



Supported Counters and Error Statistics

This appendix lists the supported counters and error statistics used in Cisco Prime Access Registrar (Prime Access Registrar).

This appendix contains the following sections:

- [Interface-Level KPI Counters, page E-1](#)
- [Error Statistics \(error-stats\), page E-9](#)

Interface-Level KPI Counters

Prime Access Registrar allows you to view the Diameter peer statistics at the interface level. Applicable statistics will be listed for interfaces such as SWm, S6b, STa, SWx, NASREQ, and so on.

The following is a sample CLI that shows the Diameter statistics for a client with interface level counters:



Note

The generic statistics counters are also displayed along with the interface-level counters.

Diameter Peer statistics for client: client1, 10.81.79.79 With Origin-Host 10.81.79.79, And port 4994

```
cdbpPeerStatsState = Closed
cdbpPeerStatsACRsIn = 0
cdbpPeerStatsACRsOut = 0
cdbpPeerStatsACAsIn = 0
cdbpPeerStatsACAsOut = 0
cdbpPeerStatsCERsIn = 0
cdbpPeerStatsCERsOut = 0
cdbpPeerStatsCEAsIn = 0
cdbpPeerStatsCEAsOut = 0
cdbpPeerStatsDWRsIn = 0
cdbpPeerStatsDWRsOut = 0
cdbpPeerStatsDWAsIn = 0
cdbpPeerStatsDWAsOut = 0
cdbpPeerStatsDPRsIn = 0
cdbpPeerStatsDPRsOut = 0
cdbpPeerStatsDPAsIn = 0
cdbpPeerStatsDPAsOut = 0
cdbpPeerStatsRedirectEvents = 0
cdbpPeerStatsAccDupRequests = 0
cdbpPeerStatsMalformedReqsts = 0
```

Interface-Level KPI Counters

```

cdbpPeerStatsAccsNotRecorded = 0
cdbpPeerStatsWhoInitDisconnect = 0
cdbpPeerStatsAccRetrans = 0
cdbpPeerStatsTotalRetrans= 0
cdbpPeerStatsAccPendReqstsOut = 0
cdbpPeerStatsAccReqstsDropped = 0
cdbpPeerStatsHByHDropMessages = 0
cdbpPeerStatsEToEDupMessages= 0
cdbpPeerStatsUnknownTypes= 0
cdbpPeerStatsProtocolErrors = 0
cdbpPeerStatsTransientFailures = 0
cdbpPeerStatsPermanentFailures = 0
cdbpPeerStatsDWCurrentStatus= 0
cdbpPeerStatsTransportDown = 0
cdbpPeerStatsTimeoutConnAtmpts = 0
cdbpPeerStatsFailedCERs = 0
cdbpPeerStatsFailedDWRs = 0
cdbpPeerStatsFailedDPRs = 0

Stats Interface = SWm
cdbpPeerStatsASAsOut = 0
cdbpPeerStatsRARsOut = 0
cdbpPeerStatsRAAsIn = 0
cdbpPeerStatsRAAsOut = 0
cdbpPeerStatsRstRARsOut = 0
cdbpPeerStatsRstRAAsIn = 0
cdbpPeerStatsSTRsIn= 0
cdbpPeerStatsSTRsOut = 0
cdbpPeerStatsSTAsIn = 0
cdbpPeerStatsSTAsOut = 0
cdbpPeerStatsASRsIn= 0
cdbpPeerStatsASRsOut= 0
cdbpPeerStatsASAsIn = 0
cdbpPeerStatsDERsIn = 0
cdbpPeerStatsDERsOut = 0
cdbpPeerStatsDEAsIn = 0
cdbpPeerStatsDEAsOut = 0
cdbpPeerStatsAARsIn = 0
cdbpPeerStatsAARsOut = 0
cdbpPeerStatsAAAsIn = 0
cdbpPeerStatsAAAsOut = 0
cdbpPeerStatsMARSIn = 0
cdbpPeerStatsMARSOut = 0
cdbpPeerStatsMAAsIn = 0
cdbpPeerStatsMAAsOut = 0
cdbpPeerStatsSARsIn = 0
cdbpPeerStatsSARsOut = 0
cdbpPeerStatsSAAsIn = 0
cdbpPeerStatsSAAsOut = 0
cdbpPeerStatsUDRsIn = 0
cdbpPeerStatsUDRsOut = 0
cdbpPeerStatsUDAsIn = 0
cdbpPeerStatsUDAsOut = 0
cdbpPeerStatsRTRsIn = 0
cdbpPeerStatsRTRsOut = 0
cdbpPeerStatsRTAsIn = 0
cdbpPeerStatsRTAsOut = 0
cdbpPeerStatsPPRsIn = 0
cdbpPeerStatsPPRsOut = 0
cdbpPeerStatsPPAsIn = 0
cdbpPeerStatsPPAsOut = 0
cdbpPeerStatsFailedAARs = 0
cdbpPeerStatsFailedDERs = 0
cdbpPeerStatsFailedMARS = 0

