# NCID Manual Pages



Copyright © 2018-2024

NCID Development Team

Last edited: Jun 23, 2024

# Index

NCID Package:				
Server	• Server ncidd.8	4		
	Server Alias File ncidd.alias.5	12		
	Server Blacklist file ncidd.blacklist.5	14		
	• Server Whitelist file ncidd.whitelist.5	16		
	Server Configuration file ncidd.conf.5	18		
	Server Recordings ncid_modems.7	20		
	Server Recordings ncid_recordings.7	21		
Server Hang	gup Extensions			
	Overview ncid_extensions.7	22		
	Calls hangup–calls.1	23		
	Closed hangup-closed-skel.1	24		
	Call two extensions hangup-combo.1	25		
	• Fake Numbers hangup–fakenum.1	26		
	FCC Complaint Calls List hangup-fcc.1	27		
	Message hangup-message-skel.1	28		
	• No hangup on any calls hangup–nohangup.1	29		
	Pustal Code Hangup hangup-postal-code.1	30		
	• Skel hangup–skel.1	31		
Client		22		
		32		
	• Client configuration file ncid.conf.5	36		
Client Modu	<ul> <li>Iles</li> <li>Overview ncid modules 7</li> </ul>	37		
	Alert ncid_alert 1	39		
	Initmodem ncid—initmodem 1	40		
	Knopup neid-knopup 1	41		
	Notify neid-notify.1	42		
	Page ncid-page 1	44		
	• Samha ncid-samha 1	46		
	• Speak noid-speak 1	47		
	• MySQL ncid=mysal 1	48		
	• MythTV neid-mythty 1	49		
	• Skel ncid-skel 1	50		
	Wakeun ncid-wakeun 1	50		
	• Vac neid-vac 1	52		
	1 av 11010-yav. 1	55		

# **Client Plugins**

	Overview ncid_plugins.7	54
Gateways		
	Overview ncid_gateways.7	55
	Artech device to NCID artech2ncid.1	56
	• Artech device to NCID configuration file artech2ncid.conf.5	58
	CID Easy device to NCID cideasy2ncid.1	59
	CID Easy device to NCID configuration file cideasy2ncid.conf.5	61
	Email to NCID email2ncid.1	62
	• Email to NCID configuration file email2ncid.conf.5	64
	Obihai devices to NCID obi2ncid.1	65
	Obihai devices to NCID configuration file obi2ncid.conf.5	69
	NCID to NCID ncid2ncid.1	70
	NCID to NCID configuration file ncid2ncid.conf.5	73
	• Remote Notifier to NCID rn2ncid.1	74
	• Remote Notifier to NCID configuration file rn2ncid.conf.5	76
	• SIP to NCID sip2ncid.8	78
	• SIP to NCID configuration file sip2ncid.conf.5	81
	Whozz Calling to NCID wc2ncid.1	82
	• Whozz Calling to NCID configuration file wc2ncid.conf.5	85
	• XDMF devices to NCID xdmf2ncid.1	86
	• XDMF devices to NCID configuration file xdmf2ncid.conf.5	89
	• YAC to NCID yac2ncid.1	90
	• YAC to NCID configuration file yac2ncid.conf.5	91
Tools		
	Overview ncid_tools.7	92
	• View alias file and aliases in the blacklist file cidalias.1	93
	• View call file cidcall.1	95
	• Update call file cidupdate.1	98
	• Fetch the areacodes list get-areacodes-list.1	100
	• Fetch the fcc.blacklist get-fcc-list.1	101
	• Create yearly call log files ncid-yearlog.1	102
	• Server helper ncidutil.1	103
	• Lookup phonenumber information ncidnumberinfo.1	105
	• Update lines from the call log update-cidcall.1	107
	• Whozz Calling Ethernet Link Device interactive tool wct.1	108
Setup Scri	ipts	
	• Setup helper script ncid-setup.1	113
	• MySQL module setup ncid-mysql-setup.8	114

<ul> <li>Procmailrc setup for email2ncid ncid–email2ncid–setup.1</li> </ul>	115			
Log File Support				
Log rotation ncidrotate.1	116			
Log rotation configuration file ncidrotate.conf.5	117			
• Log rotation size configuration file rotatebysize.conf.5	118			
LCDncid Package:				
LCDproc NCID Client lcdncid.1	119			
LCDproc NCID Client Configuration lcdncid.conf.5	121			

```
ncidd - Network Caller ID Server
```

# SYNOPSIS

ncidd [options]

Options:

```
[-A <file>
              --alias <file>]
[-a <file>
             --announce <file>]
[-B <file>
              --blacklist <file>]
[-C <file>
              --config <file>]
[-c <file>
             --cidlog <file>]
[-D
            --debug]
             --datalog <file>]
[-d <file>
[-e <identifier> | --lineid <identifier>]
[-f <command> |--audiofmt <command>]
              |--gencid <0|1>]
[-g <0|1>
[-H <0|1|2|3> | --hangup <0|1|2|3>]
[-h
           --help]
[-I <string>
              --initstr <string>]
[-i <string>
              --initcid <string>]
[-j <0|1|2|3> | --cidinput <0|1|2|3>]
[-L <file>
             --logfile <file>]
             --lockfile <file>]
[-l <file>
[-M <MaxBytes> | --cidlogmax <MaxBytes>]
[-m < 0|1|2|3 > |--hupmode < 0|1|2|3 > ]
[-N <0|1>
              |--noserial <0|1>] (Obsolete, replaced by -j|--cidinput)
[-n <0]1>
              |--nomodem <0|1>] (Obsolete, replaced by -j|--cidinput)
[-P <file>
              | --pidfile <file>]
[-p <portnumber> ] --port <portnumber>]
[-Q <dotted-ip> ] --ifaddr <dotted-ip>]
             |--regex <0|1|2>]
[-r <0|1|2>
[-S <ttyspeed> |--ttyspeed <ttyspeed>]
[-s <datatype> |--send <datatype>]
              --ttyclocal <0[1>]
[-T <0|1>
              --ttyport <ttyport>]
[-t <ttyport>
            --version]
[-V
              --verbose <1-9>]
[-v <1-9>
[-W <file>
               --whitelist <file>]
[--osx-launchd]
```

# DESCRIPTION

The ncidd server collects Caller ID data from:

- one of more modems or CID devices on a telephone line
- one of more CID gateways on the network
- or both modems and gateways

It formats the data on a single text line and then sends it to one or more **Network Caller ID** (**NCID**) clients over TCP/IP. The **ncidd** server also allows an alias for the number, an alias for the name and an alias for the telephone line identifier.

The telephone company limits names to 15 upper case characters, so by using the alias function, you can display the name as you would like to view it, or correct a name that was truncated. You can even change or mask (hide) a telephone number.

The **send cidinfo** option configures **ncidd** to send a CIDINFO line to clients at each ring and when ringing stops. It contains a telephone LINE label and a RING indicator.

If the Caller ID is obtained from a modem and the modem supports it, the server will include a ring count in each CIDINFO line. When ringing stops, the ring count will be zero. This allows, for example, a client to send the call information to a pager or cell phone on a specific ring count. If the ring count is not reached, it is assumed the phone was answered and there is no need to send a page or cell phone notification.

If **ncidd** is using a modem that indicates ring but not Caller ID, **ncidd** can handle calls without Caller ID by generating call data on ring number 2 and sending it to the connected clients. The number will be "RING" and the name will be "No Caller ID". This feature is on by default.

If the Caller ID is obtained from a Gateway, the CIDINFO line may be sent at the beginning and end of a call. At the end of a call, RING indicates either *Hangup Without Answer* or *Hangup after Answer*. This allows a cell phone or pager to receive a message only if the phone was not answered.

If the Caller ID is obtained from a Gateway that supports outgoing calls and the **send callout** option is configured, **ncidd** will send outgoing call text lines to the clients.

If the Caller ID is obtained from a Gateway that supports automatic hangup, **ncidd** will send hangup call text lines to the clients.

Internal Hangup refers to call termination that is based on the blacklist and whitelist files. A Hangup Extension refers to call termination that is based on a user-defined external script or program.

If the Internal Hangup --hangup option and/or the Hangup Extension --hupmode option is configured, **ncidd** will automatically hangup the call and send a hangup (HUP) text line to the clients. Both --hangup and --hupmode have identical modes: normal hangup, FAX hangup and Announce hangup. If the --hangup option and/or --hupmode option is configured for FAX hangup, but the modem does not support FAX, **ncidd** changes the mode from a FAX hangup to a normal hangup. Similarly, if the --hangup option and/or --hupmode option is configured for Announce hangup, but the modem does not support FAX, **ncidd** changes the mode from a FAX hangup to a normal hangup. Similarly, if the --hangup option and/or --hupmode option is configured for Announce hangup, but the modem does not support or the Announcement file is missing, **ncidd** changes hangup from an Announce hangup to a normal hangup.

A client can send **ncidd** a text message. The text message is then sent to all connected clients, including the one that sent it.

A client can also send **ncidd** a job. The job can be adding, modifying, or deleting entries from the alias file; adding or removing entries from the blacklist or whitelist files; updating the call logs; dialing a number.

Gateways send **ncidd** a *CALL text line*. The *CALL text line* is either an incoming call (CID), an outgoing call (OUT), a hangup (HUP), or a message (MSG). Gateways are normally used in place of a modem, but can also be used with a modem connected to **ncidd**.

Gateways also send **ncidd** *CALLINFO text lines*. A SIP gateway will send a CALLINFO line when it receives a CANCEL or BYE command. The server then sends a ring count of -1 to its clients to indicate a hangup with no answer.

The NCID gateway sends **ncidd** CID and CIDINFO text lines instead of the normal gateway CALL and CALLINFO lines which need conversion.

When ncidd receives a SIGHUP signal, it reloads the alias, blacklist and whitelist files.

When **ncidd** receives a SIGUSR2 signal, it sends a list of connected clients to the logfile. This is for troubleshooting in debug mode.

#### **OPTIONS**

-A <file> | --alias <file>

Alias file.

Default: /etc/ncid/ncidd.alias

#### -a <file> | --announce <file>

Announcement file. Used for the Internal Hangup Announce option, **--hangup** 3. If a Hangup Extension is enabled with **--hupmode** 3 but the Hangup Extension does not specify its own Announcement file, it will default to this announcement file.

Default: /usr/share/ncid/recordings/DisconnectedNotInService.rmd

#### -B <file> | --blacklist <file>

Blacklist file used for Internal Hangups.

Default: /etc/ncid/ncidd.blacklist

-C <file> | --config <file>

Config file.

Default: /etc/ncid/ncidd.conf

-c <file> | --cidlog <file>

Call log data file.

Default: /var/log/cidcall.log

#### -D | --debug

In debug mode, *ncidd* stays attached to the terminal and displays all messages that go to the server logfile.

Default: verbose 3

#### -d <file> | --datalog <file>

Data logfile, used to capture the raw data sent to/received from **ncidd**. This is usually the data to/from a modem, CID device or gateway. The logfile must exist, **ncidd** will not create it.

Default: /var/log/ciddata.log

#### -e <identifier> | --lineid <identifier>

The telephone line identifier is used for a modem or serial device. It is normally 1 to 16 characters. The default indicator is *POTS* If you have multiple telephone lines, you probably want to change the identifier from *POTS* to the 4 digit extension of your exchange office. For example, if the telephone number is 321-555-1212 the identifier would be 1212.

When the gateway provides Caller ID and a hangup is required by the modem connected to the same phone line, the line indicator must be changed to the gateway line indicator.

For example, if the xdmf2ncid gateway line indicator (corresponds to the device name) is "CometUSB0" or "HoltekUSB0", the line indicator must be changed to *CometUSB0* or *HoltekUSB0*.

Default: -

#### -f <command> | --audiofmt <command>

Used for the Internal Hangup Announce option, **--hangup** 3 and for a Hangup Extension Announce option, **--hupmode** 3. The audio format command is very dependent on the modem. It must match the number of one of the lines returned by AT+VSM=?. The default modem manufacturer is CONEXANT, but the voice file also works for U.S. Robotics provided the modem firmware version is at least V1.2.23.

Default: AT+VSM=130

## -g <0|1> | --gencid <0|1>

Generate a generic Caller ID at ring 2 if one is not received from the modem, either because the telco is not sending it or because the modem does not support it. The generic Caller ID generated uses "RING" for the number and "No Caller ID" for the name.

Default: gencid = 1

## -H <0|1|2|3> | --hangup <0|1|2|3>

Controls Internal Hangup that will automatically hangup on a call if the caller name or number is in the neidd.blacklist file but not the neidd.whitelist file. If **—hangup** is set to 1, **neidd** will immediately hangup the call. If **—hangup** is set to 2, **neidd** will generate FAX tones and then hangup the call. (If FAX mode does not produce FAX tones try setting pickup = 0 in neidd.conf.) If **—hangup** is set to 3, **neidd** will play an announcement file and then hangup the call.

Default: hangup = 0

#### -h | --help

Display a help message.

#### -I <string> | --initstr <string>

Modem initialization string.

Default: ATE1V1Q0

## -i <string> | --initcid <string>

CID initialization string.

Default: AT+VCID=1

if it fails: AT#CID=1

#### -j <0|1|2|3> | --cidinput <0|1|2|3>

Determines the Caller ID input source:

0: Caller ID from a modem and optional gateways

1: Caller ID from a serial or USB device and optional gateways

2: Caller ID from a gateway with modem support

3: Caller ID from gateways without modem support

Default: cidinput = 0

#### -L <file> | --logfile <file>

Server logfile.

Default: /var/log/ncidd.log

-l <file> | --lockfile <file>

Modem lockfile.

Default: /var/lock/LCK..modem

#### -M <MaxBytes> | --cidlogmax <MaxBytes>

Set the maximum CID call logfile size in bytes.

Maximum size is 10000000.

Default: cidlogmax = 1000000

#### -m <0|1|2|3> | --hupmode <0|1|2|3>

A Hangup Extension uses the same modes as the Internal Hangup setting, **—hangup**. It enables an external script or program to determine if **ncidd** should hangup or not. It can be used with and without the Internal Hangup. If used with Internal Hangup, **—hupmode** is only executed if the Internal Hangup is not going to terminate the call.

If **--hupmode** is set to 1, **ncidd** will immediately hangup the call. If **--hupmode** is set to 2, **ncidd** will generate FAX tones and then hangup the call. (If FAX mode does not produce FAX tones try setting pickup = 0 in ncidd.conf.) If **--hupmode** is set to 3, **ncidd** will play an announcement file and then hangup the call.

Default: hupmode = 0

# -N <0|1> | --noserial <0|1> (Obsolete, replaced by -j|--cidinput)

Serial device is being used (0) or no serial device (1).

Default: noserial = 0

-n <0|1> | --nomodem <0|1> (Obsolete, replaced by -j|--cidinput) Modem is being used (0) or no modem (1).

Default: nomodem = 0

#### -P <pidfile> | --pidfile <pidfile>

Server PID file. Set to */var/run/ncidd.pid* in an rc or init script when **ncidd** is used as a service. The program will still run if it does not have permission to write a pidfile. There is no default. If pidfile is not set, no pid file will be used.

## -p <port> | --port <port>

Server port.

Default: 3333

#### -Q <dotted-ip> | --ifaddr <dotted-ip>

Restrict connections to the interface associated with this IP address.

Default: Port accepts client or gateway connections from anywhere.

#### -r <0|1|2> | --regex <0|1|2>

Use 0 for Simple Expressions (default) Use 1 for Posix Extended Regular Expressions Use 2 for Perl-compatible Regular Expressions

NCID Simple Expression Syntax

^ = partial match from beginning

\* = partial match after the '\*'

1? = optional leading 1 for US numbers only

Posix Regular Expression Description and Syntax: https://en.wikipedia.org/wiki/Regular\_expression

Perl-compatible regular expression syntax Cheatsheet https://www.debuggex.com/cheatsheet/regex/pcre

Introduction to Regular Expressions: http://www.regular-expressions.info/quickstart.html

Default: regex = 0

#### -S <ttyspeed> | --ttyspeed <ttyspeed>

Set the tty port speed to one of: 115200, 38400, 19200, 9600, 4800, 2400, 1200

Default: ttyspeed = 115200

## -s <datatype> | --send <datatype>

Send optional CID data to a client. Where *datatype* is: *cidlog*: sent when the client connects. If the CID call log gets too big, it will not be sent.

cidinfo: sent on each ring, to all clients, gives the current ring count.

Default: Optional CID DATA is not sent

#### -T <0|1> | --ttyclocal <0|1>

Enable (0) or disable (1) modem control signals.

Default: modem control signals enabled

#### -t <ttyport> | --ttyport <ttyport>

Modem device file, or serial port that provides Caller ID information.

Default: /dev/modem

#### -V | --version

Display the version number.

#### -v <1-9> | --verbose <1-9>

Verbose mode. Sends information to the server logfile and displays information for the -D option. Set a higher number for more information.

Do not use level 9 unless there is a problem in poll(). It grows the logfile very fast.

To debug, try: verbose = 3

Default: verbose = 1

#### -W <file> | --whitelist <file>

Whitelist file used for Internal Hangups.

Default: /etc/ncid/ncidd.whitelist

#### --osx-launchd

This option is only for OSX when using launchd to control **ncidd**. It prevents **ncidd** from entering daemon mode. It is like debug mode, but nothing is printed to the screen.

#### **CONFIGURATION**

The ncidd.conf(5) file is used to set options. The syntax of the ncidd.conf(5) file is discussed separately and should be consulted for detailed reference information.

The ncidd.alias(5) file is used to create aliases. The syntax of the ncidd.alias(5) file is discussed separately and should be consulted for detailed reference information.

#### DATA LINE FORMAT EXAMPLES

These are six examples of the four types of lines sent to *NCID* clients. The first field identifies the type of info which follows.

The CID: line gives the CID information of the current call.

The CIDLOG: line gives the CID information of a line in the CID logfile.

The *CID:* and *CIDLOG:* lines are identical, with data stored as name and value pairs. Clients should always locate the line identifier and then scan for a field name and get its value. It's possible that additional name/value pairs may be added in the future.

CID: \*DATE\*mmddyyyy\*TIME\*hhmm\*NMBR\*number\*MESG\*NONE\*NAME\*name\* CIDLOG: \*DATE\*mmddyyyy\*TIME\*hhmm\*NMBR\*number\*MESG\*NONE\*NAME\*name\*

The *CIDINFO*: line gives a line number and ring count from the server. The ring count starts at 1 and increases until ringing ends, at which time a count of 0 is sent. The line number default is 1. If Distinctive Ring service is being provided by the telco, **ncidd** will add one of the letters A, B, C, or D to indicate the virtual line called.

CIDINFO: \*LINE\*line indicator\*RING\*ringcount\*TIME\*hh:mm:ss\*

The MSG: line gives messages from the server.

The *MSGLOG*: line gives a message logged in the CID logfile.

The *MSG*: and *MSGLOG*: lines are identical format:

MSG: Too many clients connected: 15 MSGLOG: Too many clients connected: 15

The CIDOUT: line gives outgoing call information.

CIDOUT: \*DATE\*mmddyyyy\*TIME\*hhmm\*NMBR\*number\*MESG\*NONE\*NAME\*NON-AME\*

#### FILES

Blacklist file:	/etc/ncid/ncidd.blacklist
Whitelist file:	/etc/ncid/ncidd.whitelist
Configuration file:	/etc/ncid/ncidd.conf
PID file:	/var/run/ncidd.pid

Call and Message Log:

/var/log/cidcall.log

Modem, Device, or Gateway Output: /var/log/ciddata.log

Server logfile:

/var/log/ncidd.log (Contents controlled by --verbose.)

# DIAGNOSTICS

Return Code Meaning

- 0 Successful
- -100 Usage
- -101 Invalid port number
- -102 TTY lockfile exists
- -103 Unable to set modem for Caller ID
- -104 Configuration file error
- -105 No modem found
- -106 Invalid data type.
- -107 Invalid number
- -108 Invalid tty port speed [set in config file]
- -109 Alias file error
- -110 PID file already exists
- -111 Cannot init TTY
- -112 Serial device error
- -113 string too long
- -114 Blacklist or whitelist file error
- -? System error

## SEE ALSO

ncidd.conf.5, ncidd.alias.5, ncidd.blacklist.5, ncidd.whitelist.5, ncidrotate.1, ncid\_extensions.7, ncid\_gate-ways.7, ncid\_tools.7, ncid.1, lcdncid.1

ncidd.alias - NCID Server Alias File

#### DESCRIPTION

The *ncidd.alias* file contains the alias information for *ncidd*, the NCID Server. It contains the aliases for Caller ID names and numbers. It also contains the aliases for telephone line identifiers.

The ncidd.alias file understands 3 types of lines:

blank line: ignored

comment line, beginning with '#': ignored

#### alias line: processed

```
alias [NMBR|NAME] ["]FROM["] = ["]TO["] [if ["]VALUE["]]
alias [LINE] ["]FROM["] = ["]TO["
where NMBR, NAME or LINE is a KEYWORD
FROM is a CID string:
can be a '*' (match everything) when using if
TO is the alias for the FROM string
VALUE is a NAME if KEYWORD = NMBR
VALUE is a NMBR if KEYWORD = NAME
can contain a '^' (partial match from beginning)
VALUE is a LINE if KEYWORD = LINE
```

#### Alias Types:

NAME and NMBR: alias <name> = <new name> NAME: alias NAME <name> = <new name> NMBR: alias NMBR <number> = <new number> LINE: alias LINE <line> = <new line> (the name, number and line can contain a simple posix or pcre expression)

NAMEDEP: NAME \* = <new name> if <number> NMBRDEP: NMBR \* = <new number> if <name> (the The '\*' in NAMEDEP and NMBRDEP is a placeholder and is ignored)

## EXAMPLES

```
Change OUT-OF-AREA to UNAVAILABLE in both name and number fields:
alias OUT-OF-AREA = UNAVAILABLE
```

- Change OUT-OF-AREA to UNAVAILABLE in the name field only: alias NAME OUT-OF-AREA = UNAVAILABLE
- Change any name to a specific name for a phone number: alias NAME \* = "John on cell" if 4075551212
- Change any name to a specific name matching the beginning of a phone number alias NAME \* = "Toll Free" if ^800

Mask a phone number:

alias NMBR 4075551212 = "-----"

The default line indicator for a POTS line is "-". The neid client will not display the "-" indicator. To display 'POTS' for a POTS line:

alias LINE - = POTS

To not display a gateway line indicator, change it from the one received a '-'. If the line indicator is '1122': alias LINE 1122 = -

Change any line indicator to VOIP. Be careful to place this after a POTS line indicator if a POTS line is also present:

alias LINE \* = VOIP

#### **SEE ALSO**

ncidd.8, ncidd.conf.5, ncidd.blacklist.5, ncidd.whitelist.5

ncidd.blacklist - blacklist file for ncidd hangup

### DESCRIPTION

The ncidd.blacklist file contains the expressions to match against a telephone call name or number.

