Test description

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| **Test ID** | MIP4SLT3SF\_3112 |
| **Test Title** | Filter by Topic - data leaving. |
| **Execution Priority** | 1 |
| **Objective** | Evaluate the behaviour associated with Filtering. Assess the impact of data 'leaving the filter' by Topic. |
| **Scenario** | A Consumer is subscribed to part of the Topic list of the Producer. Several BSOs within this subscription will be updated ‘leaving the filter' at the Producer.  Given the initial set of MIP4 Topics, the easiest way to test a BSO leaving a Topic filter, is by means of changing its Type or Hostility elements to values that do not match its filters anymore, without changing any other of its elements or attributes.  Care must be taken about filtering on an attribute that is dynamic. |
| **Environment** | Internet, co-located. Exchange Pattern: P/S, R/R. |
| **Participation** | 2 |
| **MTRS** |  |
| **Pre-test Conditions** | 31001 - Filter by Topic test case, 3901 - The Type of the object changes. |
| **Test Inputs** | N/A |
| **Conclusion** | Even though the Consumer may specify a Filter, it remains the responsibility of the Provider to determine how best to satisfy the request, which should be considered a ‘best effort’ requirement.  The Consumer must accept the fact that some updates may continue to be received for BSOs that leave the Topic Filter. If the Provider implements logic to stop sending updates when a BSO leaves the Topic Filter, the Consumer will not receive any special notification – it is its (system) responsibility to detect when BSO topic updates have gone stale and should be removed from the current operational picture shown on its C2IS.  Consequently, the conclusion of this test is just to evaluate the behaviour associated with Filtering, assessing the impact of data 'leaving the filter' by Topic. |
| **Test Outputs** | N/A |
| **Traceability** | REQ\_SYS\_0021 |

Test Procedure

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| --- | --- | --- | --- | --- |
| Step | Action | Expected Result | Src | Dst |
|  | The Producer inserts BSOs in its C2IS, within the Topic list to which the Consumer is subscribed. ~~ | The insertions are automatically received at the Consumer, which is able to incorporate them to the current operational picture shown on its C2IS. ~~ | 1 | 2 |
|  | Change some BSOs Type or Hostility elements to any that make them fall out of the consumer’s subscriptions, at the producer. Rest of these BSOs’ attributes and elements will stay unchanged. Obtain them on the consumer.  Allow some reasonable time, to let the Consumer detect when BSO topic updates have gone stale and act consequently. ~~ | It remains the responsibility of the Provider to determine how best to satisfy the Consumer’s Filter specification request.  The not filtered out insertions are automatically received at the Consumer, which is able to incorporate them to the current operational picture shown on its C2IS.  The Filtering behaviour will be evaluated on both Producer and Consumer sides. ~~ | 1 | 2 |
|  | Producer and Consumer rotate roles and conduct Step 1 again. ~~ | As steps 1 and 2. ~~ | 2 | 1 |

**Configuration**

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| Item | Value | Comment |
| EventGeneration | 1 | 0 🡪 Combine steps to one event in the MTMT, generate new MTMT events on every source - destination change. 1 🡪 Every step will be added to the MTMT as a separate event. |