```

```
cdbpPeerStatsFailedSARs = 0
cdbpPeerStatsFailedPPRs = 0
cdbpPeerStatsFailedRARs = 0
cdbpPeerStatsRstFailedRARs = 0
cdbpPeerStatsFailedRTRs = 0
cdbpPeerStatsFailedASRs = 0
cdbpPeerStatsFailedSTRs = 0
cdbpPeerStatsMultiRoundDEAs = 0
cdbpPeerStatsFailedUDRs = 0

Stats Interface = S6b
cdbpPeerStatsASAsOut = 0
cdbpPeerStatsRARsOut = 0
cdbpPeerStatsRAAsIn = 0
cdbpPeerStatsRAAsOut = 0
cdbpPeerStatsRstRARsOut = 0
cdbpPeerStatsRstRAAsIn = 0
cdbpPeerStatsSTRsIn= 0
cdbpPeerStatsSTRsOut = 0
cdbpPeerStatsSTAsIn = 0
cdbpPeerStatsSTAsOut = 0
cdbpPeerStatsASRsIn= 0
cdbpPeerStatsASRsOut= 0
cdbpPeerStatsASAsIn = 0
cdbpPeerStatsDERsIn = 0
cdbpPeerStatsDERsOut = 0
cdbpPeerStatsDEAsIn = 0
cdbpPeerStatsDEAsOut = 0
cdbpPeerStatsAARsIn = 0
cdbpPeerStatsAARsOut = 0
cdbpPeerStatsAAAsIn = 0
cdbpPeerStatsAAAsOut = 0
cdbpPeerStatsMARSIn = 0
cdbpPeerStatsMARSOut = 0
cdbpPeerStatsMAAsIn = 0
cdbpPeerStatsMAAsOut = 0
cdbpPeerStatsSARsIn = 0
cdbpPeerStatsSARsOut = 0
cdbpPeerStatsSAAsIn = 0
cdbpPeerStatsSAAsOut = 0
cdbpPeerStatsUDRsIn = 0
cdbpPeerStatsUDRsOut = 0
cdbpPeerStatsUDAsIn = 0
cdbpPeerStatsUDAsOut = 0
cdbpPeerStatsRTRsIn = 0
cdbpPeerStatsRTRsOut = 0
cdbpPeerStatsRTAsIn = 0
cdbpPeerStatsRTAsOut = 0
cdbpPeerStatsPPRsIn = 0
cdbpPeerStatsPPRsOut = 0
cdbpPeerStatsPPAsIn = 0
cdbpPeerStatsPPAsOut = 0
cdbpPeerStatsFailedAARs = 0
cdbpPeerStatsFailedDERs = 0
cdbpPeerStatsFailedMARS = 0
cdbpPeerStatsFailedSARs = 0
cdbpPeerStatsFailedPPRs = 0
cdbpPeerStatsFailedRARs = 0
cdbpPeerStatsRstFailedRARs = 0
cdbpPeerStatsFailedRTRs = 0
cdbpPeerStatsFailedASRs = 0
cdbpPeerStatsFailedSTRs = 0
cdbpPeerStatsMultiRoundDEAs = 0
cdbpPeerStatsFailedUDRs = 0
```

■ Interface-Level KPI Counters

```
Stats Interface = STA
cdbpPeerStatsASAsOut = 0
cdbpPeerStatsRARsOut = 0
cdbpPeerStatsRAAsIn = 0
cdbpPeerStatsRAAsOut = 0
cdbpPeerStatsRstRARsOut = 0
cdbpPeerStatsRstRAAsIn = 0
cdbpPeerStatsSTRsIn= 0
cdbpPeerStatsSTRsOut = 0
cdbpPeerStatsSTAsIn = 0
cdbpPeerStatsSTAsOut = 0
cdbpPeerStatsASRsIn= 0
cdbpPeerStatsASRsOut= 0
cdbpPeerStatsASAsIn = 0
cdbpPeerStatsDERsIn = 0
cdbpPeerStatsDERsOut = 0
cdbpPeerStatsDEAsIn = 0
cdbpPeerStatsDEAsOut = 0
cdbpPeerStatsAARsIn = 0
cdbpPeerStatsAARsOut = 0
cdbpPeerStatsAAAsIn = 0
cdbpPeerStatsAAAsOut = 0
cdbpPeerStatsMARSIn = 0
cdbpPeerStatsMARSOut = 0
cdbpPeerStatsMAAsIn = 0
cdbpPeerStatsMAAsOut = 0
cdbpPeerStatsSARsIn = 0
cdbpPeerStatsSARsOut = 0
cdbpPeerStatsSAAsIn = 0
cdbpPeerStatsSAAsOut = 0
cdbpPeerStatsUDRsIn = 0
cdbpPeerStatsUDRsOut = 0
cdbpPeerStatsUDAsIn = 0
cdbpPeerStatsUDAsOut = 0
cdbpPeerStatsRTRsIn = 0
cdbpPeerStatsRTRsOut = 0
cdbpPeerStatsRTAsIn = 0
cdbpPeerStatsRTAsOut = 0
cdbpPeerStatsPPRsIn = 0
cdbpPeerStatsPPRsOut = 0
cdbpPeerStatsPPAsIn = 0
cdbpPeerStatsPPAsOut = 0
cdbpPeerStatsFailedAARs = 0
cdbpPeerStatsFailedDERs = 0
cdbpPeerStatsFailedMARS = 0
cdbpPeerStatsFailedSARs = 0
cdbpPeerStatsFailedPPRs = 0
cdbpPeerStatsFailedRARs = 0
cdbpPeerStatsRstFailedRARs = 0
cdbpPeerStatsFailedRTRs = 0
cdbpPeerStatsFailedASRs = 0
cdbpPeerStatsFailedSTRs = 0
cdbpPeerStatsMultiRoundDEAs = 0
cdbpPeerStatsFailedUDRs = 0
```

For remote server statistics, the interface is listed as a combination of the source (front-end) and destination (back-end) interfaces e.g. SWx-SWm. In certain cases, where there is a failure of requests initiated from HSS, there will not be any front-end interface. Those requests are grouped under SWx interface.

For details about the Diameter peer and remote server statistics, see the [Cisco Prime Access Registrar 9.1 User Guide](#).

