Oracle Communications Diameter Signaling Router MAP-Diameter feature activation procedure, Release 6.X/7.1/7.2/7.3
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See more information on MOS in the Appendix section.
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1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

This document defines the procedure that is executed to activate the MAP-Diameter feature on a DSR network element (NE). This procedure may be run either 1) as part of a new DSR installation, after the standard DSR installation is complete but before the NE is in service, or 2) on an in-service DSR NE, where the MAP-Diameter feature is activated during a planned maintenance window to minimize the impact to network traffic.

This document also provides a procedure to deactivate MAP-Diameter IWF after it has been activated. Please see Section 0 for a discussion of deactivation.

No additional software installation is required prior to executing this procedure. The standard DSR installation procedure has loaded all of the required software, even if the MAP-Diameter feature is activated at a later time.
## 1.2 ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>DA-MP</td>
<td>Diameter Agent Message Processor</td>
</tr>
<tr>
<td>DB</td>
<td>Database</td>
</tr>
<tr>
<td>DIH</td>
<td>Diameter Intelligent Hub</td>
</tr>
<tr>
<td>DM-IWF</td>
<td>Diameter Interworking Function. The DSR Application which resides on a DA-MP which manages Diameter transactions between the local DRL instance and the MD-IWFs on the SS7-MPs.</td>
</tr>
<tr>
<td>DSR</td>
<td>Diameter Signaling Router</td>
</tr>
<tr>
<td>FOA</td>
<td>First Office Application</td>
</tr>
<tr>
<td>GUI</td>
<td>Graphical User Interface</td>
</tr>
<tr>
<td>HA</td>
<td>High Availability</td>
</tr>
<tr>
<td>IMI</td>
<td>Internal Management Interface</td>
</tr>
<tr>
<td>IDIH</td>
<td>Integrated DIH</td>
</tr>
<tr>
<td>IP</td>
<td>Internet Protocol</td>
</tr>
<tr>
<td>IWF</td>
<td>InterWorking Function</td>
</tr>
<tr>
<td>MAP</td>
<td>Mobile Application Part</td>
</tr>
<tr>
<td>MD-IWF</td>
<td>MAP Interworking Function. The TCAP application which resides on a SS7-MP which performs (1) the interworking of Diameter transactions received from DA-MPs to SS7-MAP transactions initiated towards SS7 network nodes and (2) the interworking of SS7-MAP transactions received from SS7 network nodes to Diameter transactions initiated towards Diameter Nodes via DM-IWFs on DA-MPs.</td>
</tr>
<tr>
<td>MP</td>
<td>Message Processing or Message Processor</td>
</tr>
<tr>
<td>NE</td>
<td>Network Element</td>
</tr>
<tr>
<td>NOAM</td>
<td>Network OAM</td>
</tr>
<tr>
<td>OAM</td>
<td>Operations, Administration and Maintenance</td>
</tr>
<tr>
<td>RMS</td>
<td>Rack Mounted Server</td>
</tr>
<tr>
<td>SOAM</td>
<td>System OAM</td>
</tr>
<tr>
<td>SSH</td>
<td>Secure Shell</td>
</tr>
<tr>
<td>UI</td>
<td>User Interface</td>
</tr>
<tr>
<td>VIP</td>
<td>Virtual IP</td>
</tr>
<tr>
<td>VPN</td>
<td>Virtual Private Network</td>
</tr>
<tr>
<td>XMI</td>
<td>External Management Interface</td>
</tr>
</tbody>
</table>
1.3 GENERAL PROCEDURE STEP FORMAT

Where it is necessary to explicitly identify the server on which a particular step is to be taken, the server name is given in the title box for the step (e.g. “ServerX” in Figure 1: Example of a procedure step).

Each step has a checkbox for every command within the step that the technician should check to keep track of the progress of the procedure.

The title box describes the operations to be performed during that step.

Each command that the technician is to enter is in 10 point bold Courier font.

<table>
<thead>
<tr>
<th>5</th>
<th>ServerX: Connect to the console of the server</th>
<th>Establish a connection to the server using cu on the terminal server/console.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ cu -l /dev/ttyS7</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1: Example of a procedure step

2.0 FEATURE ACTIVATION OVERVIEW

Table 5 and Table 9 provide a high level overview of the actual activation and deactivation process on DSR. The reader is also invited to review the sample screens and the corresponding OAM topology to get a feel for how MAP-Diameter IWF is deployed in terms of OAM hierarchy.

This section lists the required materials and information needed to execute the feature activation. In addition, Table 4 through Table 9 provide estimates of the time required to execute the procedure. These tables can be used to estimate the total time necessary to complete the feature activation. The timing values shown are estimates only – use these tables to plan the timing of the activation, not to execute the procedure. The detailed procedure steps to be executed begin in Section 5.0.
2.1 DEFINITION OF ACTIVATION FOR THE MAP-DIAMETER FEATURE

This section briefly defines what activation means with respect to the MAP-Diameter IWF feature. In general, activation of a feature refers to the initialization of the feature on DSR making it possible to further configure and provision the feature on DSR.

MAP-Diameter IWF feature consists of two (co-operating) DSR Applications:

- DM-IWF - the DSR Application that runs on DA-MPs and
- MD-IWF – the DSR Application that runs on SS7-MPs

All software required to run MAP-Diameter IWF is available by default as part of a DSR release installation or upgrade. The process of activating the feature simply makes proper use of software elements and file system files that are already present, to change the behavior of the DSR NE.

Prior to MAP-Diameter IWF feature activation, there are no MAP-Diameter IWF related menu items visible on the SOAM GUI or NOAM GUI, and there is no MAP-Diameter IWF related processing taking place on the DA-MPs or SS7-MPs.

After feature activation, all selectable MAP-Diameter IWF related menu items are present on the SOAM and NOAM GUI, allowing full MAP-Diameter IWF configuration and provisioning. Specifically, for MAP-Diameter IWF, the top-level “Map-Diameter IWF” folder is visible on the Main Menu on the NOAM, under which, the “Configuration” folder with MD-IWF Options, Diameter Realm, Diameter Identity, GTA Range to PC and MAP Exception screens shall be visible.

![Figure 2: Example of MAP Interworking folder on NOAM](image1)

On the SOAM, the “MAP-Diameter IWF” folder shall be visible, which shall have a “Configuration” folder with “DM-IWF Options” and “Diameter Exception” screens. In addition, the SS7/Sigtran and Transport Manager folders shall be visible.

![Figure 3: Example of MAP Interworking folder on SOAM](image2)
On SOAM, new entries are added to the **Diameter->Maintenance->Applications** screen, showing the state of the two DSR Application components (DM-IWF and MD-IWF) that make up the MAP-Diameter IWF feature.

### Main Menu: Diameter -> Maintenance -> Applications

![Example of DSR Application maintenance screen](image)

<table>
<thead>
<tr>
<th>DSR Application Name</th>
<th>MP Server Hostname</th>
<th>Admin State</th>
<th>Operational Status</th>
<th>Operational Reason</th>
<th>Congestion Level</th>
<th>Time of Last Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>DM-IWF</td>
<td>RDU01A-DMA</td>
<td>Enabled</td>
<td>Unk</td>
<td>Unk</td>
<td>Unk</td>
<td>Unk</td>
</tr>
<tr>
<td>MD-IWF</td>
<td>RDU01A-SS7</td>
<td>Enabled</td>
<td>Unk</td>
<td>Unk</td>
<td>Unk</td>
<td>Unk</td>
</tr>
</tbody>
</table>

**Important:** once the MAP-Diameter IWF feature is activated, it is not automatically enabled. Activation simply means the mechanism for provisioning MAP-Diameter IWF behavior is in place. The DA-MP(s) and SS7-MP(s) will act on provisioning information and begin providing service only after the DM-IWF and MD-IWF DSR applications have been enabled (via the **Diameter->Maintenance->Applications** screen).

The SS7-MP(s) will act on provisioning information and begin providing service only after the MD-IWF DSR application has been enabled (via the Diameter->Maintenance->Applications screen).

The crafts person shall be offered a choice whether to activate the DSR Application for each of the B-level OAMs (SOAMs) subtending from the A-level OAM (NOAM). It is possible to activate the DSR Application on only some of the B-level OAMs (SOAMs).

If the crafts person chooses to activate a MAP-Diameter IWF on a given B-level OAM (SOAM), **all** DA and SS7 MPs under that B-level OAM shall have the DSR Application activated. There is no option to exclude some activation MAP-Diameter IWF for some DA or SS7 MPs under that B-level OAM (SOAM).

