SDK REVISION HISTORY







SDK Revision History

SDK version Aug2013		
Versions	DTAPI: v5.2.4.31 Drivers: Dta v4.5.2.46, DtaNw v3.4.0.17, Dtu v4.4.0.38 DtapiService: v2.2.6.29	
Changes	New features: • VLAN support using manually installation of protocol driver DtaNwAp • DTU-351 USB-3 HD-SDI input support • Support for ISDB-Tmm modulation using DtMplpOutpChannel::SetModControl(DtlsdbTmmPars&) • DTA-2162 does now have port id included in device description strings • DVB-T demodulation statistic DTAPI_STAT_TPS_INFO including DVB-T Cell-ID information • The number of DtDevice/DtChannel instances is no longer limited to 256	
	Bug fixes: DtDevice::GeTGenlockState was missing since DTAPI v4.0 release Added private copy constructors to DTAPI classes to make sure that a copy will result in compile errors DtInpChannel::GetIpStat documentation updated; values are not reset after read DtInpChannel::GetTunerFrequency returned DTAPI_E_NOT_SUPPORTED DtaNw Promiscuous mode was not working DtIsdbtPars::RetrievesParsFromTs did not support 1- and 3-segments audio streams Certain T2-MI streams did not playout DTA-124: Crash could occur on 64 bit OS DTA-2111/DTU-215: MER was lower for DVB-C when Channel Simulator was enabled DTA-2137: DVB-S2 L3 input selection caused a long delay DTA-2137: DVB-S2 Multi Input Streams did not always lock (due to invalid ModType) DTA-2142: Calling DtOutpChannel::SetTstRateRatio was failing DTA-2152: Unsupported mode DTAP_RXMODE_SDI_ACTVID could be configured DTA-2152: Reading 8-bit SDI data could cause the DtInpChannel::ReadFrame to hang DTA-2160: DTAPI_E_OUT_OF_RESOURCES did sometimes occur after a lot of application restarts Linux only bug fixes: Dta driver did not compile on 64-bit CentOS 5	

SDK version June2013		
Versions	DTAPI: v5.2.3.29 Drivers: Dta v4.5.1.44, DtaNw v3.3.0.15, Dtu v4.3.1.37 DtapiService: v2.2.5.27	
Changes	New features: • Windows SDK is now distributed using an installer containing all drivers, libraries and include files Bug fixes:	
	 DTE board could be reported twice when using multiple network cards and retrieving the available ports DTE board was not reported when retrieving the available ports and user has no administrator rights DTAPI documentation was incomplete for SetloConfig, DtStatitics and DVB-C QAM-128 limitation for DTA-2136 and DTA-2139 DTAPI_E_DRIVER_INCOMP was not returned on Attach when an incompatible driver was installed DTAPI_E_NOLINK was not returned when no network connection was available Visual Studio Express was not able to link DTAPI caused by an ATL dependency Division by zero exception was thrown when using Huffman compression DTA-2131: For ISDB-T demodulation a relock was not automatically re-acquired DTA-2131: Retrieving the RF level statistic resulted in an error DTA-2135: Demodulation of bad signals could fail caused by a FIFO overflow DTA-2139: MER/SNR statistics were incorrectly calculated 	



Linux only bug fixes:

Dta driver could crash when aborting the application

SDK version	May2013
Versions	DTAPI: v5.2.2.26 Drivers: Dta v4.5.0.43, DtaNw v3.3.0.15, Dtu v4.3.0.36 DtapiService: v2.2.4.26
Changes	 New features: Support for DTA-2162 Support for L3 input for DVB-S2 modulation Support for DAB+/ T-DMB software demodulation Support for ISDB-T software demodulation of all layers using TMCC Support for extra Error statistics for DVB-T and ISDB-T software demodulation Support for new DTA-2137 statistics: Link Margin, Es/N0, Eb/N0, Pre-LDBC BER, Occupied bandwidth and Roll-off factor DTU-236A: Support for individually tuning of both tuners Non-backwards compatible API change (a code change might be required!) Statistics like SNR, MER and RF LVL that did support double and integer values now only support integer values
	 Bug fixes: DtaNw driver installation was not executed when network port was active Dta driver could hang during shutdown or disable Unicast IP receive address in March release did only accept 0.0.0.0 and did not accept IP address of adapter DtInpChannel:ReadFrame blocked on SDI frame when no valid input signal was attached AdvDemod constellation points data stopped in case of a unlock-lock scenario Driver did not check if firmware reboot was allowed Visual Studio 2005 projects could fail building because of missing ATL reference DTE license file programming failed since SDK version Mar2013 DTA-2136 and DTA-2139: Sometimes a value of -1 was returned for SNR DTA-2136: MER/SNR statistics were incorrectly calculated DTA-2137: 32-APSK performance was decreased since SDK version Aug2012 DTA-2152: Video standard capabilities were not set for port 3 (GENLOCK reference port) Linux only bug fixes: DtapiService installation did not work for CentOS 6.3/6.4 DTA-2160: CentOS 5.9 possible crash on IP port DTA-2160: Ethtool didn't work

