

Diameter, Configure Realm Routing Table

OPERATING INSTRUCTIONS

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Contents

1	Description	1
2	Procedure	1
2.1	Configure Realm Routing Table using CLI	1
2.2	Configure Realm Routing Table using NETCONF	5





1 Description

This instruction describes how to configure a Realm Routing Table (RRT) in the Diameter application for the following:

- Authorization and Authentication Application Routing
- Accounting Application Routing

The RRT contains routing information, which is used to decide how to process the incoming requests from a particular Diameter application.

The RRT must be configured for the following traffic cases:

- When outgoing messages are sent to the realm
- When the destination host is not specified
- When the destination host is specified, but not present in peer table, that is, among the configured neighbor peers

2 Procedure

Prerequisites

- No documents are required.
- No tools are required.
- The following conditions must apply:
 - For configuration of Authorization and Authentication Application Routing, the appropriate routing information is known.
 - For configuration of Accounting Application Routing, the appropriate routing information is known.

2.1 Configure Realm Routing Table using CLI

Prerequisites

- An Ericsson Command-Line Interface (ECLI) session in Exec mode is in progress.

Steps



1. Navigate to the `DIA-CFG-RoutingContainer` Managed Object (MO), for example:

```
>dn ManagedElement=NODE06ST,XYZFunction=xyz,DIA-CFG-Application=DIA,DIA-CFG-StackContainer=abc,DIA-CFG-RoutingContainer=abc
```

2. Enter Config mode:

```
(DIA-CFG-RoutingContainer=abc)>configure
```

3. Create a `DIA-CFG-Drt` MO, for example:

```
(config-DIA-CFG-RoutingContainer=abc)>DIA-CFG-Drt=ericsson.com:abc:FALSE
```

4. Commit the settings:

```
(config-DIA-CFG-Drt=ericsson.com:abc:FALSE)>commit
```

5. Navigate to the `DIA-CFG-RoutingContainer` MO:

```
(DIA-CFG-Drt=ericsson.com:abc:FALSE)>up
```

6. Show the settings:

```
(DIA-CFG-RoutingContainer=abc)>show DIA-CFG-Drt=ericsson.com:abc:FALSE
```

The following is an example output:

```
DIA-CFG-Drt=ericsson.com:abc:FALSE
DIA-CFG-AccReqContainer=accReqContainerName
DIA-CFG-AuthReqContainer=authReqContainerName
```

7. Is it required to configure Accounting Application Routing?

- Yes: Continue with the next step.
- No: Proceed with Step 17.

8. Navigate to the `DIA-CFG-AccReqContainer` MO, for example:

```
(DIA-CFG-RoutingContainer=abc)>dn ManagedElement=NODE06ST,XYZFunction=xyz,DIA-CFG-Application=DIA,DIA-CFG-StackContainer=abc,DIA-CFG-RoutingContainer=abc,DIA-CFG-Drt=ericsson.com:abc:FALSE,DIA-CFG-AccReqContainer=accReqContainerName
```

9. Enter Config mode:

```
(DIA-CFG-AccReqContainer=accReqContainerName)>configure
```

10. Create a `DIA-CFG-AppRouting` MO, for example:



```
(config-DIA-CFG-AccReqContainer=accReqContainerName)>DIA-CFG-AppRouting=0:8
```

11. Set the `action` attribute, for example:

```
(config-DIA-CFG-AppRouting=0:8)>action=4
```

12. Set the `nodeIds` attribute, for example:

```
(config-DIA-CFG-AppRouting=0:8)>nodeIds="0:node12.ericsson.com#abc"
```

13. Set the optional attributes, as needed:

- `autoFailback`
- `secondaryNodeIds`

14. Commit the settings:

```
(config-DIA-CFG-AppRouting=0:8)>commit
```

15. Verify the settings:

```
(DIA-CFG-AppRouting=0:8)>show
```

The following is an example output:

```
DIA-CFG-AppRouting=0:8
  action="4"
  nodeIds
    "0:node12.ericsson.com#abc"
  secFailoverActive=false
```

16. Is it required to configure the Authorization and Authentication Application Routing?

- Yes: Continue with the next step.
- No: Proceed with Step 25.