If the hangup option is set and if there is no match in the whitelist file, a match in the blacklist file will cause *ncidd* to automatically terminate the call.

The *ncidd.blacklist* file understands 4 types of lines:

blank line:skip itcomment line:skip itentry line:process it

Entry lines contain one or more expressions and an optional comment. An expression is either a string of non-blank characters or everything between double quotes. Multiple expressions are separated by spaces. A comment must be last.

Entry line comments are either normal comments or match name comments.

A normal comment begins with a '#' and must not be immediately followed by an equals sign. Anything after the '#' is ignored.

A match name comment begins with '#=' and is followed by a name to display for the caller when the entry matches either the number or name of a call. Do not use double quotes around the name.

Example: 407-555-5670 #= Unwanted Marketing Call

#### NOTES

Each expression is compared to the caller name and number.

Upper and lower case letters are significant.

The number must be a string of digits as they appear in /var/log/cidcall.log.

A leading '1' is required if it is in */var/log/cidcall.log*.

A partial name or number can match.

If Simple expressions are used (regex = 0):

NCID Simple Expression Syntax

- \* A partial name or number can match. 1234 will match any of 6312346600 or 6311234600 or 6312123460
- \* A '^' at the beginning an expression means it must match at the start of a name or number

\* A "^1?" at the beginning makes a leading 1 optional, and is only needed when using the '^' the beginning of the number. This is only useful for US numbers.

- \* A '\$' at the end of an expression means it must match
- at the end of a name or number. " FL\$" matches "MIAMI FL"
- \* A single '\*' matches anything.
- \* Upper and lower case letters are significant.
- \* If an expression is longer than the name or number, it will never match.

If POSIX regular expressions are used (regex = 1):

POSIX Extended Regular Expression Syntax https://en.wikipedia.org/wiki/Regular\_expression

Introduction to Regular Expressions http://www.regular-expressions.info/quickstart.html

If Perl Compatible Regular Expressions (PCRE) are used (regex = 2):

Perl regular expressions man page https://perldoc.perl.org/perlre

pcre2syntax man page https://www.pcre.org/current/doc/html/pcre2syntax.html

Simple and Regular Expressions:

A ''' at the beginning of an expression means it must match at the start of a name or number.

A "^1?" at the beginning makes a leading 1 optional. This is only useful for US/Canadian numbers.

If an expression is longer than the name or number field it will never match.

# EXAMPLES

Blacklist the unassigned 999 area code with and without a leading 1 ^1?999

Blacklist callers with the name "BAD MARKETING": "BAD MARKETING"

Blacklist anything with "MARKETING" in the name: MARKETING

Blacklist a caller name and a different caller number on one line: Ogre 13215551212

## SEE ALSO

ncidd.8, ncidd.conf.5, ncidd.alias.5, ncidd.whitelist.5

ncidd.whitelist - whitelist file for ncidd hangup

#### DESCRIPTION

The ncidd.whitelist file contains the expressions to match against a telephone call name or number.

If the hangup option is set and if there is no match in the whitelist file, a match in the blacklist file will cause *ncidd* to automatically terminate the call.

The *ncidd.whitelist* file understands 4 types of lines:

blank line:	skip it	
comment line:	skip it	
entry line:	process it	

Entry lines contain one or more expressions and an optional comment. An expression is either a string of non-blank characters or everything between double quotes. Multiple expressions are separated by spaces. A comment must be last.

Entry line comments are either normal comments or match name comments.

A normal comment begins with a '#' and must not be immediately followed by an equals sign. Anything after the '#' is ignored.

A match name comment begins with '#=' and is followed by a name to display for the caller when the entry matches either the number or name of a call. Do not use double quotes around the name.

Example: ncidd.blacklist: <sup>^</sup>999 #= Unwanted Area code ncidd.whitelist: <sup>9995550000</sup> #= WHT (999) 555-0000

#### NOTES

Each expression is compared to the caller name and number.

Upper and lower case letters are significant.

The number must be a string of digits as they appear in /var/log/cidcall.log.

A leading '1' is required if it is in */var/log/cidcall.log*.

A partial name or number can match.

If Simple expressions are used (regex = 0):

NCID Simple Expression Syntax

\* A partial name or number can match. 1234 will match any of

6312346600 or 6311234600 or 6312123460

\* A '^' at the beginning an expression means it must match at the start of a name or number

\* A "^1?" at the beginning makes a leading 1 optional, and is only needed when using the '^' the beginning of the number. This is only useful for US numbers.

\* A '\$' at the end of an expression means it must match at the end of a name or number. " FL\$" matches "MIAMI FL"

\* A single '\*' matches anything.

\* Upper and lower case letters are significant.

\* If an expression is longer than the name or number, it will never match.

If POSIX regular expressions cware is used (regex = 1):

POSIX Extended Regular Expression Syntax https://en.wikipedia.org/wiki/Regular\_expression

Introduction to Regular Expressions http://www.regular-expressions.info/quickstart.html If Perl Compatible Regular Expressions (PCRE) are used (regex = 2):

Perl regular expressions man page https://perldoc.perl.org/perlre

pcre2syntax man page https://www.pcre.org/current/doc/html/pcre2syntax.html

Simple and Regular Expressions:

A '^' at the beginning of an expression means it must match at the start of a name or number.

A "^1?" at the beginning makes a leading 1 optional. This is only useful for US/Canadian numbers.

If an expression is longer than the name or number field it will never match.

## **EXAMPLES**

Blacklist the unassigned 999 area code with and without a leading 1, but allow a call from 999-555-1212: ncidd.blacklist: ^1?999 ncidd.whitelist: 9995551212

Whitelist expression for an optional leading 1 (US/Canada only): ^1?9995551212

# SEE ALSO

ncidd.8, ncidd.conf.5, ncidd.alias.5, ncidd.blacklist.5

ncidd.conf - ncidd configuration file

# DESCRIPTION

The ncidd.conf file contains the configuration information for ncidd, the Network Caller ID Server.

The *ncidd.conf* file is used to set options. Options are set on a command line. A line is broken up into words. A word is either a string of non-blank characters, everything between double quotes, or an equal sign.

The *ncidd.conf* file understands 4 types of lines:

blank line

ignored

#### comment line, beginning with '#'

ignored

## command lines, beginning with 'send'

send DATATYPE

where DATATYPE = cidlog or cidinfo

Most gateways and the command line option of neid do not need the cidlog. They send a HELLO command at connect so the server does not send cidlog.

#### command lines, beginning with 'set'

set ITEM = VALUE [ITEM = VALUE] [...]

```
where ITEM =
```

announce, audiofmt, blacklist, cidalias, cidinput, cidlog, cidlogmax, datalog, gencid, hangup, hupmode, hupname, huprmd, ignore1, initcid, initstr, lineid, lockfile, pickup, pidfile, port, regex, send, ttyclocal, ttyport, ttyspeed, verbose, whitelist

## EXAMPLES

Send the CID log to each client at connect: send cidlog

Send the ring count, at each ring, to each client: send cidinfo

Caller ID from a modem and optional gateways: set cidinput = 0 # default

Caller ID from a serial or USB device and optional gateways: set cidinput = 1

Caller ID from gateways without modem support: set cidinput = 3

Caller ID from a gateway with modem support for hangup and dialing a number. The gateway and modem must be using the same telephone line:

set cidinput = 2

Set the Telephone Line Indicator for the modem providing support to the xdmf2ncid gateway when its gateway line indicator is "CometUSB0":

set lineid = CometUSB0

Set the Telephone Line Indicator for the modem providing support to the xdmf2ncid gateway when its gateway line indicator is "HoltekUSB0":

set lineid = HoltekUSB0

Set the Telephone Line Indicator for the modem: set lineid = POTS

Automatically hangup on a call in the blacklist using a modem: (Gateways must have modem support)

set hangup = 1

Set the modem port for a USB modem: set ttyport=/dev/ttyACM0

Set the modem for Caller ID: set initcid = "AT#CID=1"

Ignore modems that do not send Caller ID: set gencid = 0

# SEE ALSO

ncidd.8, ncidd.alias.5, ncidd.blacklist.5, ncidd.whitelist.5

ncid\_modems - NCID modems overview

# DESCRIPTION

NCID is configured for one internal modem. The /etc/ncid/modem2.conf file is provided but, as a minimum, it needs lineid and ttyport configuread. In addition, modem2.conf needs to be enabled by the the addedmodems variable at the bottom of ncidd.conf.

Example: uncomment to enable modem2.conf # set addedmodems = "ncid2.conf"

# FILES

/etc/ncid/ncidd.modem2.conf (default)
/etc/ncid/ncidd.modem3.conf (created by: make modem3.conf)
/etc/ncid/ncidd.modem4.conf (created by: make modem4.conf)
/etc/ncid/ncidd.modem5.conf (created by: make modem5.conf)

# SEE ALSO

ncidd.conf.1,

ncid\_recordings - NCID recordings overview

# DESCRIPTION

The NCID distributed recordings are used with a modem in voice mode and automatic hangup enabled in ncidd. Instead of using the distributed recordings, you can create your own[1].

Refer to Hangup Overview[2] in the NCID User Manual for information on using automatic hangup.

The current recordings distributed with NCID are:

## CallingDeposit.rmd

The call you have made requires a calling deposit. Please hang up momentarily, listen for dial tone, deposit coin and try your call again.

Duration: 9 seconds Begins with SIT[3]: yes Ends with SIT[3]: no

#### CannotBeCompleted.rmd

We're sorry, your call cannot be completed as dialed. If you feel you have reached this recording in error, please check the area code and the number and try your call again.

Duration: 13 seconds Begins with SIT[3]: yes Ends with SIT[3]: no

## DisconnectedNotInService.rmd

We're sorry, you have reached a number that has been disconnected or is no longer in service. If you feel you have reached this recording in error, please check the area code and the number and try your call again.

Duration: 15 seconds Begins with SIT[3]: yes Ends with SIT[3]: yes

## NotInService.rmd

We're sorry, you have reached a number that is no longer in service. If you feel that you have reached this recording in error, please, check the number and try your call again.

Duration: 13 seconds Begins with SIT[3]: yes Ends with SIT[3]: yes

## FILES

/usr/share/ncid/recordings/\*

## SEE ALSO

ncidd.conf.5, ncidd.blacklist.5, ncidd.whitelist.5

- [1]http://ncid.sourceforge.net/doc/NCID-UserManual.html#hangup\_scratch
- [2]http://ncid.sourceforge.net/doc/NCID-UserManual.html#hangup\_ov
- [3]https://en.wikipedia.org/wiki/Special\_information\_tones

ncid\_extensions - NCID extensions overview

#### DESCRIPTION

The only extensions available are hangup extensions.

NCID hangup extensions are programs or scripts called by ncidd to determine if it should hangup on a call. The caller number in ncidd.whitelist prevents ncidd from calling a hangup extension.

The current hangup extensions distributed with NCID are:

#### hangup-calls

Hangup on all calls except those in the whitelist.

#### hangup-closed-skel

Example script to play a recording during closed business hours.

#### hangup-combo

Shell script for calls two or more extension scripts.

## hangup-fakenum

Hangup on non-valid North American number plan callers

#### hangup-greylist

Hangup on all calls except those in the whitelist. Caller must call back within a limited time period for the call to be accepted.

hangup-fcc Hangup on telephone numbers in the FCC data list of "Unwanted Calls".

#### hangup-message-skel

Example script to play messages for specific telephone numbers, then hangup.

#### hangup-nohangup

Does not hangup on any calls. Safe hangup script used as the default.

#### hangup-postal-code

Hangup on a name of "city postal\_code"

#### hangup-skel

Example hangup script.

#### FILES

/etc/ncid/ncidd.whitelist /var/log/ncidd.log

#### **SEE ALSO**

hangup-calls.1, hangup-closed-skel.1, hangup-fakenum.1, hangup-fcc.1, hangup-greylist.1, hangup-mes-sage-skel.1, hangup-skel.1, hangup-combo-skel.1, hangup-nohangup.1

hangup-calls

# SYNOPSIS

hangup-calls

# DESCRIPTION

Hangup-calls hangs up on all calls not in the whitelist.

Script is not called if caller number or name is in *ncidd.whitelist*.

# REQUIREMENTS

Set hupname to the name of this script *ncidd.conf*. Set hupmode to 1, 2 or 3 in *ncidd.conf*. Set huprmd to a unique voice file in *ncidd.conf*, if hupmode set to 3.

#### **FILES**

/usr/share/ncid/extensions/hangup-calls /usr/share/ncid/recording/\*.rmd /etc/ncid/ncidd.conf /etc/ncid/ncidd.whitelist

# SEE ALSO

ncidd.8, ncidd.whitelist.5, hangup-closed-skel.1, hangup-message-skel.1, hangup-skel.1, hangup-combo-skel.1, hangup-nohangup.1

hangup-closed-skel

# SYNOPSIS

hangup-closed-skel [-h]

hangup-closed-skel [-v] <string>

where string is in this format: \*DATE\*<mmddyyyy>\*TIME\*<hhmm>\*LINE\*<lineid>\ \*NMBR\*<number>\*NAME\*<name>\*MODE\*<hupmode>\ \*FNMBR\*<formatted number>\*NTYPE\*<type of device>\ \*CTRY\*<country code>\*LOCA\*<location>\*CARI\*<carrier>\ \*NAME\*<name>\*

# DESCRIPTION

Hangup-closed-skel is a template for hanging up on callers within a specified time peroid.

Your script name should be the same name without -skel. Script names use the format: hangup-<name>

Script is not called if caller number or name is in *ncidd.whitelist*.

The example below assumes you have copied *hangup-closed-skel* to *hangup-closed* for your customized version of hangup-closed-skel.

Change the start and end times to whatever is needed in *hangup-closed*. Record your message for *hangup-closed*. Call it closed.rmd and place it in /usr/share/ncid/recordings.

Server hangup extensions are only executed by the server unless testing.

Execute your custom **hangup-closed** in a terminal window by itself for testing. Only fields used in the script are needed for the input string. To test your custom hangup-closed script with a number:

/usr/share/ncid/extensions/hangup-closed -v "\*NMBR\*4075551212\*"

## REQUIREMENTS

Set hupname to the name of this script ncidd.conf.

Set hupmode to 1, 2 or 3 in neidd.conf.

Set huprmd to a unique voice file in ncidd.conf, if hupmode set to 3.

## **OPTIONS**

-h show help message

-v turn on verbose and send additional data to STDOUT for troubleshooting

## FILES

/usr/share/ncid/extensions/hangup-closed-skel /usr/share/ncid/recording/\*.rmd /etc/ncid/ncidd.conf /etc/ncid/ncidd.whitelist

## SEE ALSO

ncidd.8, ncidd.whitelist.5, hangup-calls.1, hangup-message-skel.1, hangup-skel.1, hangup-combo-skel.1, hangup-nohangup.1

hangup-combo

# SYNOPSIS

hangup-combo

# DESCRIPTION

Hangup-combo is a shell script for calling two or more extension scripts.

Script is not called if caller number or name is in *ncidd.whitelist*.

You can use it without any changes. If you want to change the extensions called, you need to change EXTLIST in *hangup-combo.conf* 

EXTLIST="hangup-fakenum hangup-fcc"

By default hangup-combo calls hangup-fakenum and hangup-fcc.

#### REQUIREMENTS

Set hupmame to the name of this script neidd.conf. Set hupmode to 1, 2 or 3 in neidd.conf. Set hupmd to a unique voice file in neidd.conf, if hupmode set to 3.

#### FILES

/usr/share/ncid/extensions/hangup-combo /usr/share/ncid/recording/\*.rmd /etc/ncid/habgup-combo.conf /etc/ncid/ncidd.conf /etc/ncid/ncidd.whitelist

#### **SEE ALSO**

ncidd.8, ncidd.whitelist.5, hangup-calls.1, hangup-fakenum.1, hangup-fcc.1, hangup-skel.1, hangup-closed-skel.1, hangup-message-skel.1

hangup-fakenum

# **SYNOPSIS**

hangup-fakenum [-h]
hangup-fakenum [-v] <string>

```
where string is in this format:

*DATE*<mmddyyyy>*TIME*<hhmm>*LINE*<lineid>\

*NMBR*<number>*NAME*<name>*MODE*<hupmode>\

*FNMBR*<formatted number>*NTYPE*<type of device>\

*CTRY*<country code>*LOCA*<location>*CARI*<carrier>\

*NAME*<name>*
```

## DESCRIPTION

**hangup-fakenum** checks for valid North American number plan callers as described by the North Americal Numbering Plan (https://en.wikipedia.org/wiki/North\_American\_Numbering\_Plan).

Script is not called if caller number or name is in ncidd.whitelist.

Bad callers have *ncidd* hangup on them. The CannotBeCompleted.rmd recording is played before the hangup if using hupmode 3. FAX tones are sent before the hangup if using hupmode 2.

**hangup-fakenum** expects 10 digit or 1+10 caller ID and has *ncidd* hangup on others including private callers. There is also a check for stupid caller names provided by telemarketers, such as V12345678901234 and 321-555-1212 and +1-321-555-1212

If /etc/ncid/valid-area-codes exists, hangup-fakenum has ncidd hangup on areacodes that are not valid.

Make sure you 'set hupmode = 1|2|3' in ncidd.conf. ncidd does not call this script if the caller number or name is in ncidd.whitelist.

Server hangup extensions are only executed by the server unless testing.

## **OPTIONS**

-h show help message

-v turn on verbose and send additional data to STDOUT for troubleshooting

# REQUIREMENTS

Set hupname to the name of this script ncidd.conf.

Set hupmode to 1, 2 or 3 in ncidd.conf.

Set huprmd to a unique voice file in ncidd.conf, if hupmode set to 3.

## FILES

/usr/share/ncid/extensions/hangup-fakenum /usr/share/ncid/recording/\*.rmd /etc/ncid/ncidd.whitelist /etc/ncid/valid-area-codes

## SEE ALSO

ncidd.8, ncidd.whitelist.5, get-areacodes-list.1 hangup-calls.1, hangup-closed-skel.1, hangup-skel.1

hangup-fcc

# SYNOPSIS

hangup-fcc [-h]
hangup-fcc [-v] <string>

where string is in this format: \*DATE\*<mmddyyyy>\*TIME\*<hhmm>\*LINE\*<lineid>\ \*NMBR\*<number>\*NAME\*<name>\*MODE\*<hupmode>\ \*FNMBR\*<formatted number>\*NTYPE\*<type of device>\ \*CTRY\*<country code>\*LOCA\*<location>\*CARI\*<carrier>\ \*NAME\*<name>\*

## DESCRIPTION

hangup-fcc hangs up on calls where the number can be found in the FCC's open data list of "Unwanted Calls".

Script is not called if caller number or name is in *ncidd.whitelist*.

The blacklist is stored locally in **/etc/ncid/fcc.blacklist** and is typically updated daily by a cron job that calls **get-fcc-list hangup-fcc** to fetch the latest version from a web site.

Make sure you 'set hupmode = 1|2|3' in ncidd.conf. The ncidd server does not call this script if the caller number or name is in ncidd.whitelist.

Server hangup extensions are only executed by the server unless testing.

## **OPTIONS**

-h show help message

-v turn on verbose and send additional data to STDOUT for troubleshooting

# REQUIREMENTS

Set hupname to the name of this script ncidd.conf.

Set hupmode to 1, 2 or 3 in ncidd.conf.

Set huprmd to a unique voice file in ncidd.conf, if hupmode set to 3.

Create the *fcc.blacklist* file, which has the list of numbers, from the FCC "Unwanted Calls" complaints data.

The *fcc.blacklist* file can be kept up-to-date by adding a daily call to **get-fcc-list hangup-fcc** in the root user's crontab. (See the documentation for get-fcc-list for more information.)

## FILES

/usr/share/ncid/extensions/hangup-fcc /usr/share/ncid/recording/\*.rmd /etc/ncid/ncidd.conf /etc/ncid/ncidd.whitelist /etc/ncid/fcc.blacklist :fi

# SEE ALSO

ncidd.8, get-fcc-list.1, ncidd.whitelist.5, hangup-calls.1, hangup-closed-skel.1, hangup-skel.1

hangup-message-skel

#### **SYNOPSIS**

hangup-message-skel [-h] hangup-message-skel [-v] <string>

```
where string is in this format:

*DATE*<mmddyyyy>*TIME*<hhmm>*LINE*<lineid>\

*NMBR*<number>*NAME*<name>*MODE*<hupmode>\

*FNMBR*<formatted number>*NTYPE*<type of device>\

*CTRY*<country code>*LOCA*<location>*CARI*<carrier>\

*NAME*<name>*
```

#### DESCRIPTION

Hangup-message-skel is a template for leaving caller specific messages prior to terminating a call.

Your script name should be the same name without -skel. Script names use the format: hangup-<name>

Script is not called if caller number or name is in *ncidd.whitelist*.

The example below assumes you have copied *hangup-message-skel* to *hangup-message* for your customized version of hangup-message-skel.

Delete the caller and message lines that are in *hangup-message*. If you want to detect a name, comment the NMBR line and uncomment the NAME line:

Add your own caller and message lines to *hangup-message*:

CALLER="\${NMBR}" caller[1]="<number>" message[1]="<recording file>" CALLER="\$(NAME)" caller[1]="<name>" message[1]="<recording file>"

You can add as many caller-message lines as you want. You would need to record the message files if you want to leave a personalized message.

Use this format for a message name for your recording: <number>.rmd

Server hangup extensions are only executed by the server unless testing.

Execute your custom **hangup-message** in a terminal window by itself for testing. Only fields used in the script are needed for the input string. To test your custom hangup-message script with a number:

/usr/share/ncid/extensions/hangup-message -v "\*NMBR\*4075551212\*"

### **OPTIONS**

-h show help message

-v turn on verbose and send additional data to STDOUT for troubleshooting

#### REQUIREMENTS

Set hupmame to the name of this script *ncidd.conf*. Set hupmode to 1, 2 or 3 in *ncidd.conf*. Set hupmd to a unique voice file in *ncidd.conf*, if hupmode set to 3.

#### FILES

/usr/share/ncid/extensions/hangup-message-skel /usr/share/ncid/recording/\*.rmd /etc/ncid/ncid.conf /etc/ncid/ncidd.whitelist

#### SEE ALSO

ncidd.8, ncidd.whitelist.5, hangup-calls.1, hangup-closed-skel.1, hangup-skel.1, hangup-combo-skel.1, hangup-nohangup.1

hangup-nohangup

# SYNOPSIS

hangup-nohangup

# DESCRIPTION

Hangup-nohangup is a hangup script that does not hangup on any calls.