If the crafts person chooses not to activate MAP-Diameter IWF on a given B-level OAM (SOAM), **none** of the DA or SS7 MPs under that B-level OAM (SOAM) shall have MAP-Diameter IWF activated. There is no option to activate MAP-Diameter IWF only for some DA or SS7 MPs in under that B-level OAM (SOAM).
Once MAP-Diameter IWF is activated on a given B-level OAM (SOAM) in this fashion, it is possible to deactivate MAP-Diameter IWF on that specific B-level OAM (SOAM) or on all SOAMs at a later time.

2.2 FEATURE ACTIVATION OVERVIEW

2.2.1 Pre-Feature Activation Overview

The pre-activation procedures shown in the following table may be executed outside a maintenance window if desired. Procedure completion times shown here are estimates. Times may vary due to differences in database size, network configuration and loading, user experience, and user preparation.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Elapsed Time (Hours: Minutes)</th>
<th>Activity</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This Step</td>
<td>Cum.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0:00-0:20</td>
<td>0:00-0:20</td>
<td></td>
</tr>
<tr>
<td>System Topology Check</td>
<td></td>
<td>Feature Activation Preparation</td>
<td></td>
</tr>
<tr>
<td>(Procedure 1)</td>
<td></td>
<td>• Verify Network Element Configuration data.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Verify System Group Configuration data.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Analyze and plan DA-MP restart sequence.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>0:01-0:05</td>
<td>0:21-1:05</td>
<td></td>
</tr>
<tr>
<td>Perform Health Check</td>
<td></td>
<td>Feature Activation Preparation</td>
<td></td>
</tr>
<tr>
<td>(Procedure 2)</td>
<td>System Topology Check</td>
<td>• Verify DSR Release.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Procedure 1)</td>
<td>• Verify Server status.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Log all current alarms.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>System Topology Check</td>
<td></td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>(Procedure 1)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.2.2 Feature Activation Execution Overview

The procedures shown in the following table are executed inside a single maintenance window. Procedure completion times shown here are estimates. Times may vary due to differences in database size, network configuration and loading, user experience, and user preparation.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Elapsed Time (Hours: Minutes)</th>
<th>Activity</th>
<th>Impact</th>
</tr>
</thead>
</table>
| **Perform Health Check (Procedure 2)** | 0:01-0:05 | 0:01-0:05 | • Verify DSR Release.  
• Verify proper feature state for MAP-Diameter IWF.  
• Verify Server status.  
• Log all current alarms. | None |
| **Feature Activation (Procedure 4)** | 0:10-0:40 | 0:11-0:50 | • Log out of NOAM/SOAM GUI.  
• SSH to Active NOAM.  
• Log in as admusr.  
• Change directory to /usr/TKLC/dsr/prod/maint/loaders/  
• Execute the feature activation script.  
• Log into SOAM GUI  
• Verify GUI folders relevant to MAP-Diameter IWF.  
• Verify Maintenance screens.  
• Log into NOAM GUI  
• Verify GUI folders relevant to MAP-Diameter IWF  
• Restart each active DA-MP and SS7-MP server.  
• Verify Maintenance screen. | MAP-Diameter IWF is activated |

2.2.3 Post-Feature Activation Overview

The procedures shown in the following table are executed inside a maintenance window. Procedure completion times shown here are estimates. Times may vary due to differences in database size, network configuration and loading, user experience, and user preparation.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Elapsed Time (Hours: Minutes)</th>
<th>Activity</th>
<th>Impact</th>
</tr>
</thead>
</table>
| **Perform Health Check (Procedure 5)** | 0:01-0:05 | 0:01-0:05 | • Verify Server status.  
• Log all current alarms. | Map-Diameter has been activated on DSR |
3.0 FEATURE DEACTIVATION OVERVIEW

3.1.1 Pre-Feature Deactivation Overview

The procedures shown in the following table are executed inside a maintenance window. Deactivation procedure times are only estimates as the reason to execute a deactivation has a direct impact on any additional deactivation preparation that must be done. Times may vary due to differences in database size, network configuration and loading, user experience, and user preparation.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Elapsed Time (Hours or Minutes)</th>
<th>Activity</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perform Health Check (Procedure 6)</td>
<td>0:01-0:05</td>
<td>• Verify DSR Release.</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Verify proper MAP-Diameter IWF feature state.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Verify server status.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Log current alarms.</td>
<td></td>
</tr>
</tbody>
</table>

3.1.2 Feature Deactivation Execution Overview

The procedures shown in the following table are executed inside a maintenance window. Deactivation procedure times are only estimates as the reason to execute a deactivation has a direct impact on any additional deactivation preparation that must be done. Times may vary due to differences in database size, network configuration and loading, user experience, and user preparation.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Elapsed Time (Hours or Minutes)</th>
<th>Activity</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deactivation Setup</td>
<td>0:10-0:30</td>
<td>The reason to deactivate has a direct impact on any additional backout preparation that must be done. Since all possible reasons cannot be predicted ahead of time, only estimates are given here. Execution time will vary.</td>
<td>None</td>
</tr>
<tr>
<td>Deactivation (Procedure 7)</td>
<td>00:10-00:40</td>
<td>• Log out of Active NOAM/SOAM GUI.</td>
<td>MAP-Diameter IWF is deactivated</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• SSH into active NOAM.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Log in as admusr.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Change directory to /usr/TKLC/dsr/prod/maint/loaders/</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Execute the feature deactivation script.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Log into SOAM GUI</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Verify the GUI folders for MAP-Interworking.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Log into NOAM GUI</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Verify the GUI folders for MAP-Interworking.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Restart each active DA-MP and SS7-MP server.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Verify Maintenance screen.</td>
<td></td>
</tr>
</tbody>
</table>
3.1.3 Post-Feature Deactivation Overview

The procedures shown in the following table are executed inside a maintenance window. Deactivation procedure times are only estimates as the reason to execute a deactivation has a direct impact on any additional deactivation preparation that must be done. Times may vary due to differences in database size, network configuration and loading, user experience, and user preparation.

Table 7. Post-Feature Deactivation Overview

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Elapsed Time (Hours or Minutes)</th>
<th>Activity</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perform Health Check (Procedure 9)</td>
<td>0:01-0:05</td>
<td>0:01-0:05</td>
<td>Deactivation Procedures</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Verify Server status.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Log all current alarms.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>None</td>
</tr>
</tbody>
</table>
4.0 FEATURE ACTIVATION PREPARATION

This section provides detailed procedures to prepare a system for MAP-Diameter IWF feature activation. These procedures are executed outside a maintenance window.

4.1 HARDWARE REQUIREMENTS

4.1.1 DA-MP

DM-IWF, a component of the MAP-Diameter IWF feature, is the DSR application that runs on the DA-MPs. DM-IWF has specific requirements with respect to supported hardware types and minimum memory requirement. If MAP-Diameter IWF feature is activated on a DA-MP which does not meet these minimum requirements, the “dsr” process shall fail to come up on such DA-MPs. Hence it is imperative that the crafts person verify that the minimum DM-IWF hardware requirements are met before activating this feature. Detailed information on the procedure to verify hardware requirements shall be provided later.

If the DA-MP hardware or memory does not meet the requirements, contact Appendix A. My Oracle Support (MOS) for assistance on upgrading the hardware and/or memory. It shall be the responsibility of the crafts person to ensure that all DA-MPs under the SOAM(s) on which MAP-Diameter IWF is to be activated comply with the hardware and minimum memory requirements prior to activating MAP-Diameter IWF.

Table 8. DA-MP (DM-IWF) Hardware Requirements

<table>
<thead>
<tr>
<th>Supported Hardware types for DA-MP</th>
<th>Minimum memory requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>RMS (Virtualized MP - TVOE guest)</td>
<td>24GB (24576 MB)</td>
</tr>
<tr>
<td><strong>G6</strong> (BL460 G6 HP C-class (half height) server blade)</td>
<td>48GB (49152 MB)</td>
</tr>
<tr>
<td><strong>G8</strong> (BL460 Gen8 HP C-class (half height) server blade)</td>
<td>64GB (65536 MB)</td>
</tr>
<tr>
<td><strong>G9</strong> (BL460 Gen9 HP C-class (half height) server blade)</td>
<td><strong>DSR 7.1+ Only</strong> 64GB (65536 MB)</td>
</tr>
</tbody>
</table>
4.1.2 SS7-MP

MD-IWF, a component of the MAP-Diameter IWF feature, is the DSR application that runs on the SS7-MPs. MD-IWF has specific requirements with respect to supported hardware types and minimum memory requirement. If MAP-Diameter IWF feature is activated on an SS7-MP which does not meet these minimum MD-IWF requirements, the “mapiwf” process shall fail to come up on such SS7-MPs. Hence it is imperative that the crafts person verify that the minimum DM-IWF hardware requirements are met before activating this feature. The detailed procedure to verify hardware requirements for SS7-MPs shall be presented later.

