

# Cell Trace Module Configuration Mode Commands

The Cell Trace Module Configuration Mode provides the commands to configure real time cell traffic trace parameters in a context.

**Command Modes**

Exec > Global Configuration > Context Configuration > Cell Trace Module Configuration

**configure > context** *context_name* **> cell-trace-module**

Entering the above command sequence results in the following prompt:

`[context_name]host_name(config-cell-trace)#`

**Important** The commands or keywords/variables that are available are dependent on platform type, product version, and installed license(s).


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# cell-trace

This command allows you to configure the Cell Traffic Trace transfer parameters.

**Product**

MME

**Privilege**

Security Administrator, Administrator

**Command Modes**

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**configure > context** *context_name* **> cell-trace-module**

Entering the above command sequence results in the following prompt:

`[context_name]host_name(config-cell-trace)#`

## Syntax Description

```
cell-trace { purge { { storage-limit storage_limit  | time-limit time_limit
} [ max-files max_files ] } | push-interval interval | push-trigger {
space-usage-percent usage_precent } | remove-file-after-transfer |
transfer-mode { pull [ module-only ] | push primary { encrypted-url enc_url
 | url url [ module-only ] } | use-harddisk }
default cell-trace [ purge | push-interval | push-trigger |
remove-file-after-transfer | transfer-mode | use-harddisk ]
no cell-trace [ purge | remove-file-after-transfer | use-harddisk ]
```

### default

Configures this command with its default setting for the specified cell traffic trace parameters.

### no

Deletes the specified cell traffic trace parameters.

### purge { { storage-limit*storage_limit* | time-limit *time_limit* } [ max-files *max_files* ] }

Specifies to purge or delete the cell trace records based on "time" or "volume" to restrict hard-disk space usage for cell trace records.

**storage-limit** *storage_limit*: Specifies the storage space for the record files, in megabytes. *storage_limit* must be an integer from 10 to 143360.

**time-limit** *time_limit*: Specifies the time to delete record files, in seconds. *time_limit* must be an integer from 600 to 2592000.

**max-files** *max_files*: Specifies the maximum number of records to purge per iteration. *max_files* must be an integer 0 or ranging from 1000 to 10000. When value is set to 0, it deletes all records until purge limit is reached.

By default, no purge operation is performed by the VPNMGR module.

### push-interval *interval*

Specifies the transfer interval in seconds to push cell traffic trace files to an external file server. *interval* must be an integer from 1 to 30.

Default: 1 second

### push-trigger { space-usage-percent *usage_precent* }

Configures the disk utilization trigger for cell traffic trace files.

**space-usage-percent** *usage_precent*: Specifies the disk utilization percentage for triggering PUSH. *usage_precent* must be an integer from 10 to 80.

### remove-file-after-transfer

Deletes the files from RAMFS after transfer to an external server. If the **cell-trace use-harddisk** command is not configured, it is recommended to use this command.

**transfer-mode { pull [ module-only ] | push primary { encrypted-url *enc_url* | url *url* } [ module-only ] }**

Configures the transfer mode for cell trace record files. Only one TCE address configuration is required and all files will be sent to this address irrespective of the TCE address received from eNodeB in S1AP cell tracing message. Both the addresses must be the same mostly.

**pull [ module-only ]**: Specifies that external storage pulls the cell trace files.

**push primary { encrypted-url** *enc_url* **| url** *url* **} [ module-only ]**: Specifies that ST pushes the cell trace files onto the configured external storage server. *enc_url* specifies the location where the cell trace files will be transferred and must be entered in encrypted format. *url* specifies the location where the cell trace files will be transferred and must be entered in the server URL format *scheme://user:password@host:[port]/directory* - string of size 1 to 1024.

If the **module-only** keyword is set, then the given configuration is applied only for the specific record type. The administrator can configure record transfer information for all record types separately or combined using the **module-only** keyword.

**pull [ module-only ]**:

Server URL in the format: scheme://user:password@host:[port]/directory - string of size 1 to 1024

If the **module-only** keyword is set, then the given configuration is applied only for the specific record type. The administrator can configure record transfer information for all record types separately or combined using the **module-only** keyword.

