|  |  |
| --- | --- |
| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_Version\_001 |
| **Test Objective** | The IUT is responding on a correctly set version number. |
| **Reference** | RFC7252#section-3  https://tools.ietf.org/html/rfc7252#section-3  RFC7252#section-4.2 (b)  https://tools.ietf.org/html/rfc7252#section-4.2 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
|  | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a request message containing  version indicating value 1,  msg\_type indicating value 0, //Confirmable  token\_length indicating value 0,  code indicating value 0.00, //Empty Message  msg\_id corresponding to MSG\_ID1;  }  then {  the IUT sends a response message containing  version indicating value 1,  msg\_type indicating value 3, //Reset  token\_length indicating value 0,  code indicating value 0.00, //Empty Message  msg\_id corresponding to the value of request message;  or the client times\_out  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_Version\_002 |
| **Test Objective** | The IUT silently ignores an incorrectly set version number. |
| **Reference** | RFC7252#section-3  https://tools.ietf.org/html/rfc7252#section-3  RFC7252#section-4.2 (b)  https://tools.ietf.org/html/rfc7252#section-4.2 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
|  | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a request message containing  version indicating value 3, //reserved  msg\_type indicating value 0, //Confirmable  token\_length indicating value 0,  code indicating value 0.00, //Empty Message  msg\_id corresponding to MSG\_ID1;  }  then {  the client times\_out  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_Type\_CON\_001 |
| **Test Objective** | The IUT is acknowledging on a Confirmable message correctly. |
| **Reference** | RFC7252#section-3  https://tools.ietf.org/html/rfc7252#section-3  RFC7252#section-4.2 (a)  https://tools.ietf.org/html/rfc7252#section-4.2 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
|  | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a request message containing  version indicating value 1,  msg\_type indicating value 0, //Confirmable  token\_length indicating value 0,  code indicating value 0.01, //GET request  msg\_id corresponding to MSG\_ID1;  }  then {  the IUT sends a response message containing  version indicating value 1,  msg\_type indicating value 2, //Acknowledge, from section 4.2 (a)  token\_length indicating value 0,  code indicating value 2.05, //Success (Content)  msg\_id corresponding to the value of request message;  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_Type\_CON\_002 |
| **Test Objective** | The IUT is rejecting a Confirmable message that is carrying a response. |
| **Reference** | RFC7252#section-3  https://tools.ietf.org/html/rfc7252#section-3  RFC7252#section-4.2 (b)  https://tools.ietf.org/html/rfc7252#section-4.2 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
|  | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a request message containing  version indicating value 1,  msg\_type indicating value 0, //Confirmable  token\_length indicating value 0,  code indicating value 2.03, //Valid, respnse code  msg\_id corresponding to MSG\_ID1;  }  then {  the IUT sends a response message containing  version indicating value 1,  msg\_type indicating value 3, //Reset  token\_length indicating value 0,  code indicating value 0.00, //Empty Message  msg\_id corresponding to the value of request message;  or the client times\_out  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_Type\_CON\_003 |
| **Test Objective** | The IUT is rejecting a Confirmable message that lacks context to process the message properly. The message carries a reserved class. |
| **Reference** | RFC7252#section-3  https://tools.ietf.org/html/rfc7252#section-3  RFC7252#section-4.2 (b)  https://tools.ietf.org/html/rfc7252#section-4.2 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
|  | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a request message containing  version indicating value 1,  msg\_type indicating value 0, //Confirmable  token\_length indicating value 0,  code indicating value 1.00, //reserved  msg\_id corresponding to MSG\_ID1;  }  then {  the IUT sends a response message containing  version indicating value 1,  msg\_type indicating value 3, //Reset  token\_length indicating value 0,  code indicating value 0.00, //Empty Message  msg\_id corresponding to the value of request message;  or the client times\_out  }  } | |
| **Final Conditions** | |
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| --- | --- |
| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_Type\_NON\_001 |
| **Test Objective** | The IUT is acknowledging on a Non-confirmable message correctly. |
| **Reference** | RFC7252#section-3  https://tools.ietf.org/html/rfc7252#section-3  RFC7252#section-4.3  https://tools.ietf.org/html/rfc7252#section-4.3 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