17. Navigate to the `DIA-CFG-AuthReqContainer` MO:

```
>dn ManagedElement=NODE06ST,XYZFunction=xyz,DIA-CFG-Application=DIA,DIA-CFG-StackContainer=abc,DIA-CFG-RoutingContainer=abc,DIA-CFG-Drt=ericsson.com:abc:FALSE,DIA-CFG-AuthReqContainer=authReqContainerName
```

18. Enter Config mode:

```
(DIA-CFG-AuthReqContainer=authReqContainerName)>configure
```

19. Create a `DIA-CFG-AppRouting` MO, for example:



```
(config-DIA-CFG-AuthReqContainer=authReqContainerName)>DIA-CFG-AppRouting=0:8
```

20. Set the action attribute, for example:

```
(config-DIA-CFG-AppRouting=0:8)>action=4
```

21. Set the nodeIds attribute, for example:

```
(config-DIA-CFG-AppRouting=0:8)>nodeIds="0:node12.ericsson.com#abc"
```

22. Set the optional attributes, as needed:

- autoFailback
- secondaryNodeIds

23. Commit the settings:

```
(config-DIA-CFG-AppRouting=0:8)>commit
```

24. Verify the settings:

```
(DIA-CFG-AppRouting=0:8)>show
```

The following is an example output:

```
DIA-CFG-AppRouting=0:8
  action="4"
  nodeIds
    "0:node12.ericsson.com#abc"
  secFailoverActive=false
```

25. Navigate to the relevant DIA-CFG-RoutingContainer MO, for example:

```
>dn ManagedElement=NODE06ST,XYZFunction=xyz,DIA-CFG-Application=DIA,DIA-CFG-StackContainer=abc,DIA-CFG-RoutingContainer=abc
```

26. Verify the settings:

```
(DIA-CFG-RoutingContainer=abc)>show -r
```

The following is an example output:



```

DIA-CFG-RoutingContainer=abc
routingContainerName="routingContainerName"
DIA-CFG-Drt=ericsson.com:abc:FALSE
DIA-CFG-AccReqContainer=accReqContainerName
DIA-CFG-AppRouting=0:8
action="4"
nodeIds
"0:node12.ericsson.com#abc"
secFailoverActive=false
DIA-CFG-AuthReqContainer=authReqContainerName
DIA-CFG-AppRouting=0:8
action="4"
nodeIds
"0:node12.ericsson.com#abc"
secFailoverActive=false

```

2.2 Configure Realm Routing Table using NETCONF

1. Prepare an XML file according to the following template to add an Entry in RRT:

```

<?xml version="1.0" encoding="UTF-8"?>
<hello xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <capabilities>
    <capability>urn:ietf:params:netconf:base:1.0</capability>
  </capabilities>
</hello>]]>]]>
<rpc message-id="100" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <edit-config>
    <target><running/></target>
    <config>
      <ManagedElement xmlns="urn:com:ericsson:ecim:ComTop">
        <managedElementId>1</managedElementId>
        <XYZFunctionBranch>
          <DIA-CFG-Application xmlns="urn:com:ericsson:ecim:dia_mim">
            <applicationName>DIA</applicationName>
            <DIA-CFG-StackContainer>
              <stackContainerId><applStackId></stackContainerId>
              <DIA-CFG-RoutingContainer>
                <routingContainerId><applStackId></routingContainerId>
                <DIA-CFG-Drt operation="create">
                  <entryId><entryId></entryId>
                </DIA-CFG-Drt>
              </DIA-CFG-RoutingContainer>
            </DIA-CFG-StackContainer>
          </DIA-CFG-Application>
        </XYZFunctionBranch>
      </ManagedElement>
    </config>
  </edit-config>
</rpc>]]>]]>
<?xml version="1.0" encoding="UTF-8"?>
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <close-session/>
</rpc>]]>]]>

```

Note: The XYZFunctionBranch part can be composed of many elements, depending on where the Diameter subtree is connected in the managed element structure. In the example below, we assume that the parent MOs are already created and the XYZFunctionBranch is empty.



