

User Guide for 5G-NIDD

Please read below instructions carefully to understand how to use the files in 5G-NIDD Dataset.

File formats

All the files/directories are compressed using zip in a windows 10 PC. The files need to be uncompressed before use. The compressed files have three types of files inside called pcapng, argus, and csv.

- pcapng files contains the data captured from the extraction points in their original format
- argus files contains the networks flows. These files are obtained from processing the pcapng files using argus tool
- csv files are created by converting the argus files into csv format

File contents

The dataset contains files from different stages of processing. pcapng → argus → csv. The dataset contains files in each stage facilitating the user to select a set of files according to their requirement.

Directory name/ Filename	Type	Contents
BS[X]	Directory	Contains pcapng files collected from base station X on each attack session in pcapng format. The directory contains one file for each attack
BS[X]_GTP_removed	Directory	Contains a processed version previous files where the GTP layer has been removed in packets. The files are still in pcapng format, and the directory contains one file for each attack
BS[X]_each_attack_argus	Directory	Contains network flow files created from the GTP layer removed pcapng files. The file format is argus. The directory contains one file for each attack
BS[X]_each_attack_csv	Directory	Contains the csv files converted from previous argus files. The directory contains one file for each attack
BTS_[X]	File	Concatenated data for all attack scenarios for base station X. This is a concatenated version of the previous step per base station and the files are in csv format.
Combined	File	Concatenated data for all attack scenarios for both base stations in csv format
Encoded	File	Data from both base stations containing all attack scenarios with categorical data encoded. The files are in csv format
BTS1_BTS2_fields_preserved	File	This file has all the data from both base stations with original fields preserved. Ex: without removing NULL fields.

Contact

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