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This document has been assembled as a service to users of ZyNOS and other interested parties. No responsibility is assumed for users who use this information to corrupt or damage their equipment. If you are not sure what you are doing then DON'T do it! You have been warned.

Reader Note: It appears that most commands and subcommands can be abbreviated to a minimal unique level. If anyone has the full name of commands and the minimum abbreviation acceptable I would like to feature this information in the command tables.

Reader Note: If anyone finds any errors or omissions in this document please submit corrections. Also, if you know or can expand on any of the instructions, commands, definitions, usage or version number when of any commands were added, removed or changed then please submit them. It is hoped that this document will grow to become a single point of reference for ZyNOS Command Interface usage.

Please submit error corrections or updates to our ZyNOS CI and Bootbase Manual Forum.

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http://wave.prohosting.com/lameto/support/command...
CI (Command Interface) Syntax

CI has the following command syntax:

```
command subcommand [<param>]
command <iface | device> subcommand [<param>]
command ? | help
command subcommand ? | help
```

This document has been collated from a number of sources. Some sources were for earlier versions of ZyNOS and some predate ZyNOS as it now exists. Some commands may only be available on specific types of device. All known commands will be listed here for completeness but may no longer exist on any devices. Some commands may never have been implemented.

Parameters shown in italics, e.g. `<parameter>`, should be replaced by the appropriate data. Parameters that are shown as a non-italicised list, e.g. `<one|two|three>`, indicate that one of the values listed should be used. Parameters shown in square brackets, e.g. `[<value>]`, are optional and may be omitted.

Some of the more common parameters include:

- `<chan>`: Ethernet channel name, either `enet0` or `enet1`
- `<iface>`: Interface, either `enif0` or `wanif0`
- `<switch>`: Switch setting, either `on` or `off`
- `<ip-addr>`: IP address of format `xxx.xxx.xxx.xxx`
- `<bits>`: Number that indicates the number of bits of the subnet mask
- `<gw>`: Gateway IP address of format `xxx.xxx.xxx.xxx`

http://wave.prohosting.com/lameto/support/command…
WARNING: Many commands use the absence of a parameter to display the current value of the command while a few set the value to an indeterminate value!

NOTE: Commands from previous versions of the firmware are still listed but are marked as DEFUNCT if they are no longer available. Newer commands are marked with the version number of the version of ZyNOS when they were created or modified.

**CI (Command Interface) - Top Level Commands**

- ? List major commands (Not all commands are listed!)
- bridge List major bridge subcommands (Not all subcommands, if any, are listed!)
- device List major device subcommands (Not all subcommands, if any, are listed!)
- dialer List major dialer subcommands (Not all subcommands, if any, are listed!)
- ether List major ether subcommands (Not all subcommands, if any, are listed!)
- exit Exit the Command Interface
- hdap List major hdap subcommands (Not all subcommands, if any, are listed!)
- ip List major ip subcommands (Not all subcommands, if any, are listed!)
- ipx List major ipx subcommands (Not all subcommands, if any, are listed!)
- isdn List major isdn subcommands (Not all subcommands, if any, are listed!)
- l2tp List major l2tp subcommands (Not all subcommands, if any, are listed!)
- lan List major lan subcommands (Not all subcommands, if any, are listed!)
- ppp List major ppp subcommands (Not all subcommands, if any, are listed!)
- radius List major radius subcommands (Not all subcommands, if any, are listed!)
- snmp List major snmp subcommands (Not all subcommands, if any, are listed!)
- sys List major sys subcommands (Not all subcommands, if any, are listed!)
- wan List major wan subcommands (Not all subcommands, if any, are listed!)

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**BRIDGE - Bridge Routing Related Subcommands**

- bri blt disp Display BLT counters
  - monitor [<switch>] Display / Set traffic monitor switch (Default is OFF)
  - reset Reset BLT counters

http://wave.prohosting.com/lameto/support/command…
ZyNOS CI and BootBase Commands

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>time</td>
<td>Display / Set BLT re-init interval timer (in seconds)</td>
</tr>
<tr>
<td>traffic</td>
<td>Display local LAN traffic table</td>
</tr>
<tr>
<td>brt</td>
<td>Display bridge route table</td>
</tr>
<tr>
<td>reset</td>
<td>Reset bridge route table</td>
</tr>
<tr>
<td>cnt</td>
<td>Clear bridge routing statistics table</td>
</tr>
<tr>
<td>fcs</td>
<td>Set bridge FCS control flag</td>
</tr>
<tr>
<td>mode</td>
<td>Display / Set LAN promiscuous mode switch</td>
</tr>
<tr>
<td>stat</td>
<td>Clear bridge packet statistics table</td>
</tr>
</tbody>
</table>