Example to add Entry in RRT using NETCONF

```
<?xml version="1.0" encoding="UTF-8"?>
<hello xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <capabilities>
    <capability>urn:ietf:params:netconf:base:1.0</capability>
  </capabilities>
</hello>]]>]]>
<rpc message-id="100" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
<edit-config>
  <target><running/></target>
  <config>
    <ManagedElement xmlns="urn:com:ericsson:ecim:ComTop">
      <managedElementId>1</managedElementId>
      <DIA-CFG-Application xmlns="urn:com:ericsson:ecim:dia_mim">
        <applicationName>DIA</applicationName>
        <DIA-CFG-StackContainer>
          <stackContainerId>TST_SRV</stackContainerId>
          <DIA-CFG-RoutingContainer>
            <routingContainerId>TST_SRV</routingContainerId>
            <DIA-CFG-Drt operation="create">
              <entryId>realm.com:TST_SRV:TRUE</entryId>
            </DIA-CFG-Drt>
          </DIA-CFG-RoutingContainer>
        </DIA-CFG-StackContainer>
      </DIA-CFG-Application>
    </ManagedElement>
  </config>
</edit-config>
</rpc>]]>]]>
<?xml version="1.0" encoding="UTF-8"?>
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
<close-session/>
</rpc>]]>]]>
```

2. Pass the prepared XML file to shell:

```
ssh -p 830 <user_name>@<node_vip_address> -s -t =>
netconf < <xml_file>
```

<xml_file> refers to the XML file name.

3. Prepare an XML file according to the following template to add Routing to the RRT Entry:

To add a routing for an Authorization and Authentication Application:



```
<?xml version="1.0" encoding="UTF-8"?>
<hello xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <capabilities>
    <capability>urn:ietf:params:netconf:base:1.0</capability>
  </capabilities>
</hello>]]>]]>
<rpc message-id="100" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <edit-config>
    <target><running/></target>
    <config>
      <ManagedElement xmlns="urn:com:ericsson:ecim:ComTop">
        <managedElementId>1</managedElementId>
        <XYZFunctionBranch>
          <DIA-CFG-Application xmlns="urn:com:ericsson:ecim:dia_mim">
            <applicationName>DIA</applicationName>
            <DIA-CFG-StackContainer>
              <stackContainerId><applStackId></stackContainerId>
              <DIA-CFG-RoutingContainer>
                <routingContainerId><applStackId></routingContainerId>
                <DIA-CFG-Drt>
                  <entryId><entryId></entryId>
                  <DIA-CFG-AuthReqContainer>
                    <authReqContainerName>authReqContainerName</authReqContainerName>
                    <DIA-CFG-AppRouting operation="create">
                      <requestedApp><routingId></requestedApp>
                      <action><action></action>
                      <nodeIds><nodeIds></nodeIds>
                    </DIA-CFG-AppRouting>
                  </DIA-CFG-AuthReqContainer>
                </DIA-CFG-Drt>
              </DIA-CFG-RoutingContainer>
            </DIA-CFG-StackContainer>
          </DIA-CFG-Application>
        </XYZFunctionBranch>
      </ManagedElement>
    </config>
  </edit-config>
</rpc>]]>]]>
<?xml version="1.0" encoding="UTF-8"?>
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <close-session/>
</rpc>]]>]]>
```

Example to add a routing for an Accounting Application:



```

<?xml version="1.0" encoding="UTF-8"?>
<hello xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <capabilities>
    <capability>urn:ietf:params:netconf:base:1.0</capability>
  </capabilities>
</hello>]]>]]>
<rpc message-id="100" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <edit-config>
    <target><running/></target>
    <config>
      <ManagedElement xmlns="urn:com:ericsson:ecim:ComTop">
        <managedElementId>1</managedElementId>
        <XYZFunctionBranch>
          <DIA-CFG-Application xmlns="urn:com:ericsson:ecim:dia_mim">
            <applicationName>DIA</applicationName>
            <DIA-CFG-StackContainer>
              <stackContainerId><applStackId></stackContainerId>
              <DIA-CFG-RoutingContainer>
                <routingContainerId><applStackId></routingContainerId>
                <DIA-CFG-Drt>
                  <entryId><entryId></entryId>
                  <DIA-CFG-AccReqContainer>
                    <accReqContainerName>accReqContainerName</accReqContainerName>
                    <DIA-CFG-AppRouting operation="create">
                      <requestedApp><routingId></requestedApp>
                      <action><action></action>
                      <nodeIds><nodeIds></nodeIds>
                    </DIA-CFG-AppRouting>
                  </DIA-CFG-AccReqContainer>
                </DIA-CFG-Drt>
              </DIA-CFG-RoutingContainer>
            </DIA-CFG-StackContainer>
          </DIA-CFG-Application>
        </XYZFunctionBranch>
      </ManagedElement>
    </config>
  </edit-config>
</rpc>]]>]]>
<?xml version="1.0" encoding="UTF-8"?>
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <close-session/>
</rpc>]]>]]>

```

The nodeIds attribute must be set only for outgoing requests, otherwise this list must be empty

Note: The XYZFunctionBranch part can be composed of many elements depending on where the Diameter subtree is connected in the managed element structure. In the example, we assume that the parent MOs are already created and the XYZFunctionBranch is empty.