|  | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a request message containing  version indicating value 1,  msg\_type indicating value 1, //Non-confirmable  token\_length indicating value 0,  code indicating value 0.01, //GET request  msg\_id corresponding to MSG\_ID1;  }  then {  the IUT sends a response message containing  version indicating value 1,  msg\_type indicating value 1, //Non-confirmable  token\_length indicating value 0,  code indicating value 2.05, //Success (Content)  msg\_id corresponding to MSG\_ID2;  }  } | |
| **Final Conditions** | |
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| --- | --- |
| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_Type\_NON\_002 |
| **Test Objective** | The IUT is rejecting a Non-confirmable message that is Empty. |
| **Reference** | RFC7252#section-3  https://tools.ietf.org/html/rfc7252#section-3  RFC7252#section-4.3  https://tools.ietf.org/html/rfc7252#section-4.3 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
|  | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a request message containing  version indicating value 1,  msg\_type indicating value 1, //Non-confirmable  token\_length indicating value 0,  code indicating value 0.00, //Empty Message  msg\_id corresponding to MSG\_ID1;  }  then {  the client times\_out  }  } | |
| **Final Conditions** | |
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| --- | --- |
| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_Type\_NON\_003 |
| **Test Objective** | The IUT is rejecting a Non-confirmable message that is carrying a response. |
| **Reference** | RFC7252#section-3  https://tools.ietf.org/html/rfc7252#section-3  RFC7252#section-4.3  https://tools.ietf.org/html/rfc7252#section-4.3 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
|  | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a request message containing  version indicating value 1,  msg\_type indicating value 1, //Non-confirmable  token\_length indicating value 0,  code indicating value 2.03, //Success (Valid)  msg\_id corresponding to MSG\_ID1;  }  then {  the client times\_out  }  } | |
| **Final Conditions** | |
|  | |

|  |  |
| --- | --- |
| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_Type\_NON\_004 |
| **Test Objective** | The IUT is rejecting a NON-confirmable message that lacks context to process the message properly. The message carries a reserved class. |
| **Reference** | RFC7252#section-3  https://tools.ietf.org/html/rfc7252#section-3  RFC7252#section-4.3  https://tools.ietf.org/html/rfc7252#section-4.3 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
|  | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a request message containing  version indicating value 1,  msg\_type indicating value 0, //Confirmable  token\_length indicating value 0,  code indicating value 6.00, //reserved  msg\_id corresponding to MSG\_ID1;  }  then {  the client times\_out  }  } | |
| **Final Conditions** | |
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|  |  |
| --- | --- |
| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_Type\_ACK\_001 |
| **Test Objective** | The IUT is rejecting an Acknowledgement message that is carrying an request. |
| **Reference** | RFC7252#section-3  https://tools.ietf.org/html/rfc7252#section-3  RFC7252#section-4.2  https://tools.ietf.org/html/rfc7252#section-4.2 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
|  | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a request message containing  version indicating value 1,  msg\_type indicating value 2, //Acknowledgement  token\_length indicating value 0,  code indicating value 0.02, //POST request  msg\_id corresponding to MSG\_ID1;  }  then {  the client times\_out  }  } | |
| **Final Conditions** | |
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| --- | --- |
| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_Type\_ACK\_002 |
| **Test Objective** | The IUT is rejecting a Acknowledgement message that carries a reserved class. |
| **Reference** | RFC7252#section-3  https://tools.ietf.org/html/rfc7252#section-3  RFC7252#section-4.2  https://tools.ietf.org/html/rfc7252#section-4.2 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
|  | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a request message containing  version indicating value 1,  msg\_type indicating value 2, //Acknowledgement  token\_length indicating value 0,  code indicating value 7.00, //reserved  msg\_id corresponding to MSG\_ID1;  }  then {  the client times\_out  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_Type\_RST\_001 |
| **Test Objective** | The IUT is rejecting a Reset message that is not Empty. |
| **Reference** | RFC7252#section-3  https://tools.ietf.org/html/rfc7252#section-3  RFC7252#section-4.2  https://tools.ietf.org/html/rfc7252#section-4.2 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
