SDK REVISION HISTORY







SDK Revision History

SDK version	Dec2013
Versions	DTAPI: v5.5.0.38 Drivers: Dta v4.7.1.104, DtaNw v3.4.3.24, Dtu v4.4.7.46 DtapiService: v2.2.9.33
Changes	New features: DTU-236: Added support for GetTunerFrequency() and GetDemodControl() DTA-160/2160/2162: Support for specifying the source port for IP transmission DTA-2131: Support for new statistic DTAPI_STAT_FER_POSTBCH Bug fixes: QAM-B modulation produced inverted spectrum when channel modelling was enabled DTU-351: Frames were dropped on high CPU load DTU-351: Some PC's did have incidentally a frame drop DTA-2131: BER_PRELDPC and PER DVB-T2 statistics were not valid after DTAPI_STAT_LDPC_STATS call DTA-2131: DtAdvDemod port attach was failing introduced in SDK Oct2013 DTA-2137: Re-attach could have failed with error DTAPI_E_INVALID_FREQ DTA-2154: Dta driver did sometimes crash on RS422 simultaneously read/write DTA-2154: Switching from fractional SDI standard to ASI resulted in an incorrect ASI stream Linux only bug fixes:
	 Dta driver did not build for 32 bit linux, introduced by SDK Nov2013 changes DtapiService could have crashed when long filenames processes were running DTU-236A: driver communication could have failed during initialization

SDK version	Nov2013
Versions	DTAPI: v5.4.0.36 Drivers: Dta v4.7.0.102, DtaNw v3.4.2.21, Dtu v4.4.3.41 DtapiService: v2.2.8.31
Changes	New features: • DTA-2154 official release including RS422 support • DTA-2131: Support for demodulation of complete DAB ETI using DtDabEtiStreamSelPars • DTAPI_STAT_DVBT2_L1DATA statistic extended with extra fields
	Bug fixes: Possible not supported error when SetloConfig() was called on DtInputChannel/DtOutputChannel DtaNw network driver was stalling when network stack was too busy Dta driver crash could have incidentally happen at startup up due to I2C register remap DtInpChannel::SetRxMode() for IPRAW and STTRP was not working since Aug2013 release DTU-351: FrmBufInputChannel::GetStatus() ClkDet return parameter was always -1 DTA-107: For some PC's DVB-S2 playout was failing in combination with DTA-2111 boards DTA-2138: DVB-T2 L1 data modulation type was incorrectly set DTA-2154: Invalid eeprom content could result in crash DTA-2154: The reported ASI input rate was incorrect DTA-2154: ASI read with NumBytesToRead not a multiple of 32 was failing DTA-2154: ASI fifo was not cleared when going from RCV to IDLE and back DTA-2154: The reported TS-rate for ASI input was not corrected to 188 bytes for 204 bytes packets DTA-2154: Port was not (re-)configured when switching between ASI and SDI

SDK version	Oct2013	
Versions	DTAPI: Drivers:	v5.3.0.35 Dta v4.6.0.92, DtaNw v3.4.1.18, Dtu v4.4.2.40



	DtapiService: v2.2.7.30
Changes	DtapiService: v2.2.7.30 New features: DTU-351 official release DTA-2154 initial support Bug fixes: GetTsRateBps() was incorrect for RxMode STRAW SetRxMode did not return an error when DTAPI_TXMODE_SDI_16B was not supported Application restart could fail after application exception situation Data playout could fail after unclean stop and restart of application Multicast list was not updated correctly when configuring multiple VLAN's SDI reception of Huffman compressed active video was not working SDI DtOutpChannel:Write() could fail for specific frame-alignment Matrix API audio samples alignment issue for fractional video standards DTU-236: QAM tuner initialization was not completely correct DTU-236: limit of tuning frequency is 885MHz not 865MHz DTA-2131: PCR jitter for ISDB-T demodulation could be out of spec
	DTA-2131: ISDB-T emergency flag was not set correctly for IIP and dummy byte DTA-2131: Transport Error Indicator (TEI) flag was not set (not supported for T2/C2 HEM mode)
	DTA-2151: Indispon that indicator (12) hag was not set (not supported for 12/C2 FizM mode) DTA-2152: Reading 8-bit SDI data was not done correctly
	Linux only bug fixes: • DtapiService did not start automatically after unclean stop of DtapiService

SDK version	n 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 initial 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 disabled 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-2139: MER/SNR statistics were incorrectly calculated Linux only bug fixes: Dta driver could crash when aborting the application

SDK version	on 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 rextra 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



- 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

• DTU-236: RF level readings were unstable

SDK version	on 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 DtTsIpPars 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 FrmBuflnpChannel: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 DTIL 606 PF In the Item 1.

SDK version 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)	١
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- 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
- SetloConfig 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
- DtuO 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	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 o 	rder of the	ISSY fields generated for the	first frame was not correct
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- 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::RegisterDemodCallback: 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 ofRAM 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		
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		
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: DtlnpChannel::GetRxMode always returned 0 for IP ports DtlnpChannel::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.	