Example to add a Routing for an Authorization and Authentication Application:



```
<?xml version="1.0" encoding="UTF-8"?>
<hello xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <capabilities>
    <capability>urn:ietf:params:netconf:base:1.0</capability>
  </capabilities>
</hello>]]>]]>
<rpc message-id="100" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <edit-config>
    <target><running/></target>
    <config>
      <ManagedElement xmlns="urn:com:ericsson:ecim:ComTop">
        <managedElementId>1</managedElementId>
        <DIA-CFG-Application xmlns="urn:com:ericsson:ecim:dia_mim">
          <applicationName>DIA</applicationName>
          <DIA-CFG-StackContainer>
            <stackContainerId>TST_SRV</stackContainerId>
            <DIA-CFG-RoutingContainer>
              <routingContainerId>TST_SRV</routingContainerId>
              <DIA-CFG-Drt>
                <entryId>realm.com:TST_SRV:FALSE</entryId>
                <DIA-CFG-AuthReqContainer>
                  <authReqContainerName>authReqContainerName</authReqContainerName>
                  <DIA-CFG-AppRouting operation="create">
                    <requestedApp>193:19302</requestedApp>
                    <action>4</action>
                    <nodeIds>0:server1.realm.com#TST_SRV</nodeIds>
                    <nodeIds>1:server2.realm.com#TST_SRV</nodeIds>
                  </DIA-CFG-AppRouting>
                </DIA-CFG-AuthReqContainer>
              </DIA-CFG-Drt>
            </DIA-CFG-RoutingContainer>
          </DIA-CFG-StackContainer>
        </DIA-CFG-Application>
      </ManagedElement>
    </config>
  </edit-config>
</rpc>]]>]]>
<?xml version="1.0" encoding="UTF-8"?>
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <close-session/>
</rpc>]]>]]>
```

Example to add a Routing for an Accounting Application:



```

<?xml version="1.0" encoding="UTF-8"?>
<hello xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <capabilities>
    <capability>urn:ietf:params:netconf:base:1.0</capability>
  </capabilities>
</hello>]]>]]>
<rpc message-id="100" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <edit-config>
    <target><running/></target>
    <config>
      <ManagedElement xmlns="urn:com:ericsson:ecim:ComTop">
        <managedElementId>1</managedElementId>
        <DIA-CFG-Application xmlns="urn:com:ericsson:ecim:dia_mim">
          <applicationName>DIA</applicationName>
          <DIA-CFG-StackContainer>
            <stackContainerId>TST_SRV</stackContainerId>
            <DIA-CFG-RoutingContainer>
              <routingContainerId>TST_SRV</routingContainerId>
              <DIA-CFG-Drt>
                <entryId>real.com:TST_SRV:TRUE</entryId>
                <DIA-CFG-AccReqContainer>
                  <accReqContainerName>accReqContainerName</accReqContainerName>
                  <DIA-CFG-AppRouting operation="create">
                    <requestedApp>193:19302</requestedApp>
                    <action>1</action>
                  </DIA-CFG-AppRouting>
                </DIA-CFG-AccReqContainer>
              </DIA-CFG-Drt>
            </DIA-CFG-RoutingContainer>
          </DIA-CFG-StackContainer>
        </DIA-CFG-Application>
      </ManagedElement>
    </config>
  </edit-config>
</rpc>]]>]]>
<?xml version="1.0" encoding="UTF-8"?>
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <close-session/>
</rpc>]]>]]>

```

4. Pass the prepared XML file to shell:

```
ssh -p 830 <user_name>@<node_vip_address> -s -t =>
netconf < <xml_file>
```

<xml_file> refers to the XML file name.

