

Dépannage d'un scénario lié aux schémas Bulkstats et aux solutions recommandées dans StarOS

Contenu

[Introduction](#)

[Conditions préalables](#)

[Conditions requises](#)

[Components Used](#)

[Informations générales](#)

[Problème](#)

[Scénarios de test](#)

[Solution](#)

Introduction

Ce document décrit un scénario lié à l'ajout et à la suppression de schémas de bulkstat dans StarOS, ainsi que des problèmes et des solutions recommandées pour ces problèmes.

Conditions préalables

Conditions requises

Cisco vous recommande de prendre connaissance des rubriques suivantes :

- Linux
- StarOS

Cisco vous recommande de disposer d'un accès privilégié :

- mode masqué pour exécuter l'**interpréteur de commandes debug** afin d'accéder à l'invite de commandes linux shell
- Accès SFTP (Secure File Transfer Protocol) au noeud StarOS

Components Used

Les informations de ce document sont basées sur StarOS version 21.16.6.77063.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. Si votre réseau est en ligne, assurez-vous de bien comprendre l'incidence possible des commandes.

Informations générales

1. Pour configurer un fichier de configuration afin de stocker les configurations associées aux statistiques de bulkstats.
2. Le format de la commande est le suivant :

```
configure
    [no] bulkstats config [ schema | supplement ] <url>
end
```

Where:

- Le mot clé **schema** facultatif vous permet de remplacer uniquement le schéma à l'aide du fichier fourni et de conserver la configuration du serveur.
- Le mot clé **de complément** facultatif vous permet de compléter la configuration de bulkstats en cours avec le contenu du fichier de configuration fourni. Ces mots-clés ne fonctionnent que sur les fichiers existants.
- URL spécifie l'emplacement du fichier de configuration bulkstats.

Problème

Impossible d'ajouter de nouveaux schémas/de réajouter le schéma actuel (s'il est supprimé) via l'invite de commande CLI.

Scénarios de test

1. Ce problème est dû à l'utilisation du **schéma de configuration cli bulkstat <URL>**.
2. Il s'agit d'un résultat attendu par conception lorsqu'un **schéma** de mot clé facultatif est utilisé.
3. Le même scénario a été testé au cours des travaux pratiques. Voici les résultats :
Scénario A. Initialement, **bulkstat config <url>** cli a été configuré.

```
[local]MME# show configuration bulkstats
config
    bulkstats collection
    bulkstats historical collection
    bulkstats config /hd-raid/file1
    bulkstats mode
        file 1
            header format Version-20.0,%ipaddr%,%date%-%time%,%localdate%-
%localtime%,%localtz%,%localtzooffset%,%localdate3%-%localtime3%,%swbuild%
            footer format EndOfFile
        card schema cardSch1 format
```

```
PPM,card,cardSch1,%epochtime%,%localdate%,%localtime%,%uptime%,%card%,%cpubusy%,%cpuidle%,%numproc%,%memused%,%memtotal%,%numcpu%,%cpu0-cpubusy%,%cpu0-cpuidle%,%cpu0-numproc%,%cpu0-memused%,%cpu0-memtotal%,%cpu0-name%,%cpu0-cpuused-user%,%cpu0-cpuused-sys%,%cpu0-cpuused-io%,%cpu0-cpuused-irq%,%cpu0-cpuused-idle%,%cpu1-cpubusy%,%cpu1-cpuidle%,%cpu1-numproc%,
```

```
card schema cardSch2 format
```

```
PPM,card,cardSch2,%epochtime%,%localdate%,%localtime%,%uptime%,%card%,%cpu1-memused%,%cpu1-memtotal%,%cpu1-name%,%cpu1-cpuused-user%,%cpu1-cpuused-sys%,%cpu1-cpuused-io%,%cpu1-cpuused-irq%,%cpu1-cpuused-idle%,%cpu2-cpubusy%,%cpu2-cpuidle%,%cpu2-numproc%,%cpu2-memused%,%cpu2-memtotal%,%cpu2-name%,%cpu2-cpuused-user%,%cpu2-cpuused-sys%,%cpu2-cpuused-io%,%cpu2-cpuused-irq%,%cpu2-cpuused-idle%,%cpu3-cpubusy%,%cpu3-cpuidle%,
```

```
card schema cardSch3 format
```

```
PPM,card,cardSch3,%epochtime%,%localdate%,%localtime%,%uptime%,%card%,%cpu3-numproc%,%cpu3-memused%,%cpu3-memtotal%,%cpu3-name%,%cpu3-cpuused-user%,%cpu3-cpuused-sys%,%cpu3-cpuused-io%,%cpu3-cpuused-irq%,%cpu3-cpuused-idle%,%15avg-cpubusy%,%15peak-cpubusy%,%5avg-cpubusy%,%5peak-cpubusy%,%1avg-cpubusy%,%15avg-memused%,%15peak-memused%,%5avg-memused%,%5peak-memused%,%1avg-memused%,%cpu0-15avg-cpubusy%,%cpu0-15peak-cpubusy%,
```

```
port schema portSch1 format
```

```
PPM,port,portSch1,%epochtime%,%localdate%,%localtime%,%uptime%,%card%,%port%,%maxrate%,%rxbytes%,%txbytes%,%ucast_inpackets%,%ucast_outpackets%,%mcast_inpackets%,%mcast_outpackets%,%bcast_inpackets%,%bcast_outpackets%,%rxpackets%,%txpackets%,%rxdiscbytes%,%rxdiscpackets%,%txdiscbytes%,%txdiscpackets%,%rxerrorbytes%,%rxerrorpackets%,%txerrorbytes%,%txerrorpackets%,
```

```
port schema portSch2 format
```

```
PPM,port,portSch2,%epochtime%,%localdate%,%localtime%,%uptime%,%card%,%port%,%frag-rcvd%,%pkt-reassembled%,%frag-tokernel%,%util-rx-curr%,%util-tx-curr%,%util-rx-5min%,%util-tx-5min%,%util-rx-15min%,%util-tx-15min%,%port-5peak-rx-util%,%port-5peak-tx-util%,%port-15peak-rx-util%,%port-15peak-tx-util%,
```

```
apn-expansion schema apn1 format PPM,apn-expansion,%epochtime%,%localdate%,%localtime%,
```

```
apn-expansion schema apn2 format PPM,apn-expansion,%epochtime%,%localdate%,%localtime%,
```

```
apn-expansion schema apn3 format PPM,apn-expansion,%epochtime%,%localdate%,%localtime%,
```

```
#exit
```

```
#exit
```

```
end
```

```
[local]MME# show bulkstats schemas
```

```
Bulk Statistics Server Configuration:
```

```
Server State:           Enabled
File Limit:             7500 KB
Sample Interval:       15 minutes (0D 0H 15M)
Transfer Interval:     480 minutes (0D 8H 0M)
Receiver Mode:         Secondary-on-failure
Historical Data Collection: Enabled (15 samples stored)
```

```
Bulk Statistics Server Statistics:
```

Records awaiting transmission: 0
Bytes awaiting transmission: 0
Total records collected: 0
Total bytes collected: 0
Total records transmitted: 0
Total bytes transmitted: 0
Total records discarded: 0
Total bytes discarded: 0
Last collection time required: 0 second(s)
Last transfer time required: 0 second(s)
No successful data transfers
No attempted data transfers

