Bulkstats Stops Working on MME When TAI Schema Is Configured

Contents

Introduction

This document describes the problem where the Bulk Statistics (bulkstats) file generation and transfer stops working on Mobility Management Entity (MME) when the Tracking Area Identity (TAI) schema is configured, and how to solve this problem.

Problem

Bulkstats periodically collects the statistics and transfers the data to an external server as per the configuration.

```
bulkstats mode
sample-interval time_interval
transfer-interval xmit_time_interval

file number
receiver ip_address { primary | secondary }
```

On the MME node where bulkstats is configured, the statistics collection and file transfer are stopped. The bulkstats related CLI commands are not responsive and eventually return this error.

```
# show bulkstats
Failure: Unable to retrieve bulkstats server information
```

The problem is seen when MME is configured to collect the TAI schema, and the bulkstats sample-inverval has a value less than 15 minutes. A sample TAI schema configuration is shown here.

```
mme-service mme_service_name
statistics collection-mode tai

bulkstats mode
file file_number
tai schema
```

The TAI schema statistics collection can take a long time, especially when MME has a large TAI management database (tai-mgmt-db). It might not be able to complete within the configured sample-interval and does not respond.

Solution

Increase the sample-interval to a value greater than 15 minutes, which is recommended when TAI schema is configured. Otherwise, tai-mgmt-db needs to be optimized/reduced to accommodate the sample-interval configured. The **show bulkstats timing** CLI command can be used to monitor the time spent to collect statistics for each schema. Note that the CLI itself will be unresponsive once the issue occurs.

> **Note**: The **show bulkstats timing** command is a hidden CLI command, which needs to be run in hidden mode.

```
# show bulkstats timing
--- skip ---
Bulk Statistics Collection Times:
Schema Secs
------------------------ -----------
egtpc 0.022828
mme 0.071027
sgs 0.006026
hss 0.003606
tai 0.064781
```