DEVICE - Device Management Related Subcommands

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>device</td>
<td>Display channel information</td>
</tr>
<tr>
<td>chan</td>
<td>Display channel information</td>
</tr>
<tr>
<td>drop</td>
<td>Drop a channel connection</td>
</tr>
<tr>
<td>name</td>
<td>Display available ethernet channel names</td>
</tr>
<tr>
<td>dial</td>
<td>Dial to a remote node</td>
</tr>
<tr>
<td>node</td>
<td>Node: 1 - 12</td>
</tr>
</tbody>
</table>

DIALER - ISDN Dialer Related Subcommands

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>dialer</td>
<td>Clear dialer statistic counter</td>
</tr>
<tr>
<td>cnt</td>
<td>Display dialer statistic counter</td>
</tr>
<tr>
<td>status</td>
<td>Display ISDN channel status</td>
</tr>
<tr>
<td>timeout</td>
<td>Set callback timeout</td>
</tr>
<tr>
<td>callback</td>
<td>Callback timeout</td>
</tr>
<tr>
<td>digital</td>
<td>Set callback timeout</td>
</tr>
<tr>
<td>disp</td>
<td>Display digital and callback timeout</td>
</tr>
</tbody>
</table>
### ETHER - Ethernet / LAN Debug Subcommands

**ether config**
Display ethernet driver configuration information

**debug disp** `<chan>`
Display ethernet debug information

**level** `<chan> <level>`
Set the ethernet debug log level
  - level = 0: Disable
  - level = 1: Enable (Default)

(* DEFUNCT *)

**driver cnt disp** `<chan>`
Display ethernet driver counters

**clear** `<chan>`
Clear ethernet driver counters

**mac** `<chan> <ether-addr>`
Set LAN MAC address

**reg** `<chan>`
Display ethernet hardware related registers

**rxmod** `<chan> <mode>`
Set ethernet receive mode
  - mode = 1: Turn off receiving
  - mode = 2: Receive only packets of this interface
  - mode = 3: Mode 2 + broadcast
  - mode = 5: Mode 2 + multicast
  - mode = 6: All packets

**status** `<chan>`
Display status of the ethernet driver

**mac**
Set LAN MAC address (Only available via RS232 serial interface)

**pkttest**
Display ethernet software version

**arp** `<ip-addr>`

**disp event** `<chan> <switch>`

**packet** `<1|2|3>`

**sap**

### HDAP - HDAP Related Subcommands

**hdap debug** `[<switch>]`
Display / Set HDAP debug mode switch

**reset**
Reset HDAP flag

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**IP - TCP/IP Protocol Subcommands**

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
<th>Flags (Since ZyNOS V3.25 (M.01))</th>
</tr>
</thead>
<tbody>
<tr>
<td>ip address [ip-addr]</td>
<td>Display / Set host IP address</td>
<td></td>
</tr>
<tr>
<td>adj iface [value]</td>
<td>Display / Set TCP MSS (Maximum Segment Size) on an interface</td>
<td>(Since ZyNOS V3.25 (M.01))</td>
</tr>
<tr>
<td>adjmss [value]</td>
<td>Display / Set TCP MSS (Maximum Segment Size)</td>
<td></td>
</tr>
<tr>
<td>alias iface</td>
<td>Create a new alias for interface (Default existing aliases are enif0:0 and enif0:1)</td>
<td></td>
</tr>
<tr>
<td>aliasdis flag</td>
<td>Enable / Disable routing between aliased interfaces</td>
<td></td>
</tr>
<tr>
<td>antip flag</td>
<td>Display / Set IP antiprobe status</td>
<td></td>
</tr>
<tr>
<td>arp add hostid ether ether-addr</td>
<td>Add ARP entry to cache</td>
<td></td>
</tr>
<tr>
<td>arp drop hostid ether</td>
<td>Drop ARP entry from cache</td>
<td></td>
</tr>
<tr>
<td>arp flush hostid ether</td>
<td>Flush ARP cache</td>
<td></td>
</tr>
<tr>
<td>arp publish</td>
<td>Add proxy ARP</td>
<td></td>
</tr>
<tr>
<td>arp reply [value]</td>
<td>Display / Set ARP reply between LAN and WAN ethernet interface</td>
<td>(Since ZyNOS V3.25 (M.01))</td>
</tr>
<tr>
<td>resolve hostid</td>
<td>Display IP ARP status</td>
<td></td>
</tr>
<tr>
<td>dhcp iface server arpcount num</td>
<td>Set DHCP client's DNS server(s)</td>
<td></td>
</tr>
<tr>
<td>dhcp dnsserver dns1P1 [dns2P2]</td>
<td>(Default is 0.0.0.0 which refers to the values obtained from the WAN interface)</td>
<td></td>
</tr>
<tr>
<td>dhcp gateway gw</td>
<td>Set DHCP client's gateway IP address</td>
<td>(Default is the router's IP address)</td>
</tr>
<tr>
<td>dhcp hostname prefix</td>
<td>Set DHCP client's hostname prefix</td>
<td></td>
</tr>
<tr>
<td>dhcp leasetime period</td>
<td>Set DHCP client's lease time</td>
<td></td>
</tr>
<tr>
<td>dhcp netmask netmask</td>
<td>Set DHCP client's netmask</td>
<td></td>
</tr>
</tbody>
</table>