File 1

Remote File Format: %date%-%time%

File Header: Version-20.0,%ipaddr%,%date%-%time%,%localdate%-%localtime%,%localtz%,%localtzoffset%,%localdate3%-%localtime3%,%swbuild%

File Footer: EndOfFile

No bulkstats receivers

File Statistics:

Records awaiting transmission: 0
Bytes awaiting transmission: 0
Total records collected: 0
Total bytes collected: 0
Total records transmitted: 0
Total bytes transmitted: 0
Total records discarded: 0
Total bytes discarded: 0
Last transfer time required: 0 second(s)
No successful data transfers
No attempted data transfers

File 2 not configured

File 3 not configured

File 4 not configured

----- Schemas for File 1-----

Type	Name	Active-Only	Format
card	cardSch1	No	PPM,card,cardSch1,%epochtime%,%localdate%,%localtime%,%uptime%,%card%,%cpubusy%,%cpuidle%,%numproc%,%memused%,%memtotal%,%numcpu%,%cpu0-cpubusy%,%cpu0-cpuidle%,%cpu0-numproc%,%cpu0-memused%,%cpu0-memtotal%,%cpu0-name%,%cpu0-cpuused-user%,%cpu0-cpuused-sys%,%cpu0-cpuused-io%,%cpu0-cpuused-irq%,%cpu0-cpuused-idle%,%cpu1-cpubusy%,%cpu1-cpuidle%,%cpu1-numproc%,
card	cardSch2	No	PPM,card,cardSch2,%epochtime%,%localdate%,%localtime%,%uptime%,%card%,%cpu1-memused%,%cpu1-memtotal%,%cpu1-name%,%cpu1-cpuused-user%,%cpu1-cpuused-sys%,%cpu1-cpuused-io%,%cpu1-cpuused-irq%,%cpu1-cpuused-idle%,%cpu2-cpubusy%,%cpu2-cpuidle%,%cpu2-numproc%,%cpu2-memused%,%cpu2-memtotal%,%cpu2-name%,%cpu2-cpuused-user%,%cpu2-cpuused-sys%,%cpu2-cpuused-io%,%cpu2-cpuused-irq%,%cpu2-cpuused-idle%,%cpu3-cpubusy%,%cpu3-cpuidle%,
card	cardSch3	No	PPM,card,cardSch3,%epochtime%,%localdate%,%localtime%,%uptime%,%card%,%cpu3-numproc%,%cpu3-memused%,%cpu3-memtotal%,%cpu3-name%,%cpu3-cpuused-user%,%cpu3-cpuused-sys%,%cpu3-cpuused-io%,%cpu3-cpuused-irq%,%cpu3-cpuused-idle%,%15avg-cpubusy%,%15peak-cpubusy%,%5avg-cpubusy%,%5peak-cpubusy%,%1avg-cpubusy%,%15avg-memused%,%15peak-memused%,%5avg-memused%,%5peak-memused%,%1avg-memused%,%cpu0-15avg-cpubusy%,%cpu0-15peak-cpubusy%,
port	portSch1	No	PPM,port,portSch1,%epochtime%,%localdate%,%localtime%,%uptime%,%card%,%port%,%maxrate%,%rxbytes%,%txbytes%,%ucast_inpackets%,%ucast_outpackets%,%mcast_inpackets%,%mcast_outpackets%,%bcast_inpackets%,%bcast_outpackets%,%rxpackets%,%txpackets%,%rxdisbytes%,%rxdiscpackets%,%txdisbytes%,%txdiscpackets%,%rxerrorbytes%,%rxerrorpackets%,%txerrorbytes%,%txerrorpackets%,
port	portSch2	No	PPM,port,portSch2,%epochtime%,%localdate%,%localtime%,%uptime%,%card%,%port%,%frag-rcvd%,%pkt-reassembled%,%frag-tokenel%,%util-rx-curr%,%util-tx-curr%,%util-rx-5min%,%util-tx-5min%,%util-rx-15min%,%util-tx-15min%,%port-5peak-rx-util%,%port-5peak-tx-util%,%port-15peak-rx-util%,%port-15peak-tx-util%,
apn-expansion	apn1	No	PPM,apn-expansion,%epochtime%,%localdate%,%localtime%,
apn-expansion	apn2	No	PPM,apn-expansion,%epochtime%,%localdate%,%localtime%,
apn-expansion	apn3	No	PPM,apn-expansion,%epochtime%,%localdate%,%localtime%,

mon-di-net mdn1 No PPM,%epochtime%,%localdate%,%localtime%,

[local]MME#

Scénario B. Pour ajouter le **schéma** de mot clé facultatif, vous devez d'abord supprimer le cli **bulkstat** par **aucune configuration bulkstats**. Dès que vous n'exécutez **aucune configuration bulkstats**, tous les schémas actuels du noeud sont supprimés.

[local]MME#

[local]MME# configure

[local]MME(config)# bulkstats collection

[local]MME(config)# no bulkstats config

<cr> - newline

[local]MME(config)# no bulkstats config

[local]MME(config)# end

[local]MME# show configuration bulkstats

config

bulkstats collection

bulkstats historical collection

bulkstats mode

file 1

header format Version-20.0,%ipaddr%,%date%-%time%,%localdate%-%localtime%,%localtz%,%localtzoffset%,%localdate3%-%localtime3%,%swbuild%

footer format EndOfFile

#exit

#exit

end

[local]MME# show bulkstats schemas

Bulk Statistics Server Configuration:

Server State: Enabled

File Limit: 7500 KB

Sample Interval: 15 minutes (0D 0H 15M)

Transfer Interval: 480 minutes (0D 8H 0M)

Receiver Mode: Secondary-on-failure

Historical Data Collection: Enabled (15 samples stored)

Bulk Statistics Server Statistics:

Records awaiting transmission: 0
Bytes awaiting transmission: 0
Total records collected: 0
Total bytes collected: 0
Total records transmitted: 0
Total bytes transmitted: 0
Total records discarded: 0
Total bytes discarded: 0
Last collection time required: 0 second(s)
Last transfer time required: 0 second(s)
No successful data transfers
No attempted data transfers

File 1

Remote File Format: %date%-%time%

File Header: Version-20.0,%ipaddr%,%date%-%time%,%localdate%-%localtime%,%localtz%,%localtzoffset%,%localdate3%-%localtime3%,%swbuild%

File Footer: EndOfFile

No bulkstats receivers

File Statistics:

Records awaiting transmission: 0
Bytes awaiting transmission: 0
Total records collected: 0
Total bytes collected: 0
Total records transmitted: 0
Total bytes transmitted: 0
Total records discarded: 0
Total bytes discarded: 0
Last transfer time required: 0 second(s)
No successful data transfers
No attempted data transfers

File 2 not configured

File 3 not configured

File 4 not configured

[local]MME#

[local]MME#

Scénario C. Puis l'interface de ligne de commande **bulkstat config schema <url>** est configuré. Toutes les configurations et tous les schémas présents dans le fichier de configuration sont ajoutés au noeud.

