



BACnet[®] TESTING LABORATORIES ADDENDA

Addendum Imp2 to BTL Test Package 26.1

**Revision final
Revised 6/29/2026**

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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.

BTL-26.1 imp2-1: Remove Deprecated Object Services and BIBBs [BTLWG-1706]2

BTL-26.1 imp2-2: Test Plan Improvements [BTLWG-1707]5

BTL-26.1 imp2-3: Add Supports Proprietary Command to Data Link Layer Section [BTLWG-1800]9

BTL-26.1 imp2-4: Data Link Section Clarification Changes for Network Port Object Properties [BTLWG-1747] 14

In the following document, language to be added to existing clauses within the BTL Test Package 26.1 is indicated through the use of *italics*, while deletions are indicated by ~~striketrough~~. 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-26.1 imp2-1: Remove Deprecated Object Services and BIBBs [BTLWG-1706]**Overview:**

Remove deprecated object services and BIBBs

Changes:**Checklist Changes****3 Objects**

Support	Listing	Option
...		
		Network Security Object
	R ⁺	Base Requirements
		⁺ Contact BTL for interim tests for this object.
...		

12 Network Security BIBBs

Support	Listing	Option
		Network Security – Secure Device
	R ⁺	Base Requirements
		⁺ Contact BTL for interim tests for this BIBB.
		Network Security – Encrypted Device
	R ⁺	Base Requirements
		⁺ Contact BTL for interim tests for this BIBB.
		Network Security – Multi Application Device
	R ⁺	Base Requirements
		⁺ Contact BTL for interim tests for this BIBB.
		Network Security – Device Master Key – A
	R ⁺	Base Requirements
		⁺ Contact BTL for interim tests for this BIBB.
		Network Security – Device Master Key – B
	R ⁺	Base Requirements
		⁺ Contact BTL for interim tests for this BIBB.
		Network Security – Key Server
	R ⁺	Base Requirements
		⁺ Contact BTL for interim tests for this BIBB.
		Network Security – Temporary Key Server
	R ⁺	Base Requirements
		⁺ Contact BTL for interim tests for this BIBB.
		Network Security – Secure Router
	R ⁺	Base Requirements
		⁺ Contact BTL for interim tests for this BIBB.
		Network Security – Security Proxy

Support	Listing	Option
	R ⁺	Base Requirements
+Contact BTL for interim tests for this BIBB.		

Test Plan Changes

3.50Network Security Object

3.50.1 Base Requirements

Contact BTL for interim tests for this object

12 Network Security BIBBs

12.1Network Security – Secure Device

12.1.1 Base Requirements

Contact BTL for Interim tests for this BIBB.

12.2Network Security – Encrypted Device

12.2.1 Base Requirements

Contact BTL for Interim tests for this BIBB.

12.3 Network Security – Multi-Application Device

12.3.1 Base Requirements

Contact BTL for Interim tests for this BIBB.

12.4 Network Security – Device Master Key – A

12.4.1 Base Requirements

Contact BTL for Interim tests for this BIBB.

12.5 Network Security – Device Master Key – B

12.5.1 Base Requirements

Contact BTL for Interim tests for this BIBB.

12.6 Network Security – Key Server

12.6.1 Base Requirements

Contact BTL for Interim tests for this BIBB.

12.7 Network Security – Temporary Key Server

12.7.1 Base Requirements

Contact BTL for Interim tests for this BIBB.

12.8 Network Security – Secure Router

12.8.1 Base Requirements

Contact BTL for Interim tests for this BIBB.

12.9 Network Security – Security Proxy

12.9.1 Base Requirements

Contact BTL for Interim tests for this BIBB.

Specified Test Changes

None

BTL-26.1 imp2-2: Test Plan Improvements [BTLWG-1707]

Overview:

Removal of references to older Protocol_Revisions.

Changes:

Checklist Changes

None

Test Plan Changes

[For complete details - reference BTLWG-1707 document which contains the entire Test Plan with these changes highlighted in yellow.]