SDK version Mar2013	
Versions	DTAPI: v5.2.1.24 Drivers: Dta v4.4.0.37, DtaNw v3.2.1.14, Dtu v4.2.3.35 DtapiService: v2.2.2.25
Changes	 New features: Support for DtTslpPars Differentiated Services field (formerly Type Of Service) in the IP v4 header or Traffic Class field in the IP v6 header Support for DTE-3120 polarity control Support for DTE-3100 transmit on timestamp mode
	 Bug fixes: Some DVB-T2 modulation settings did not run on a Core Duo anymore (CPU load to high) DTE attach speed was slow



- IP packets were in some cases discarded because the packets were incorrectly recognized as VLAN packets
- DVB-T2 modulator was not ignoring the IN_BAND_B_FLAG for DVB-T2 version V.1.1.1
- SetTxControl was failing when using QAM-B and channel modeling
- FrmBufInpChannel:SetRxControl call could have resulted in deadlock
- Source Specific Multicast was limited to the IANA's SSM range for DTA-(2)160
- Added missing DtInpChannel ISDB-T and T2MI functions in DTAPI core documentation
- Uncorrected blocks was not reset between calls to GetStatistics() using DTAPI_STAT_BADPCKCN for DTA-2136 and DTA-2139
- DTU-234: For some firmware versions a signal lock problem did occur
- DTU-234: Added missing statistics DTAPI_STAT_BER_PREVIT, DTAPI_STAT_BER_POSTVIT, DTAPI_STAT_BER_PRERS
- DTA-2131: Support for missing Rx modes: DTAPI_RXMODE_STMP2, DTAPI_RXMODE_STRAW, DTAPI_RXMODE_STTRP, DTAPI_RXMODE_TIMESTAMP32
- DTA-2131: DTAPI FULL RESET resulted in no data received anymore
- DTA-2131: ISDB-T SetDemodControl failed in some cases
- DTA-2131: DVB-T bandwidth 5MHz was not supported
- DTA-2137: Transport Error Indicator (TEI) bit was not set on packets with uncorrectable errors
- DTA-2138: DtInpChannel:Tune() returned timeout error when there was no input signal
- DTE-3114: Device was not found on DtapiDeviceScan

Linux only bug fixes:

- DtaNw driver is now installed and loaded automatically
- DTU-236: RF level readings were unstable

SDK version	on Feb2013
Versions	DTAPI: v5.2.0.21 Drivers: Dta v4.3.0.35, DtaNw v3.2.0.13, Dtu v4.2.2.34 DtapiService: v2.2.1.22
Changes	New features: • Advanced Demodulator API: support for DVB-T,-T2,-C2 and ISDB-T including measurements Please refer to DTAPI Manual and DTAPI Reference – Advanced Demodulator API documentation • Changed Modulation capabilities and new Receiver capabilities and licenses: RXA (Advanced Demodulator), IQ, T2MI and GOLD RX Please refer to DTAPI 5.2 Releases Notes explaining how to adapt your application for these changes. • Support for ATSC-MH modulation • SDK support for Visual Studio 2012 (VC11) • DtDvbT2Pars::RetrieveT2miRateFromTs calculates required TS rate for a given buffer with T2MI data • New Statistics BER_PREBCH and BER_PRELDPC, renamed BER_BCH and BER_LDPC to BER_POSTBCH and BER_POSTLDPC • DTA-160/2160: support for IPv6 • Support for DAB modulation Bug fixes: • IP header identification field value was not incremented for IP outputs • DVB-C2 modulator inserted invalid ISSY in case of HEM and NPD=1 • Invalid DVB-C2 signal when using ACM + plp_header_counter=1 + odd number of XFEC-frames • DVB-T2-MI FEF sub-part not correctly encoded
	 Possible error when calling DtOutpChannel::GetFlags before DtOutpChannel:SetTxControl SetIoConfig was not thread safe GetFifoLoad returned wrong value for DVB-S2 when symbol rate was changed DtapiDeviceScan returned DTE device's that were not in DTAPI mode DtapiService crash when using incompatible driver DTAPINET DtapiDtDeviceDesc2String() returned incorrect string DTAPINET added missing functions: DtapiModPars2Bandwidth(), DtapiModPars2SymRate() and DtapiModPars2TsRate() DtInpChannel::GetTsRateBps() doesn't normalize rate to 188byte packets Reading data from USB device failed after warm reboot



