

# **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)>  
([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("module", "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 sent 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>