by which the verification result is provided to the access point is a local matter.</p> <p>If the external verification process denies access, then the Access_Event property shall be set to DENIED_VERIFICATION_FAILED.</p> <p>If there is no external verification result within the time specified by the Verification_Time property, then the Access_Event property shall be set to DENIED_VERIFICATION_TIMEOUT.</p> <p>If the credential has a VERIFICATION exemption, then the external verification step shall be omitted.</p>
AUTHORIZATION_DELAYED	<p>The access rights of an active credential are evaluated, unless an ACCESS_RIGHTS exemption exists for this credential, in addition to other possible authorization checks. Granting access is delayed by the time specified by the Verification_Time property. This provides an external verification process the opportunity to deny access. In this case the Access_Event property is set to AUTHORIZATION_DELAYED and the access point waits for the external verification. The external verification process and the mechanism by which the verification result is provided to the access point is a local matter.</p> <p>If the external verification process denies access within the time specified in the Verification_Time property, then the Access_Event property shall be set to DENIED_VERIFICATION_FAILED.</p> <p>If there is no external verification result within the time specified by the Verification_Time property, then this authorization check succeeded.</p> <p>If the credential has an AUTHORIZATION_DELAY exemption, then the authorization delay step shall be omitted.</p>
NONE	No authorization functionality takes place at this access point and no authorization events (e.g., grant or any deny events) are generated. This may be used to implement special access point functionality, such as a guard tour or muster point, where authorization checks are not required.
<Proprietary Enum Values>	A vendor may use other proprietary enumeration values to allow proprietary authorization modes other than those defined by the standard. For proprietary extensions of this enumeration, see Clause 23.1 of this standard.

135.1-2023 7.3.2.41.4 Authorization Mode Test

This test requires the Authentication_Status to be set to DISABLED when Authorization_Mode is written to NONE.

Problem:

The standard does not directly rule on the value of Authentication_Status when Authorization_Mode is written to NONE.

Interpretation: It is a local matter what the value of Authentication_Status property is when the Authorization_Mode property is written to NONE.

Question: Is this Interpretation correct?

Answer: Yes