http://wave.prohosting.com/lameto/support/command...
pool <start> <num>
rebindtime <period>
renewaltime <period>
reset

<iiface> status
<iiface> client release
<iiface> renew

<iface> client release
<iiface> client renew

<iface> Status
Display interface DHCP information

<iface> client release
Release DHCP client IP address

<iface> renew
Renew DHCP client IP address

Dns query status
Display DNS query status

stats disp
Display DNS active settings and statistics

clear
Clear DNS statistics

table
Display DNS proxy table

httpd

icmp check [<cmd|rsp|indication>]
data
 echo [<switch>]
 status
 trace [<switch>]
 discovery <iface> [<switch>]

ifconfig [<iface][<bits>] [<gw>]]

igmp debug [<level>]
forwardall [<switch>]
iiface querier [<switch>]
robustness [<variable>]
status

nat disp
iface <iface>
loopback [<switch>]

http://wave.prohosting.com/lameto/support/command...
set [<switch>]
Set static NAT entry for this port on IP interface

(timeout generic [<timeout>]
Display / Set UDP NAT timeout time (in seconds)
(Default is 180 seconds)
tcp [<timeout>]
Display / Set TCP connection phase timeout time (in seconds)
(Default is 270 seconds)
tcpother [<timeout>]
Display / Set TCP data phase timeout time (in seconds)
(Default is 9000 seconds)

ping <host-id>
Ping remote host by name or IP address

rip accept <gw>
Drop an entry from the RIP information
activate
Activate the RIP listener list
dialin_user [<direction>]
Display / Set dialin user's RIP direction
direction = show: Show the current RIP setting
direction = in: Set inbound RIP direction
direction = out: Set outbound RIP direction
direction = both: Set bidirectional RIP
direction = none: Disable RIP
merge [<switch>]
Display / Set RIP merging switch
mode <iface> [<direction>] [<mode>]
Set RIP direction and mode
direction: in | out
mode: 0 - 3
refuse <gw>
Add an entry to the RIP refuse list
reverse [<switch>]
Display / Set RIP Poisoned Reverse switch
status
Display RIP statistic counters
trace [<flag>]
Display / Set RIP trace
flag = 0: Off
flag = 1: On

route add <ip-addr>[<bits>] <gw> [<metric>]
Add route
addprivate <ip-addr>[<bits>] <gw> [<metric>]
Add private route
drop <ip-addr>[<bits>]
Drop a route
errcnt clear
Clear routing statistic counters
disp
Display routing statistic counters
flush
Flush route table
lookup <ip-addr>[<bits>]
Show host route table
status
Display routing table
status
Display IP statistic counters
sua iface <iface>
disp display single user account statistic
set <ip-addr> <port>
(tcp ceiling [<value>]
Display/Set TCP maximum Round Trip Time (RTT)
floor [<value>]
Display / Set TCP minimum RTT
kick <controlblock>
irtt [<value>]
Display / Set TCP default init RTT
limit [<value>]
Display / Set TCP output window size limit
mss [<size>]
Display / Set TCP input MSS size
reset
rtt <controlblock>
status Display TCP statistic counters, active connections and listening sockets (NetStat)
syndata [<switch>]
Display / Set TCP syndata piggyback switch
trace [<switch>]
Display / Set trace debugging switch
window [<switch>]
Display / Set TCP input window size limit

tftp
stats
Display TFTP statistics
support
Display confirmation of TFTP support
tredir failcount
partner
target
timeout
checktime
active
save
disp
debug

http://wave.prohosting.com/lameto/support/command...
ZyNOS CI and BootBase Commands

udp status
Display UDP statistics and control blocks

xparent break <iface>
Detach this interface by breaking any transparent bridging with other interfaces

join <iface1> [<iface2>]
Display interfaces that are joined in a transparent bridge with interface 1. If specified, join interface 2 in a transparent bridge with interface 1