5. Prepare an XML file according to the following template to modifying the Attributes of the Routing in the RRT.

To modify the attributes of the Routing in the RRT for an Authorization and Authentication Application:



```
<?xml version="1.0" encoding="UTF-8"?>
<hello xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <capabilities>
    <capability>urn:ietf:params:netconf:base:1.0</capability>
  </capabilities>
</hello>]]>]]>
<rpc message-id="100" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <edit-config>
    <target><running/></target>
    <config>
      <ManagedElement xmlns="urn:com:ericsson:ecim:ComTop">
        <managedElementId>1</managedElementId>
        <XYZFunctionBranch>
          <DIA-CFG-Application xmlns="urn:com:ericsson:ecim:dia_mim">
            <applicationName>DIA</applicationName>
            <DIA-CFG-StackContainer>
              <stackContainerId><applStackId></stackContainerId>
              <DIA-CFG-RoutingContainer>
                <routingContainerId><applStackId></routingContainerId>
                <DIA-CFG-Drt>
                  <entryId><entryId></entryId>
                  <DIA-CFG-AuthReqContainer>
                    <authReqContainerName>authReqContainerName</authReqContainerName>
                    <DIA-CFG-AppRouting operation="create">
                      <requestedApp><routingId></requestedApp>
                      <attribute1>value1</attribute1>
                      ...
                      <attributeN>valueN</attributeN>
                    </DIA-CFG-AppRouting>
                  </DIA-CFG-AuthReqContainer>
                </DIA-CFG-Drt>
              </DIA-CFG-RoutingContainer>
            </DIA-CFG-StackContainer>
          </DIA-CFG-Application>
        </XYZFunctionBranch>
      </ManagedElement>
    </config>
  </edit-config>
</rpc>]]>]]>
<?xml version="1.0" encoding="UTF-8"?>
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <close-session/>
</rpc>]]>]]>
```

Example to modify the attributes of the Routing in the RRT for an Accounting Application:



```

<?xml version="1.0" encoding="UTF-8"?>
<hello xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <capabilities>
    <capability>urn:ietf:params:netconf:base:1.0</capability>
  </capabilities>
</hello>]]>]]>
<rpc message-id="100" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <edit-config>
    <target><running/></target>
    <config>
      <ManagedElement xmlns="urn:com:ericsson:ecim:ComTop">
        <managedElementId>1</managedElementId>
        <XYZFunctionBranch>
          <DIA-CFG-Application xmlns="urn:com:ericsson:ecim:dia_mim">
            <applicationName>DIA</applicationName>
            <DIA-CFG-StackContainer>
              <stackContainerId><applStackId></stackContainerId>
              <DIA-CFG-RoutingContainer>
                <routingContainerId><applStackId></routingContainerId>
                <DIA-CFG-Drt>
                  <entryId><entryId></entryId>
                  <DIA-CFG-AccReqContainer>
                    <accReqContainerName>accReqContainerName</accReqContainerName>
                    <DIA-CFG-AppRouting operation="create">
                      <requestedApp><routingId></requestedApp>
                      <attribute1>value1</attribute1>
                      ...
                      <attributeN>valueN</attributeN>
                    </DIA-CFG-AppRouting>
                  </DIA-CFG-AccReqContainer>
                </DIA-CFG-Drt>
              </DIA-CFG-RoutingContainer>
            </DIA-CFG-StackContainer>
          </DIA-CFG-Application>
        </XYZFunctionBranch>
      </ManagedElement>
    </config>
  </edit-config>
</rpc>]]>]]>
<?xml version="1.0" encoding="UTF-8"?>
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <close-session/>
</rpc>]]>]]>

```

The `nodeIds` attribute must be set only for outgoing requests, otherwise this list must be empty.

The `redirectNodeIds` attribute can be set if action is `redirect` or left empty.

Note: The `XYZFunctionBranch` part can be composed of many elements depending on where the Diameter subtree is connected in the managed element structure. In the example below, we assume that the parent MOs are already created and the `XYZFunctionBranch` is empty.