If the SS7-MP hardware or memory does not meet the requirements, contact Appendix A. My Oracle Support (MOS) for assistance on upgrading the hardware and/or memory. It shall be the responsibility of the crafts person to ensure that all SS7-MPs under the SOAM(s) on which MAP-Diameter IWF is to be activated comply with the minimum hardware requirements prior to activating MAP-Diameter IWF.

Table 9. SS7-MP (MD-IWF) Hardware Requirements

<table>
<thead>
<tr>
<th>Supported Hardware types for SS7-MP</th>
<th>Minimum memory requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>RMS (Virtualized MP – TVOE guest)</td>
<td>24GB (24576 MB)</td>
</tr>
<tr>
<td>G8 (BL460 Gen8 HP C-class (half height) server blade)</td>
<td>128GB (65536 MB)</td>
</tr>
<tr>
<td>G9 (BL460 Gen9 HP C-class (half height) server blade) – DSR 7.1+ Only</td>
<td>128GB (65536 MB)</td>
</tr>
</tbody>
</table>
4.2 SYSTEM TOPOLOGY AND HARDWARE CHECK

This procedure is part of feature activation preparation and is used to verify the system topology of the DSR network and servers and to validate that the MP servers meet the hardware type requirement and minimum memory requirement for MAP-Diameter IWF feature.

Table 10. List of SOAM Server Groups supporting MAP-Diameter IWF

<table>
<thead>
<tr>
<th>SOAM Server Group Name</th>
<th>SOAM Server Hostnames</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 11. Checklist for DA-MP information

<table>
<thead>
<tr>
<th>SOAM Server Group Name</th>
<th>DA-MP Server Group Name</th>
<th>DA-MP Server Hostnames</th>
<th>Hardware Type</th>
<th>Memory (MB)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Duplicate this check list, once for each SOAM Server Groups on which MAP-Diameter IWF is being setup.
Table 12. Checklist for SS7-MP information

<table>
<thead>
<tr>
<th>SOAM Server Group Name</th>
<th>SS7-MP Server Group Name</th>
<th>SS7-MP Server Hostnames</th>
<th>Hardware Type</th>
<th>Memory (MB)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Duplicate this check list, once for each SOAM Server Group on which MAP-Diameter IWF is being setup. If there are more than one SS7-MP Server Groups configured under the SOAM Server Group, duplicate this check list for each SOAM Server Group – SS7-MP Server Group combination.

The following table maps the output of the command "cat /var/TKLC/hardware/hw_id" (executed on DA or SS7 MP Servers) to a concise hardware type.

Table 13. Hardware ID to Hardware Type Mapping for MP servers

<table>
<thead>
<tr>
<th>Hardware ID</th>
<th>Hardware Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProLiantBL460cG6</td>
<td>G6</td>
</tr>
<tr>
<td>ProLiantBL620cG7</td>
<td>G7</td>
</tr>
<tr>
<td>ProLiantBL460cGen8</td>
<td>G8</td>
</tr>
<tr>
<td>ProLiantBL460cGen9</td>
<td>G9</td>
</tr>
<tr>
<td>KVM</td>
<td>RMS</td>
</tr>
</tbody>
</table>

For the SS7-MP server group, there is currently a limitation of one SS7-MP per server group (this limitation is required due to how the SS7 stack operates). The only SS7-MP server group configuration supported is N+0 (Active/Active) where N=1. This also implies that if more than one SS7-MP needs to be provisioned under an SOAM server group, it shall require multiple SS7-MP server groups to be configured under the SOAM server group. The crafts person should keep this in mind.
Note that the hardware ID referred to here, is the hardware ID obtained by logging on to the MP. In case of RMS setups, this will be a virtualized MP (TVOE guest), not the TVOE host machine. To clarify this distinction, please review the following example. The TVOE host machine below has the following information, which is a DL380 based machine with 128GB (131072 MB) of memory.

```
[admusr@hubtones1-TVOE ~]# cat /var/TKLC/hardware/hw_id
ProLiantDL380pGen8
[admusr@hubtones1-TVOE ~]# sudo dmidecode --type 17 | grep -e "Size:\ [0-9]" | sed -e "s/.*: //g" -e "s/ .*/g" | paste -sd+ | bc
131072
```

Here is the output from a virtualized MP hosted on this machine. This is the information of interest to us. This virtualized MP has 24GB (24576MB) of memory:

```
[admusr@HUBTONES-MP1 ~]# cat /var/TKLC/hardware/hw_id
KVM
[admusr@HUBTONES-MP1 ~]# sudo dmidecode --type 17 | grep -e "Size:\ [0-9]" | sed -e "s/.*: //g" -e "s/ .*/g" | paste -sd+ | bc
24576
```
### Procedure 1: System Topology Check

<table>
<thead>
<tr>
<th>STEP #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This procedure verifies System Topology. Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number. If this procedure fails, contact Appendix A. My Oracle Support (MOS) and ask for assistance.</td>
</tr>
</tbody>
</table>

**1** | NOAM VIP GUI: Login  
Establish a GUI session on the NOAM server by using the VIP IP address of the NOAM server. Open the web browser and enter a URL of:  
http://<Primary_NOAM_VIP_IP_Address>  
Login as the *guiadmin* user:  

![Oracle System Login](image-url)

*Oracle System Login*  
Fri Mar 20 12:29:52 2015 EDT  
Log In  
Enter your username and password to log in  
Username: *guiadmin*  
Password: ***********  
[Change password]  
Log In  

Welcome to the Oracle System Login.  
Unauthorized access is prohibited. This Oracle system requires the use of Microsoft Internet Explorer 8.0, 9.0, or 10.0 with support for JavaScript and cookies.  
Oracle and Java are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.
## Procedure 1: System Topology Check

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
<th>Navigation Path</th>
<th>Configuration Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>NOAM VIP GUI: Verify Network Configuration Data</td>
<td>Navigate to <strong>Main Menu -&gt; Configuration -&gt; Network Elements</strong></td>
<td><img src="image1.png" alt="System Topology Check" /> Click the Report button. Verify the configuration data is correct for your network. <strong>Save</strong> or <strong>Print</strong> this report, keep copies for future reference.</td>
</tr>
<tr>
<td>3</td>
<td>NOAM VIP GUI: Verify Server Configuration</td>
<td>Navigate to <strong>Main Menu -&gt; Configuration -&gt; Server Groups</strong></td>
<td><img src="image1.png" alt="System Topology Check" /> Click the Report button. Verify the configuration data is correct for your network. <strong>Save</strong> or <strong>Print</strong> this report, keep copies for future reference.</td>
</tr>
</tbody>
</table>
Procedure 1: System Topology Check

<table>
<thead>
<tr>
<th></th>
<th>Identify the B-level OAMs (SOAMs) Server Groups and Hostnames on which MAP-Diameter IWF shall be activated.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>There can be multiple B-level OAM (SOAM) server groups under the parent A-level OAM (NOAM) server group. Identify which of these SOAM server groups shall have MAP-Diameter IWF activated.</td>
</tr>
</tbody>
</table>

1. Review Server Configuration information obtained in Step 2 (Verify Server Configuration data).
2. Identify all Servers with a Role of “System OAM”. Record the Server Group name for these Servers. Hint: This item can be conveniently accomplished by using the filter on the Configuration → Servers screen, filtering for the Role of “System OAM”, and recording the common Server Group names.
3. For each SOAM Server Group identified in item #2, discuss with System Engineering or Network Planning and identify the SOAM Server Groups on which MAP-Diameter IWF needs to be activated.
4. Update the check list specified in Table 10. List of SOAM Server Groups supporting MAP-Diameter IWF. For each SOAM Server Group identified, document the SOAM servers in that server group in this check list. Save the check list for future reference.
Procedure 1: System Topology Check

<table>
<thead>
<tr>
<th>5</th>
<th>Verify MP Server Group configuration</th>
</tr>
</thead>
</table>

Verify that for each OAM Server Group of interest, there is an appropriately provisioned DA-MP server group and SS7-MP server group that shall support MAP-Diameter IWF.

1. Review Server Group Configuration information obtained in Step 2 (Verify Server Group Configuration data). Refer to the check list Table 10. List of SOAM Server Groups supporting MAP-Diameter IWF that was created in Step 5. These are the OAM Server Groups that shall be reviewed. Enter each OAM server group in a separate copy of Table 11. Checklist for DA-MP information and

2. Table 12. Checklist for SS7-MP information in the column “SOAM Server Group Name “. Hint: You may need multiple copies of these tables, one copy for each SOAM server group on which MAP-Diameter IWF will be activated. In this case, obtain multiple blank copies of the two tables in advance.

4. For each OAM Server Group identified in item #1 as the OAM parent server group, discuss with System Engineering or Network Planning and identify: One Server Group at Level “C”, Function “DSR (multi-active cluster)” which has at least one DA-MP Server provisioned, which shall be used as the DA-MP Server Group. Record this (DA-MP) Server Group name and the list of DA-MPs in the DA-MP Server Group in the corresponding copy of Table 11. Checklist for DA-MP information in the column.

