USB Modem Test Case

Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date | Author | Description |
| 0.1 | 03/22/2012 | Zhonghua Xu | Initial draft |
| 0.2 | 03/23/2012 | Zhonghua Xu | Add HM cases, Chapter 6.9 |
| 0.3 | 03/27/2012 | Zhonghua Xu | Add browser related HM cases;  Add usbmodem mode delta switch cases |
| 0.4 | 03/28/2012 | Zhonghua Xu | Add negative cases to check CLI config after usbmodem process crash;  Add HM cases about Config/ Auto Provision pages |
| 0.5 | 04/06/2012 | Zhonghua Xu | Complete HiveOS test |
| 0.6 | 04/11/2012 | Zhonghua Xu | Delete HM related cases;  Refer to the standard HM cases on test link and case execution record from the progress excel |
| 0.7 | 04/16/2012 | Zhonghua Xu | Add cases for eth0 with pppoe |
| 0.8 | 04/17/2012 | Zhonghua Xu | Add cases for LED state, considering capwap connection |
| 0.9 | 04/26/2012 | Zhonghua Xu | Update test result for 6.9.3 |
| 1.0 | 04/26/2012 | Zhonghua Xu | Correct the case id of UsbModem\_PrimaryWan\_2 |
| 1.1 | 06/14/2012 | Zhonghua Xu | Add check for DNS switch before/ after failover/ failback, for cases,  UsbModem\_OnDemand\_2  UsbModem\_ AlwaysConnected\_2  UsbModem\_PrimaryWan\_2 |
| 1.2 | 06/20/2012 | Zhonghua Xu | Correct the typo, “modem is PPPoE required” |
| 1.3 | 09/18/2012 | Zhonghua Xu | Add case “UsbModem\_TypicalIssue\_1” for bug 18369 |
| 1.4 | 01/10/2013 | Zhonghua Xu | Update auto flag |
| 1.5 | 03/20/2013 | Zhonghua Xu | Update cli/ log with Firenze release |

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Glossary and Abbreviations

# Introduction

This project adds support for 3G mobile broadband modems to Aerohive’s access points equipped with a USB port. These modems will be used to provide primary and backup backhaul access over 3G networks.

# TestObjectives

The goal is to validate feature functionality on both HiveOS and HiveManager (configuration), testing shall also provide customer and negative scenarios

1. USB modem should support 3G network service
2. USB modem should support 4G network service
3. USB modem can work as backup WAN, when eth0 WAN is unavailable
4. USB modem can work as primary WAN, even eth0 WAN is also available
5. USB modem can be configured as one of 3 WAN mode successfully
6. WAN should failover/ failback between eth0 and USB modem without issue
7. Traffic should not be affected between WAN failover/ failback
8. Error msg about USB modem should be reported

# Test Acceptance Criterion from Development

* Approved – MRD

http://saturn.aerohive.com/view.php?fDocumentId=3310

* Approved – Functional Specifications

N/A

* Approved – Unit Test Plans

N/A

# Product Pass Criterion

Feature testing is considered pass when test result meets the requirement defined in the expected result field. The expected result field is defined by the requirements stated in the functional specification and/ or MRD; whichever is stricter; plus additional quality and usability expectations set by the test engineer.

# Test Bed/Topo Design

**Topo1**-In headquater, connect internet through both eth0 and usbmodem WAN are available



**Figure01- Topo1**

**Topo2**-Outside headquater, connect internet through both eth0 and usbmodem WAN are available



**Figure02- Topo2**

# TestCase

## UsbModem\_CLI

### UsbModem\_CLI\_1

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_CLI\_1 | | |
| Priority | Middle | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | CLI check,  1) show usbmodem | | |
| Pre-condition |  | | |
| Test procedure | 1) Show the default status of USB modem  ***show usbmodem*** | | |
| Expect result | 1) There should be “Enabled” state  2) There should be “Mode” state  3) There should be 6 supported modem listed  ***AH-0c32c0#sh usbm***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: sierra\_308***  ***USB Id(s): Vendor Id: 0xf3d, Product Id: 0x68a3***  ***Vendor Id: 0x1199, Product Id: 0x68a3***  ***APN: ISP.CINGULAR***  ***Dialup Username: ISP@CINGULARGPRS.COM***  ***Dialup Password: CINGULAR1***  ***Dialup Number: ATD\*99\*\*\*1#***  ***-----------------***  ***Modem Id: sierra\_313***  ***USB Id(s): Vendor Id: 0xf3d, Product Id: 0x68aa***  ***Vendor Id: 0x1199, Product Id: 0x68aa***  ***APN: broadband***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***-----------------***  ***Modem Id: pantech\_uml***  ***USB Id(s): Vendor Id: 0x106c, Product Id: 0x3718***  ***APN:***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*3#***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN:***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***-----------------***  ***Modem Id: huawei\_e1752***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x140c***  ***Vendor Id: 0x12d1, Product Id: 0x141b***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***-----------------***  ***Modem Id: huawei\_e366***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x14ac***  ***APN:***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***-----------------***  ***Modem Id: novatel\_551L***  ***USB Id(s): Vendor Id: 0x1410, Product Id: 0xb001***  ***APN:***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number:***  ***<End of USB modem configuration>*** | | |
| Test Result | PASS | | |

### UsbModem\_CLI\_2

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_CLI\_2 | | |
| Priority | Middle | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | CLI check,  1) [no] usbmodem modem-id <string> apn [[<string>]]  2) show usbmodem [modem-id <string>] | | |
| Pre-condition |  | | |
| Test procedure | 1) Config apn as "3gnet” for modem-id huawei\_e220  ***usbmodem modem-id huawei\_e220 apn 3gnet***  2) Show the detail of modem huawei\_e220  ***sh usbmodem modem-id huawei\_e220***  3) Delete the config in step 1)  ***no usbmodem modem-id huawei\_e220 apn***  4) Repeat step 2) | | |
| Expect result | 1) apn configured for modem huawei\_e220 successfully  ***AH-8c66c0#sh usbmodem modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  2) There is no apn once delete the apn config of modem huawei\_e220  ***AH-8c66c0#sh usbmodem modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN:***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>*** | | |
| Test Result | PASS | | |

### UsbModem\_CLI\_3

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_CLI\_3 | | |
| Priority | Middle | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | CLI check,  1) [no] usbmodem modem-id <string> dialup-number [[<string>]]  2) [no] usbmodem modem-id <string> dialup-username [[<string>]]  3) [no] usbmodem modem-id <string> dialup-password [[<string>]]  4) show usbmodem [modem-id <string>] | | |
| Pre-condition |  | | |
| Test procedure | 1) Config dialup-number for modem huawei\_e220  ***usbmodem modem-id huawei\_e220 dialup-number 12345678***  2) Config dialup-username for modem huawei\_e220  ***usbmodem modem-id huawei\_e220 dialup-username admin***  3) Config dialup-password for modem huawei\_e220  ***usbmodem modem-id huawei\_e220 dialup-password \*\*\*\*\*\*\*\****  4) Show the detail of modem huawei\_e220  ***sh usbmodem modem-id huawei\_e220***  5) Delete the config in step 1) ~3)  6) Repeat step 4) | | |
| Expect result | 1) dialup-number/ username/ passwd configured for modem huawei\_e220 successfully  ***AH-8c66c0#sh usbmodem modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN:***  ***Dialup Username: admin***  ***Dialup Password: aerohive***  ***Dialup Number: 12345678***  ***<End of USB modem configuration>***  2) There is no dialup-username/ passwd once delete these config of modem huawei\_e220, and dialup-number is configured as “ATD\*99\*\*\*1#” by default.  ***AH-8c66c0#sh usbmodem modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN:***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>*** | | |
| Test Result | PASS | | |

### UsbModem\_CLI\_4

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_CLI\_4 | | |
| Priority | Middle | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | CLI check,  1) [no] usbmodem mode {on-demand|always-connected|primary-wan}  2) show usbmodem [modem-id <string>] | | |
| Pre-condition |  | | |
| Test procedure | 1) Config usbmodem mode as on-demand,  ***usbmodem mode on-demand***  2) Show the usbmodem mode of modem huawei\_e220,  ***sh usbmodem modem-id huawei\_e220***  3) Config usbmodem mode as always-connected,  ***usbmodem mode always-connected***  4) Repeat step 2)  5) Config usbmodem mode as primary-wan,  ***usbmodem mode primary-wan***  6) Repeat step 2)  7) Delete mode config for USB modem  ***no usbmodem mode***  8) Repeat step 2) | | |
| Expect result | 1) usbmodem mode is configured as on-demand successfully  ***AH-8c66c0#sh usbmodem modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN:***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  2) usbmodem mode is configured as always-connected successfully  ***AH-8c66c0#sh usbmodem modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN:***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  3) usbmodem mode is configured as primary-wan successfully  ***AH-8c66c0#sh usbmodem modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: primary-wan***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN:***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  4) usbmodem mode will be on-demand by default once delete mode config  ***AH-8c66c0#sh usbmodem modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN:***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>*** | | |
| Test Result | PASS | | |

### UsbModem\_CLI\_5

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_CLI\_5 | | |
| Priority | Middle | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | CLI check,  1) [no] usbmodem enable  2) show usbmodem [modem-id <string>] | | |
| Pre-condition |  | | |
| Test procedure | 1) Show the default usbmodem availability  ***show usbmodem***  2) Disable the availability of usbmodem  ***no usbmodem enable***  3) Repeat step 1) | | |
| Expect result | 1) The default availability of usbmodem is "Enabled",  ***zhxu-8c66c0#sh usbmodem***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  2) The usbmodem availability is "Disabled" after run "no" operation  ***zhxu-8c66c0#sh usbmodem***  ***<Begin of USB modem configuration>***  ***Enabled: no*** | | |
| Test Result | PASS | | |