[local]MME# configure

[local]MME(config)# bulkstats collection

[local]MME(config)# bulkstats config schema /hd-raid/file2

Info: config

Info: bulkstats mode

Info: file 2

Info: header format Version-20.0,%ipaddr%,%date%-&time%,%localdate%-
%localtime%,%localtz%,%localtzoffset%,%localdate3%-&localtime3%,%swbuild%

Info: footer format EndOfFile

Info: diameter-auth schema diameter-authSch1 format PPM,diameter-auth,diameter-
authSch1,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnid%,%vpnname%,%ipaddr%,%port%,%servert
ype%,%group%,%der-req-id-sent%,%der-req-aka-chal-sent%,%der-req-retried%,%dea-chal-rcvd%,%dea-
acpt-rcvd%,%dea-timeout%,%dea-badauth%,%dea-malformed%,%dea-malformed-avp%,%dea-dropped%,%rar-
req-rcvd%,%raa-ans-accpt-sent%,%aar-req-sent%,%str-req-sent%,%str-req-retried%,

Info: diameter-auth schema diameter-authSch2 format PPM,diameter-auth,diameter-
authSch2,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnid%,%vpnname%,%ipaddr%,%port%,%sta-
ans-accpt-rcvd%,%asr-req-rcvd%,%asa-rsp-accpt-sent%,%asa-rsp-rej-sent%,%req-sock-write-
err%,%rsp-sock-write-err%,%any-sock-read-err%,%rem-disconnect%,%loc-disconnect%,

Info: diameter-auth schema diameter-authSch3 format PPM,diameter-auth,diameter-
authSch3,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnid%,%vpnname%,%ipaddr%,%port%,%peer%,%
diameter-auth-msg-multi-round%,%diameter-auth-msg-success%,%diameter-auth-msg-err-
protocol%,%diameter-auth-msg-err-transient%,%diameter-auth-msg-err-permanent%,%diameter-auth-
msg-err-other%,%aaa-req-received%,%aaa-req-timeouts%,%aaa-req-dropped%,

Info: schema systemSch1 format

PPM,system,systemSch1,%epochtime%,%localdate%,%localtime%,%uptime%,%sess-ttlarrived%,%sess-
ttlrejected%,%sess-ttlconnected%,%sess-ttlfailed%,%sess-ttldisconnect%,%sess-ttlhandoff%,%sess-
ttlrenewal%,%sess-ttlcallop%,%sess-ttlauthsucc%,%sess-ttlauthfail%,%sess-curaaaactive%,%sess-
curaaaadeleting%,%sess-curaaaacctpending%,%sess-curaaaacctitemsused%,%sess-

curaaaacctitemsmax%,%sess-curaaabuffused%,%sess-curaaabuffmax%,%sess-ttlaaacancauth%,%sess-ttlaaacctpurged%,%sess-ttlradacctpurged%,%sess-ttllcpup%,

Info: schema systemSch10 format

PPM,system,systemSch10,%epochtime%,%localdate%,%localtime%,%uptime%,%aaa-ttlpseudoauthreq%,%aaa-curpseudoauthreq%,%aaa-ttlauthnulluser%,%aaa-ttlacctsucc%,%aaa-ttlacctpurged%,%aaa-ttlacctcancelled%,%aaa-ttlacctkeepalivesuccess%,%aaa-ttlacctkeepalivetimeout%,%aaa-ttlacctkeepalivepurged%,%aaa-ttlradacctreq%,%aaa-ttlradacctcancelled%,%aaa-ttlradacctpurged%,%aaa-ttlradacctreqretried%,%aaa-ttlradacctrspdropped%,%aaa-ttlmgrpurgedrequests%,%diamauth-msg-mareq%,%diamauth-msg-maans%,%diamauth-msg-marretry%,%diamauth-msg-maamtimeout%,%diamauth-msg-maadropped%,%diamauth-msg-sareq%,

Info: schema systemSch100 format

PPM,system,systemSch100,%epochtime%,%localdate%,%localtime%,%uptime%,%sess-bearerdur-24hr-qci6%,%sess-bearerdur-over24hr-qci6%,%sess-bearerdur-2day-qci6%,%sess-bearerdur-4day-qci6%,%sess-bearerdur-5day-qci6%,%sess-bearerdur-5sec-qci7%,%sess-bearerdur-10sec-qci7%,%sess-bearerdur-30sec-qci7%,%sess-bearerdur-1min-qci7%,%sess-bearerdur-2min-qci7%,%sess-bearerdur-5min-qci7%,%sess-bearerdur-15min-qci7%,%sess-bearerdur-30min-qci7%,%sess-bearerdur-1hr-qci7%,%sess-bearerdur-4hr-qci7%,%sess-bearerdur-12hr-qci7%,%sess-bearerdur-24hr-qci7%,%sess-bearerdur-over24hr-qci7%,%sess-bearerdur-2day-qci7%,%sess-bearerdur-4day-qci7%,%sess-bearerdur-5day-qci7%,

Info: sgs schema sgsSch1 format

PPM,sgs,sgsSch1,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnname%,%vpnid%,%servname%,%servid%,%pag-req-tx%,%pag-req-retx%,%pag-req-rx%,%pag-rej-tx%,%pag-rej-retx%,%pag-rej-rx%,%service-req-tx%,%service-req-retx%,%service-req-rx%,%dl-ud-tx%,%dl-ud-retx%,%dl-ud-rx%,%ul-ud-tx%,%ul-ud-retx%,%ul-ud-rx%,%localupd-req-tx%,%localupd-req-retx%,

Info: sgs schema sgsSch2 format

PPM,sgs,sgsSch2,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnname%,%vpnid%,%servname%,%servid%,%localupd-req-rx%,%localupd-accept-tx%,%localupd-accept-retx%,%localupd-accept-rx%,%localupd-rej-tx%,%localupd-rej-retx%,%localupd-rej-rx%,%tmsi-reloc-tx%,%tmsi-reloc-retx%,%tmsi-reloc-rx%,%alert-req-tx%,%alert-req-retx%,%alert-req-rx%,%alert-ack-tx%,%alert-ack-retx%,%alert-ack-rx%,%alert-rej-tx%,%alert-rej-retx%,%alert-rej-rx%,%ue-actind-tx%,%ue-actind-retx%,

Info: sgs schema sgsSch3 format

PPM,sgs,sgsSch3,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnname%,%vpnid%,%servname%,%servid%,%ue-actind-rx%,%eps-detind-tx%,%eps-detind-retx%,%eps-detind-rx%,%eps-detack-tx%,%eps-detack-retx%,%eps-detack-rx%,%imsi-detind-tx%,%imsi-detind-retx%,%imsi-detind-rx%,%imsi-detack-tx%,%imsi-detack-retx%,%imsi-detack-rx%,,,,,,%mm-inforeq-tx%,%mm-inforeq-retx%,