Script is not called if caller number or name is in *ncidd.whitelist*.

# REQUIREMENTS

Set hupname to the name of this script *ncidd.conf*. Set hupmode to 1, 2 or 3 in *ncidd.conf*. Set huprmd to a unique voice file in *ncidd.conf*, if hupmode set to 3.

## **FILES**

/usr/share/ncid/extensions/hangup-nohangup /etc/ncid/ncid.conf /etc/ncid/ncidd.whitelist

# SEE ALSO

ncidd.8, ncidd.whitelist.5, hangup-closed-skel.1, hangup-message-skel.1, hangup-skel.1, hangup-combo-skel.1, hangup-fcc.1, hangup-fakenum.1, hangup-calls.1

#### hangup-POSTAL-CODE

## **SYNOPSIS**

hangup-postal-code [-h] hangup-postal-code [-v] <string>

> where string is in this format: \*DATE\*<mmddyyyy>\*TIME\*<hhmm>\*LINE\*<lineid>\ \*NMBR\*<number>\*NAME\*<name>\*MODE\*<hupmode>\ \*FNMBR\*<formatted number>\*NTYPE\*<type of device>\ \*CTRY\*<country code>\*LOCA\*<location>\*CARI\*<carrier>\ \*NAME\*<name>\*

#### DESCRIPTION

The **hangup-postal-code** Extension searches the US postal codes for a state, commonwealth or territory abbreviation at the end of a Caller ID name. If a postal code is found, the server will hangup on the call. The caller name format for hangup is "*CITY POSTAL\_CODE*". The extension only checks for a POSTAL\_CODE at end of the name field.

The script is not called if the caller name is in *ncidd.whitelist*.

The *postal-codes* file was created from (https://www.50states.com/abbreviations.htm).

Server hangup extensions are only executed by the server unless testing.

## **OPTIONS**

-h show help message

-v turn on verbose and send additional data to STDOUT for troubleshooting

## REQUIREMENTS

Set hupmome to the name of this script *ncidd.conf*. Set hupmode to 1, 2 or 3 in *ncidd.conf*. Set hupmd to a unique voice file in *ncidd.conf*, if hupmode set to 3.

## FILES

/etc/ncid/postal-codes /usr/share/ncid/recording/\*.rmd /etc/ncid/ncidd.conf /etc/ncid/ncidd.whitelist

## SEE ALSO

ncidd.8 ncidd.whitelist.5 ncid\_extensions.7

hangup-skel

# SYNOPSIS

hangup-skel [-h] hangup-skel [-v] <string>

> where string is in this format: \*DATE\*<mmddyyyy>\*TIME\*<hhmm>\*LINE\*<lineid>\ \*NMBR\*<number>\*NAME\*<name>\*MODE\*<hupmode>\ \*FNMBR\*<formatted number>\*NTYPE\*<type of device>\ \*CTRY\*<country code>\*LOCA\*<location>\*CARI\*<carrier>\ \*NAME\*<name>\*

## DESCRIPTION

**Hangup-skel** is a template for writing a server hangup extension. Use a new name to duplicate the file and make the necessary modifications. You need to write the code to check if a number should return the word *hangup* to STDOUT. You have the option of returning a recording file name to use with a hangup. Your script name should follow this format: *hangup-<name>* 

Script is not called if caller number or name is in *ncidd.whitelist*.

The example below assumes you have copied *hangup-skel* to *hangup-myscript* for your customized version of hangup-skel.

Server hangup extensions are only executed by the server unless testing.

Execute your customized **hangup-myscript** in a terminal window by itself for testing. Only fields used in the script are needed for the input string. To test your customized hangup-myscript with a number:

# **OPTIONS**

-h show help message

-v turn on verbose and send additional data to STDOUT for troubleshooting

## REQUIREMENTS

Set hupname to the name of this script *ncidd.conf*. Set hupmode to 1, 2 or 3 in *ncidd.conf*. Set huprmd to a unique voice file in *ncidd.conf*, if hupmode set to 3.

## FILES

/usr/share/ncid/extensions/hangup-skel /usr/share/ncid/recordings/\*.rmd /etc/ncid/ncidd.conf /etc/ncid/ncidd.whitelist

## SEE ALSO

ncidd.8, ncidd.whitelist.5, hangup-calls.1, hangup-closed-skel.1, hangup-message-skel.1, hangup-combo-skel.1, hangup-nohangup.1

ncid - Network Caller ID Client

# SYNOPSIS

ncid [options] [arguments]

#### **Options:**

```
[--no-gui]
[--alt-date
                  -A]
[--call-log
                   -c]
[--debug
                   |-D]
[--delay <seconds>
                       -d <seconds>]
[--help
                 |-h]
[--hostname-flag
                     |-H]
[--log-enable < 0|1>
                      -1 <0[1]2>]
[--log-dir <directory> |-L <directory>]
[--module <module name> | -m <module name>]
[--noexit
                  |-X]
                    |-p <file>]
[--pidfile <file>
[--PopupTime <0-5> | -t <0-5 seconds>]
[--ring <0-9|-1|-2|-3|-9> | -r <0-9|-1|-2|-3|-9>]
[--verbose <1-9>
                     |-v <1-9>]
[--version
                   -V]
                   |-W]
[--wakeup
```

Arguments:

## [PORT\_NUMBER] [HOSTNAME | IP\_ADDRESS]

# DESCRIPTION

The **ncid** client displays Caller ID information sent to it by the NCID server. In the default GUI mode, if the server is configured to send the Call Log, it will load the call log in the call history window at startup. The history window is then updated by *ncid* whenever a call is received.

The minimum size of the client window at startup displays 8 columns and 5 rows in the history window. The user can resize the window bigger, but not smaller than the minimum size. The user can select which columns to display in the history window, but must select at least 3 columns.

The history window displays one line per call or message in columns. Each line starts with a line label and has a context menu. Column headers and most line columns have a tooltip to display more information. The help menu displays information about each topic listed.

The view window shows all Line Types that can appear in the history window. The view window also shows all LineIDS that do appear in the history window. The view menu can select Line Types and LineIDS for viewing. Those not selected have a horizontal line through them.

The message window will send a user typed single line message to the server which, in turn, will send it to all connected clients.

The **ncid** client supports three themes:

- Day: Color theme on a white background.
- Night: Color theme on a black background.
- Default: Black and white theme.

The **ncid** client supports multiple languages. Supported languages are in the Help menu. The default language is English.

The **ncid** client runs on Linux, Windows and Mac OS X. If *ncid* is given the --no-gui option, it will run without a GUI.

If ncid is given the --module <module name> option, it will output to either an external program or output

module. The **ncid** client can be configured to call any single module. It cannot call multiple modules, but multiple clients can be used, each calling a different output module.

If *ncid* is configured to output to an external program, it will test for it and if it is not found, or if it is not executable, it will terminate with an error message.

The default configuration file for *ncid* is /etc/ncid/ncid.conf.

The distributed output modules are listed in the ncid\_modules man page. They are customized as needed in the /etc/ncid/conf.d/ncid-<module name>.conf files.

Whenever the server connection is broken, *ncid* will normally try to reconnect every 15 seconds. It provides a visual indication of the countdown and number of tries. If the delay between attempts is set to zero seconds, *ncid* will not attempt a reconnect.

#### **OPTIONS**

#### --no-gui

Do not display CID information using a GUI.

Default: display CID using a GUI

#### --alt-date | -A

Display the date in an alternate format. Assuming the date separator is a "/", the date is displayed as dd/mm/yyyy.

Default: display the date as mm/dd/yyyy

#### --call-log | -c

Configure ncid to tell the server to send the call log. Only used in the NoGUI mode.

Default: the call log is not sent

#### --debug | -D

Debug mode. Displays all log messages sent to the client logfile.

Default: Verbose 3

#### --delay <seconds> | -D <seconds>

If <seconds> > 0, delay <seconds> between server connection attempts.

If  $\langle seconds \rangle = 0$ , only one attempt to reconnect to server will be made.

Default: 15 seconds

#### --help | -h

Display usage.

#### --hostname-flag | -H

Changes the LINE field to **<hostname>:ncid** for created messages and adds **<hostname>** to the IDENT string

Default LINE field: ncid

#### --log-enable | -l

LogEnable can be set from 0-2.

If LogEnable = 0: \* do not write to log file (disabled)

If LogEnable = 1:

\* embed process ID xxx in log file name: ncid-xxx.log

If LogEnable = 2:

\* overwrite log file

\* Use the OS name or hostname in log file name: ncid-<OS|hostname>.log

\* Be careful you don't launch multiple processes or they will step on each other!

Default: 2

#### --log-dir | -L

Set the directory for log files. It can be an absolute or relative path. A relative path should only be used when the ncid.conf file is in the same directory as the running client script, an indication the client is running on a limited OS, e.g. Android.

Examples: set LogDir "/tmp/logs" set LogDir "logs"

Default: \$HOME/NCID/client

#### --module <module name> | -m <module name>

Output the Caller ID information to the external program or output module. <module name> is the name of the output module (program) to use. The selected module is sent all calls and messages.

Default module PATH: /usr/share/ncid/modules

#### --noexit | -X

Configure neid to ignore the close window button.

#### --pidfile | -p

Name of PID file to create. Set to /var/run/ncid.pid in an rc or init script when used as a service. Set to /var/run/<module name>.pid in an rc or init script when used as a service and when using a output module. There is no default. If pidfile is not set, no pid file will be used.

#### --PopupTime <seconds> | -t <seconds>

Time the popup is forced to stay on top of all windows. Range is 1 second to 5 seconds, or 0 to disable.

Default popup time: 1 second

#### --ring <count> | -r <count>

Execute output module on specific ring count.

All count values: -9 -3 -2 -1 0 2 3 4 5 6 7 8 9

For modems that indicate RING, count can be: -9 0 2 3 4 5 6 7 8 9

A count of -9 executes the output module on each ring.

A count of 0 executes the output module when ringing stops.

A count of 1 should never be used in the US/Canada,

because Caller ID is sent between rings 1 and 2.

A count between 2-9 executes the output module on that ring number.

A count greater than 9 is not useful.

For VoIP, using a SIP gateway, count is: -3 -2 -1

For POTS, using a wc2ncid gateway, count is: -2 -1

A count of -1 executes the output module on call termination without pickup.

A count of -2 executes the output module on call termination after pickup.

A count of -3 executes the output module on line busy termination.

Default: output module called as soon as CID received

#### --verbose <0-9> | -v <0-9>

Verbose mode. Verbose mode. Sends information to the client logfile and displays information for the -D option. Set a higher number for more information. Verbose mode 0 turns of logging.

Default: Verbose 1

# --version | -V

Display version and exit.

#### --wakeup | -W

Works only on X-Windows and Gnome. On the first ring, this causes module ncid-wakeup to be executed to wake the monitor and/or exit the screensaver. Do not use with the "--module | -m"

option.

#### ARGUMENTS PORT\_NUMBER

Set the port number. Default: 3333 Set the HOSTNAME or IP\_Address.

# HOSTNAME IP\_ADDRESS

Default: 127.0.0.1 (localhost)

# **FILES**

/etc/ncid/ncid.conf /etc/ncid/conf.d/ncid-\* /usr/share/ncid/modules/\*

# **EXAMPLES**

# Display the date as dd/mm/yyyy ncid --alt-date

# run ncid in a terminal window, server on remote host ncid --no-gui tardis.drwho.home

# only speak Caller ID
ncid --no-gui --module ncid-speak

# send CID output to GUI and desktop alert messages ncid --module ncid-alert

# send CID output to a cell phone ncid --no-gui --module ncid-page

# run ncid in a terminal window and tell the server to send the call log ncid --no-gui --call-log

## SEE ALSO

ncid.conf.5, ncid\_modules.7, ncidd.8

ncid.conf - ncid configuration file

# DESCRIPTION

The ncid.conf file contains the configuration information for ncid, the Network Caller ID Client.

The *ncid.conf* file is a tcl/tk configuration file used to set options.

The ncid.conf file understands 3 types of lines:

**blank line:** ignored **comment line:** beginning with '#' and is ignored **shell variable:** set to a value, for example: foo=bar

See the ncid.conf file for a complete list of variables to set and what the default values are.

# **EXAMPLES**

Set ncid to use the page output module: set ModName *ncid-page* 

Set neid to format its date output in alternate form 1. Assuming the date separator is a "/", the display will be DD/MM/YYYY:

set AltDate 1

Set neid to format its date output with hyphen (-) as separator. The display will be MM-DD-YYYY. If the date is in alternate form, the display will be DD-MM-YYYY:

set DateSepar "-"

Set neid to format its date output with period (.) appended to year (ordinal numbers), when the period (.) is date separator. If the date is in alternate form, the display will be dd.mm.yyyy. set YearDot 1

Set neid to format its date output in alternate form 2. The display will be: weekday month dd yyyy set AltDate 2

Set neid to add a dial prefix to the phone number sent to the server to dial. The dial prefix may be "9" or even "91" but a leading 1 can be set in the GUI instead, if the leading 1 is not always needed. set DialPrefix=""

Set the number of characters to display a name in the GUI to 40. The range is from 20 to 50: set nameWidth 40

Set neid to tell the server to send the call log, only used in the NoGUI mode: set CallLog 1

# SEE ALSO

ncid.1
ncid\_modules - NCID client output modules overview

# DESCRIPTION

NCID output modules are used to extend the functionality of the client. They are mostly simple shell scripts.

Module names are of the format: ncid-<name>.

Modules are normally called by the client using the command line: ncid --no-gui --module ncid-<name>

The client can only call one module at a time, but multiple clients can each have a different output module.

Each module may have a configuration file called *ncid-<name>.conf>*.

The *ncid-<name>.conf>* file understands three line types:

blank line:		ignored		
comment line:		begins with a '#' and is ignored		
shell variable:		set to a value, for example: foo=bar		
The current modules distributed with NCID are:				
ncid-alert	Module sends NCID call or message desktop notifications. Its configuration file: ncid-alert.conf			
ncid-initmodem	<b>m</b> Module reinitializes the modem when RING is received as the number. Do configuration file.			
	IMPORT. continues	ANT: Module should only be used if modem stops sending CID to neidd but to send RING.		
ncid-kpopup	Module p	opups Caller ID using KDE. Its configuration file:		
	ncid-kpopup.conf			
ncid-mysql	Module s ncid-mys	stores NCID data in a MySQL or MariaDB Database. Its configuration file: ql.conf		
ncid-mythtv	Module d	isplays Caller ID on MythTV. Its configuration file:		
	ncid-mytl	ntv.conf		

ncid-notify Module displays Caller ID on a iOS device. Its configuration file: ncid-notify.conf IMPORTANT: Register at https://www.prowlapp.com for iOS key

- ncid-page Module sends Caller ID to a cell phone or pager. Its configuration file: ncid-page.conf IMPORTANT: sendmail.cf must hide user root when masquerading is used and root is sending the email
- Module sends Caller ID to samba to get a popup. Its configuration file: ncid-samba.conf ncid-samba

ncid-skel Module just echos the input. Modify it and its configuration file to write new modules. Its configuration file: ncid-skel.conf

- ncid-speak Module sends Caller ID to a text-to-speech program. Its configuration file: ncidspeak.cconf
- ncid-wakeup Module wakes up a X-Window system that is using Gnome. It is automatically called when the ncid option is set. Does not have a configuration file.
- ncid-yac Module sends Caller ID to YAC clients. Its configuration file: ncid-yac.conf

#### **FILES**

/usr/share/ncid/modules/ncid-<name> /etc/ncid/conf.d/ncid-<name>.conf

/etc/ncid/ncid.conf

## SEE ALSO

ncid.1, ncid.conf.5, ncid-initmodem.1, ncid-kpopup.1, ncid-mysql.1, ncid-mysql-setup.8, ncid-mythtv.1, ncid-notify.1, ncid-page.1, ncid-samba.1, ncid-skel.1, ncid-speak.1, ncid-wakeup.1, ncid-yac.1

ncid-alert - send NCID call or message desktop notifications

# SYNOPSIS

ncid --no-gui --module ncid-alert

ncid --module ncid-alert

# DESCRIPTION

The **ncid-alert** output module sends NCID call and message desktop notifications to the user via a notification daemon from the command line. It displays the Caller ID or message in the desktop notification.

If you want ncid in GUI mode along with ncid-alert:

# ncid --module ncid-alert

## CONFIGURATION

The ncid-alert output module is configured in ncid-alert.conf.

#### allowed\_types

This sets the NCID call and/or message types **ncid-alert** will send. See *ncid-alert.conf* for a complete list.

Default: allowed\_types="ALLTYPES"

*alert\_send* Alert uses the notify-send program

Default: alert\_send="/usr/bin/notify-send"

#### alert\_timeout

Notification appearance time in milliseconds.

Default: alert\_timeout=10000

#### alert\_urgency=low

Urgency level: low, normal, critical

Default: alert\_urgency=low

alert\_icon Application icon - name or path.

Default: alert\_icon=call-start

alert\_call Caller ID data shown in Alert message, arranged in rows.

Default: name, number, time, date and line

#### alert\_message

Integral Message or Notice data shown in Alert message, arranged in rows.

Default: name, message, time, date and line

#### REQUIREMENTS

libnotify /usr/bin/notify-send

#### **FILES**

/etc/ncid/conf.d/ncid-alert.conf /usr/share/ncid/modules/ncid-alert

## SEE ALSO

ncid-initmodem - use ncidd to reinitialize modem to Caller ID mode

# SYNOPSIS

ncid --no-gui --module ncid-initmodem

# DESCRIPTION

The **ncid-initmodem** output module re-initializes the modem obtaining the Caller ID for the server. It can only be used if the modem supports Caller ID and sends "RING" at each ringing signal. If the server indicates a non-CID call, ncid-initmodem will cause ncidd to re-initialize the modem for CID. Never use this module with a modem that does not support Caller ID. The module can be used with modems that drop out of Caller ID mode.

## **REQUIREMENTS**

modem that supports Caller ID

The module does not have a configuration file, but it does check for one.

# FILES

/usr/share/ncid/modules/ncid-initmodem

## SEE ALSO

ncid-kpopup - popup Caller ID using KDE

# SYNOPSIS

ncid --no-gui --module ncid-kpopup

# DESCRIPTION

The **ncid-kpopup** output module is a KDE GUI application. When a telephone call is received, it pops up a window. It can be configured to also speak the Caller ID using kmix and festival.

# CONFIGURATION

The ncid-kpopup output module is configured in ncid-kpopup.conf.

#### allowed\_types

This sets the NCID call and/or message types **ncid-kpopup** will send. See *ncid-kpopup.conf* for a complete list.

Default: allowed\_types="ALLTYPES"

#### kpopup\_geo

Sets the geometry. "0x0+1600+1000" for a 22" monitor, bottom right corner "0x0+950+728" for 1024x768 resolution

Default: kpopup\_geo="0x0+1600+1000"

## kpopup\_timeout

Popup time on screen in seconds.

Default: kpopup\_timeout=10

#### kpopup\_speak

Calls the ncid-speak module (may need to configure it). Set to "enable" to speak or "disable' to not speak.

Default: kpopup\_speak="disable"

#### REQUIREMENTS

kde-baseapps, kmix

# FILES

/etc/ncid/conf.d/ncid-kpopup.conf /usr/share/ncid/modules/ncid-kpopup

#### **SEE ALSO**

ncid-notify - send an NCID notification to your iOS device

# SYNOPSIS

ncid --no-gui --module ncid-notify

#### DESCRIPTION

The ncid-notify output module uses Prowl to display the Caller ID or message on an iOS device.

#### Prowl (iOS)

notify 'application', 'event' and 'notification' values: \$NAME \$NMBR \$LINE \$DATE \$TIME \$TYPE \$DESC \$MESG \$MTYPE

Three "rows" of information are available for Prowl.

When \$TYPE is one of the CALLTYPEs

Row 1 'application'NCIDRow 2 'event' textIncoming CallRow 3 'notification' textJohn on Cell 407-555-7777 POTSClick on ">" to see 'url'http://callerr.com/4075557777

The Prowl "bubble" notification pop-up is even more compact, consisting of only two lines: Row 1 'application' & 'event' NCID -- Incoming Call Row 2 'notification' John on Cell 407-555-7777 POTS

When \$TYPE is one of the MSGTYPEs

Row 1 'application'NCIDRow 2 'event' textMessageRow 3 'notification' textFood ready!

The Prowl "bubble" notification pop-up is even more compact, consisting of only two lines: Row 1 'application' & 'event' NCID -- Message Row 2 'notification' Food ready!

Prowl defaults when \$TYPE is one of the CALLTYPEs notify\_application\_for\_calls\_prowl='NCID' notify\_event\_for\_calls\_prowl='\$DESC' notify notification for calls prowl='\$NAME \$NMBR \$LINE'

Prowl defaults when \$TYPE is one of the MSGTYPEs notify\_application\_for\_messages\_prowl='NCID' notify\_event\_for\_messages\_prowl='\$DESC' notify\_notification\_for\_messages\_prowl='\$MESG'

#### NMA (Notify My Android)

No longer supported, closed operation on May 24, 2018.

## CONFIGURATION

The ncid-notify output module is configured in ncid-notify.conf.

#### allowed types

This sets the NCID call and/or message types **ncid-notify** will send. See *ncid-notify.conf* for a complete list.

Default: allowed\_types="ALLTYPES"

If you want to send notification only when a ring count is reached, configure ring by creating the *ncid\_no-tify* variable in *ncid-conf*.

#### REQUIREMENTS

The *ncid-notify* module requires either a key variable to be set to an API key or a key file that contains the API key.

iOS Device Requirements: The Prowl (Growl client for iOS) app from the app store Registration at Prowl website http://www.prowlapp.com/ Generated API key to be placed in configuration file.

# FILES

/etc/ncid/conf.d/ncid-notify.conf /usr/share/ncid/modules/ncid-notify /etc/ncid/conf.d/key-prowl-api /etc/ncid/conf.d/key-prowl-provider

# SEE ALSO

ncid-page - send a Caller ID or message to a cell phone, pager or other email address

# SYNOPSIS

ncid --no-gui --module ncid-page

# DESCRIPTION

The **ncid-page** output module sends the Caller ID or message to a cell phone, pager, or any other email address. It can have multiple email addresses.

The module always sends the information as soon as the Caller ID is received.