### UsbModem\_CLI\_6

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_CLI\_6 | | |
| Priority | Middle | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | CLI check,  1) show usbmodem status | | |
| Pre-condition |  | | |
| Test procedure | 1) Show the usbmodem/ WAN status of BR  ***show usbmodem status*** | | |
| Expect result | 1) The usbmodem/ WAN status of BR is displayed accordingly,  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.49.60.11 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:8 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:10 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:276 (276.0 B) TX bytes:366 (366.0 B)***  ***PPP Process Status:***  ***PID: 4895***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***276 8 0 0 0 0 8 | 366 10 0 0 10 0 0*** | | |
| Test Result | PASS | | |

### UsbModem\_CLI\_7

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_CLI\_7 | | |
| Priority | Middle | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | CLI check,  1) show usbmodem rssi | | |
| Pre-condition | 1) USB modem is plugged with BR and enabled | | |
| Test procedure | 1) Show the rssi of 3g signal received at usbmodem  ***show usbmodem rssi*** | | |
| Expect result | 1) The rssi is displayed accordingly  ***AH-0c32c0#sh usbm r***  ***RSSI: 17 (-79 dBm, Power Rating: good)***  ***BER: 99 (unknown or undetectable)*** | | |
| Test Result | FAIL, BUG 16848 | | |

### UsbModem\_CLI\_8

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_CLI\_8 | | |
| Priority | Middle | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | CLI check,  1) show usbmodem info | | |
| Pre-condition | 1) USB modem is plugged with BR and enabled | | |
| Test procedure | 1) Show the hardware/ provisioned data of usbmodem  ***show usbmodem info*** | | |
| Expect result | 1) The provisioned USB modem info is displayed accordingly,  ***AH-0c32c0#sh usbm i***  ***ATI***  ***Manufacturer: huawei***  ***Model: E220***  ***Revision: 11.117.07.00.00***  ***IMEI: 358193014014105***  ***+GCAP: +CGSM,+DS,+ES***  ***OK*** | | |
| Test Result |  | | |

### UsbModem\_CLI\_9

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_CLI\_9 | | |
| Priority | Middle | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | CLI check,  1) Input invalid modem-id should fail | | |
| Pre-condition |  | | |
| Test procedure | 1) Try to input an invalid modem-id, which is not in the modem list  ***usbmodem modem-id xxx apn 3gnet*** | | |
| Expect result | 1) Invalid modem-id should not be allowed,  ***AH-8c66c0#usbmodem modem-id xxx apn 3gnet***  ***No entry for modem id [xxx]***  ***ERROR: Invalid parameter(s)*** | | |
| Test Result | PASS | | |

## UsbModem\_ServiceProvider

### UsbModem\_ServiceProvider\_1

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_ServiceProvider\_1 | | |
| Priority | Accept | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | UMTS supported | | |
| Pre-condition | 1) The UMTS service is activated and available  2) Configured the dialup username/ passwd/ number if the modem if necessary | | |
| Test procedure | 1) Config USB modem as on-demand mode  2) Unplug the eth0 cable from BR  ***in e0 sh***  3) Show USB modem status in the console  4) Ping an internet address | | |
| Expect result | 1) The mode of USB modem is displayed as configured accordingly  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN:***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  2) Failover to usbmodem once WAN is unavailable through eth0  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: FAILOVER***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Fri Mar 22 20:10:01 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Fri Mar 22 20:10:11 2013***  3) USB modem get access to the APN successfully  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 0.0.0.0 wan - 08ea:440c:32c0 D***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.27.46.155 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  4) Success to ping internet address  ***AH-8c66c0#ping 8.8.8.8***  ***PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.***  ***64 bytes from 8.8.8.8: icmp\_seq=1 ttl=46 time=120 ms***  ***64 bytes from 8.8.8.8: icmp\_seq=2 ttl=46 time=110 ms***  ***64 bytes from 8.8.8.8: icmp\_seq=3 ttl=46 time=118 ms***  ***64 bytes from 8.8.8.8: icmp\_seq=4 ttl=46 time=127 ms***  ***64 bytes from 8.8.8.8: icmp\_seq=5 ttl=46 time=116 ms***  ***--- 8.8.8.8 ping statistics ---***  ***5 packets transmitted, 5 received, 0% packet loss, time 4003ms***  ***rtt min/avg/max/mdev = 110.006/118.396/127.005/5.619 ms*** | | |
| Test Result |  | | |

### UsbModem\_ServiceProvider\_2

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_ServiceProvider\_2 | | |
| Priority | High | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | CDMA supported | | |
| Pre-condition | 1) The CDMA service is activated and available  2) Configured the dialup username/ passwd/ number if the modem if necessary | | |
| Test procedure | 1) Config USB modem as on-demand mode  2) Unplug the eth0 cable from BR  ***in e0 sh***  3) Show USB modem status in the console  4) Ping an internet address | | |
| Expect result | 1) The mode of USB modem is displayed as configured accordingly  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN:***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  2) Failover to usbmodem once WAN is unavailable through eth0  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: FAILOVER***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Fri Mar 22 20:10:01 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Fri Mar 22 20:10:11 2013***  3) USB modem get access to the APN successfully  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 0.0.0.0 wan - 08ea:440c:32c0 D***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.27.46.155 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  4) Success to ping internet address  ***AH-8c66c0#ping 8.8.8.8***  ***PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.***  ***64 bytes from 8.8.8.8: icmp\_seq=1 ttl=46 time=120 ms***  ***64 bytes from 8.8.8.8: icmp\_seq=2 ttl=46 time=110 ms***  ***64 bytes from 8.8.8.8: icmp\_seq=3 ttl=46 time=118 ms***  ***64 bytes from 8.8.8.8: icmp\_seq=4 ttl=46 time=127 ms***  ***64 bytes from 8.8.8.8: icmp\_seq=5 ttl=46 time=116 ms***  ***--- 8.8.8.8 ping statistics ---***  ***5 packets transmitted, 5 received, 0% packet loss, time 4003ms***  ***rtt min/avg/max/mdev = 110.006/118.396/127.005/5.619 ms*** | | |
| Test Result |  | | |

### UsbModem\_ServiceProvider\_3

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_ServiceProvider\_3 | | |
| Priority | Middle | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | LTE supported | | |
| Pre-condition | 1) The LTE service is activated and available  2) Configured the dialup username/ passwd/ number if the modem if necessary | | |
| Test procedure | 1) Config USB modem as on-demand mode  2) Unplug the eth0 cable from BR  ***in e0 sh***  3) Show USB modem status in the console  4) Ping an internet address | | |
| Expect result | 1) The mode of USB modem is displayed as configured accordingly  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN:***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  2) Failover to usbmodem once WAN is unavailable through eth0  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: FAILOVER***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Fri Mar 22 20:10:01 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Fri Mar 22 20:10:11 2013***  3) USB modem get access to the APN successfully  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 0.0.0.0 wan - 08ea:440c:32c0 D***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.27.46.155 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  4) Success to ping internet address  ***AH-8c66c0#ping 8.8.8.8***  ***PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.***  ***64 bytes from 8.8.8.8: icmp\_seq=1 ttl=46 time=120 ms***  ***64 bytes from 8.8.8.8: icmp\_seq=2 ttl=46 time=110 ms***  ***64 bytes from 8.8.8.8: icmp\_seq=3 ttl=46 time=118 ms***  ***64 bytes from 8.8.8.8: icmp\_seq=4 ttl=46 time=127 ms***  ***64 bytes from 8.8.8.8: icmp\_seq=5 ttl=46 time=116 ms***  ***--- 8.8.8.8 ping statistics ---***  ***5 packets transmitted, 5 received, 0% packet loss, time 4003ms***  ***rtt min/avg/max/mdev = 110.006/118.396/127.005/5.619 ms*** | | |
| Test Result |  | | |

### UsbModem\_ServiceProvider\_4

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_ServiceProvider\_4 | | |
| Priority | Low | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | EDGE supported | | |
| Pre-condition | 1) The EDGE service is activated and available  2) Configured the dialup username/ passwd/ number if the modem if necessary | | |
| Test procedure | 1) Config USB modem as on-demand mode  2) Unplug the eth0 cable from BR  ***in e0 sh***  3) Show USB modem status in the console  4) Ping an internet address | | |
| Expect result | 1) The mode of USB modem is displayed as configured accordingly  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN:***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  2) Failover to usbmodem once WAN is unavailable through eth0  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: FAILOVER***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Fri Mar 22 20:10:01 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Fri Mar 22 20:10:11 2013***  3) USB modem get access to the APN successfully  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 0.0.0.0 wan - 08ea:440c:32c0 D***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.27.46.155 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  4) Success to ping internet address  ***AH-8c66c0#ping 8.8.8.8***  ***PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.***  ***64 bytes from 8.8.8.8: icmp\_seq=1 ttl=46 time=120 ms***  ***64 bytes from 8.8.8.8: icmp\_seq=2 ttl=46 time=110 ms***  ***64 bytes from 8.8.8.8: icmp\_seq=3 ttl=46 time=118 ms***  ***64 bytes from 8.8.8.8: icmp\_seq=4 ttl=46 time=127 ms***  ***64 bytes from 8.8.8.8: icmp\_seq=5 ttl=46 time=116 ms***  ***--- 8.8.8.8 ping statistics ---***  ***5 packets transmitted, 5 received, 0% packet loss, time 4003ms***  ***rtt min/avg/max/mdev = 110.006/118.396/127.005/5.619 ms*** | | |
| Test Result |  | | |