Sample CLI configuration is given below:

```
--> cd /r/remoteServers/
[ //localhost/Radius/RemoteServers ]
Entries 1 to 1 from 1 total entries
Current filter: <all>

remserver/
--> dia-stats /r/RemoteServers/remserver

Diameter Remote server statistics for: remserver, 10.81.78.165, port 3869
active = FALSE
cDiaRemSvrRTTAverage = 0ms
cDiaRemSvrRTTDeviation = 0ms
cDiaRemSvrServerType = Diameter
cDiaRemSvrTotalRequestsPending = 0
cDiaRemSvrTotalRequestsOutstanding = 0
cDiaRemSvrTotalRequestsAcknowledged = 0
cDiaRemSvrStatsState = Closed
cDiaRemSvrStatsACRsIn = 0
cDiaRemSvrStatsACRsOut = 0
cDiaRemSvrStatsACAsIn = 0
cDiaRemSvrStatsACAsOut = 0
cDiaRemSvrStatsCERsIn = 0
cDiaRemSvrStatsCERsOut = 11
cDiaRemSvrStatsCEAsIn = 0
cDiaRemSvrStatsCEAsOut = 0
cDiaRemSvrStatsDWRsIn = 0
cDiaRemSvrStatsDWRsOut = 0
cDiaRemSvrStatsDWAsIn = 0
cDiaRemSvrStatsDWAsOut = 0
cDiaRemSvrStatsDPRsIn = 0
cDiaRemSvrStatsDPRsOut = 0
cDiaRemSvrStatsDPAsIn = 0
cDiaRemSvrStatsDPAsOut = 0
cDiaRemSvrStatsRedirectEvents = 0
cDiaRemSvrStatsAccDupRequests = 0
cDiaRemSvrStatsMalformedRequests = 0
cDiaRemSvrStatsAccsNotRecorded = 0
cDiaRemSvrStatsWhoInitDisconnect = 2
cDiaRemSvrStatsAccRetrans = 0
cDiaRemSvrStatsTotalRetrans= 0
cDiaRemSvrStatsAccPendRequestsOut = 0
cDiaRemSvrStatsAccReqstsDropped = 0
cDiaRemSvrStatsHByHDropMessages = 0
cDiaRemSvrStatsEToEDupMessages= 0
cDiaRemSvrStatsUnknownTypes= 0
cDiaRemSvrStatsProtocolErrors = 0
cDiaRemSvrStatsTransientFailures = 0
cDiaRemSvrStatsPermanentFailures = 0
cDiaRemSvrStatsDWCurrentStatus= 2
cDiaRemSvrStatsTransportDown = 1
cDiaRemSvrStatsTimeoutConnAtmpts = 0
cDiaRemSvrStatsFailedCERs = 11
cDiaRemSvrStatsFailedDWRs = 0
cDiaRemSvrStatsFailedDPRs = 0

Stats for Interface= SWx-SWm
cDiaRemSvrStatsASRsIn= 0
cDiaRemSvrStatsASRsOut= 0
```

■ Interface-Level KPI Counters

```

cDiaRemSvrStatsASAsIn = 0
cDiaRemSvrStatsASAsOut = 0
cDiaRemSvrStatsRARsIn = 0
cDiaRemSvrStatsRARsOut = 0
cDiaRemSvrStatsRAAsIn = 0
cDiaRemSvrStatsRAAsOut = 0
cDiaRemSvrStatsSTRsIn= 0
cDiaRemSvrStatsSTRsOut = 0
cDiaRemSvrStatsSTAsIn = 0
cDiaRemSvrStatsSTAsOut = 0
cDiaRemSvrStatsMARSIn = 0
cDiaRemSvrStatsMARSOut = 0
cDiaRemSvrStatsMAAsIn= 0
cDiaRemSvrStatsMAAsOut = 0
cDiaRemSvrStatsSARSIn = 0
cDiaRemSvrStatsSARSOut = 0
cDiaRemSvrStatsSAAsIn = 0
cDiaRemSvrStatsSAAsOut = 0
cDiaRemSvrStatsUDRsIn = 0
cDiaRemSvrStatsUDRsOut = 0
cDiaRemSvrStatsUDAsIn = 0
cDiaRemSvrStatsUDAsOut = 0
cDiaRemSvrStatsRTRsIn= 0
cDiaRemSvrStatsRTRsOut = 0
cDiaRemSvrStatsRTAsIn = 0
cDiaRemSvrStatsRTAsOut = 0
cDiaRemSvrStatsPPRsIn= 0
cDiaRemSvrStatsPPRsOut = 0
cDiaRemSvrStatsPPAsIn = 0
cDiaRemSvrStatsPPAsOut = 0
cDiaRemSvrStatsDERsIn= 0
cDiaRemSvrStatsDERsOut = 0
cDiaRemSvrStatsDEAsIn = 0
cDiaRemSvrStatsDEAsOut = 0
cDiaRemSvrStatsAARSIn= 0
cDiaRemSvrStatsAARSOut = 0
cDiaRemSvrStatsAAAsIn = 0
cDiaRemSvrStatsAAAsOut = 0
cDiaRemSvrStatsFailedAARS = 0
cDiaRemSvrStatsFailedDERs = 0
cDiaRemSvrStatsFailedMARS = 0
cDiaRemSvrStatsFailedSARs = 0
cDiaRemSvrStatsFailedPPRs = 0
cDiaRemSvrStatsFailedRARs = 0
cDiaRemSvrStatsFailedRTRs = 0
cDiaRemSvrStatsFailedASRs = 0
cDiaRemSvrStatsFailedSTRs = 0
cDiaRemSvrStatsFailedUDRs = 0