Info: exit

[local]MME(config)# end

[local]MME#

[local]MME# show configuration bulkstats

config

bulkstats collection

bulkstats historical collection

bulkstats config schema /hd-raid/file2

bulkstats mode

file 1

header format Version-20.0,%ipaddr%,%date%-time%,%localdate%-localtime%,%localtz%,%localtzoffset%,%localdate3%-localtime3%,%swbuild%

footer format EndOfFile

#exit

file 2

header format Version-20.0,%ipaddr%,%date%-%time%,%localdate%-%localtime%,%localtz%,%localtzoffset%,%localdate3%-%localtime3%,%swbuild%

footer format EndOfFile

schema systemSch1 format

PPM,system,systemSch1,%epochtime%,%localdate%,%localtime%,%uptime%,%sess-ttlarrived%,%sess-ttlrejected%,%sess-ttlconnected%,%sess-ttlfailed%,%sess-ttldisconnect%,%sess-ttlhandoff%,%sess-ttlrenewal%,%sess-ttlcallop%,%sess-ttlauthsucc%,%sess-ttlauthfail%,%sess-curaaaactive%,%sess-curaaaadeleting%,%sess-curaaaacctpending%,%sess-curaaaacctitemsused%,%sess-curaaaacctitemsmax%,%sess-curaaabuffused%,%sess-curaaabuffmax%,%sess-ttlaaacanauth%,%sess-ttlaaaacctpurged%,%sess-ttlradacctpurged%,%sess-ttllcpup%,

schema systemSch10 format

PPM,system,systemSch10,%epochtime%,%localdate%,%localtime%,%uptime%,%aaa-ttlpseudoauthreq%,%aaa-curpseudoauthreq%,%aaa-ttlauthnulluser%,%aaa-ttlacctsucc%,%aaa-ttlacctpurged%,%aaa-ttlacctcancelled%,%aaa-ttlacctkeepalivesuccess%,%aaa-ttlacctkeepalivetimeout%,%aaa-ttlacctkeepalivepurged%,%aaa-ttlradacctreq%,%aaa-ttlradacctcancelled%,%aaa-ttlradacctpurged%,%aaa-ttlradacctreqretried%,%aaa-ttlradacctrspdropped%,%aaa-ttlmgrpurgedrequests%,%diamauth-msg-mareq%,%diamauth-msg-maans%,%diamauth-msg-marretry%,%diamauth-msg-maamtimeout%,%diamauth-msg-maadropped%,%diamauth-msg-sareq%,

schema systemSch100 format

PPM,system,systemSch100,%epochtime%,%localdate%,%localtime%,%uptime%,%sess-bearerdur-24hr-qci6%,%sess-bearerdur-over24hr-qci6%,%sess-bearerdur-2day-qci6%,%sess-bearerdur-4day-qci6%,%sess-bearerdur-5day-qci6%,%sess-bearerdur-5sec-qci7%,%sess-bearerdur-10sec-qci7%,%sess-bearerdur-30sec-qci7%,%sess-bearerdur-1min-qci7%,%sess-bearerdur-2min-qci7%,%sess-bearerdur-5min-qci7%,%sess-bearerdur-15min-qci7%,%sess-bearerdur-30min-qci7%,%sess-bearerdur-1hr-qci7%,%sess-bearerdur-4hr-qci7%,%sess-bearerdur-12hr-qci7%,%sess-bearerdur-24hr-qci7%,%sess-bearerdur-over24hr-qci7%,%sess-bearerdur-2day-qci7%,%sess-bearerdur-4day-qci7%,%sess-bearerdur-5day-qci7%,

diameter-auth schema diameter-authSch1 format PPM,diameter-auth,diameter-authSch1,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnid%,%vpnname%,%ipaddr%,%port%,%servertype%,%group%,%der-req-id-sent%,%der-req-aka-chal-sent%,%der-req-retried%,%dea-chal-rcvd%,%dea-acpt-rcvd%,%dea-timeout%,%dea-badauth%,%dea-malformed%,%dea-malformed-avp%,%dea-dropped%,%rar-req-rcvd%,%raa-ans-acpt-sent%,%aar-req-sent%,%str-req-sent%,%str-req-retried%,

diameter-auth schema diameter-authSch2 format PPM,diameter-auth,diameter-authSch2,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnid%,%vpnname%,%ipaddr%,%port%,%staans-acpt-rcvd%,%asr-req-rcvd%,%asa-rsp-acpt-sent%,%asa-rsp-rej-sent%,%req-sock-write-err%,%rsp-sock-write-err%,%any-sock-read-err%,%rem-disconnect%,%loc-disconnect%,

diameter-auth schema diameter-authSch3 format PPM,diameter-auth,diameter-authSch3,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnid%,%vpnname%,%ipaddr%,%port%,%peer%,%diameter-auth-msg-multiround%,%diameter-auth-msg-success%,%diameter-auth-msg-err-protocol%,%diameter-auth-msg-err-transient%,%diameter-auth-msg-err-permanent%,%diameter-auth-msg-err-other%,%aaa-req-received%,%aaa-req-timeouts%,%aaa-req-dropped%,

sgs schema sgsSch1 format

PPM,sgs,sgsSch1,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnname%,%vpnid%,%servname%,%servid%,%pag-req-tx%,%pag-req-retx%,%pag-req-rx%,%pag-rej-tx%,%pag-rej-retx%,%pag-rej-rx%,%service-req-tx%,%service-req-retx%,%service-req-rx%,%dl-ud-tx%,%dl-ud-retx%,%dl-ud-rx%,%ul-ud-tx%,%ul-ud-retx%,%ul-ud-rx%,%localupd-req-tx%,%localupd-req-retx%,

sgs schema sgsSch2 format

PPM,sgs,sgsSch2,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnname%,%vpnid%,%servname%,%servid%,%localupd-req-rx%,%localupd-accept-tx%,%localupd-accept-retx%,%localupd-accept-rx%,%localupd-

```
rej-tx%,%localupd-rej-retx%,%localupd-rej-rx%,%tmsi-reloc-tx%,%tmsi-reloc-retx%,%tmsi-reloc-
rx%,%alert-req-tx%,%alert-req-retx%,%alert-req-rx%,%alert-ack-tx%,%alert-ack-retx%,%alert-ack-
rx%,%alert-rej-tx%,%alert-rej-retx%,%alert-rej-rx%,%ue-actind-tx%,%ue-actind-retx%,
```

```
sgs schema sgsSch3 format
```

```
PPM,sgs,sgsSch3,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnname%,%vpnid%,%servname%,%servi
d%,%ue-actind-rx%,%eps-detind-tx%,%eps-detind-retx%,%eps-detind-rx%,%eps-detack-tx%,%eps-detack-
retx%,%eps-detack-rx%,%imsi-detind-tx%,%imsi-detind-retx%,%imsi-detind-rx%,%imsi-detack-
tx%,%imsi-detack-retx%,%imsi-detack-rx%,,,,,,,%mm-inforeq-tx%,%mm-inforeq-retx%,
```

```
#exit
```

```
#exit
```

```
end
```

```
[local]MME#
```