|  | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a request message containing  version indicating value 1,  msg\_type indicating value 3, //Reset  token\_length indicating value 0,  code indicating value 0.02, //PUT request  msg\_id corresponding to MSG\_ID1;  }  then {  the client times\_out  }  } | |
| **Final Conditions** | |
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| --- | --- |
| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_TokenLength\_001 |
| **Test Objective** | The IUT is responding on a valid token length correctly. |
| **Reference** | RFC7252#section-3  https://tools.ietf.org/html/rfc7252#section-3 |
| **PICS Selection** |  |
| **Initial Conditions** | |
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| **Expected Behaviour** | |
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| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_TokenLength\_002 |
| **Test Objective** | The IUT is responding on a invalid token length correctly. |
| **Reference** | RFC7252#section-3  https://tools.ietf.org/html/rfc7252#section-3 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
|  | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a request message containing  version indicating value 1,  msg\_type indicating value 0, //Confirmable  token\_length indicating value 53,  code indicating value 0.01, //GET request  msg\_id corresponding to MSG\_ID1;  }  then {  the client times\_out  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_TokenLength\_002 |
| **Test Objective** | The IUT is processing a message format error when receiving a reserved token length. |
| **Reference** | RFC7252#section-3  https://tools.ietf.org/html/rfc7252#section-3 |
| **PICS Selection** |  |
| **Initial Conditions** | |
|  | |
| **Expected Behaviour** | |
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| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_Code\_Content |
| **Test Objective** | The IUT is responding with code 2.05 on a GET request. |
| **Reference** | RFC7252#section-5.8.1  https://tools.ietf.org/html/rfc7252#section-5.8.1 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named Simple\_Resource  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_type indicating value 0, /\* CONfirmable \*/  code indicating value 0.01,  uri\_path corresponding to DEFAULT\_RESOURCE;  }  then {  the IUT sends the message containing  msg\_type indicating value 2, /\* ACknowledgement \*/  code indicating value 2.05;  }  } | |
| **Final Conditions** | |
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| --- | --- |
| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_Code\_MethodNotAllowed\_001 |
| **Test Objective** | The IUT is responding with code 4.05 on a GET request. |
| **Reference** | RFC7252#section-5.8.1  https://tools.ietf.org/html/rfc7252#section-5.8.1 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named Simple\_Resource and must not implement the GET operation  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_type indicating value 0, /\* CONfirmable \*/  code indicating value 0.01,  uri\_path corresponding to DEFAULT\_RESOURCE;  }  then {  the IUT sends the message containing  msg\_type indicating value 2, /\* ACknowledgement \*/  code indicating value 4.05;  }  } | |
| **Final Conditions** | |
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| --- | --- |
| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_Code\_MethodNotAllowed\_002 |
| **Test Objective** | The IUT is responding with code 4.05 on a POST request. |
| **Reference** | RFC7252#section-5.8.2  https://tools.ietf.org/html/rfc7252#section-5.8.2 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named Simple\_Resource and must not implement the POST operation  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_type indicating value 0, /\* CONfirmable \*/  code indicating value 0.02,  uri\_path corresponding to DEFAULT\_RESOURCE;  }  then {  the IUT sends the message containing  msg\_type indicating value 2, /\* ACknowledgement \*/  code indicating value 4.05;  }  } | |
| **Final Conditions** | |
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| --- | --- |
| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_Code\_NotFound |
| **Test Objective** | The IUT is responding with code 4.04 on a GET request. |
| **Reference** | RFC7252#section-5.8.1  https://tools.ietf.org/html/rfc7252#section-5.8.1 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must not provide a resource named Simple\_Resource  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_type indicating value 0, /\* CONfirmable \*/  code indicating value 0.01,  uri\_path corresponding to DEFAULT\_RESOURCE;  }  then {  the IUT sends the message containing  msg\_type indicating value 2, /\* ACknowledgement \*/  code indicating value 4.04;  }  } | |
| **Final Conditions** | |