```

Stats for Interface= SWx-S6b

```

cDiaRemSvrStatsASRsIn= 0
cDiaRemSvrStatsASRsOut= 0
cDiaRemSvrStatsASAsIn = 0
cDiaRemSvrStatsASAsOut = 0
cDiaRemSvrStatsRARsIn = 0
cDiaRemSvrStatsRARsOut = 0
cDiaRemSvrStatsRAAsIn = 0
cDiaRemSvrStatsRAAsOut = 0
cDiaRemSvrStatsSTRsIn= 0
cDiaRemSvrStatsSTRsOut = 0
cDiaRemSvrStatsSTAsIn = 0
cDiaRemSvrStatsSTAsOut = 0
cDiaRemSvrStatsMARSIn = 0
cDiaRemSvrStatsMARSOut = 0

```

```

cDiaRemSvrStatsMAAsIn= 0
cDiaRemSvrStatsMAAsOut = 0
cDiaRemSvrStatsSARsIn = 0
cDiaRemSvrStatsSARsOut = 0
cDiaRemSvrStatsSAAsIn = 0
cDiaRemSvrStatsSAAsOut = 0
cDiaRemSvrStatsUDRsIn = 0
cDiaRemSvrStatsUDRsOut = 0
cDiaRemSvrStatsUDAsIn = 0
cDiaRemSvrStatsUDAsOut = 0
cDiaRemSvrStatsRTRsIn= 0
cDiaRemSvrStatsRTRsOut = 0
cDiaRemSvrStatsRTAsIn = 0
cDiaRemSvrStatsRTAsOut = 0
cDiaRemSvrStatsPPRsIn= 0
cDiaRemSvrStatsPPRsOut = 0
cDiaRemSvrStatsPPAsIn = 0
cDiaRemSvrStatsPPAsOut = 0
cDiaRemSvrStatsDERsIn= 0
cDiaRemSvrStatsDERsOut = 0
cDiaRemSvrStatsDEAsIn = 0
cDiaRemSvrStatsDEAsOut = 0
cDiaRemSvrStatsAARsIn= 0
cDiaRemSvrStatsAARsOut = 0
cDiaRemSvrStatsAAAsIn = 0
cDiaRemSvrStatsAAAsOut = 0
cDiaRemSvrStatsFailedAARs = 0
cDiaRemSvrStatsFailedDERs = 0
cDiaRemSvrStatsFailedMARS = 0
cDiaRemSvrStatsFailedSARs = 0
cDiaRemSvrStatsFailedPPRs = 0
cDiaRemSvrStatsFailedRARs = 0
cDiaRemSvrStatsFailedRTRs = 0
cDiaRemSvrStatsFailedASRs = 0
cDiaRemSvrStatsFailedSTRs = 0
cDiaRemSvrStatsFailedUDRs = 0

```

Stats for Interface= SWx-STa

```

cDiaRemSvrStatsASRsIn= 0
cDiaRemSvrStatsASRsOut= 0
cDiaRemSvrStatsASAsIn = 0
cDiaRemSvrStatsASAsOut = 0
cDiaRemSvrStatsRARsIn = 0
cDiaRemSvrStatsRARsOut = 0
cDiaRemSvrStatsRAAsIn = 0
cDiaRemSvrStatsRAAsOut = 0
cDiaRemSvrStatsSTRsIn= 0
cDiaRemSvrStatsSTRsOut = 0
cDiaRemSvrStatsSTAsIn = 0
cDiaRemSvrStatsSTAsOut = 0
cDiaRemSvrStatsMARsIn = 0
cDiaRemSvrStatsMARsOut = 0
cDiaRemSvrStatsMAAsIn= 0
cDiaRemSvrStatsMAAsOut = 0
cDiaRemSvrStatsSARsIn = 0
cDiaRemSvrStatsSARsOut = 0
cDiaRemSvrStatsSAAsIn = 0
cDiaRemSvrStatsSAAsOut = 0
cDiaRemSvrStatsUDRsIn = 0
cDiaRemSvrStatsUDRsOut = 0
cDiaRemSvrStatsUDAsIn = 0
cDiaRemSvrStatsUDAsOut = 0
cDiaRemSvrStatsRTRsIn= 0
cDiaRemSvrStatsRTRsOut = 0

```

■ Interface-Level KPI Counters

```

cDiaRemSvrStatsRTAsIn = 0
cDiaRemSvrStatsRTAsOut = 0
cDiaRemSvrStatsPPRsIn= 0
cDiaRemSvrStatsPPRsOut = 0
cDiaRemSvrStatsPPAsIn = 0
cDiaRemSvrStatsPPAsOut = 0
cDiaRemSvrStatsDERsIn= 0
cDiaRemSvrStatsDERsOut = 0
cDiaRemSvrStatsDEAsIn = 0
cDiaRemSvrStatsDEAsOut = 0
cDiaRemSvrStatsAARsIn= 0
cDiaRemSvrStatsAARsOut = 0
cDiaRemSvrStatsAAAsIn = 0
cDiaRemSvrStatsAAAsOut = 0
cDiaRemSvrStatsFailedAARs = 0
cDiaRemSvrStatsFailedDERs = 0
cDiaRemSvrStatsFailedMARS = 0
cDiaRemSvrStatsFailedSARS = 0
cDiaRemSvrStatsFailedPPRs = 0
cDiaRemSvrStatsFailedRARs = 0
cDiaRemSvrStatsFailedRTRs = 0
cDiaRemSvrStatsFailedASRs = 0
cDiaRemSvrStatsFailedSTRs = 0
cDiaRemSvrStatsFailedUDRs = 0