Scénario D. Après cela, il n'est plus possible d'ajouter de nouveaux schémas. Lorsque vous tentez de supprimer un schéma actuel et de l'ajouter à nouveau, le schéma est supprimé mais vous ne pourrez pas l'ajouter à nouveau. Cependant, le schéma actuel était toujours présent dans le fichier de configuration (fichier de configuration présent dans l'URL).

```
[local]MME# configure
```

```
[local]MME(config)# bulkstats mode
```

```
mode - Enters bulk statistics configuration mode, where you can define what
statistics to collect
```

```
[local]MME(config)# bulkstats mode
```

```
[local]MME(config-bulkstats)# file 1
```

```
[local]MME(config-bulkstats-file-1)# mon-di-net schema mdn1 format PPM,%epochti
me%,%localdate%,%localtime%,
```

```
[local]MME(config-bulkstats-file-1)# exit
```

```
[local]MME(config-bulkstats)# file 2
```

```
[local]MME(config-bulkstats-file-2)# mon-di-net schema mdn2 format PPM,%epochti
me%,
```

```
[local]MME(config-bulkstats-file-2)# end
```

```
[local]MME# show bulkstats schemas
```

```
Bulk Statistics Server Configuration:
```

```
Server State: Enabled
File Limit: 7500 KB
Sample Interval: 15 minutes (0D 0H 15M)
Transfer Interval: 480 minutes (0D 8H 0M)
```

Receiver Mode: Secondary-on-failure
Historical Data Collection: Enabled (15 samples stored)

Bulk Statistics Server Statistics:

Records awaiting transmission: 0
Bytes awaiting transmission: 0
Total records collected: 0
Total bytes collected: 0
Total records transmitted: 0
Total bytes transmitted: 0
Total records discarded: 0
Total bytes discarded: 0
Last collection time required: 0 second(s)
Last transfer time required: 0 second(s)
No successful data transfers
No attempted data transfers

File 1

Remote File Format: %date%-%time%

File Header: Version-20.0,%ipaddr%,%date%-%time%,%localdate%-%localtime%,%localtz%,%localtzoffset%,%localdate3%-%localtime3%,%swbuild%

File Footer: EndOfFile

No bulkstats receivers

File Statistics:

Records awaiting transmission: 0
Bytes awaiting transmission: 0
Total records collected: 0
Total bytes collected: 0
Total records transmitted: 0
Total bytes transmitted: 0
Total records discarded: 0

Total bytes discarded: 0
Last transfer time required: 0 second(s)
No successful data transfers
No attempted data transfers

File 2

Remote File Format: %date%-%time%

File Header: Version-20.0,%ipaddr%,%date%-%time%,%localdate%-%localtime%,%localtz%,%localtzoffset%,%localdate3%-%localtime3%,%swbuild%

File Footer: EndOfFile

No bulkstats receivers

File Statistics:

Records awaiting transmission: 0
Bytes awaiting transmission: 0
Total records collected: 0
Total bytes collected: 0
Total records transmitted: 0
Total bytes transmitted: 0
Total records discarded: 0
Total bytes discarded: 0
Last transfer time required: 0 second(s)
No successful data transfers
No attempted data transfers

File 3 not configured

File 4 not configured

----- Schemas for File 2-----

Type	Name	Active-Only Format
------	------	--------------------

system systemSch1 No
PPM,system,systemSch1,%epochtime%,%localdate%,%localtime%,%uptime%,%sess-ttlarrived%,%sess-ttlrejected%,%sess-ttlconnected%,%sess-ttlfailed%,%sess-ttldisconnect%,%sess-ttlhandoff%,%sess-ttlrenewal%,%sess-ttlcallop%,%sess-ttlauthsucc%,%sess-ttlauthfail%,%sess-curaaaactive%,%sess-curaaaadeleting%,%sess-curaaaacctpending%,%sess-curaaaacctitemsused%,%sess-curaaaacctitemsmax%,%sess-curaaabuffused%,%sess-curaaabuffmax%,%sess-ttlaaacanauth%,%sess-ttlaaacctpurged%,%sess-ttlradacctpurged%,%sess-ttllcpup%,

system systemSch10 No
PPM,system,systemSch10,%epochtime%,%localdate%,%localtime%,%uptime%,%aaa-ttlpseudoauthreq%,%aaa-curpseudoauthreq%,%aaa-ttlauthnulluser%,%aaa-ttlacctsucc%,%aaa-ttlacctpurged%,%aaa-ttlacctcancelled%,%aaa-ttlacctkeepalivesuccess%,%aaa-ttlacctkeepalivetimeout%,%aaa-ttlacctkeepalivepurged%,%aaa-ttlradacctreq%,%aaa-ttlradacctcancelled%,%aaa-ttlradacctpurged%,%aaa-ttlradacctreqretried%,%aaa-ttlradacctrspdropped%,%aaa-ttlmgrpurgedrequests%,%diamauth-msg-mareq%,%diamauth-msg-maans%,%diamauth-msg-marretry%,%diamauth-msg-matimeout%,%diamauth-msg-maadropped%,%diamauth-msg-sareq%,

system systemSch100 No
PPM,system,systemSch100,%epochtime%,%localdate%,%localtime%,%uptime%,%sess-bearerdur-24hr-qci6%,%sess-bearerdur-over24hr-qci6%,%sess-bearerdur-2day-qci6%,%sess-bearerdur-4day-qci6%,%sess-bearerdur-5day-qci6%,%sess-bearerdur-5sec-qci7%,%sess-bearerdur-10sec-qci7%,%sess-bearerdur-30sec-qci7%,%sess-bearerdur-1min-qci7%,%sess-bearerdur-2min-qci7%,%sess-bearerdur-5min-qci7%,%sess-bearerdur-15min-qci7%,%sess-bearerdur-30min-qci7%,%sess-bearerdur-1hr-qci7%,%sess-bearerdur-4hr-qci7%,%sess-bearerdur-12hr-qci7%,%sess-bearerdur-24hr-qci7%,%sess-bearerdur-over24hr-qci7%,%sess-bearerdur-2day-qci7%,%sess-bearerdur-4day-qci7%,%sess-bearerdur-5day-qci7%,

diameter-auth diameter-authSch1 No PPM,diameter-auth,diameter-authSch1,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnid%,%vpnname%,%ipaddr%,%port%,%servertype%,%group%,%der-req-id-sent%,%der-req-aka-chal-sent%,%der-req-retried%,%dea-chal-rcvd%,%dea-acpt-rcvd%,%dea-timeout%,%dea-badauth%,%dea-malformed%,%dea-malformed-avp%,%dea-dropped%,%rar-req-rcvd%,%raa-ans-acpt-sent%,%aar-req-sent%,%str-req-sent%,%str-req-retried%,

diameter-auth diameter-authSch2 No PPM,diameter-auth,diameter-authSch2,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnid%,%vpnname%,%ipaddr%,%port%,%staans-acpt-rcvd%,%asr-req-rcvd%,%asa-rsp-acpt-sent%,%asa-rsp-rej-sent%,%req-sock-write-err%,%rsp-sock-write-err%,%any-sock-read-err%,%rem-disconnect%,%loc-disconnect%,

diameter-auth diameter-authSch3 No PPM,diameter-auth,diameter-authSch3,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnid%,%vpnname%,%ipaddr%,%port%,%peer%,%diameter-auth-msg-multiround%,%diameter-auth-msg-success%,%diameter-auth-msg-err-protocol%,%diameter-auth-msg-err-transient%,%diameter-auth-msg-err-permanent%,%diameter-auth-msg-err-other%,%aaa-req-received%,%aaa-req-timeouts%,%aaa-req-dropped%,