|  | |

|  |  |
| --- | --- |
| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_Code\_Created\_001 |
| **Test Objective** | The IUT is responding with code 2.01 on a POST request. |
| **Reference** | RFC7252#section-5.8.2  https://tools.ietf.org/html/rfc7252#section-5.8.2 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named Storage\_Resource  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_type indicating value 0, /\* CONfirmable \*/  code indicating value 0.02,  uri\_path corresponding to STORAGE\_RESOURCE,  payload indicating value 116 145 167 061 057 116 145 167 062;  }  then {  the IUT sends the message containing  msg\_type indicating value 2, /\* ACknowledgement \*/  code indicating value 2.01,  LocationPath corresponding to SECOND\_LVL\_RESOURCE,  LocationPath corresponding to THIRD\_LVL\_RESOURCE;  }  } | |
| **Final Conditions** | |
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| --- | --- |
| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_Code\_Created\_002 |
| **Test Objective** | The IUT is responding with code 2.01 on a PUT request. |
| **Reference** | RFC7252#section-5.8.3  https://tools.ietf.org/html/rfc7252#section-5.8.3 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named Storage\_Resource  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_type indicating value 0, /\* CONfirmable \*/  code indicating value 0.03,  uri\_path corresponding to STORAGE\_RESOURCE,  payload indicating value 116 145 167 061 057 116 145 167 062;  }  then {  the IUT sends the message containing  msg\_type indicating value 2, /\* ACknowledgement \*/  code indicating value 2.01,  LocationPath corresponding to SECOND\_LVL\_RESOURCE;  }  } | |
| **Final Conditions** | |
|  | |

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| --- | --- |
| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_Code\_Changed\_001 |
| **Test Objective** | The IUT is responding with code 2.04 on a POST request. |
| **Reference** | RFC7252#section-5.8.2  https://tools.ietf.org/html/rfc7252#section-5.8.2 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named Storage\_Resource/New1/New2  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_type indicating value 0, /\* CONfirmable \*/  code indicating value 0.02,  uri\_path corresponding to STORAGE\_RESOURCE,  uri\_path corresponding to SECOND\_LVL\_RESOURCE,  uri\_path corresponding to THIRD\_LVL\_RESOURCE,  payload indicating value 116 145 167 061 057 116 145 167 062;  }  then {  the IUT sends the message containing  msg\_type indicating value 2, /\* ACknowledgement \*/  code indicating value 2.04,  LocationPath corresponding to SECOND\_LVL\_RESOURCE,  LocationPath corresponding to THIRD\_LVL\_RESOURCE;  }  } | |
| **Final Conditions** | |
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| --- | --- |
| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_Code\_Changed\_002 |
| **Test Objective** | The IUT is responding with code 2.04 on a POST request. |
| **Reference** | RFC7252#section-5.8.2  https://tools.ietf.org/html/rfc7252#section-5.8.2 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named Storage\_Resource/New1/New2  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_type indicating value 0, /\* CONfirmable \*/  code indicating value 0.02,  uri\_path corresponding to STORAGE\_RESOURCE,  uri\_path corresponding to SECOND\_LVL\_RESOURCE,  uri\_path corresponding to NEW\_RESOURCE,  payload indicating value 116 145 167 061 057 116 145 167 062;  }  then {  the IUT sends the message containing  msg\_type indicating value 2, /\* ACknowledgement \*/  code indicating value 2.04,  LocationPath corresponding to SECOND\_LVL\_RESOURCE,  LocationPath corresponding to NEW\_RESOURCE;  }  } | |
| **Final Conditions** | |
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| --- | --- |
| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_Code\_Changed\_003 |
| **Test Objective** | The IUT is responding with code 2.04 on a PUT request. |
| **Reference** | RFC7252#section-5.8.3  https://tools.ietf.org/html/rfc7252#section-5.8.3 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named Storage\_Resource/New1  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_type indicating value 0, /\* CONfirmable \*/  code indicating value 0.03,  uri\_path corresponding to STORAGE\_RESOURCE,  uri\_path corresponding to SECOND\_LVL\_RESOURCE;  }  then {  the IUT sends the message containing  msg\_type indicating value 2, /\* ACknowledgement \*/  code indicating value 2.04,  LocationPath corresponding to SECOND\_LVL\_RESOURCE;  }  } | |
| **Final Conditions** | |
|  | |

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| --- | --- |
| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_Code\_Deleted\_001 |
| **Test Objective** | The IUT is responding with code 2.02 on a DELETE request. |
