

nathelper Module

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nathelper Module

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Revision History

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Chapter 1. User's Guide

1.1. Overview

This is a module to help with NAT traversal. In particular, it helps symmetric UAs that don't advertise they are symmetric and are not able to determine their public address. `fix_nated_contact` rewrites Contact header field with request's source address:port pair. `fix_nated_sdp` adds the active direction indication to SDP (flag 0x01) and updates source IP address too (flag 0x02).

Known devices that get along over NATs with nathelper are ATAs (as clients) and Cisco Gateways (since 12.2(T)) as servers. See http://www.cisco.com/en/US/products/sw/iosswrel/ps1839/products_feature_guide09186a0080110bf9.html (http://www.cisco.com/en/US/products/sw/iosswrel/ps1839/products_feature_guide09186a0080110bf9.html)

1.2. Dependencies

1.2.1. SER Modules

The following modules must be loaded before this module:

- *No dependencies on other SER modules.*

1.2.2. External Libraries or Applications

The following libraries or applications must be installed before running SER with this module loaded:

- *None.*

1.3. Exported Parameters

1.3.1. `natping_interval` (integer)

Period of time in seconds between sending short UDP packets to all currently registered UAs to keep their NAT bindings alive. Value of 0 disables this functionality.

Default value is 0.

Example 1-1. Set natping_interval parameter

```
...
modparam("nathelper", "natping_interval", 10)
...
```

1.4. Exported Functions

1.4.1. fix_nated_contact()

Rewrites Contact HF to contain request's source address:port.

Example 1-2. fix_nated_contact usage

```
...
if (search("User-Agent: Cisco ATA.*") {fix_nated_contact();};
...
```

1.5. Exported Functions

1.5.1. fix_nated_sdp(mode)

Rewrites Contact HF to contain request's source address:port.

Meaning of the parameters is as follows:

- *mode* - 0x01 (add direction=active), 0x02 (rewrite media IP address with source address of the message).

Example 1-3. fix_nated_sdp usage

```
...
if (search("User-Agent: Cisco ATA.*") {fix_nated_sdp(3);};
...
```

1.5.2. force_rtp_proxy()

Rewrites SDP body to ensure that media is passed through an RTP proxy.

Example 1-4. force_rtp_proxy usage

```
...  
if (search("User-Agent: Cisco ATA.*") {force_rtp_proxy(3);}  
...
```

Chapter 2. Developer's Guide

The module does not provide any sort of API to use in other SER modules.

Chapter 3. Frequently Asked Questions

1. Where can I find more about SER?

Take a look at <http://iptel.org/ser>.

2. Where can I post a question about this module?

First at all check if your question was already answered on one of our mailing lists:

- <http://mail.iptel.org/mailman/listinfo/serusers>
- <http://mail.iptel.org/mailman/listinfo/serdev>

E-mails regarding any stable version should be sent to [<serusers@iptel.org>](mailto:serusers@iptel.org) and e-mail regarding development versions or CVS snapshots should be send to [<serdev@iptel.org>](mailto:serdev@iptel.org).

If you want to keep the mail private, send it to [<serhelp@iptel.org>](mailto:serhelp@iptel.org).

3. How can I report a bug?

Please follow the guidelines provided at: <http://iptel.org/ser/bugs>