sgs sgsSch1 No
PPM,sgs,sgsSch1,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnname%,%vpnid%,%servname%,%servid%,%pag-req-tx%,%pag-req-retx%,%pag-req-rx%,%pag-rej-tx%,%pag-rej-retx%,%pag-rej-rx%,%service-req-tx%,%service-req-retx%,%service-req-rx%,%dl-ud-tx%,%dl-ud-retx%,%dl-ud-rx%,%ul-ud-tx%,%ul-ud-retx%,%ul-ud-rx%,%localupd-req-tx%,%localupd-req-retx%,

sgs sgsSch2 No
PPM,sgs,sgsSch2,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnname%,%vpnid%,%servname%,%servid%,%localupd-req-rx%,%localupd-accept-tx%,%localupd-accept-retx%,%localupd-accept-rx%,%localupd-rej-tx%,%localupd-rej-retx%,%localupd-rej-rx%,%tmsi-reloc-tx%,%tmsi-reloc-retx%,%tmsi-reloc-rx%,%alert-req-tx%,%alert-req-retx%,%alert-req-rx%,%alert-ack-tx%,%alert-ack-retx%,%alert-ack-rx%,%alert-rej-tx%,%alert-rej-retx%,%alert-rej-rx%,%ue-actind-tx%,%ue-actind-retx%,

sgs sgsSch3 No
PPM,sgs,sgsSch3,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnname%,%vpnid%,%servname%,%servid%,%ue-actind-rx%,%eps-detind-tx%,%eps-detind-retx%,%eps-detind-rx%,%eps-detack-tx%,%eps-detack-retx%,%eps-detack-rx%,%imsi-detind-tx%,%imsi-detind-retx%,%imsi-detind-rx%,%imsi-detack-tx%,%imsi-detack-retx%,%imsi-detack-rx%, , , , , , %mm-inforeq-tx%,%mm-inforeq-retx%,

```
[local]MME# configure
[local]MME(config)# bulkstats mode
[local]MME(config-bulkstats)# file 2
[local]MME(config-bulkstats-file-2)# no sgs
sgs                - Removes sgs bulk statistics schema
[local]MME(config-bulkstats-file-2)# no sgs schema sgsSch1
[local]MME(config-bulkstats-file-2)# end
[local]MME# show bulkstats schemas
```

Bulk Statistics Server Configuration:

```
Server State:           Enabled
File Limit:             7500 KB
Sample Interval:        15 minutes (0D 0H 15M)
Transfer Interval:      480 minutes (0D 8H 0M)
Receiver Mode:          Secondary-on-failure
Historical Data Collection: Enabled (15 samples stored)
```

Bulk Statistics Server Statistics:

```
Records awaiting transmission: 0
Bytes awaiting transmission: 0
Total records collected: 0
Total bytes collected: 0
Total records transmitted: 0
Total bytes transmitted: 0
Total records discarded: 0
Total bytes discarded: 0
Last collection time required: 0 second(s)
Last transfer time required: 0 second(s)
No successful data transfers
No attempted data transfers
```

Remote File Format: %date%-%time%

File Header: Version-20.0,%ipaddr%,%date%-%time%,%localdate%-%localtime%,%localtz%,%localtzoffset%,%localdate3%-%localtime3%,%swbuild%

File Footer: EndOfFile

No bulkstats receivers

File Statistics:

Records awaiting transmission: 0
Bytes awaiting transmission: 0
Total records collected: 0
Total bytes collected: 0
Total records transmitted: 0
Total bytes transmitted: 0
Total records discarded: 0
Total bytes discarded: 0
Last transfer time required: 0 second(s)
No successful data transfers
No attempted data transfers

File 2

Remote File Format: %date%-%time%

File Header: Version-20.0,%ipaddr%,%date%-%time%,%localdate%-%localtime%,%localtz%,%localtzoffset%,%localdate3%-%localtime3%,%swbuild%

File Footer: EndOfFile

No bulkstats receivers

File Statistics:

Records awaiting transmission: 0
Bytes awaiting transmission: 0
Total records collected: 0
Total bytes collected: 0
Total records transmitted: 0
Total bytes transmitted: 0
Total records discarded: 0
Total bytes discarded: 0

Last transfer time required: 0 second(s)

