



ASHRAE ADDENDA

BACnet[®] —A Data Communication Protocol for Building Automation and Control Networks

Approved by the ASHRAE Standards Committee on January 29, 2011; by the ASHRAE Board of Directors on February 2, 2011; and by the American National Standards Institute on March 3, 2011.

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[This foreword and the “rationale” on the following page are not part of this standard. They are merely informative and do not contain requirements necessary for conformance to the standard.]

FOREWORD

Addendum 135*ah* to ANSI/ASHRAE Standard 135-2008 contains a number of changes to the current standard. These modifications are the result of change proposals made pursuant to the ASHRAE continuous maintenance procedures and of deliberations within Standing Standard Project Committee 135. The changes are summarized below.

135-2008*ah*-1 Remove ReadPropertyConditional, p. 2.

In the following document, language added to existing clauses of ANSI/ASHRAE 135-2008 and addenda is indicated through the use of *italics*, while deletions are indicated by ~~strike through~~. Where entirely new subclauses are added, plain type is used throughout.

135-2008ah-1 Remove ReadPropertyConditional

Rationale
Due to the lack of implementations of ReadPropertyConditional, the benefits that could be achieved by a client are limited.

[Remove **Clause 15.6** ReadPropertyContional Service, p 345, and all of its subclauses, and replace with text as shown]

~~15.6 ReadPropertyConditional Service~~

~~The ReadPropertyConditional service is ...~~

15.6 Deleted Clause

This clause has been removed.

[Change **Clause 12**, p 129]

...
Several object types defined in this clause— the Command, Event Enrollment, Group, Loop, and Schedule— have one or more properties of type BACnetObjectPropertyReference. The property identifier component of these references may not be the special property identifiers ALL, REQUIRED, or OPTIONAL. These are reserved for use in the ~~ReadPropertyConditional and ReadPropertyMultiple services~~ *service* or in services not defined in this standard.
...

[Change **Clause 17.1.2**, p 380]

17.1.2 VT-classes

The classes of virtual terminal that are available in a peer VT service may be determined by examining the BACnet Device object in the peer device. The BACnet Device object has a property called VT_Classes_Supported, which may be read with the ReadProperty, *or* ReadPropertyMultiple, ~~or ReadPropertyConditional services~~ *service* to determine which VT-classes are available in that device.

[Change **Clause 20.2.10**, p. 421]

20.2.10 Encoding of a BitString Value

...
Bit strings defined in this standard, e.g., the Status_Flags property, shall be encoded in the order of definition, with the first defined Boolean value in the most significant bit, i.e. bit 7, of the first subsequent octet. The bits in the bitstring shall be placed in bits 7 to 0 of the first subsequent octet, followed by bits 7 to 0 of the second subsequent octet, followed by bits 7 to 0 of each octet in turn, followed by as many bits as are needed of the final subsequent octet, commencing with bit 7. *Undefined bits shall be zero.*

[Change **Clause 21**, BACnetConfirmedServiceChoice, p 431]

...
readProperty (12),
~~readPropertyConditional (13),~~
-- service 13 has been removed (13)

readPropertyMultiple (14),

[Change **Clause 21**, BACnet-Confirmed Service Request, p 432]

```

...
readProperty [12] ReadProperty-Request,
readPropertyConditional [13] ReadPropertyConditional Request,
-- service 13 has been removed [13]
readPropertyMultiple [14] ReadPropertyMultiple-Request,

```

[Change **Clause 21**, BACnet Confirmed-Service ACK, p 433]

```

...
readProperty [12] ReadProperty-ACK,
readPropertyConditional [13] ReadPropertyConditional ACK,
-- service 13 has been removed [13]
readPropertyMultiple [14] ReadPropertyMultiple-ACK,

```

[Change **Clause 21**, p 437]

```

ReadPropertyConditional Request ::= SEQUENCE {
objectSelectionCriteria [0] SEQUENCE {
selectionLogic [0] ENUMERATED {
and (0),
or (1),
all (2)
};
listOfSelectionCriteria [1] SEQUENCE OF SEQUENCE {
propertyIdentifier [0] BACnetPropertyIdentifier,
propertyArrayIndex [1] Unsigned OPTIONAL,
relationSpecifier [2] ENUMERATED {
equal (0),
not equal (1),
less than (2),
greater than (3),
less than or equal (4),
greater than or equal (5)
};
comparisonValue [3] ABSTRACT SYNTAX.&Type
} OPTIONAL
};
listOfPropertyReferences [1] SEQUENCE OF BACnetPropertyReference OPTIONAL
};

```

```

ReadPropertyConditional ACK ::= SEQUENCE {
listOfReadAccessResults SEQUENCE OF ReadAccessResult OPTIONAL
};

```

[Change **Clause 21**, BACnet Error, p 443]

```

...
readProperty [12] Error,
readPropertyConditional [13] Error,
-- service 13 has been removed [13]
readPropertyMultiple [14] Error,

```

[Change **Clause 21**, comment after BACnetPropertyIdentifier, p 471]

- The special property identifiers all, optional, and required are reserved for use in the ~~ReadPropertyConditional~~ and
- ReadPropertyMultiple ~~services~~ *service* or in services not defined in this standard.

