BR200 PSE Support Test Case

Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date | Author | Description |
| 0.1 | 12/8/2011 | Tiezhu Zhu | Initial Version |
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Glossary and Abbreviations

# Introduction

Noise floor is a basic RF specification which related RSSI/RX performance/client connectivity .

# Test Objectives

To keep noise floor in a normal value, we should maintain a noise floor base line for each platform.

# Test Acceptance Criterion from Development

* Approved – MRD

The link to MRD

* Approved – Functional Specifications

The link to function spec：

* Approved – Unit Test Plans

The link to unit test report of dev

# Product Pass Criterion

Meet all objects in marketing requirement or function spec which may include key function objectives, capacity objectives, performance objectives and so on.

# Test Bed/Topo Design

<List topo and topo ID>

# Test Point

## Function Test

### Enable netdump with default native vlan and vlan, check if it can do correct netdump

### Enable netdump with same native vlan and vlan, check if it can do correct netdump

### Enable netdump with different native vlan and vlan, check if it can do correct netdump

### Check if netdump can restore if tftp server break for a while

### Disable netdump, AP will not do netdump when crash

### After netdump, check if netdump’s name base on timestamp. (bug 17330)

### HM side, check if can do netdump under DHCP mode

### HM side , check if AP can do netdump under static mode

## Stress Test

## Performance test

# Test Case

## NetDump Function check

### Enable netdump with default native vlan and vlan, check if it can do correct netdump

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | Netdump\_Check\_01 | | |
| Priority | Accept | Automation Flag | Yes |
| Topology to use | AP------SW-----server | | |
| Description | Enable netdump with default native vlan and vlan, check if it can do correct netdump | | |
| Pre-condition | boot parameters:  Device IP: 10.155.30.6  Netmask: 255.255.255.0  TFTP Server IP: 10.155.30.230  Gateway IP: 10.155.32.254  VLAN ID: 0  Native-VLAN ID: 0  Netboot: Enabled  Boot File: newimg/ap350-HiveOS-033112044048-0449.img  Netdump: enable  Netdump File: 35011120900749.netdump  Region Code: FCC  Country Code: 840 | | |
| Test procedure | 1. Enter bootload and set parameter:   “set\_bootparam”   1. Set vlan ID and native vlan with default and enable netdump 2. Set Netdump file and TFTP server 3. Simulate crash after enter CLI   “\_crash \_kerenel”   1. Check if netdump will dump kernel crash information to pointed server | | |
| Expect result | Netdump will dump kernel crash to pointed server | | |
| Test Result | ///check the log as marked.  AH-81b700#\_crash \_kernel  Kernel panic - not syncing: kills itself.  ====CPU #1 (myself)====begin====  Call Trace:  [ce17fdd0] [c0006ef0] show\_stack+0x50/0x154 (unreliable)  [ce17fe00] [c0304388] panic+0xc4/0x1ac  [ce17fe50] [d521fb94] ah\_hwmon\_ioctl+0x1b8/0x340 [ah\_board0]  [ce17fe70] [d521d0a0] ah\_boarddev\_ioctl+0x78/0xa4 [ah\_board0]  [ce17fe80] [c00b053c] vfs\_ioctl+0x40/0xa4  [ce17fea0] [c00b0e0c] do\_vfs\_ioctl+0x80/0x73c  [ce17ff10] [c00b1508] sys\_ioctl+0x40/0x74  [ce17ff40] [c00102f8] ret\_from\_syscall+0x0/0x3c  ====CPU #1 (myself)====end====  ====other CPUs dump====begin====  -------CPU #0------  Call Trace:  [cd7fbd50] [c0007f8c] \_\_ah\_buf\_dump\_stack+0x58/0x200 (unreliable)  [cd7fbd90] [c00602b0] ah\_mcd\_dump\_func+0x84/0xa4  [cd7fbdb0] [c006a030] generic\_smp\_call\_function\_single\_interrupt+0xe8/0x148  [cd7fbde0] [c0011204] call\_function\_single\_action+0x10/0x24  [cd7fbdf0] [c00708ec] handle\_IRQ\_event+0x6c/0x140  [cd7fbe20] [c0073204] handle\_percpu\_irq+0x58/0xac  [cd7fbe30] [c00041ac] do\_IRQ+0xc0/0xe8  [cd7fbe50] [c0010950] ret\_from\_except+0x0/0x18  [cd7fbf10] [33ad71b5] 0x33ad71b5  [cd7fbf40] [c00102f8] ret\_from\_syscall+0x0/0x3c  ====other cpu dump====end====  Rebooting in 5 seconds..  U-Boot 2009.11 (Jun 24 2012 - 08:09:51)  CPU0: P1020E, Version: 1.1, (0x80ec0011)  Core: E500, Version: 5.1, (0x80212051)  Clock Configuration:  CPU0:533.333 MHz, CPU1:533.333 MHz,  CCB:266.667 MHz,  DDR:266.667 MHz (533.333 MT/s data rate) (Asynchronous), LBC:16.667 MHz  L1: D-cache 32 kB enabled  I-cache 32 kB enabled  I2C: ready  SPI: ready  DRAM: Configuring DDR for 533.333 MT/s data rate  DDR: 256 MB  FLASH: 64 MB  L2: 256 KB enabled  MMC:  PCIE2 connected to Slot 1 as Root Complex (base addr ffe09000)  Scanning PCI bus 01  01 00 168c 0030 0280 ff  PCIE2 on bus 00 - 01  PCIE1 connected to Slot 2 as Root Complex (base addr ffe0a000)  Scanning PCI bus 03  03 00 168c 0030 0280 ff  PCIE1 on bus 02 - 03  In: serial  Out: serial  Err: serial  Net: eth0, eth1  Waiting for PHY auto negotiation to complete.. done  Speed: 100, full duplex  Using eth0 device  host 10.155.30.155 is alive  system crash last time, net dump RAM to tftpserver.  