**IPX - IPX Related Subcommands**

px ifconfig <name> <frm> <net> <age> <hops> <ticks> <seed_route>
Set the network parameters to iface and add IPX route to RIP table

px rip err
Display RIP error counter

dpx req <net> [<mi>]
RIP request

dpx rsp <if-name> <frm> <mi>
RIP response

px route add <dest> <gw> <gw-node> <hop> <ticks> <age> <mi>
Add an IPX route

cpx cnt clear
Clear IPX route error counter

cpx disp
Display IPX route error counter

cpx drop <network> [<mi>]
Drop the remote node route

cpx flush <mi> <status>
Flush the remote node

cpx stat
Display IPX routing table

px sap add <name><type><network><socket>

px cnt
drop <type><network><node><socket>
flush clear
disp
req <net> <m>
IPX SAP request

px rsp <if> <frame> <type>
IPX SAP response

px stat
Display SAP routing table

px cnt clear
disp
req <net> <m>
IPX SAP request

px rtn [<num>]
Display / Set maximum number of IPX routes

px sapn [<num>]
Display / Set maximum number of SAP routes

http://wave.prohosting.com/lameto/support/command...
**ISDN - ISDN Related Subcommands**

- **isdn atring clear [ch-name]** Clear AT command ring buffer history
- **isdn disp [ch-name]** Display AT command ring buffer history
- **callback speedyCLID [on|off]**
- **timeout [value]** Display / Set callback timeout  
  value: 1 - 60
- **config** Display NDIS config block, board, line, channel
- **event clear** Clear ISDN event
- **func disp** Display ISDN event
- **func redir** Enter the modem redirect mode (For P128IMH only)
- **fw cnt clear** Clear ISDN counters
- **fw disp** Display ISDN counters
- **fw ana [on|off|dump]** Turn on/off isdn fw epa trace and collect epa trace
- **init [set|clear]** Set channel in-service
- **is [ch-name]** ISDN loop back test
- **loop <isdn #>**
- **map** Display ISDN map
- **oos [ch-name]** Set channel out-of-service
- **prtl [ch-name] [level]** Print channel information
- **reset**
- **script [ch-name]**
- **set american [switch][dn1][spid1][dn2][spid2]** Save phone number to SPT in American version
- **set european [B-usage][isdn data][dial prefix]** Save phone number to SPT in European version
- **status** Display ISDN link status
- **test dial [ch-name][ph#]**
- **test disp**
- **test drop [ch-name]**
- **test send [ch-name][size][ms][times]**
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static Display packet and Octet receive and transmit
stop
version Display ISDN version

**L2TP - L2TP Related Subcommands**

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>l2tp debug &lt;level&gt;</code></td>
<td>Display L2TP endpoint</td>
</tr>
<tr>
<td><code>l2tp endpoint disp</code></td>
<td>Display/L2TP endpoint</td>
</tr>
</tbody>
</table>
| `l2tp hide [<flag>]` | Display/Set hide switch 
  flag = 0: Off
  flag = 1: On |
| `l2tp realm [<value>]` | Display/Set realm 
  value: 0 - 9 |
| `l2tp rxtimeout [<value>]` | Display/Set receiver timeout 
  value: 200 - 2000 msec |
| `l2tp tunnel [<id>]` | Display/Set tunnel ID 
  id: 1 - 8 |
| `l2tp window [<size>]` | Display/Set window size 
  size: 0 - 23352 |

**LAN - LAN Related Subcommands**

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>lan cnt clear</code></td>
<td>Clear LAN debug counters</td>
</tr>
<tr>
<td><code>lan cnt disp</code></td>
<td>Display LAN debug counters</td>
</tr>
<tr>
<td><code>dbg arp &lt;lpAddr&gt;</code></td>
<td>Send a IP ARP packet (Only used in RAS debug mode)</td>
</tr>
<tr>
<td><code>dbg attach</code></td>
<td>Setup LAN driver (Only used in RAS debug mode)</td>
</tr>
<tr>
<td><code>dbg sap</code></td>
<td>Send a IPX SAP packet (Only used in RAS debug mode)</td>
</tr>
<tr>
<td><code>enet cnt clear</code></td>
<td>Clear ethernet counter</td>
</tr>
<tr>
<td><code>enet cnt disp</code></td>
<td>Display ethernet counter</td>
</tr>
</tbody>
</table>
| `enete cnt <type>` | Set type of interface: 
  type = 0: TPI (10BaseT, compatible Squelch level)
  type = 1: 10Base2 |

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ZyNOS CI and BootBase Commands

type = 2: AUI

type = 3: IPI (Reduced Squelch Level)

mac <macaddr> Set LAN Mac address

muladdr <bitmask> Set bit mask for multicast address

reg Display LAN hardware related registers

rxmod <mode> Set LAN receive mode:

mode = 1: Turn OFF receiving
mode = 2: Receive only packets of this interface
mode = 3: Mode 2 + Broadcast
mode = 5: Mode 2 + Multicast
mode = 6: All packets

