

Traces Page

The list of parameters in this section relate to a HEVC service and code 7.00.07.077

The Traces page is a section under the **Console** section of the MFEL. This page shows debug information for each service, selectable in a drop down list.

The main interesting parts in terms of coding settings is the list of parameters. These are the parameters that you can change by adding entries to the Console page itself.

ENC_HevcEncoder.cpp(1376)	INFO	Service3.Profile 3-1.enc.vid0.seg0	mind=33 maxd=783 encd=2463
ENC_HevcEncoder.cpp(1373)	INFO	Service3.Profile 3-1.enc.vid0.seg0	VOPTimeIncrement=1
timeResolution=25			
ENC_HevcEncoder.cpp(1372)	INFO	Service3.Profile 3-1.enc.vid0.seg0	m_lookaheadSize=42
maxJitter=0.750000 brand=dvb			
ENC_HevcEncoder.cpp(1286)	INFO	Service3.Profile 3-1.enc.vid0.seg0	Look ahead size: 42
ENC_HevcEncoder.cpp(1271)	INFO	Service3.Profile 3-1.enc.vid0.seg0	getEncoderDelay => 41
ENC_HevcEncoder.cpp(2525)	INFO	Service3.Profile 3-1.enc.vid0.seg0	NEX version: uncl.1.0.4
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	cpuId = 2
NEX_CheckParameters.cpp(79)	INFO	NEX_ENGINE	###Intel instruction set support
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	slcAddress = 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	mslcNonUniformSpacing = 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	mslcPadding = 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	mslcExchange = 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	mslcNumSlices = 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	imHeight = 544
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	imWidth = 960
NEX_CheckParameters.cpp(79)	INFO	NEX_ENGINE	###Multi-instance encoding parameters
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	numaExSize = 128
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	numaNode0 = 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	numNodes = 0
NEX_CheckParameters.cpp(79)	INFO	NEX_ENGINE	###NUMA parameters
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	disableIntra32x32 = 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	disableIntra64x64 = 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	disableMe32x32 = 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	disableMe64x64 = 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	disableIntra8x8 = 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	disableMe8x8 = 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	codingDepth.depthB = 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	codingDepth.depthBr = 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	codingDepth.depthP = 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	codingDepth.depthI = 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	useIntraNxN = 2
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	useTransformNxN = 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	maxDepth = 2
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	LCUSize = 32
NEX_CheckParameters.cpp(79)	INFO	NEX_ENGINE	###Coding Unit structure
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	useTileSliceMotionBias = 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	useAdaptiveLambdaScaling = 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	partModeDecisionB = 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	partModeDecisionP = 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	partModeDecisionI = 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	useIntraSmoothing = 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	decisionChromaIntraFromLuma = 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	useFullIntraModeSearch = 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	useRingingDetection = 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	predSkipMergeDecision = 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	predIntraDecisionB = 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	predIntraDecisionP = 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	predIntraDecisionI = 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	useIntraSearchP = 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	useIntraSearchBr = 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	useIntraSearchB = 0
NEX_CheckParameters.cpp(79)	INFO	NEX_ENGINE	###Decision parameters
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	padding.right = 32
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	padding.left = 32

NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	padding.down	= 32
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	padding.up	= 32
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	nbReferenceFieldsBL1	= 2
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	nbReferenceFieldsBL0	= 2
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	nbReferenceFieldsP	= 2
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	nbReferenceFramesBL1	= 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	nbReferenceFramesBL0	= 2
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	nbReferenceFramesP	= 2
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	multirefShortcut	= 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	fastSubPelMode	= 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	pixelPrecision	= 4
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	ME_typeB	= 4
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	ME_typeBRef	= 4
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	ME_typeP	= 4
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	searchRange	= 128
NEX_CheckParameters.cpp(79)	INFO	NEX_ENGINE	###Motion search parameters	
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	dumpBotFieldForSTCLearning	= 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	dumpInfoForSTCLearning	= 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	reencodeIntraFrame	= 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	weightedPrediction	= 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	useTransitionDetection	= 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	motionEstimationInLA	= 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	useSpatioTemporalComplexity	= 1
NEX_CheckParameters.cpp(79)	INFO	NEX_ENGINE	###Lookahead parameters	
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	useStaticZones	= 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	maxQuantizer	= 50
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	minQuantizer	= 16
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	dequantType	= 2
NEX_CheckParameters.cpp(79)	INFO	NEX_ENGINE	###Dequant parameters	
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	constantQuantizers.qpBref	= 27
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	constantQuantizers.qpB	= 28
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	constantQuantizers.qpP	= 25
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	constantQuantizers.qpI	= 26
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	vbvFillingRemainder	= 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	vbvFilling	= 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	vbvSize	= 16000000
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	statmuxed	= 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	rcAlgorithm	= 3
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	rcType	= 1
NEX_CheckParameters.cpp(79)	INFO	NEX_ENGINE	###Rate Control parameters	
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	dynamicSubGopSelection	= 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	useDynamicB	= 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	numBFrames	= 7
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	keyFramePeriodPolicy	= 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	keyFramePeriodInMs	= 1000
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	chunksWithoutIntra	= 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	gopPolicy	= 0
NEX_CheckParameters.cpp(79)	INFO	NEX_ENGINE	###GOP structure parameters	
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	parHeight	= 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	parWidth	= 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	panScanMode	= 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	ccSeiPosition	= 2
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	useVersionMessages	= 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	useActiveParameterSetSeiMessages	= 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	useHrdBufferingMessages	= 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	minAUSize	= 184
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	useAuDelimiter	= 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	standard	= 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	preset	= 1
NEX_CheckParameters.cpp(79)	INFO	NEX_ENGINE	###Signaling parameters	
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	numForThreadingMode	= 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	threadingMode	= 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	numThreadsHME	= 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	firstTileXNbLCUs	= 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	embedTileRowsInSlices	= 0
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	numTilesY	= 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	numTilesX	= 1
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	useMonoThread	= 0
NEX_CheckParameters.cpp(79)	INFO	NEX_ENGINE	###Internal architecture parameters	
NEX_CheckParameters.cpp(40)	INFO	NEX_ENGINE	useTrickPlay	= 0

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NEX_CheckParameters.cpp(40) INFO NEX_ENGINE SAFFDelay = 0
NEX_CheckParameters.cpp(40) INFO NEX_ENGINE ANA_MbFrameFieldThreshold = 450
NEX_CheckParameters.cpp(40) INFO NEX_ENGINE picStructREC = 0
NEX_CheckParameters.cpp(40) INFO NEX_ENGINE interlacedEncodingMode = 0
NEX_CheckParameters.cpp(40) INFO NEX_ENGINE sourceScanType = 1
NEX_CheckParameters.cpp(40) INFO NEX_ENGINE tier = 0
NEX_CheckParameters.cpp(40) INFO NEX_ENGINE level = 41
NEX_CheckParameters.cpp(40) INFO NEX_ENGINE profile = 1
NEX_CheckParameters.cpp(79) INFO NEX_ENGINE ###General coding infos
NEX_CheckParameters.cpp(40) INFO NEX_ENGINE outputBitDepth = 8
NEX_CheckParameters.cpp(40) INFO NEX_ENGINE inputBitDepth = 8
NEX_CheckParameters.cpp(40) INFO NEX_ENGINE internalBitDepth = 8
NEX_CheckParameters.cpp(40) INFO NEX_ENGINE bitRate = 8000000
NEX_CheckParameters.cpp(40) INFO NEX_ENGINE VOPTimeIncrement = 1
NEX_CheckParameters.cpp(40) INFO NEX_ENGINE timeResolution = 25
NEX_CheckParameters.cpp(40) INFO NEX_ENGINE displayHeight = 540
NEX_CheckParameters.cpp(40) INFO NEX_ENGINE displayWidth = 960
NEX_CheckParameters.cpp(40) INFO NEX_ENGINE height = 544
NEX_CheckParameters.cpp(40) INFO NEX_ENGINE width = 960
NEX_CheckParameters.cpp(79) INFO NEX_ENGINE ###Video infos
RC_Predictive.cpp(466) INFO RC Predictive Init Intra Pump : 0 level: -1
RC_Predictive.cpp(465) INFO RC Predictive Init IntraPeriodicLevel: 60
RC_Predictive.cpp(464) INFO RC Predictive Init Max Fr Cpx : 75000
RC_Predictive.cpp(463) INFO RC Predictive Init STC Size filtering: 30

```

After this there is a handy reminder on how to use the parameters.

```

NEX_CheckParameters.cpp(1257) INFO NEX use the prefix nex to override codec parameters in
mpeg4.cfg
ENC_HevcEncoder.cpp(2482) INFO Service3.Profile 3-1.enc.vid0.seg0 NEX version: uncl.1.0.4
ENC_HevcEncoder.cpp(2888) INFO use the prefix nex.iptv to override codec parameters in mpeg4.cfg

```

So in the Console page, if you wanted to limit the number B frames to 3 (from the default of 7) you would enter something like:

```
nex.cmd.numBframes=7
```

```

nex.cmd is used for HEVC settings
exec is used for H264 and mpg2

```

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