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| --- | --- | --- | --- | --- | --- | --- | --- |
| *TEST CASE DESCRIPTION* | | | | | | | |
|  | | Code | Version | | Title | | |
| Test Case | | 3.32.3 | 2 | | Key modification | | |
|
| Baseline applicable | | Baseline 3 | | | | | |
| Test case author | | ADIF | | | | | |
| Test Objective(s) | | Verify the correct KMAC key modification in the RBC and in the EVC. | | | | | |
| Diagram | |  | | | | | |
| Starting conditions | | Level | | | | 2 | |
| Mode | | | | SB | |
| Train Speed (km/h) | | | | 0 | |
| Additional starting conditions | | | | Case 1: The RU has its own KMC:  There is an operative KMAC key already installed in the RBC and the EVC for the authentication between them.  A Key deletion archive of the KMAC key for both, the RBC and the EVC is generated by the KMC-1 (IM), and the one corresponding to the RU has been transmitted to the KMC-2 (RU).  A key installation archive of a new key for one of the equipment (RBC or EVC), and the key installation archive for the other one are available, both of them have been generated by the KMC-1 (IM) and the one corresponding to the RU has been transmitted to the KMC-2 (RU).  Case 2: The EVC belongs to the KMC(IM) domain:  There is an operative KMAC key already installed in the RBC and the EVC for the authentication between them.  A Key deletion archive of the KMAC key for both, the RBC and the EVC is generated by the KMC(IM).  A key installation archive of a new key for one of the equipment (RBC or EVC), and the key installation archive for the other one is available, both have been generated by the KMC(IM). | |
| Sequence of the Test Case | | Checkpoints | | | | | |
| Step | Step description | Interfaces | | Description of what to be tested at the interface | | | OK? |
| 1 | The EVC establishes a communication session with the RBC. | DMI (O) | | Safe radio connection “Connection Up” symbol | | |  |
| DMI (I) | |  | | |  |
| JRU | | Message 155  Message 32  Message 159  Message 129  Message 8  DMI\_SYMB\_STATUS  ST03 | | |  |
| 2 | “Start” is selected. | DMI (O) | |  | | |  |
| DMI (I) | | “Start” selection | | |  |
| JRU | | M\_DRIVERACTION = 19  Message 132  Packet 0/1 | | |  |
| 3 | The RBC sends a movement authority to run in SR. | DMI (O) | |  | | |  |
| DMI (I) | |  | | |  |
| JRU | | Message 2 | | |  |
| 4 | The driver acknowledges SR mode. | DMI (O) | | SR Symbol | | |  |
| DMI (I) | | Acknowledgement of SR | | |  |
| JRU | | M\_DRIVERACTION=3 | | |  |
| M\_MODE =2  DMI\_SYMB\_STATUS  MO09 | | |
| 5 | The new key is updated in one of the equipment RBC or EVC (equipment 1) by means of a process of deletion and installation. The EVC tries to establish a communication session with the RBC. | DMI (O) | | SB Symbol | | |  |
| DMI (I) | |  | | |  |
| JRU | | DMI\_SYMB\_STATUS  MO13 | | |  |
| 6 | The DMI displays a connection failure with the RBC. | DMI (O) | | Safe radio connection “Connection Lost/Set-Up failed” symbol | | |  |
| DMI (I) | |  | | |  |
| JRU | | DMI\_SYMB\_STATUS  ST04 | | |  |
| 7 | The KMAC key in the equipment 2 is updated (deletion & installation). A start of mission is performed again. The EVC establishes a communication session with the RBC. | DMI (O) | | Safe radio connection “Connection Up” symbol | | |  |
| DMI (I) | |  | | |  |
| JRU | | Message 155  Message 32  Message 159  Message 129  Message 8  DMI\_SYMB\_STATUS  ST03 | | |  |
| 8 | “Start” is selected. | DMI (O) | |  | | |  |
| DMI (I) | | “Start” selection | | |  |
| JRU | | M\_DRIVERACTION = 19  Message 132  Packet 0/1 | | |  |
| 9 | The RBC sends a movement authority to run in SR. | DMI (O) | |  | | |  |
| DMI (I) | |  | | |  |
| JRU | | Message 2 | | |  |
| 10 | The driver acknowledges SR mode. | DMI (O) | | SR Symbol | | |  |
| DMI (I) | | Acknowledgement of SR | | |  |
| JRU | | M\_DRIVERACTION=3 | | |  |
| M\_MODE =2  DMI\_SYMB\_STATUS  MO09 | | |
| Final state | | Level | | 2 | | |  |
| Mode | | SR | | |  |
| Train Speed (km/h) | | 0 | | |  |
| Other parameters | |  | | |  |
| Final Test Result | |  | | | | | |
| Field of Application | | Spain | | | | | |
| Briefing instructions | |  | | | | | |