PPP - PPP Related Subcommands

ppp bod clear <iface> Clear WAN interface BOD counters

ddebug [<switch>] Display / Set BOD debug status switch

[<switch>] Display / Set BOD switch

reset Reset BOD counters

status <iface> Display WAN interface BOD counters

ccp [<switch>] Display / Set dial-in CCP switch

config ipcp address [<switch>] Display / Set IPCP address option switch

compress [<switch>] Display / Set VJ header compression switch

idcompress [<switch>] Display / Set slot ID compression switch

slots [<value>] Display / Set number of slots

value: 1 - 64

ccp ascend [<switch>] Display / Set ascend Stac on|off

check Display Stac check mode

ddebug [<switch>] Display / Set CCP debug mode switch

history Display Stac history count

pfc [<switch>] Display / Set PFC switch

reset [<mode>] Display / Set ascend Stac reset mode

mode: 1 - 3

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**ZyNOS CI and BootBase Commands**

- **delay [\(<msec>\)]**
  - Display / Set the delay timer, in milliseconds, for sending first PPP packet after call answered

- **fsm trace break**
  - Set finite state machine trace

- **fsm trace clear**
  - Clear finite state machine trace

- **fsm trace disp**
  - Display finite state machine trace

- **fsm trace filter**
  - Set finite state machine trace filter

- **fdata clear**
  - Clear finite state machine trace data

- **fdata disp**
  - Display finite state machine trace data

- **fdata filter**
  - Set finite state machine trace data filter

- **iface <name> <protocol>**
  - Display protocol state

- **ipcp address [\(<switch>\)]**
  - Display / Set IPCP address option switch

- **ipcp close**
  - Close connection on PPP IPCP interface

- **ipcp compress [\(<switch>\)]**
  - Display / Set VJ header compression switch

- **ipcp idcompress [\(<switch>\)]**
  - Display / Set slot ID compression switch

- **ipcp list <iface>**
  - Display interface PPP IPCP table

- **ipcp open**
  - Open connection on PPP IPCP interface

- **ipcp slots [\(<slots>\)]**
  - Display / Set local number of VJ compression slots

- **ipcp timeout [\(<timeout>\)]**
  - Display / Set authentication and link quality setup timeout timer in milliseconds (Timeout interval when waiting for response from remote peer)

- **ipcp try configure [\(<value>\)]**

- **ipcp failure [\(<value>\)]**

- **ipcp terminate [\(<value>\)]**

- **ipcp lcp acfc [\(<switch>\)]**
  - Display / Set address/control field compression switch

- **ipcp lcp baccp [\(<switch>\)]**
  - Display / Set bandwidth allocation control switch

- **ipcp lcp callback [\(<switch>\)]**
  - Display / Set PPP LCP callback switch

- **ipcp lcp mpin [\(<switch>\)]**
  - Display / Set PPP LCP MP for incoming calls switch

- **ipcp pfc [\(<switch>\)]**
  - Display / Set protocol field compression switch

- **ipcp mp default [\(<type>\)]**
  - Display / Set PPP MP default or unknown interface
  
  - **type: rotate | split**

- **ipcp mp rotate [\(<switch>\)]**
  - Display / Set PPP MP rotate switch

- **ipcp mp split [\(<switch>\)]**
  - Display / Set PPP MP split switch

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http://wave.prohosting.com/lameto/support/command...
show <device>

Show channel PPP information
device: PPP device channel, e.g. poe0

**RADIUS - Radius Related Subcommands**

```
radius auth debug [<switch>]

port

secret <password>

server [<name>]

switch [<switch>]
```

Display / Set authentication debug mode switch

Display radius authentication client port number

Set radius authentication secret (password)

Display / Set radius authentication server

Display / Set authentication mode switch

**SNMP - SNMP Related Subcommands**

```
smmp
```

**SYS - System Related Subcommands**

```
sys adjtime

baud <speed>

callhist add <name> <dir> <rate> <uptime>

display

remove <index>

cbuf cnt disp
clear

disp <a|f|u>
```

Adjust the local date and time, try a client connection to the configured time server and accord the UTC answer with the preset timezone offset

Set console speed

speed = 1: 38400 bps (Default if omitted)
speed = 2: 19200 bps
speed = 3: 9600 bps
speed = 4: 57600 bps
speed = 5: 115200 bps

Add the call history

Display the call history

Remove the call history at index

Display cbuf static

Clear cbuf static

Display cbuf

(* DEFUNCT *)