```

Stats for Interface= SH

```

cDiaRemSvrStatsASRsIn= 0
cDiaRemSvrStatsASRsOut= 0
cDiaRemSvrStatsASAsIn = 0
cDiaRemSvrStatsASAsOut = 0
cDiaRemSvrStatsRARsIn = 0
cDiaRemSvrStatsRARsOut = 0
cDiaRemSvrStatsRAAsIn = 0
cDiaRemSvrStatsRAAsOut = 0
cDiaRemSvrStatsSTRsIn= 0
cDiaRemSvrStatsSTRsOut = 0
cDiaRemSvrStatsSTAsIn = 0
cDiaRemSvrStatsSTAsOut = 0
cDiaRemSvrStatsMARSIn = 0
cDiaRemSvrStatsMARSOut = 0
cDiaRemSvrStatsMAAsIn= 0
cDiaRemSvrStatsMAAsOut = 0
cDiaRemSvrStatsSARSIn = 0
cDiaRemSvrStatsSARSOut = 0
cDiaRemSvrStatsSAAsIn = 0
cDiaRemSvrStatsSAAsOut = 0
cDiaRemSvrStatsUDRsIn = 0
cDiaRemSvrStatsUDRsOut = 0
cDiaRemSvrStatsUDAsIn = 0
cDiaRemSvrStatsUDAsOut = 0
cDiaRemSvrStatsRTRsIn= 0
cDiaRemSvrStatsRTRsOut = 0
cDiaRemSvrStatsRTAsIn = 0
cDiaRemSvrStatsRTAsOut = 0
cDiaRemSvrStatsPPRsIn= 0
cDiaRemSvrStatsPPRsOut = 0
cDiaRemSvrStatsPPAsIn = 0
cDiaRemSvrStatsPPAsOut = 0
cDiaRemSvrStatsDERsIn= 0
cDiaRemSvrStatsDERsOut = 0
cDiaRemSvrStatsDEAsIn = 0
cDiaRemSvrStatsDEAsOut = 0
cDiaRemSvrStatsAARsIn= 0
cDiaRemSvrStatsAARsOut = 0

```

```
cDiaRemSvrStatsAAAsIn = 0
cDiaRemSvrStatsAAAsOut = 0
cDiaRemSvrStatsFailedAARs = 0
cDiaRemSvrStatsFailedDERs = 0
cDiaRemSvrStatsFailedMARS = 0
cDiaRemSvrStatsFailedSARs = 0
cDiaRemSvrStatsFailedPPRs = 0
cDiaRemSvrStatsFailedRARs = 0
cDiaRemSvrStatsFailedRTRs = 0
cDiaRemSvrStatsFailedASRs = 0
cDiaRemSvrStatsFailedSTRs = 0
cDiaRemSvrStatsFailedUDRs = 0
```

Error Statistics (error-stats)

Prime Access Registrar aggregates the error counters in case of failure of requests. Error statistic is the list of error codes with the number of failures for each command. These statistics are also listed at the interface level.

To enable error-stats, you must place the **errorstats.xml** file in the following location:

/opt/CSCOar/conf

The xml file must contain the error codes to be monitored. Error statistics will be displayed only for the error codes mentioned in the xml file.

A sample errorstats.xml file content is shown below:

```
[root@cpars-rhel-93 conf]# cat errorstats.xml <?xml version="1.0"?> <Application>
<Command>
<ErrorCode Name="Diameter-Command-Unsupported">3001</ErrorCode>
<ErrorCode Name="Diameter-Unable-To-Deliver">3002</ErrorCode>
<ErrorCode Name="Diameter-Realm-Not-Served">3003</ErrorCode>
<ErrorCode Name="Diameter-Too-Busy">3004</ErrorCode>
<ErrorCode Name="Diameter-Loop-Detected">3005</ErrorCode>
<ErrorCode Name="Diameter-Redirect-Indication">3006</ErrorCode>
<ErrorCode Name="Diameter-Application-Unsupported">3007</ErrorCode>
<ErrorCode Name="Diameter-Invalid-Hdr-Bits">3008</ErrorCode>
<ErrorCode Name="Diameter-Invalid-Avp-Bits">3009</ErrorCode>
<ErrorCode Name="Diameter-Unknown-Peer">3010</ErrorCode>
<ErrorCode Name="Diameter-Authentication-Rejected">4001</ErrorCode>
<ErrorCode Name="Diameter-Out-Of-Space">4002</ErrorCode>
<ErrorCode Name="Diameter-Election-Lost">4003</ErrorCode>
<ErrorCode Name="Diameter-Error-User-Unknown">5001</ErrorCode>
<ErrorCode Name="Diameter-Unknown-Session-Id">5002</ErrorCode>
<ErrorCode Name="Diameter-Error-Identity-Not-Registered">5003</ErrorCode>
<ErrorCode Name="Diameter-Error-Roaming-Not-Allowed">5004</ErrorCode>
<ErrorCode Name="Diameter-Error-Identity-Already-Registered">5005</ErrorCode>
<ErrorCode Name="Diameter-Unable-To-Comply">5012</ErrorCode>
<ErrorCode Name="Diameter-Error-User-No-Non-3gpp-Subscription">5450</ErrorCode>
<ErrorCode Name="Diameter-Error-User-No-Apn-Subscription">5451</ErrorCode>
<ErrorCode Name="Diameter-Error-Rat-Type-Not-Allowed">5452</ErrorCode>
<ErrorCode Name="Diameter-Error-Late-Overlapping-Request">5453</ErrorCode>
<ErrorCode Name="Diameter-Error-Timed-Out-Request">5454</ErrorCode>
<ErrorCode Name="Diameter-Error-Illegal-Equipment">5554</ErrorCode>
</Command>
</Application>
```

Following is the sample CLI of the error statistics:

```
--> error-stats /r/RemoteServers/remserver SWx-SWm
```