| **Reference** | RFC7252#section-5.8.4  https://tools.ietf.org/html/rfc7252#section-5.8.4 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named Storage\_Resource  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_type indicating value 0, /\* CONfirmable \*/  code indicating value 0.04,  uri\_path corresponding to STORAGE\_RESOURCE;  }  then {  the IUT sends the message containing  msg\_type indicating value 2, /\* ACknowledgement \*/  code indicating value 2.02;  }  } | |
| **Final Conditions** | |
|  | |

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| --- | --- |
| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_Code\_Deleted\_002 |
| **Test Objective** | The IUT is responding with code 2.02 on a DELETE request. |
| **Reference** | RFC7252#section-5.8.4  https://tools.ietf.org/html/rfc7252#section-5.8.4 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must not provide a resource named Storage\_Resource  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_type indicating value 0, /\* CONfirmable \*/  code indicating value 0.04,  uri\_path corresponding to STORAGE\_RESOURCE;  }  then {  the IUT sends the message containing  msg\_type indicating value 2, /\* ACknowledgement \*/  code indicating value 2.02;  }  } | |
| **Final Conditions** | |
|  | |

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| --- | --- |
| **TP Id** | TP\_CoAP\_Server\_Separate\_Response\_GET\_001 |
| **Test Objective** | The IUT is responding with code 2.05 on a GET request. |
| **Reference** | RFC7252#section-5.8.4  https://tools.ietf.org/html/rfc7252#section-5.8.4 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named separate  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_type indicating value 0, /\* CONfirmable \*/  code indicating value 0.01,  uri\_path corresponding to SEPARATE\_RESOURCE;  }  then {  the IUT first sends an empty message and  the IUT sends the second message containing  msg\_type indicating value 0.00, /\* Confirmable \*/  code indicating value 2.01;  and  the client sends an empty message containing  msg\_type indicating value 2.00, /\* Acknowledgement \*/  code indicating value 0.00;  }  } | |
| **Final Conditions** | |
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| --- | --- |
| **TP Id** | TP\_CoAP\_Server\_Separate\_Response\_POST\_001 |
| **Test Objective** | The IUT is responding with Confirmable and code 2.01 on a POST request. |
| **Reference** | RFC7252#section-5.8.2  https://tools.ietf.org/html/rfc7252#section-5.8.4 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named separate  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_type indicating value 0, /\* CONfirmable \*/  code indicating value 0.02,  uri\_path corresponding to SEPARATE\_RESOURCE,  payload indicating value 116 145 167 061 057 116 145 167 062;  }  then {  the IUT first sends an empty message and  the IUT sends the second message containing  msg\_type indicating value 0.00, /\* Confirmable \*/  code indicating value 2.01;  and  the client sends an empty message containing  msg\_type indicating value 2.00, /\* Acknowledgement \*/  code indicating value 0.00;  }  } | |
| **Final Conditions** | |
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| --- | --- |
| **TP Id** | TP\_CoAP\_Server\_Separate\_Response\_POST\_002 |
| **Test Objective** | The IUT is responding with code 2.04 on a GET request. |
| **Reference** | RFC7252#section-5.8.4  https://tools.ietf.org/html/rfc7252#section-5.8.4 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named separate/new1/new2  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_type indicating value 0, /\* CONfirmable \*/  code indicating value 0.02,  uri\_path corresponding to SEPARATE\_RESOURCE,  uri\_path corresponding to SECOND\_LVL\_RESOURCE,  uri\_path corresponding to THIRD\_LVL\_RESOURCE,  payload indicating value 116 145 167 061 057 116 145 167 062;  }  then {  the IUT first sends an empty message and  the IUT sends the second message containing  msg\_type indicating value 0.00, /\* Confirmable \*/  code indicating value 2.04,  Location\_Path corresponding to SECOND\_LVL\_RESOURCE,  Location\_Path corresponding to THIRD\_LVL\_RESOURCE; /\*Try to add two new resources named New1 and New2 which already exist.\*/  and  the client sends an empty message containing  msg\_type indicating value 2.00, /\* Acknowledgement \*/  code indicating value 0.00;  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_Server\_Separate\_Response\_POST\_003 |
| **Test Objective** | The IUT is responding with code 2.04 on a GET request. |
