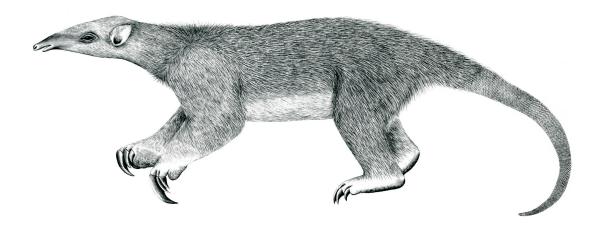
# Tranalyzer2

# mndpDecode



MikroTik Neighbor Discovery Protocol (MNDP)



Tranalyzer Development Team

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# 1 mndpDecode

#### 1.1 Description

The mndpDecode plugin analyzes MNDP traffic.

## 1.2 Configuration Flags

The following flags can be used to control the output of the plugin:

| Name        | Default | Description                      | Flags |
|-------------|---------|----------------------------------|-------|
| MNDP_DEBUG  | 0       | Print debug messages             |       |
| MNDP_LSTLEN | 5       | Max number of elements for lists |       |
| MNDP_STRLEN | 32      | Max length for strings           |       |

#### 1.3 Flow File Output

The mndpDecode plugin outputs the following columns:

| Column         | Туре   | Description             | Flags         |
|----------------|--------|-------------------------|---------------|
| mndpStat       | H8     | Status                  |               |
| mndpMAC        | R(MAC) | MAC-Address             | MNDP_LSTLEN>0 |
| mndpIdentity   | R(STR) | Identity                | MNDP_LSTLEN>0 |
| mndpVersion    | R(STR) | Version                 | MNDP_LSTLEN>0 |
| mndpPlatform   | R(STR) | Platform                | MNDP_LSTLEN>0 |
| mndpSoftwareID | R(STR) | Software-ID             | MNDP_LSTLEN>0 |
| mndpBoard      | R(STR) | Board                   | MNDP_LSTLEN>0 |
| mndpUnpack     | R(U8)  | Packet compression type | MNDP_LSTLEN>0 |
| mndpIface      | R(STR) | Interface name          | MNDP_LSTLEN>0 |
| mndpIPv4       | R(IP4) | IPv4-Address            | MNDP_LSTLEN>0 |
| mndpIPv6       | R(IP6) | IPv6-Address            | MNDP_LSTLEN>0 |

#### 1.3.1 mndpStat

The mndpStat column is to be interpreted as follows:

| mndpStat            | Description   |
|---------------------|---|
| 0x01                | Flow is MNDP  |
| 0x02                | IPv4 address  |
| $0 \times 04$       | IPv6 address  |
| 0x08                | Unknown TLV type                                    |
| 0x <b>1</b> 0       | Invalid TLV length, e.g., length of MAC address > 6 |
| 0x <mark>2</mark> 0 | List was truncated increase MNDP_LSTLEN             |
| 0x40                | String was truncated increase MNDP_STRLEN           |

| mndpStat | Description        |  |
|----------|--------------------|--|
| 0x80     | Packet was snapped |  |

#### 1.4 Packet File Output

In packet mode (-s option), the mndpDecode plugin outputs the following columns:

| Column         | Type | Description             | Flags |
|----------------|------|-------------------------|-------|
| mndpStat       | Н8   | Status                  |       |
| mndpSeqNo      | U16  | Sequence Number         |       |
| mndpMAC        | STR  | MAC-Address             |       |
| mndpIdentity   | STR  | Identity                |       |
| mndpVersion    | STR  | Version                 |       |
| mndpPlatform   | STR  | Platform                |       |
| mndpUptime     | U32  | Uptime (seconds)        |       |
| mndpSoftwareID | STR  | Software-ID             |       |
| mndpBoard      | STR  | Board                   |       |
| mndpUnpack     | U8   | Packet compression type |       |
| mndpIface      | STR  | Interface name          |       |
| mndpIPv4       | IP4  | IPv4-Address            |       |
| mndpIPv6       | IP6  | IPv6-Address            |       |

## 1.5 Plugin Report Output

The following information is reported:

- Aggregated mndpStat
- Number of MNDP packets