

### Release Notes for T1 E1 Analyzer Version 21.7.21

This release notes lists all the enhancements and bug-fixes for each protocol and framework in general.

#### Release History

Reason for Release / Description of Enhancement	Version
<p><b>Enhancements:</b></p> <ul style="list-style-type: none"><li>• MAPS™ Update: MAPS APS (FXO).</li><li>• Updated region definitions.</li><li>• VBM synchronization mechanism uses single-frequency tones instead of DTMF.</li><li>• Ring detection cadence definition now allows multiple values.</li><li>• Added UK FSK support.</li><li>• Added debug option to show all detected tones.</li><li>• Added debug option to show on/off time for detected call progress tones.</li><li>• Added debug option to record call setup.</li><li>• Added 1004 Hz tone-based path verification option.</li><li>• Updated IVR detailed log path.</li><li>• Added AutoTrafficFile and AutoTrafficTone options, added Auto Traffic Direction option.</li><li>• The offline protocol analyzers have the warranty license support.</li><li>• <b>MAPS CAS:</b><ul style="list-style-type: none"><li>➤ Updated digit detector.</li><li>➤ Fixed UK FSK detection when used with E1 Analyzer.</li><li>➤ Updated region definitions.</li><li>➤ Change TestbedDefault.xml to non-SF based profile.</li></ul></li><li>• <b>MAPS CLI Update:</b><ul style="list-style-type: none"><li>➤ Added Java Client DLL and Parser files to Fix floating number issue in RING_ON and RING_OFF value.</li><li>➤ Updated Python Client PythonMapsCliIfc.pyd and Parser files for 64-bit and 32-bit version and for Python's version 2 and version 3.</li></ul></li><li>• Added right-click search and aggregate summary column groups for <b>Protocol Analyzers</b>.</li><li>• <b>MFR-IP-PacketCheck:</b><ul style="list-style-type: none"><li>➤ VC Configuration dialog has been removed and its configuration fields have moved to Route configuration dialog.</li><li>➤ Bandwidth Configuration and Transmission Rate Control is made applicable to per streams Instead of per Virtual Channel.</li><li>➤ Selection of Packet Mode for each stream is provided based on the default values that are selected and loaded to the respective configuration fields. Customization of those configuration values also provided.</li><li>➤ Supported Packet Mode selection options are FR-Route, FR-Bridge, FR-Q.933, PPP-IPV4, PPP-LCP, and Custom.</li></ul></li></ul>	<b>21.7.21</b>

- Support for Transmit and Receive Non MFR Frames. (Frames without Frame Relay Header).
- Default flags between frames has been changed from 100 to 1.
- Added support for Unframed mode in E1 Analyzer, user can include Timeslot 0 for transmission/reception.
- Frame Relay Emulator window is now re-sizable.
- Added WCS scripts for Datacomm Interface and Enhanced BERT WCS Script for Datacomm, T1 and E1 Analyzer.
- Added support warranty and trial license to WCS T1/E1 dll based tasks.
- Protocol Analyzers :
  - Added Protocol decode errors and data link errors for searching and filtering criteria.
  - Implemented aggregate column priority groups for protocol analyzers.
  - Aggregate column items user interface for reversing order src->dst or dst->src and rearranging in any order using GUI.
- **PDA:** Added option to display latest calls on top.
- **HDLC Test:** Now, variable length test range is 7-12000.
  - Fixed an issue that disabled HDLC Tx random variable length buckets selection.
  - Saves HDLC Test to file for variable length test both random and filler.
  - Tx variable length test has two options random data and non-random data that allows to determine information if some fragments of frame are transmitted due to performance or logic problems.
- **HDLFileConversionUtility:** Added option to provide user defined header while converting.
- **MAPSCLI:** Updated MapsCasApi.py to support for UK caller ID.
- **MAPSCLI:** Added glmaps\_python\_reference document.
- **SS7Prot.ini:** Option to set the number of digits for MNC in MAP protocol.
- **MAPS™:** Added support for UK caller ID (CLI) MAPS™ APS FXO-FXS: Indian region is included in APS\_Regions.xml with India.mtd file.
- **WCS:** BT extension is added to Caller-ID module.
- MAPS™ APS VF and EandM folders are updated. Now, reports are sent to database (NetSurveyorWeb™).
- **MapsCasApi.py update** – added detect\_call script.
- Four wire VF scripts updated.
- **Error Insertion** - Added an underrun counter during auto insertion of errors.
- Allow more than 64K flags in **HDLC Tx Test**.
- PDA supports for offline Protocol Analyzers – CAS, SS7, ISDN, GSM.
- MAPS™ APS supports for E and M Protocol.
- Updated Scripts to support Ground Start signaling in MAPS FXO FXS.
- Updated APS and VF Voiceband measurements.
- Updated MAPS-ISDN profile with VQT\_Iteration option.
- Updated Java Client Doc files.
- Updated MAPS CLI parsers.
- Updated MapsApisApi.