Speed: 100, full duplex  set tftp\_filename for put, to: /35011120900749.netdump.5025c277.0.Using eth0 device  TFTP from server 10.155.30.155; our IP address is 10.155.30.6  Filename '/35011120900749.netdump.5025c277.0'.  Load address: 0x1004000  Loading: start tftp put. we get the first ack, start write data.  $$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$done with one time put.  Speed: 100, full duplex  set tftp\_filename for put, to: /35011120900749.netdump.5025c277.1.Using eth0 device  TFTP from server 10.155.30.155; our IP address is 10.155.30.6  Filename '/35011120900749.netdump.5025c277.1'.  Load address: 0x1004000  Loading: start tftp put. we get the first ack, start write data.  $$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$done with one time put.  Speed: 100, full duplex  set tftp\_filename for put, to: /35011120900749.netdump.5025c277.2.Using eth0 device  TFTP from server 10.155.30.155; our IP address is 10.155.30.6  Filename '/35011120900749.netdump.5025c277.2'.  Load address: 0x1004000  Loading: start tftp put. we get the first ack, start write data.  $$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$done with one time put.  Speed: 100, full duplex  set tftp\_filename for put, to: /35011120900749.netdump.5025c277.3.Using eth0 device  TFTP from server 10.155.30.155; our IP address is 10.155.30.6  Filename '/35011120900749.netdump.5025c277.3'.  Load address: 0x1004000  Loading: start tftp put. we get the first ack, start write data.  $$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$done with one time put.  Speed: 100, full duplex  set tftp\_filename for put, to: /35011120900749.netdump.5025c277.4.Using eth0 device  TFTP from server 10.155.30.155; our IP address is 10.155.30.6  Filename '/35011120900749.netdump.5025c277.4'.  Load address: 0x1004000  Loading: start tftp put. we get the first ack, start write data.  $$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$done with one time put.  Speed: 100, full duplex  set tftp\_filename for put, to: /35011120900749.netdump.5025c277.5.Using eth0 device  TFTP from server 10.155.30.155; our IP address is 10.155.30.6  Filename '/35011120900749.netdump.5025c277.5'.  Load address: 0x1004000  Loading: start tftp put. we get the first ack, start write data.  $$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$done with one time put.  Speed: 100, full duplex  set tftp\_filename for put, to: /35011120900749.netdump.5025c277.6.Using eth0 device  TFTP from server 10.155.30.155; our IP address is 10.155.30.6  Filename '/35011120900749.netdump.5025c277.6'.  Load address: 0x1004000  Loading: start tftp put. we get the first ack, start write data.  $$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$done with one time put.  Speed: 100, full duplex  set tftp\_filename for put, to: /35011120900749.netdump.5025c277.7.Using eth0 device  TFTP from server 10.155.30.155; our IP address is 10.155.30.6  Filename '/35011120900749.netdump.5025c277.7'.  Load address: 0x1004000  Loading: start tftp put. we get the first ack, start write data.  $$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$done with one time put.  Speed: 100, full duplex  set tftp\_filename for put, to: /35011120900749.netdump.5025c277.8.Using eth0 device  TFTP from server 10.155.30.155; our IP address is 10.155.30.6  Filename '/35011120900749.netdump.5025c277.8'.  Load address: 0x1004000  Loading: start tftp put. we get the first ack, start write data.  all blocks have been uploaded.  dump RAM to tftpserver succeeded.  current temperature is 38  current id 1, download id 0  Hit any key to stop autoboot: 0  . done  9....8....7....6....5....4....3....2....1..  . done  9....8....7....6....5....4....3....2....1..## Booting kernel from Legacy Image at eec40000 ...  Image Name: Linux-2.6.32  Created: 2012-08-09 13:43:59 UTC  Image Type: PowerPC Linux Kernel Image (gzip compressed)  Data Size: 2248419 Bytes = 2.1 MB  Load Address: 00000000  Entry Point: 00000000  Verifying Checksum ... OK  ## Loading init Ramdisk from Legacy Image at 02000000 ...  Image Name: uboot initramfs rootfs  Created: 2012-08-09 14:26:22 UTC  Image Type: PowerPC Linux RAMDisk Image (uncompressed)  Data Size: 17350656 Bytes = 16.5 MB  Load Address: 00000000  Entry Point: 00000000  Verifying Checksum ... OK  ## Flattened Device Tree blob at ec020000  Booting using the fdt blob at 0xec020000  Uncompressing Kernel Image ... OK  Loading Ramdisk to 0eda3000, end 0fe2f000 ... OK  Loading Device Tree to 00ffa000, end 00fff19a ... OK    Mounting local file systems...  Aerohive Wireless Extension 1.0.0 ... INIT!  Aerohive Forwarding Engine module ... INIT!  Welcome to Aerohive Product  AH-81b700 login: | | |