BTLWG-1707 Summary

3.8 Calendar Object

3.8.1 Base Requirements

Test Conditionality changes for 7.2.10, 7.2.11, 9.23.2.22,

3.9 Command Object

3.9.5 Supports Resizable Action and Action_Text Properties.

Opening text changes to remove PR4 or higher...

Change Test Conditionality to remove PR4 or greater ...

3.10 Device Object

3.10.3 Supports Database_Revision Property

removes PR2 or higher text.

3.10.4 Supports Time_Synchronization_Recipients

Changes to require DM-ATS-A if supports property. removes the test.

3.10.5 Supports UTC_Time_Synchronization_Recipients

Removes the PR7 reference in Test Conditionality.

3.10.6 Contains a Writable Local_Date Property

Removes PR11 reference for 9.23.2.19 Test Conditionality.

3.10.7 Contains a Writable Local_Time Property

Removes the PR11 references for test 9.23.2.20 in Test Conditionality.

3.14 Multi-state Input Object

3.14.4 remove PR4 references

3.14.5 remove PR4 references

3.15 Multi-state Output Object

3.15.5 remove PR4 references

3.15.6 remove PR4 references

3.16 Multi-state Value Object

3.16.5 remove PR4 references

3.16.6 remove PR4 references

3.17 Notification Class Object

3.17.3 remove PR11 references

3.19 Schedule Object

3.19.5 remove PR4 references

3.27 Date Value Object

3.27.4 remove PR11 references

3.27.5 remove PR11 references

3.29 Date Time Value Object

3.29.4 Remove PR11 references

3.29.5 remove PR11 references

3.35 Time Value Object

3.35.4 remove PR11 references

3.35.5 remove PR11 references

3.51 Notification Forwarder Object

3.51.1 remove PR11 references

4.2 DS-RP-B

4.2.1 remove PR4 reference

4.4 DS-RPM-B

4.4.1 remove PR4 reference

4.6 DS-WP-B

4.6.4 remove PR4 reference

4.8 DS-WPM-B

4.8.1 remove PR10 references

4.8.7 remove PR4 reference

4.10 DS-COV-B

4.10.1 remove PR1 reference

4.12 DS-AV-A

4.12.1 change protocol revision to Protocol_Revision.

4.28 DS-LSAV-A

4.28.1 change protocol revision to Protocol_Revision

4.32 DS-ACAV-A

4.32.1 change protocol revision to Protocol_Revision

4.49 DS-LAV-A

4.49.1 change protocol revision to Protocol_Revision

4.53 DS-EAV-A

4.53.1 change protocol revision to Protocol_Revision

5.1

5.1.18 - 28 remove references to PR10

5.2 AE-NI-B

5.2.20 remove PR3 reference

5.9 AE-ELV-A

5.9.3 - 9 remove PR7 reference

5.11 AE-EL-I-B

5.11.5 remove PR11 references

6.2 Sched - VM-A

6.2.4 remove PR3 and PR4 reference

6.2.6 remove PR4 references

6.3 Sched - WS -A

6.3.4 remove PR3 reference

6.4 Sched - I - B

6.4.1 - 6 remove all Pre PR4 tests from test plan. remove all references to PR4. Test names did not change.

6.5 SCHED - E - B

6.5.1 remove all Pre PR4 test from test plan, remove all references to PR4. Test names did not change.

6.6 SCHED-WS-I-B

6.6.1 remove all pre PR4 tests from test plan, remove all references to PR4. Test names did not change.

6.6.6 remove all pre PR4 tests from test plan, remove all references to PR4. Test names did not change.

6.7 SCHED-R-B

6.7.1 remove all pre PR4 tests from test plan, remove all references to PR4. Test names did not change.

6.7.16 remove all pre PR4 tests from test plan, remove all references to PR4. Test names did not change.