- For APS protocol, the Python examples are updated with VQT parameters.
- Added option to select Error rate between 1.00E-009 to 1.00E+000.
- Added common default file directory attribute for all Protocol Analyzers.
- HDL extension is enforced in the following options: capture , save as, save as and close, and join multiple trace files.
- Default file size increased to 1GB (1 000 000 000 for 1GB).
- Inband Called and Inband Calling MidCall Digits detection in ISDN Analyzer PDA.
- Offline \*.hdl files, ACF samples files are organized with respect to protocols.
- Implemented Hardware based Software licensing evaluation and support for Warranty Licensing.
- MAPS™ GPRS Gb enhancement.
- Updated MAPS™ clients – Java, Python, TCL, and VB.
- AIN, CAMEL, MAP, ANSI TCAP, and CNAM protocols are supported over ATM layer in MAPS.
- MapsCLILauncher includes the changes to enable APS protocol in Mapscli.
- Enhanced MFR-IP-PacketCheck.
- Pulse dialing is supported in MAPS FXO-FXS.
- Updated CAS, FXO FXS for R and S.
- Updated MAPS ISUP INL changes.
- MAPS™ CAS now supports SF signaling, Voice Call signaling simulation for E1.
- MAPS™ FXO-FXS- high-pass filter added for FXS Answercall to fix detect dial digits issue.
- MAPS™ Camel, INAP import/Export files are updated to support TCAP Layer separation.
- MAPS™ CAS supports SS5, SF signaling, Voice Call Signaling simulation.
- MAPS™ ISDN scripts updated with Arinc standard support for ISDN protocol.
- Enhanced T1/E1 BERT commands to give error insertion rate and bit inversion capability.

#### Bug Fixes:

- Fixed Timestamp issue in WCS Server.
- Fixed WCS LapD Server Licensing issue.
- T1E1-MAPS-MAP Emulator – Fixed bluescreen crash issue while closing Message editor.
- PPP Protocol Analyzer: Fixed Reserved frames issue during longer run.
- **PDA Bug fixes:**
  - **PPP PDA:** Fixed MLPPP MEGACO call flow application crash issue.
  - **SS7 PDA** for MAP protocol is not displaying SMDData for intermediate MO-Forward messages.
- T1/E1 PDA show Latest call is not visible properly in PDA call flow and Latest messages are not displaying in call flow.
- **PDA:** Incorrect OPC and DPC values are displaying in SS7 Analyzer PDA for INAP protocol.
- **StripChart:**
  - **T1E1 Analyzer Real Time Strip Chart:** Signals are not capturing when starting for the first time after invoking the Application.

- **T1 Analyzer:** Real-time Strip Chart Y Axis signaling graph displays huge value for offline analysis.
- **CAS Analyzer:** Crash is observed for SF Signaling Protocol of CAS Analyser in multiple timeslots.
- **PDA:** Invalid length value observed in the exported csv files for frame-details.
- **PDA:** ISDN call status issue for incomplete calls.
- **HDLC Test Update:**
  - Corrected and optimized Tx test and Rx test on long frames.
  - Consistent error messages and no auto reset on incorrect varlen parameters such as len 7-20000 resetting to 256.
  - When user clicks stop button the transmitted frame count is not displayed.
  - When close button (X) in upper right corner is clicked during transmission sometimes GUI looked frozen now it displays hourglass.
  - HDLC Tx to file for variable length and subsequent Tx caused errors in HDLC Rx test.
- Fixed invoking crash issue on GSMA, PPP and UMTS Protocol Analyzers.
- MAPS™ FXO-FXS FXO CAMA Monitor.gls graph issue fixed in the script.
- “End Of DID” (\_EODID)-Removed from MFCR2 Testbed.
- SS5 Signaling script fixes.
- MFCR2 signaling script Fixes.
- MAPS™ CAS: Unnecessary call configuration, scripts, profiles are removed.
- Script fix in AttenuationDistortion.gls for APS FXO FXS, EandM, VF.
- Script Fix in FXO CAMA Monitor.gls for MAPS™ FXO-FXS.
- CAS Analyzer: In CAS Analyzer for FGD Protocol, Frames are not monitored.
- Implemented wraparound counters for frame errors and BPV errors for E1.
- Implemented wraparound counters for CRC4 errors for T1 and E1.
- Utility function enabling for Mapscore and Faxsimulator crash fix.
- Fixed CRC Error Insertion problem for Fixed error rate – up to a rate of 1.0E-03.
- Fixed Single CRC error insertion.
- Corrected spelling and wordings in Protocol Analyzers.
- Fixed Error insertion problem after changing transmission data rate in MCBERT.
- Fixed application crash while starting MCBERT at 56kbps rate for more than 64 channels.
- Fixed TCP Connection issues in CLI for Python and Java Client.
- Corrected VF level for new FPGA revisions in tProbe and Dual Express
- Fixed Rx frequency fix in WCS.
- Improved the pulse shape alignment on port 2.
- Multi-channel Bert increased performance allowing to handle more channels.

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| <ul style="list-style-type: none"><li>• Fixed Protocol Analyzer GUI problem when user clicks on data, the first frame details are displayed instead of selected frames .</li><li>• Fixed SS1 Analyzer – Channel Locking problem.</li><li>• Fixed WCS – Traffic Function Server.</li><li>• Added option to enable/disable logging of commands to *.txt file.</li><li>• Protected against blue screen on shutdown of PC while Dual Express is running.</li><li>• Fixed timing issues with the CDR.</li><li>• Error Insertion – WCS.</li><li>• Modified Error Insert client to conform more closely to the GUI version of Error Insertion, especially on framer and resync issues with E1. Fax call issue fixed in tProbe™ Lite Analyzer.</li><li>• Performance issues with 8 ports Tx/Rx test and 1-10 flags.</li><li>• Performance issues with limited number of frames and 1-10 flags; was reporting not all frames received.</li></ul> |  |
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