### Enable netdump with same native vlan and vlan, check if it can do correct netdump

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | Netdump\_Check\_02 | | |
| Priority | Accept | Automation Flag | Yes |
| Topology to use | AP------SW-----server | | |
| Description | Enable netdump with same native vlan and vlan, check if it can do correct netdump | | |
| Pre-condition |  | | |
| Test procedure | 1. Enter bootload and set parameter:   “set\_bootparam”   1. Set vlan ID and native vlan with same and enable netdump 2. Set Netdump file and TFTP server 3. Simulate crash after enter CLI   “\_crash \_kerenel”   1. Check if netdump will dump kernel crash information to pointed server | | |
| Expect result | Netdump will dump kernel crash to pointed server | | |
| Test Result |  | | |

### Enable netdump with different native vlan and vlan, check if it can do correct netdump

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | Netdump\_Check\_03 | | |
| Priority | Accept | Automation Flag | Yes |
| Topology to use | AP------SW-----server | | |
| Description | Enable netdump with different native vlan and vlan, check if it can do correct netdump | | |
| Pre-condition |  | | |
| Test procedure | 1. Enter bootload and set parameter:   “set\_bootparam”   1. Set vlan ID and native vlan with different and enable netdump 2. Set Netdump file and TFTP server 3. Simulate crash after enter CLI   “\_crash \_kerenel”   1. Check if netdump will dump kernel crash information to pointed server | | |
| Expect result | Netdump will dump kernel crash to pointed server | | |
| Test Result |  | | |

### Check if netdump can restore if tftp server break for a while

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | Netdump\_Check\_04 | | |
| Priority | Accept | Automation Flag | NA |
| Topology to use | AP------SW-----server | | |
| Description | Check if netdump can restore if tftp server break for a while | | |
| Pre-condition | => set\_bootparam  Change boot parameter, ENTER to skip the item  Device IP : [10.155.30.6]  Netmask : [255.255.255.0]  TFTP Server IP : [10.155.30.155]  Gateway IP : [10.155.30.254]  VLAN ID : [0] 10  NVLAN ID : [0] 10  Boot File : []  Netboot after flashboot failed [1 for yes, 0 for no] : [0]  Netdump after crash [1 for yes, 0 for no]: [1]  Netdump file : [35011120900749.netdump]  Are you sure to save? [Y/N] y  . done  9....8....7....6....5....4....3....2....1..  . done  9....8....7....6....5....4....3....2....1..Parameter saved  => reset | | |
| Test procedure | 1. Enter bootload and set parameter:   “set\_bootparam”   1. Set vlan ID and native vlan with default and enable netdump 2. Set Netdump file and TFTP server 3. Simulate crash after enter CLI   “\_crash \_kerenel”   1. Disconnect tftp server for a while 2. Check if netdump will dump kernel crash information to pointed server | | |
| Expect result | Netdump will restore dump in a short while | | |
| Test Result |  | | |