**use-harddisk**

Moves the cell trace files from RAMFS to */hd-raid/* and then transferred to an external server. It is recommended to use this command to prevent space on RAMFS becoming full.

**Usage Guidelines**

Use this command to configure the Cell Traffic Trace transfer parameters. The user must be in a non-local context when specifying the **cell-trace-module** command.

**Example**

The following command pushes the cell traffic trace files to an external file server in *20* seconds:

```
cell-trace push-interval 20
```

# do show

Executes all **show** commands while in Configuration mode.

**Product**

All

**Privilege**

Security Administrator, Administrator

**Syntax Description**

```
do show
```

**Usage Guidelines**

Use this command to run all Exec mode **show** commands while in Configuration mode. It is not necessary to exit the Config mode to run a **show** command.

The pipe character **|** is only available if the command is valid in the Exec mode.

**Caution** There are some Exec mode **show** commands which are too resource intensive to run from Config mode. These include: **do show support collection**, **do show support details**, **do show support record** and **do show support summary**. If there is a restriction on a specific **show** command, the following error message is displayed:

```
Failure: Cannot execute 'do show support' command from Config mode.
```

# end

Exits the current configuration mode and returns to the Exec mode.

**Product** All

**Privilege** Security Administrator, Administrator

**Syntax Description** **end**

**Usage Guidelines** Use this command to return to the Exec mode.

# exit

Exits the current mode and returns to the parent configuration mode.

**Product** All

**Privilege** Security Administrator, Administrator

**Syntax Description** **exit**

**Usage Guidelines** Use this command to return to the parent configuration mode.

# file

This command allows you to configure the file creation properties for cell trace records.

**Product** All

**Privilege** Security Administrator, Administrator

**Command Modes** Exec > Global Configuration > Context Configuration > Cell Trace Module Configuration

**configure > context** *context_name* **> cell-trace-module**

Entering the above command sequence results in the following prompt:

```
[context_name]host_name(config-cell-trace)#
```

## Syntax Description

```
file [ delete-timeout seconds | directory directory_name | field-separator {
hyphen | omit | underscore } | rotation { num-records num_records | time
rotation_time } | storage-limit storage_limit | trap-on-file-delete ]
default file [ delete-timeout | directory | field-separator | rotation |
 storage-limit | trap-on-file-delete ]
```

### default

Configures this command with its default value for the specified parameters.

### file delete-timeout *seconds*

Configures the time to delete the completed cell traffic trace files after specified number of seconds. *seconds* must be an integer from 3600 through 31536000.

### file directory *directory_name*

Specifies a subdirectory to be generated in the default directory */records/celltrace* in which to store EDR files. *directory_name* must be an alphanumeric string of 1 through 191 characters.

### file field-separator { hyphen | omit | underscore }

Specifies the field inclusion/exclusion type of separators between two fields of cell trace files.

- **hyphen**: Specifies to use "-" (hyphen) as the field separator between file format fields.
- **omit**: Excludes the field separator.
- **underscore**: Specifies to use "_" (underscore) as the field separator between file format fields.

### file rotation { num-records *num_records* | time *rotation_time* }

Specifies the criteria to rotate the record file. CDRMOD will hold the cell trace records in buffer and write them to the XML file only when the criteria configured by this command are met.

**num-records** *num_records*: Completes the file when the specified number of records are added. When the number of records in the buffer reaches the specified value, records will be written to the XML file. *num_records* must be an integer from 100 to 2000. Default: 1000.

**time** *rotation_time*: Completes the file based on file duration, time after which records will be written to XML file. *num_records* must be an integer from 1 to 30. Default: 1 second.

### file storage-limit *storage_limit*

Configures the total available storage space on RAMFS for cell trace files. *storage_limit* must be an integer from 10485760 to 134217728. When the storage space is full, the oldest files on RAMFS will be deleted first to create space for new files.

### file trap-on-file-delete

Instructs the system to send an SNMP notification (starCDRFileRemoved) when a cell trace file is deleted due to lack of space.

## Usage Guidelines

Use this command to configure the file creation properties for cell trace records.

### Example

The following command configures the time to delete the cell trace files after *4000* seconds:

```
file delete-timeout 4000
```