Example to add a Routing for an Accounting Application:



```
<?xml version="1.0" encoding="UTF-8"?>
<hello xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <capabilities>
    <capability>urn:ietf:params:netconf:base:1.0</capability>
  </capabilities>
</hello>]]>]]>
<rpc message-id="100" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <edit-config>
    <target><running/></target>
    <config>
      <ManagedElement xmlns="urn:com:ericsson:ecim:ComTop">
        <managedElementId>1</managedElementId>
        <DIA-CFG-Application xmlns="urn:com:ericsson:ecim:dia_mim">
          <applicationName>DIA</applicationName>
          <DIA-CFG-StackContainer>
            <stackContainerId>TST_SRV</stackContainerId>
            <DIA-CFG-RouterContainer>
              <routerContainerId>TST_SRV</routerContainerId>
              <DIA-CFG-Drt>
                <entryId>realm.com:TST_SRV:FALSE</entryId>
                <DIA-CFG-AuthReqContainer>
                  <authReqContainerName>authReqContainerName</authReqContainerName>
                  <DIA-CFG-AppRouting operation="create">
                    <requestedApp>193:19302</requestedApp>
                    <action>4</action>
                    <nodeIds>0:server1.realm.com#TST_SRV</nodeIds>
                    <secondaryNodeIds>0:server11.realm.com#TST_SRV</secondaryNodeIds>
                    <autoFailback>true</autoFailback>
                  </DIA-CFG-AppRouting>
                </DIA-CFG-AuthReqContainer>
              </DIA-CFG-Drt>
            </DIA-CFG-RouterContainer>
          </DIA-CFG-StackContainer>
        </DIA-CFG-Application>
      </ManagedElement>
    </config>
  </edit-config>
</rpc>]]>]]>
<?xml version="1.0" encoding="UTF-8"?>
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <close-session/>
</rpc>]]>]]>
```

Example to add a Routing for an Accounting Application:



```

<?xml version="1.0" encoding="UTF-8"?>
<hello xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <capabilities>
    <capability>urn:ietf:params:netconf:base:1.0</capability>
  </capabilities>
</hello>]]>]]>
<rpc message-id="100" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <edit-config>
    <target><running/></target>
    <config>
      <ManagedElement xmlns="urn:com:ericsson:ecim:ComTop">
        <managedElementId>1</managedElementId>
        <DIA-CFG-Application xmlns="urn:com:ericsson:ecim:dia_mim">
          <applicationName>DIA</applicationName>
          <DIA-CFG-StackContainer>
            <stackContainerId>TST_SRV</stackContainerId>
            <DIA-CFG-RoutingContainer>
              <routingContainerId>TST_SRV</routingContainerId>
              <DIA-CFG-Drt>
                <entryId>realm.com:TST_SRV:TRUE</entryId>
                <DIA-CFG-AccReqContainer>
                  <accReqContainerName>accReqContainerName</accReqContainerName>
                  <DIA-CFG-AppRouting operation="create">
                    <requestedApp>193:19302</requestedApp>
                    <action>3</action>
                    <redirectNodeIds>0:server1.realm.com#TST_SRV</redirectNodeIds>
                    <secondaryNodeIds>0:server11.realm.com#TST_SRV</secondaryNodeIds>
                    <autoFailback>false</autoFailback>
                  </DIA-CFG-AppRouting>
                </DIA-CFG-AccReqContainer>
              </DIA-CFG-Drt>
            </DIA-CFG-RoutingContainer>
          </DIA-CFG-StackContainer>
        </DIA-CFG-Application>
      </ManagedElement>
    </config>
  </edit-config>
</rpc>]]>]]>
<?xml version="1.0" encoding="UTF-8"?>
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <close-session/>
</rpc>]]>]]>

```

6. Pass the prepared XML file to shell:

```
ssh -p 830 <user_name>@<node_vip_address> -s -t =>
netconf < <xml_file>
```

<xml_file> refers to the XML file name.

7. Prepare an XML file according to the following template to delete Routing from the RRT:

Example to delete the Routing from the RRT for an Authorization/Authentication Application:



```

<?xml version="1.0" encoding="UTF-8"?>
<hello xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <capabilities>
    <capability>urn:ietf:params:netconf:base:1.0</capability>
  </capabilities>
</hello>]]>]]>
<rpc message-id="100" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <edit-config>
    <target><running/></target>
    <config>
      <ManagedElement xmlns="urn:com:ericsson:ecim:ComTop">
        <managedElementId>1</managedElementId>
        <XYZFunctionBranch>
          <DIA-CFG-Application xmlns="urn:com:ericsson:ecim:dia_mim">
            <applicationName>DIA</applicationName>
            <DIA-CFG-StackContainer>
              <stackContainerId><applStackId></stackContainerId>
              <DIA-CFG-RoutingContainer>
                <routingContainerId><applStackId></routingContainerId>
                <DIA-CFG-Drt>
                  <entryId><entryId></entryId>
                  <DIA-CFG-AuthReqContainer>
                    <authReqContainerName>authReqContainerName</authReqContainerName>
                    <DIA-CFG-AppRouting operation="delete">
                      <requestedApp><appId></requestedApp>
                    </DIA-CFG-AppRouting>
                  </DIA-CFG-AuthReqContainer>
                </DIA-CFG-Drt>
              </DIA-CFG-RoutingContainer>
            </DIA-CFG-StackContainer>
          </DIA-CFG-Application>
        </XYZFunctionBranch>
      </ManagedElement>
    </config>
  </edit-config>
</rpc>]]>]]>
<?xml version="1.0" encoding="UTF-8"?>
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <close-session/>
</rpc>]]>]]>

