User Guide for Trace

There are two kinds of command can be used for trace. One is IMM command and the other is trace CLI command. Trace CLI command is recommended to use.

The example in this document is a simple user guide for trace. Please refer to the document in the following link for details.
http://calstore.internal.ericsson.com/alexserv?ID=22569&DB=32243-en_lzn7020354_1_r1a.alx&FN=1_1540-APR9010500_1Uen.A.html

Trace CLI command summary

tracecc Related Subcommands

Trace Manager Subcommands	Trace Profile Subcommands	Trace Recording Subcommands
tracecc-manager-listevents tracecc-manager-set tracecc-manager-view	tracecc-profile-activate tracecc-profile-cancel tracecc-profile-create tracecc-profile-deactivate tracecc-profile-delete tracecc-profile-list tracecc-profile-set tracecc-profile-view	tracecc-recording-cancelconvert tracecc-recording-convert tracecc-recording-delete tracecc-recording-list tracecc-recording-view

Trace Collection Steps

Collecting traces using the Trace CC involves the following activities:

1. Perform a List Trace Events operation to identify trace expressions for the applications running in the cluster.
2. Create a Trace Profile with the required trace expressions.
3. Activate the Trace Profile to start a Trace Recording session.
4. Deactivate the Trace Recording when enough data has been collected.
5. Convert the trace logs from the binary Common Trace Format (CTF) to readable ASCII.

Example:

Suggest checking the trace manager attributes with “tracecc-manager-view” and setting proper values for Trace Manager configurable attributes with “tracecc-manager-set” command according to the system.

Run an application program and keep it running during demon period.
./TestApp_Thread1 5000 np &
Here:
TestApp_Thread1 5000 → application program for demon
5000 →5000 seconds
np →no print
& →running in the background

Step 1: List the trace events for the application running in the node.

```
-sh-3.2# tracecc-manager-listevents "com_ericsson_cba_trace_testapp_thread1_lowtraf:*"
-sh-3.2# cd /home/trace/trace_events_list/000212_222420
-sh-3.2# ls
metadata.txt  result_0001.txt
-sh-3.2# cat result_0001.txt
com_ericsson_cba_trace_testapp_thread1_lowtraf:OnePerSecA,TRACE_DEBUG_PROGRAM(8) LOGLEVEL_ONLY
com_ericsson_cba_trace_testapp_thread1_lowtraf:OnePerSecB,TRACE_DEBUG_PROCESS(9) LOGLEVEL_ONLY
com_ericsson_cba_trace_testapp_thread1_lowtraf:TenPerSecA,TRACE_DEBUG_MODULE(10) LOGLEVEL_ONLY
com_ericsson_cba_trace_testapp_thread1_lowtraf:TenPerSecB,TRACE_DEBUG_UNIT(11) LOGLEVEL_ONLY
```

Step 2: Create a Trace Profile with the required trace expressions.

```
-sh-3.2# tracecc-profile-create -c NOT_ENFORCED -d "It is a trace_demon" -l TRACE_DEBUG_MODULE trace_profile1 -t
"com_ericsson_cba_trace_testapp_thread1_lowtraf:*"
or
-sh-3.2# tracecc-profile-create -c NOT_ENFORCED -d "It is a trace_demon" -l TRACE_DEBUG_MODULE trace_profile1 -f
/home/trace/trace_events_list/000212_222420/ result_0001.txt
```

Use command "tracecc-profile-set", when you need to modify trace profiles,
Use command "tracecc-profile-list" to list all the profiles already created.
Check the profile status with "tracecc-profile-view".

```
-sh-3.2# tracecc-profile-list
profile_hcy
trace_profile1
sh-3.2# tracecc-profile-view trace_profile1
consistentLogs              : NOT_ENFORCED
description                 : It is a trace_demon
latestSessionId             : 0
logLevelDefault             : TRACE_DEBUG_MODULE(10)
state                       : INACTIVE
traceExpressions            : com_ericsson_cba_trace_testapp_thread1_lowtraf:*
--------------------------------
progress.actionName         : ""
progress.additionalInfo     : ""
progress.info               : ""
progress.percentage         : 0
progress.result             : NOT_AVAILABLE
progress.resultInfo         : ""
progress.state              : RUNNING
progress.timeActionCompleted    : ""
progress.timeActionStarted      : 02/12/00T21:55:30+0000
progress.timeOfLastStatusUpdate : 02/12/00T21:55:30+0000
```