Error Statistics (error-stats)

```
Diameter Error Stats for RemoteServer : remserver, Interface: SWx-SWm

Command Code = CER
Diameter-Command-Unsupported = 0
Diameter-Unable-To-Deliver = 0
Diameter-Realm-Not-Served = 0
Diameter-Too-Busy = 0
Diameter-Loop-Detected = 0
Diameter-Redirect-Indication = 0
Diameter-Application-Unsupported = 0
Diameter-Invalid-Hdr-Bits = 0
Diameter-Invalid-Avp-Bits = 0
Diameter-Unknown-Peer = 0
Diameter-Authentication-Rejected = 0
Diameter-Out-Of-Space = 0
Election-Lost = 0
Diameter-Error-User-Unknown = 0
Diameter-Unknown-Session-Id = 0
Diameter-Error-Identity-Not-Registered = 0
Diameter-Error-Roaming-Not-Allowed = 0
Diameter-Error-Identity-Already-Registered = 0
Diameter-Unable-To-Comply = 0
Diameter-Error-User-No-Non-3gpp-Subscription = 0
Diameter-Error-User-No-Apn-Subscription = 0
Diameter-Error-Rat-Type-Not-Allowed = 0
Diameter-Error-Late-Overlapping-Request = 0
Diameter-Error-Timed-Out-Request = 0
Diameter-Error-Illegal-Equipment = 0

Command Code = DWR
Diameter-Command-Unsupported = 0
Diameter-Unable-To-Deliver = 0
Diameter-Realm-Not-Served = 0
Diameter-Too-Busy = 0
Diameter-Loop-Detected = 0
Diameter-Redirect-Indication = 0
Diameter-Application-Unsupported = 0
Diameter-Invalid-Hdr-Bits = 0
Diameter-Invalid-Avp-Bits = 0
Diameter-Unknown-Peer = 0
Diameter-Authentication-Rejected = 0
Diameter-Out-Of-Space = 0
Election-Lost = 0
Diameter-Error-User-Unknown = 0
Diameter-Unknown-Session-Id = 0
Diameter-Error-Identity-Not-Registered = 0
Diameter-Error-Roaming-Not-Allowed = 0
Diameter-Error-Identity-Already-Registered = 0
Diameter-Unable-To-Comply = 0
Diameter-Error-User-No-Non-3gpp-Subscription = 0
Diameter-Error-User-No-Apn-Subscription = 0
Diameter-Error-Rat-Type-Not-Allowed = 0
Diameter-Error-Late-Overlapping-Request = 0
Diameter-Error-Timed-Out-Request = 0
Diameter-Error-Illegal-Equipment = 0

Command Code = DPR
Diameter-Command-Unsupported = 0
Diameter-Unable-To-Deliver = 0
Diameter-Realm-Not-Served = 0
Diameter-Too-Busy = 0
Diameter-Loop-Detected = 0
Diameter-Redirect-Indication = 0
```

```
Diameter-Application-Unsupported = 0
Diameter-Invalid-Hdr-Bits = 0
Diameter-Invalid-Avp-Bits = 0
Diameter-Unknown-Peer = 0
Diameter-Authentication-Rejected = 0
Diameter-Out-Of-Space = 0
Election-Lost = 0
Diameter-Error-User-Unknown = 0
Diameter-Unknown-Session-Id = 0
Diameter-Error-Identity-Not-Registered = 0
Diameter-Error-Roaming-Not-Allowed = 0
Diameter-Error-Identity-Already-Registered = 0
Diameter-Unable-To-Comply = 0
Diameter-Error-User-No-Non-3gpp-Subscription = 0
Diameter-Error-User-No-Apn-Subscription = 0
Diameter-Error-Rat-Type-Not-Allowed = 0
Diameter-Error-Late-Overlapping-Request = 0
Diameter-Error-Timed-Out-Request = 0
Diameter-Error-Illegal-Equipment = 0

Command Code = AAR
Diameter-Command-Unsupported = 0
Diameter-Unable-To-Deliver = 0
Diameter-Realm-Not-Served = 0
Diameter-Too-Busy = 0
Diameter-Loop-Detected = 0
Diameter-Redirect-Indication = 0
Diameter-Application-Unsupported = 0
Diameter-Invalid-Hdr-Bits = 0
Diameter-Invalid-Avp-Bits = 0
Diameter-Unknown-Peer = 0
Diameter-Authentication-Rejected = 0
Diameter-Out-Of-Space = 0
Election-Lost = 0
Diameter-Error-User-Unknown = 0
Diameter-Unknown-Session-Id = 0
Diameter-Error-Identity-Not-Registered = 0
Diameter-Error-Roaming-Not-Allowed = 0
Diameter-Error-Identity-Already-Registered = 0
Diameter-Unable-To-Comply = 0
Diameter-Error-User-No-Non-3gpp-Subscription = 0
Diameter-Error-User-No-Apn-Subscription = 0
Diameter-Error-Rat-Type-Not-Allowed = 0
Diameter-Error-Late-Overlapping-Request = 0
Diameter-Error-Timed-Out-Request = 0
Diameter-Error-Illegal-Equipment = 0

Command Code = DER
Diameter-Command-Unsupported = 0
Diameter-Unable-To-Deliver = 0
Diameter-Realm-Not-Served = 0
Diameter-Too-Busy = 0
Diameter-Loop-Detected = 0
Diameter-Redirect-Indication = 0
Diameter-Application-Unsupported = 0
Diameter-Invalid-Hdr-Bits = 0
Diameter-Invalid-Avp-Bits = 0
Diameter-Unknown-Peer = 0
Diameter-Authentication-Rejected = 0
Diameter-Out-Of-Space = 0
Election-Lost = 0
Diameter-Error-User-Unknown = 0
Diameter-Unknown-Session-Id = 0
Diameter-Error-Identity-Not-Registered = 0
```