### UsbModem\_ServiceProvider\_5

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_ServiceProvider\_5 | | |
| Priority | Low | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | APN config | | |
| Pre-condition | 1) The 3g service is activated and available | | |
| Test procedure | 1) Config a modem-id with an APN selected from the list on wiki.ubuntu.com  2) Config the dialup username/ passwd/ number if the modem if necessary  3) Show modem status of the modem-id  4) Reboot BR, check the APN config after get up  5) Select another APN from the list, repeat step 1)-4)  6) Config an APN which is not in the list, repeat step 1)-4) | | |
| Expect result | 1) APN config successfully for each scenario  2) APN config won't lost after reboot | | |
| Test Result |  | | |

### UsbModem\_ServiceProvider\_6

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_ServiceProvider\_6 | | |
| Priority | High | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | SIM card from other providers | | |
| Pre-condition | 1) The 3g service is activated and available  2) WAN through 3g modem with original SIM card works well | | |
| Test procedure | 1) Unplug the origianl SIM card and plug a new SIM card from other providers  2) WAN through usbmodem  3) Ping an internet address | | |
| Expect result | 1) USB modem get access to the new APN successfully  2) Ping successfully through usbmodem WAN | | |
| Test Result |  | | |

### UsbModem\_ServiceProvider\_7

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_ServiceProvider\_7 | | |
| Priority | Middle | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Update APN list | | |
| Pre-condition | 1) The 3g service is activated and available | | |
| Test procedure | 1) Show the APN list in BR console and HM  2) Refresh the APN list in BR console and HM | | |
| Expect result | 1) There is APN list printed in console as well as in HM  2) The APN list will be updated in console as well as in HM | | |
| Test Result |  | | |

## UsbModem\_OnDemand

### UsbModem\_OnDemand\_1

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_OnDemand\_1 | | |
| Priority | Accept | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | 3g connection status | | |
| Pre-condition | 1) Config usbmodem mode as on-demand  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) Check the usbmodem status while WAN is eth0 by default  2) Trigger failover to usbmodem WAN via shut eth0  ***in e0 sh***  3) Check the WAN and usbmodem status | | |
| Expect result | 1) WAN is eth0 by default, and 3g connection is “Backup”and “Attached”  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm sUSB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Fri Mar 22 20:10:01 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Fri Mar 22 20:10:11 2013***  2) WAN is usbmodem once failover, and WAN failover state is "FAILOVER”  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - 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| Test Result |  | | |

### UsbModem\_OnDemand\_2

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_OnDemand\_2 | | |
| Priority | Accept | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Failover usbmodem via unplug eth0 | | |
| Pre-condition | 1) Config usbmodem mode as on-demand  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) From client, ping an external endpoint that is outside of the BR's vlan, and check the DNS of BR, while WAN is eth0 by default  2) Trigger failover to usbmodem WAN via shut eth0  ***in eth0 sh***  3) Continue ping process and check the DNS of BR, and check the WAN and usbmodem status  4) Trigger failback to eth0 WAN via enable eth0  ***no in eth0 sh***  5) Repeat step 3) | | |
| Expect result | 1) WAN is eth0 by default, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm sUSB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - 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- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=127ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=139ms TTL=44***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh dns***  ***DNS server from DHCP:***  ***Domain name suffix: RF&Driver***  ***Primary : 10.155.3.222***  ***Secondary : 0.0.0.0***  ***Tertiary : 0.0.0.0***  2) WAN is usbmodem once failover, and ping without error, and DNS changed accordingly  ***AH-8c66c0#in eth0 sh***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - 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- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Ping during failover - - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 192.168.85.1: Destination net unreachable.***  ***Reply from 192.168.85.1: Destination net unreachable.***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Ping after failover - - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=136ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=138ms TTL=45***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh dns***  ***DNS server from DHCP:***  ***Domain name suffix:***  ***Primary : 221.12.1.227***  ***Secondary : 221.12.33.227***  ***Tertiary : 0.0.0.0***  3) WAN is eth0 after failback, and ping without error, and DNS changed accordingly  ***AH-0c32c0#sh usbm sUSB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Fri Mar 22 20:10:01 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Fri Mar 22 20:10:11 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=127ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=139ms TTL=44***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh dns***  ***DNS server from DHCP:***  ***Domain name suffix: RF&Driver***  ***Primary : 10.155.3.222***  ***Secondary : 0.0.0.0***  ***Tertiary : 0.0.0.0*** | | |
| Test Result |  | | |

### UsbModem\_OnDemand\_3

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_OnDemand\_3 | | |
| Priority | Accept | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Failover usbmodem when no internet access through eth0 | | |
| Pre-condition | 1) Config usbmodem mode as on-demand  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan\_failover\_test ip 8.8.8.8***  ***track wan\_failover\_test interval 5***  ***track wan\_failover\_test use-for-wan-testing***  ***capwap client server name 10.155.33.220***  ***capwap client vhm-name JingLi-VHM***  ***routing route-request enable***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) From client, ping an external endpoint that is outside of the BR's vlan, while WAN is eth0 by default  2) Trigger failover to usbmodem WAN when internet access is unavailable  ***Unplug the internet cable from the HUB which the BR is connected with***  3) Continue ping process and check the WAN and usbmodem status  4) Trigger failback to eth0 WAN when internet access through eth0 is restored  ***plug the internet cable back to the HUB which the BR is connected with***  5) Repeat step 3) | | |
| Expect result | 1) WAN is eth0 by default, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 2 times (since Wed Mar 28 09:57:31 2012)***  ***DOWN: 2 times (since Wed Mar 28 09:57:22 2012)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:03:38 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 2 times (since Wed Mar 28 09:57:38 2012)***  ***DOWN: 4 times (since Wed Mar 28 10:17:18 2012)***  ***Local Link State:***  ***UP: 2 times (since Wed Mar 28 09:57:33 2012)***  ***DOWN: 2 times (since Wed Mar 28 10:17:08 2012)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: ATTACHED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=127ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=139ms TTL=44***  2) WAN is usbmodem once failover, and ping without error  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 14427***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***6471 103 0 0 0 0 103 | 6361 105 0 0 105 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: down***  ***UP: 7 times (since Wed Mar 28 11:06:26 2012)***  ***DOWN: 8 times (since Wed Mar 28 11:11:13 2012)***  ***Local Link State:***  ***UP: 4 times (since Wed Mar 28 11:06:16 2012)***  ***DOWN: 3 times (since Wed Mar 28 11:04:57 2012)***  ***Active: no***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 8 times (since Wed Mar 28 11:11:29 2012)***  ***DOWN: 14 times (since Wed Mar 28 11:06:34 2012)***  ***Local Link State:***  ***UP: 8 times (since Wed Mar 28 11:11:24 2012)***  ***DOWN: 7 times (since Wed Mar 28 11:06:26 2012)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: FAILOVER***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.26.197.44 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 32766 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - debug console - - - - - - - - - - - - - - - - - - - - - - - -*  ***2012-03-28 11:14:43 debug ah\_brd: [brd\_wanmon]: WFOIFM: Ping cmd [/bin/ping -q -c 1 -I eth0 -w 2 8.8.8.8] executing***  ***2012-03-28 11:14:45 debug ah\_brd: [brd\_wanmon]: WFOIFM: Ping 8.8.8.8 via eth0: 100% packet loss***  ***2012-03-28 11:14:45 debug ah\_brd: [brd\_wanmon]: WFOIFM: Ping 8.8.8.8 via eth0 failed***  ***2012-03-28 11:14:45 debug ah\_brd: [brd\_wanmon]: WFOIFM: Interface eth0: 1 targets tested, result: FAIL***  ***2012-03-28 11:14:45 debug ah\_brd: [brd\_wanmon]: WFOIFM: Use cached gw IP 0x0 for ppp0***  ***2012-03-28 11:14:45 debug ah\_brd: [brd\_wanmon]: WFOIFM: Interface ppp0 disallows ARP (ifr\_flags = 0x10d1)***  ***2012-03-28 11:14:45 debug ah\_brd: [brd\_wanmon]: WFOIFM: Going to test 1 targets for ppp0 ...***  ***2012-03-28 11:14:45 debug ah\_brd: [brd\_wanmon]: WFOIFM: Ping cmd [/bin/ping -q -c 1 -I ppp0 -w 2 8.8.8.8] executing***  ***2012-03-28 11:14:45 debug ah\_brd: [brd\_wanmon]: WFOIFM: Ping 8.8.8.8 via ppp0: 0% packet loss***  ***2012-03-28 11:14:45 debug ah\_brd: [brd\_wanmon]: WFOIFM: Ping 8.8.8.8 via ppp0: RTT min/avg/max = 131.177002/131.177002/131.177002***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Ping during failover - - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 192.168.85.1: Destination net unreachable.***  ***Reply from 192.168.85.1: Destination net unreachable.***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Ping after failover - - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=136ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=138ms TTL=45***  3) WAN is eth0 after failback, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 2 times (since Wed Mar 28 09:57:31 2012)***  ***DOWN: 2 times (since Wed Mar 28 09:57:22 2012)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:03:38 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 2 times (since Wed Mar 28 09:57:38 2012)***  ***DOWN: 4 times (since Wed Mar 28 10:17:18 2012)***  ***Local Link State:***  ***UP: 2 times (since Wed Mar 28 09:57:33 2012)***  ***DOWN: 2 times (since Wed Mar 28 10:17:08 2012)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: ATTACHED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=127ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=139ms TTL=44*** | | |
| Test Result |  | | |