The *ncid-page* module can be configured in *ncid.conf* to wait until a specific number of rings before sending the Caller ID to a module when using a modem that indicates RING, or it can send the Caller ID if the call was unanswered or at the completion of the call when using a SIP gateway. Do this by creating an *ncid\_page* variable in *ncid.conf*.

The module requires PageTo in ncid-page.conf to be set to the SMS gateway for your cell phone carrier.

List of SMS gateways:

https://en.wikipedia.org/wiki/List\_of\_SMS\_gateways

# CONFIGURATION

The ncid-page output module is configured in ncid-page.conf.

## allowed\_types

This sets the NCID call and/or message types **ncid-page** will send. See *ncid-page.conf* for a complete list.

Default: allowed\_types="CID MSG"

#### IMPORTANT

If *MSG* is added to PageTypes and you are using the rn2ncid gateway, you must configure *reject* in the rn2ncid.conf file to avoid sending the message back to NCID.

*PageTo* Required. Must be set to either the SMS gateway for your cell phone carrier or an email address.

Default: PageTo=""

*PageFrom* This variable has no effect unless root runs **ncid-page**. If set, it allows root to run **ncid-page** as another user.

Default: PageFrom=""

PageMail This variable sets the mail program to use in sending NCID messages.

Default: PageMail="mail"

- *PageOpt* This variable, if set provides a Subject line for sending email.
  - PageOpt="" no subject line
  - PageOpt="NMBR" calling number subject line
  - PageOpt="NAME" calling name subject line
  - PageOpt="NONA" calling number and name subject line
  - PageOpt="NANO" calling name and number subject line
  - Default: PageOpt=""

## **REQUIREMENTS**

mailx Can be another mail program with an optional subject line

MTA See https://en.wikipedia.org/wiki/Message\_transfer\_agent
Suggest a simple MTA like exim to send and receive mail.
The sendmail MTA is very good but hard to configure.
Use an SMTP program like SSMTP if you only need to send mail.
You can use ssmtp or exim to handle mail on the Raspberry Pi.
ssmtp: https://web.archive.org/web/20140831073557/https://rpi.tnet.com/project/faqs/smtp
exim: http://www.sbprojects.com/projects/raspberrypi/exim4.php

To use google for outgoing mail, you need 2-step verification: https://support.google.com/accounts/answer/180744

# EXAMPLES

If you want to call a module on a certain ring count, you need to configure the module to set ring in the ncid.conf file.

ncid command line options to call ncid-page at ring number 4

ncid --no-gui --module ncid-page --ring 4

ncid.conf line and ncid command line to call ncid-page if no answer

uncomment the ncid\_page line in ncid.conf and change 4 to -1 set ncid\_page {set Ring -1}

ncid command to call ncid-page if no answer ncid --no-gui --module ncid-page

## FILES

/etc/ncid/conf.d/ncid-page.conf /usr/share/ncid/modules/ncid-page

## SEE ALSO

ncid-samba - send Caller ID to samba to create a popup

# SYNOPSIS

ncid --no-gui --module ncid-samba

# DESCRIPTION

The ncid-samba output module sends the Caller ID or message to a Windows computer.

#### CONFIGURATION

The ncid-samba output module is configured in ncid-samba.conf.

allowed\_types

This sets the NCID call and/or message types **ncid-samba** will send. See *ncid-samba.conf* for a complete list.

Default: allowed\_types="ALLTYPES"

SambaClient Must be set to a Windows Computer Name.

Default: Samba Client=""

# REQUIREMENTS

Windows computer

# **FILES**

/etc/ncid/conf.d/ncid-samba.conf /usr/share/ncid/modules/ncid-samba

#### **SEE ALSO**

ncid-speak - send Caller ID to a text-to-speech program

# SYNOPSIS

ncid --no-gui --module ncid-speak

#### DESCRIPTION

The ncid-speak output module speaks the Caller ID using festival.

#### CONFIGURATION

The ncid-speak output module is configured in ncid-speak.conf.

allowed\_types

This sets the NCID call and/or message types **ncid-speak** will send. See *ncid-speak.conf* for a complete list.

Default: allowed\_types="CID PID MSG NOT"

*SpeakThis* What to say, '\$NAME' or '\$NMBR' or '\$NMBR \$NAME' or '\$NAME \$NMBR'. Must be inside single quotes.

Default: SpeakThis='\$NAME'

#### SpeakInput

Test-to-speech program. Default uses festival.

If using the Macintosh: SpeakInput="say \$SpeakThis"

If you want a specific voice for the Macintosh: SpeakInput="say -v Vicki \$SpeakThis"

Default: SpeakInput="echo \$SpeakThis | festival --tts"

#### SpeakTimes

The number of times to speak the same input.

Default: SpeakTimes=1

#### **SpeakDelay**

If SpeakTimes is greater than 1, SpeakDelay is the delay in seconds between repeating the input.

Default: SpeakDelay=2

#### AreaCodeLength

If non-zero, a name value of "NO NAME" will be replaced with the string "Area Code " followed by the requested number of area code digits separated by spaces.

If set to the number of digits in phone number, a name value of "NO NAME" will be replaced with the digits of the phone number separated by spaces.

A leading "1" for the CID number is always ignored.

Default: AreaCodeLength=3

#### REQUIREMENTS

festival text-to-speech software

#### FILES

/etc/ncid/conf.d/ncid-speak.conf /usr/share/ncid/modules/ncid-speak

#### SEE ALSO

ncid-mysql

# SYNOPSIS

ncid --no-gui --module ncid-mysql

# DESCRIPTION

The **ncid-mysql** output module stores NCID data in a MySQL or MariaDB Database using the 'mysql' command line client (it is called 'mysql' for both MySQL and MariaDB).

The database configuration parameters are specified in the **ncid-mysql.conf** file.

Available field names (columns) in the created table:

CID (primary key, auto-increment) CIDTYPE CIDDATE CIDTIME CIDTIME CIDLINE CIDNMBR CIDNAME CIDMTYPE CIDMESG

#### **REQUIREMENTS**

Network access to a MySQL or MariaDB database server.

The MySQL or MariaDB command line client 'mysql'.

The ncid-mysql-setup script to initialize settings before first use.

#### **FILES**

/etc/ncid/conf.d/ncid-mysql.conf /usr/share/ncid/modules/ncid-mysql /usr/sbin/ncid-mysql-setup

#### **SEE ALSO**

ncid-mysql-setup.8, ncid.8, ncid\_modules.7, ncid.1, ncid.conf.5

ncid-mythtv - display Caller ID on MythTV using mythtvosd

# SYNOPSIS

ncid --no-gui --module ncid-mythtv

# DESCRIPTION

The **ncid-mythtv** output module is a MythTV display program. It displays the Caller ID or message on a TV.

# CONFIGURATION

The ncid-mythtv output module is configured in ncid-mythtv.conf.

#### allowed\_types

This sets the NCID call and/or message types **ncid-mythtv** will send. See *ncid-mythtv.conf* for a complete list.

Default: allowed\_types="ALLTYPES"

#### mythtv\_bcastaddr[N]

Must be set to the MythTV broadcast address. Multiple clients are supported. N starts at 0 and increases by one for each client. For Example, two clients might be:

mythtv\_bcastaddr[0]=127.0.0.1 mythtv\_bcastaddr[1]=10.0.0.1 Default: mythtv\_bcastaddr[0]=127.0.0.1

# REQUIREMENTS

The mythutil command line application from the mythty-frontend package

if mythutil is not present, ncid-mythtv will not send output to MythTV.

# FILES

/etc/ncid/conf.d/ncid-mythtv.conf /usr/share/ncid/modules/ncid-mythtv

## SEE ALSO

ncid-skel - shell script output module template

# SYNOPSIS

ncid --no-gui --module ncid-skel

# DESCRIPTION

The **ncid-skel** output module is used as a template for writing a shell script output module. All it does is send the Caller ID data to standard output. This makes it useful for troubleshooting.

# CONFIGURATION

The ncid-skel output module is configured in ncid-skel.conf.

allowed\_types

This sets the NCID call and/or message types **ncid-skel** will send. See *ncid-skel.conf* for a complete list.

Default: allowed\_types="ALLTYPES"

*skel\_raw* If set to 0, data will be shown as a single horizontal line. If set to 1, data will also be formatted vertically, one line per input received.

Default: skel\_raw=0

#### REQUIREMENTS

run ncid-skel with ncid in a terminal window to view output: ncid --no-gui --module ncid-skel

#### FILES

/etc/ncid/conf.d/ncid-skel.conf /usr/share/ncid/modules/ncid-skel

#### **CUSTOM MODULE**

Modify ncid-skel as required and rename it to create a custom module. There are three ways to test the custom module.

If you have source you can use ncid/test/test-client. This is the preferred method.

If you do not have source, the custom module can be tested by executing the shell script directly and inputting data.

The command line for a new custom module called ncid-custom: /usr/share/ncid/modules/ncid-custom

The module expects 7 lines of input:

DATE TIME NMBR NAME LINE TYPE MESG MTYPE FNMBR NTYPE CTRY LOCA CARI

TYPE must be a valid, but all others can have any input or no input.

Valid TYPES:

BLK - blocked incoming call CID - incoming call HUP - blacklisted hangup MWI - message waiting OUT - outgoing call PID - Caller ID from a smart phone PUT - smart phone outgoing call RID - ring back when called number available WID - incoming call waiting

The last method is execute "ncid --no-gui -m ncid-custom" and make a call.

# SEE ALSO

ncid-wakeup - wakeup X-Windows for ncid in GUI mode or ncid using an output module

# SYNOPSIS

ncid --wakeup

# DESCRIPTION

The **ncid-wakeup** output module is called to wakeup X-Windows for ncid in GUI mode or ncid using an output module. If another module is called, it is executed before that module. Since no information regarding the call is required, none is sent. It is called when the WakeUp option is set either on the command line or in the *ncid.conf* file.

# REQUIREMENTS

This module only works with X-windows and Gnome. Do not set the ncid "--module | -m" option.

# FILES

/etc/ncid/ncid.conf /usr/share/ncid/modules/ncid-wakeup

## SEE ALSO

ncid-yac - send Caller ID to YAC listeners

# SYNOPSIS

ncid --no-gui --module ncid-yac

# DESCRIPTION

The ncid-yac output module sends the Caller ID or message to YAC listeners.

# CONFIGURATION

The **ncid-yac** output module is configured in *ncid-yac.conf*.

#### allowed\_types

This sets the NCID call and/or message types **ncid-yac** will send. See *ncid-yac.conf* for a complete list.

Default: allowed\_types="ALLTYPES"

YACPORT The YAC network port

Default: YACPORT=10629

*YACLIST* A list of YAC clients, separated by spaces, inside quotes. List can be IP\_Addresses or hostnames or both.

Default: YACLIST="localhost"

# REQUIREMENTS

YAC listener

URL: https://web.archive.org/web/20160824011700/http://www.sunflowerhead.com/software/yac/

## FILES

/etc/ncid/conf.d/ncid-yac.conf /usr/share/ncid/modules/ncid-yac

# SEE ALSO

ncid\_plugins - NCID client plugins overview

# DESCRIPTION

Plugins are distributed or user defined scripts, or programs, launched from either the Plugins Menu, or the Context Menu with one or more variables from the selected call line.

Plugins are configured in ncid.conf using the following format:

{"<plugin label>" "<command [options] {[arguments]} {[argumenats]} {...}>"}

A plugin is executed by clicking on the Plugin Menu, or Context Menu, Name.

A plugin is removed by either deleting its line or adding a '#' before <label>, spaces are optional: {"[spaces]#[spaces]<label>" "<command [options] [arguments]>"}

A comment for a plugin can be added in this line format: "# <comment>"

The current plugins distributed with NCID are:

Plugins Menu: Hello World Example

Example plugin menu item in ncid.conf using messages\_dialog plugin: {"Hello World Example" "message\_dialog {info} {Hello World}"}

Context Menu: US Number Info

Reverse search on US phonenumber, using https://www.usphonebook.com

Context Menu: Display ncid variables

Display ncid variable names and variable data for a selected history line.

## FILES

/etc/ncid/ncid.conf /usr/share/ncid/plugins/display\_ncid\_variables /usr/share/ncid/plugins/messages.dialog /usr/share/ncid/plugins/US\_number\_info

## **SEE ALSO**

ncidd.conf.1,

ncid\_gateways - NCID gateways overview

# DESCRIPTION

NCID gateways convert other protocols to the NCID protocol.

The current gateways distributed with NCID are:

artech2ncid	sends Artech AD102 HID device messages to the NCID server		
easy2ncid	sends cideasy HID device MDMF messages to the NCID server		
email2ncid	Sends the content of an email body to the NCID server		
ncid2ncid	Connects multiple NCID servers to a single NCID server		
obi2ncid	sends OBIHAI device messages to the NCID server		
rn2ncid	Android smart phone app 'Remote Notifier' messages to the NCID server		
sip2ncid	Injects CID info into the NCID server by snooping SIP invites		
wc2ncid	sends Whozz Calling device messages to the NCID server		
xdmf2ncid	sends messages from MDMF or SDMF devices to the NCID server		
yac2ncid	YAC server sends Caller ID to the NCID server		

# FILES

/var/log/ncidd.log /var/log/ncid2ncid.log /var/log/rn2ncid.log /var/log/sip2ncid.log /var/log/wc2ncid.log /var/log/xdmf2ncid.log /var/log/yac2ncid.log

# SEE ALSO

email2ncid.1, obi2ncid.1, ncid2ncid.1, rn2ncid.1, sip2ncid.8, wc2ncid.1, xdmf2ncid.1, yac2ncid.1

artech2ncid - ARTECH Caller ID device to NCID server gateway

# SYNOPSIS

artech2ncid [options]

#### Options:

```
[--configfile <filename> |-C <filename>]
[--disable_incoming <0-0xF> |-d <0-0xF>]
[--debug
                   |-D]
[--help
                  -h]
[--hostname-flag <0]1>
                        |-H <0|1>]
[--logfile <filename>
                       |-L <filename>]
[--mem trace <0-2>
                        |-m <0-2>
[--ncid
        <[host][:port]> | -n [host][:port]>]
[--pidfile <filename>
                     -P <filename>]
[--test
                 -t]
[--tracefile <filename>
                       -T <filename>]
[--verbose <1-9>
                      -v <1-9>
                                  1
[--version
                   -V]
```

## DESCRIPTION

The **artech2ncid** gateway is designed for the ARTECH AD102 device. The device captures CID data for incoming and outgoing calls on a POTS line. It also keeps track of the phone line state.

The line identifier is set in the config file artech2ncid.conf. It can be aliased by the NCID server so you can give each phone line a meaningful identification such as the last 4 digits of the phone number. For example: 1234. You can even use the complete phone number if you desire.

The configuration file for *artech2ncid* is */etc/ncid/artech2ncid.conf*. It may be located in same directory as the script, or in the *etc* directory, or in NCID default configuration directory. Read the comments in the config file for more details.

The *artech2ncid* device can run on any system, but normally it is run on same box as the NCID server. If it is not run on the same box as the NCID server, you must configure the server IP address in the configuration file.

# **OPTIONS**

#### -C <filename> | --config <filename>

Configuration file.

Default: /etc/ncid/artech2ncid.conf

#### -d <0|1>| --disable\_incoming <0-0xF>

The *artech2ncid* gateway, by default, obtains the CID/WID/RID/MWI from a call and sends the information to the server. If you want the the server to hangup on a call, set cidinput = 2 and enable hangup in ncidd.conf.

If you want the modem to get CID from a call and do hangup, set this option to 0x1, and enable hangup in ncidd.conf. There is normally no reason to do this.

It is possible to disable selectively the sending of incoming calls to ncidd : 0x0 will send everything (default), 0x1 disables sending CID, 0x2 disables sending WID, 0x4 disables sending RID, 0x8 disable sending MWI. Those 4 bits can be combined. This is useful for special cases like multiple gateways on the same line.

Default: 0

#### -D | --debug

Debug mode, *artech2ncid* stays attached to the terminal and displays all messages that go into the log file.

## -h | --help

Displays the help message and exits.

#### -H <0|1> | --hostname-flag <0|1>

When the hostname flag is set to 1, the IDENT string sent to a server will include the hostname with the program name.

Default: 1

# -L <filename> | --logfile <filename>

Specifies the logfile name to use.

Default: /var/log/artech2ncid.log

#### -m <0-2> | --mem\_trace <0-2>

Trace mode : Dumps the 64 byte read buffer of the device into the tracefile

0: no trace.

1: dumps read buffer every time important bytes change.

2: dumps read buffer every time it is read (heavy).

Default: 0

#### -P <filename> | --pidfile <filename>

Specifies the pidfile name to write. Set to */var/run/artech2ncid.pid* in an rc or init script when used as a service. The program will still run if it does not have permission to write a pidfile. There is no default. If pidfile is not set, no pid file will be used.

#### -v <1-9> | --verbose <1-9>

Verbose mode. Send information into the logfile

To debug, try: verbose = 4 or 5

Default: 1

#### -t | --test

Test mode, *artech2ncid* stays attached to the terminal and no connection is made to the server. Displays all messages that go into the log file.

Test mode sets debug mode and verbose = 3. The verbose level can be changed on the command line.

#### -T <filename> | --tracefile <filename>

Specifies the trace file name to write.

Default: /var/log/artech2ncid.trace

#### -V | --version

Displays the version then exits

#### REQUIREMENTS

ARTECH AD102 device

# FILES

/etc/ncid/artech2ncid.conf

#### SEE ALSO

artech2ncid.conf.5, ncidd.8, ncidd.conf.5, ncid\_gateways.7

atrech2ncid.conf - artech2ncid configuration file

## DESCRIPTION

The artech2ncid.conf file contains the configuration information for artech2ncid.

The *artech2ncid.conf* file understands 3 types of lines:

## blank line

ignored

comment line, beginning with '#' ignored

# **VARIABLE = VALUE**

VARIABLE = disable-incoming, HostnameFlag, lineid, outcall, pidfile, ncidhost, ncidport, trace, tracefile, verbose MIN\_BEEP\_BEEP, MAX\_BEEP\_BEEP, MIN\_OFF\_HOOK, MAX\_OFF\_HOOK, MIN\_ON\_HOOK, MAX\_ON\_HOOK, MIN\_ON\_LINE, MAX\_ON\_LINE, MIN\_RING, VAL\_OFF\_LINE

See artech2ncid.conf for a complete list of variables to set, a description and what the default values are.

# EXAMPLES

Set the NCID server IP address: ncidhost = 192.168.1.20

Set the gateway id:

gatewayid = foobar

# SEE ALSO

artech2ncid.1, ncidd.8, ncidd.conf.5

cideasy2ncid - CIDEasy Caller ID device to NCID server gateway

# SYNOPSIS

cideasy2ncid [options]

# Options:

```
[--configfile <filename> |-C <filename>]
                   |-D]
[--debug
[--delay <seconds>
                        -d <seconds>]
[--help
                  |-h]
[--hostname-flag <0|1>
                       |-H <0|1>]
[--logfile <filename> |-L <filename>]
[--ncidhost <[host][:port]> | -n [host][:port]>]
[--pidfile <filename>
                      -p <filename>]
[--test
                  |-t]
                   |-T <testfile>]
[--test-file
                    |--verbose <1-9>]
[-v <1-9>
[-V
                  --version]
[--osx-launchd]
```

# DESCRIPTION

The **cideasy2ncid** gateway sends Caller ID messages in a modified MDMF format. Model-E and Model-F are supported. Model-E has two telephone line inputs labeled A and B. Model-F has four telephone line inputs labeled A, B, C and D.

The line identifier is set to CIDEASY-<port> (CIDEASY-A, CIDEASY-B, etc). It can be aliased by the NCID server so you can give each phone line a meaningful identification such as the last 4 digits of the phone number. For example: 1234. You can even use the complete phone number if you desire.

The configuration file for *cideasy2ncid* is */etc/ncid/cideasy2ncid.conf*. It may be located in same directory as the script, or in the *etc* directory, or in NCID default configuration directory. Read the comments in the config file for more details.

The -fIcideasy2ncid=fR device can run on any system, but normally it is run on same box as the NCID server. If it is not run on the same box as the NCID server, you must configure the server IP address in the configuration file.

## **OPTIONS**

#### -C <filename> | --config <filename>

Configuration file.

Default: /etc/ncid/cideasy2ncid.conf

#### -D | --debug

Debug mode, *cideasy2ncid* stays attached to the terminal and displays all messages that go into the log file.

#### -h | --help

Displays the help message and exits.

#### -H <0|1> | --hostname-flag <0|1>

When the hosthame flag is set to 1, the IDENT string sent to a server will include the hostname with the program name.

Default: 1

## -L <filename> | --logfile <filename>

Specifies the logfile name to use.

Default: /var/log/cideasy2ncid.log

#### -P <filename> | --pidfile <filename>

Specifies the pidfile name to write. Set to */var/run/cideasy2ncid.pid* in an rc or init script when used as a service. The program will still run if it does not have permission to write a pidfile. There is no default. If pidfile is not set, no pid file will be used.

#### --test | -t

Test mode, *cideasy2ncid* stays attached to the terminal and no connection is made to the server. Displays all messages that go into the log file.

Test mode sets debug mode and verbose = 4. The verbose level can be changed on the command line.

## --test-file | -T

Test file mode, no connection is made to the *cideasy2ncid device*. The test-file mode uses a test file as input instead of a *cideasy2ncid device*. If test mode is also set, there is no connection to the NCID server. It sets debug mode and verbose = 4. The verbose level can be changed on the command line.

#### -v <1-9> | --verbose <1-9>

Verbose mode. Send information into the logfile and display information for the -D option. Set a higher number for more information.

To debug, try: verbose = 4 or 5

Default: 1

## -V | --version

Displays the version then exits

#### --osx-launchd

This option is only for OSX when using launchd to control **ncidd**. It prevents **ncidd** from entering daemon mode. It is like debug mode, but nothing is printed to the screen.

## REQUIREMENTS

CIDEasy device

## FILES

/etc/ncid/cideasy2ncid.conf

# SEE ALSO

cideasy2ncid.conf.5, ncidd.8, ncidd.conf.5, ncid\_gateways.7

cideasy2ncid.conf - cideasy2ncid configuration file

#### DESCRIPTION

The cideasy2ncid.conf file contains the configuration information for cideasy2ncid.

The *cideasy2ncid.conf* file understands 3 types of lines:

## blank line

ignored

comment line, beginning with '#'

ignored

VARIABLE = VALUE

VARIABLE = gatewayid, HostnameFlag, outcall, pidfile, ncidhost, ncidport, verbose

See cideasy2ncid.conf for a complete list of variables to set, a description and what the default values are.