No successful data transfers

No attempted data transfers

File 3 not configured

File 4 not configured

----- Schemas for File 2-----

Type	Name	Active-Only	Format
system	systemSch1	No	PPM,system,systemSch1,%epochtime%,%localdate%,%localtime%,%uptime%,%sess-ttlarrived%,%sess-ttlrejected%,%sess-ttlconnected%,%sess-ttlfailed%,%sess-ttldisconnect%,%sess-ttlhandoff%,%sess-ttlrenewal%,%sess-ttlcallop%,%sess-ttlauthsucc%,%sess-ttlauthfail%,%sess-curaaaactive%,%sess-curaaaadeleting%,%sess-curaaaacctpending%,%sess-curaaaacctitemsused%,%sess-curaaaacctitemsmax%,%sess-curaaaabuffused%,%sess-curaaaabuffmax%,%sess-ttlaaacancauth%,%sess-ttlaaaaacctpurged%,%sess-ttlradacctpurged%,%sess-ttllcpup%,
system	systemSch10	No	PPM,system,systemSch10,%epochtime%,%localdate%,%localtime%,%uptime%,%aaa-ttlpseudoauthreq%,%aaa-curpseudoauthreq%,%aaa-ttlauthnulluser%,%aaa-ttlacctsucc%,%aaa-ttlacctpurged%,%aaa-ttlacctcancelled%,%aaa-ttlacctkeepalivesuccess%,%aaa-ttlacctkeepalivetimeout%,%aaa-ttlacctkeepalivepurged%,%aaa-ttlradacctreq%,%aaa-ttlradacctcancelled%,%aaa-ttlradacctpurged%,%aaa-ttlradacctreqretried%,%aaa-ttlradacctrspdropped%,%aaa-ttlmgrpurgedrequests%,%diamauth-msg-mareq%,%diamauth-msg-maans%,%diamauth-msg-marretry%,%diamauth-msg-maamtimeout%,%diamauth-msg-maadropped%,%diamauth-msg-sareq%,
system	systemSch100	No	PPM,system,systemSch100,%epochtime%,%localdate%,%localtime%,%uptime%,%sess-bearerdur-24hr-qci6%,%sess-bearerdur-over24hr-qci6%,%sess-bearerdur-2day-qci6%,%sess-bearerdur-4day-qci6%,%sess-bearerdur-5day-qci6%,%sess-bearerdur-5sec-qci7%,%sess-bearerdur-10sec-qci7%,%sess-bearerdur-30sec-qci7%,%sess-bearerdur-1min-qci7%,%sess-bearerdur-2min-qci7%,%sess-bearerdur-5min-qci7%,%sess-bearerdur-15min-qci7%,%sess-bearerdur-30min-qci7%,%sess-bearerdur-1hr-qci7%,%sess-bearerdur-4hr-qci7%,%sess-bearerdur-12hr-qci7%,%sess-bearerdur-24hr-qci7%,%sess-bearerdur-over24hr-qci7%,%sess-bearerdur-2day-qci7%,%sess-bearerdur-4day-qci7%,%sess-bearerdur-5day-qci7%,
diameter-auth	diameter-authSch1	No	PPM,diameter-auth,diameter-authSch1,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnid%,%vpnname%,%ipaddr%,%port%,%servertype%,%group%,%der-req-id-sent%,%der-req-aka-chal-sent%,%der-req-retried%,%dea-chal-rcvd%,%dea-acpt-rcvd%,%dea-timeout%,%dea-badauth%,%dea-malformed%,%dea-malformed-avp%,%dea-dropped%,%rar-req-rcvd%,%raa-ans-acpt-sent%,%aar-req-sent%,%str-req-sent%,%str-req-retried%,
diameter-auth	diameter-authSch2	No	PPM,diameter-auth,diameter-authSch2,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnid%,%vpnname%,%ipaddr%,%port%,%staans-acpt-rcvd%,%asr-req-rcvd%,%asa-rsp-acpt-sent%,%asa-rsp-rej-sent%,%req-sock-write-err%,%rsp-sock-write-err%,%any-sock-read-err%,%rem-disconnect%,%loc-disconnect%,

```
diameter-auth diameter-authSch3          No          PPM,diameter-auth,diameter-
authSch3,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnid%,%vpnname%,%ipaddr%,%port%,%peer%,%
diameter-auth-msg-multiround%,%diameter-auth-msg-success%,%diameter-auth-msg-err-
protocol%,%diameter-auth-msg-err-transient%,%diameter-auth-msg-err-permanent%,%diameter-auth-
msg-err-other%,%aaa-req-received%,%aaa-req-timeouts%,%aaa-req-dropped%,
```

```
sgs          sgsSch2          No
PPM,sgs,sgsSch2,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnname%,%vpnid%,%servname%,%servi
d%,%localupd-req-rx%,%localupd-accept-tx%,%localupd-accept-retx%,%localupd-accept-rx%,%localupd-
rej-tx%,%localupd-rej-retx%,%localupd-rej-rx%,%tmsi-reloc-tx%,%tmsi-reloc-retx%,%tmsi-reloc-
rx%,%alert-req-tx%,%alert-req-retx%,%alert-req-rx%,%alert-ack-tx%,%alert-ack-retx%,%alert-ack-
rx%,%alert-rej-tx%,%alert-rej-retx%,%alert-rej-rx%,%ue-actind-tx%,%ue-actind-retx%,
```

```
sgs          sgsSch3          No
PPM,sgs,sgsSch3,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnname%,%vpnid%,%servname%,%servi
d%,%ue-actind-rx%,%eps-detind-tx%,%eps-detind-retx%,%eps-detind-rx%,%eps-detack-tx%,%eps-detack-
retx%,%eps-detack-rx%,%imsi-detind-tx%,%imsi-detind-retx%,%imsi-detind-rx%,%imsi-detack-
tx%,%imsi-detack-retx%,%imsi-detack-rx%,,,,,,%mm-inforeq-tx%,%mm-inforeq-retx%,
```

```
[local]MME# configure
```

```
[local]MME(config)# bulkstats mode
```

```
[local]MME(config-bulkstats)# file 2
```

```
[local]MME(config-bulkstats-file-2)# sgs schema sgsSch1 format PPM,sgs,sgsSch1,
%epochtime%,%localdate%,%localtime%,%uptime%,%vpnname%,%vpnid%,%servname%,%serv
id%,%pag-req-tx%,%pag-req-retx%,%pag-req-rx%,%pag-rej-tx%,%pag-rej-retx%,%pag-r
ej-rx%,%service-req-tx%,%service-req-retx%,%service-req-rx%,%dl-ud-tx%,%dl-ud-r
etx%,%dl-ud-rx%,%ul-ud-tx%,%ul-ud-retx%,%ul-ud-rx%,%localupd-req-tx%,%localupd-
req-retx%,
```

```
[local]MME(config-bulkstats-file-2)# end
```

```
[local]MME# show bulkstats schemas
```

```
Bulk Statistics Server Configuration:
```

```
Server State:          Enabled
File Limit:            7500 KB
Sample Interval:       15 minutes (0D 0H 15M)
Transfer Interval:     480 minutes (0D 8H 0M)
Receiver Mode:         Secondary-on-failure
Historical Data Collection: Enabled (15 samples stored)
```

```
Bulk Statistics Server Statistics:
```

```
Records awaiting transmission: 0
Bytes awaiting transmission: 0
```

Total records collected: 0
Total bytes collected: 0
Total records transmitted: 0
Total bytes transmitted: 0
Total records discarded: 0
Total bytes discarded: 0
Last collection time required: 0 second(s)
Last transfer time required: 0 second(s)
No successful data transfers
No attempted data transfers

File 1

Remote File Format: %date%-%time%

File Header: Version-20.0,%ipaddr%,%date%-%time%,%localdate%-%localtime%,%localtz%,%localtzoffset%,%localdate3%-%localtime3%,%swbuild%

File Footer: EndOfFile

No bulkstats receivers

File Statistics:

Records awaiting transmission: 0
Bytes awaiting transmission: 0
Total records collected: 0
Total bytes collected: 0
Total records transmitted: 0
Total bytes transmitted: 0
Total records discarded: 0
Total bytes discarded: 0
Last transfer time required: 0 second(s)
No successful data transfers
No attempted data transfers

File 2

Remote File Format: %date%-%time%

File Header: Version-20.0,%ipaddr%,%date%-%time%,%localdate%-
%localtime%,%localtz%,%localtzoffset%,%localdate3%-%localtime3%,%swbuild%

File Footer: EndOfFile

No bulkstats receivers

File Statistics:

Records awaiting transmission: 0
Bytes awaiting transmission: 0
Total records collected: 0
Total bytes collected: 0
Total records transmitted: 0
Total bytes transmitted: 0
Total records discarded: 0
Total bytes discarded: 0
Last transfer time required: 0 second(s)
No successful data transfers
No attempted data transfers

File 3 not configured

File 4 not configured

----- Schemas for File 2-----

Type	Name	Active-Only Format
system	systemSch1	No
PPM,system,systemSch1,%epochtime%,%localdate%,%localtime%,%uptime%,%sess-ttlarrived%,%sess-ttlrejected%,%sess-ttlconnected%,%sess-ttlfailed%,%sess-ttldisconnect%,%sess-ttlhandoff%,%sess-ttlrenewal%,%sess-ttlcallop%,%sess-ttlauthsucc%,%sess-ttlauthfail%,%sess-curaaaactive%,%sess-curaaaadeleting%,%sess-curaaaacctpending%,%sess-curaaaacctitemsused%,%sess-curaaaacctitemsmax%,%sess-curaaaabuffused%,%sess-curaaaabuffmax%,%sess-ttlaaacanauth%,%sess-ttlaaaaacctpurged%,%sess-ttlradacctpurged%,%sess-ttlcpup%,		
system	systemSch10	No
PPM,system,systemSch10,%epochtime%,%localdate%,%localtime%,%uptime%,%aaa-ttlpseudoauthreq%,%aaa-curpseudoauthreq%,%aaa-ttlauthnulluser%,%aaa-ttlacctsucc%,%aaa-ttlacctpurged%,%aaa-ttlacctcancelled%,%aaa-ttlacctkeepalivesuccess%,%aaa-ttlacctkeepalivetimeout%,%aaa-ttlacctkeepalivepurged%,%aaa-ttlradacctreq%,%aaa-ttlradacctcancelled%,%aaa-		