### UsbModem\_OnDemand\_4

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_OnDemand\_4 | | |
| Priority | High | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Failover usbmodem via track-wan failure | | |
| Pre-condition | 1) Config usbmodem mode as on-demand  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  5) Open debug toggle,  ***\_deb brd wanmon***  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) From client, ping an external endpoint that is outside of the BR's vlan, while WAN is eth0 by default  2) Track-wan fail on eth0 via config invalid ip for tracking  ***track-wan use-for-wan-eth0 ip 1.1.1.1***  3) Continue ping process and check the WAN and usbmodem status  4) Trigger failback to eth0 WAN via remove invalid ip for tracking  ***no track-wan use-for-wan-eth0 ip 1.1.1.1***  5) Repeat step 3) | | |
| Expect result | 1) WAN is eth0 by default, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm sUSB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: up***  ***Interface: eth0; State: up***  ***Interface: ppp0; State: unknown***  ***[use-for-wan-eth0]***  ***WAN Monitor State: up***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: unknown***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Fri Mar 22 20:10:01 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Fri Mar 22 20:10:11 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - debug console - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh lo b | i wanmon***  ***2012-03-28 11:45:34 debug ah\_brd: [brd\_wanmon]: WFOIFM: Interface eth0: 1 targets tested, result: PASS***  ***2013-03-23 01:34:11 debug ah\_brd: [brd\_wanmon]: WFOIFM: [Mark as unknown]: Skip test for use-for-wan-usbnet0: interface (ppp0 : wifidx=1) is not connected.***  ***2012-03-28 11:45:34 debug ah\_brd: [brd\_wanmon]: WFOIFM: Going to pause for 2 secs before next test***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=127ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=139ms TTL=44***  2) WANfailover to usb once track invalid ip with eth0  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.35.64.96 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:421 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:422 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:35085 (34.2 KiB) TX bytes:34930 (34.1 KiB)***  ***PPP Process Status:***  ***PID: 1952***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***35085 421 0 0 0 0 421 | 34930 422 0 0 422 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: up***  ***Interface: eth0; State: up***  ***Interface: ppp0; State: up***  ***[use-for-wan-eth0]***  ***WAN Monitor State: down***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: up***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 2***  ***lkdn\_time: Fri Mar 22 22:54:34 2013***  ***ifmon\_up\_count: 83***  ***ifmon\_up\_time: Sat Mar 23 01:32:21 2013***  ***ifmon\_down\_count: 81***  ***ifmon\_down\_time: Sat Mar 23 01:42:20 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: FAILOVER***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sat Mar 23 01:42:30 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 01:42:38 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 10001 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - debug console - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh lo b | i wanmon***  ***2013-03-23 01:58:26 debug ah\_brd: [brd\_wanmon]: WFOIFM: [use-for-wan-eth0]: Interface eth0: 2 targets tested, result: FAIL***  ***……***  ***2013-03-23 01:58:23 debug ah\_brd: [brd\_wanmon]: WFOIFM: [use-for-wan-usbnet0]: Interface ppp0: 1 targets tested, result: PASS***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Ping during failover - - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 192.168.85.1: Destination net unreachable.***  ***Reply from 192.168.85.1: Destination net unreachable.***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Ping after failover - - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=136ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=138ms TTL=45***  3) WAN is eth0 after failback, and ping without error  ***AH-0c32c0#sh usbm sUSB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: up***  ***Interface: eth0; State: up***  ***Interface: ppp0; State: unknown***  ***[use-for-wan-eth0]***  ***WAN Monitor State: up***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: unknown***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Fri Mar 22 20:10:01 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Fri Mar 22 20:10:11 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - debug console - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh lo b | i wanmon***  ***2012-03-28 11:45:34 debug ah\_brd: [brd\_wanmon]: WFOIFM: Interface eth0: 1 targets tested, result: PASS***  ***2013-03-23 01:34:11 debug ah\_brd: [brd\_wanmon]: WFOIFM: [Mark as unknown]: Skip test for use-for-wan-usbnet0: interface (ppp0 : wifidx=1) is not connected.***  ***2012-03-28 11:45:34 debug ah\_brd: [brd\_wanmon]: WFOIFM: Going to pause for 2 secs before next test***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=127ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=139ms TTL=44*** | | |
| Test Result |  | | |

### UsbModem\_OnDemand\_5

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_OnDemand\_5 | | |
| Priority | Low | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Ping with different pkt size through usbmodem WAN | | |
| Pre-condition | 1) Config usbmodem mode as on-demand  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) MTU of each peer of network (Client/ BR/ Switch) is 1518  5) Client get association with BR either by eth or wifi  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan ip 23.15.247.43***  ***track wan use-for-wan-testing***  ***routing route-request enable***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) From client, ping an external endpoint that is outside of the BR's vlan, with pkt size 32 bytes, while WAN is eth0 by default  2) Trigger failover to usbmodem WAN via shut eth0  ***in e0 sh***  3) Continue ping process and check the WAN and usbmodem status  4) Trigger failback to eth0 WAN via enable eth0  ***no in e0 sh***  5) Repeat step 3)  6) Repeat step 1)-5) with ping pkt size 1472  7) Repeat step 1)-5) with ping pkt size 1473 | | |
| Expect result | 1) WAN is eth0 by default, and ping without error  ***AH-8c66c0#sh usbm m huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 2 times (since Sun Apr 1 02:50:10 2012)***  ***DOWN: 1 times (since Sun Apr 1 02:49:52 2012)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 0 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 0 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: ATTACHED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 23.15.247.43 with 32 bytes of data:***  ***Reply from 23.15.247.43: bytes=32 time=253ms TTL=50***  ***Reply from 23.15.247.43: bytes=32 time=256ms TTL=50***  2) WAN is usbmodem once failover, and ping without error  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 4800***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***996 20 0 0 0 0 20 | 1236 22 0 0 22 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: down***  ***UP: 2 times (since Sun Apr 1 02:50:10 2012)***  ***DOWN: 2 times (since Sun Apr 1 03:08:43 2012)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 1 times (since Sun Apr 1 03:08:38 2012)***  ***Active: no***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 1 times (since Sun Apr 1 03:08:59 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Sun Apr 1 03:08:54 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: FAILOVER***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 D***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.38.208.207 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 192.168.85.1: Destination net unreachable.***  ***Reply from 192.168.85.1: Destination net unreachable.***  ***Reply from 23.15.247.43: bytes=32 time=204ms TTL=51***  ***Reply from 23.15.247.43: bytes=32 time=213ms TTL=51***  3) WAN is eth0 after failback, and ping without error  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 3 times (since Sun Apr 1 03:10:50 2012)***  ***DOWN: 2 times (since Sun Apr 1 03:08:43 2012)***  ***Local Link State:***  ***UP: 2 times (since Sun Apr 1 03:10:40 2012)***  ***DOWN: 1 times (since Sun Apr 1 03:08:38 2012)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 1 times (since Sun Apr 1 03:08:59 2012)***  ***DOWN: 1 times (since Sun Apr 1 03:10:51 2012)***  ***Local Link State:***  ***UP: 1 times (since Sun Apr 1 03:08:54 2012)***  ***DOWN: 1 times (since Sun Apr 1 03:10:50 2012)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: ATTACHED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 23.15.247.43: bytes=32 time=234ms TTL=50***  ***Reply from 23.15.247.43: bytes=32 time=229ms TTL=50***  4) When ping pkt size < 1473, there is no ip fragment    5) When ping pkt size ≥ 1473, there is ip fragment | | |
| Test Result |  | | |

### UsbModem\_OnDemand\_6

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_OnDemand\_6 | | |
| Priority | High | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Http video through usbmodem WAN | | |
| Pre-condition | 1) Config usbmodem mode as on-demand  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan\_failover\_test ip 8.8.8.8***  ***track wan\_failover\_test interval 5***  ***track wan\_failover\_test use-for-wan-testing***  ***capwap client server port 80***  ***vpn client-ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 vpn-mode layer-3***  ***vpn ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 gateway 115.236.187.186 client-name 7FJRFnPmu9LA894kZB7GSKzJGWZtNLwJ password \*\*\****  ***vpn tunnel-policy vpn\_tunnel\_policy client ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 primary***  ***routing route-request enable***  ***routing internal-sub-network 192.168.85.0/24***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) Check the WAN status as eth0 is the default WAN  2) Try to play http video from client,  [***http://www.letv.com/ptv/vplay/1257936.html***](http://www.letv.com/ptv/vplay/1257936.html)  3) Trigger failover to usbmodem WAN via shut eth0  4) Continue playing the http video  5) Trigger failback to eth0 WAN via enable eth0  6) Repeat step 4) | | |
| Expect result | 1) Play http video successfully before/ after faiover/ failback  2) failover/ failback without error  3) Have to replay the video after failover/ failback  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Before failover - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 2 times (since Wed Mar 28 09:57:31 2012)***  ***DOWN: 2 times (since Wed Mar 28 09:57:22 2012)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:03:38 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 2 times (since Wed Mar 28 09:57:38 2012)***  ***DOWN: 4 times (since Wed Mar 28 10:17:18 2012)***  ***Local Link State:***  ***UP: 2 times (since Wed Mar 28 09:57:33 2012)***  ***DOWN: 2 times (since Wed Mar 28 10:17:08 2012)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: ATTACHED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - After failover - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 11912***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***1848 33 0 0 0 0 33 | 4106 44 0 0 44 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: down***  ***UP: 5 times (since Wed Mar 28 10:43:15 2012)***  ***DOWN: 6 times (since Wed Mar 28 10:52:03 2012)***  ***Local Link State:***  ***UP: 2 times (since Wed Mar 28 10:34:57 2012)***  ***DOWN: 2 times (since Wed Mar 28 10:51:53 2012)***  ***Active: no***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 6 times (since Wed Mar 28 10:52:18 2012)***  ***DOWN: 10 times (since Wed Mar 28 10:43:23 2012)***  ***Local Link State:***  ***UP: 6 times (since Wed Mar 28 10:52:13 2012)***  ***DOWN: 5 times (since Wed Mar 28 10:43:15 2012)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: FAILOVER***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 D***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - After failback - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 2 times (since Wed Mar 28 09:57:31 2012)***  ***DOWN: 2 times (since Wed Mar 28 09:57:22 2012)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:03:38 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 2 times (since Wed Mar 28 09:57:38 2012)***  ***DOWN: 4 times (since Wed Mar 28 10:17:18 2012)***  ***Local Link State:***  ***UP: 2 times (since Wed Mar 28 09:57:33 2012)***  ***DOWN: 2 times (since Wed Mar 28 10:17:08 2012)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: ATTACHED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0*** | | |
| Test Result |  | | |