• DTA-107 produced incorrect SNR level for DVB-S2

• DTU-215: boot time was slow

• DTU-236: RF level was always returning around 396

• DTU-245: port 2 could not be set in loop-through mode

• DTA-2137: MER statistic for 16APSK and 32APSK was incorrect

• DTA-2137: Not all BER statistics were correct

• DTA-2137: FEC lock statistic was incorrect

• DTA-2138: DVB-C, interleaving parameter was not ignored by SetDemodControl

• DTA-2152: field length error on 525i59.94 signal

• DTE-3120: Cannot attach to the DTE in DTAPI mode

Linux only bug fixes:

• Compile warnings for DTA/DTU drivers

• Dtu0 symlink was not created for some Linux distributions

• Dtu driver failed on udev version before v98

• Possible system freeze when using IP port on CentOS 5.8

• On 64-bit linux not all license were recognized

• DtapiService installer didn't work when /tmp was not executable

• IP multicast receive only worked for 1 multicast address(-range)

• Driver hangs on unloading driver (Red hat 5.4)

• DTA-2131: AttachToPort was failing

SDK version	n Dec2012
Versions	DTAPI: v5.1.0.19 Drivers: Dta v4.2.0.33, DtaNw v3.1.0.12, Dtu v4.2.0.30 DtapiService: v2.2.0.18
Changes	New features: • DTU-236: Support for enabling/disabling equalizer • DTA-2137: removed Frameld from L3 header (firmware V7) • Added support for subtype field in DtDeviceDesc
	Bug fixes: DTAPI_TX_CPU_UFL reported but should be DTAPI_TX_DMA_UFL IPAT was very large for RTP stream including FEC and lost packets Local NIC: the data was corrupted every time the RTP sequence number wraps Linker warnings regarding missing .pdb files when linking to DTAPI debug version DVB-C2 modulation: stopped when type 1 and type 2 data slices are mixed DVB-C2 modulation: crashed when header_counter=1 and modulation <= 64qam DVB-C2 modulation: the order of the ISSY fields generated for the first frame was not correct DtFrameBuffer::AncAddPacket returns DTAPI_OK but AncCommit did not add the packet to the output DtFrameBuffer::AncGetPackets never returns DTAPI_E_BUF_TOO_SMALL DtInpChannel::GetStatus incorrectly reported -1 for AsiLock parameter DtInpChannel::SetDemodCallback: possible fail on tuner event-register DtInpChannel::SetDemodControl did not accept -1 for ParXtra1 for QAM-B DtOutputChannel::Write(buf,0) caused a DTAPI crash DTA-115: on certain PC's DMA performance caused OFDM modulation to stop working DTU-215: device was not started on a "warm" reboot DTA-2137: tuning to some DVB-S modulated streams was failing DTA-2144: double-buffered output was not supported anymore DTA-2152: bottom of frame showed a green line DTA-2152: BSOD after enabling GENREF mode for one of the ports Linux only bug fixes: Multi-threading DTAPI usage could result in a crash Dtu0 symlink was not created for some Linux distributions

SDK version Oct2012		
Versions	DTAPI:	v5.0.11.17



	Drivers: Dta v4.1.1.30, DtaNw v3.1.0.12, Dtu v4.1.2.26 DtapiService: v2.1.2.17
Changes	New features:
	Support for DTA-2138
	 Optimized performance of Matrix-API audio and ancillary data embedding and de-embedding code Added support for add/removal event for USB devices
	Bug fixes:
	DVB-T2/C2 modulation did not work
	Failure to read licenses from DTE devices
	 DtapiHwFuncScan did not return a DTAPI_E_DRIVER_INCOMPATIBLE when an old driver is used DtDeviceAttachToSerial did not return a DTAPI_E_DRIVER_INCOMPATIBLE when an old driver is used DTA-160/2160: exception in Dta driver on system with 64GB od RAM
	DTU-236: DTAPI crash when DTU-236 is disconnected from USB bus
	 DTU-236a: DtInpChannel::SetTunerFrequency failed when try to tune to frequencies above 862 MHz DTA-2107: spectrum of DVB-S output was inverted
	DTA-2107: actual SNR level did not match applied level
	DTA-2139: first call to AttachToPort was very slow
	DTA-2152: error in audio embedding when embedding less than 4 channels in an audio group
	Linux only bug fixes:
	Stack corruption when reading data from a DTU device
	• SDK could still not be built on Red Hat Enterprise Linux 5 with kernel version 2.6.18