tllradacctpurged%,%aaa-tllradacctreqretried%,%aaa-tllradacctrspdropped%,%aaa-tllmgrpurgedrequests%,%diamauth-msg-mareq%,%diamauth-msg-maans%,%diamauth-msg-marretry%,%diamauth-msg-matimeout%,%diamauth-msg-maadropped%,%diamauth-msg-sareq%,

system systemSch100 No PPM,system,systemSch100,%epochtime%,%localdate%,%localtime%,%uptime%,%sess-bearerdur-24hr-qci6%,%sess-bearerdur-over24hr-qci6%,%sess-bearerdur-2day-qci6%,%sess-bearerdur-4day-qci6%,%sess-bearerdur-5day-qci6%,%sess-bearerdur-5sec-qci7%,%sess-bearerdur-10sec-qci7%,%sess-bearerdur-30sec-qci7%,%sess-bearerdur-1min-qci7%,%sess-bearerdur-2min-qci7%,%sess-bearerdur-5min-qci7%,%sess-bearerdur-15min-qci7%,%sess-bearerdur-30min-qci7%,%sess-bearerdur-1hr-qci7%,%sess-bearerdur-4hr-qci7%,%sess-bearerdur-12hr-qci7%,%sess-bearerdur-24hr-qci7%,%sess-bearerdur-over24hr-qci7%,%sess-bearerdur-2day-qci7%,%sess-bearerdur-4day-qci7%,%sess-bearerdur-5day-qci7%,

diameter-auth diameter-authSch1 No PPM,diameter-auth,diameter-authSch1,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnid%,%vpnname%,%ipaddr%,%port%,%servertype%,%group%,%der-req-id-sent%,%der-req-aka-chal-sent%,%der-req-retried%,%dea-chal-rcvd%,%dea-acpt-rcvd%,%dea-timeout%,%dea-badauth%,%dea-malformed%,%dea-malformed-avp%,%dea-dropped%,%rar-req-rcvd%,%raa-ans-acpt-sent%,%aar-req-sent%,%str-req-sent%,%str-req-retried%,

diameter-auth diameter-authSch2 No PPM,diameter-auth,diameter-authSch2,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnid%,%vpnname%,%ipaddr%,%port%,%sta-ans-acpt-rcvd%,%asr-req-rcvd%,%asa-rsp-acpt-sent%,%asa-rsp-rej-sent%,%req-sock-write-err%,%rsp-sock-write-err%,%any-sock-read-err%,%rem-disconnect%,%loc-disconnect%,

diameter-auth diameter-authSch3 No PPM,diameter-auth,diameter-authSch3,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnid%,%vpnname%,%ipaddr%,%port%,%peer%,%diameter-auth-msg-multiround%,%diameter-auth-msg-success%,%diameter-auth-msg-err-protocol%,%diameter-auth-msg-err-transient%,%diameter-auth-msg-err-permanent%,%diameter-auth-msg-err-other%,%aaa-req-received%,%aaa-req-timeouts%,%aaa-req-dropped%,

sgs sgsSch2 No PPM,sgs,sgsSch2,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnname%,%vpnid%,%servname%,%servid%,%localupd-req-rx%,%localupd-accept-tx%,%localupd-accept-retx%,%localupd-accept-rx%,%localupd-rej-tx%,%localupd-rej-retx%,%localupd-rej-rx%,%tmsi-reloc-tx%,%tmsi-reloc-retx%,%tmsi-reloc-rx%,%alert-req-tx%,%alert-req-retx%,%alert-req-rx%,%alert-ack-tx%,%alert-ack-retx%,%alert-ack-rx%,%alert-rej-tx%,%alert-rej-retx%,%alert-rej-rx%,%ue-actind-tx%,%ue-actind-retx%,

sgs sgsSch3 No PPM,sgs,sgsSch3,%epochtime%,%localdate%,%localtime%,%uptime%,%vpnname%,%vpnid%,%servname%,%servid%,%ue-actind-rx%,%eps-detind-tx%,%eps-detind-retx%,%eps-detind-rx%,%eps-detack-tx%,%eps-detack-retx%,%eps-detack-rx%,%imsi-detind-tx%,%imsi-detind-retx%,%imsi-detind-rx%,%imsi-detack-tx%,%imsi-detack-retx%,%imsi-detack-rx%,,,,,,,%mm-inforeq-tx%,%mm-inforeq-retx%,

[local]MME#

Scénario E. Ainsi, le résultat est chaque fois que vous utilisez le mot clé optionnel **schéma**, vous ne pouvez pas ajouter de nouveaux schémas. Vous pouvez supprimer des schémas actuels (à partir du noeud) mais ne pouvez pas les ajouter à nouveau. Cependant, les schémas actuels présents dans le fichier de configuration (qui se trouve dans l'<url>, ne sont pas affectés par les modifications apportées au noeud).

Solution

1. Le **schéma de configuration cli bulkstat <url>** est utilisé en raison de ce problème.
2. Il s'agit d'un résultat attendu par conception, que vous obtenez si le **schéma** de mot clé facultatif est utilisé.
3. Il existe trois solutions pour ce cas :

A.Pour supprimer le **schéma de configuration cli bulkstat <url>** et contrôler l'ajout/suppression de schémas via l'invite de commande/cli manuelle.

B. Pour utiliser le **complément** de mot clé facultatif dans l'interface de configuration de bulkstat. Avec le **complément de configuration cli bulkstat <url>** vous pouvez ajouter les schémas présents dans le fichier de configuration aux schémas du noeud actuel. Vous pouvez ajouter/supprimer de nouveaux schémas et les schémas actuels peuvent également être supprimés/ajoutés à nouveau via l'invite de commande CLI.

C. Pour ajouter/supprimer les schémas requis directement dans le fichier de configuration, puis recharger les configurations avec le fichier de configuration (supprimez d'abord le cli par **no bulkstat config**, ajoutez les schémas dans le fichier de configuration, puis ajoutez-le à nouveau par **bulkstats config schema <url>**). Pour ajouter les schémas dans le fichier de configuration, vous pouvez soit le faire avec l'éditeur vi, soit par SFTP le fichier

Avec l'éditeur vi :

```
[local]MME-01# cli test-commands password <pswd>
Warning: Test commands enables internal testing and debugging commands
USE OF THIS MODE MAY CAUSE SIGNIFICANT SERVICE INTERRUPTION

[local]MME-01# debug shell
Last log in: Wed Dec 22 15:05:12 +0530 2021 on pts/3 from 10.227.224.108.
MME-01:card1-cpu0# ls -lrtha

total 16
-r--r--r-- 1 root root 952 Dec 15 23:30 .rhosts
-r--r--r-- 1 root root 1.7K Dec 15 23:30 .gdbinit
drwx----- 2 root root 100 Dec 15 23:30 .ssh
drwxr-xr-x 24 root root 500 Dec 15 23:30 ..
-rw----- 1 root root 118 Dec 21 14:48 .bash_history
-rw-r--r-- 1 root root 1 Dec 22 15:05 file
drwxr-xr-x 3 root root 140 Dec 22 15:05 .

MME-01:card1-cpu0# vi file
```

Effectuez un FTP du fichier de configuration de l'<url> vers votre lecteur local, modifiez-le et retournez-le à l'<url>.