NRF Test

The Network Repository Function (NRF) is a 5G SA Core Network element responsible for registering Core Network Functions (NF) (AMF, SMF etc.) and allowing discovery of these registered network functions.

The NRF supports the following functions:

- Maintains the profiles of the available NF instances and their supported services in the 5G core network
- Allows other NF instances to subscribe to the registration of new NF of a given type
- Supports service discovery from NF looking for available NFs fulfilling certain criteria
- Allows NF instances to track the status of other NF instances
**NRF Procedures**

TeraVM NRF wraparound test supports the following test procedures:

- **Register NF instance request**: Allows an NF instance to register its NF profile in the NRF along with the list of services provided by the NF instance
- **Register NF instance accept**: NRF responds to requesting NF with acceptance of the registration request
- **Register NF instance reject**: NRF responds to requesting NF with rejection of the registration request including the reject reason
- **NRF Heartbeat request**: Enables NRF to check if a NF is functioning normally
- **NRF Heartbeat accept**: Successful response from a NF indicating it is functioning normally
- **NRF Heartbeat reject**: Unsuccessful response from a NF indicating it is not functioning normally
- **NF Discovery**: NF instances request the NRF for any NFs fulfilling a certain criteria

**Example Test Case**

**Register NF instance request** (NRF_register_req):

An NF (e.g. AMF) registers its function and capabilities in the NRF by sending the procedure NRF_register_req. The NRF marks the requesting NF as available to be discovered by other NFs and responds to the requesting NF.

**Order Codes**

NRF wraparound test is available with the following product codes:

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<th>Part Number</th>
<th>Description</th>
<th>Capacity</th>
<th>Support</th>
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<tbody>
<tr>
<td>TVM3000</td>
<td>Dell Server for Core Test</td>
<td>—</td>
<td>HWSUP PPG15</td>
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<td>TVM3198</td>
<td>NRF wraparound test</td>
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