### UsbModem\_OnDemand\_7

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_OnDemand\_7 | | |
| Priority | High | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Http download through usbmodem WAN | | |
| Pre-condition | 1) Config usbmodem mode as on-demand  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan\_failover\_test ip 8.8.8.8***  ***track wan\_failover\_test interval 5***  ***track wan\_failover\_test use-for-wan-testing***  ***capwap client server port 80***  ***vpn client-ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 vpn-mode layer-3***  ***vpn ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 gateway 115.236.187.186 client-name 7FJRFnPmu9LA894kZB7GSKzJGWZtNLwJ password \*\*\****  ***vpn tunnel-policy vpn\_tunnel\_policy client ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 primary***  ***routing route-request enable***  ***routing internal-sub-network 192.168.85.0/24***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) Check the WAN status as eth0 is the default WAN  2) Try to download file “QQ2012Beta1\_QQProtect2.5.exe” from client  [***http://im.qq.com/qq/2012/safe/***](http://im.qq.com/qq/2012/safe/)  3) Trigger failover to usbmodem WAN via shut eth0  4) Continue downloading the file  5) Trigger failback to eth0 WAN via enable eth0  6) Repeat step 4) | | |
| Expect result | 1) Http download successfully before/ after faiover/ failback  2) failover/ failback without error  3) Have to re-download the file after failover/ failback  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Before failover - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 2 times (since Wed Mar 28 09:57:31 2012)***  ***DOWN: 2 times (since Wed Mar 28 09:57:22 2012)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:03:38 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 2 times (since Wed Mar 28 09:57:38 2012)***  ***DOWN: 4 times (since Wed Mar 28 10:17:18 2012)***  ***Local Link State:***  ***UP: 2 times (since Wed Mar 28 09:57:33 2012)***  ***DOWN: 2 times (since Wed Mar 28 10:17:08 2012)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: ATTACHED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - After failover - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 15290***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***2556 16 0 0 0 0 16 | 2157 22 0 0 22 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: down***  ***UP: 4 times (since Wed Apr 4 06:31:05 2012)***  ***DOWN: 4 times (since Wed Apr 4 07:04:04 2012)***  ***Local Link State:***  ***UP: 2 times (since Wed Apr 4 06:30:50 2012)***  ***DOWN: 2 times (since Wed Apr 4 07:03:57 2012)***  ***Active: no***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 3 times (since Wed Apr 4 07:04:19 2012)***  ***DOWN: 6 times (since Wed Apr 4 06:31:13 2012)***  ***Local Link State:***  ***UP: 4 times (since Wed Apr 4 07:04:14 2012)***  ***DOWN: 3 times (since Wed Apr 4 06:31:05 2012)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: FAILOVER***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 D***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 172.28.106.7 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***172.18.0.1 0.0.0.0 255.255.255.255 UH 0 0 0 tunnel0***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***192.168.30.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***10.155.33.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***192.168.10.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***172.28.0.0 0.0.0.0 255.255.0.0 U 1 0 0 tunnel0***  ***172.18.0.0 0.0.0.0 255.255.0.0 U 1 0 0 tunnel0***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - After failback - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 2 times (since Wed Mar 28 09:57:31 2012)***  ***DOWN: 2 times (since Wed Mar 28 09:57:22 2012)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:03:38 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 2 times (since Wed Mar 28 09:57:38 2012)***  ***DOWN: 4 times (since Wed Mar 28 10:17:18 2012)***  ***Local Link State:***  ***UP: 2 times (since Wed Mar 28 09:57:33 2012)***  ***DOWN: 2 times (since Wed Mar 28 10:17:08 2012)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: ATTACHED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0*** | | |
| Test Result |  | | |

### UsbModem\_OnDemand\_8

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_OnDemand\_8 | | |
| Priority | Accept | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | VPN tunnel accessibility | | |
| Pre-condition | 1) Config usbmodem mode as on-demand  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  5) VPN tunnel for usbmodem WAN has been configured  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan\_failover\_test ip 8.8.8.8***  ***track wan\_failover\_test interval 5***  ***track wan\_failover\_test use-for-wan-testing***  ***vpn client-ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 vpn-mode layer-3***  ***vpn ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 gateway 115.236.187.186 client-name 7FJRFnPmu9LA894kZB7GSKzJGWZtNLwJ password \*\*\****  ***vpn tunnel-policy vpn\_tunnel\_policy client ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 primary***  ***routing route-request enable***  ***routing internal-sub-network 192.168.85.0/24***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) Ping another VPN endpoint through tunnel  ***ping 10.155.33.67***  2) Trigger failover to usbmodem WAN via shut eth0, continue ping process  3) Continue ping process and check the WAN and usbmodem status from both HM and console  4) Trigger failback to eth0 WAN via enable eth0, continue ping process  5) Repeat step 3) | | |
| Expect result | 1) Ping through VPN tunnel successfully with failover and failback  2) failover/ failback without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Before failover - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 2 times (since Wed Mar 28 09:57:31 2012)***  ***DOWN: 2 times (since Wed Mar 28 09:57:22 2012)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:03:38 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 2 times (since Wed Mar 28 09:57:38 2012)***  ***DOWN: 4 times (since Wed Mar 28 10:17:18 2012)***  ***Local Link State:***  ***UP: 2 times (since Wed Mar 28 09:57:33 2012)***  ***DOWN: 2 times (since Wed Mar 28 10:17:08 2012)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: ATTACHED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 10.155.33.67 with 32 bytes of data:***  ***Reply from 10.155.33.67: bytes=32 time=1ms TTL=126***  ***Reply from 10.155.33.67: bytes=32 time=1ms TTL=126***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - After failover - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 4200***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***9034 59 0 0 0 0 59 | 9435 74 0 0 74 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: down***  ***UP: 2 times (since Wed Apr 4 08:25:50 2012)***  ***DOWN: 2 times (since Wed Apr 4 08:26:23 2012)***  ***Local Link State:***  ***UP: 1 times (since Wed Apr 4 08:25:38 2012)***  ***DOWN: 2 times (since Wed Apr 4 08:26:20 2012)***  ***Active: no***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 2 times (since Wed Apr 4 08:26:38 2012)***  ***DOWN: 2 times (since Wed Apr 4 08:25:58 2012)***  ***Local Link State:***  ***UP: 2 times (since Wed Apr 4 08:26:33 2012)***  ***DOWN: 1 times (since Wed Apr 4 08:25:50 2012)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: FAILOVER***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 D***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.31.218.171 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***172.18.0.1 0.0.0.0 255.255.255.255 UH 0 0 0 tunnel0***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***192.168.30.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***10.155.33.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***192.168.10.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***172.28.0.0 0.0.0.0 255.255.0.0 U 1 0 0 tunnel0***  ***172.18.0.0 0.0.0.0 255.255.0.0 U 1 0 0 tunnel0***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 10.155.33.67: bytes=32 time=142ms TTL=126***  ***Reply from 10.155.33.67: bytes=32 time=139ms TTL=126***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - After failback - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 2 times (since Wed Mar 28 09:57:31 2012)***  ***DOWN: 2 times (since Wed Mar 28 09:57:22 2012)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:03:38 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 2 times (since Wed Mar 28 09:57:38 2012)***  ***DOWN: 4 times (since Wed Mar 28 10:17:18 2012)***  ***Local Link State:***  ***UP: 2 times (since Wed Mar 28 09:57:33 2012)***  ***DOWN: 2 times (since Wed Mar 28 10:17:08 2012)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: ATTACHED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 10.155.33.67: bytes=32 time=1ms TTL=126***  ***Reply from 10.155.33.67: bytes=32 time=1ms TTL=126*** | | |
| Test Result |  | | |