6.7.17 - 24 remove all pre PR4 tests from test plan, remove all references to PR4. Test names did not change.

7.1 T-V-A

7.1.4 remove PR7 reference

7.3 T-VMT-I-B

7.3.7 remove PR11 references

7.5 T-ATR-A

7.5.4 - 5 remove PR3 references

7.7 T-VMMV-I-B

7.7.1 remove PR3 reference

7.7.7 remove PR11 reference

8.11 DM-ATS-A

8.11.1 remove pre PR4 tests from test plan. Remove PR7 references. Test names did not change.

9.1 DLL-MS/TP-Manager Node

9.1.1 add 38400 to test directives and remove references to PR12.

9.1.10 change Protocol Revision to Protocol_Revision

9.2 DLL - MS/TP Subordinate Node

9.2.1 add 38400 to test directives and remove references to PR12.

9.2.5 change Protocol Revision to Protocol_Revision

9.3.10 change Protocol Revision to Protocol_Revision

9.4.4 change Protocol Revision to Protocol_Revision

9.5.4 change Protocol Revision to Protocol_Revision

9.6.4 change Protocol Revision to Protocol_Revision

9.7.4 change Protocol Revision to Protocol_Revision

9.8.8 change Protocol Revision to Protocol_Revision

10.1.2 remove PR11 references

10.1.3 remove PR11 references

Specified Test Changes

None

BTL-26.1 imp2-3: Add Supports Proprietary Command to Data Link Layer Section [BTLWG-1800]

Overview:

The issue is that the Data Link Layer sections of the BTL Checklist do not allow for products that support Network Port object’s Command property while only supporting proprietary Command values, which the BACnet standard allows. This issue is fixed by adding new checklist items for proprietary commands.

Changes:

Checklist Changes

[Add new ‘Supports proprietary command’ Checklist item to Data Link Layer area MS/TP Manager Node, MS/TP Subordinate Node, IPv4, ZigBee, Ethernet, ARCNET, LonTalk, IPv6, Secure Connect, Virtual Network, and Proprietary]

9 Data Link Layer

Support	Listing	Option
...		
Data Link Layer - MS/TP - Manager Node		
...		
	O ^{6,9}	Supports proprietary command
...		
⁶ Protocol_Revision 17 or higher must be claimed.		
...		
⁹ At least one of these options is required if the Network Port object Command property is supported.		
...		
Data Link Layer - MS/TP – Subordinate Node		
...		
	O ^{3,5}	Supports proprietary command
...		
³ Protocol_Revision 17 or higher must be claimed.		
...		
⁵ At least one of these options is required if the Network Port object Command property is supported.		
...		
Data Link Layer - IPv4		
...		
	O ^{3,6}	Supports proprietary command
...		
³ Protocol_Revision 17 or higher must be claimed.		
...		
⁶ At least one of these options is required if the Network Port object Command property is supported.		
...		
Data Link Layer - ZigBee		
...		
	O ^{2,5}	Supports proprietary command
...		
² Protocol_Revision 17 or higher must be claimed.		
...		
⁵ At least one of these options is required if the Network Port object Command property is supported.		
...		
Data Link Layer - Ethernet		

