

ctys-wakeup(1)

WoL and IPMI

August 18, 2012

Contents

1	NAME	2
2	SYNTAX	2
3	DESCRIPTION	2
4	OPTIONS	3
5	ARGUMENTS	3
6	EXIT-VALUES	4
7	SEE ALSO	5
8	AUTHOR	5
9	COPYRIGHT	5

1 NAME

ctys-wakeup - WoL and IPMI

2 SYNTAX

ctys-wakeup

```
[-d <level>]
[-h]
[-H <help-options>]
[-i <interface>]
[-n]
[-p <port>]
[-t <TCP/IP address>]
[-V]
[-X]
<mac-address>
```

3 DESCRIPTION

ctys-wakeup ctys-wakeup sends a so called MagicPacket(TM) to a given destination. In case a remote segment is addressed by setting the "-t" option, a UDP message is sent to port "9". The script consists of a few lines of bash code with a call to Netcat. So it could be adapted easily.

```
mac=$1;shift
ip=$1;shift

function buildWOLMagicPacket () {
    local _mac=$1;shift
    declare -a _pdu;

    function macAsc2Hex () {
        for i in ${@};do
            printf "\x$i"
        done
    }

    #frame
    _pdu=(ff ff ff ff ff ff);

    #MAC addr in "little endian"
    addr=(${mac: })
    addrLitteEndian=(${addr[0]} ${addr[1]} \
                     ${addr[2]} ${addr[3]} \
                     ${addr[4]} ${addr[5]});

    #add 16 duplications
    for((i=0;i<16;i++));do
        for m in ${addrLitteEndian[@]};do
            size=${#_pdu[@]}
```

```

        _pdu[${size}]=$m
    done
done

macAsc2Hex ${_pdu[@]}
}

if [ -n "$ip" ];then
    printf "'buildWOLMagicPacket $mac'\n"|nc -u -w 1 $ip 9
else
    buildWOLMagicPacket $mac
fi
.

```

4 OPTIONS

- d** <level> Sets debug.
- h** Print help, refer to "-H" for additional information.
- H** <help-option> The extended help option is based on system interfaces for display of manpages, PDF and HTML documents. This comprises the man pages and installed manuals.

For additional help refer to the documents or type **ctys -H help**.

- i** <broadcast-interface> The ethernet-broadcast interface for local segment. When used "-t" option is not applicable.
- n** No execution, evaluation only.
- p** <port> The port for destination, which is by default "9" for a hard-coded UDP message. It is not really relevant, might be used only for adaptation to firewall rule.
- t** <TCP/IP address> When provided the packet is send to destination. The destination address could be a "directed-broadcast" address, which has to be supported by the router.
E.g. OpenBSD requires "net.init.ip.directed-broadcast=1", and the appropriate pf-rules.
For 1.2.3.4:

```
<wol> {1.2.3.255}
```

```
pass in on \${ifX} from <wolExec> to <wol>
pass out on \${ifY} from <wolExec> to <wol>
```

Alternatively a "rdr" - Redirection could be set. When this option is not provided, a UDP packet will be sent to "255:255:255:255:9".

When used "-i" option is not applicable.

- V** Version.
- X** See ctys, terse for machine output.

5 ARGUMENTS

The MAC address of the targeted NIC, this could be evaluated by call of "ctys-macmap" and/or "ctys-vhost"

6 EXIT-VALUES

0: OK: Result is valid.

1: NOK: Erroneous parameters.

2: NOK: Missing an environment element like files or databases.

7 SEE ALSO

ctys use-cases *ctys-IPMI(7)*, *ctys-WoL(7)*

ctys plugins **PMs** *ctys-PM(7)*

VMs *ctys-KVM(7)*, *ctys-QEMU(7)*, *ctys-VMV(7)*, *ctys-XEN(7)*, *ctys-VBOX(7)*

HOSTS *ctys-CLI(7)*, *ctys-PM(7)*, *ctys-VNC(7)*, *ctys-X11(7)*

ctys executables *ctys-extractARPlst(1)*, *ctys-extractMAClst(1)*, *ctys-genmconf(1)*, *ctys-plugins(1)*, *ctys-vping(1)*, *ctys-vhost(1)*

system executables *dmidecode(8)*, *ether-tool(8)*, *ether-wake(8)*, *nc(1)* <a.k.a. *netcat*>

8 AUTHOR

Maintenance: <acue_sf1@sourceforge.net>
 Homepage: <<http://www.UnifiedSessionsManager.org>>
 Sourceforge.net: <<http://sourceforge.net/projects/ctys>>
 Berlios.de: <<http://ctys.berlios.de>>
 Commercial: <<http://www.i4p.com>>



9 COPYRIGHT

Copyright (C) 2008, 2009, 2010 Ingenieurbuero Arno-Can Uestuensoez

For BASE package following licenses apply,

for software see GPL3 for license conditions,

for documents see GFDL-1.3 with invariant sections for license conditions,

This document is part of the **DOC package**,

- for documents and contents from DOC package see
 'Creative-Common-Licence-3.0 - Attrib: Non-Commercial, Non-Deriv'
 with optional extensions for license conditions.

For additional information refer to enclosed Releasenotes and License files.