### Disable netdump, AP will not do netdump when crash

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | Netdump\_Check\_05 | | |
| Priority | Accept | Automation Flag | Yes |
| Topology to use | AP------SW-----server | | |
| Description | Disable netdump, AP will not do netdump when crash | | |
| Pre-condition | => set\_bootparam  Change boot parameter, ENTER to skip the item  Device IP : [10.155.30.6]  Netmask : [255.255.255.0]  TFTP Server IP : [10.155.30.155]  Gateway IP : [10.155.30.254]  VLAN ID : [0] 10  NVLAN ID : [0] 10  Boot File : []  Netboot after flashboot failed [1 for yes, 0 for no] : [0]  Netdump after crash [1 for yes, 0 for no]: [0]  Netdump file : [35011120900749.netdump]  Are you sure to save? [Y/N] y  . done  9....8....7....6....5....4....3....2....1..  . done  9....8....7....6....5....4....3....2....1..Parameter saved  => reset | | |
| Test procedure | 1. Enter bootload and set parameter:   “set\_bootparam”   1. Set vlan ID and native vlan with default and disable netdump 2. Set Netdump file and TFTP server 3. Simulate crash after enter CLI   “\_crash \_kerenel”   1. Check if netdump will dump kernel crash information to pointed server | | |
| Expect result | Netdump will not dump | | |
| Test Result |  | | |