### UsbModem\_OnDemand\_9

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_OnDemand\_9 | | |
| Priority | Middle | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Play video through vpn tunnel when WAN is usbmodem | | |
| Pre-condition | 1) Config usbmodem mode as on-demand  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  5) VPN tunnel for usbmodem WAN has been configured  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan\_failover\_test ip 8.8.8.8***  ***track wan\_failover\_test interval 5***  ***track wan\_failover\_test use-for-wan-testing***  ***vpn client-ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 vpn-mode layer-3***  ***vpn ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 gateway 115.236.187.186 client-name 7FJRFnPmu9LA894kZB7GSKzJGWZtNLwJ password \*\*\****  ***vpn tunnel-policy vpn\_tunnel\_policy client ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 primary***  ***routing route-request enable***  ***routing internal-sub-network 192.168.85.0/24***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) Check the WAN status as eth0 is the default WAN  2) Access the video on HQ server,  ***\\10.155.33.67\share\cctv.rm***  3) Try to play the video from client  4) Trigger failover to usbmodem WAN via shut eth0  5) Continue playing the video through vpn tunnel  6) Trigger failback to eth0 WAN via enable eth0  7) Continue playing the video | | |
| Expect result | 1) Play the video through vpn tunnel from client successfully  2) Have to replay the video after failover/ failback  3) failover/ failback without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Before failover - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 2 times (since Wed Mar 28 09:57:31 2012)***  ***DOWN: 2 times (since Wed Mar 28 09:57:22 2012)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:03:38 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 2 times (since Wed Mar 28 09:57:38 2012)***  ***DOWN: 4 times (since Wed Mar 28 10:17:18 2012)***  ***Local Link State:***  ***UP: 2 times (since Wed Mar 28 09:57:33 2012)***  ***DOWN: 2 times (since Wed Mar 28 10:17:08 2012)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: ATTACHED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - After failover - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 4200***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***9034 59 0 0 0 0 59 | 9435 74 0 0 74 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: down***  ***UP: 2 times (since Wed Apr 4 08:25:50 2012)***  ***DOWN: 2 times (since Wed Apr 4 08:26:23 2012)***  ***Local Link State:***  ***UP: 1 times (since Wed Apr 4 08:25:38 2012)***  ***DOWN: 2 times (since Wed Apr 4 08:26:20 2012)***  ***Active: no***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 2 times (since Wed Apr 4 08:26:38 2012)***  ***DOWN: 2 times (since Wed Apr 4 08:25:58 2012)***  ***Local Link State:***  ***UP: 2 times (since Wed Apr 4 08:26:33 2012)***  ***DOWN: 1 times (since Wed Apr 4 08:25:50 2012)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: FAILOVER***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 D***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.31.218.171 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***172.18.0.1 0.0.0.0 255.255.255.255 UH 0 0 0 tunnel0***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***192.168.30.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***10.155.33.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***192.168.10.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***172.28.0.0 0.0.0.0 255.255.0.0 U 1 0 0 tunnel0***  ***172.18.0.0 0.0.0.0 255.255.0.0 U 1 0 0 tunnel0***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***Have to replay the video since the WAN connection has changed***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - After failback - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 2 times (since Wed Mar 28 09:57:31 2012)***  ***DOWN: 2 times (since Wed Mar 28 09:57:22 2012)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:03:38 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 2 times (since Wed Mar 28 09:57:38 2012)***  ***DOWN: 4 times (since Wed Mar 28 10:17:18 2012)***  ***Local Link State:***  ***UP: 2 times (since Wed Mar 28 09:57:33 2012)***  ***DOWN: 2 times (since Wed Mar 28 10:17:08 2012)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: ATTACHED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***Have to replay the video since the WAN connection has changed*** | | |
| Test Result |  | | |

### UsbModem\_OnDemand\_10

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_OnDemand\_10 | | |
| Priority | Middle | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | FTP download file through vpn tunnel when WAN is usbmodem | | |
| Pre-condition | 1) Config usbmodem mode as on-demand  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  5) VPN tunnel for usbmodem WAN has been configured  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan\_failover\_test ip 8.8.8.8***  ***track wan\_failover\_test interval 5***  ***track wan\_failover\_test use-for-wan-testing***  ***vpn client-ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 vpn-mode layer-3***  ***vpn ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 gateway 115.236.187.186 client-name 7FJRFnPmu9LA894kZB7GSKzJGWZtNLwJ password \*\*\****  ***vpn tunnel-policy vpn\_tunnel\_policy client ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 primary***  ***routing route-request enable***  ***routing internal-sub-network 192.168.85.0/24***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) Check the WAN status as eth0 is the default WAN  2) Access HQ FTP server,  ***ftp 10.155.33.67***  3) Download file “hivemanager-5.0r3-beta-1-1U-patch-20120217.tar.gz” to client  4) Trigger failover to usbmodem WAN via shut eth0  5) Continue downloading through vpn tunnel  6) Trigger failback to eth0 WAN via enable eth0  7) Continue downloading the file | | |
| Expect result | 1) Download file through vpn tunnel from client successfully  2) FTP resume file transfer after failover/ failback  3) failover/ failback without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Before failover - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 2 times (since Wed Mar 28 09:57:31 2012)***  ***DOWN: 2 times (since Wed Mar 28 09:57:22 2012)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:03:38 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 2 times (since Wed Mar 28 09:57:38 2012)***  ***DOWN: 4 times (since Wed Mar 28 10:17:18 2012)***  ***Local Link State:***  ***UP: 2 times (since Wed Mar 28 09:57:33 2012)***  ***DOWN: 2 times (since Wed Mar 28 10:17:08 2012)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: ATTACHED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - After failover - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 4200***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***9034 59 0 0 0 0 59 | 9435 74 0 0 74 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: down***  ***UP: 2 times (since Wed Apr 4 08:25:50 2012)***  ***DOWN: 2 times (since Wed Apr 4 08:26:23 2012)***  ***Local Link State:***  ***UP: 1 times (since Wed Apr 4 08:25:38 2012)***  ***DOWN: 2 times (since Wed Apr 4 08:26:20 2012)***  ***Active: no***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 2 times (since Wed Apr 4 08:26:38 2012)***  ***DOWN: 2 times (since Wed Apr 4 08:25:58 2012)***  ***Local Link State:***  ***UP: 2 times (since Wed Apr 4 08:26:33 2012)***  ***DOWN: 1 times (since Wed Apr 4 08:25:50 2012)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: FAILOVER***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 D***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.31.218.171 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***172.18.0.1 0.0.0.0 255.255.255.255 UH 0 0 0 tunnel0***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***192.168.30.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***10.155.33.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***192.168.10.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***172.28.0.0 0.0.0.0 255.255.0.0 U 1 0 0 tunnel0***  ***172.18.0.0 0.0.0.0 255.255.0.0 U 1 0 0 tunnel0***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***Continue FTP process since FTP support resuming transfer***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - After failback - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 2 times (since Wed Mar 28 09:57:31 2012)***  ***DOWN: 2 times (since Wed Mar 28 09:57:22 2012)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:03:38 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 2 times (since Wed Mar 28 09:57:38 2012)***  ***DOWN: 4 times (since Wed Mar 28 10:17:18 2012)***  ***Local Link State:***  ***UP: 2 times (since Wed Mar 28 09:57:33 2012)***  ***DOWN: 2 times (since Wed Mar 28 10:17:08 2012)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: ATTACHED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***Continue FTP process since FTP support resuming transfer*** | | |
| Test Result |  | | |

### UsbModem\_OnDemand\_11

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_OnDemand\_11 | | |
| Priority | High | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Delta switch from on-demand to always-connect mode | | |
| Pre-condition | 1) Config usbmodem mode as on-demand  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) From client, ping an external endpoint that is outside of the BR's vlan, while WAN is eth0 by default  2) Delta config usbmodem mode to always-connect without reboot BR  ***usbm mode a***  3) Continue ping process and check the WAN and usbmodem status  4) Switch usbmodem mode back to on-demand  ***no usbm mode***  5) Repeat step 3) | | |
| Expect result | 1) WAN is eth0 by default, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm sUSB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=127ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=139ms TTL=44***  2) WAN is eth0 once config usbmodem mode to always-connect, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.35.64.96 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:651 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:652 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:54405 (53.1 KiB) TX bytes:54250 (52.9 KiB)***  ***PPP Process Status:***  ***PID: 1952***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***54405 651 0 0 0 0 651 | 54250 652 0 0 652 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=127ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=139ms TTL=44***  3) WAN is eth0 after switch usbmodem mode back to on-demand, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm sUSB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=127ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=139ms TTL=44*** | | |
| Test Result |  | | |

### UsbModem\_OnDemand\_12

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_OnDemand\_12 | | |
| Priority | Middle | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Delta switch from on-demand to primary-wan mode | | |
| Pre-condition | 1) Config usbmodem mode as on-demand  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) From client, ping an external endpoint that is outside of the BR's vlan, while WAN is eth0 by default  2) Delta config usbmodem mode to primary-wan without reboot BR  ***usbm mode p***  3) Continue ping process and check the WAN and usbmodem status  4) Switch usbmodem mode back to on-demand  ***no usbm mode***  5) Repeat step 3) | | |
| Expect result | 1) WAN is eth0 by default, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm sUSB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=127ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=139ms TTL=44***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=127ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=139ms TTL=44***  2) WAN is usbmodem once config its mode to primary-wan, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: primary-wan***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.35.64.96 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:30555 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:30703 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:2566496 (2.4 MiB) TX bytes:2581432 (2.4 MiB)***  ***PPP Process Status:***  ***PID: 1952***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***2566496 30555 0 0 0 0 30555 | 2581432 30703 0 0 30703 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 03:27:59 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 88***  ***ifmon\_up\_time: Sat Mar 23 20:35:01 2013***  ***ifmon\_down\_count: 84***  ***ifmon\_down\_time: Sat Mar 23 20:34:55 2013***  ***dft\_ifmon\_up\_count: 4***  ***dft\_ifmon\_up\_time: Sat Mar 23 03:30:57 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 0 0 0 ppp0***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=127ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=139ms TTL=44***  3) WAN is eth0 after switch usbmodem mode back to on-demand, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm sUSB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=127ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=139ms TTL=44***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=127ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=139ms TTL=44*** | | |
| Test Result |  | | |