Error Statistics (error-stats)

```

Diameter-Error-Roaming-Not-Allowed = 0
Diameter-Error-Identity-Already-Registered = 0
Diameter-Unable-To-Comply = 0
Diameter-Error-User-No-Non-3gpp-Subscription = 0
Diameter-Error-User-No-Apn-Subscription = 0
Diameter-Error-Rat-Type-Not-Allowed = 0
Diameter-Error-Late-Overlapping-Request = 0
Diameter-Error-Timed-Out-Request = 0
Diameter-Error-Illegal-Equipment = 0

Command Code = MAR
Diameter-Command-Unsupported = 0
Diameter-Unable-To-Deliver = 0
Diameter-Realm-Not-Served = 0
Diameter-Too-Busy = 0
Diameter-Loop-Detected = 0
Diameter-Redirect-Indication = 0
Diameter-Application-Unsupported = 0
Diameter-Invalid-Hdr-Bits = 0
Diameter-Invalid-Avp-Bits = 0
Diameter-Unknown-Peer = 0
Diameter-Authentication-Rejected = 0
Diameter-Out-Of-Space = 0
Election-Lost = 0
Diameter-Error-User-Unknown = 0
Diameter-Unknown-Session-Id = 0
Diameter-Error-Identity-Not-Registered = 0
Diameter-Error-Roaming-Not-Allowed = 0
Diameter-Error-Identity-Already-Registered = 0
Diameter-Unable-To-Comply = 0
Diameter-Error-User-No-Non-3gpp-Subscription = 0
Diameter-Error-User-No-Apn-Subscription = 0
Diameter-Error-Rat-Type-Not-Allowed = 0
Diameter-Error-Late-Overlapping-Request = 0
Diameter-Error-Timed-Out-Request = 0
Diameter-Error-Illegal-Equipment = 0

Command Code = SAR
Diameter-Command-Unsupported = 0
Diameter-Unable-To-Deliver = 0
Diameter-Realm-Not-Served = 0
Diameter-Too-Busy = 0
Diameter-Loop-Detected = 0
Diameter-Redirect-Indication = 0
Diameter-Application-Unsupported = 0
Diameter-Invalid-Hdr-Bits = 0
Diameter-Invalid-Avp-Bits = 0
Diameter-Unknown-Peer = 0
Diameter-Authentication-Rejected = 0
Diameter-Out-Of-Space = 0
Election-Lost = 0
Diameter-Error-User-Unknown = 0
Diameter-Unknown-Session-Id = 0
Diameter-Error-Identity-Not-Registered = 0
Diameter-Error-Roaming-Not-Allowed = 0
Diameter-Error-Identity-Already-Registered = 0
Diameter-Unable-To-Comply = 0
Diameter-Error-User-No-Non-3gpp-Subscription = 0
Diameter-Error-User-No-Apn-Subscription = 0
Diameter-Error-Rat-Type-Not-Allowed = 0
Diameter-Error-Late-Overlapping-Request = 0
Diameter-Error-Timed-Out-Request = 0
Diameter-Error-Illegal-Equipment = 0

```

```

Command Code = PPR
Diameter-Command-Unsupported = 0
Diameter-Unable-To-Deliver = 0
Diameter-Realm-Not-Served = 0
Diameter-Too-Busy = 0
Diameter-Loop-Detected = 0
Diameter-Redirect-Indication = 0
Diameter-Application-Unsupported = 0
Diameter-Invalid-Hdr-Bits = 0
Diameter-Invalid-Avp-Bits = 0
Diameter-Unknown-Peer = 0
Diameter-Authentication-Rejected = 0
Diameter-Out-Of-Space = 0
Election-Lost = 0
Diameter-Error-User-Unknown = 0
Diameter-Unknown-Session-Id = 0
Diameter-Error-Identity-Not-Registered = 0
Diameter-Error-Roaming-Not-Allowed = 0
Diameter-Error-Identity-Already-Registered = 0
Diameter-Unable-To-Comply = 0
Diameter-Error-User-No-Non-3gpp-Subscription = 0
Diameter-Error-User-No-Apn-Subscription = 0
Diameter-Error-Rat-Type-Not-Allowed = 0
Diameter-Error-Late-Overlapping-Request = 0
Diameter-Error-Timed-Out-Request = 0
Diameter-Error-Illegal-Equipment = 0

Command Code = RAR
Diameter-Command-Unsupported = 0
Diameter-Unable-To-Deliver = 0
Diameter-Realm-Not-Served = 0
Diameter-Too-Busy = 0
Diameter-Loop-Detected = 0
Diameter-Redirect-Indication = 0
Diameter-Application-Unsupported = 0
Diameter-Invalid-Hdr-Bits = 0
Diameter-Invalid-Avp-Bits = 0
Diameter-Unknown-Peer = 0
Diameter-Authentication-Rejected = 0
Diameter-Out-Of-Space = 0
Election-Lost = 0
Diameter-Error-User-Unknown = 0
Diameter-Unknown-Session-Id = 0
Diameter-Error-Identity-Not-Registered = 0
Diameter-Error-Roaming-Not-Allowed = 0
Diameter-Error-Identity-Already-Registered = 0
Diameter-Unable-To-Comply = 0
Diameter-Error-User-No-Non-3gpp-Subscription = 0
Diameter-Error-User-No-Apn-Subscription = 0
Diameter-Error-Rat-Type-Not-Allowed = 0
Diameter-Error-Late-Overlapping-Request = 0
Diameter-Error-Timed-Out-Request = 0
Diameter-Error-Illegal-Equipment = 0

Command Code = RstRAR
Diameter-Command-Unsupported = 0
Diameter-Unable-To-Deliver = 0
Diameter-Realm-Not-Served = 0
Diameter-Too-Busy = 0
Diameter-Loop-Detected = 0
Diameter-Redirect-Indication = 0
Diameter-Application-Unsupported = 0
Diameter-Invalid-Hdr-Bits = 0
Diameter-Invalid-Avp-Bits = 0

