Test and Verification for SKA logging

Three device servers

- 1. Sending.py Run for two devices ("a/b/c" and "x/y/z") under same instance name "sending"
- 2. ElementLogger.py Sets 2 different logging levels for Sending.py
 - a. SetStorageLoggingLevel b. SetElementLoggingLevel
- 3. CentralLogger.py Sets logging level for Sending.py i.e. SetCentralLoggingLevel

Tests are done and verified in following manner

	Test	Remark	Comments
1.	Started Sending.py changed storageLoggingLevel and elementLoggingLevel and verified at syslog and TLS for Sending.py	Pass	
2.	Started Sendng.py + ElementLogger.py and changed storageLoggingLevel and elementLoggingLevel for Sending.py through SetStorageLoggingLevel and SetElementLoggingLevel command from ElementLogger.py and verified at syslog and TLS for ElementLogger	Pass	Filter introduced in ElementLogger.py (Can be introduce in Sending.py but have a catch, mentioned by Rajesh.)
3.	Started Sending.py + ElementLogger.py + CentralLogger.py and changed centralLoggingLevel from CentralLogger, storageLoggingLevel + elementLoggingLevel from ElementLogger and verified syslogs and TLS for CentralLogger and ElementLogger	Pass	Filters are introduced in Loggers.

One of the test inputs are as follows : (See related snapshots for TLS for CentralLogger and ElementLogger and syslogs on next page.)

CentralLogger(commands)	ElementLogger(commands)	Sending(changes)	
SetCentralLoggingLevel [3,2]["a/b/c","x/y/z"]	SetStorageLoggingLevel [5,4]["a/b/c","x/y/z"]	For "a/b/c" storageLoggingLevel = 5 elementLoggingLevel = 4 centralLoggingLevel = 3 For "x/y/z" storageLoggingLevel = 4 elementLoggingLevel = 5 centralLoggingLevel = 2	
	SetElementLoggingLevel [4,5]["a/b/c","x/y/z"]		

```
lmcuser@e01:~$ tail -f /var/log/syslog | grep "Sending"
Jan 12 22:31:10 e01 Sending: DEBUG Sending 'TurnOn Sending debug'
Jan 12 22:31:10 e01 Sending: INFO Sending 'TurnOn Sending info'
Jan 12 22:31:10 e01 Sending: WARNING Sending 'TurnOn Sending warn'
Jan 12 22:31:10 e01 Sending: ERROR Sending 'TurnOn Sending error'
Jan 12 22:31:10 e01 Sending: CRITICAL Sending 'TurnOn Sending fatal'

Jan 12 22:31:20 e01 Sending: WARNING Sending 'TurnOn Sending warn'
Jan 12 22:31:20 e01 Sending: ERROR Sending 'TurnOn Sending error'
Jan 12 22:31:20 e01 Sending: ERROR Sending 'TurnOn Sending fatal'
```

Illustration 1: syslog output for device "a/b/c" and "x/y/z" having storagelogginglevel 5 and 4 respectively

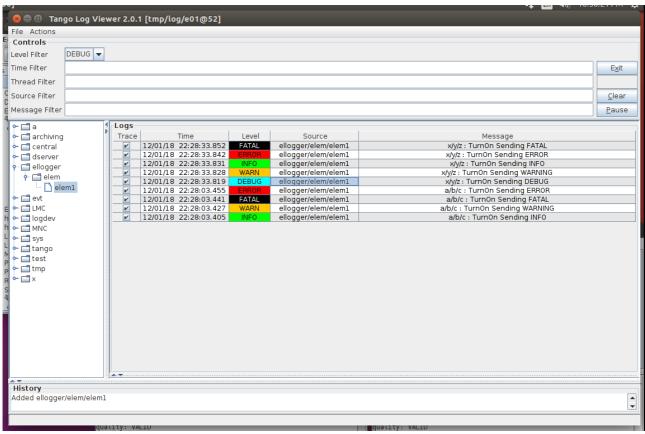


Illustration 2: TLS for ElementLogger for devices "a/b/c" and "x/y/z" where elementLoggingLevel are 4 and 5 respectively

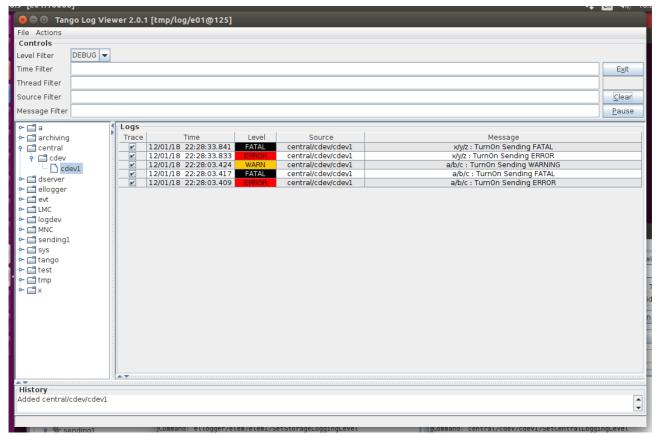


Illustration 3: TLS for CentralLogger for devices "a/b/c" and "x/y/z" where centralLoggingLevels are 3 and 2 respectively