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| --- | --- |
| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_001 |
| **Test Objective** | The IUT ignores a correct CoAP ReSeT message, including correct version number, type, token length , code and message id. |
| **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 message containing  version indicating value 1, /\* 01 in binary \*/  msg\_type indicating value 3, /\* ReSeT \*/  token\_length indicating value 0,  code indicating value 0.00, /\* EMPTY \*/  token indicating value 0;  }  then {  the client times\_out  }  } | |
| **Final Conditions** | |
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| --- | --- |
| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_002 |
| **Test Objective** | The IUT ignores on an incorrect CoAP message header. The version number, a 2-bit unsigned integer, is set to the reserved value 3. |
| **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 message containing  version indicating value 3,  msg\_type indicating value 0, /\* CONfirmable \*/  token\_length indicating value 0,  code indicating value 0.00, /\* EMPTY \*/  token indicating value 0;  }  then {  the client times\_out  }  } | |
| **Final Conditions** | |
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| --- | --- |
| **TP Id** | TP\_CoAP\_MessageFormat\_Header\_003 |
| **Test Objective** | The IUT ignores on an incorrect CoAP message header. The token length, a 4-bit unsigned integer, is set to 9 and must processed as message format error. |
| **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 message containing  version indicating value 1,  msg\_type indicating value 0, /\* CONfirmable \*/  token\_length indicating value 9, /\* reserved \*/  code indicating value 0.00, /\* EMPTY \*/  token indicating value 0;  }  then {  the IUT sends no message and  the client times\_out  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_Server\_001 |
| **Test Objective** | The IUT is responding on a PING message. |
| **Reference** | RFC7252#section4.2  https://tools.ietf.org/html/rfc7252#section-4.2 |
| **PICS Selection** | PIC\_Server |
| **Initial Conditions** | |
|  | |
| **Expected Behaviour** | |
| ensure that {  when {  the IUT receives a message containing  msg\_type indicating value 0, /\* CONfirmable \*/  code indicating value 0.00;  }  then {  the IUT sends the message containing  msg\_type indicating value 3;  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_Server\_GET\_001 |
| **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 indicating value "Simple\_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\_GET\_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 indicating value "Simple\_Resource",  uri\_path indicating value "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\_GET\_003 |
| **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 indicating value "Simple\_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\_Server\_GET\_004 |
| **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 indicating value "Simple\_Resource";  }  then {  the IUT sends the message containing  msg\_type indicating value 2, /\* ACknowledgement \*/  code indicating value 4.04;  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_Server\_POST\_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 indicating value "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 indicating value "New1",  LocationPath indicating value "New2";  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_Server\_POST\_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 indicating value "Storage\_Resource",  uri\_path indicating value "New1",  uri\_path indicating value "New2",  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 indicating value "New1",  LocationPath indicating value "New2";  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_Server\_POST\_003 |
| **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 indicating value "Storage\_Resource",  uri\_path indicating value "New1",  uri\_path indicating value "New1a",  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 indicating value "New1",  LocationPath indicating value "New1a";  }  } | |
| **Final Conditions** | |
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| --- | --- |
| **TP Id** | TP\_CoAP\_Server\_POST\_004 |
| **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 indicating value "Simple\_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\_Server\_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 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 indicating value "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 indicating value "New1";  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_Server\_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 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 indicating value "Storage\_Resource",  uri\_path indicating value "New1";  }  then {  the IUT sends the message containing  msg\_type indicating value 2, /\* ACknowledgement \*/  code indicating value 2.04,  LocationPath indicating value "New1";  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_Server\_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 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 indicating value "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\_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 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 indicating value "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\_NON\_001 |
| **Test Objective** | The IUT is responding with code 2.05 on a NON-confirmable GET request. |
| **Reference** | RFC7252#section-5.2.3  https://tools.ietf.org/html/rfc7252#section-5.2.3 |
| **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 1, /\* NON-confirmable \*/  code indicating value 0.01,  uri\_path indicating value "Simple\_Resource";  }  then {  the IUT sends the message containing  msg\_type indicating value 1, /\* NON-confirmable \*/  code indicating value 2.05;  }  } | |
| **Final Conditions** | |
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| --- | --- |
| **TP Id** | TP\_CoAP\_Server\_NON\_002 |
| **Test Objective** | The IUT is responding with code 2.01 on a NON-confirmable POST request. |
| **Reference** | RFC7252#section-5.2.3  https://tools.ietf.org/html/rfc7252#section-5.2.3 |
| **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 1, /\* NON-confirmable \*/  code indicating value 0.02,  uri\_path indicating value "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 1, /\* NON-confirmable \*/  code indicating value 2.01,  LocationPath indicating value "New1",  LocationPath indicating value "New2";  }  } | |
| **Final Conditions** | |
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| **TP Id** | TP\_CoAP\_Server\_NON\_003 |
| **Test Objective** | The IUT is responding with code 2.01 on a NON-confirmable PUT request. |
| **Reference** | RFC7252#section-5.2.3  https://tools.ietf.org/html/rfc7252#section-5.2.3 |
| **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 1, /\* NON-confirmable \*/  code indicating value 0.03,  uri\_path indicating value "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 1, /\* NON-confirmable \*/  code indicating value 2.01,  LocationPath indicating value "New1";  }  } | |
| **Final Conditions** | |
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| --- | --- |
| **TP Id** | TP\_CoAP\_Server\_NON\_004 |
| **Test Objective** | The IUT is responding with code 2.02 on a DELETE request. |
| **Reference** | RFC7252#section-5.2.3  https://tools.ietf.org/html/rfc7252#section-5.2.3 |
| **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 1, /\* NON-confirmable \*/  code indicating value 0.04,  uri\_path indicating value "Storage\_Resource";  }  then {  the IUT sends the message containing  msg\_type indicating value 1, /\* NON-confirmable \*/  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 indicating value "separate";  }  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 indicating value "separate",  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 indicating value "separate",  uri\_path indicating value "new1",  uri\_path indicating value "new2",  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 indicating value "new1",  Location\_Path indicating value "new2"; /\*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 indicating value "separate",  uri\_path indicating value "new1",  uri\_path indicating value "new1a",  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 indicating value "new1",  Location\_Path indicating value "new1a"; /\*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 indicating value "separate";  }  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 indicating value "separate",  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 indicating value "New1";  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 indicating value "separate",  uri\_path indicating value "new1";  }  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 indicating value "separate";  }  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 indicating value "new1"; /\*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 indicating value "separate";  }  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 indicating value "new1"; /\*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\_Options\_Coap\_Uri |
| **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 indicating value "IP Literal", /\*default eg. [2001:db8::2:1] \*/  port indicating value "destination UDP 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\_Options\_Uri\_Host |
| **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 indicating value "IP Literal", /\*default eg. [2001:db8::2:1] \*/  port indicating value "destination UDP 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\_Options\_Uri\_Path |
| **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 indicating value "IP Literal", /\*default eg. [2001:db8::2:1] \*/  port indicating value "destination UDP 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\_Options\_Uri\_Query |
| **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 indicating value "IP Literal", /\*default eg. [2001:db8::2:1] \*/  port indicating value "destination UDP 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\_Options\_Proxy\_Uri |
| **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 indicating value "sample\_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\_Options\_Proxy\_Uri\_Fail |
| **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 indicating value "sample\_proxy\_uri",  uri\_host indicating value "sample\_uri";  }  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\_Options\_Content\_Format |
| **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\_Options\_Content\_Format\_Fail |
| **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\_Options\_Content\_Accept |
| **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\_Options\_Content\_Accept\_Fail |
| **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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