# **EXAMPLES**

Set the NCID server IP address: ncidhost = 192.168.1.20

Set the gateway id: gatewayid = foobar

#### **SEE ALSO**

cideasy2ncid.1, ncidd.8, ncidd.conf.5

email2ncid - convert an email to an NCID message

# SYNOPSIS

```
email2ncid [--configfile | -C <filename>]
    [--hostname-flag | -H <0 | 1>]
    [--help | -h]
    [--man | -m]
    [--notify | -N <0 | 1>]
    [--ncidserver | -n <[host][:port]>]
    [--test | -t <1-9>]
    [--version | -V]
```

## DESCRIPTION

The email2ncid gateway sends the contents of an email to the NCID server as one line. It is called from a .procmailrc file when an email contains the line: Subject: NCID Message

The email2ncid gateway has an option to only send an email subject line to the NCID server. It is called from a .procmailrc file when the email address or name matches on the email "From:" line.

The email must be in either plain text, or HTML and plain text. The output of email2ncid is a one line NCID message sent to an NCID server.

# **OPTIONS**

-C, --configfile <filename>

Specifies the configuration file to use. The program will still run if a configuration file is not found.

-H <0|1>, --hostname-flag <0|1>

When the hostname flag is set to 1, the IDENT string sent to a server will include the hostname with the program name.

Default: 0

```
-h, --help
```

Displays the help message and exits.

-m, --man

Displays the manual page and exits.

-N <0|1>, --notify <0|1>

This option sends a message to NCID containing only the subject line instead of the email contents as one line. It is a notification of some type:

\* visitor arrived at a gate in a gated community \* an important email arrived

-n <[host][:port]>, --ncidserver <[host][:port]>

Specifies the NCID server. Port may be specified by suffixing the hostname with :<port>.

Input must be <host:port> or <host>, or <:host>

```
-t <1-9>, --test <1-9>
```

Test mode connects to the server and displays some information and the message. It does not send the message to the server. Set the level to a higher number for more information. Levels range from 1 to 9, but not all levels are used.

```
test = 1: show some variables and generated message
test = 2: additionally show 2 or 3 lines returned by server
test = 3: additionally show the email message
```

Default: no test mode

–V, ––version

Displays the version.

## REQUIREMENTS

The NCID server http://ncid.sourceforge.net/ncid/ncid.html

A dynamic DNS service:

ChangeIP (https://www.changeip.com/dns.php)

Dynu (https://www.dynu.com)

DynDNS (https://www.dyn.com)

A Mail Transport Agent (MTA): exim, postfix, sendmail, etc.

#### firewall:

Forward port 25 TCP/UDP to the computer running the MTA

#### procmail:

\$HOME/.procmailrc must be created or updated to call email2ncid.

Execute the following command to automate this process:

ncid-setup email2ncid

Perl

perl 5.6 or higher, perl(Config::Simple)

#### FILES

/etc/ncid/email2ncid.conf

\$HOME/.procmailrc

## **SEE ALSO**

email2ncid.conf.5, ncid\_email2ncid\_setup.1, ncidd.8, ncid.conf.5, ncid\_gateways.7

email2ncid.conf - email2ncid configuration file

## DESCRIPTION

The *email2ncid.conf* file contains the configuration information for *email2ncid*.

The *email2ncid.conf* file understands 3 types of lines:

#### blank line

ignored

comment line, beginning with '#'

ignored

VARIABLE=VALUE

VARIABLE = HostnameFlag, lineid, ncidserver, notify VALUE can be between quotes.

# **OPTIONS**

# NCIDSERVER=<host address>:<port>

The NCID server host address can be an IP address or a resolvable host name.

Default: ncidserver = localhost:3333

lineid Suggested values: WIRELESS NETWORK Internet

Default: lineid = NETWORK

See email2ncid.conf for a complete list of variables to set and what the default values are.

#### **EXAMPLES**

Set the NCID server IP address: ncidserver = 192.168.1.20 Set the NCID server port: ncidserver = :3333

## **SEE ALSO**

email2ncid.1, ncid-email2ncid-setup.1

obi2ncid – Obihai device to NCID gateway

## SYNOPSIS

obi2ncid	[configfile	-C <filename>]</filename>
	[debug	-D]
	[delay	-d <seconds>]</seconds>
	[help	-h]
	[hostname-flag	-H <0  1>]
	[linefx	-f <string>]</string>
	[logfile-append	-l <filename>]</filename>
	[logfile-overwrite	-L <filename>]</filename>
	[man	-m]
	[ncidhost	-n <[host][:port]>]
	[no-filter	-N]
	[obiport	-o <port>]</port>
	[pidfile	-p <filename>]</filename>
	[rawfile-append	-r <filename>]</filename>
	[rawfile-overwrite	-R <filename>]</filename>
	[test	-t]
	[verbose	-v <1-9>]
	[version	-V]

## DESCRIPTION

The **obi2ncid** gateway obtains Caller ID from an Obihai VOiP telephone adapter and sends it to the NCID server. The server then sends the CID information to the NCID clients.

The gateway was developed using Obi100, OBi110 and OBi200 devices that were available.

The **obi2ncid** gateway uses either GTALK, the Voice Service AuthUserName, or the configurable default name for a line identifier.

The line identifier(s) can be aliased by the NCID server so you can give each Voice Service a meaningful identification.

The **obi2ncid** configuration file is **/etc/ncid/obi2ncid.conf**. See the obi2ncid.conf man page for more details.

The **obi2ncid** gateway can run on any computer, but normally it is run on the same box as the NCID server. If it is not run on the same box as the NCID server, you must configure the server IP address in the configuration file.

#### LINEID

The **obi2ncid** gateway attempts to assign the lineid based on the following table. "SP" is an abbreviation for "Service Provider" and "PSTN" is an abbreviation for "Public Switched Telephone Network."

Call type	Lineid assigned
=======	=============
Google Voice in or out	"GTALK"
VoIP in or out on default line	<authusername></authusername>
Incoming PSTN	"FXO"
Outgoing PSTN using ## <number></number>	"FXS"
Outgoing VoIP using **1 <number></number>	SP1"
Outgoing VoIP using **2 <number></number>	SP2"
Outgoing VoIP using **3 <number></number>	SP3"
Outgoing VoIP using **4 <number></number>	SP4"
Device setup using **5 <number></number>	SP5"
Outgoing VoIP using **9 <number></number>	"OBITALK" (a.k.a. Obi-to-Obi)

NOTES: If line selected is the GTALK line, then GTALK replaces SP?.

If line selected is \*\*9, then OBITALK replaces SP9. PSTN requires an OBiLINE device connected to an Obi200.

For incoming/outgoing PSTN calls, see the description for -- linefx.

If \*\*[0-9] is dialed on the keypad to select a line, the lineid becomes SP[0-9].

The number of SP lines are 1 to 4 plus 5 and 9, depending on the device. The default lineid for SP1 to SP4 can be changed only in the obi2ncid.conf configuration file. Google Talk is special in that "GTALK" can be detected on which SP line is used for it. The other voice providers must have their linesp[0–4] variable set to their lineid.

SP9 has the reserved lineid of "OBITALK" and can not be changed.

In cases where the lineid cannot otherwise be determined, the default lineid becomes OBIHAI.

#### IMPORTANT

This gateway does not work properly with a OBILINE add-on accessory that connects to a phone line.

# REQUIREMENTS

Obihai VoIP Telephone Adapter: Obi100, Obi110, Obi200, Obi202? http://www.obihai.com/

- Google Voice or a SIP voice provider (voip.ms, callcentric, others untested)
- The NCID server http://ncid.sourceforge.net/ncid/ncid.html
- perl 5.6 or higher, perl(Config::Simple)

#### **OPTIONS**

--configfile <filename>, -C <filename>

Specifies the configuration file to use. The program will still run if a configuration file is not found.

Default: /etc/ncid/obi2ncid.conf

--debug, -D

Debug mode, displays all messages that go into the log file. Use this option to run interactively.

--delay <seconds>, -d <seconds>

If the connection to the NCID server is lost, try every <delay> seconds to reconnect.

Default: 15

--help, -h

Displays the help message and exits.

--hostname-flag <0|1>, -H <0|1>

When the hostname flag is set to 1, the IDENT string sent to a server will include the hostname with the program name.

Default: 0

--linefx <string>, -f <string>

This option requires the OBiLINE FXO-to-USB Phone Line Adapter for the Obi2xx series. The Obi110 has it built in.

Normally "FXO" and "FXS" refer to line (telco) and phone (handset) respectively. OBiLINE changes the meaning of these to be "FXO" for incoming calls and "FXS" for outgoing calls, so by default "FXO" and "FXS" are used as the lineid and can not be changed.

However, if -- linefx is given a value, it replaces both "FXO" and "FXS" with that value.

For example:

--linefx POTS will cause the lineid for incoming and outgoing calls to be POTS.

Default: no default

- --logfile-append <filename>, -l <filename>
- --logfile-overwrite <filename>, -L <filename>
- Specifies the logfile name to write. The program will still run if it does not have permission to write to it.

If both options are present, --logfile-append takes precedence.

Default: Append to /var/log/obi2ncid.log

––man, –m

Displays the manual page and exits.

--ncidhost <[host][:port]>, -n <[host][:port]>

Specifies the NCID server. Port may be specified by suffixing the hostname with :<port>.

Input must be <host> or <host:port>, or <:port>.

Default: localhost:3333

--no-filter, -N

Useful for development and troubleshooting purposes.

A list of zero or more filter lines is stored in **obi2ncid.conf**.

An Obihai device periodically sends out packets when it is doing its own internal "housekeeping." Such packets do not have anything to do with call activity, but they can clutter and confuse verbose output because of their sheer volume and frequency.

However, in unusual circumstances it may be necessary to use the --no-filter option to include all housekeeping packets.

Default: filtering is ON

```
--obiport <port>, -o <port>
```

Specifies the UDP port to listen on for Caller ID from an OBi device.

Default: 4335

--pcap-read <filename>

Read packets from a libpcap capture file instead of the network. This also sets the test option and verbose to level 3. Mostly only useful for development and debug purposes.

--pidfile <filename>, -p <filename>

Specifies the pidfile name to write. The program will still run if it does not have permission to write a pidfile. The pid filename that should be used is /var/run/obi2ncid.pid.

Default: no pidfile

--rawfile-append <filename>, -r <filename>

--rawfile-overwrite <filename>, -R <filename>

Useful for development and troubleshooting purposes.

Writes packets to a file exactly as received from the gateway device. A filename extension of .data is suggested. The rawfile can be "played back" using **test-obi-gw**.

Raw packets from Obihai devices do not have a date/time stamp. When played back, the **obi2ncid** gateway script will treat the packets as arriving using the current date/time.

If both options are present, --rawfile-append takes precedence.

Default: no raw file

--test, -t

Test mode is a connection to the gateway device without a connection to the NCID server. It sets debug mode and verbose = 3. The verbose level can be changed on the command line.

Default: no test mode

### --verbose <1-9>, -v <1-9>

Output information, used for the logfile and the debug option. Set the level to a higher number for more information. Levels range from 1 to 9, but not all levels are used.

Default: verbose = 1

```
--version, -V
```

Displays the version and exits.

# EXAMPLES

Start obi2ncid in test mode at verbose level 3 obi2ncid --test

Start obi2ncid in test mode at verbose level 5 and keep a test log obi2ncid -t -v5 -L test.log

Start obi2ncid in test mode and keep a file of the input data obi2ncid -t -R test.data

Start obi2ncid in debug mode at verbose level 1 obi2ncid –D

# FILES

/etc/ncid/obi2ncid.conf

# SEE ALSO

obi2ncid.conf.5, ncidd.8, ncidd.conf.5, ncid\_gateways.7

obi2ncid.conf - obi2ncid configuration file

#### DESCRIPTION

The *obi2ncid.conf* file contains the configuration information for *obi2ncid*.

The *obi2ncid.conf* file understands 3 types of lines:

#### blank line

ignored

# comment line, beginning with '#' ignored

VARIABLE = VALUE

VALUE can contain spaces if it is between quotes.

See *obi2ncid.conf* for all default values.

# VARIABLES

**verbose =** *level* 

Level is in the range 1-9. Not all verbose levels are used.

#### **HostnameFlag** = *value*

Value is 0 or 1. Includes hostname in the IDENT string if 1.

# ncidaddr = host address

The NCID server host address can be an IP address or a resolvable host name.

#### **ncidport** = *port*

The NCID server port number.

#### delay = seconds

If the connection to the NCID server is lost, this specifies the number of seconds between reconnection attempts.

#### obiport = port

The NCID gateway listen port.

#### **lineid** = *string*

The telephone line identification

## EXAMPLES

Set the NCID server IP address: ncidaddr = 192.168.1.20

Set gateway listen port: obiport = 4335

#### **SEE ALSO**

obi2ncid.1

ncid2ncid - NCID to NCID gateway, connect multiple NCID sending servers to a single NCID receiving server

## SYNOPSIS

# ncid2ncid [options]

Options:

```
[-C <filename>
                --config <filename>]
[-D
             --debug]
[-f <[host][:port]> | --fromhost <[host][:port>]
              --hostname-flag <0|1>]
[-H <0]1>
[-h
            --help]
[-L <filename> | --logfile <filename>]
[-t <[host][:port]> | --tohost <[host][:port>]
[-P <filename> | --pidfile <filename>]
[-u
            --usage]
[-V
             --version]
[-v <1-9>
               --verbose <1-9>]
[-W <0]1>
                |--warn <0|1>]
[--osx-launchd]
```

#### DESCRIPTION

This gateway obtains the current Caller ID or message from one or more NCID servers, called sending servers and inputs them into another NCID server called a receiving server. Line labels are used to distinguish the different phone calls.

There can be up to 4 sending servers, but the first sending server must be configured by either the command line or the configuration file. The receiving server has a default and may not need to be configured.

If a sending server disconnects, the gateway will keep trying to reconnect until it either succeeds or is terminated. The gateway will send a disconnect message to the receiving server if a sending server disconnects and it will send a reconnect message to the receiving server if it reconnects.

The log file is /var/log/ncid2ncid.log.

If a pid file is given, usually /var/run/ncid2ncid.pid, then a pid file is used to store the process ID.

The configuration file for *ncid2ncid* is /etc/ncid/ncid2ncid.conf.

## **OPTIONS**

## -C <filename> | --config <filename>

Configuration file.

Default: /etc/ncid/ncid2ncid.conf

#### -D | --debug

Debug mode, *ncid2ncid* stays attached to the terminal and displays all messages that go into the log file.

#### -f <fromhost[:fromport]>

Specifies the first sending NCID server. It sends the Caller ID and messages to another NCID server. Port may be specified by suffixing the hostname with :<port>. Input must be <host> or <host:port>.

Default: :3333

#### -H <0|1> | --hostname-flag <0|1>

When the hosthame flag is set to 1, the IDENT string sent to a server will include the hostname with the program name.

Default: 0

## -h | --help

Prints this help

#### -L <filename> | --logfile <filename>

Specifies the logfile name to use. The logfile must exist before it is used.

Default: /var/log/ncid2ncid.log

#### -t <[host][:port]> | --ncid <[host][:port]>

Specifies the receiving NCID server. It receives Caller ID and messages from another NCID server. Port may be specified by suffixing the hostname with :<port>. Input can be <host> or <:port> or <host:port>

Default: localhost:3333

#### -P <filename> | --pidfile <filename>

Specifies the pidfile name to write. Set to */var/run/ncid2ncid.pid* in its rc, init ior service script when used as a service. The program will still run if it does not have permission to write a pidfile. There is no default. If pidfile is not set, no pid file will be used. Prints this help

#### -V | --version

Displays the version

#### -v <1-9> | --verbose <1-9>

Verbose mode. Send information into the logfile and display information for the -D option. Set a higher number for more information. LEVEL2 will give a warning every time it fails to connect with an NCID server. LEVEL8 will print the logfiles from every server and LEVEL9 will add the socket of the received logfile.

To debug, try: verbose = 2

Default: 1

#### -W <0|1> | --warn <0|1>

Send server disconnected or server reconnected messages to clients. Default: 0

#### --osx-launchd

This option is only for OSX when using launchd to control **ncidd**. It prevents **ncidd** from entering daemon mode. It is like debug mode, but nothing is printed to the screen.

## EXAMPLES

Forward Caller ID information or messages from localhost:3334 to localhost:3333 ncid2ncid --fromhost localhost:3334

Forward Caller ID information or messages from localhost:3334 to localhost:3333 in debug mode using verbose level 1.

ncid2ncid -D -f localhost:3334

Forward Caller ID information or messages from localhost:3334 to localhost:3333 in debug mode and display all logfiles.

ncid2ncid -Dv8 -f localhost:3334

#### FILES

/etc/ncid/ncid2ncid.conf /var/run/ncid2ncid.pid /var/log/ncid2ncid.log

## DIAGNOSTICS

Return Code Meaning

- -----
  - 0 Successful
- -100 Usage
- -101 Invalid port number
- -104 Configuration file error

- -107 Invalid number
- -108 Missing sending host 1
- -110 PID file already exists
- -? System error

# SEE ALSO

ncid2ncid.conf.5, ncidd.8, ncidd.conf.5, ncid\_gateways.7
ncid2ncid.conf - ncid2ncid configuration file

## DESCRIPTION

The ncid2ncid.conf file contains the configuration information for ncid2ncid, the NCID to NCID gateway.

The *ncid2ncid.conf* file is used to set options. Options can also be set on a command line. A line is broken up into words. A word is either a string of non-blank characters, everything between double quotes, or an equal sign.

The *ncid2ncid.conf* file understands 3 types of lines:

blank line

ignored

comment line, beginning with '#'

ignored

#### command lines, beginning with 'set'

set ITEM = VALUE [ITEM = VALUE] [...]
where ITEM = pidfile, verbose, HostnameFlag, tohost,
 toport, fromhost?, fromport?
 (? is a digit sequence number)

## EXAMPLES

Set the verbose level to 2 set verbose = 2

Set the first sending host to 192.168.5.10 using the default port set fromhost1 = 192.168.5.10

Set the second sending host to ncidhost.home using the default port set fromhost2 = ncidhost.home:3334

## SEE ALSO

ncid2ncid.1

rn2ncid – Android smart phone app 'Remote Notifier' to NCID gateway

## SYNOPSIS

rn2ncid	[debug	-D]
	[delay	-d <seconds>]</seconds>
	[help	-h]
	[hostname-flag	-H <0 1>]
	[logfile-append	-l <filename>]</filename>
	[logfile-overwrite	-L <filename>]</filename>
	[configfile	-C <filename>]</filename>
	[man	—m]
	[ncidhost	-n <[host][:port]>]
	[test	-t]
	[pidfile	-p <filename>]</filename>
	[verbose	-v <1-9>]
	[version	-V]
	[cellport	-c <port>]</port>

#### DESCRIPTION

The **rn2ncid** gateway obtains Caller ID and messages from a cell phone. It uses an Android app called **Remote Notifier for Android** to obtain the information and send it to the NCID server. The server then sends the CID information to the NCID clients.

The **Remote Notifier for Android** app uses a 16 digit hex number to identify the smart phone. The **rn2ncid** gateway uses 4 of the least significant digits as the phone id. Therefore you can run the app in multiple smart phones without needing to configure them.

The phone id can be aliased by the NCID server so you can give each phone a meaningful identification such a **CELL**, or **SP-1**, or wharever.

The **rn2ncid** configuration file is **/etc/ncid/rn2ncid.conf**. See the rn2ncid.conf man page for more details. If you are also using **ncid–page** or **ncid–notify** you need to configure the **reject** variable.

The **rn2ncid** gateway can run on any computer, but normally it is run on the same box as the NCID server. If it is not run on the same box as the NCID server, you must configure the server IP address in the configuration file.

## REQUIREMENTS

The NCID server

http://ncid.sourceforge.net/ncid/ncid.html

The "Remote Notifier for Android" app on your Android device https://f-droid.org/wiki/page/org.damazio.notifier

perl 5.6 or higher, perl(Config::Simple)

#### **OPTIONS**

-n <[host][:port]>, --ncidhost <[host][:port]>

Specifies the NCID server. Port may be specified by suffixing the hostname with :<port>.

Input must be <host> or <host:port>, or <:port>

Default: localhost:3333

-c <port>, --cellport <port>

Specifies the port to listen on for messages from a smart phone.

Default 10600

-d <seconds>, --delay <seconds>

If the connection to the NCID server is lost, try every <delay> seconds to reconnect.

Default: 15

#### -D, --debug

Debug mode, displays all messages that go into the log file. Use this option to run interactively.

-H <0|1>, --hostname-flag <0|1>

When the hostname flag is set to 1, the IDENT string sent to a server will include the hostname with the program name.

Default: 0

-h, --help

Displays the help message and exits.

-m, --man Displays the manual page and exits.

```
-C, --configfile <filename>
```

Specifies the configuration file to use. The program will still run if a configuration file is not found.

Default: /etc/ncid/rn2ncid.conf

-l, --logfile-append <filename>

-L, --logfile-overwrite <filename>

Specifies the logfile name to write. The program will still run if it does not have permission to write to it.

If both options are present, --logfile-append takes precedence.

Default: Append to /var/log/rn2ncid.log

-p, --pidfile <filename>

Specifies the pidfile name to write. The program will still run if it does not have permission to write a pidfile. The pid filename that should be used is /var/run/rc2ncid.pid.

Default: no pidfile

-t, --test

Test mode is a connection to the Whozz Calling Network Device without a connection to the NCID server. It sets debug mode and verbose = 3. The verbose level can be changed on the command line.

Default: no test mode

```
-v, --verbose <1-9>
```

Output information, used for the logfile and the debug option. Set the level to a higher number for more information. Levels range from 1 to 9, but not all levels are used.

Default: verbose = 1

-V, --version

# Displays the version. **EXAMPLES**

Start rn2ncid in test mode at verbose level 3

rn2ncid --test

Start rn2ncid in debug mode at verbose level 1 rn2ncid –D

## FILES

/etc/ncid/rn2ncid.conf

## SEE ALSO

rn2ncid.conf.5, ncidd.8, ncidd.conf.5, ncid\_gateways.7

rn2ncid.conf - rn2ncid configuration file

#### **DESCRIPTION**

The *rn2ncid.conf* file contains the configuration information for *rn2ncid*.

The *rn2ncid.conf* file understands 3 types of lines:

#### blank line

ignored

## comment line, beginning with '#'

ignored VARIABLE = VALUE

VALUE can contain spaces if it is between quotes.

See *rn2ncid.conf* for all default values.

## VARIABLES

**verbose** = *level* 

Level is in the range 1-9. Not all verbose levels are used.