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ZynOS CI and BootBase Commands

a: all
f: free
u: used

clock display Display clock procedure

cmgr data chan Display channel connection manager data
trace clear chan Clear channel connection manager trace
disp chan Display channel connection manager trace
countrycode country-code Display / Set country code
cpu display Display CPU utilization
date year month day Display / Set system date
    year: 4 digit year
    month: number between 1 and 12
    day: number between 1 and 31
ddns debug flag Display / Set Dynamic DNS debug
    flag = 0: Disable
    flag = 1: Enable

display Display Dynamic DNS status
logout iface Publish IP address of interface with offline status onto the configured Dynamic DNS server
restart iface Publish IP address of interface with online status onto the configured Dynamic DNS server
dir Display file directory

(errctl level) Display / Set the error control level

(" DEFUNCT ")

domainname Display system domain name
edit filename Edit a text file
    Edit Commands:
    q: Quit
    x: Save and exit
    i: Insert after this line
    d: Delete this line
    r: Replace this line
    n: Next line
    Press n until you see the line you want to modify, or where you want to insert a new line, etc., then press the key for the appropriate command, e.g.: i followed by the new entry you want to add. When you are done, enter x to save the file and exit or q to quit without saving.

errctl level Display / Set the error control level

(" DEFUNCT ")

http://wave.prohosting.com/lameto/support/command...

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event display Display tag flags information
trace display Display system event information
clear Clear system event information
extraphnum add <set> <phone1> [<phone2> ] Add outcalling phone numbers
               set: 1 - 3
               display Display outcalling phone numbers
node remove <set> set: 1 - 3
reset

feature display Display feature bit settings list
fid display Display function id list
filter clear Clear filter statistic counter
disp Display filter statistic counters
sw [<switch>] Display / Set filter statistic counter switch
hostname [<name>] Display / Set system hostname (Max 32 characters from [A-Z,a-z,0-9])
iface disp Display interface list
isr disp Display interrupt entry (Debugging tool)

log clear Clear error log
disp Display error log
online [<switch>] Display / Set error log online display switch
map Display memory map table

mbuf cnt cl Clear system mbuf count
disp Display system mbuf count
debug [<switch>] Display / Set mbuf system debug switch

(* DEFUNCT *)
ZyNOS CI and BootBase Commands

**disp** <address>  Display mbuf status

**link** link  List system mbuf link

**pool** <id> <type>  List system mbuf pool

**status**  Display system mbuf status

**memory** <address> <len>  Display memory content

(* DEFUNCT *)

**memutil** mceld <mid> [<type>]  Display memory cells by given ID

  type = a: All cells (Default)
  type = f: Free cells
  type = u: Used cells

**mq** <address> <len>  Display memory queues

**msecs**  Display memory sections

**usage**  Display memory allocate and heap status

**memwrite** <null>  Write to memory

(* DEFUNCT *)

**pro** disp  Display all process information

**ps** <tag>  Display process’s status by a given tag

**stack** <tag>  Display process’s stack by a given tag

**queue** disp [<type>] [start [end]]  Display queue by given status and range numbers

  type = a: All queues
  type = f: Free queues
  type = u: Used queues

**ndisp** <num>  Display a queue by a given number

**quit**  Quit CI command mode

**reboot** <code>  Reboot system

  code = 0: Cold boot
  code = 1: Immediately boot
  code = 2: BootModule (BootBase) debug mode

**reslog** disp  Display resources trace

**clear**  Clear resources trace

**m** disp

**load**
01/10/2008

ZyNOS CI and BootBase Commands

nailup
nat
save
syst

roadrunner debug <level>
  Enable / Disable roadrunner service
  level = 0: Disable (Default)
  level = 1: Enable

disp <iface>
  Display roadrunner information
  iface: wanif0 (WAN port)

restart <iface>
  Restart roadrunner service

server access <service> <type>
  Set access type for service
  service: dns | ftp | icmp | telnet | web
  type = 0: Both LAN and WAN access
  type = 1: Disable access to service
  type = 2: LAN access only
  type = 3: WAN access only

disp
load
port <service> <port>
  Set IP port number for service
  service: dns | ftp | icmp | telnet | web

save
secureip <service> <ip-addr>
  Set port number for service
  service: dns | ftp | icmp | telnet | web

socket
dump <root|m|user|slot>
  Dump spt raw data

dump
size

stdio [<timeout>]
  Display / Set terminal timeout value (in minutes)

syslog facility <facility>
  Set syslog local facility number
  facility: 0 - 6

mode [<switch>]
  Display / Set syslog enabled switch

server <ip-addr>
  Set syslog server IP address

type [<bitmap>]
  Display / Set syslog log type bitmap
  bit 0: (Least significant bit)
ZyNOS CI and BootBase Commands