| **Reference** | RFC7252#section-5.8.4  https://tools.ietf.org/html/rfc7252#section-5.8.4 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named separate/new1/new2  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_type indicating value 0, /\* CONfirmable \*/  code indicating value 0.02,  uri\_path corresponding to SEPARATE\_RESOURCE,  uri\_path corresponding to SECOND\_LVL\_RESOURCE,  uri\_path corresponding to NEW\_RESOURCE,  payload indicating value 116 145 167 061 057 116 145 167 062;  }  then {  the IUT first sends an empty message and  the IUT sends the second message containing  msg\_type indicating value 0.00, /\* Confirmable \*/  code indicating value 2.04,  Location\_Path corresponding to SECOND\_LVL\_RESOURCE,  Location\_Path corresponding to NEW\_RESOURCE; /\*Change resource separate/New1/New2 to separate/New1/New1a.\*/  and  the client sends an empty message containing  msg\_type indicating value 2.00, /\* Acknowledgement \*/  code indicating value 0.00;  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_Server\_Separate\_Response\_POST\_004 |
| **Test Objective** | The IUT is responding with code 4.05 on a GET request. |
| **Reference** | RFC7252#section-5.8.4  https://tools.ietf.org/html/rfc7252#section-5.8.4 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named separate and must not implement the POST operation  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_type indicating value 0, /\* CONfirmable \*/  code indicating value 0.02,  uri\_path corresponding to SEPARATE\_RESOURCE;  }  then {  the IUT first sends an empty message and  the IUT sends the second message containing  msg\_type indicating value 0.00, /\* Confirmable \*/  code indicating value 4.05;  and  the client sends an empty message containing  msg\_type indicating value 2.00, /\* Acknowledgement \*/  code indicating value 0.00;  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_Server\_Separate\_Response\_PUT\_001 |
| **Test Objective** | The IUT is responding with code 2.01 on a PUT request. |
| **Reference** | RFC7252#section-5.8.3  https://tools.ietf.org/html/rfc7252#section-5.8.3 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named separate  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_type indicating value 0, /\* CONfirmable \*/  code indicating value 0.03,  uri\_path corresponding to SEPARATE\_RESOURCE,  payload indicating value 116 145 167 061 057;  }  then {  the IUT first sends an empty message and  the IUT sends the second message containing  msg\_type indicating value 0.00, /\* Confirmable \*/  code indicating value 2.01,  Location\_Path corresponding to SECOND\_LVL\_RESOURCE;  and  the client sends an empty message containing  msg\_type indicating value 2.00, /\* Acknowledgement \*/  code indicating value 0.00;  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_Server\_Separate\_Response\_PUT\_002 |
| **Test Objective** | The IUT is responding with code 2.04 on a PUT request. |
| **Reference** | RFC7252#section-5.8.3  https://tools.ietf.org/html/rfc7252#section-5.8.3 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named separate/new1  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_type indicating value 0, /\* CONfirmable \*/  code indicating value 0.03,  uri\_path corresponding to SEPARATE\_RESOURCE,  uri\_path corresponding to SECOND\_LVL\_RESOURCE;  }  then {  the IUT first sends an empty message and  the IUT sends the second message containing  msg\_type indicating value 0.00, /\* Confirmable \*/  code indicating value 2.04; /\*Try to add resource New1 although it already exists \*/  and  the client sends an empty message containing  msg\_type indicating value 2.00, /\* Acknowledgement \*/  code indicating value 0.00;  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_Server\_Separate\_Response\_DELETE\_001 |
| **Test Objective** | The IUT is responding with code 2.02 on a DELETE request. |
| **Reference** | RFC7252#section-5.8.4  https://tools.ietf.org/html/rfc7252#section-5.8.4 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named separate  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_type indicating value 0, /\* CONfirmable \*/  code indicating value 0.04,  uri\_path corresponding to SEPARATE\_RESOURCE;  }  then {  the IUT first sends an empty message and  the IUT sends the second message containing  msg\_type indicating value 0.00, /\* Confirmable \*/  code indicating value 2.02,  Location\_Path corresponding to SECOND\_LVL\_RESOURCE; /\*Delete resource Separate \*/  and  the client sends an empty message containing  msg\_type indicating value 2.00, /\* Acknowledgement \*/  code indicating value 0.00;  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_Server\_Separate\_Response\_DELETE\_002 |
| **Test Objective** | The IUT is responding with code 2.02 on a DELETE request. |