```

Example to delete the Routing from the RRT for an Accounting Application:



```
<?xml version="1.0" encoding="UTF-8"?>
<hello xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <capabilities>
    <capability>urn:ietf:params:netconf:base:1.0</capability>
  </capabilities>
</hello>]]>]]>
<rpc message-id="100" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <edit-config>
    <target><running/></target>
    <config>
      <ManagedElement xmlns="urn:com:ericsson:ecim:ComTop">
        <managedElementId>1</managedElementId>
        <XYZFunctionBranch>
          <DIA-CFG-Application xmlns="urn:com:ericsson:ecim:dia_mim">
            <applicationName>DIA</applicationName>
            <DIA-CFG-StackContainer>
              <stackContainerId><applStackId></stackContainerId>
              <DIA-CFG-RoutingContainer>
                <routingContainerId><applStackId></routingContainerId>
                <DIA-CFG-Drt>
                  <entryId><entryId></entryId>
                  <DIA-CFG-AccReqContainer>
                    <accReqContainerName>accReqContainerName</accReqContainerName>
                    <DIA-CFG-AppRouting operation="delete">
                      <requestedApp><appId></requestedApp>
                    </DIA-CFG-AppRouting>
                  </DIA-CFG-AccReqContainer>
                </DIA-CFG-Drt>
              </DIA-CFG-RoutingContainer>
            </DIA-CFG-StackContainer>
          </DIA-CFG-Application>
        </XYZFunctionBranch>
      </ManagedElement>
    </config>
  </edit-config>
</rpc>]]>]]>
<?xml version="1.0" encoding="UTF-8"?>
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <close-session/>
</rpc>]]>]]>
```

Note: The XYZFunctionBranch part can be composed of many elements depending on where the Diameter subtree is connected in the managed element structure. In the example below, we assume that the parent MOs are already created and the XYZFunctionBranch is empty.

Example to delete the Routing from the RRT for an Authorization and Authentication Application:



```
<?xml version="1.0" encoding="UTF-8"?>
<hello xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <capabilities>
    <capability>urn:ietf:params:netconf:base:1.0</capability>
  </capabilities>
</hello>]]>]]>
<rpc message-id="100" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <edit-config>
    <target><running/></target>
    <config>
      <ManagedElement xmlns="urn:com:ericsson:ecim:ComTop">
        <managedElementId>1</managedElementId>
        <DIA-CFG-Application xmlns="urn:com:ericsson:ecim:dia_mim">
          <applicationName>DIA</applicationName>
          <DIA-CFG-StackContainer>
            <stackContainerId>TST_SRV</stackContainerId>
            <DIA-CFG-RoutingContainer>
              <routingContainerId>TST_SRV</routingContainerId>
              <DIA-CFG-Drt>
                <entryId>realm.com:TST_SRV:FALSE</entryId>
                <DIA-CFG-AuthReqContainer>
                  <authReqContainerName>authReqContainerName</authReqContainerName>
                  <DIA-CFG-AppRouting operation="delete">
                    <requestedApp>193:19302</requestedApp>
                  </DIA-CFG-AppRouting>
                </DIA-CFG-AuthReqContainer>
              </DIA-CFG-Drt>
            </DIA-CFG-RoutingContainer>
          </DIA-CFG-StackContainer>
        </DIA-CFG-Application>
      </ManagedElement>
    </config>
  </edit-config>
</rpc>]]>]]>
<?xml version="1.0" encoding="UTF-8"?>
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <close-session/>
</rpc>]]>]]>
```