Support	Listing	Option
...		
	<i>O^{2,5}</i>	<i>Supports proprietary command</i>
...		
² Protocol_Revision 17 or higher must be claimed.		
...		
⁵ At least one of these options is required if the Network Port object Command property is supported.		
...		
Data Link Layer - ARCNET		
...		
	<i>O^{2,5}</i>	<i>Supports proprietary command</i>
...		
² Protocol_Revision 17 or higher must be claimed.		
...		
⁵ At least one of these options is required if the Network Port object Command property is supported.		
...		
Data Link Layer - LonTalk		
...		
	<i>O^{2,5}</i>	<i>Supports proprietary command</i>
...		
² Protocol_Revision 17 or higher must be claimed.		
...		
⁵ At least one of these options is required if the Network Port object Command property is supported.		
...		
Data Link Layer - IPv6		
...		
	<i>O⁴</i>	<i>Supports proprietary command</i>
...		
⁴ At least one of these options is required if the Network Port object Command property is supported.		
...		
Data Link Layer - Secure Connect		
...		
	<i>O^{7,9}</i>	<i>Supports proprietary command</i>
...		
⁷ Protocol_Revision 17 or higher must be claimed.		
...		
⁹ At least one of these options is required if the Network Port object Command property is supported.		
...		
Data Link Layer - Virtual Network		
...		
	<i>O^{1,4}</i>	<i>Supports proprietary command</i>
...		
¹ Protocol_Revision 17 or higher must be claimed.		
...		
⁴ At least one of these options is required if the Network Port object Command property is supported.		
...		
Data Link Layer - Proprietary		
...		
	<i>O^{2,4}</i>	<i>Supports proprietary command</i>
...		
² Protocol_Revision 17 or higher must be claimed.		
...		
⁴ At least one of these options is required if the Network Port object Command property is supported.		

Support	Listing	Option
...		

Test Plan Changes

[Add new ‘Supports Proprietary Command’ Testplan sections to Data Link Layer area for MS/TP Manager Node, MS/TP Subordinate Node, IPv4, ZigBee, Ethernet, ARCNET, LonTalk, IPv6, Secure Connect, Virtual Network, and Proprietary]

9.1 Data Link Layer - MS/TP - Manager Node

9.1.20 Supports Proprietary Command

The IUT contains a Network Port object with Network_Type = MSTP or SERIAL and supports a proprietary command. There are no tests for this functionality.

9.2 Data Link Layer - MS/TP - Subordinate Node

9.2.12 Supports Proprietary Command

The IUT contains a Network Port object with Network_Type = MSTP or SERIAL and supports a proprietary command. There are no tests for this functionality.

9.3 Data Link Layer - IPv4

9.3.21 Supports Proprietary Command

The IUT contains a Network Port object with Network_Type = IPV4 and supports a proprietary command. There are no tests for this functionality.

9.4 Data Link Layer - ZigBee

9.4.13 Supports Proprietary Command

The IUT contains a Network Port object with Network_Type = ZIGBEE and supports a proprietary command. There are no tests for this functionality.

9.5 Data Link Layer - Ethernet

9.5.13 Supports Proprietary Command

The IUT contains a Network Port object with Network_Type = ETHERNET and supports a proprietary command. There are no tests for this functionality.

9.6 Data Link Layer - ARCNET

9.6.13 Supports Proprietary Command

The IUT contains a Network Port object with Network_Type = ARCNET and supports a proprietary command.

There are no tests for this functionality.

9.7 Data Link Layer - LonTalk

9.7.13 Supports Proprietary Command

The IUT contains a Network Port object with Network_Type = LONTALK and supports a proprietary command.

There are no tests for this functionality.

9.8 Data Link Layer - IPv6

9.8.19 Supports Proprietary Command

The IUT contains a Network Port object with Network_Type = IPV6 and supports a proprietary command.

There are no tests for this functionality.

9.9 Data Link Layer - Secure Connect

9.9.24 Supports Proprietary Command

The IUT contains a Network Port object with Network_Type = SECURE_CONNECT or proprietary,

Protocol_Level = BACNET_APPLICATION, and supports a proprietary command.

There are no tests for this functionality.

9.10 Data Link Layer - Virtual Network

9.10.18 Supports Proprietary Command

The IUT contains a Network Port object with Network_Type = VIRTUAL and supports a proprietary command.

There are no tests for this functionality.

9.12 Data Link Layer - Proprietary

9.12.10 Supports Proprietary Command

The IUT contains a Network Port object with Network_Type = proprietary and supports a proprietary command.

There are no tests for this functionality.