| **Reference** | RFC7252#section-5.8.4  https://tools.ietf.org/html/rfc7252#section-5.8.4 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must not provide a resource named separate  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_type indicating value 0, /\* CONfirmable \*/  code indicating value 0.04,  uri\_path corresponding to SEPARATE\_RESOURCE;  }  then {  the IUT first sends an empty message and  the IUT sends the second message containing  msg\_type indicating value 0.00, /\* Confirmable \*/  code indicating value 2.02,  Location\_Path corresponding to SECOND\_LVL\_RESOURCE; /\*Get Response code 2.02 although the requested resource does not exist\*/  and  the client sends an empty message containing  msg\_type indicating value 2.00, /\* Acknowledgement \*/  code indicating value 0.00;  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_Server\_Options\_UriHost\_001 |
| **Test Objective** | The Uri-Host Option specifies the Internet host of the resource being requested |
| **Reference** | RFC7252#section5.10  https://tools.ietf.org/html/rfc7252#section-5.10 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named coap\_URI  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_option indicating value 0, /\* CONfirmable \*/  code indicating value 0.01,  host corresponding to DEFAULT\_HOST, /\*default eg. [2001:db8::2:1] \*/  port corresponding to DEFAULT\_PORT;  }  then {  the IUT sends the message containing  msg\_type indicating value 2, /\* ACknowledgement \*/  code indicating value 2.05,  content indicating value coap\_URI;  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_Server\_Options\_UriHost\_002 |
| **Test Objective** | The Uri-Host Option specifies the Internet host of the resource being requested |
| **Reference** | RFC7252#section5.10  https://tools.ietf.org/html/rfc7252#section-5.10 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named coap\_URI  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_option indicating value 0, /\* CONfirmable \*/  code indicating value 0.01,  host corresponding to DEFAULT\_HOST, /\*default eg. [2001:db8::2:1] \*/  port corresponding to DEFAULT\_PORT, /\*default eg. 5683 \*/  option\_delta indicating value 3, /\*URI-Host \*/  option\_value indicating value "example.net";  }  then {  the IUT sends the message containing  msg\_type indicating value 2, /\* ACknowledgement \*/  code indicating value 2.05,  content indicating value coap\_URI;  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_Server\_Options\_UriPath\_001 |
| **Test Objective** | The Uri-Path Option specifies one segment of the absolute path to the resource |
| **Reference** | RFC7252#section5.10  https://tools.ietf.org/html/rfc7252#section-5.10 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named coap\_URI  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_option indicating value 0, /\* CONfirmable \*/  code indicating value 0.01,  host corresponding to DEFAULT\_HOST, /\*default eg. [2001:db8::2:1] \*/  port corresponding to DEFAULT\_PORT, /\*default eg. 5683 \*/  option\_delta indicating value 3, /\*URI-Host \*/  option\_value indicating value "example.net",  option\_delta indicating value 8, /\*URI-Path \*/  option\_value indicating value ".well-known",  option\_delta indicating value 3, /\*URI-Path \*/  option\_value indicating value "core";  }  then {  the IUT sends the message containing  msg\_type indicating value 2, /\* ACknowledgement \*/  code indicating value 2.05,  content indicating value coap\_URI;  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_Server\_Options\_UriPath\_002 |
| **Test Objective** | The IUT is responding with code 2.05 on a GET request. |
| **Reference** | RFC7252#section-5.8.1  https://tools.ietf.org/html/rfc7252#section-5.8.1 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named Simple\_Resource/New\_Resource  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_type indicating value 0, /\* CONfirmable \*/  code indicating value 0.01,  uri\_path corresponding to DEFAULT\_RESOURCE,  uri\_path corresponding to NEW\_RESOURCE;  }  then {  the IUT sends the message containing  msg\_type indicating value 2, /\* ACknowledgement \*/  code indicating value 2.05;  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_Server\_Options\_UriQuery\_001 |
| **Test Objective** | The Uri-Query Option specifies one argument parameterizing the resource |
| **Reference** | RFC7252#section5.10  https://tools.ietf.org/html/rfc7252#section-5.10 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named coap\_URI  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_option indicating value 0, /\* CONfirmable \*/  code indicating value 0.01,  host corresponding to DEFAULT\_HOST, /\*default eg. [2001:db8::2:1] \*/  port corresponding to DEFAULT\_PORT, /\*default eg. 5683 \*/  option\_delta indicating value 11, /\*URI-Path \*/  option\_value indicating value "",  option\_delta indicating value 0, /\*URI-Path \*/  option\_value indicating value "/",  option\_delta indicating value 11, /\*URI-Path \*/  option\_value indicating value "",  option\_delta indicating value 0, /\*URI-Path \*/  option\_value indicating value "",  option\_delta indicating value 15, /\*URI-Query \*/  option\_value indicating value "//",  option\_delta indicating value 0, /\*URI-Query \*/  option\_value indicating value "?&";  }  then {  the IUT sends the message containing  msg\_type indicating value 2, /\* ACknowledgement \*/  code indicating value 2.05,  content indicating value coap\_URI;  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_Server\_Options\_ProxyUri\_001 |