### After netdump, check if netdump’s name base on timestamp. (bug 17330)

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | Netdump\_Check\_06 | | |
| Priority | Accept | Automation Flag | Yes |
| Topology to use | AP------SW-----server | | |
| Description | After netdump, check if netdump’s name base on timestamp. (bug 17330) | | |
| Pre-condition |  | | |
| Test procedure | 1. Enter bootload and set parameter:   “set\_bootparam”   1. Set vlan ID and native vlan with default and disable netdump 2. Set Netdump file and TFTP server 3. Simulate crash after enter CLI   “\_crash \_kerenel”   1. Check if netdump will dump kernel crash information to pointed server and name will base on timestamp | | |
| Expect result | Netdump name will be base on serial number and timestamp | | |
| Test Result | ///not netdump in log  AH-81b700#sh boot-param  boot parameters:  Device IP: 10.155.30.6  Netmask: 255.255.255.0  TFTP Server IP: 10.155.30.155  Gateway IP: 10.155.30.254  VLAN ID: 10  Native-VLAN ID: 10  Netboot: Disabled  Boot File:  Netdump: Disabled  Netdump File: 35011120900749.netdump  Region Code: FCC  Country Code: 840  AH-81b700#  AH-81b700#\_crash \_kernel  Kernel panic - not syncing: kills itself.  ====CPU #1 (myself)====begin====  Call Trace:  [ce183dd0] [c0006ef0] show\_stack+0x50/0x1542012-08-11 05:50 (unreliable):37 emerg kern  el: Kernel panic[ce183e00] [c0304388] panic+0xc4/0x1ac - not syncing:  kills itself.  [ce183e50] [d521fb94] ah\_hwmon\_ioctl+0x1b8/0x340 [ah\_board0]2012-08-11 05:50  :37 emerg kern[ce183e70] [d521d0a0] ah\_boarddev\_ioctl+0x78/0xa4 [ah\_board0]el:  [ce183e80] [c00b053c] vfs\_ioctl+0x40/0xa4  [ce183ea0] [c00b0e0c] do\_vfs\_ioctl+0x80/0x73c  [ce183f10] [c00b1508] sys\_ioctl+0x40/0x74  [ce183f40] [c00102f8] ret\_from\_syscall+0x0/0x3c  ====CPU #1 (myself)====end====  ====other CPUs dump====begin====  -------CPU #0------  Call Trace:  [cd7efe40] [c0007f8c] \_\_ah\_buf\_dump\_stack+0x58/0x200 (unreliable)  [cd7efe80] [c00602b0] ah\_mcd\_dump\_func+0x84/0xa4  [cd7efea0] [c006a030] generic\_smp\_call\_function\_single\_interrupt+0xe8/0x148  [cd7efed0] [c0011204] call\_function\_single\_action+0x10/0x24  [cd7efee0] [c00708ec] handle\_IRQ\_event+0x6c/0x140  [cd7eff10] [c0073204] handle\_percpu\_irq+0x58/0xac  [cd7eff20] [c00041ac] do\_IRQ+0xc0/0xe8  [cd7eff40] [c0010950] ret\_from\_except+0x0/0x18  ====other cpu dump====end====  Rebooting in 5 seconds..  U-Boot 2009.11 (Jun 24 2012 - 08:09:51)  CPU0: P1020E, Version: 1.1, (0x80ec0011)  Core: E500, Version: 5.1, (0x80212051)  Clock Configuration:  CPU0:533.333 MHz, CPU1:533.333 MHz,  CCB:266.667 MHz,  DDR:266.667 MHz (533.333 MT/s data rate) (Asynchronous), LBC:16.667 MHz  L1: D-cache 32 kB enabled  I-cache 32 kB enabled  I2C: ready  SPI: ready  DRAM: Configuring DDR for 533.333 MT/s data rate  DDR: 256 MB  FLASH: 64 MB  L2: 256 KB enabled  MMC:  PCIE2 connected to Slot 1 as Root Complex (base addr ffe09000)  Scanning PCI bus 01  01 00 168c 0030 0280 ff  PCIE2 on bus 00 - 01  PCIE1 connected to Slot 2 as Root Complex (base addr ffe0a000)  Scanning PCI bus 03  03 00 168c 0030 0280 ff  PCIE1 on bus 02 - 03  In: serial  Out: serial  Err: serial  Net: eth0, eth1  current temperature is 32  current id 1, download id 0  Hit any key to stop autoboot: 0  . done  9....8....7....6....5....4....3....2....1..  . done  9....8....7....6....5....4....3....2....1..## Booting kernel from Legacy Image at eec40000 ...  Image Name: Linux-2.6.32  Created: 2012-08-09 13:43:59 UTC  Image Type: PowerPC Linux Kernel Image (gzip compressed)  Data Size: 2248419 Bytes = 2.1 MB  Load Address: 00000000  Entry Point: 00000000  Verifying Checksum ... OK  ## Loading init Ramdisk from Legacy Image at 02000000 ...  Image Name: uboot initramfs rootfs  Created: 2012-08-09 14:26:22 UTC  Image Type: PowerPC Linux RAMDisk Image (uncompressed)  Data Size: 17350656 Bytes = 16.5 MB  Load Address: 00000000  Entry Point: 00000000  Verifying Checksum ... OK  ## Flattened Device Tree blob at ec020000  Booting using the fdt blob at 0xec020000  Uncompressing Kernel Image ... OK  Loading Ramdisk to 0eda3000, end 0fe2f000 ... OK  Loading Device Tree to 00ffa000, end 00fff19a ... OK    Mounting local file systems...  Aerohive Wireless Extension 1.0.0 ... INIT!  Aerohive Forwarding Engine module ... INIT!  Welcome to Aerohive Product  AH-81b700 login: | | |

### HM side, check if can do netdump under DHCP mode

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | Netdump\_Check\_06 | | |
| Priority | Accept | Automation Flag | NA |
| Topology to use | AP------SW-----server | | |
| Description | HM side, check if can do netdump under DHCP mode | | |
| Pre-condition |  | | |
| Test procedure | 1. Connect AP to HM and set netdump parameter in HM   Enable netdump and set tftpserver/vlan , select dhcp mode   1. Simulate crash after enter CLI   “\_crash \_kerenel”   1. Check if netdump will dump kernel crash information to pointed server | | |
| Expect result | Netdump will not dump | | |
| Test Result |  | | |

### HM side , check if AP can do netdump under static mode

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | Netdump\_Check\_07 | | |
| Priority | Accept | Automation Flag | NA |
| Topology to use | AP------SW-----server | | |
| Description | HM side , check if AP can do netdump under static mode | | |
| Pre-condition |  | | |
| Test procedure | 1. Connect AP to HM and set netdump parameter in HM   Enable netdump and set tftpserver/vlan, select static mode and enter static IP   1. Simulate crash after enter CLI   “\_crash \_kerenel”   1. Check if netdump will dump kernel crash information to pointed server | | |
| Expect result | Netdump will not dump | | |
| Test Result |  | | |

## Capacity Test Case

## Compatibility Test Case

## CLI Management (Automation Status: Yes/No)

<firstly, list all cli that this feature has one by one>

<CLI test case>

## GUI Management-HiveManager

<List HM test case or test log>

## GUI Management-HiveUI

<List HiveUI test case or test log>