Specified Test Changes

None

BTL-26.1 imp2-4: Data Link Section Clarification Changes for Network Port Object Properties [BTLWG-1747]**Overview:**

The footnotes referring to the NPO entries in each Data Link are confusing. We need to clarify when the line item refers to a property within the Network Port object associated with this Data Link.

Changes:**Checklist Changes**

Data Link Layer - MS/TP - Manager Node		
	R	Base Requirements
	C ¹	Supports writable Max_Manager property in Network Port object
	C ^{1,5}	Supports read-only Max_Manager property in Network Port object
	C ²	Contains writable Max_Info_Frames property in Network Port object
	C ^{2,5}	Contains read-only Max_Info_Frames property in Network Port object
	O	Is a BACnet router
	C ^{3,4}	Supports extended MS/TP frames (over 501 octets)
	C ^{5,6}	Supports the Network Port object
	O ⁶	Supports configurable Out_Of_Service property in Network Port object
	C ⁷	Supports hierarchical Network Port objects
	C ⁷	Supports Non-hierarchical Network Port objects
	C ^{6,8}	Supports writable Network_Number property in Network Port object
	O ⁶	Supports the Routing_Table property in Network Port object
	O ⁶	Supports the Command property in Network Port object
	O ^{6,9}	Supports the DISCARD_CHANGES command
	O ^{6,9}	Supports the RESTART_SUBORDINATE_DISCOVERY command
	O ^{6,9}	Supports the RESTART_AUTONEGOTIATION command
	O ^{6,9}	Supports the RESTART_PORT command
	O ^{9,10}	Supports the VALIDATE_CHANGES command
¹ Exactly one of these options is required if the IUT claims Protocol_Revision 17 or higher. ² Exactly one of these options is required if the IUT claims Protocol_Revision 17 or higher. ³ Protocol_Revision 16 or higher must be claimed. ⁴ Required if the device is a router and claims Protocol_Revision 16 or higher. ⁵ Required for devices which claim Protocol_Revision 17 or higher and which support DS-WP-B. Only allowed if the IUT does not support DS-WP-B. ⁶ Protocol_Revision 17 or higher must be claimed. ⁷ At least one of these options is required if the IUT claims Protocol_Revision 17 or higher. ⁸ Support for writable Network_Number properties is required in routers and other IUTs that need to know the network number in order to operate. ⁹ At least one of these options is required if the Network Port object Command property is supported. ¹⁰ Protocol_Revision 24 or higher must be claimed.		

[Repeat changes for adding 'in Network Port object' for all other datalinks as shown below]

		Supports configurable Out_Of_Service property in Network Port object
...		
		Supports writable Network_Number property in Network Port object
		Supports the Routing_Table property in Network Port object
		Supports the Command property in the Network Port object Command property

Test Plan Changes

[Base Requirement - add new Verify if Protocol_Revision 17]
 [Change titles of test plan entries to match the checklist changes above]
 [Add new sections in test plan that were added to checklist]

[Update tests in the old and new duplicate sections to match new meaning]

9.1 Data Link Layer - MS/TP - Manager Node

9.1.1 Base Requirements

Base requirements for all MS/TP manager devices.

...		
135.1-2025 - 12.1.3.24 - Verify MSTP Response Queue Test		
	Test Conditionality	Must be executed.
	Test Directives	
	Testing Hints	
BTL135.1-2025 - 12.1.3.10 - Max_Manager Test		
	Test Conditionality	Must be executed. if the IUT claims Protocol_Revision 16 or lower.
	Test Directives	Use the Max_Manager property in the Device Object for this test.
	Testing Hints	
BTL135.1-2025 - 12.1.3.11 - Max_Info_Frames Test		
	Test Conditionality	Must be executed if the IUT claims Protocol_Revision 16 or lower.
	Test Directives	Use the Max_Info_Frames property in the Device Object for this test.
	Testing Hints	

9.1.2 Supports Writable Max_Manager Property in Network Port Object

The IUT contains the Max_Manager property ~~in the Network Port object~~ and it is writable.