[Change **Clause 21**, BACnetServicesSupported, p 473]

...
readProperty (12),
~~readPropertyConditional (13);~~
~~-- service 13 has been removed (13)~~
readPropertyMultiple (14),

[Remove **Clause E.3.6**, p 545, and replace with text as shown]

~~E.3.6 Examples of the ReadPropertyConditional Service~~

~~Example 1: Parameters for getting the ...~~

~~E.3.6 Deleted Clause~~

This clause has been removed.

[Remove **Clause F.3.6**, p 569, and replace with text as shown]

~~F.3.6 Encoding for Example E.3.6 ReadPropertyConditional Service~~

~~Example 1: Getting the object identifiers of ...~~

~~F.3.6 Deleted Clause~~

This clause has been removed.

[Remove **Clause K.1.5**, p 629, and replace with text as shown]

~~K.1.5 BIBB Data Sharing ReadPropertyConditional A (DS-RPC-A)~~

~~The A device is a user of data from ...~~

~~K.1.5 Deleted Clause~~

This clause has been removed.

[Remove **Clause K.1.6**, p 630, and replace with text as shown]

~~K.1.6 Data Sharing ReadPropertyConditional B (DS-RPC-B)~~

~~The B device is a provider of data to ...~~

~~K.1.6 Deleted Clause~~

This clause has been removed.

Changes to 135.1

[Change **Clause 4.5.3**, p. 6]

AcknowledgeAlarm	RemoveListElement	ConfirmedTextMessage
ConfirmedCOVNotification	CreateObject	UnconfirmedTextMessage
UnconfirmedCOVNotification	DeleteObject	TimeSynchronization
ConfirmedEventNotification	ReadProperty	UTCTimeSynchronization
UnconfirmedEventNotification	ReadPropertyConditional	Who-Has
GetAlarmSummary	ReadPropertyMultiple	I-Have
GetEnrollmentSummary	ReadRange	Who-Is
GetEventInformation	WriteProperty	I-Am
LifeSafetyOperation	WritePropertyMultiple	VT-Open
SubscribeCOV	DeviceCommunicationControl	VT-Close
SubscribeCOVProperty	ConfirmedPrivateTransfer	VT-Data
AtomicReadFile	UnconfirmedPrivateTransfer	RequestKey
AtomicWriteFile	ReinitializeDevice	Authenticate
AddListElement		

[Remove **Change 8.19**, p. 165, and its subclauses, and replace with text as shown]

~~8.19 ReadPropertyConditional Service Initiation Tests~~

~~This clause defines the tests necessary to ...~~

8.19 Deleted Clause

This clause has been removed.

[Remove **Clause 9.19**, p. 255, and its subclauses, and replace with text as shown]

~~9.19 ReadPropertyConditional Service Execution Tests~~

~~This clause specifies the tests necessary to ...~~

9.19 Deleted Clause

This clause has been removed.

[Change **Annex A**, p 472]

...			
ReadProperty	Initiate	Execute	
ReadPropertyConditional	Initiate	Execute	
ReadPropertyMultiple	Initiate	Execute	
...			

[Add a new entry to **History of Revisions**, p. 688]

(This History of Revisions is not part of this standard. It is merely informative and does not contain requirements necessary for conformance to the standard.)

HISTORY OF REVISIONS

<i>Protocol</i>		<i>Summary of Changes to the Standard</i>
<i>Version</i>	<i>Revision</i>	
...
1	12	<p>Addendum ah to ANSI/ASHRAE 135-2008 Approved by the ASHRAE Standards Committee January 29, 2011; by the ASHRAE Board of Directors February 2, 2011; and by the American National Standards Institute March 3, 2011.</p> <p>1. Remove ReadPropertyConditional.</p>

POLICY STATEMENT DEFINING ASHRAE'S CONCERN FOR THE ENVIRONMENTAL IMPACT OF ITS ACTIVITIES

ASHRAE is concerned with the impact of its members' activities on both the indoor and outdoor environment. ASHRAE's members will strive to minimize any possible deleterious effect on the indoor and outdoor environment of the systems and components in their responsibility while maximizing the beneficial effects these systems provide, consistent with accepted standards and the practical state of the art.

ASHRAE's short-range goal is to ensure that the systems and components within its scope do not impact the indoor and outdoor environment to a greater extent than specified by the standards and guidelines as established by itself and other responsible bodies.

As an ongoing goal, ASHRAE will, through its Standards Committee and extensive technical committee structure, continue to generate up-to-date standards and guidelines where appropriate and adopt, recommend, and promote those new and revised standards developed by other responsible organizations.

Through its *Handbook*, appropriate chapters will contain up-to-date standards and design considerations as the material is systematically revised.

ASHRAE will take the lead with respect to dissemination of environmental information of its primary interest and will seek out and disseminate information from other responsible organizations that is pertinent, as guides to updating standards and guidelines.

The effects of the design and selection of equipment and systems will be considered within the scope of the system's intended use and expected misuse. The disposal of hazardous materials, if any, will also be considered.

ASHRAE's primary concern for environmental impact will be at the site where equipment within ASHRAE's scope operates. However, energy source selection and the possible environmental impact due to the energy source and energy transportation will be considered where possible. Recommendations concerning energy source selection should be made by its members.