#### **HostnameFlag** = *value*

Value is 0 or 1. Includes hostname in the IDENT string if 1.

# **ncidaddr** = host address

The NCID server host address can be an IP address or a resolvable host name.

#### **ncidport** = *port*

The NCID server port number.

delay = seconds

If the connection to the NCID server is lost, this specifies the number of seconds between reconnection attempts.

#### cellport = port

The listen port as specified in the Remote Notifier application.

#### reject = from address[,from address][,from address]...

SMS and MMS messages usually have a 'from' address and depending on the carrier this could be a number or an email address. Specify a comma separated list of addresses that will NOT be transmitted by the NCID server to all listening NCID clients. This is used to prevent endless loops which could result in excessively high data or text charges by your cell phone carrier.

Remote Notifier sends the 'from' address in its 'data' (fifth) field. See NOTES below.

An example of an endless loop would be:

- cell phone gets SMS
- Remote Notifier sends out the SMS
- rn2ncid gets the SMS and sends it to the NCID server as 'MSG'
- the neid-page module gets this 'MSG' and forwards it back to the cell phone
- cell phone gets the 'MSG' as an SMS
- cycle repeats forever

To prevent this endless loop, suppose you have ncid-page.conf configured to send SMS messages to your cell 'from' your email address of: johndoe@yahoo.com

You might want to set 'reject' to be:

reject = johndoe@yahoo.com

## NOTES

Remote Notifier sends six pieces of information:

- 1: version (e.g., 'v2')
- 2: unique device id in hex
- 3: unique notification id in hex
- 4: event type (BATTERY, PING, SMS, etc.)
- 5: data (terse information)
- 6: event contents (verbose free-form text, can be multi-line)

## **EXAMPLES**

Set the NCID server IP address: ncidaddr = 192.168.1.20

Set the Remote Notifier listen port cellport = 10600

Reject SMS/MMS messages to manage text blocking reject = 9999

## SEE ALSO

rn2ncid.1

sip2ncid - SIP to NCID gateway, inject CID info into ncidd by snooping SIP 'INVITE's

## SYNOPSIS

sip2ncid [options]

Options:

```
[-C <filename>
                  |--config <filename>]
[-D
             --debug]
[-h
             --help]
[-H <0]1>
                | --hostname-flag <0|1>]
[-i <interface>
               --interface <interface>]
[-1
            --listdevs]
[-L <filename>
                  --logfile <filename>]
[-n <[host][:port]> | --ncid <[host][:port]>]
[-P <filename>
                --pidfile <filename>]
                 |--readfile <dumpfile>]
[-r <dumpfile>
[-s <[host][:port]> | --sip <[host][:port]>]
               --lineid-size <1-9>]
[-S <1-9>
[-t
            --testsip]
[-T
             --testall]
               |--verbose <1-9>]
[-v <1-9>
[-V
             --version]
                 --writefile <dumpfile>]
[-w <dumpfile>
[-W <0]1>
                |-warn < 0|1>]
[--osx-launchd]
```

# DESCRIPTION

Snoops SIP Invites via libpcap and injects the caller id information found to the NCID server specified. Snoops TCP and UDP traffic on the specified SIP host and port.

The **sip2ncid** gateway uses the trailing digits of a phone line as the lineid for each phone line monitored. The default number of trailing digits is 4 unless changed by the *extension-size* option.

The log file is /var/log/sip2ncid.log.

If a pid file is given, usually /var/run/sip2ncid.pid, then a pid file used to store the process ID.

The configuration file for sip2ncid is /etc/ncid/sip2ncid.conf.

#### **OPTIONS**

#### -C <filename> | --config <filename>

Configuration file.

Default: /etc/ncid/sip2ncid.conf

#### -D | --debug

Debug mode, *sip2ncid* stays attached to the terminal.

## -h | --help

Prints this help

#### -H <0|1> | --hostname-flag <0|1>

Sets the hosthame flag so the IDENT string sent to a server will include the hostname with the program name.

Default: 0

#### -i <interface> | --interface <interface>

Specifies the network interface to snoop on. If this is not specified then libpcap will pick a network interface. This will generally be the first Ethernet interface found.

#### -l | --listdevs

Returns a list of all network device names that can be used.

#### -L <filename> | --logfile <filename>

Specifies the logfile name to use. The logfile must exist before it is used.

Default log filename: /var/log/sip2ncid.log

#### -n <[host][:port]> | --ncid <[host][:port]>

Specifies the NCID server to connect to. Port may be specified by suffixing the hostname with <:port>, or if you only want to change the port, just <:port>. By default it will connect to port 3333 on "127.0.0.1".

#### -P <filename> | --pidfile <filename>

Specifies the pidfile name to write. Set to /var/run/ncidd.pid in a rc or init script when used as a service. The program will still run if it does not have permission to write a pidfile. There is no default. If pidfile is not set, no pid file will be used.

#### -r <dumpfile> | --readfile <dumpfile>

Read packets from a libpcap capture file instead of the network. This also sets the testsip option, verbose to level 3 and no filter is applied. Mostly only useful for development and debug purposes.

## -s <[host][:port]> | --sip <[host][:port]>

Specifies the hostname of the SIP device to snoop. Both TCP and UDP protocol packets are automatically monitored. You may also specify the port by suffixing the hostname with :<port>, or if no hostname is wanted, just <:port>. If you do not specify a host, it defaults to the network interface. If you do not specify a port, it defaults to <5061> (Vonage default). Other Vonage ports are 5060 and 10000. The new Vonage default appears to be <10000>.

#### -S <1-9> | --lineid-size <1-9>

Specify the number of trailing digits from a phone number to be used as the lineid. On a PBX, this usually represents the extension number.

Default: 4

#### -t | --testsip

Test for SIP packets. This option is used to check if SIP packets exist without starting the NCID server. It will display the Caller ID line generated when a call comes in and a CANCEL line if cancel was generated. It will not send any CID data to NCID. It also sets the debug option.

#### -T | --testall

Test for all packets. This option is used to check for IP packets without starting the NCID server. It will display a packet count and the packet type. It will not send any CID data to NCID. It also sets the debug option.

#### -v <1-9> | --verbose <1-9>

Verbose mode. Send information into the logfile and display information for the -D option. Set a higher number for more information.

To debug, try: verbose = 3

Default: verbose = 1

## -V | --version

Displays the version

#### -w <dumpfile> | --writefile <dumpfile>

Write packets to a libpcap capture file. This also sets the debug option, verbose to level 3 and no filter is applied. Mostly only useful for development and debug purposes.

## -W <0|1> | --warn <0|1>

Send 'No SIP packets' or 'SIP packets returned' messages to clients

Default: warn = 0

#### --osx-launchd

This option is only for Mac OSX when using launchd to control sip2ncid. It prevents **sip2ncid** from entering daemon mode. It is like debug mode, but nothing is printed to the screen.

## FILES

/etc/ncid/sip2ncid.conf /var/run/sip2ncid.pid /var/log/sip2ncid.log

## **MESSAGES FORMAT**

CALL: ###DATE<MMDDHHMM>...LINE<#####>...NMBR<########>...NAME<words>+++ CALLINFO: ###CANCEL...NMBR<########>...DATE<MMDDHHMM+++ CALLINFO: ###BYE...NMBR<#########>...DATE<MMDDHHMM>+++

#### Example

CALL: ###DATE05311233...LINE1122...NMBR13215551212...NAMEBig John+++

#### **EXAMPLES**

# run sip2ncid as root and view status and SIP packets: sip2ncid -Dv3

# run sip2ncid as root and list all network device names: sip2ncid --listdevs

# run sip2ncid as root in test mode to look for SIP packets. sip2ncid --testsip

# run sip2ncid as root in test mode to look for any packets. sip2ncid --testall

## DIAGNOSTICS

Return Code Meaning

-----

- 0 Successful
- -100 Usage
- -101 Invalid port number
- -104 Configuration file error
- -107 Invalid number
- -110 PID file already exists
- -? System error

#### SEE ALSO

sip2ncid.conf.5, ncidd.8, ncidd.conf.5

sip2ncid.conf - sip2ncid configuration file

## DESCRIPTION

The *sip2ncid.conf* file contains the configuration information for *sip2ncid*, the SIP gateway.

The *sip2ncid.conf* file is used to set options. Options are set on a command line. A line is broken up into words. A word is either a string of non-blank characters, everything between double quotes, or an equal sign.

The *sip2ncid.conf* file understands 3 types of lines:

blank line

ignored

comment line, beginning with '#'

ignored

## command lines, beginning with 'set'

## **EXAMPLES**

Set the verbose level to 3 set verbose = 3

Set the SIP port to 5061 set sipport = 5061

## **SEE ALSO**

sip2ncid.8, ncidd.8, ncidd.conf.5

wc2ncid - Whozz Calling device to NCID server gateway

## SYNOPSIS

wc2ncid	[debug	-D]
	[delay	-d <seconds>]</seconds>
	[help	-h]
	[hostname-flag	-H <0 1>]
	[logfile-append	-l <filename>]</filename>
	[logfile-overwrite	-L <filename>]</filename>
	[configfile	-C <filename>]</filename>
	[man	-m]
	[ncidhost	-n <[host][:port]>]
	[set-wc]	
	[test	-t]
	[pidfile	-p <filename>]</filename>
	[verbose	-v <1-9>]
	[version	-V]
	[wchost	<pre>-w <address1>[,address2][,]</address1></pre>

#### DESCRIPTION

The WC (Whozz Calling) gateway obtains Caller ID from one or more Whozz Calling Ethernet Link devices. The Whozz Calling Ethernet Link device handles multi–line Caller ID, either 2, 4, or 8 telephone lines. The basic models handle incoming calls and the deluxe models handle incoming and outgoing calls.

See the Whozz Calling feature matrix for the various models: http://www.callerid.com/feature-table/

The Whozz Calling devices do not pick–up, go off–hook, or answer the telephone line. They cannot be used to hangup the line for phone numbers in the ncidd blacklist file, but a modem can be used with the WC gateway for the blacklist feature of ncidd.

## REQUIREMENTS

The NCID server

http://ncid.sourceforge.net/ncid/ncid.html

At least one Whozz Calling Ethernet Link device http://www.callerid.com

perl 5.6 or higher, perl(Config::Simple), perl(Data::HexDump)

#### **OPTIONS**

-n <[host][:port]>, --ncidhost <[host][:port]>

Specifies the NCID server. Port may be specified by suffixing the hostname with :<port>.

Input must be <host> or <host:port>, or <:port>

Default: localhost:3333

-w <address1[,address2][,...]>, --wchost <address1[,address2],[,...]>

Specifies the Whozz Calling Ethernet Link Device or devices. Multiple addresses for devices are comma separated.

Input must be <address> or <address1,address2,etc>.

Default: 192.168.0.90

-d <seconds>, --delay <seconds>

If the connection to the NCID server is lost, try every <delay> seconds to reconnect.

Default: 15

#### -D, --debug

Debug mode, displays all messages that go into the log file. Use this option to run interactively.

-H <0|1>, --hostname-flag <0|1>

When the hostname flag is set to 1, the IDENT string sent to a server will include the hostname with the program name.

Default: 0

-h, --help

Displays the help message and exits.

-m, --man

Displays the manual page and exits.

-C, --configfile <filename>

Specifies the configuration file to use. The program will still run if a configuration file is not found.

Default: /etc/ncid/wc2ncid.conf

--set-wc

Sets the IP address, beginning line number, number of telephone lines, and sending port for each Whozz Calling Ethernet Link Device.

It sets the IP address for the WC device from the address for "wcaddr" in the configuration file or --wchost on the command line.

It automatically sets the beginning line number for the WC device which is used as a line label prefixed with "WC". Each device gets a beginning line number that is the ending line number plus one from the preceeding device, for example; device 1 (WC01 WC02) device 2 (WC03 WC04 WC05 WC06).

NOTE: All devices are automatically configured to send call information on port 3520.

-l, --logfile-append <filename>

-L, --logfile-overwrite <filename>

Specifies the logfile name to write. The program will still run if it does not have permission to write to it.

If both options are present, --logfile-append takes precedence.

Default: Append to /var/log/wc2ncid.log

-p, --pidfile <filename>

Specifies the pidfile name to write. The program will still run if it does not have permission to write a pidfile. The pid filename that should be used is /var/run/wc2ncid.pid.

Default: no pidfile

-t, --test

Test mode is a connection to the Whozz Calling Network Device without a connection to the NCID server. It sets debug mode and verbose = 3. The verbose level can be changed on the command line.

Default: no test mode

```
-v, --verbose <1-9>
```

Output information, used for the logfile and the debug option. Set the level to a higher number for more information. Levels range from 1 to 9, but not all levels are used.

Default: verbose = 1

-V, --version

Displays the version.

## EXAMPLES

Start wc2ncid, set IP address to 192.168.1.90 from command line, set the beginning line number automatically and set the sending Ethernet port to 3520 (the default): wc2ncid --set-wc --wchost 192.168.1.90 Start wc2ncid in test and debug modes at verbose 5: wc2ncid -tv5

## FILES

/etc/ncid/wc2ncid.conf

# SEE ALSO

wc2ncid.conf.5, wct.1, ncidd.8, ncidd.conf.5, ncid\_gateways.7

wc2ncid.conf - wc2ncid configuration file

## DESCRIPTION

The wc2ncid.conf file contains the configuration information for wc2ncid.

The *wc2ncid.conf* file understands 3 types of lines:

## blank line

ignored

comment line, beginning with '#'

ignored

VARIABLE = VALUE

VARIABLE = HostnameFlag, delay, ncidaddr, ncidport, outcall, verbose, wcaddr

See wc2ncid.conf for a complete list of variables to set and what the default values are.

## **EXAMPLES**

Set the NCID server IP address: ncidaddr = 192.168.1.20

Set the WC Internet Link address wcaddr = 192.168.1.90

## SEE ALSO

wc2ncid.1, ncidd.8, ncidd.conf.5

xdmf2ncid - XDMF Caller ID to NCID gateway

## SYNOPSIS

xdmf2ncid	[configfile	-C <filename>]</filename>
	[debug	-D]
	[delay	-d <seconds>]</seconds>
	[help	-h]
	[hostname-flag	-H <0  1>]
	[ht9032-ic	-I <0  1>]
	[logfile-append	-l <filename>]</filename>
	[logfile-overwrite	-L <filename>]</filename>
	[man	—m]
	[ncidhost	-n <[host][:port]>]
	[pidfile	-p <filename>]</filename>
	[pretty]	
	[test	-t]
	[test-file	-T <testfile>]</testfile>
	[usbport	-u <usb port="">]</usb>
	[verbose	-v <1-9>]
	[version	-V]

#### **DESCRIPTION**

The **xdmf2ncid** gateway obtains Caller ID and messages from an SDMF or MDMF USB device (or modem) and sends the information to the NCID server. The server then sends the CID information to the NCID clients.

The USB port is set to 1200 baud with 1 start bit, 8 data bits, 1 stop bit and no parity.

The gateway uses the USB port as the default line identifier, for example ttyUSB0.

The **line identifier** can be aliased by the NCID server so you can give each phone line a meaningful identification such as the last 4 digits of the phone number. For example: **1234**. You can even use the complete phone number if you desire.

The configuration file is /etc/ncid/xdmf2ncid.conf. See the xdmf2ncid.conf man page for more details.

The **xdmf2ncid** gateway can run on any computer, but normally it is run on the same box as the NCID server. If it is not run on the same box as the NCID server, you must configure the server IP address in the configuration file.

#### REQUIREMENTS

Perl 5.6 or higher, perl(Config::Simple)

The NCID server

http://ncid.sourceforge.net/ncid/ncid.html

Either one of the following:

CTI Comet USB Caller ID

http://www.crucible-technologies.co.uk/products/WEB-COMET

#### Modem

configured for Caller ID by setting AT+VCID=2

Holtek HT9032D based PSTN Caller ID module with required USB adapter https://www.aliexpress.com/item/-/32807442435.html

http://cutedigi.com/pstn-caller-id-module-for-arduino-pcduino/

USB to UART TTL cable adapter for PC connection https://www.aliexpress.com/item/-/1859099599.html

http://store.linksprite.com/ttl-uart-to-usb-cable-serial-usb-debug-cable/

Possibly other Type I Caller ID devices using the HT9032 http://www.holtek.com.tw/documents/10179/116745/an0053e.pdf

#### **OPTIONS**

-C, --configfile <filename>

Specifies the configuration file to use. The program will still run if a configuration file is not found.

Default: /etc/ncid/xdmf2ncid.conf

-D, --debug

Debug mode, displays all messages that go into the log file. Use this option to run interactively.

-d <seconds>, --delay <seconds>

If the connection to the NCID server is lost, try every <delay> seconds to reconnect.

Default: 15

-h, --help

Displays the help message and exits.

-H < 0|1>, --hostname-flag < 0|1>

When the hostname flag is set to 1, the IDENT string sent to a server will include the hostname with the program name.

Default: 0

-I <0|1>, --ht9032-ic <0|1>

Set to 0 for input from either the CTI Comet USB or modem, or set to 1 for input from the Holtek HT9032D based PSTN Caller ID module or possibly other devices based on the Holtek HT9032 IC.

Default: 0

-l, --logfile-append <filename>

-L, --logfile-overwrite <filename>

Specifies the logfile name to write. The program will still run if it does not have permission to write to it.

If both options are present, --logfile-append takes precedence.

Default: Append to /var/log/xdmf2ncid.log

-m, --man

Displays the manual page and exits.

-n <[host][:port]>, --ncidhost <[host][:port]>

Specifies the NCID server. Port may be specified by suffixing the hostname with :<port>.

Input must be <host> or <host:port>, or <:port>

Default: localhost:3333

-p, --pidfile <filename>

Specifies the pidfile name to write. The program will still run if it does not have permission to write a pidfile. The pid filename that should be used is */var/run/xdmf2ncid.pid*.

Default: no pidfile

--pretty

Provides a more structured, decoded output for debugging and development purposes. Output is in the form of perl comment lines, suitable for insertion into test-xdmf-calls.data.

-t, --test

Test mode is a connection to the SDMF or MDMF USB Caller ID device, to the gateway without a connection to the NCID server. It sets debug mode and verbose = 4. The verbose level can be changed on the command line.

Default: no test mode

#### -T, --test-file

The test-file mode uses a test file as input instead of a SDMF or MDMF USB Caller ID device. If test mode is also set, there is no connection to the NCID server. It sets debug mode and verbose = 4. The verbose level can be changed on the command line.

Default: no test file mode

-u <USB port>, --usbport <USB port>

Specifies the USB port to listen on for messages from an XDMF device.

Default "/dev/ttyUSB0"

-v, --verbose <1-9>

Output information, used for the logfile and the debug option. Set the level to a higher number for more information. Levels range from 1 to 9, but not all levels are used.

Default: verbose = 1

-V, --version

Displays the version.

#### **EXAMPLES**

Start xdmf2ncid in test mode at verbose level 3 xdmf2ncid --test

Start xdmf2ncid in debug mode at verbose level 1 xdmf2ncid –D

#### FILES

/etc/ncid/xdmf2ncid.conf

#### **SEE ALSO**

xdmf2ncid.conf.5, ncidd.8, ncidd.conf.5, ncid\_gateways.7

xdmf2ncid.conf - xdmf2ncid configuration file

## DESCRIPTION

The *xdmf2ncid.conf* file contains the configuration information for xdmf2ncid.

The *xdmf2ncid.conf* file understands 3 types of lines:

blank line ignored

comment line, beginning with '#'
ignored

VARIABLE = VALUE

VALUE can contain spaces if it is between quotes.

See *xdmf2ncid.conf* for all default values.

## VARIABLES

verbose = *level* 

Level is in the range 1–9. Not all verbose levels are used.

HostnameFlag = *value* 

Value is 0 or 1. Includes hostname in the IDENT string if 1.

ncidaddr = host address

The NCID server host address can be an IP address or a resolvable host name.

#### ncidport = port

The NCID server port number.

#### delay = seconds

If the connection to the NCID server is lost, this specifies the number of seconds between reconnection attempts.

#### ht9032 = *value*

Value is 0 or 1. Set the operation mode for the Holtek HT9032D based PSTN Caller ID module if 1.

#### **EXAMPLES**

Set the NCID server IP address: ncidaddr = 192.168.1.20

Set the USB device (or modem) listen port usbport = /dev/ttyUSB0

#### **SEE ALSO**

xdmf2ncid.1

yac2ncid - YAC server to NCID server gateway

## SYNOPSIS

yac2ncid [-v] [-p <PIDFILE>]

yac2ncid [-V]

## DESCRIPTION

**YAC2NCID** acts as a YAC client, listens to the CID information from a YAC server and sends it to the NCID server. The server then sends the CID information to the NCID clients.

It is important to understand that to run YAC server with NCID clients you must run YAC2NCID gateway as well as NCID server.

The configuration file for *yac2ncid* is */etc/ncid/yac2ncid.conf*. It may be located in same directory as the script, or in the *etc* directory, or in NCID default configuration directory. Read the comments in the config file for more details.

**YAC2NCID** can run on any system, but normally it is run on same box as the NCID server. If it is not run on the same box as the NCID server, you must configure the server IP address in the configuration file.

Configure the YAC server with IP address of the box running YAC2NCID.

**YAC2NCID** relies on netcat binary (nc). As there are multiple implementations of this binary in existence, the script will try to auto detect the options to use. If script is unable to properly detect the version of nc, set NETCAT\_TYPE to CUSTOM in the config file and set custom parameters to match your version.

There is also a client output module called *ncid-yac*. It sends the NCID CID information to YAC clients.

## OPTIONS

## -p <PIDFILE>

Sets the PID file name. Default: /var/run/yac2ncid.pid

-v Verbose mode.

-V Display version.

## REQUIREMENTS

netcat: /usr/bin/nc

#### FILES

/etc/ncid/yac2ncid.conf

## SEE ALSO

yac2ncid.conf.5, ncidd.8, ncidd.conf.5, ncid\_gateways.7

yac2ncid.conf - yac2ncid configuration file

#### **DESCRIPTION**

The *yac2ncid.conf* file contains the configuration information for *yac2ncid*.

The *yac2ncid.conf* file understands 3 types of lines:

## blank line

ignored

comment line, beginning with '#' ignored

# VARIABLE=VALUE

VALUE can be between quotes.

VARIABLE = HOSTNAME\_FLAG, LINE, NETCAT, NETCAT\_TYPE=CUSTOM, NETCAT\_CUSTOM\_SEND\_OPTS, NETCAT\_CUSTOM\_LISTEN\_OPTS, VERBOSE, YACPORT

See yac2ncid.conf for a complete list of variables to set and what the default values are.