135.1-2025 - 12.1.3.10 - Max_Manager Test		
	Test Conditionality	Must be executed. if the IUT claims Protocol_Revision 16 or lower.
	Test Directives	Use the Max_Manager property in the Device Object for this test.
	Testing Hints	
BTL - 12.1.3.X1 - Max_Manager Test for Network Port Objects		
	Test Conditionality	Must be executed.
	Test Directives	This test shall be performed on the Max_Manager property in the Network Port object.
	Testing Hints	
135.1-2025 - 7.3.2.46.1.1 Configure Network Through Network Port Object Test		
	Test Conditionality	Must be executed.
	Test Directives	Execute this test at least once for each Network Port object that has Network_Type = MSTP and Protocol_Level = BACNET_APPLICATION. This test shall be performed on the Max_Manager property.
	Testing Hints	

9.1.3 Supports Read-Only Max_Manager Property in Network Port Object

The IUT contains the Max_Manager property that is read-only ~~in the Network Port object~~.

135.1-2025 - 12.1.3.10 - Max_Manager Test		
	Test Conditionality	Must be executed. if the IUT claims Protocol_Revision 16 or lower.
	Test Directives	Use the Max_Manager property in the Device Object for this test.

	Testing Hints	
BTL - 12.1.3.X1 - Max_Manager Test for Network Port Objects		
	Test Conditionality	Must be executed.
	Test Directives	This test shall be performed on the Max_Manager property in this Network Port object.
	Testing Hints	
Verify Checklist		
	Test Conditionality	Must be executed
	Test Directives	Verify that the IUT does not claim support for DS-WP-B.
	Testing Hints	
135.1 2025 - 7.3.2.46.1.5 - Network Port Object Not Writable Property Test		
	Test Conditionality	Must be executed.
	Test Directives	Execute this test on each Network Port object that has Network_Type = MSTP and Protocol_Level = BACNET_APPLICATION. This test shall be performed on the Max_Manager property with a default value of 127.
	Testing Hints	

9.1.4 Contains Writable Max_Info_Frames Property in Network Port Object

The IUT contains a configurable Max_Info_Frames property in the Network Port object.

135.1 2025 - 12.1.3.11 - Max_Info_Frames Test		
	Test Conditionality	Must be executed if the IUT claims Protocol_Revision 16 or lower.
	Test Directives	Use the Max_Info_Frames property in the Device Object for this test.
	Testing Hints	
BTL - 12.1.3.X2 - Max_Info_Frames Test for Network Port Objects		
	Test Conditionality	Must be executed.
	Test Directives	This test shall be performed on the Max_Info_Frames property in this Network Port object.
	Testing Hints	
135.1 2025 - 7.3.2.46.1.1 - Configure Network Through Network Port Object Test		
	Test Conditionality	Must be executed.
	Test Directives	This test shall be executed at least once for each Network Port object that has Network_Type = MSTP and Protocol_Level = BACNET_APPLICATION. This test shall be performed on the Max_Info_Frames property.
	Testing Hints	

9.1.5 Contains Read-Only Max_Info_Frames Property in Network Port Object

The IUT contains a non-configurable Max_Info_Frames property in the Network Port object.

135.1 2025 - 12.1.3.11 - Max_Info_Frames Test		
	Test Conditionality	Must be executed if the IUT claims Protocol_Revision 16 or lower.
	Test Directives	Use the Max_Info_Frames property in the Device Object for this test.
	Testing Hints	
BTL - 12.1.3.X2 - Max_Info_Frames Test		
	Test Conditionality	Must be executed.
	Test Directives	This test shall be performed on the Max_Info_Frames property in this Network Port object.
	Testing Hints	
Verify Checklist		
	Test Conditionality	Must be executed.
	Test Directives	Verify that the IUT does not claim support for DS-WP-B.
	Testing Hints	
135.1 2025 - 7.3.2.46.1.5 - Network Port Object Not Writable Property Test		
	Test Conditionality	Must be executed.