## UsbModem\_AlwaysConnected

### UsbModem\_AlwaysConnected\_1

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_AlwaysConnected\_1 | | |
| Priority | Accept | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | 3g connection status | | |
| Pre-condition | 1) Config usbmodem mode as always-connected  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem mode always-connected***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) Check the usbmodem status while WAN is eth0 by default  2) Trigger failover to usbmodem WAN via shut eth0  ***in e0 sh***  3) Check the WAN and usbmodem status | | |
| Expect result | 1) WAN is eth0 by default, and 3g connection is “Backup”  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: up***  ***Interface: eth0; State: up***  ***Interface: ppp0; State: up***  ***[use-for-wan-eth0]***  ***WAN Monitor State: up***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: up***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 2***  ***lkdn\_time: Fri Mar 22 22:54:34 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sat Mar 23 02:14:19 2013***  ***last\_event: PRIMARY\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 02:14:25 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  2) WAN is usbmodem once failover, and 3g connection is“FAILOVER”  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: up***  ***Interface: eth0; State: unknown***  ***Interface: ppp0; State: up***  ***[use-for-wan-eth0]***  ***WAN Monitor State: unknown***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: up***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: FAILOVER***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Sat Mar 23 02:14:25 2013***  ***last\_event: PRIMARY\_WAN\_DOWN***  ***last\_evt\_time: Sat Mar 23 03:25:06 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 0.0.0.0 wan - 08ea:440c:32c0 D***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0*** | | |
| Test Result |  | | |

### UsbModem\_AlwaysConnected\_2

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_AlwaysConnected\_2 | | |
| Priority | Accept | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Failover usbmodem via unplug eth0 | | |
| Pre-condition | 1) Config usbmodem mode as always-connected  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem mode always-connected***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) From client, ping an external endpoint that is outside of the BR's vlan, and check the DNS of BR, while WAN is eth0 by default  2) Trigger failover to usbmodem WAN via shut eth0  ***in eth0 sh***  3) Continue ping process and check the DNS of BR, and check the WAN and usbmodem status  4) Trigger failback to eth0 WAN via enable eth0  ***no in eth0 sh***  5) Repeat step 3) | | |
| Expect result | 1) WAN is eth0 by default, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 2***  ***lkdn\_time: Fri Mar 22 22:54:34 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sat Mar 23 02:14:19 2013***  ***last\_event: PRIMARY\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 02:14:25 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=34ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=33ms TTL=44***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh dns***  ***DNS server from DHCP:***  ***Domain name suffix: RF&Driver***  ***Primary : 10.155.3.222***  ***Secondary : 0.0.0.0***  ***Tertiary : 0.0.0.0***  2) WAN is usbmodem once failover, and ping without error, and DNS changed accordingly  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: FAILOVER***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Sat Mar 23 02:14:25 2013***  ***last\_event: PRIMARY\_WAN\_DOWN***  ***last\_evt\_time: Sat Mar 23 03:25:06 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 0.0.0.0 wan - 08ea:440c:32c0 D***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Ping during failover - - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 192.168.85.1: Destination net unreachable.***  ***Reply from 192.168.85.1: Destination net unreachable.***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Ping after failover - - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=136ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=138ms TTL=45***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh dns***  ***DNS server from DHCP:***  ***Domain name suffix:***  ***Primary : 221.12.1.227***  ***Secondary : 221.12.33.227***  ***Tertiary : 0.0.0.0***  3) WAN is eth0 after failback, and ping without error, and DNS changed accordingly  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 2***  ***lkdn\_time: Fri Mar 22 22:54:34 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sat Mar 23 02:14:19 2013***  ***last\_event: PRIMARY\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 02:14:25 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=32ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=32ms TTL=44***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh dns***  ***DNS server from DHCP:***  ***Domain name suffix: RF&Driver***  ***Primary : 10.155.3.222***  ***Secondary : 0.0.0.0***  ***Tertiary : 0.0.0.0*** | | |
| Test Result |  | | |

### UsbModem\_AlwaysConnected\_3

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_AlwaysConnected\_3 | | |
| Priority | Accept | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Failover usbmodem when no internet access through eth0 | | |
| Pre-condition | 1) Config usbmodem mode as always-connected  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan\_failover\_test ip 8.8.8.8***  ***track wan\_failover\_test interval 5***  ***track wan\_failover\_test use-for-wan-testing***  ***capwap client server name 10.155.33.220***  ***capwap client vhm-name JingLi-VHM***  ***vpn client-ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 vpn-mode layer-3***  ***vpn ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 gateway 115.236.187.186 client-name 7FJRFnPmu9LA894kZB7GSKzJGWZtNLwJ password \*\*\****  ***vpn tunnel-policy vpn\_tunnel\_policy client ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 primary***  ***routing route-request enable***  ***routing internal-sub-network 192.168.85.0/24***  ***usbmodem mode always-connected***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) From client, ping an external endpoint that is outside of the BR's vlan, while WAN is eth0 by default  2) Trigger failover to usbmodem WAN when internet access is unavailable  ***Unplug the internet cable from the HUB which the BR is connected with***  3) Continue ping process and check the WAN and usbmodem status  4) Trigger failback to eth0 WAN when internet access through eth0 is restored  ***Plug the internet cable back to the HUB which the BR is connected with***  5) Repeat step 3) | | |
| Expect result | 1) WAN is eth0 by default, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2307***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***17748 216 0 0 0 0 216 | 17754 217 0 0 217 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 06:57:12 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 06:57:18 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Mar 29 06:57:12 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: CONNECTED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.28.188.69 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=34ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=33ms TTL=44***  2) WAN is usbmodem once failover, and ping without error  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2307***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***451674 3187 0 0 0 0 3187 | 253391 2734 0 0 2734 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: down***  ***UP: 3 times (since Thu Mar 29 07:30:51 2012)***  ***DOWN: 3 times (since Thu Mar 29 07:36:50 2012)***  ***Local Link State:***  ***UP: 3 times (since Thu Mar 29 07:30:46 2012)***  ***DOWN: 2 times (since Thu Mar 29 07:27:15 2012)***  ***Active: no***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 2 times (since Thu Mar 29 07:49:12 2012)***  ***DOWN: 1 times (since Thu Mar 29 07:48:58 2012)***  ***Local Link State:***  ***UP: 1 times (since Thu Mar 29 06:57:12 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: FAILOVER***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.28.188.69 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 32766 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - debug console - - - - - - - - - - - - - - - - - - - - - - - -*  ***2012-03-29 07:53:54 debug ah\_brd: [brd\_wanmon]: WFOIFM: Ping 8.8.8.8 via eth0: 100% packet loss***  ***2012-03-29 07:53:54 debug ah\_brd: [brd\_wanmon]: WFOIFM: Ping 8.8.8.8 via eth0 failed***  ***2012-03-29 07:53:54 debug ah\_brd: [brd\_wanmon]: WFOIFM: Interface eth0: 1 targets tested, result: FAIL***  ***2012-03-29 07:53:54 debug ah\_brd: [brd\_wanmon]: WFOIFM: Use cached gw IP 0x0 for ppp0***  ***2012-03-29 07:53:54 debug ah\_brd: [brd\_wanmon]: WFOIFM: Interface ppp0 disallows ARP (ifr\_flags = 0x10d1)***  ***2012-03-29 07:53:54 debug ah\_brd: [brd\_wanmon]: WFOIFM: Going to test 1 targets for ppp0 ...***  ***2012-03-29 07:53:54 debug ah\_brd: [brd\_wanmon]: WFOIFM: Ping cmd [/bin/ping -q -c 1 -I ppp0 -w 2 8.8.8.8] executing***  ***2012-03-29 07:53:54 debug ah\_brd: [brd\_wanmon]: WFOIFM: Ping 8.8.8.8 via ppp0: 0% packet loss***  ***2012-03-29 07:53:54 debug ah\_brd: [brd\_wanmon]: WFOIFM: Ping 8.8.8.8 via ppp0: RTT min/avg/max = 132.227997/132.227997/132.227997***  ***2012-03-29 07:53:56 debug ah\_brd: [brd\_wanmon]: WFOIFM: Ping cmd [/bin/ping -q -c 1 -I ppp0 -w 2 8.8.8.8] executing***  ***2012-03-29 07:53:57 debug ah\_brd: [brd\_wanmon]: WFOIFM: Ping 8.8.8.8 via ppp0: 0% packet loss***  ***2012-03-29 07:53:57 debug ah\_brd: [brd\_wanmon]: WFOIFM: Ping 8.8.8.8 via ppp0: RTT min/avg/max = 119.209000/119.209000/119.209000***  ***2012-03-29 07:53:59 debug ah\_brd: [brd\_wanmon]: WFOIFM: Ping cmd [/bin/ping -q -c 1 -I ppp0 -w 2 8.8.8.8] executing***  ***2012-03-29 07:53:59 debug ah\_brd: [brd\_wanmon]: WFOIFM: Ping 8.8.8.8 via ppp0: 0% packet loss***  ***2012-03-29 07:53:59 debug ah\_brd: [brd\_wanmon]: WFOIFM: Ping 8.8.8.8 via ppp0: RTT min/avg/max = 110.170998/110.170998/110.170998***  ***2012-03-29 07:54:01 debug ah\_brd: [brd\_wanmon]: WFOIFM: Interface ppp0: 1 targets tested, result: PASS***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Ping during failover - - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 10.155.30.55: Destination net unreachable.***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Ping after failover - - - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=136ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=138ms TTL=45***  3) WAN is eth0 after failback, and ping without error  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2307***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***17748 216 0 0 0 0 216 | 17754 217 0 0 217 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 06:57:12 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 06:57:18 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Mar 29 06:57:12 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: CONNECTED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.28.188.69 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=34ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=33ms TTL=44*** | | |
| Test Result |  | | |

