

MNDP

Document revision 1.5 (January 23, 2008, 16:06 GMT)

This document applies to V3.0

Table of Contents

[Table of Contents](#)

[Summary](#)

[Specifications](#)

[Related Documents](#)

[Description](#)

[Setup](#)

[Property Description](#)

[Example](#)

[Neighbour List](#)

[Description](#)

[Property Description](#)

[Example](#)

General Information

Summary

The MikroTik Neighbor Discovery Protocol (MNDP) eases network configuration and management by enabling each MikroTik router to discover other connected MikroTik routers and learn information about the system along with features which are enabled. The MikroTik routers can automatically use learned information to set up some features with minimal or no configuration.

MNDP features:

- works on IP level connections
- works on all non-dynamic interfaces
- distributes basic information on the software version
- distributes information on configured features that should interoperate with other MikroTik routers

MikroTik RouterOS is able to discover both MNDP and CDP (Cisco Discovery Protocol) devices.

Specifications

Packages required: *system*

License required: *level1*

Home menu level: */ip neighbor*

Standards and Technologies: *MNDP*

Hardware usage: *Not significant*

Related Documents

- [Package Management](#)
- [M3P](#)

Description

MNDP basic function is to assist with automatic configuration of features that are only available between MikroTik routers. Currently this is used for the 'Packet Packer' feature. The 'Packet Packer' may be enabled on a per interface basis. The MNDP protocol will then keep information about what routers have enabled the 'unpack' feature and the 'Packet Packer' will be used for traffic between these routers.

Specific features

- works on interfaces that support IP protocol and have at least one IP address and on all ethernet-like interfaces even without IP addresses
- is enabled by default for all new Ethernet-like interfaces -- Ethernet, wireless, EoIP, IPIP tunnels, PPTP-static-server
- when older versions on the RouterOS are upgraded from a version without discovery to a version with discovery, current Ethernet like interfaces will not be automatically enabled for MNDP
- uses UDP protocol port 5678
- a UDP packet with router info is broadcasted over the interface every 60 seconds
- every 30 seconds, the router checks if some of the neighbor entries are not stale
- if no info is received from a neighbor for more than 180 seconds the neighbor information is discarded

Setup

Home menu level: */ip neighbor discovery*

Property Description

discover (yes | no; default: **yes**) - specifies whether the neighbour discovery is enabled or not

name (*read-only: name*) - interface name for reference

Example

To disable MNDP protocol on Public interface:

```
[admin@MikroTik] ip neighbor discovery> set Public discover=no
[admin@MikroTik] ip neighbor discovery> print
# NAME DISCOVER
0 Public no
1 Local yes
```

Neighbour List

Home menu level: */ip neighbor*

Description

This submenu allows you to see the list of neighbours discovered

Property Description

address (*read-only: IP address*) - IP address of the neighbour router

age (*read-only: time*) - specifies the record's age in seconds (time from the last update)

identity (*read-only: text*) - system identity of the neighbour router

interface (*read-only: name*) - local interface name the neighbour is connected to

mac-address (*read-only: MAC address*) - MAC address of the neighbour router

platform (*read-only: text*) - hardware/software platform type of neighbour router

softwate-id (*read-only: text*) - Software ID of the neighbour MikroTik RouterOS router

unpack (*read-only: none | simple | compress-headers | compress-all*) - identifies if the interface of the neighbour router is unpacking packets packed with M3P

uptime (*read-only: time*) - uptime of the neighbour router

version (*read-only: text*) - operating system or firmware version of the neighbour router

Example

To view the table of discovered neighbours:

```
[admin@MikroTik] ip neighbor> pri
# INTERFACE ADDRESS          MAC-ADDRESS      IDENTITY  VERSION
0 ether2    10.1.0.113       00:0C:42:00:02:06 ID        2.9beta5
1 ether2    1.1.1.3          00:0C:42:03:02:ED MikroTik  2.9beta5
[admin@MikroTik] ip neighbor>
```