



**BACnet[®] TESTING LABORATORIES
ADDENDA**

**Addendum misc4 to
BTL Test Package 16.1**

**Revision 4
Revised September 30, 2020**

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[This foreword and the “Overview” on the following pages are not part of this Test Package. They are merely informative and do not contain requirements necessary for conformance to the Test Package.]

FOREWORD

The purpose of this addendum is to present current changes being made to the BTL Test Package. These modifications are the result of change proposals made pursuant to the continuous maintenance procedures and of deliberations within the BTL-WG Committee. The changes are summarized below.

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In the following document, language to be added to existing clauses within the BTL Test Package 16.1 is indicated through the use of *italics*, while deletions are indicated by ~~strike through~~. Where entirely new subclauses are proposed to be added, plain type is used throughout

In contrast, changes to BTL Specified Tests also contain a **yellow** highlight to indicate the changes made by this addendum. When this addendum is applied, all highlighting will be removed. Change markings on tests will remain to indicate the difference between the new test and an existing 135.1 test. If a test being modified has never existed in 135.1, the applied result should not contain any change markings. When this is the case, square brackets will be used to describe the changes required for this test.

Each addendum can stand independently unless specifically noted via dependency within the addendum. If multiple addenda change the same test or section, each future released addendum that changes the same test or section will note in square brackets whether or not those changes are reflected.

BTL-16.1misc4-1: Update IPv6 DHCP Tests - BTLWG-982

Overview:

The IPv6 DHCP testing introduced in 16.1ai were improved to verify Network Port Properties are updated correctly.

Changes:

BTL Specified Tests Changes

[In BTL Specified Tests, modify tests below as specified below by adding verification steps to each.]

7.3.2.X62.7.1 Basic IPv4 DHCP Test

Purpose: Verify that the IUT is able to participate in IPv4 DHCP and correctly report its DHCP status.

Test Concept: The DHCP server is removed from network. The IUT is the configured with an IPv4 network requiring DHCP, and if required, its DHCP settings are cleared. The related Network Port object is queried to verify that the DHCP related properties have the appropriate values indicating DHCP has not completed. **The DHCP server is connected to the network.** It is verified that the IUT obtains network **settings** from the DHCP server, and that the DHCP properties reflect the current status.

Configuration Requirements: The DHCP is disconnected from the network or turned off. The IUT is configured for DHCP and any settings it previously received via DHCP are cleared.

1. IF the IUT has a second enabled network port THEN
 - VERIFY IP_DHCP_Enable = True
 - IF IP_DHCP_Lease_Time property is present THEN
 - VERIFY IP_DHCP_Lease_Time = 0
 - IF IP_DHCP_Lease_Time_Remaining property is present THEN
 - VERIFY IP_DHCP_Lease_Time_Remaining = 0
 - IF IP_DHCP_Server property is present THEN
 - VERIFY IP_DHCP_Server = X'00000000'
2. MAKE(connect the DHCP server to the network)
3. WAIT until the IUT obtains DHCP information
4. IF IP_DHCP_Lease_Time property is present THEN
 - VERIFY IP_DHCP_Lease_Time = (0 or the value provided by the DHCP server)
5. IF IP_DHCP_Lease_Time_Remaining property is present THEN
 - VERIFY IP_DHCP_Lease_Time_Remaining = (0 or a value less than that provided by the DHCP server)
6. IF IP_DHCP_Server property is present THEN
 - VERIFY IP_DHCP_Server = (the DHCP server's address or X'00000000')
7. VERIFY IP_Address = (the value served by the DHCP server)
8. VERIFY IP_Default_Gateway = (the value served by the DHCP server)

7.3.2.X62.7.2 Basic IPv6 DHCP Test

Purpose: Verify that the IUT is able to participate in IPv6 DHCP and correctly report its DHCP status.

Test Concept: The DHCP server is removed from network. The IUT is the configured with an IPv6 network requiring DHCP, and if required, its DHCP settings are cleared. The related Network Port object is queried to verify that the DHCP related properties have the appropriate values indicating DHCP has not completed. **The DHCP server is connected to the network.** It is verified that the IUT obtains network **settings** from the DHCP server, and that the DHCP properties reflect the current status.

Configuration Requirements: The DHCP is disconnected from the network or turned off. The IUT is configured for DHCP and any settings it previously received via DHCP are cleared.

1. IF the IUT has a second enabled network port THEN
 - VERIFY IPv6_DHCP_Enable = True
 - IF IPv6_DHCP_Lease_Time property is present THEN
 - VERIFY IPv6_DHCP_Lease_Time = 0
 - IF IPv6_DHCP_Lease_Time_Remaining property is present THEN
 - VERIFY IPv6_DHCP_Lease_Time_Remaining = 0
 - IF IPv6_DHCP_Server property is present THEN
 - VERIFY IPv6_DHCP_Server = X'00000000'
2. MAKE(connect the DHCP server to the network)
3. WAIT until the IUT obtains DHCP information
4. IF IPv6_DHCP_Lease_Time property is present THEN
 - VERIFY IPv6_DHCP_Lease_Time = (0 or the value provided by the DHCP server)
5. IF IPv6_DHCP_Lease_Time_Remaining property is present THEN
 - VERIFY IPv6_DHCP_Lease_Time_Remaining = (0 or a value less than that provided by the DHCP server)
6. IF IPv6_DHCP_Server property is present THEN
 - VERIFY IPv6_DHCP_Server = (the DHCP server's address or X'00000000')
7. VERIFY IPv6_Address = (the value served by the DHCP server)
8. VERIFY IPv6_Default_Gateway = (the value served by the DHCP server)

BTL-16.1misc4-2: NM-CE-B Tests - BTLWG-26

Overview:

There are no tests in the TP for NM-CE-B and a device has been received by a lab which supports it.

Changes:

BTL Checklist Changes

[In BTL Checklist, modify Network Management - Connection Establishment - B section]

Network Management - Connection Establishment - B	
R ⁺	Base Requirements
⁺ Contact BTL for interim tests for this BIBB.	

BTL Test Plan Changes

[In BTL Test Plan, replace section 10.4 Network Management - Connection Establishment - B]

10.4 Network Management - Connection Establishment - B

10.4.1 Base Requirements

Base requirements must be met by any IUT that supports NM-CE-B.

Verify Checklist	
Test Conditionality	Must be executed.
Test Directives	Verify that the IUT claims Network Management - Routing
Testing Hints	Note that when applying routing tests to a half-router, the PTP connection should be established before the tests are started, and the IUT plus its peer half-router are together considered the router under test.
135.1-2013 - 10.3.1.2 - A Network Number is Specified that can be Reached Through a PTP Connection	
Test Conditionality	Must be executed.
Test Directives	Configure the test network as per 10.2.
Testing Hints	
135.1-2013 - 10.3.3 - Initiating Half-Router Procedure for Connection Establishment	
Test Conditionality	Must be executed.
Test Directives	Configure the test network as per 10.2.
Testing Hints	
135.1-2013 - 10.3.7 - Disconnect-Connection-To-Network	
Test Conditionality	Must be executed.
Test Directives	Configure the test network as per 10.2.
Testing Hints	