```

Error Statistics (error-stats)

```

Diameter-Unknown-Peer = 0
Diameter-Authentication-Rejected = 0
Diameter-Out-Of-Space = 0
Election-Lost = 0
Diameter-Error-User-Unknown = 0
Diameter-Unknown-Session-Id = 0
Diameter-Error-Identity-Not-Registered = 0
Diameter-Error-Roaming-Not-Allowed = 0
Diameter-Error-Identity-Already-Registered = 0
Diameter-Unable-To-Comply = 0
Diameter-Error-User-No-Non-3gpp-Subscription = 0
Diameter-Error-User-No-Apn-Subscription = 0
Diameter-Error-Rat-Type-Not-Allowed = 0
Diameter-Error-Late-Overlapping-Request = 0
Diameter-Error-Timed-Out-Request = 0
Diameter-Error-Illegal-Equipment = 0

Command Code = RTR
Diameter-Command-Unsupported = 0
Diameter-Unable-To-Deliver = 0
Diameter-Realm-Not-Served = 0
Diameter-Too-Busy = 0
Diameter-Loop-Detected = 0
Diameter-Redirect-Indication = 0
Diameter-Application-Unsupported = 0
Diameter-Invalid-Hdr-Bits = 0
Diameter-Invalid-Avp-Bits = 0
Diameter-Unknown-Peer = 0
Diameter-Authentication-Rejected = 0
Diameter-Out-Of-Space = 0
Election-Lost = 0
Diameter-Error-User-Unknown = 0
Diameter-Unknown-Session-Id = 0
Diameter-Error-Identity-Not-Registered = 0
Diameter-Error-Roaming-Not-Allowed = 0
Diameter-Error-Identity-Already-Registered = 0
Diameter-Unable-To-Comply = 0
Diameter-Error-User-No-Non-3gpp-Subscription = 0
Diameter-Error-User-No-Apn-Subscription = 0
Diameter-Error-Rat-Type-Not-Allowed = 0
Diameter-Error-Late-Overlapping-Request = 0
Diameter-Error-Timed-Out-Request = 0
Diameter-Error-Illegal-Equipment = 0

Command Code = ASR
Diameter-Command-Unsupported = 0
Diameter-Unable-To-Deliver = 0
Diameter-Realm-Not-Served = 0
Diameter-Too-Busy = 0
Diameter-Loop-Detected = 0
Diameter-Redirect-Indication = 0
Diameter-Application-Unsupported = 0
Diameter-Invalid-Hdr-Bits = 0
Diameter-Invalid-Avp-Bits = 0
Diameter-Unknown-Peer = 0
Diameter-Authentication-Rejected = 0
Diameter-Out-Of-Space = 0
Election-Lost = 0
Diameter-Error-User-Unknown = 0
Diameter-Unknown-Session-Id = 0
Diameter-Error-Identity-Not-Registered = 0
Diameter-Error-Roaming-Not-Allowed = 0
Diameter-Error-Identity-Already-Registered = 0
Diameter-Unable-To-Comply = 0

```

```

Diameter-Error-User-No-Non-3gpp-Subscription = 0
Diameter-Error-User-No-Apn-Subscription = 0
Diameter-Error-Rat-Type-Not-Allowed = 0
Diameter-Error-Late-Overlapping-Request = 0
Diameter-Error-Timed-Out-Request = 0
Diameter-Error-Illegal-Equipment = 0

Command Code = STR
Diameter-Command-Unsupported = 0
Diameter-Unable-To-Deliver = 0
Diameter-Realm-Not-Served = 0
Diameter-Too-Busy = 0
Diameter-Loop-Detected = 0
Diameter-Redirect-Indication = 0
Diameter-Application-Unsupported = 0
Diameter-Invalid-Hdr-Bits = 0
Diameter-Invalid-Avp-Bits = 0
Diameter-Unknown-Peer = 0
Diameter-Authentication-Rejected = 0
Diameter-Out-Of-Space = 0
Election-Lost = 0
Diameter-Error-User-Unknown = 0
Diameter-Unknown-Session-Id = 0
Diameter-Error-Identity-Not-Registered = 0
Diameter-Error-Roaming-Not-Allowed = 0
Diameter-Error-Identity-Already-Registered = 0
Diameter-Unable-To-Comply = 0
Diameter-Error-User-No-Non-3gpp-Subscription = 0
Diameter-Error-User-No-Apn-Subscription = 0
Diameter-Error-Rat-Type-Not-Allowed = 0
Diameter-Error-Late-Overlapping-Request = 0
Diameter-Error-Timed-Out-Request = 0
Diameter-Error-Illegal-Equipment = 0

Command Code = UDR
Diameter-Command-Unsupported = 0
Diameter-Unable-To-Deliver = 0
Diameter-Realm-Not-Served = 0
Diameter-Too-Busy = 0
Diameter-Loop-Detected = 0
Diameter-Redirect-Indication = 0
Diameter-Application-Unsupported = 0
Diameter-Invalid-Hdr-Bits = 0
Diameter-Invalid-Avp-Bits = 0
Diameter-Unknown-Peer = 0
Diameter-Authentication-Rejected = 0
Diameter-Out-Of-Space = 0
Election-Lost = 0
Diameter-Error-User-Unknown = 0
Diameter-Unknown-Session-Id = 0
Diameter-Error-Identity-Not-Registered = 0
Diameter-Error-Roaming-Not-Allowed = 0
Diameter-Error-Identity-Already-Registered = 0
Diameter-Unable-To-Comply = 0
Diameter-Error-User-No-Non-3gpp-Subscription = 0
Diameter-Error-User-No-Apn-Subscription = 0
Diameter-Error-Rat-Type-Not-Allowed = 0
Diameter-Error-Late-Overlapping-Request = 0
Diameter-Error-Timed-Out-Request = 0
Diameter-Error-Illegal-Equipment = 0

```

Error Statistics (error-stats)