5. For each OAM Server Group identified in item #1 as the OAM parent server group, discuss with System Engineering or Network Planning and identify: One Server Group at Level “C”, Function “SS7-IWF” which has at least one SS7-MP Server provisioned, which shall be used as the SS7-MP Server Group. Record this (SS7-MP) Server Group name and the list of SS7-MPs in the SS7-MP Server Group in the corresponding copy of Table 12. Checklist for SS7-MP information in the column.
Procedure 1: System Topology Check

In Step 5, we identified all the DA-MPs and SS7-MPs that shall support MAP-Diameter IWF. Now, we shall verify MP hardware and memory requirements for these MP servers. After completing this step, if any MP has been identified that does not meet these requirements, **DO NOT** activate MAP-Diameter IWF. Instead, contact Appendix A. My Oracle Support (MOS) to upgrade the hardware or memory (as need be) to meet the requirements.

1. Review your copies of Table 11. Checklist for DA-MP information which provide an exhaustive list all DA-MP Servers that shall support MAP-Diameter IWF.

2. For each listed DA-MP Server, execute item #3 through #6

3. Login to the DA-MP Server. A typical login session may look like this, however the display may differ based on the log in procedure, and your setup:

   ```
   $ ssh <XMI IP Address of DA-MP>
   ```

4. Execute the following command to identify the hardware type. Review the output of this command, compare it with the Hardware ID column in Table 13. Hardware ID to Hardware Type Mapping and enter the corresponding hardware type for the DA-MP Hostname in Table 11. Checklist for DA-MP information. If no matching entry is found, enter “Unsupported Hardware”.

   ```
   $ cat /var/TKLC/hardware/hw_id
   ```

5. Execute the following command to determine amount of memory (in MB) on the DA-MP Server. Enter the output of this command in the column “Memory”, against the DA-MP hostname in Table 11. Checklist for DA-MP information.

   ```
   sudo dmidecode --type 17 | grep -e "Size:\ [0-9]" | sed -e "s/.*: //g" -e "s/ .*/g" | paste -sd+ | bc
   ```

   Example output: 24576 (MB) corresponds to 24GB (24576 / 1024)

6. Compare your completed copies of Table 11. Checklist for DA-MP information against Table 8. DA-MP (DM-IWF) Hardware Requirements. If any DA-MP hardware type is not listed under the supported hardware types, or if the memory on the DA-MP does not meet the minimum memory requirement for that hardware type:

   **** STOP ****

Your hardware does not meet minimum hardware and memory requirements for MAP-Diameter IWF. Contact Appendix A. My Oracle Support (MOS) if necessary.
Procedure 1: System Topology Check

<table>
<thead>
<tr>
<th>7</th>
<th>SS7-MP: Verify hardware and memory requirements</th>
</tr>
</thead>
</table>

In Step 6, we verified that the DA-MPs satisfy minimum hardware and memory requirements. Here, we will verify that the SS7-MPs satisfy minimum hardware and memory requirements. After completing this step, if any MP has been identified that does not meet these requirements, **DO NOT** activate MAP-Diameter IWF. Instead, contact Appendix A. My Oracle Support (MOS) to upgrade the hardware or memory (as need be) to meet the requirements.

1. Review your copies of
2.  
3. Table 12. Checklist for SS7-MP information which provide an exhaustive list all SS7-MP Servers that shall support MAP-Diameter IWF. 
4. For each listed SS7-MP Server, execute item #3 through #6 
5. Login to the SS7-MP Server. A typical login session may look like this, however the display may vary based on the log in procedure, and your setup: 

   

   `$ ssh <XMI IP Address of SS7-MP>`

6. Execute the following command to identify the hardware type. Review the output of this command, compare it with the Hardware ID column in Table 13. Hardware ID to Hardware Type Mapping and enter the corresponding hardware type for the DA-MP Hostname in Table 11. Checklist for DA-MP information. If no matching entry is found, enter “Unsupported Hardware”.

   

   `$ cat /var/TKLC/hardware/hw_id`

7. Execute the following command to determine amount of memory (in MB) on the SS7-MP Server. Enter the output of this command in the column “Memory”, against the DA-MP hostname in
8.  

   

   `$ sudo dmidecode --type 17 | grep -e "Size:\[0-9]\" | sed -e "s/\.*://g" -e "s/ /.*/g" | paste -sd+ | bc`

   Example output: 24576 (MB) corresponds to 24GB (24576 / 1024).

   Compare your completed copies of

Table 12. Checklist for SS7-MP information against Table 9. SS7-MP (MD-IWF) Hardware Requirements. If any SS7-MP hardware type is not listed under the supported hardware types, or if the memory on the SS7-MP does not meet the minimum memory requirement for that hardware type:

   **** STOP *****

   Your hardware does not meet minimum hardware and memory requirements for MAP-Diameter IWF. Contact Appendix A. My Oracle Support (MOS) to upgrade hardware and/or memory.
### Procedure 1: System Topology Check

<table>
<thead>
<tr>
<th></th>
<th>Analyze and plan DA-MP restart sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Analyze system topology and plan for any DA-MPs and SS7-MPs which will be out-of-service during the feature activation sequence.</td>
</tr>
<tr>
<td></td>
<td>1. Analyze system topology gathered in Step 2 and 3.</td>
</tr>
<tr>
<td></td>
<td>2. Determine exact sequence which DA-MP and SS7-MP servers will be restarted (with the expected out-of-service periods).</td>
</tr>
</tbody>
</table>
### 4.3 PERFORM HEALTH CHECK

This procedure is part of feature activation preparation and is used to determine the health and status of the DSR release network and servers. This may be executed multiple times but must also be executed at least once within the time frame of 24-36 hours prior to the start of the maintenance window in which the feature activation will take place.

#### Procedure 2: Perform Health Check (Feature Activation Preparation)

<table>
<thead>
<tr>
<th>STEP #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This procedure provides steps to perform needed health checks. Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number. If this procedure fails, contact Appendix A. My Oracle Support (MOS) and ask for assistance.</td>
</tr>
<tr>
<td>1</td>
<td><strong>NOAM VIP GUI:</strong> Establish a GUI session on the NOAM server by using the VIP IP address of the NOAM server. Open the web browser and enter a URL of:</td>
</tr>
</tbody>
</table>

```
http://<Primary_NOAM_VIP_IP_Address>
```

Login as the *guiadmin* user:
Procedure 2: Perform Health Check (Feature Activation Preparation)

<table>
<thead>
<tr>
<th></th>
<th>NOAM VIP GUI: Verify Server Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Navigate to Main Menu -&gt; Status &amp; Manage -&gt; Server</td>
</tr>
</tbody>
</table>

Verify all Server Status is Normal (Norm) for: Alarm (Alm), Database (DB), Replication Status, and Processes (Proc).

<table>
<thead>
<tr>
<th>Status</th>
<th>Alm</th>
<th>DB</th>
<th>Reporting Status</th>
<th>Proc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enabled</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
</tr>
<tr>
<td>Enabled</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
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<tr>
<td>Enabled</td>
<td>Norm</td>
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<td>Norm</td>
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<tr>
<td>Enabled</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
</tr>
</tbody>
</table>

Do not proceed to feature activation if any of the above states are not Norm. If any of these are not Norm, corrective action should be taken to restore the non-Norm status to Norm before proceeding with the feature activation.

If the Alarm (Alm) status is not Norm but only Minor alarms are present, it is acceptable to proceed with the feature activation. If there are Major or Critical alarms present, these alarms should be analyzed prior to proceeding with the feature activation. The activation may be able to proceed in the presence of certain Major or Critical alarms. Contact Appendix A. My Oracle Support (MOS) for assistance as necessary.
### Procedure 2: Perform Health Check (Feature Activation Preparation)

<table>
<thead>
<tr>
<th>3</th>
<th><strong>NOAM VIP GUI:</strong> Log Current Alarms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Navigate to <strong>Main Menu -&gt; Alarms &amp; Events -&gt; View Active</strong></td>
</tr>
</tbody>
</table>

Click on the **Report** button

Save or Print this report, keep copies for future reference.
5.0 FEATURE ACTIVATION

Before feature activation, perform the system health check in Section 4.2. This check ensures that the system is ready for feature activation. Performing the system health check determines which alarms are present in the system and if feature activation can proceed with alarms.

**** WARNING *****

If there are servers in the system which are not in Normal state, these servers should be brought to the Normal or the Application Disabled state before the feature activation process is started.

If alarms are present on the server, contact My Oracle Support (MOS) to diagnose those alarms and determine whether they need to be addressed or if it is safe to proceed with the feature activation.