bit 1: 
bit 2: 
bit 3: 
bit 4: PPP log 
bit 5: Filter log 
bit 6: Packet triggered 
bit 7: CDR (Most significant bit)

time [hour] [min] [sec]]] Display / Set system time 
hour: number between 0 and 24 
min: number between 0 and 59 (0 if omitted) 
sec: number between 0 and 59 (0 if omitted)
timer disp [type] Display timer cell 
type = a: A timers 
type = f: F timers 
type = u: U timers 
trcdisp brief Online display packet content briefly 
parse Online parse packet content 
trclog call Display call event 
clear Clear trace 
disp Display trace log 
level [level] Display / Set trace level of trace log 
level: 1 - 10 
online [switch] Display / Set trace log online switch 
switch [switch] Display / Set system trace log switch 
type [bitmap] Display / Set trace type of trace log (64 bits) 
trcpacket channel <chan> [direction] Display / Set packet trace direction for a given channel 
direction: none | incoming | outgoing | bothway 
create <entry> <size> Create packet trace buffer 
destroy Destroy packet trace buffer 
disp Display packet trace 
string [switch] Display / Set string display in packet trace switch 
switch [switch] Display / Set packet trace switch 
udp <sw|addr|port> Send packet trace to other system

http://wave.prohosting.com/lameto/support/command...
### brief Display packet content briefly
### parse \[ \[begin\] <end>\] Display packet content
### version Display RAS code and driver version
### view <filename> View a text file
### wdog switch \[switch\] Display / Set watchdog timer switch
### cnt \[value\] Display / Set watchdog counts
  value: 0 - 34463

### WAN - WAN Related Subcommands

<table>
<thead>
<tr>
<th>Command</th>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>wan</td>
<td>astring &lt;chan&gt;</td>
<td>Show AT command response buffer</td>
</tr>
<tr>
<td>cnt</td>
<td>clear &lt;chan&gt;</td>
<td>Clear status counters</td>
</tr>
<tr>
<td></td>
<td>disp &lt;chan&gt;</td>
<td>Display status counters</td>
</tr>
<tr>
<td>drop</td>
<td>&lt;chan&gt;</td>
<td>Drop connection</td>
</tr>
<tr>
<td>mtype</td>
<td>&lt;chan&gt;</td>
<td>Display internal modem type</td>
</tr>
<tr>
<td>redirect</td>
<td>&lt;chan&gt;</td>
<td>Enter redirect mode</td>
</tr>
</tbody>
</table>

### Default AUTOEXEC.NET File Contents

```plaintext
sys errctl 0
sys trcl level 5
sys trcl type 1180
sys trcp cr 96 128
sys trcl sw on
ip tcp mss 1024
ip tcp limit 2
ip tcp irtt 65000
ip tcp window 4
ip tcp ceiling 6000
ip rip activate
ip rip merge on
ip icmp disc eni0 off
ppp ipcp com off
sys mbuf debug off
```

http://wave.prohosting.com/lameto/support/command...
Default TERMCAP File Contents

```
vt100|dec-vt100|vt100-am|vt100am|dec vt100:
  :do=^J:co#80:li#24:cl=50\E[H]:E[m=2*\ED:\
  :le=^H:bs:am:cm=5[E%i%d;dHind=2/E[C:up=2/E[A:\
  :ce=3/E[K:cd=50\E[J:so=2\E[m=ue=2/E[4m:ue=2/E[m:\n  :md=2/E[lm:mr=2\E[m:mb=2\E[m:me=2\E[m:is=\E[1;24r\E[24;1H:\
  :if=/usr/share/tabset/vt100:\
  :as=\E[0;ae=\E[B:ac=1mmkkjjuuttvvwqqoxnnoossa\r`aaffgg+;+++,hh100yyzz:\
  :rs=\E[?31\E[?41\E[?51\E[?7h\E[?8h:ks=\E[?1h\E=:ke=\E[?1l\E>:
  :ku=\E[OA:kd=\EOB:kr=\EOC:kl=\EOD:kb=^H:
  :ho=\E[H:k1=\EOP:k2=\EOQ:k3=\EOR:k4=\EOS:pt=2*\EM:vt#3:xn:\
  :sc=\E[7:rc=\E[8:cs=\E[8;%d;%d:

# END OF TERMCAP
# ------------------------
```

BootBase Command List

**AT**
Just answer OK

**ATHE**
Print help

**ATBAx**
Change baudrate
  
  x = 1: 38.4 Kbps (38400 bps)
  x = 2: 19.2 Kbps (19200 bps)
  x = 3: 9.6 Kbps (9600 bps)
  x = 4: 57.6 Kbps (57600 bps)
  x = 5: 115.2 Kbps (115200 bps)