SDK version Sep2012		
Versions	DTAPI: v5.0.10.16 Drivers: Dta v4.1.0.29, DtaNw v3.1.0.12, Dtu v4.1.0.24 DtapiService: v2.1.0.15	
Changes	New features: Support for DTU-236a (1GHz version) DTU-236: support for reading BER, SNR, MER and constellation points Genlock support for DTA-145/2144/2145 Support for controlling DTA-plus (VHF/UHF Booster/Attenuator for DTA-115) Bug fixes: DTA-2107: DVB-S spectrum was inverted DTA-2136/2139: return sensible value for SNRs which are outside of the range that can be measured by demod chip DTA-2152: failure to set IO-standard to 720p50 DTA-2152: VANC data was not committed in DtFrameBuffer::AncCommit TS-rate returned for TS-over-IP streams received via a local-NIC was always ~10% to high Non-exclusive attach of DtInpChannel object to a demodulator causes re-initialization of the port it is attached too	
	Linux only bug fixes: • DTA-2111: setting the output level had no effect • SDK could not be built on Red Hat Enterprise Linux 5 with kernel version 2.6.18 • Potential DMA data corruption, on 64-bit Linux, for cards that do not natively support 64-bit DMAs • 32-bit DTAPI could not connect with 64-bit driver. NOTE: the fix for this issue breaks backwards compatibility between the DTAPI and previous versions of the Dta, Dtu and DtaNw drivers (on 32-bit Linux configurations only)	



SDK version Aug2012		
Versions	DTAPI: v5.0.9.15 Drivers: Dta v4.0.14.27, DtaNw v3.0.7.11, Dtu v4.0.8.23 DtapiService: v2.0.9.12	
Changes	New features: Support for DTA-2139 DTA-102: implementation for DtOutpChannel::SetPower DTA-2137: support for firmware version V6 DTA-2137: support for C-version (with STV0900AAC) DTA-2137: support for getting the spectral-inversion status DtapiCheckDeviceDriverVersion now also detects the presence of pre V4 drivers Added new EULA for Linux SDK Bug fixes: DtInpChannel::GetRxMode always returned 0 for IP ports DtInpChannel::GetRxControl always returned DTAPI_RXCTRL_IDLE for IP ports CPU overload when DtapiService was stopped while used Crash in SetDemocControl if invalid ISDB-T parameters were passed to this function Linux only bug fixes: Unknown symbols when loading Dta, Dtu and DtaNw driver DtapiService.bin installer only contained 64-bit version of DtapiService DTA-2145: Kernel panic in ISR when Dta driver is loaded during system boot-up "DMA: Out of SW-IOMMU space" in Dta driver	

SDK version Jul2012	
Versions	DTAPI: v5.0.8.12 Drivers: Dta v4.0.13.25, DtaNw v3.0.7.11, Dtu v4.0.8.23 DtapiService: v2.0.8.10
Changes	New features: Support for DTA-2131 Bug fixes: DTA-2152: fixed timeout error for WaitFrame DTA-2136: added missing loop-through capability DTA-2137: added missing support for DTAPI_STAT_CNR DTA-2135/2137: added missing support for DTAPI_STAT_BER_PRERS & DTAPI_STAT_CNR DTA-2152: DtInpChannel::ReadFrame always retuned 10-bit frames, regardless of rx-mode settings DTA-2152: error in audio embedding when embedding less than 4 channels in an audio group DtapiHwFuncScan never returns DTAPI_E_BUF_TOO_SMALL when supplied buffer really is too small DTA-235: added missing support for DTAPI_STAT_BER_PRERS & DTAPI_STAT_CNR DTU-236: added missing support for DTAPI_STAT_CNR GetloConfig for DTAPI_IOCONFIG_LOOPTHR returned incorrect buddy port value Probe attach to DTE always failed



SDK version Jun2012	
Versions	DTAPI: v5.0.7.10 Drivers: Dta v4.0.12.23, DtaNw v3.0.7.11, Dtu v4.0.8.23 DtapiService: v2.0.7.8
Changes	Bug fixes: AttachToPort, with the probe flag set, failed for DTEs Could not set DTAPI_RXMODE_TIMESTAMP32 for DTE devices Deadlock in DtFrameBuffer::WriteSdiLines DtInpChannel::SetLnbVoltage always returned DTAPI_E_INVALID_ARG DtIsdbtPars::RetrieveParsFromTs always sets m_Guard to 1/8 DVB-S2 capability was missing for DTA-2137 Exception in DTAPI which occurred when an application using the DTAPI was closed Link errors due to missing symbols in VC9 version of the DTAPI Memory leak in modulation code Using SetloConfig to set a fractional IOSTD failed for the input of a DTA-2152 Updated FIFO load algorithm for a DTA-2152 in 'DtOutpChannel-mode'

SDK version May2012	
Versions	DTAPI: v5.0.5.8 Drivers: Dta v4.0.11.20, DtaNw v3.0.7.11, Dtu v4.0.7.22 DtapiService: v2.0.6.7
Changes	Major new release of the entire SDK. Please refer to DTAPI 5.0 Release Notes in the SDK documentation for an overview of changes.