Please read the following notes on feature activation procedures:

- Where possible, command response outputs are shown as accurately as possible. EXCEPTIONS are as follows:
  - Session banner information such as time and date.
  - System-specific configuration information such as hardware locations, IP addresses and hostnames.
  - ANY information marked with "XXXX" or "YYYY." Where appropriate, instructions are provided to determine what output should be expected in place of “XXXX or YYY”
  - Aesthetic differences unrelated to functionality such as browser attributes: window size, colors, toolbars and button layouts.

- After completing each step and at each point where data is recorded from the screen, the technician performing the feature activation must initial each step. A check box should be provided. For procedures which are executed multiple times, the check box can be skipped, but the technician must initial each iteration the step is executed. The space on either side of the step number can be used (margin on left side or column on right side).

- Captured data is required for future support reference.
### 5.1 PRE-ACTIVATION PROCEDURES

#### 5.1.1 Perform Health Check

This procedure is used to determine the health and status of the network and servers. This must be executed at the start of every maintenance window.

**Note:** The Health Check procedure below is the same as the Health Check procedure described in Section 4.2 when preparing for feature activation, but it is repeated here to emphasize that it is being re-executed if Section 4.2 was performed outside the maintenance window.

#### Procedure 3: Perform Health Check (Pre Feature Activation)

<table>
<thead>
<tr>
<th>Step #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>This procedure provides steps to perform needed health checks.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>If this procedure fails, contact My Oracle Support (MOS), and ask for assistance.</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>NOAM VIP GUI: Login</td>
</tr>
</tbody>
</table>

Establish a GUI session on the NOAM server by using the VIP IP address of the NOAM server. Open the web browser and enter a URL of:

```plaintext
http://<Primary_NOAM_VIP_IP_Address>
```

Login as the *guiadmin* user:
### Procedure 3: Perform Health Check (Pre Feature Activation)

<table>
<thead>
<tr>
<th>Step</th>
<th>Task</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 NOAM VIP GUI:</td>
<td>Verify MAP-Diameter IWF Folder is not Present</td>
<td>Under <strong>Main Menu</strong>, verify the MAP-Diameter IWF folder is NOT present.</td>
</tr>
</tbody>
</table>
| 3 NOAM VIP GUI: | Verify Server Status | Navigate to **Main Menu -> Status & Manage -> Server**  
Verify all Server Status is Normal (Norm) for:  
Alarm (Alm), Database (DB), Replication Status, and Processes (Proc). |

<table>
<thead>
<tr>
<th>Status</th>
<th>Alm</th>
<th>DB</th>
<th>Reporting Status</th>
<th>Proc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enabled</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
</tr>
<tr>
<td>Enabled</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
</tr>
<tr>
<td>Enabled</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
</tr>
<tr>
<td>Enabled</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
</tr>
</tbody>
</table>

Do not proceed to feature activation if any of the above states are not Norm. If any of these are not Norm, corrective action should be taken to restore the non-Norm status to Norm before proceeding with the feature activation.

If the Alarm (Alm) status is not Norm but only Minor alarms are present, it is acceptable to proceed with the feature activation. If there are Major or Critical alarms present, these alarms should be analyzed prior to proceeding with the feature activation. The activation may be able to proceed in the presence of certain Major or Critical alarms. Contact My Oracle Support (MOS) for assistance as necessary.
### Procedure 3: Perform Health Check (Pre Feature Activation)

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
</table>
| 4    | **NOAM VIP GUI:** Verify Server Configuration  
      | Navigate to **Main Menu -> Configuration -> Server Groups**  
      | ![Screenshot of Main Menu Configuration](image)  
      | Verify the configuration data is correct for your network. |
| 5    | **NOAM VIP GUI:** Log Current Alarms  
      | Navigate to **Main Menu -> Alarms & Events -> View Active**  
      | ![Screenshot of Alarms & Events View Active](image)  
      | Click on the **Report** button  
      | **Save** or **Print** this report, keep copies for future reference. |
5.1.2 Activation Procedures
This section provides the detailed procedure steps of the feature activation execution. These procedures are executed inside a maintenance window.

5.1.3 Feature Activation
Detailed steps for MAP-Diameter feature activation are given in the procedure below.

Procedure 4: Feature Activation

<table>
<thead>
<tr>
<th>STEP #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>This procedure provides steps to Activate Map-Diameter</td>
<td></td>
</tr>
<tr>
<td>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</td>
<td></td>
</tr>
<tr>
<td>If this procedure fails, contact My Oracle Support (MOS), and ask for assistance.</td>
<td></td>
</tr>
</tbody>
</table>

1. NOAM/SOAM VIP GUI: Logout
   
   Logout of any active NOAM and/or SOAM GUI Sessions:
   
   ![Welcome guiadmin [Logout]](image)

2. NOAM VIP: Establish an SSH session
   
   Establish an SSH session to the NOAM VIP. Login as admusr.

3. NOAM VIP: Navigate to the Feature Activation/Deactivation Directory
   
   Navigate to the feature activation directory by executing the following command:
   
   ```
   $ cd /usr/TKLC/dsr/prod/maint/loaders/
   ```
## Procedure 4: Feature Activation

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>NOAM VIP: Execute the Feature Activation Script</td>
<td>Run the feature activation script by executing the following command:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$ ./featureActivateDeactivate</td>
<td></td>
</tr>
<tr>
<td>Choose Activate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You want to Activate or Deactivate the Feature:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Activate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Deactivate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enter your choice:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choose MAP Interworking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>List of Feature you can Activate:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. CPA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. RBAR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. FABR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Mediation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. LoadGen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. GLA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. MAP Interworking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enter the choice:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Choose the SOAM site for which the application will be activated:

**Note:** As an alternative, you can also activate on all SOAM sites:

The Active SO server configured in the Topology are

1. Delta-50-1
2. A2 500

Enter your choice on which SO you want to Activate or Deactivate the Feature:

Refer to **Section 7.1** for output Example.
### Procedure 4: Feature Activation

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
| **5** | **Active NOAM GUI: Login** | Establish a GUI session on the active NOAM server by using IP address of the NOAM server. Open the web browser and enter a URL of:  

```
http://<Active_NOAM_IP_Address>
```

Login as the *guiadmin* user:

![Oracle System Login](image)

6 | **Active NOAM GUI: Verify the Map-Diameter IWF Folder is Visible** | Locate and verify the Map-Diameter IWF folder from Main Menu is visible and the configuration folder items are present

![Map-Diameter IWF](image)

7 | **Standby NOAM GUI: Repeat Verification Steps** | Repeat Steps 5-6 for the Standby NOAM

**Note:** If the verifications for the standby NOAM differ from the Active NOAM, stop and contact My Oracle Support (MOS)
### Procedure 4: Feature Activation

<table>
<thead>
<tr>
<th>Step</th>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
</table>
| 8    | Active DR-NOAM GUI: Verify and Activate | Repeat **Steps 5-6** for any DR-NOAMs present. For DSR 5.1, 6.0, and 7.0, you will have to run the following command to activate MAP-Diameter on each DR-NOAM:  

**Note:** For DSR 7.1/7.2, skip this step.

```
$ cd /usr/TKLC/dsr/prod/maint/loaders/activate
$ ./load.mapinterworkingActivateAsourced
```

| 9    | Active SOAM GUI: Login | Establish a GUI session on the active SOAM server by using IP address of the SOAM server. Open the web browser and enter a URL of:  

```
http://<Active_SOAM_IP_Address>
```

Login as the *guiadmin* user:

![Oracle System Login](image)

| 10   | Active SOAM GUI: Verify the Map-Diameter IWF Folder is Visible | Locate and verify the Map-Diameter IWF folder from Main Menu is visible and the configuration folder items are present |

![Map-Diameter IWF](image)
## Procedure 4: Feature Activation

### Active SOAM GUI: Verify Application Maintenance Screen is Visible

- Verify the DM-IWF Application is present in the Application Status screen.

Navigate to **Main Menu -> Diameter -> Maintenance -> Applications**.

1. Verify DSR Application Name “DM-IWF” status is uninitialized on each DA-MP Server. The following data should be displayed:
   - MP Server Hostname = <Refer to Table 13 Checklist>
   - Admin State = Disabled
   - Operational State = Unk
   - Operational Reason = Unk
   - Congestion Level = Unk

![Table showing DM-IWF status](image)

2. Verify DSR Application Name “MD-IWF” status is uninitialized on each SS7-MP Server. The following data should be displayed:
   - MP Server Hostname = <Refer to table 14 Checklist>
   - Admin State = Disabled
   - Operational State = Unk
   - Operational Reason = Unk
   - Congestion Level = Unk

![Table showing MD-IWF status](image)

### Standby SOAM GUI: Repeat Verification Steps

Repeat **Steps 10-11** for the Standby SOAM.