Example to delete the Routing from the RRT for an Accounting Application:



```

<?xml version="1.0" encoding="UTF-8"?>
<hello xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <capabilities>
    <capability>urn:ietf:params:netconf:base:1.0</capability>
  </capabilities>
</hello>]]>]]>
<rpc message-id="100" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <edit-config>
    <target><running/></target>
    <config>
      <ManagedElement xmlns="urn:com:ericsson:ecim:ComTop">
        <managedElementId>1</managedElementId>
        <DIA-CFG-Application xmlns="urn:com:ericsson:ecim:dia_mim">
          <applicationName>DIA</applicationName>
          <DIA-CFG-StackContainer>
            <stackContainerId>TST_SRV</stackContainerId>
            <DIA-CFG-RoutingContainer>
              <routingContainerId>TST_SRV</routingContainerId>
              <DIA-CFG-Drt>
                <entryId>realm.com:TST_SRV:TRUE</entryId>
                <DIA-CFG-AccReqContainer>
                  <accReqContainerName>accReqContainerName</accReqContainerName>
                  <DIA-CFG-AppRouting operation="delete">
                    <requestedApp>193:19302</requestedApp>
                  </DIA-CFG-AppRouting>
                </DIA-CFG-AccReqContainer>
              </DIA-CFG-Drt>
            </DIA-CFG-RoutingContainer>
          </DIA-CFG-StackContainer>
        </DIA-CFG-Application>
      </ManagedElement>
    </config>
  </edit-config>
</rpc>]]>]]>
<?xml version="1.0" encoding="UTF-8"?>
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <close-session/>
</rpc>]]>]]>

```

8. Pass the prepared XML file to shell:

```
ssh -p 830 <user_name>@<node_vip_address> -s -t =>
netconf < <xml_file>
```

<xml_file> refers to the XML file name.

9. Prepare an XML file according to the following template to delete the RRT Entry:



```
<?xml version="1.0" encoding="UTF-8"?>
<hello xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <capabilities>
    <capability>urn:ietf:params:netconf:base:1.0</capability>
  </capabilities>
</hello>]]>]]>
<rpc message-id="100" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <edit-config>
    <target><running/></target>
    <config>
      <ManagedElement xmlns="urn:com:ericsson:ecim:ComTop">
        <managedElementId>1</managedElementId>
        <XYZFunctionBranch>
          <DIA-CFG-Application xmlns="urn:com:ericsson:ecim:dia_mim">
            <applicationName>DIA</applicationName>
            <DIA-CFG-StackContainer>
              <stackContainerId><applStackId></stackContainerId>
              <DIA-CFG-RoutingContainer>
                <routingContainerId><applStackId></routingContainerId>
                <DIA-CFG-Drt operation="delete">
                  <entryId><entryId></entryId>
                </DIA-CFG-Drt>
              </DIA-CFG-RoutingContainer>
            </DIA-CFG-StackContainer>
          </DIA-CFG-Application>
        </XYZFunctionBranch>
      </ManagedElement>
    </config>
  </edit-config>
</rpc>]]>]]>
<?xml version="1.0" encoding="UTF-8"?>
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <close-session/>
</rpc>]]>]]>
```

Note: The XYZFunctionBranch part can be composed of many elements depending on where the Diameter subtree is connected in the managed element structure. In the example below, we assume that the parent MOs are already created and the XYZFunctionBranch is empty.

Example to delete the RRT Entry:



```
<?xml version="1.0" encoding="UTF-8"?>
<hello xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <capabilities>
    <capability>urn:ietf:params:netconf:base:1.0</capability>
  </capabilities>
</hello>]]>]]>
<rpc message-id="100" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <edit-config>
    <target><running/></target>
    <config>
      <ManagedElement xmlns="urn:com:ericsson:ecim:ComTop">
        <managedElementId>1</managedElementId>
        <DIA-CFG-Application xmlns="urn:com:ericsson:ecim:dia_mim">
          <applicationName>DIA</applicationName>
          <DIA-CFG-StackContainer>
            <stackContainerId>TST_SRV</stackContainerId>
            <DIA-CFG-RoutingContainer>
              <routingContainerId>TST_SRV</routingContainerId>
              <DIA-CFG-Drt operation="delete">
                <entryId>realm.com:TST_SRV:TRUE</entryId>
              </DIA-CFG-Drt>
            </DIA-CFG-RoutingContainer>
          </DIA-CFG-StackContainer>
        </DIA-CFG-Application>
      </ManagedElement>
    </config>
  </edit-config>
</rpc>]]>]]>
<?xml version="1.0" encoding="UTF-8"?>
<rpc message-id="101" xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <close-session/>
</rpc>]]>]]>
```

10. Pass the prepared XML file to shell:

```
ssh -p 830 <user_name>@<node_vip_address> -s -t =>
netconf < <xml_file>
```

<xml_file> refers to the XML file name.