**ATENx,y**
Set BootExtension Debug Flag
  
  y = password

**ATSE**
Show the seed of password generator

**ATT[1h.m.s]**
Show current time or change system time
  
  h = hours

http://wave.prohosting.com/lameto/support/command...
<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATDA[y,m,d]</td>
<td>Show current date or change system date</td>
</tr>
<tr>
<td></td>
<td>y = year</td>
</tr>
<tr>
<td></td>
<td>m = month</td>
</tr>
<tr>
<td></td>
<td>d = day</td>
</tr>
<tr>
<td>ATDS</td>
<td>Dump RAS stack</td>
</tr>
<tr>
<td>ATDT</td>
<td>Dump Boot Module Common Area</td>
</tr>
<tr>
<td>ATDUx,y</td>
<td>Dump memory contents from address x for length y</td>
</tr>
<tr>
<td>ATWBx,y</td>
<td>Write address x with 8-bit value y</td>
</tr>
<tr>
<td>ATWWx,y</td>
<td>Write address x with 16-bit value y</td>
</tr>
<tr>
<td>ATWLx,y</td>
<td>Write address x with 32-bit value y</td>
</tr>
<tr>
<td>ATRBx</td>
<td>Display the 8-bit value of address x</td>
</tr>
<tr>
<td>ATRWx</td>
<td>Display the 16-bit value of address x</td>
</tr>
<tr>
<td>ATRLx</td>
<td>Display the 32-bit value of address x</td>
</tr>
<tr>
<td>ATGO[x]</td>
<td>Run program at addr x or boot router</td>
</tr>
<tr>
<td>ATGR</td>
<td>Boot router</td>
</tr>
<tr>
<td>ATGT</td>
<td>Run Hardware Test Program</td>
</tr>
<tr>
<td>AT%Tx</td>
<td>Enable Hardware Test Program at boot up</td>
</tr>
<tr>
<td>ATBTx</td>
<td>Block write enable (x=1: enable, other: disable)</td>
</tr>
<tr>
<td>ATRTw,x,y,[z]</td>
<td>RAM test level w, from address x to y (z iterations)</td>
</tr>
<tr>
<td>ATWEa[b,c,d]</td>
<td>Write MAC addr, Country code, EngDbgFlag, FeatureBit to flash ROM</td>
</tr>
<tr>
<td>ATCUx</td>
<td>Write Country code to flash ROM</td>
</tr>
<tr>
<td>ATCB</td>
<td>Copy from FLASH ROM to working buffer</td>
</tr>
<tr>
<td>ATCL</td>
<td>Clear working buffer</td>
</tr>
<tr>
<td>ATSB</td>
<td>Save working buffer to FLASH ROM</td>
</tr>
<tr>
<td>ATBU</td>
<td>Dump manufacturer related data in working buffer</td>
</tr>
<tr>
<td>ATSH</td>
<td>Dump manufacturer related data in ROM</td>
</tr>
<tr>
<td>ATWMx</td>
<td>Set MAC address in working buffer</td>
</tr>
<tr>
<td>ATCOx</td>
<td>Set country code in working buffer</td>
</tr>
</tbody>
</table>

http://wave.prohosting.com/lameto/support/command...
ATFLx Set EngDebugFlag in working buffer
ATSTx Set ROMRAS address in working buffer
ATSYx Set system type in working buffer
ATVDx Set vendor name in working buffer
ATPNx Set product name in working buffer
ATFEx,y,... Set feature bits in working buffer
ATMP Check & dump memMapTab
ATDOx,y Download from address x for length y to PC via XMODEM
ATT Download router configuration to PC via XMODEM
ATUPx,y Upload to RAM address x for length y from PC via XMODEM
ATUR Upload router firmware to flash ROM
ATLC Upload router configuration file to flash ROM
ATUX(x,y) XMODEM upload from flash block x to y
ATERx,y Erase flash rom from block x to y
ATWFx,y,z Copy data from addr x to flash addr y, length z
ATXSx XMODEM select
    x = 0: CRC mode (Default)
    x = 1: Checksum mode
ATLOa,b,c,d Int/Trap Log Cmd
ATSR System reboot

Revision History

22-Aug-2002 (Ian)
First version (still editing/checking) NOT FOR PUBLIC DISTRIBUTION

If you find any errors or omissions in this document please submit corrections. Also, if you know or can expand on any of the instructions, commands, definitions, usage or version number when of any commands were added, removed or changed then please submit them. It is hoped that this document will grow to become a single point of reference for ZyNOS Command Interface usage.

Please submit error corrections or updates to our ZyNOS CI and Bootbase Manual Forum.

http://wave.prohosting.com/lameto/support/command...