**Note:** If the verifications for the standby SOAM differ from the Active SOAM, stop and contact My Oracle Support (MOS).

### Spare SOAM GUI: Verify and Activate

Repeat **Steps 10-11** for any spare SOAMs present.

For DSR 5.1, 6.0, and 7.0, you will have to run the following command to activate Map-Diameter IWF on each spare SOAM:

**Note:** For DSR 7.1/7.2, skip this step.

```bash
$ cd /usr/TKLC/dsr/prod/maint/loaders/activate
$ ./load.mapinterworkingActivateBsourced
```
Procedure 4: Feature Activation

Establish a GUI session on the SOAM server by using the VIP IP address of the SOAM server. Open the web browser and enter a URL of:

http://<Primary_SOAM_VIP_IP_Address>

Login as the guiadmin user:

---

See page for GUI login screen.

---

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### Procedure 4: Feature Activation

12 **SOAM VIP GUI:** Restart DA-MPs

Multiple iterations of this step may be executed during the feature activation procedure. This is dependent on the number of DA-MP and SS7-MP servers within your system. Make a written record of the number of times the step was performed. It is recommended that no more than 50% of the DA-MPs/SS7-MPs be restarted at once.

Navigate to **Main Menu -> Status & Manage -> Server**

- Select the desired DA-MP/SS7-MPs, you can use ‘Ctrl’ to select multiple DA-MP/SS7-MPs at once.

- Click the **Restart** button.

- Verify the Server changes to the Err state and wait until it returns to the Enabled/Norm state.

- Repeat for the additional DA-MP/SS7-MPs.

13 **Active SOAM GUI:** Verify Application Maintenance Screen is Visible

Verify the Map-Diameter IWF Application is present in the Application Status screen

Navigate to **Main Menu -> Diameter -> Maintenance -> Applications.**

1. Verify Map-Diameter IWF status is initialized. The following data should be displayed:
   - Admin State = Disabled
   - Operational State = Unavailable
   - Operational Reason = Shut Down
   - Congestion Level = Normal

   ![Map-Diameter IWF Status](image-url)
### 5.2 POST-ACTIVATION PROCEDURES

#### 5.2.1 Perform Health Check

This procedure is used to determine the health and status of the DSR release network and servers.

#### Procedure 5: Perform Health Check (Post-Feature Activation)

<table>
<thead>
<tr>
<th>STEP #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>This procedure performs a post activation Health Check.</td>
<td></td>
</tr>
<tr>
<td>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</td>
<td></td>
</tr>
<tr>
<td>If this procedure fails, contact My Oracle Support (MOS), and ask for assistance.</td>
<td></td>
</tr>
</tbody>
</table>

1. **NOAM VIP GUI: Login**

   Establish a GUI session on the NOAM server by using the VIP IP address of the NOAM server. Open the web browser and enter a URL of:

   ```
   http://<Primary_NOAM_VIP_IP_Address>
   ```

   Login as the `guiadmin` user:
Procedure 5: Perform Health Check (Post-Feature Activation)

2

NOAM VIP GUI: Verify Server Status

Navigate to Main Menu -> Status & Manage -> Server

Verify all Server Status is Normal (Norm) for:
Alarm (Alm), Database (DB), Replication Status, and Processes (Proc).

<table>
<thead>
<tr>
<th>Appl State</th>
<th>Alm</th>
<th>DB</th>
<th>Reporting Status</th>
<th>Proc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enabled</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
</tr>
<tr>
<td>Enabled</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
</tr>
<tr>
<td>Enabled</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
</tr>
<tr>
<td>Enabled</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
</tr>
</tbody>
</table>

3

NOAM VIP GUI: Log Current Alarms

Navigate to Main Menu -> Alarms & Events -> View Active

Click on the Report button

Save or Print this report, keep copies for future reference.

Compare this alarm report with those gathered in the pre-activation procedures. Contact My Oracle Support (MOS) if needed.
6.0 FEATURE DEACTIVATION

Execute this section only if there is a problem and it is desired to revert back to the pre-activation version of the software. In general, as long as there are no Application Routing Rules using the MAP-Diameter IWF application (specifically DM-IWF), it will have no impact on the system and does not need to be deactivated. The deactivation procedure will cause all the MAP-Diameter IWF related configuration data to be removed. The crafts person must ensure that this is acceptable.

6.1 PRE-DEACTIVATION PROCEDURES

Before beginning the feature deactivation, complete the Pre-Deactivation procedure below.
6.1.1 Perform Health Check

This procedure is used to determine the health and status of the DSR network and servers.

Procedure 6: Perform Health Check (Pre-Feature Deactivation)

<table>
<thead>
<tr>
<th>STEP #</th>
<th>This procedure performs a Health Check.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</td>
</tr>
<tr>
<td></td>
<td>If this procedure fails, contact My Oracle Support (MOS), and ask for assistance.</td>
</tr>
</tbody>
</table>

1 NOAM VIP GUI: Login

Establish a GUI session on the NOAM server by using the VIP IP address of the NOAM server. Open the web browser and enter a URL of:

```
http://<Primary_NOAM_VIP_IP_Address>
```

Login as the `guiadmin` user:
Procedure 6: Perform Health Check (Pre-Feature Deactivation)

2

NOAM VIP GUI: Verify Server Status

Navigate to Main Menu -> Status & Manage -> Server

Verify all Server Status is Normal (Norm) for:

<table>
<thead>
<tr>
<th>Status</th>
<th>Alarm (Alm)</th>
<th>Database (DB)</th>
<th>Replication Status</th>
<th>Processes (Proc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enabled</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
</tr>
<tr>
<td>Enabled</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
</tr>
<tr>
<td>Enabled</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
</tr>
</tbody>
</table>

3

NOAM VIP GUI: Log Current Alarms

Navigate to Main Menu -> Alarms & Events -> View Active

Click on the Report button

Save or Print this report, keep copies for future reference.

Compare this alarm report with those gathered in the pre-activation procedures. Contact My Oracle Support (MOS) if needed.
6.2 FEATURE DEACTIVATION

Detailed steps are given in the procedure below

**Procedure 7: Feature Deactivate**

<table>
<thead>
<tr>
<th>STEP #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>This procedure provides steps to Deactivate Map-Diameter IWF.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>If this procedure fails, contact My Oracle Support (MOS), and ask for assistance.</strong></td>
<td></td>
</tr>
</tbody>
</table>

1. **SOAM VIP GUI:**
   - **Login**
     - Establish a GUI session on the SOAM server by using the VIP IP address of the SOAM server. Open the web browser and enter a URL of:

   ```
   http://<Primary_SOAM_VIP_IP_Address>
   ```

   - Login as the `guiadmin` user:

   ![Oracle System Login](image)
Procedure 7: Feature Deactivate

2

Active SOAM GUI: Disable Map-Diameter IWF Application

Navigate to Main Menu -> Diameter -> Maintenance -> Applications

Select the DM-IWF and MD-IWF applications to disable.

Click the Disable button.

3

NOAM/SOAM VIP GUI: Logout

Logout of any active NOAM and/or SOAM GUI Sessions:

4

NOAM VIP: Establish an SSH session

Establish an SSH session to the NOAM VIP. Login as admusr.

5

NOAM VIP: Navigate to the Feature Activation/Deactivation Directory

Navigate to the feature activation directory by executing the following command:

```
$ cd /usr/TKLC/dsr/prod/maint/loaders/
```
**Procedure 7: Feature Deactivate**

| 6 | **NOAM VIP:** Execute the Feature Activation Script |

Run the feature activation script by executing the following command:

```
$ ./featureActivateDeactivate
```

**Choose Deactivate**

You want to Activate or Deactivate the Feature:
1. Activate
2. Deactivate

Enter your choice: [ ]

**Choose MAP Interworking**

List of Feature you can Activate:
1. CPA
2. RBAR
3. FABR
4. Mediation
5. LoadGen
6. GLA
7. MAP Interworking

Enter the choice: [ ]

Choose the SOAM site for which the application will be deactivated:

**Note:** As an alternative, you can also deactivate on all SOAM sites:

The Active SO server configured in the Topology are:

```
1. <server-1>
2. <server-2>
```

Enter your choice on which SO you want to Activate or Deactivate the Feature: [ ]

Refer to Section 7.2 for output Example.
**Procedure 7: Feature Deactivate**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 7 | **Active NOAM GUI: Login** | Establish a GUI session on the active NOAM server by using IP address of the NOAM server. Open the web browser and enter a URL of:

```text
http://<Active_NOAM_IP_Address>
```

Login as the **guiadmin** user:

![Oracle System Login](image)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td><strong>Active NOAM GUI: Verify the Map-Diameter IWF folder is not visible</strong></td>
<td>Verify the Map-Diameter IWF folder is not visible under Main Menu.</td>
</tr>
</tbody>
</table>

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 9 | **Standby NOAM GUI: Repeat Verification Steps** | Repeat **Steps 7-8** for the Standby NOAM

**Note:** If the verifications for the standby NOAM differ from the Active NOAM, stop and contact My Oracle Support (MOS) |

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 10 | **DR-NOAM GUI: Verify and Deactivate** | Repeat **Steps 7-8** for any DR-NOAMs present.