Test Directives	Execute this test on each Network Port object that has Network_Type = MSTP and Protocol_Level = BACNET_APPLICATION. This test shall be performed on the Max_Info_Frames property with a default value of 1.
Testing Hints	

...

9.1.9 Supports Configurable Out_Of_Service Property in Network Port Object

The IUT contains a Network Port object with Network_Type = MSTP or SERIAL and contains a writable or configurable Out_Of_Service property.

135.1-2025 - 7.3.1.1.5 - Out_Of_Service, Status_Flags, Reliability and Command Property Test		
Test Conditionality	Must be executed.	
Test Directives		
Testing Hints		

...

9.1.12 Supports Writable Network_Number Property in Network Port Object

The IUT contains a Network Port object with Network_Type = MSTP and Protocol_Level = BACNET_APPLICATION that contains a writable Network_Number property.

135.1-2025 - 7.3.2.46.2 - Network-Number-Is Updates Network_Number_Quality Test		
Test Conditionality	For IUTs which do not accept a value of zero in their Network_Number property, this test shall be skipped.	
Test Directives		
Testing Hints		

9.1.13 Supports the Routing_Table Property in Network Port Object

The IUT contains a Network Port object with Network_Type = MSTP and Protocol_Level = BACNET_APPLICATION that contains the Routing_Table property.

135.1-2025 - 7.3.2.46.6 - Routing_Table Test		
Test Conditionality	If the IUT only supports 1 entry in its routing table, then this test shall be skipped.	
Test Directives		
Testing Hints		

9.1.14 Supports the Command Property in Network Port Object-Command Property

The IUT contains a Network Port object with Network_Type = MSTP or SERIAL and supports the Command property.

[No changes to the tests in this section - only the name change, therefore the table is not shown here.]

[Change titles for sections that reference Network Port object properties to include 'in Network Port Object' for all datalinks.]

Specified Test Changes

[Move test 12.1.3.10 from 135.1 to BTL Specified Tests and modify as noted]

12.1.3.10 Max_Manager Test

Reason for Change: Updated read-only verification to only run if prior to PR 17.

Purpose: Verify that Max_Manager *property in the Device Object* is writable, or that it is 127.

Configuration Requirements: The IUT shall be configured with an MS/TP MAC address less than 127.

Test Steps:

1. VERIFY Max_Manager = (any valid value, V1)
2. IF Max_Manager is writable THEN
 WRITE Max_Manager = (any other valid value, with V2 greater than or equal to the IUT's address)
3. ELSE IF (Protocol Revision < 17) THEN
 VERIFY Max_Manager = 127

[Add new test]

12.1.3.X1 Max_Manager Test for Network Port Object

Reason for Change: New test for Network Port Object properties.

Purpose: Verify writing to the Max_Manager property in the Device object and the corresponding Network Port object are changed when the other is written. If neither are writable, the values must be 127.

Test Concept: Write the Device object (D1), Max_Manager property and check the corresponding Network Port object (NP1) is updated and the change does not require activation via the Network Port object. Write NP1, Max_Manager and check the corresponding Device object is updated.

Configuration Requirements: NP1 is the Network Port object with the lowest object instance whose Network_Type is MSTP and whose Out_Of_Service is FALSE.

Test Steps:

-- verify write via Device object

1. IF (D1, Max_Manager is writable) THEN {
2. READ V1 = D1, Max_Manager
3. WRITE D1, Max_Manager = (any valid value V2, other than V1 greater than or equal to the IUT's address)
4. WAIT (Internal Processing Fail Time)
5. VERIFY (NP1, Max_Manager = V2)
- }