## **EXAMPLES**

Set the NCID server IP address: NCIDSERVER=192.168.0.1

Set the NCID server IP address and port 3334: NCIDSERVER=192.168.10.3:3334

Set a telephone line indicator: LINE=1212

## SEE ALSO

yac2ncid.1, ncidd.8, ncidd.conf.5, ncid\_gateways.7

ncid\_tools - NCID tools overview

## DESCRIPTION

NCID tools are Perl and shell scripts for dealing with files and devices. The current tools distributed with NCID are:

cidalias	Views alias definitions in the NCID alias and blacklist files.	
cidcall	Views calls, hangups, messages and end-of-calls in the NCID call log.	
cidupdate	Updates aliases in the NCID call file. Designed to be called by the NCID server.	
get-fcc-list	Obtains the latest fcc.blacklist derived from FCC Complaints data.	
ncidnumberinfo	Formats the number and gives new information in the neidd message format.	
ncidutil	Manipulates entries in the alias, blacklist and whitelist files. Designed to be called by the NCID server.	
ncid-yearlog	Creates a yearly call log, that grows month by month, from each monthly log	
phonetz	Returns the local time or the local time range, taking into account multiple time zones and daylight saving time.	
update-cidcall	Updates the caller log with the new name and data fields produced from <i>ncidnumberinfo</i> . The output is sent to STDOUT	
wct	Whozz Calling Ethernet Link Device interactive tool.	

## FILES

\$HOME/NCID/log/cidcall-<year>.log \$HOME/NCID/log/ciddata-<year>.log /etc/ncid/fcc.blacklist /etc/ncid/ncidd.alias /etc/ncid/ncidd.blacklist /etc/ncid/ncidd.whitelist /usr/share/ncid/sys/get-fcc-list /var/log/cidcall.log /var/log/ciddata.log /var/backups/ncid/

## SEE ALSO

cidcall.1, cidalias.1, cidupdate.1, get-fcc-list.1, ncidutil.1, ncid-yearlog.1, phonenumber, update-cidcall, wct.1

cidalias - view alias definitions in the NCID alias, blacklist and whitelist files

## SYNOPSIS

```
cidalias [--help|-h] [--man|-m] [--version|-V]
cidalias [--alias | -a <file>]
  [--blacklist | -b <file>]
  [--whitelist | -w <file>]
  [--format | -f <0-2>]
  [--delimiter | -d <text>]
  [--strip-one | -1]
```

#### DESCRIPTION

The cidalias tool displays aliases in the alias file in one of three different formats: raw, human readable and delimited.

#### Options

-h, --help

Displays the help message and exits.

-m, --man

Displays the manual page and exits.

–V, ––version

Displays the version and exits.

-f <0-2>, --format <0-2>

Determines the output format used.

Output format 0 displays the alias file as-is. The blacklist and whitelist files are ignored.

Output format 1 displays the aliases in human readable text and includes blacklist and whitelist info if applicable.

Output format 2 displays the alias, blacklist and whitelist files with field delimiters for easy parsing by another program. Uses options -d|--delimiter and -1|--strip-one.

The default output format is 1 (human readable).

-d <text>, --delimiter <text>

Used when output format is 2 (delimited). Fields will be delimited by <text>.

For pipe-delimited output, surround the pipe symbol with single or double quotes: '|' or "|".

For tab-delimited output, specify only the letter "t".

For comma-delimited output, fields containing an embedded comma will automatically be surrounded by double-quotes.

Default delimiter is a comma (",").

-1, --strip-one

Used when output format is 2 (delimited). If a number is exactly 11 digits and it begins with "1", strip the "1" before outputting it. This is to facilitate consistent sorting of the output for 10 digit numbers.

-a <file>, --alias <file>

Sets the name of the alias file.

Default: /etc/ncid/ncidd.alias

-b <file>, --blacklist <file>

Sets the name of the blacklist file.

Default: /etc/ncid/ncidd.blacklist

-w <file>, --whitelist <file> Sets the name of the whitelist file

Default: /etc/ncid/ncidd.whitelist

## **EXAMPLES**

Output as tab-delimited, changing 11-digit numbers beginning with "1" to be 10-digits: cidalias -f 2 -d t -1

Output as pipe-delimited, changing 11-digit numbers beginning with "1" to be 10-digits, then sorting numerically on the phone number column:

cidalias –f 2 –d '|' –1 | sort –t '|' –k3,3 –n

## **SEE ALSO**

ncidd.conf.5, ncidd.alias.5, ncidd.blacklist.5, ncidd.whitelist.5, cidcall.1, cidupdate.1

cidcall - view calls, hangups, messages and end of calls in the NCID call file

## **SYNOPSIS**

cidcall	[help	-h]
	[list-years	-1]
	[man	-m]
	[format	-f <0>]
	[version	-V]
cidcall	[all-types	-a]
	[format	-f <1-2>]
	[delimiter	-d <text>]</text>
	[strip-one	-1]
	[verbose	-v <1-9>]
	[thisyear	-t]
	[yearlog	<pre>  -y &lt;4 digit year&gt;]</pre>
	[BLK	-B]
	[CID	-C]
	[END	-E]
	[HUP	-H]
	[MSG	-M]
	[MWI]	
	[NOT	-N]
	[OUT	-O]
	[PID	-P]
	[PUT	[ -p]
	[RID	-R]
	[WID	-W]
	[cidlog]	

## DESCRIPTION

The cidcall tool displays the cidcall.log file in one of three different formats: raw, human readable and delimited.

The default is to display BLK, CID, HUP, MWI, OUT, PID, PUT, RID and WID lines in a human readable format.

#### **Options**

-h, --help

Displays the help message and exits.

```
-m, --man
```

Displays the manual page and exits.

-D, --debug

Debug mode. Always enabled, reserved for future use.

```
-v, --verbose <1-9>
```

Output information while processing is occurring. Set the level to a higher number for more information. Levels range from 1 to 9, but not all levels are used.

Default: verbose = 1

-V, --version

Displays the version and exits.

-f <0-2>, --format <0-2>

Determines the output format used.

Output format 0 displays the call log as-is.

Output format 1 displays the call log in human readable text.

Output format 2 displays the call log with field delimiters for easy parsing by another program. Uses options -d|--delimiter and -1|--strip-one.

The default output format is 1 (human readable).

#### -d <text>, --delimiter <text>

Used when output format is 2 (delimited). Fields will be delimited by <text>.

For pipe-delimited output, surround the pipe symbol with single or double quotes: || or "|".

For tab-delimited output, specify only the letter "t".

For comma-delimited output, fields containing an embedded comma will automatically be surrounded by double-quotes.

Default delimiter is a comma (",").

-l, --list-years

Lists all the yearly call logs.

-1, --strip-one

Used when output format is 2 (delimited). If a number is exactly 11 digits and it begins with "1", strip the "1" before outputting it. This is to facilitate consistent sorting of the output for 10 digit numbers.

If the leading "1" is stripped, the "Exception" column will so indicate.

#### -i, --lineid <text>

Output only those lines where the lineid matches <text>.

-a, --all-types

Equivalent to typing --BLK, --CID, --END, --HUP, --MSG, --MWI, --NOT, --OUT, --PID, --PUT, --RID and --WID on the command line.

## -B, --BLK

Displays BLK lines (blocked calls) in the call file.

-C, --CID

Displays CID lines (incoming calls) in the call file.

-E, --END

Displays END lines (gateway end of call) in the call file.

-H, --HUP

Displays HUP lines (terminated calls) in the call file.

-M, --MSG

Displays MSG lines (messages) in the call file.

#### --MWI

Displays MWI lines (voicemail message waiting) in the call file.

Note: There is no short option for --MWI.

-N, --NOT

Displays NOT lines (smartphone note (message)) in the call file.

-O, --OUT

Displays OUT lines (outgoing calls) in the call file.

–P, ––PID

Displays PID lines (smartphone Caller ID) in the call file.

## –p, ––PUT

Displays PID lines (smartphone outgoing calls) in the call file.

#### –R, ––RID

Displays RID lines (ringback calls) in the call file.

#### -W, --WID

Displays WID lines ("call waiting" calls) in the call file.

#### -t, --thisyear

Obtains data from \$HOME/NCID/log/cidcall-<thisyear>.log instead of the default. This overrides a call log given on the command line.

-y, --yearlog <4 digit year>

Obtains data from \$HOME/NCID/log/cidcall-<year>.log instead of the default. This overrides a call log given on the command line.

#### Arguments

cidlog The NCID call file.

Default: /var/log/cidcall.log

## EXAMPLES

Output as tab-delimited, changing 11-digit numbers beginning with "1" to be 10-digits:

cidcall –f 2 –d t –1

Output as pipe-delimited, changing 11-digit numbers beginning with "1" to be 10-digits, then sorting numerically on the phone number column:

cidcall -f 2 - d' |' - 1| sort -t' |' - k4, 4 - n

## FILES

/var/log/cidcall.log
\$HOME/NCID/log/cidcall-<year>.log

## SEE ALSO

ncidd.conf.5

cidupdate - update aliases in the NCID call file

## **SYNOPSIS**

```
cidupdate [--help | -h]

[--version | -V]

cidupdate [--aliasfile | -a <file>]

[--config | -C <file>]

[--cidlog | -c <file>]

[--blacklist | -B <file>]

[--blacklist | -W <file>]

[--whitelist | -W <file>]

[--hangup | -H <0-3>]

[--ignore1 | -i]

[--multi | -M]

[--regex | -r <0-2>]

[-verbose | -v <1-9>]

[--yes | -y]
```

#### **DESCRIPTION**

Update the current NCID call log file (cidcall.log) using the newest entries found in the alias file (ncidd.alias) and #= notes in the whitelist and blacklist files.

If the --multi option is present, the current cidcall.log file and previous call files .1 to .9 are updated.

## **OPTIONS**

-h, --help

Displays the help message and exits.

-v, --verbose <1-9>

Output information while processing is occurring. Set the level to a higher number for more information. Levels range from 1 to 9, but not all levels are used.

-V, --version

Displays the version and exits.

- -C <file>, --config <file> Get the default options from <file> Default: /etc/ncid/ncidd.conf
- -a <file>, --aliasfile <file> Get the alias commands from <file> Default: from ncidd.conf (usually /etc/ncid/ncidd.alias)
- -c <file>, --cidlog <file> Set the input call log file to <file> Default: /var/log/cidcall.log
- -B <file>, --blacklist <file> Set the blacklist file to <file> Default: from ncidd.conf (usually /etc/ncid/ncidd.blacklist)

-W <file>, --whitelist <file>

Set the whitelist file to <file> Default: from ncidd.conf (usually /etc/ncid/ncidd.whitelist)

#### -H <0–3>, --hangup <0-3>

Set the hangup level to 0 (off) to disable the addition of names from the whitelist and blacklist #= descriptions.

Default: from ncidd.conf

#### -i, --ignore1

This is a US/Canada option only.

A leading one in an alias definition and in the calling number is ignored. Normally an alias requires the calling number as it appears in the cidcall.log. In the US a leading 1 may or may not be provided in incoming or outgoing calls.

Default: from ncidd.conf, the leading 1 must be in the alias if it is in the calling number.

#### -M, --multi

Updates the current cidcall.log file and previous call files .1 to .9. Default: Updates only the cidcall.log file

## -r, --regex <0-2>

If regex = 0, uses Simple Expressions. If regex = 1, uses Posix Regular Expressions. If regex = 2, uses Perl-compatible Expressions. Default: Uses Simple Expressions

#### -y, --yes

Answer yes to the prompt for overwriting the old call log with the generated new one. Default: Waits for user input

#### SEE ALSO

ncidd.conf.5, ncidd.alias.5, cidalias.1, cidcall.1

get-areacodes-list - fetch the latest valid-area-codes derived from wikipedia

## SYNOPSIS

get-areacodes-list [-h] [-V]

## DESCRIPTION

The **get-areacodes-list** script uses wget to construct a *valid-area-codes* file from the wikipedia List of North American Numbering Plan area codes.

You will only need to run this once or twice a year.

Once downloaded, *valid-area-codes* will be added to the tests performed by the **hangup-fakenum** External Hangup Extension script.

#### **OPTIONS**

-h Prints this help and exits.

-V Displays the version and exits.

## REQUIREMENTS

NCID: release 1.7 or newer

wget: fetches files using http

## FILES

/usr/share/ncid/sys/get-areacodes-list /etc/ncid/valid-area-codes

#### **SEE ALSO**

hangup-fakenum.1, wget.1, ncidd.8 https://en.wikipedia.org/wiki/List\_of\_North\_American\_Numbering\_Plan\_area\_codes

get-fcc-list - fetch the latest fcc.blacklist derived from FCC Complaints data

## SYNOPSIS

get-fcc-list [-h] [-V] [-a|-n|-r]

## DESCRIPTION

The **get-fcc-list** script uses wget to fetch the *fcc.blacklist* file from *http://ncid-utils.ca/fcc.blacklist*. The *fcc.blacklist* is a list of phone numbers taken from the Unwanted Calls - FCC Complaints open database.

You will want to call it as often as once a day from **cron** on Linux/Unix/Mac OS X.

Once downloaded, *fcc.blacklist* can be used with NCID in one of two ways:

#### 1: hangup-fcc

The External Hangup Extension script hangup-fcc can read fcc.blacklist directly.

#### 2: ncidd.blacklist

The contents of *fcc.blacklist* are reformatted by **get-fcc-list** and appended to *ncidd.blacklist*. Before being modified, a backup of the current *ncidd.blacklist* is saved to */var/backups/ncid*.

#### **OPTIONS**

- -h Prints this help and exits.
- -V Displays the version and exits.
- -a Download *fcc.blacklist* and add to *ncidd.blacklist*. This is the default action.
- -n Download *fcc.blacklist* but do not add to *ncidd.blacklist*. The downloaded file is ready to use with hangup-fcc.
- -r Same as -n but is a special remove-only option to remove "FCC bad list" lines from *ncidd.blacklist*. Use this option once when you are transitioning from *ncidd.blacklist* to *hangup-fcc*.

#### REQUIREMENTS

NCID: release 1.7 or newer

- wget: fetches files using http
- pkill: send signal to all running neidd servers to reload alias, blacklist and whitelist

#### root crontab:

Runs *get-fcc-list* at specific times and days. The root crontab can be edited with **sudo crontab** -e to add something like the following examples which write a log file to */tmp*:

Internal Hangup - append (-a) FCC Data to 'ncidd.blacklist' # run each day at 08:15 15 08 \* \* \* /usr/share/ncid/sys/get-fcc-list -a > /tmp/get-fcc-list.log 2>&1

Hangup Extension - do not append (-n), use 'fcc.blacklist' as-is # run each day at 08:15

15 08 \* \* \* /usr/share/ncid/sys/get-fcc-list -n > /tmp/get-fcc-list.log 2>&1

## FILES

/usr/share/ncid/sys/get-fcc-list /etc/ncid/fcc.blacklist /etc/ncid/ncidd.blacklist /var/backups/ncid/

#### SEE ALSO

hangup-fcc.1, wget.1, ncidd.8, crontab.5 https://consumercomplaints.fcc.gov/hc/en-us/articles/115002234203-Unwanted-Calls

ncid-yearlog - create a yearly call log from the monthly call logs

## SYNOPSIS

ncid-yearlog [-h] [-V]

## DESCRIPTION

The **ncid-yearlog** script is called from **cron** on the first day of each month. It creates a yearly file for *cid-call.log* in \$HOME/NCID/log and, if it exists, *ciddata.log* 

The **ncid-yearlog** script should only be run once on the first of the month from the user's *crontab*.

## **OPTIONS**

Prints this help

-V Displays the version

#### REQUIREMENTS

-h

logrotate:	rotates,	compresses	and	mails	system	logs
------------	----------	------------	-----	-------	--------	------

**ncidrotate:** must have Lines2keep=0 (default)

user crontab: 11 5 1 \* \* /usr/share/ncid/sys/ncid-yearlog

## FILES

/usr/share/sys/ncid-yearlog \$HOME/NCID/log/cidcall-<year>.log \$HOME/NCID/log/ciddata-<year>.log /etc/ncid/ncidrotate.conf /var/log/cidcall.log /var/log/ciddata.log

#### SEE ALSO

ncidrotate.1, ncidrotate.conf.5, ncidd.8

ncidutil - manipulate entries in the alias, blacklist and whitelist files

#### **SYNOPSIS**

```
ncidutil [--help|-h] [--man|-m] [--version|-V]
ncidutil [--multi "<blacklist and/or whitelist file names>"]
        [--regex|-R] [--ignore1|-i] <arguments>
```

#### DESCRIPTION

The neidutil script is designed to be called by the NCID server in response to client requests. Five arguments are required.

The neidutil script can add, modify or remove an alias from the alias file. If an alias is modified or removed and if the hangup option of the server is enabled, neidutil will add or remove the alias entry in the blacklist and/or whitelist files.

The "--multi" option is used to determine if the blacklist and whitelist files should be searched for an alias or if an entry should be added or removed from the files. The entry can be an alias in the alias file.

#### Options

-h, --help Displays the help message and exits.

-m, --man Displays the manual page and exits.

-V, --version

Displays the version and exits.

-i, --ignore1

This is a US/Canada option only.

A leading one in an alias definition and in the calling number is ignored.

Normally an alias requires the calling number as it appears in the cidcall.log. In the US a leading 1 may or may not be provided in incoming or outgoing calls.

Default: The number for the alias entry must match the calling number.

```
--multi "<blacklist> <whitelist>"
```

Specifies the names of the blacklist and whitelist files to update when an alias is modified. If both are specified, separate each with a space.

Default: ""

-R, --regex <0-2>

If regex = 0, uses Simple Expressions.

If regex = 1, uses Posix Regular Expressions.

If regex = 2, uses Perl–compatible Expressions.

Default: Uses Simple Expressions.

#### Arguments

<filename> Name of the alias, blacklist, or whitelist file.

t> The case-sensitive type of list: Alias, Blacklist, Whitelist

<action> add, modify, remove

for list = Alias: add, remove, or modify
for list = Blacklist: add or remove
for list = Whitelist: add or remove

<item>

	For list = Alias, item = "number&&alias"
	For list = Blacklist, item = "number name&&"
	For list = Whitelist, item = "number name&&"
	Quotes are required.
	number is the number in the call file alias is from the user name is the name in the call file
<extra></extra>	
	For list = Alias, extra is "type&&name"
	For list = Blacklist, extra is a optional "comment"
	For list = Whitelist, extra is a optional "comment"
	Quotes are required.
	name is the name in the call file type is the uppercase alias type or NOALIAS: NAMEDEP, NMBRDEP, NMBRNAME, NMBRONLY, NAMEONLY, LINEONLY

# SEE ALSO

ncidd.conf.5, ncidd.alias.5, ncidd.blacklist.5, ncidd.whitelist.5, cidalias.1, cidcall.1, cidupdate.1

ncidnumberinfo - shows country information and country formatted number

## SYNOPSIS

ncidnumberinfo [options] <phonenumber> [country]

## DESCRIPTION

The **ncidnumberinfo** tool looks up a phonenumber and shows the number formatted for the country of the number along with the following name and data fields in the ncidd call log format:

#### FNMBR

the result of formatting NMBR NTYPE caller device type (fixed, mobile, pager, etc)

CTRY Two letter country code of the caller

LOCA the locality (city/region) of the calling number

CARI the carrier of the calling number

#### Note:

The information given may be out of date because of number portability.

#### **OPTIONS**

--help | -h

Display usage

--nanp\_format <0-3> | -n <0-3>

Ten digit formatting options for NANP (North American Numbering Plan) countries:

- 0 phone number not formatted: 1234567890
- 1 google standard format: (123) 456-7890
- 2 hyphen format: 123-456-7890 (default)
- 3 dot format: 123.456.7890

North American Numbering Plan Countries and Territories: (https://en.wikipedia.org/wiki/North\_American\_Numbering\_Plan)

United States, countries, and its territories:

Canada American Samoa Anguilla Antigua & Barbuda Bahamas & Barbados Bermuda British Virgin Islands Cayman Islands Dominica Dominican Republic Grenada Guam Jamaica Montserrat Northern Mariana Islands Puerto Rico Saint Kitts & Nevis Saint Lucia Saint Vincent & Grenadines Sint Maarten Trinidad and Tobago

Turks & Caicos Islands United States Virgin Islands

#### --verbose <1-9> | -v <1-9>

Verbose mode. Display information. Set a higher number for more information.

#### --version | -V

Display version and exit.

## ARGUMENTS

phonenumber

The phonenumber to lookup (required).

country The country where the server is located (optional). Default Country: US

#### **SEE ALSO**

ncidd.8, ncid.1

update-cidcall

## SYNOPSIS

#### update-cidcall [-h] [-n <0123>] CIDCALL\_LOG COUNTRY\_CODE

#### DESCRIPTION

**update-cidcall** Adds the new name and data fields from *ncidnumberinfo* to the lines from the *cidcall.log* file. The output is sent to STDOUT.

#### FNMBR

the result of formatting NMBR

**NTYPE** caller device type (fixed, mobile, pager, etc)

- CTRY the 2-letter country code of the caller
- LOCA the location (city/region) of the calling number
- **CARI** the carrier of the calling number

## NOTE:

The new fields data may be out of date because of number portability.

## **OPTIONS**

-h Display a help message.

-n <0123> NANP (North American Number Plan) format options:

- **0** phone number not formatted: 1234567890
- 1 Google standard format: (123) 456-7890
- 2 Hyphen format: 123-456-7890 (default)
- **3** Dot format: 123.456.7890

## ARGUMENTS

CIDCALL\_LOG

the ncidd call log

#### COUNTRY\_CODE

the 2-letter abbreviation of the country where the server is located

## REQUIREMENTS

#### ncidnumberinfo

#### EXAMPLE

update-cidcall -n1 /var/log/cidcall.log US > /tmp/cidcall.log sudo cp /tmp/cidcall.log /var/log/cidcall.log

## SEE ALSO

ncidd.8, ncid.1, ncidnumberinfo.1

wct - Whozz Calling Ethernet Link Device interactive tool

## SYNOPSIS

wct	[debug	-D]
	[help	-h]
	[logfile-append	-l <filename>]</filename>
	[logfile-overwrite	-L <filename>]</filename>
	[configfile	-C <filename>]</filename>
	[man	—m]
	[set-wc]	
	[pidfile	-p <filename>]</filename>
	[discover	discovery   -d
	[discover-loop	discovery-loop <secs>]</secs>
	[verbose	-v <1-9>]
	[version	-V]
	[wchost	-w <address1>[,address2][,]</address1>

## DESCRIPTION

This script allows you to interact with a Whozz Calling device in order to view or change its configuration. This script is generic as configuration settings vary depending on the Whozz Calling model and firmware version.