For DSR 5.1, 6.0, and 7.0, you will have to run the following command to Deactivate Map-Diameter on each DR-NOAM:

**Note:** For DSR 7.1/7.2, skip this step.

```
$ cd /usr/TKLC/dsr/prod/maint/loaders/deactivate
$ ./load.mapinterworkingDeactivateAsourced
```
## Procedure 7: Feature Deactivate

<table>
<thead>
<tr>
<th>Active SOAM GUI: Login</th>
<th>Establish a GUI session on the active SOAM server by using IP address of the SOAM server. Open the web browser and enter a URL of:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>http://&lt;Active_SOAM_IP_Address&gt;</strong></td>
</tr>
<tr>
<td></td>
<td>Login as the <em>guiadmin</em> user:</td>
</tr>
</tbody>
</table>

![Oracle System Login](image)

**Hybrid System Login**

Enter your username and password to log in

Username: guadmin
Password: ********* (Use secure password)

Welcome to the Oracle System Login.

Unauthorized access is prohibited. This Oracle system requires the use of Microsoft Internet Explorer 8.0, 9.0, or 10.0 with support for JavaScript and cookies.

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Other names may be trademarks of their respective owners.

<table>
<thead>
<tr>
<th>Active SOAM GUI: Verify the Map-Diameter IWF Folder is not visible</th>
<th>Verify the Map-Diameter IWF folder is not visible under Main Menu.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standby SOAM GUI: Repeat Verification Steps</td>
<td>Repeat <strong>Steps 5-7</strong> for the Standby SOAM</td>
</tr>
<tr>
<td>Note: If the verifications for the standby SOAM differ from the Active SOAM, stop and contact My Oracle Support (MOS)</td>
<td></td>
</tr>
<tr>
<td>11 Spare SOAM GUI: Verify and Deactivate</td>
<td>Repeat <strong>Steps 5-7</strong> for any spare SOAMs present.</td>
</tr>
<tr>
<td>Note: For DSR 7.1/7.2, skip this step.</td>
<td>For DSR 5.1, 6.0, and 7.0, you will have to run the following command to Deactivate Map-Diameter IWF on each spare SOAM:</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong>: For DSR 7.1/7.2, skip this step.</td>
</tr>
<tr>
<td></td>
<td>$ cd /usr/TKLC/dsr/prod/maint/loaders/deactivate</td>
</tr>
<tr>
<td></td>
<td>$ ./load.mapinterworkingDeactivateBsourced</td>
</tr>
</tbody>
</table>
### Procedure 7: Feature Deactivate

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>SOAM VIP GUI: Restart DA-MPs</td>
<td>Multiple iterations of this step may be executed during the feature activation procedure. This is dependent on the number of DA-MP servers within your system. Make a written record of the number of times the step was performed. It is recommended that no more than 50% of the DA-MPs be restarted at once. Navigate to <strong>Main Menu -&gt; Status &amp; Manage -&gt; Server</strong>. Select the desired DA-MPs, you can use 'Ctrl' to select multiple DA-MPs at once. Click the <strong>Restart</strong> button. Verify the Server changes to the Err state and wait until it returns to the Enabled/Norm state. Repeat for the additional DA-MPs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>SOAM VIP GUI: Verify Maintenance Screen</td>
<td>Navigate to <strong>Main Menu -&gt; Diameter -&gt; Maintenance -&gt; Applications</strong>. Verify the DM-IWF and MD-IWF applications are not present.</td>
</tr>
</tbody>
</table>
### 6.3 POST-DEACTIVATION PROCEDURES

To complete a deactivation, complete the Post-Deactivation procedure below.

#### 6.3.1 Perform Health Check

This procedure is used to determine the health and status of the network and servers.

**Procedure 8: Perform Health Check (Post-Feature Deactivation)**

<table>
<thead>
<tr>
<th>STEP #</th>
<th>Description</th>
</tr>
</thead>
</table>
| 1      | **NOAM VIP GUI:** establish a GUI session on the NOAM server by using the VIP IP address of the NOAM server. Open the web browser and enter a URL of:  

   `http://<Primary_NOAM_VIP_IP_Address>`

   Login as the `guiadmin` user: |

To complete a deactivation, complete the Post-Deactivation procedure below.

**Perform Health Check**

This procedure is used to determine the health and status of the network and servers.

**Procedure 8: Perform Health Check (Post-Feature Deactivation)**

<table>
<thead>
<tr>
<th>STEP #</th>
<th>Description</th>
</tr>
</thead>
</table>
| 1      | **NOAM VIP GUI:** establish a GUI session on the NOAM server by using the VIP IP address of the NOAM server. Open the web browser and enter a URL of:  

   `http://<Primary_NOAM_VIP_IP_Address>`

   Login as the `guiadmin` user: |

   ![Login Screen](image-url)
Procedure 8: Perform Health Check (Post-Feature Deactivation)

2

**NOAM VIP GUI: Verify Server Status**

Navigate to Main Menu -> Status & Manage -> Server

Verify all Server Status is Normal (Norm) for:
- Alarm (Alm)
- Database (DB)
- Replication Status
- Processes (Proc)

<table>
<thead>
<tr>
<th>Appl State</th>
<th>Alm</th>
<th>DB</th>
<th>Reporting Status</th>
<th>Proc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enabled</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
</tr>
<tr>
<td>Enabled</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
</tr>
<tr>
<td>Enabled</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
</tr>
<tr>
<td>Enabled</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
<td>Norm</td>
</tr>
</tbody>
</table>

3

**NOAM VIP GUI: Log Current Alarms**

Navigate to Main Menu -> Alarms & Events -> View Active

Click on the **Report** button

Save or Print this report, keep copies for future reference.

Compare this alarm report with those gathered in the pre-Deactivation procedures. Contact My Oracle Support (MOS) if needed.
7.0 ENGINEERING NOTES

FIPS integrity verification test failed: In DSR 7.1+, you may see ‘FIPS integrity verification test failed’ message displayed during the activation/Deactivation output, this message is expected and harmless.

7.1 SAMPLE OUTPUT OF ACTIVATION (ACTIVE NOAM)

```
[admin@NO1 loaders]$ ./featureActivateDeactivate
Thu Apr 17 03:03:08 EDT 2014::Starting featureActivateDeactivate main...
Start the Automation script , To run the Feature Activation/DeActivation on Active NO.

You want to Activate or Deactivate the Feature :
1. Activate
2. Deactivate

Enter your choice : 1
List of Feature you can Activate :
1. CPA
2. RRAB
3. FABR
4. Mediation
5. LoadGen
6. GLA
7. MAP Interworking

Enter the choice : 7
Run script to Activate mapinterworking Feature
========================================================================
Starting Activation/Deactivation process....
Executing /usr/TKLC/dsr/prod/maint/loaders/activate/load.mapinterworkingActivateAsourced script on NO1
Current server is HA ACTIVE
========================================================================
Verify that DM-IWF and MD-IWF is in the table
========================================================================
Adding DM-IWF Routed Service Configuration.
```

### Adding MD-IWF Routed Service Configuration.

- **id**: 12
- **name**: MD-IWFsvc
- **preDefined**: No
- **editableOnGui**: Yes
- **birthTime**: 12/31/1969 19:00:00.000

### Add DM-IWF and MD-IWF KPI group

- **KPI_Group**: DM-IWF
- **Visibility**: VIS_SO

### Add DM-IWF and MD-IWF Measurement groups

- **Meas_Group**: DM-IWF Performance
  - **Visibility**: VIS_SO
- **Meas_Group**: DM-IWF Exception
  - **Visibility**: VIS_SO
- **Meas_Group**: MD-IWF Performance
  - **Visibility**: VIS_SO
- **Meas_Group**: MD-IWF Exception
  - **Visibility**: VIS_SO

### Add DM-IWF and MD-IWF GUI Configuration Permissions.

- **appid**: 17
- **group_id**: 8500
- **group_name**: MAP Interworking Configuration Permissions

---

Starting to Execute the Loaders on Standby server

Executing `/usr/TKLC/dsr/prod/maint/loaders/activate/load.mapinterworkingActivateAsourced script on NO2

---

Current server is HA STANDBY

Verify that DM-IWF and MD-IWF is in the table

- **KPI_Group**: DM-IWF
  - **Visibility**: VIS_SO
- **Meas_Group**: DM-IWF Performance
  - **Visibility**: VIS_SO
- **Meas_Group**: DM-IWF Exception
  - **Visibility**: VIS_SO
- **Meas_Group**: MD-IWF Performance
  - **Visibility**: VIS_SO
- **Meas_Group**: MD-IWF Exception
  - **Visibility**: VIS_SO

Add DM-IWF and MD-IWF GUI Configuration Permissions.