Step 3: Activate the Trace Profile to start a Trace recording session.

```
-sh-3.2# tracecc-profile-activate trace_profile1
-sh-3.2# tracecc-profile-view trace_profile1
consistentLogs              : NOT_ENFORCED
description                 : It is a trace_demon
latestSessionId             : 1
logLevelDefault             : TRACE_DEBUG_MODULE(10)
state                       : ACTIVE
traceExpressions            : com_ericsson_cba_trace_testapp_thread1_lowtraf:*
--------------------------------
progress.actionName         : activateSession
progress.additionalInfo     : ""
progress.info               : Trace activation is complete
```

```
progress.percentage           : 100
progress.result               : SUCCESS
progress.resultInfo           : Trace activation was completed successfully
progress.state                : FINISHED
progress.timeActionCompleted  : 02/12/00T21:57:35+0000
progress.timeActionStarted    : 02/12/00T21:57:35+0000
progress.timeOfLastStatusUpdate : 02/12/00T21:57:35+0000
```

Step 4: Deactivate the trace session when the trace is collected enough.

```
-sh-3.2# tracecc-profile-deactivate trace_profile1
-sh-3.2# tracecc-profile-view trace_profile1
consistentLogs              : NOT_ENFORCED
description                 : It is a trace_demon
latestSessionId             : 1
logLevelDefault             : TRACE_DEBUG_MODULE(10)
state                       : INACTIVE
traceExpressions            : com_ericsson_cba_trace_testapp_thread1_lowtraf:*
---------------------------------
progress.actionName           : deactivateSession
progress.additionalInfo       : ""
progress.info                 : Trace deactivation is complete
progress.percentage           : 100
progress.result               : SUCCESS
progress.resultInfo           : Trace deactivateSession was completed successfully
progress.state                : FINISHED
progress.timeActionCompleted  : 02/12/00T21:58:49+0000
progress.timeActionStarted    : 02/12/00T21:58:48+0000
progress.timeOfLastStatusUpdate : 02/12/00T21:58:49+0000
```

Step 5: Convert the trace logs from the binary Common Trace Format (CTF) to readable ASCII

Use command “tracecc-recording-list” to list all the trace recordings already generated.
Check the recording status with “tracecc-recording-view”.

```
-sh-3.2# tracecc-recording-list
trace_profile1_1

-sh-3.2# tracecc-recording-convert trace_profile1_1
-sh-3.2# tracecc-recording-view trace_profile1_1
errors                      : NoError;
logLevelDefault             : TRACE_DEBUG_MODULE(10)
startTime                   : 02/12/00T21:57:35+0000
state                       : COMPLETE
stopTime                    : 02/12/00T21:58:49+0000
traceExpressions            : com_ericsson_cba_trace_testapp_thread1_lowtraf:*
traceProfileId              : trace_profile1
---------------------------------
progress.actionName           : convertOutput
progress.additionalInfo       : nodeName=All processId=All
progress.info                 : Convert output successfully done
progress.percentage           : 100
progress.result               : SUCCESS
progress.resultInfo           : Convert output for trace_profile1_1 successfully done
progress.state                : FINISHED
progress.timeActionCompleted  : 02/12/00T22:04:53+0000
progress.timeActionStarted    : 02/12/00T22:04:53+0000
progress.timeOfLastStatusUpdate : ""
```

Step 6: check converted log

-sh-3.2# vi /home/trace/trace_profile1_2/Converted_logs/Node_node1.log

[21:57:36.000378872] TestApp_Thread1:27526 com_ericsson_cba_trace_testapp_thread1_lowtraf:TenPerSecA: { 0 }, { my_Time = "21:57:33", OnePs = 4, TenPs = 5 }
[21:57:36.444101671] TestApp_Thread1:27526 com_ericsson_cba_trace_testapp_thread1_lowtraf:TenPerSecA: { 0 }, { my_Time = "21:57:33", OnePs = 4, TenPs = 6 }
[21:57:36.888068911] TestApp_Thread1:27526 com_ericsson_cba_trace_testapp_thread1_lowtraf:TenPerSecA: { 0 }, { my_Time = "21:57:33", OnePs = 4, TenPs = 7 }
[21:57:37.332067771] TestApp_Thread1:27526 com_ericsson_cba_trace_testapp_thread1_lowtraf:TenPerSecA: { 0 }, { my_Time = "21:57:33", OnePs = 4, TenPs = 8 }
[21:57:37.776520352] TestApp_Thread1:27526 com_ericsson_cba_trace_testapp_thread1_lowtraf:TenPerSecA: { 0 }, { my_Time = "21:57:33", OnePs = 4, TenPs = 9 }
[21:57:38.220327571] TestApp_Thread1:27526 com_ericsson_cba_trace_testapp_thread1_lowtraf:OnePerSecA: { 0 }, { my_Time = "21:57:38", OnePs = 5 }
[21:57:38.220356101] TestApp_Thread1:27526 com_ericsson_cba_trace_testapp_thread1_lowtraf:OnePerSecB: { 0 }, { my_Time = "21:57:38" }