Enter the commands one per line, or simply hit <ENTER> alone to see if there are pending responses.

DO NOT type the '^Id' prefix as it will be included automatically.

## **OPTIONS**

-w <address1[,address2][,...]>, --wchost <address1[,address2],[,...]>

Specifies the Whozz Calling Ethernet Link Device or devices. Multiple addresses for devices are comma separated.

Input must be <address> or <address1,address2,etc>.

Default: 192.168.0.90

This option is ignored if --discover or --discover-loop is in effect.

–D, ––debug

Debug mode, displays all messages that go into the log file.

-h, --help

Prints the help message and exits.

–m, ––man

Prints the manual page and exits.

-C, --configfile <filename>

Specifies the configuration file to use. The program will still run if a configuration file is not found.

If --discover or --discover-loop is in effect, the configuration file will still be processed but any "wcaddr" addresses will be ignored.

Default: /etc/ncid/wc2ncid.conf

--set-wc

Sets the IP address, beginning line number, number of telephone lines and sending port for each Whozz Calling Ethernet Link Device.

It sets the IP address for the WC device from the address for "wcaddr" in the configuration file or --wchost on the command line.

It automatically sets the beginning line number for the WC device which is used as a line label prefixed with "WC". Each device gets a beginning line number that is the ending line number plus one from the
preceeding device, for example; device 1 (WC01 WC02) device 2 (WC03 WC04 WC05 WC06).

NOTE: All devices are automatically configured to send call information on port 3520.

This option is ignored if --discover or --discover-loop is in effect.

- -l, --logfile-append <filename>
- -L, --logfile-overwrite <filename>

Specifies the logfile name to write. The program will still run if it does not have permission to write to it.

If both options are present, --logfile-append takes precedence.

Default: Append to wct.log in your current directory.

-p, --pidfile <filename>

Specifies the pidfile name to write. The program will still run if it does not have permission to write a pidfile. The pid filename that should be used is /var/run/wc2ncid.pid.

Default: no pidfile

-d, --discover, --discovery =item --discover-loop <secs>, --discovery-loop <secs>

Force discovery of all powered-on Whozz Calling Ethernet Link Devices. IP addresses in the configuration file, or on the command line, will be ignored.

Using --discover-loop causes continuous looping with a new discovery ("^IdX") being sent every <secs> seconds.

Normal invocation of this script functions the same as wc2ncid, including the initialization of each device's configuration "toggles." Use the --discover or --discover-loop options if you want to bypass this initialization.

-v, --verbose <1-9>

Output information, used for the logfile and the debug option. Set the level to a higher number for more information. Levels range from 1 to 9, but not all levels are used.

Default: verbose = 1

-V, --version

Displays the version.

### **EXAMPLES**

Start wct and look for all powered-on devices:

wct –d

Start wct, set IP address to 192.168.1.90 from command line, set the beginning line number automatically and set the sending Ethernet port to 3520 (the default):

wct --set-wc --wchost 192.168.1.90

#### **INTERACTIVE COMMAND MODE**

#### d2h

Decimal-to-hex conversion.

User will be asked for the decimal number to be converted to hex.

An IP address may also be typed (e.g., 192.168.1.90) to show the proper hex digits for the 'D' and 'I' commands.

help

Displays this interactive command mode help. Press letter 'q' to return to the command prompt at any time.

select

When multiple Whozz Calling Ethernet Link Devices are being used, allows selecting which one to interact with.

A special "ALL DEVICES" choice is also available, meaning all typed commands will be broadcast to

all devices. For example, selecting "ALL DEVICES" and then typing the Z command will cause all powered on devices to be reset to their factory defaults. Use "ALL DEVICES" with care because you could set all devices to have the same IP address, same MAC address, etc.

1-9

Entering a single digit changes the verbosity level on-the-fly.

Not all of the commands below are supported by all WC devices.

#### Single character commands

- N Set destination IP and MAC addresses to THIS computer.
- X Show unit#, serial#, network settings. This command can be used to discover all powered–on WC devices. It is the same as runnning wct with the ––discover command line option.
- Z Reset unit# to '123' and network settings to factory defaults; does NOT change: toggles, block/pass numbers in memory, date/time or the device's starting line#. See also "Other ways to reset a device" on the last page of this manual.

Settings changed by this command will not be reflected under the 'select' menu until the next time you do an 'X' to discover all available devices.

#### Two character commands

- -@ Causes a device to respond with "#" sign. Can be used for establishing device communication.
- -J Show contents of block/pass numbers stored in memory. Be sure to first set the verbose level to 4 or greater to see the actual numbers.
- -R Perform power-on reset and sets all toggles to uppercase. Leaves network configuration and block/pass memory and the device's starting line# unchanged. See also "Other ways to reset a device" on the last page of this manual.
- -t Where 't' is any single toggle, case sensitive (e.g., -E, -b).

Uppercase usually means the feature/setting is OFF, lowercase means it is ON.

E, e Command echo С, с Leading '\$' and dashes in numbers (wc2ncid and wct always strip both) Comprehensive (X) or limited (x) data format Х, х U, u Use phone numbers in internal block/pass memory D, d Detail information (rings, hook on/off/flash) A, a Data sent at start AND end of a call S, s See below 0, 0 Only inbound (O) calls reported, or inbound and outbound (o) B, b Suppress first ring (B) or always pass through (b) See below K, k Inbound DTMF monitoring T, t The 'U' and 'A' toggles each have a companion toggle as described below.

If 'U' is set, blocking/passing is turned OFF and toggles 'K' and 'k' are ignored.

If 'u' is set, blocking/passing is turned ON. The toggle 'K' will pass all calls by default (i.e., only the phone numbers in the internal memory will be blocked) and 'k' will block all calls by default (i.e., only the phone numbers in the internal memory will be passed through).

If 'A' is set, data is sent at the start AND end of a call and toggles 'S' and 's' are ignored.

If 'a' is set, data is sent only at start(S) or end(s) of a call.

-V Show processor version, all toggles, line# of channel 1, date, time.

-v Show internal jumper settings.

#### Multiple character commands requiring HEX digits.

Numbers in parentheses () indicate required number of hex digits.

Commands I, T and U are typically the only ones that will be used.

Hex digits A – F may be entered in lowercase or uppercase.

#### Chhhhhhhhhhhh

Set destination MAC address (12) of the computer to receive WC data (use all 'F's for entire LAN).

#### Dhhhhhhh

Set destination IP address (8) of the computer to receive WC data (use all 'F's for entire LAN).

#### Ihhhhhhh

Set device IP address (8).

Changing the IP address will not be reflected under the 'select' menu until the next time you do an 'X' to discover all available devices.

#### Mhhhhhhhhhh

Set device MAC address (12).

Changing the MAC address will not be reflected under the 'select' menu until the next time you do an 'X' to discover all available devices.

Phhhh Set destination port number (4 hex digits) of the computer to receive WC data. This is normally 0DC0, or 3520 in decimal.

It is very rare that this command would be used. You most likely would want to use 'Thhhh' instead.

Thhhh Set device port number (4 hex digits). This is normally 0DC0, or 3520 in decimal.

Changing the port number will not be reflected under the 'select' menu until the next time you do an 'X' to discover all available devices.

#### Uhhhhhhhhhhh

Set unit number (12).

Changing the unit number will not be reflected under the 'select' menu until the next time you do an 'X' to discover all available devices.

Note that wc2ncid will change and use the unit number to track the number of telephone lines (2, 4, or 8) that can be connected to the device. This is used when establishing the starting line# of channel#1, i.e., the "L=xx" parameter seen when executing the '-V' command.

#### Multiple character commands requiring DECIMAL digits.

Normally these require a terminating carriage return character, but the wct script takes care of this for you by sending a terminating carriage return after all commands.

#### -Nnnnnnnnnn

Add a 7 to 12 digit phone number to block/pass memory, maximum of 40 phone numbers.

The WC device will not check to see if the number you're adding is already stored in memory. It

lets you add duplicates.

If the memory becomes full, additional numbers will be silently ignored.

- -N66 Add Out-of-area callers to block/pass memory. '-J' command will list as the letter 'O' ("oh") and not '66'. This counts against the maximum of 40 phone numbers.
- -N77 Add Private callers to block/pass memory. '–J' command will list as the letter 'P' and not '77'. This counts against the maximum of 40 phone numbers.
- -N0000077nn

Special undocumented command to set line# of channel#1 instead of using the 'Line No. Select' button on back of the device. And unlike the 'Line No. Select' button, you're not restricted to increments of four. 'nn' is base 16 but accepts digits only (no letters 'A' to 'F'). For example, '-N0000007710' sets line# to '16' not '10'.

The echo toggle ('E') must be OFF for this setting to be saved in the device's memory.

You should wait at least 9 seconds after sending this command before sending the next one. Otherwise, the next command sent may be ignored.

Unlike the other uses of '-N', this special command does not affect the internal block/pass memory.

- -Wnn If toggle 'u' is set, block or pass the real-time inbound call on logical line 'nn'. Note that this is NOT the physical channel# that a phone line is hooked into.
- -Zmmddhhmm

Manually set date and time (24 hour format). Normally the date and time are set automatically by the first incoming ring.

#### Other ways to reset a device

The download section at CallerID.com has a Windows program called "EL Config". To use wct to emulate the EL Config reset options, do the following commands:

Config->Reset Unit Defaults

-N0000007701 -R

The above sets the line# of channel#1 ('N') to be 1, followed by a power-on reset ('R') that sets all toggles to uppercase. It does not change the network settings nor the block/pass memory.

### Config->Reset Ethernet Defaults

DFFFFFFF U000000000001 IC0A8005A CFFFFFFFFFFFF T0DC0

The above will set the destination IP address ('D') to be the entire LAN, the unit number ('U') to 1, the device's IP address ('I') to 192.168.0.90, the destination MAC address ('C') to be the entire LAN and the device's port# ('T') to 3520. It does not change the device toggles, nor the block/pass memory, nor the device's starting line#.

# REQUIREMENTS

perl 5.6 or higher, perl(Config::Simple), perl(Data::HexDump)

### FILES

/etc/ncid/wc2ncid.conf

## **SEE ALSO**

ncidd.8, wc2ncid.8, wc2ncid.conf.5

**ncid-setup** - execute setup scripts

# SYNOPSIS

ncid-setup [-h] [-V] [name [option] [option] [...]]

# DESCRIPTION

The **ncid-setup** script uses *name* and any *name options* to call a */usr/share/ncid/setup/ncid-<name>-setup* script. It is a convenience script to launch other setup scripts without having to know its path and without having to put a lot of one-time scripts in /usr/bin.

If no argument is given, **ncid-setup** will list all setup scripts and support files.

If the setup script requires other files to complete the setup, they can be placed in the same directory as the setup script.

The RPM or DEB server package (required) contains the ncid-email2ncid-setup script. The RPM or DEB ncid-mysql package (optional) contains the ncid-mysql-setup script.

The ncid-setup script changes to the setup directory before launching the setup script.

# **OPTIONS**

-h

- Show help
- -V Display version

# **FILES**

/usr/bin/ncid-setup /usr/share/ncid/setup/ncid-<name>-setup

# **SEE ALSO**

ncid-email2ncid-setup.1, ncid-mysql-setup.8

ncid-mysql-setup

# SYNOPSIS

ncid-setup mysql <authentication>

# DESCRIPTION

The **ncid-mysql-setup** script initializes the MySQL or MariaDB database, table and user that is required for the **ncid-mysql** output module. All existing data will be erased.

The ncid-mysql-setup script uses the ncid-mysql.conf file for the database configuration.

You do not execute ncid-mysql-setup directly. Instead, you launch it as follows:

ncid-setup mysql <authentication>

## ARGUMENTS

<authentication>

Represents a string of options passed directly to the **mysql** command line client (it is called **mysql** for both MySQL and MariaDB).

It must specify a user and password (if needed) that has MySQL or MariaDB administrative privileges.

This is usually a MySQL or MariaDB user called 'root'. It is not the same as the 'root' login for this machine.

Typically you would type:

ncid-setup mysql -u root

or:

ncid-setup mysql -u root -p<password>

or:

ncid-setup mysql -u root --password=<password>

If a password is required for the administrative login, you must specify it on the command line.

# REQUIREMENTS

Network access to a MySQL or MariaDB database server.

The MySQL or MariaDB command line client 'mysql'.

Configured ncid-mysql.conf file.

# FILES

/etc/ncid/conf.d/ncid-mysql.conf /usr/share/ncid/setup/ncid-mysql-setup /usr/bin/ncid-setup

## SEE ALSO

ncid-mysql.1, ncid-setup.1, ncidd.8, ncid\_modules.7, ncid.1

ncid-email2ncid-setup

# SYNOPSIS

ncid-setup ncid-email2ncid-setup

# DESCRIPTION

The ncid-email2ncid-setup script is called by ncid-setup. It creates a *\$HOME/.procmailrc* or appends the email2ncid recipes needed to pipe a *email* or *email subject line* to a email2ncid gateway.

The setup script creates a *\$HOME/.procmailrc* file if it does not exist, or appends the *email2ncid* recipes to a *\$HOME/.procmailrc* if it exists.

If the setup script detects a *email2ncid* recipe in \$HOME/.procmailrc, it will not take any action.

The recipe for sending a *email subject line* to the **email2ncid** gateway requires the user to edit it so detect the sender's email address. The recipe can be duplicated and edited for more than one email address.

# REQUIREMENTS

A dynamic DNS service A Mail Transport Agent (MTA) Forward port 25 TCP/UDP to the computer running the MTA procmail

See email2ncid setup in the Gateways section of the NCID User Manual.

## FILES

/usr/bin/ncid-setup /usr/bin/email2ncid /usr/share/ncid/setup/ncid-email2ncid-setup

# SEE ALSO

ncid-setup.1, procmail.1

ncidrotate - keep lines in cidcall.log after it is rotated

# SYNOPSIS

ncidrotate {prerotate|postrotate}

# DESCRIPTION

The NCID log rotation module is normally found in /usr/share/ncid/sys directory.

**Ncidrotate** is called by */etc/logrotate.d/ncid* and will keep a number of lines in cidcall.log after rotation. The default is 0 lines kept. The configuration file for logrotate is */etc/ncid/ncidrotate.conf* 

## REQUIREMENTS

logrotate - rotates, compresses and mails system logs

## FILES

/usr/share/ncid/sys/ncidrotate /etc/ncid/ncidrotate.conf /etc/logrotate.d/ncid

## SEE ALSO

ncidrotate.conf.5, rotatebysize.conf.5, ncidd.8

ncidrotate.conf - ncidrotate configuration file

### DESCRIPTION

The *ncidrotate.conf* file contains the configuration information for *ncidrotate*, used to rotate the *cidcall.log* file.

The *ncidrotate.conf* file understands 3 types of lines:

#### blank line

ignored

comment line, beginning with '#' ignored

## Variable=Argument

There is only one variable to change: Lines2keep

## **Defaults:**

RotateOff=0

The other variables should not be changed. See neidrotate.conf for a complete list of variables to set and what the default values are.

## **EXAMPLES**

Keep 10 lines in cidcall.log after rotation: Lines2keep=10

Do not rotate (allows the cidcall.log file to continue growing): RotateOff=1

## REQUIREMENTS

logrotate - rotates, compresses and mails system logs

### **FILES**

/var/log/cidcall.log

#### **SEE ALSO**

ncidrotate.1, rotatebysize.conf.5

rotatebysize.conf - rotate configuration file

### DESCRIPTION

The *rotatebysize.conf* file has *logrotate* directives and is included in the ncid logrotate file. The *rotatebyzise.conf*, file is used to determine minimum size needed to rotate the *cidcall.log* file.

The *rotatebyzise.conf* file understands 3 types of lines:

#### blank line

ignored

comment line, beginning with '#' ignored

#### directive [argument]

There are two directives but you can add others.

#### **Defaults:**

minsize 1 #minsize 110000 #compress

If you want the call log to rotate each month, keep the defaults.

If you want the call log to grow large without rotation, add a # to the biginning of the **minsize 1** line and remove the # from the **#minsize 110000** line.

If you want the file to grow bigger than 110000, change the number, but **minsize** must be less than 100000000 (LOGMAXIMUM).

If you want to compress the rotated file, remove the **#** from the **#compress** line

### **EXAMPLES**

Rotate the call file monthly: minsize 1 #minsize 110000

Do not rotate the call file until it is at least 110000 bytes #minsize 1

minsize 110000

# REQUIREMENTS

logrotate - rotates, compresses and mails system logs

#### FILES

/var/log/cidcall.log

### SEE ALSO

logrotate.8, ncidrotate.1, ncidrotate.conf.5

LCDncid - LCD Display NCID Client

# SYNOPSIS

```
lcdncid [--configfile
                      -C <filename>]
       [--debug
                      -D]
       [--delay
                    -d <1-3600 seconds>]
                     | -h]
       [--help
       [--lcdhost | -l <[host][:port]>]
                    -L <0 1>]
       [--log
              | -m]
       [--man
       [--multi-screen | -M <0 | 1>]
       [--ncidhost -n <[host][:port]>]
                    -p <filename>]
       [--pidfile
       [--priority
                    -P <foreground|alert>]
                     | -r <seconds>]
       [--retry
       [--verbose
                     -v <1-9>]
       [--version
                     -V]
       [--timeout
                     | -t <1-300 seconds>]
```

## DESCRIPTION

LCDncid is a NCID (Network Caller ID) client for LCD displays. It uses LCDproc to display the NCID information on the LCD display. NCID information is either Caller ID from a telephone call or a message.

LCDproc uses the LCD information information provided by the LCDproc server to automatically configure itself for the LCD display.

LCDncid supports LCD displays with at least 12 columns and with at least one row (12x1). It works best with a 20x4 LCD. If the LCD display has more than 4 rows, only the top 4 rows are used.

If either the LCDproc server or the NCID server connection goes away, or if either one is not available on startup, LCDncid will try to reestablish a connection unless the delay option is set to 0. It will keep trying, until the program is terminated, or it connects with the server.

## **LCDd Priority Levels**

LCDd will only show screens with the highest priority at that moment. If there are three info screens and one foreground screen, only the foreground screen will be visible. Only background, info and foreground screens will rotate. The alert screen will never rotate.

LCDd priority levels

```
input: The client is doing interactive input.
alert: The screen has an important message for the user.
foreground: an active client
info: Normal info screen, default priority.
background: The screen is only visible if no "info" screens exist.
hidden: The screen will never be visible.
```

## **OPTIONS**

-C, --configfile <filename>

Specifies the configuration file to use. The program will still run if a configuration file is not found.

Default: /etc/ncid/lcdncid.conf

-D, --debug

Set debug mode to display information on screen.

-d, --delay <seconds>

Set the server reconnect delay time between 0 and 3600 seconds. If delay = 0, abort instead of trying to reconnect to a server.

Default: 0

-h, --help

Displays the help message and exits.

-l, --lcdhost <[host][:port]>

Specifies the LCDd server. Port may be specified by suffixing the hostname with :<port>.

Input must be <host> or <host:port>, or <:port>

Default: localhost:13666

```
-L, --log <0|1>
```

Turn on logging to /var/log/lcdncid.log.

Default: 0

```
-m, --man
```

Displays the manual page and exits.

-M, --multi-screen <0|1>

Turns multiple screens on or off for a 1-line LCD and a 2-line LCD.

A 1-line LCD gets 2 additional display screens and a 2-line LCD gets one additional display screen when multiple screens are turned on.

Default: 0

```
-n, --ncidhost <[host][:port]>
```

Specifies the NCID server. Port may be specified by suffixing the hostname with :<port>.

Input must be <host> or <host:port>, or <:port>

Default: localhost:3333

```
-p, --pidfile <filename>
```

Specifies the pidfile name to write. The program will still run if it does not have permission to write a pidfile. The pid filename that should be used is /var/run/lcdncid.pid.

Default: no pidfile

-P, --priority <foreground|alert>

Set the display priority.

The display priority for is used for updating the LCDd screen when a call or message arrives. The update priority can be set to "alert", if needed, when LCDd has other clients that use "alert".

Update priority levels: foreground, alert

The priority is reduced to "info" after the screen update. This cannot be changed.

LCDd priority levels used

alert: The screen has an important message for the user. foreground: an active client info: Normal info screen, default priority.

Default: foreground

-t, --timeout <seconds>

Set the display time between 1 and 300 seconds.

Default: 10

-v, --verbose <level>

Set the verbose level between 1 and 9. Set the level to a higher number for more information. Only verbose levels 1–4 are used.

Verbose Levels

- Show start, program name, options Show server connect, disconnect and retry messages show a termination by signal show a errorExit
   Include LCDproc lines sent and received
   Include NCID lines received
- 4: Include poll() wait and poll() event

-V, --version

Displays the version number

## **EXAMPLES**

Enable logging to /var/log/lcdncid.log lcdncid --log 1

Enable retry mode and retry every 30 seconds when a server disconnects lcdncid --retry 30

Display Caller ID for 5 seconds. lcdncid --timeout 5

Connect to NCID at localhost, port 3000. lcdncid --ncidhost :3000

Connect to NCID at ncid.target.home, port 3000. lcdncid ---ncidhost ncid.target.home:3000

## REQUIREMENTS

perl 5.6 or higher and perl(Config::Simple)

NCID (only server required): http://ncid.sourceforge.net/ncid/ncid.html

LCDproc: http://lcdproc.org/

# FILES

/etc/ncid/lcdncid.conf

/var/log/lcdncid.log

#### **SEE ALSO**

lcdncid.conf.5, ncidd.8, ncidd.conf.5, ncidd.alias.5, LCDd.8, lcdproc.1

lcdncid.conf - lcdncid configuration file

### DESCRIPTION

The *lcdncid.conf* file contains the configuration information for *lcdncid*.

The *lcdncid.conf* file understands 3 types of lines:

#### blank line

ignored

comment line, beginning with '#' ignored

#### Variable = Argument

Review lcdncid.conf for a complete list of variables to set and what the default values are.

#### **EXAMPLES**

Set the LCD call display time to 10 seconds.

timeout = 10

Enable retry mode and retry every 30 seconds when a server disconnects: delay = 30

delay = 50

Set the NCID server IP address: ncidhost = 192.168.1.20

Set the LCDproc server IP address: lcdhost = 192.168.1.20

Set for leading 1 display in "US" format mode: NoOne = 0

Set country code to not format display of telephone numbers: Country = "NONE"

Enable multiple screens for a 1 or 2 line display: multiScreen = 1

#### **SEE ALSO**

lcdncid.1, ncidd.8, ncidd.alias.5, ncidd.conf.5