- **appid**: 17
- **group_id**: 8500
- **group_name**: MAP Interworking Configuration Permissions

The Active SO server configured in the Topology are

1. SO1
2. ALL SOs

Enter your choice on which SO you want to Activate or Deactivate the Feature: 1

This is a 3 Tier Setup, So run the B sourced loaders on SO server: SO1

Executing `/usr/TKLC/dsr/prod/maint/loaders/activate/load.mapinterworkingActivateBsourced script on SO1

---

Current server is HA ACTIVE

Verify that MAPIWF is in the table

- **id**: 7
- **name**: CM-IWF
  - **unavailableAction**: SendAnswer

---
Add common DSR Application measurements for DM-IWF.

Display common DSR Application measurements for DM-IWF.

repgrp=DSR Application Exception
measid=15604

repgrp=DSR Application Exception
measid=15605

repgrp=DSR Application Performance
measid=15600

repgrp=DSR Application Performance
measid=15601

repgrp=DSR Application Performance
measid=15602

repgrp=DSR Application Performance
measid=15603

repgrp=DSR Application Performance
measid=15606

repgrp=DSR Application Performance
measid=15607

repgrp=DSR Application Performance
measid=15608

repgrp=DSR Application Performance
measid=15609

Add DM-IWF and MD-IWF GUI Configuration Permissions.
realm=
fqdn=
mcl=0
 id=12
name=MD-IWF
unavailableAction=ContinueRouting
avpInsertion=Yes
shutdownMode=Graceful
shutdownTime=15
resultCode=3002
vendorId=0
errorString=MD-IWF Unavailable
resExhResultCode=3004
resExhVendorId=0
resExhErrorString=MD-IWF Resource Exhausted
routeListId=-1
realm=
fqdn=
mcl=0
=================================================================================================
Add common DSR Application measurements for DM-IWF.
=================================================================================================
Display common DSR Application measurements for DM-IWF.
=================================================================================================
repgrp=DSR Application Exception
measid=15604
=================================================================================================
repgrp=DSR Application Exception
measid=15605
=================================================================================================
repgrp=DSR Application Performance
measid=15600
=================================================================================================
repgrp=DSR Application Performance
measid=15601
=================================================================================================
repgrp=DSR Application Performance
measid=15602
=================================================================================================
repgrp=DSR Application Performance
measid=15603
=================================================================================================
repgrp=DSR Application Performance
measid=15606
=================================================================================================
repgrp=DSR Application Performance
measid=15607
=================================================================================================
repgrp=DSR Application Performance
measid=15608
=================================================================================================
repgrp=DSR Application Performance
measid=15609
=================================================================================================
Add DM-IWF and MD-IWF GUI Configuration Permissions.
=================================================================================================
_do=17
group_id=8500
group_name=MAP Interworking Configuration Permissions
=================================================================================================
Do you want to activate/deactivate this feature on another OAM Server[Y/N] : n
admusr@NO1 loaders]$
7.2 SAMPLE OUTPUT OF DEACTIVATION (ACTIVE NOAM)

```bash
[admusr@NO1 loaders]$ ./featureActivateDeactivate
Thu Apr 17 03:09:01 EDT 2014::Starting featureActivateDeactivate main...
Start the Automation script , To run the Feature Activation/DeActivation on Active NO.

You want to Activate or Deactivate the Feature :
1. Activate
2. Deactivate

Enter your choice : 2
Which Feature you want to DeActivate :
1. CPA
2. RBAR
3. FABR
4. Mediation
5. loadGen
6. GLA
7. MAP Interworking

Enter your choice : 7
Run script to Deactivate mapinterworking Feature

Starting Activation/Deactivation process....
Starting Automiaton process....
Starting Activation/Deactivation process....

Current server is HA ACTIVE

== deleted 1 records ==
Verify MD-IWF is not present in the DsrApplication table
== deleted 1 records ==
Verify DM-IWF is not present in the DsrApplication table

DM-IWF Feature is not Activated

== deleted 0 records ==
Verify DM-IWF and MD-IWF are not present in the DsrApplication table

Hiding DM-IWF and MD-IWF KPI groups
== deleted 1 records ==
== deleted 1 records ==

Hiding DM-IWF and MD-IWF measurement groups
== deleted 1 records ==
== deleted 1 records ==
== deleted 1 records ==
== deleted 1 records ==

Removing MAP Interworking GUI permissions.
== deleted 1 records ==

Removing DMIWFSvc and MDIWFSvc COM Agent Loader Entries
== deleted 1 records ==

DMIWFSvc Deactivation is complete.
Deactivating MDIWFSvc

Removing MDIWFSvc
```

```bash
id=11
name=DMIWFSvc
preDefinedNo
editableOnGui=Yes
birthTime=12/31/1969 19:00:00.000

== deleted 1 records ==
```

Deactivating MDIWFSvc

Removing MDIWFSvc

```bash
id=12
name=MDIWFSvc
```
Removing applicationId=7 (DM) and applicationId=12 (MD) from the DSR Application PerMp Table

== deleted 0 records ==
== deleted 0 records ==
== deleted 1 records ==
== deleted 1 records ==

Verify DM-INF entries not present in AppRouteRule table

== deleted 0 records ==
== deleted 0 records ==
== deleted 1 records ==
== deleted 1 records ==

Verify DM-INF and MD-INF are not present in the DsrApplication table

Removing common DSR Application measurements for DM-INF

== deleted 10 records ==

Removing MAP Interworking GUI permissions.

== deleted 1 records ==

The Active SO server configured in the Topology are

1. SO1
2. ALL SOs

Enter your choice on which SO you want to Activate or Deactivate the Feature:
1

This is a 3 Tier setup, on SO server : SO1 Executive /usr/TKLC/dsr/prod/maint/loaders/deactivate/load.mapinterworkingDeactivateAsourced script on SO1

Current server is HA ACTIVE

Removing all ART rules pointing to DM-INF

== deleted 0 records ==

Removing applicationId=7 (DM-INF) and applicationId=12 (MD-INF) from the DSR Application PerMp Table

== deleted 0 records ==
== deleted 0 records ==
== deleted 1 records ==
== deleted 1 records ==

Verify DM-INF entries not present in AppRouteRule table

== deleted 0 records ==
== deleted 0 records ==
== deleted 1 records ==
== deleted 1 records ==

Verify DM-INF and MD-INF are not present in the DsrApplicationPerMp table

Removing all ART rules pointing to DM-INF

== deleted 0 records ==

Removing applicationId=7 (DM-INF) and applicationId=12 (MD-INF) from the DSR Application PerMp Table

== deleted 0 records ==

IWF Feature is not Activated

Starting to Execute the Loaders on Standby server

Executing /usr/TKLC/dsr/prod/maint/loaders/deactivate/load.mapinterworkingDeactivateAsourced script on NO2

Password:

Current server is HA STANDBY

MD-INF Feature is not Activated

Removing all ART rules pointing to DM-INF

== deleted 0 records ==

Removing applicationId=7 (DM-INF) and applicationId=12 (MD-INF) from the DSR Application PerMp Table

== deleted 0 records ==
== deleted 0 records ==
== deleted 1 records ==
== deleted 1 records ==

Verify DM-IWF entries not present in AppRoultRule table

Verify DM-IWF and MD-IWF are not present in the DsrApplicationPerm table

Verify DM-IWF and MD-IWF are not present in the DsrApplication table

== deleted 10 records ==

Removing common DSR Application measurements for DM-IWF

== deleted 1 records ==

Removing MAP Interworking GUI permissions.

Do you want to activate/deactivate this feature on another System OAM Server[Y/N] : n

[admusr@NO1 loaders]$
APPENDIX A. MY ORACLE SUPPORT (MOS)

MOS ([https://support.oracle.com](https://support.oracle.com)) is your initial point of contact for all product support and training needs. A representative at Customer Access Support (CAS) can assist you with MOS registration.

Call the CAS main number at **1-800-223-1711** (toll-free in the US), or call the Oracle Support hotline for your local country from the list at [http://www.oracle.com/us/support/contact/index.html](http://www.oracle.com/us/support/contact/index.html). When calling, there are multiple layers of menus selections. Make the selections in the sequence shown below on the Support telephone menu:

1. For the first set of menu options, select 2, “New Service Request”. You will hear another set of menu options.
3. In the third set of options, select 2, "Non-technical issue". Then you will be connected to a live agent who can assist you with MOS registration and provide Support Identifiers. Simply mention you are a Tekelec Customer new to MOS.