Test description

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| **Test ID** | MIP4SLT3SF\_3713 |
| **Test Title** | Discriminator across topics. |
| **Execution Priority** | 1 |
| **Objective** | Assess how systems handle BSOs across Topics with common Source and URI (attributes ‘source’ and ‘uri’), but different Discriminator (attribute ‘discriminator’) values. |
| **Scenario** | The MIP4 specification will need to support multiple concurrent perspectives of the same ‘real-world’ object, even coming from the same source. These perspectives may additionally belong in different Topics.  The ‘discriminator’ attribute is then used to indicate that the Producer wants to share information about a BSO, but corresponding to different states.  The Consumer is subscribed to at least two Topics of the Producer.  Insertions for one or more BSOs will be published and updated sharing ‘source’ and ‘uri’ attributes but with different ‘discriminator’, different values in other attributes (‘Lat’ and ‘Lon’ for its position, for instance) and also belonging in different topics. |
| **Environment** | Internet, co-located.  C2ISs have to receive information exchange from Producers regarding selected information that they are concerning about.  Exchange Pattern: P/S (simpler), R/R |
| **Participation** | 2. |
| **MTRS** |  |
| **Pre-test Conditions** | 3.7 Information Scope (Topics) previous test cases.  Appropriate active subscriptions with at least two Topics must be in place. |
| **Test Inputs** | N/A |
| **Conclusion** | This test will show that a recipient C2IS will always be able to identify to which of concurrent perspectives of the same ‘real-world’ object, the information received for it belongs, even if it is produced in different topics. |
| **Test Outputs** | N/A |
| **Traceability** | REQ\_SYS\_0020, REQ\_SYS\_0021 |

Test Procedure

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| Step | Action | Expected Result | Src | Dst |
|  | The Producer inserts one or more BSOs in its C2IS, sharing ‘source’ and ‘uri’ attributes but with different ‘discriminator’ and different values in other attributes (‘Lat’ and ‘Lon’ for their positions, for instance). Additionally, they will belong in different topics (usually indicated by different ‘Type’ or ‘Hostility’ elements) within the Topic list to which the Consumer is subscribed.  **Note:** These steps have been written for the P/S case, but they can also be modified to be carried out via the R/R exchange pattern. ~~ | The insertions are automatically received at the Consumer.  The Consumer is able to identify multiple concurrent perspectives of the same ‘real-world’ object, even coming from the same source and different topics and process them accordingly to its C2IS. ~~ | 1 | 2 |
|  | The Producer updates some attributes of the BSOs within various perspectives and topics created at step 1. ~~ | The updates are automatically received at the Consumer.  The Consumer is able to process them accordingly to its C2IS. ~~ | 1 | 2 |
|  | Consumer and Producer rotate roles. ~~ | Repeat 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. |