
Tranalyzer2

wavelet



Wavelet



Tranalyzer Development Team

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1 wavelet

1.1 Description

The wavelet plugin calculates the Daubechies wavelet transformation of the IP packet length or the inter-arrival time of packets (IAT).

1.2 Configuration Flags

The following flags, defined in *define_global.h*, can be used to control the output of the plugin:

Name	Default	Description
WAVELET_IAT	0	Values to analyze: 0: Packet length, 1: Inter-arrival times (IAT)
WAVELET_SIG	0	Print signal
WAVELET_PREC	0	Precision: 0: Float, 1: Double
WAVELET_THRES	8	Min. number of packets for analysis
WAVELET_MAX_PKT	40	Max. number of selected packets
WAVELET_LEVEL	3	Wavelet decomposition level
WAVELET_EXTMODE	ZPD	Extension Mode: NON: No extension, SYM: Symmetrization, ZPD: Zero-padding
WAVELET_TYPE	DB3	Mother Wavelet: DB1: Daubechies 1 wavelet DB2: Daubechies 2 wavelet DB3: Daubechies 3 wavelet DB4: Daubechies 4 wavelet

1.3 Flow File Output

The wavelet plugin outputs the following columns:

Name	Type	Description	Flags
waveNumPnts	U16	Number of points	
waveSig	R(F/D)	Packet length / IAT signal	WAVELET_PREC=0/1
waveNumLvl	U32	Number of wavelet levels	
waveCoefDetail	R(R(F/D))	Wavelet detail coefficients	WAVELET_PREC=0/1
waveCoefApprox	R(R(F/D))	Wavelet approximation coefficients	WAVELET_PREC=0/1