-- verify write via Network Port object

7. IF (NP1, Max_Manager is writable) THEN {
8. READ V1 = NP1, Max_Manager
9. VERIFY (D1, Max_Manager = V1)
10. WRITE NP1, Max_Manager = (any valid value V2, other than V1 greater than or equal to the IUT's address)
11. VERIFY NP1, Changes_Pending = TRUE
12. TRANSMIT ReinitializeDevice-Request
 'Reinitialized State of Device' = WARMSTART | ACTIVATE_CHANGES
 'Password' = (any valid password)
13. RECEIVE BACnet-SimpleACK-PDU
14. WAIT **Activate Changes Fail Time**
15. VERIFY Changes_Pending = FALSE
16. VERIFY (D1, Max_Manager = V2)
- }
17. ELSE {
18. VERIFY(NP1, Max_Manager = 127)
19. VERIFY(D1, Max_Manager = 127)
- }

[Move test 12.1.3.11 from 135.1 to BTL Specified Tests and modify as noted]

12.1.3.11 Max_Info_Frames Test

Reason for Change: Updated read-only verification to only run if prior to PR 17.

Purpose: Verify that Max_Info_Frames *property in the Device Object* is *writable*, configurable, or that it is 1.

Test Steps:

1. VERIFY Max_Info_Frames = (any valid value)
2. IF Max_Info_Frames is writable THEN
 - WRITE Max_Info_Frames = (any valid value, V)
 - VERIFY Max_Info_Frames = V
- ELSE IF Max_Info_Frames is configurable THEN
 - MAKE (Max_Info_Frames equal any valid value, V)
 - VERIFY Max_Info_Frames = V
- ELSE *IF (Protocol Revision < 17) THEN*
 - VERIFY Max_Info_Frames = 1

[Add new test]

12.1.3.X2 Max_Info_Frames Test for Network Port Objects

Reason For Change: Added new for Network Port Object property testing.

Purpose: Verify modifying the Max_Info_Frames property in the Device object and the corresponding Network Port object (NP1) are changed when the other is written. If neither are writable, verify the values are equal to 1.

Test Concept: Modify the Device object (D1), Max_Info_Frames property and check the corresponding Network Port object (NP1) is updated and the change does not require activation via the Network Port object. Write NP1, Max_Info_Frames and check the corresponding Device object is updated.

Configuration Requirements: NP1 is the Network Port object with the lowest object instance whose Network_Type is MSTP and whose Out_Of_Service is FALSE.

Test Steps:

-- verify modify via Device object

1. READ V1 = D1, Max_Info_Frames
2. IF (D1, Max_Info_Frames is writable) THEN
3. WRITE D1, Max_Info_Frames = (V2, any valid value other than V1)
4. WAIT (Internal Processing Fail Time)
5. VERIFY (NP1, Max_Info_Frames = V2)
6. ELSE IF (D1, Max_Info_Frames is configurable) THEN {
7. MAKE (D1, Max_Info_Frames equal V2, any valid value other than V1)
8. VERIFY (D1, Max_Info_Frames = V2)
9. WAIT (Internal Processing Fail Time)
10. VERIFY (NP1, Max_Info_Frames = V2)
- }

-- verify write via Network Port object

11. IF (NP1, Max_Info_Frames is writable) THEN {
12. READ V1 = NP1, Max_Info_Frames
13. VERIFY (D1, Max_Info_Frames = V1)
14. WRITE NP1, Max_Info_Frames = (any valid value V2, other than V1)
15. VERIFY NP1, Changes_Pending = TRUE
16. TRANSMIT ReinitializeDevice-Request
 - 'Reinitialized State of Device' = WARMSTART | ACTIVATE_CHANGES
 - 'Password' = (any valid password)
17. RECEIVE BACnet-SimpleACK-PDU

```
18.    WAIT Activate Changes Fail Time
19.    VERIFY Changes_Pending = FALSE
20.    VERIFY (D1, Max_Info_Frames = V2)
    }
21. ELSE {      -- WriteProperty Service shall not be supported in this case
22.    VERIFY (NP1, Max_Info_Frames = 1)
23.    VERIFY (D1, Max_Info_Frames = 1)
    }
```