| **Test Objective** | The Proxy-Uri Option is used to make a request to a forward-proxy |
| **Reference** | RFC7252#section5.10  https://tools.ietf.org/html/rfc7252#section-5.10 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named coap\_URI  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_option indicating value 0, /\* CONfirmable \*/  code indicating value 0.01,  proxy\_uri corresponding to PROXY\_URI;  }  then {  the IUT sends the message containing  msg\_type indicating value 2, /\* ACknowledgement \*/  code indicating value 2.05;  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_Server\_Options\_ProxyUri\_002 |
| **Test Objective** | The Proxy-Uri Option MUST take precedence over any of the Uri-Host, Uri-Port, Uri-Path or Uri-Query options |
| **Reference** | RFC7252#section5.10  https://tools.ietf.org/html/rfc7252#section-5.10 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named coap\_URI  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_option indicating value 0, /\* CONfirmable \*/  code indicating value 0.01,  proxy\_uri corresponding to PROXY\_URI,  uri\_host corresponding to URI\_HOST;  }  then {  the IUT sends the message containing  msg\_type indicating value 2, /\* ACknowledgement \*/  code indicating value 4.05;  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_Server\_Options\_ContentFormat\_001 |
| **Test Objective** | The Content-Format Option indicates the representation format of the message payload |
| **Reference** | RFC7252#section5.10  https://tools.ietf.org/html/rfc7252#section-5.10 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named coap\_URI  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_option indicating value 0, /\* CONfirmable \*/  code indicating value 0.01,  content\_format indicating value content\_formats\_id,  payload indicating value 116 145 167 061 057 116 145 167 062;  }  then {  the IUT sends the message containing  msg\_type indicating value 2, /\* ACknowledgement \*/  code indicating value 2.03;  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_Server\_Options\_ContentFormat\_002 |
| **Test Objective** | The Content-Format Option indicates the representation format of the message payload, in the absence of the option, no default value is assumed, i.e., the representation format of any representation message payload is indeterminate |
| **Reference** | RFC7252#section5.10  https://tools.ietf.org/html/rfc7252#section-5.10 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named coap\_URI  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_option indicating value 0, /\* CONfirmable \*/  code indicating value 0.01,  payload indicating value 116 145 167 061 057 116 145 167 062;  }  then {  the IUT sends the message containing  msg\_type indicating value 2, /\* ACknowledgement \*/  code indicating value 4.06;  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_Server\_Options\_ContentAccept\_001 |
| **Test Objective** | The CoAP Accept option can be used to indicate which Content-Format is acceptable to the client |
| **Reference** | RFC7252#section5.10  https://tools.ietf.org/html/rfc7252#section-5.10 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named coap\_URI  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_option indicating value 0, /\* CONfirmable \*/  code indicating value 0.01,  content\_format indicating value content\_formats\_id,  accept indicating value content\_formats\_id;  }  then {  the IUT sends the message containing  msg\_type indicating value 2, /\* ACknowledgement \*/  code indicating value 2.03;  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_Server\_Options\_ContentAccept\_\_002 |
| **Test Objective** | The CoAP Accept option can be used to indicate which Content-Format is acceptable to the client, If the preferred Content- Format cannot be returned, then a 4.06 MUST be sent as a response, unless another error code takes precedence for this response. |
| **Reference** | RFC7252#section5.10  https://tools.ietf.org/html/rfc7252#section-5.10 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
| with {  the IUT must provide a resource named coap\_URI  } | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_option indicating value 0, /\* CONfirmable \*/  code indicating value 0.01,  content\_format indicating value content\_formats\_id,  accept indicating value content\_formats\_id;  }  then {  the IUT sends the message containing  msg\_type indicating value 2, /\* ACknowledgement \*/  code indicating value 4.06;  }  } | |
| **Final Conditions** | |
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