### UsbModem\_AlwaysConnected\_4

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_AlwaysConnected\_4 | | |
| Priority | High | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Failover usbmodem via track-wanfailure | | |
| Pre-condition | 1) Config usbmodem mode as always-connected  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  5) Open debug toggle,  ***\_deb brd wanmon***  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem mode always-connected***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) From client, ping an external endpoint that is outside of the BR's vlan, while WAN is eth0 by default  2) Track-wan fail on eth0 via config invalid ip for tracking  ***track-wan use-for-wan-eth0 ip 1.1.1.1***  3) Continue ping process and check the WAN and usbmodem status  4) Trigger failback to eth0 WAN via remove invalid ip for tracking  ***no track-wan use-for-wan-eth0 ip 1.1.1.1***  5) Repeat step 3) | | |
| Expect result | 1) WAN is eth0 by default, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: up***  ***Interface: eth0; State: up***  ***Interface: ppp0; State: up***  ***[use-for-wan-eth0]***  ***WAN Monitor State: up***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: up***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 2***  ***lkdn\_time: Fri Mar 22 22:54:34 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sat Mar 23 02:14:19 2013***  ***last\_event: PRIMARY\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 02:14:25 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - debug console - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh lo b | i wanmon***  ***……***  ***2012-03-29 08:04:22 debug ah\_brd: [brd\_wanmon]: WFOIFM: Interface eth0: 1 targets tested, result: PASS***  ***2012-03-29 08:04:22 debug ah\_brd: [brd\_wanmon]: WFOIFM: Use cached gw IP 0x0 for ppp0***  ***2012-03-29 08:04:22 debug ah\_brd: [brd\_wanmon]: WFOIFM: Interface ppp0 disallows ARP (ifr\_flags = 0x10d1)***  ***2013-03-23 03:41:25 debug ah\_brd: [brd\_wanmon]: WFOIFM: [use-for-wan-usbnet0]: Interface ppp0: 1 targets tested, result: PASS***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=34ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=33ms TTL=44***  2) WAN is usbmodem once failover, and ping without error  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.35.64.96 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:421 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:422 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:35085 (34.2 KiB) TX bytes:34930 (34.1 KiB)***  ***PPP Process Status:***  ***PID: 1952***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***35085 421 0 0 0 0 421 | 34930 422 0 0 422 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: up***  ***Interface: eth0; State: up***  ***Interface: ppp0; State: up***  ***[use-for-wan-eth0]***  ***WAN Monitor State: down***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: up***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 2***  ***lkdn\_time: Fri Mar 22 22:54:34 2013***  ***ifmon\_up\_count: 83***  ***ifmon\_up\_time: Sat Mar 23 01:32:21 2013***  ***ifmon\_down\_count: 81***  ***ifmon\_down\_time: Sat Mar 23 01:42:20 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: FAILOVER***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sat Mar 23 01:42:30 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 01:42:38 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 10001 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - debug console - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh lo b | i wanmon***  ***2013-03-23 01:58:26 debug ah\_brd: [brd\_wanmon]: WFOIFM: [use-for-wan-eth0]: Interface eth0: 2 targets tested, result: FAIL***  ***……***  ***2013-03-23 01:58:23 debug ah\_brd: [brd\_wanmon]: WFOIFM: [use-for-wan-usbnet0]: Interface ppp0: 1 targets tested, result: PASS***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Ping during failover - - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 192.168.85.1: Destination net unreachable.***  ***Reply from 192.168.85.1: Destination net unreachable.***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Ping after failover - - - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=136ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=138ms TTL=45***  3) WAN is eth0 after failback, and ping without error  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: up***  ***Interface: eth0; State: up***  ***Interface: ppp0; State: up***  ***[use-for-wan-eth0]***  ***WAN Monitor State: up***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: up***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 2***  ***lkdn\_time: Fri Mar 22 22:54:34 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sat Mar 23 02:14:19 2013***  ***last\_event: PRIMARY\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 02:14:25 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - debug console - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh lo b | i wanmon***  ***……***  ***2012-03-29 08:04:22 debug ah\_brd: [brd\_wanmon]: WFOIFM: Interface eth0: 1 targets tested, result: PASS***  ***2012-03-29 08:04:22 debug ah\_brd: [brd\_wanmon]: WFOIFM: Use cached gw IP 0x0 for ppp0***  ***2012-03-29 08:04:22 debug ah\_brd: [brd\_wanmon]: WFOIFM: Interface ppp0 disallows ARP (ifr\_flags = 0x10d1)***  ***2013-03-23 03:41:25 debug ah\_brd: [brd\_wanmon]: WFOIFM: [use-for-wan-usbnet0]: Interface ppp0: 1 targets tested, result: PASS***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=34ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=33ms TTL=44*** | | |
| Test Result |  | | |

### UsbModem\_AlwaysConnected\_5

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_AlwaysConnected\_5 | | |
| Priority | Low | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Ping with different pkt size through usbmodem WAN | | |
| Pre-condition | 1) Config usbmodem mode as always-connected  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) MTU of each peer of network (Client/ BR/ Switch) is 1518  5) Client get association with BR either by eth or wifi  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan ip 23.15.247.43***  ***track wan use-for-wan-testing***  ***routing route-request enable***  ***usbmodem mode always-connected***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) From client, ping an external endpoint that is outside of the BR's vlan, with pkt size 64, while WAN is eth0 by default  2) Trigger failover to usbmodem WAN via shut eth0  3) Continue ping process and check the WAN and usbmodem status  4) Trigger failback to eth0 WAN via enable eth0  5) Repeat step 3)  6) Repeat step 1)-5) with ping pkt size 1472  7) Repeat step 1)-5) with ping pkt size 1473 | | |
| Expect result | 1) WAN is eth0 by default, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2307***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***17748 216 0 0 0 0 216 | 17754 217 0 0 217 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 06:57:12 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 06:57:18 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Mar 29 06:57:12 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: CONNECTED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.28.188.69 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=34ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=33ms TTL=44***  2) WAN is usbmodem once failover, and ping without error  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2307***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***61906 513 0 0 0 0 513 | 52199 501 0 0 501 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: down***  ***UP: 2 times (since Thu Mar 29 07:17:34 2012)***  ***DOWN: 2 times (since Thu Mar 29 07:27:28 2012)***  ***Local Link State:***  ***UP: 2 times (since Thu Mar 29 07:17:17 2012)***  ***DOWN: 2 times (since Thu Mar 29 07:27:15 2012)***  ***Active: no***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 06:57:18 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Mar 29 06:57:12 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: FAILOVER***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 D***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.28.188.69 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Ping during failover - - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 192.168.85.1: Destination net unreachable.***  ***Reply from 192.168.85.1: Destination net unreachable.***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Ping after failover - - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=136ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=138ms TTL=45***  3) WAN is eth0 after failback, and ping without error  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2307***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***17748 216 0 0 0 0 216 | 17754 217 0 0 217 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 06:57:12 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 06:57:18 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Mar 29 06:57:12 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: CONNECTED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.28.188.69 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=32ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=32ms TTL=44***  4) When ping pkt size < 1473, there is no ip fragment    5) When ping pkt size ≥ 1473, there is ip fragment | | |
| Test Result |  | | |

### UsbModem\_AlwaysConnected\_6

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_AlwaysConnected\_6 | | |
| Priority | High | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Http video through usbmodem WAN | | |
| Pre-condition | 1) Config usbmodem mode as always-connected  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi | | |
| Test procedure | 1) Check the WAN status as eth0 is the default WAN  2) Try to play http video from client,  [***http://www.letv.com/ptv/vplay/1257936.html***](http://www.letv.com/ptv/vplay/1257936.html)  3) Trigger failover to usbmodem WAN via shut eth0  4) Continue playing the http video  5) Trigger failback to eth0 WAN via enable eth0  6) Repeat step 4) | | |
| Expect result | 1) Play http video successfully before/ after faiover/ failback  2) failover/ failback without error  3) Have to replay the video after failover/ failback | | |
| Test Result |  | | |

### UsbModem\_AlwaysConnected\_7

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_AlwaysConnected\_7 | | |
| Priority | High | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Http download through usbmodem WAN | | |
| Pre-condition | 1) Config usbmodem mode as always-connected  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi | | |
| Test procedure | 1) Check the WAN status as eth0 is the default WAN  2) Try to download file “QQ2012Beta1\_QQProtect2.5.exe” from client  [***http://im.qq.com/qq/2012/safe/***](http://im.qq.com/qq/2012/safe/)  3) Trigger failover to usbmodem WAN via shut eth0  4) Continue downloading the file  5) Trigger failback to eth0 WAN via enable eth0  6) Repeat step 4) | | |
| Expect result | 1) Http download successfully before/ after faiover/ failback  2) failover/ failback without error  3) Have to re-download the file after failover/ failback | | |
| Test Result |  | | |

### UsbModem\_AlwaysConnected\_8

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_AlwaysConnected\_8 | | |
| Priority | Accept | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | VPN tunnel accessibility | | |
| Pre-condition | 1) Config usbmodem mode as always-connected  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  5) VPN tunnel for usbmodem WAN has been configured  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan\_failover\_test ip 8.8.8.8***  ***track wan\_failover\_test interval 5***  ***track wan\_failover\_test use-for-wan-testing***  ***vpn client-ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 vpn-mode layer-3***  ***vpn ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 gateway 115.236.187.186 client-name 7FJRFnPmu9LA894kZB7GSKzJGWZtNLwJ password \*\*\****  ***vpn tunnel-policy vpn\_tunnel\_policy client ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 primary***  ***routing route-request enable***  ***routing internal-sub-network 192.168.85.0/24***  ***usbmodem mode always-connected***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) Ping another VPN endpoint through tunnel  2) Trigger failover to usbmodem WAN via shut eth0, continue ping process  3) Continue ping process and check the WAN and usbmodem status from both HM and console  4) Trigger failback to eth0 WAN via enable eth0, continue ping process  5) Repeat step 3) | | |
| Expect result | 1) Ping through VPN tunnel successfully with failover and failback  2) failover/ failback without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Before failover - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2307***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***17748 216 0 0 0 0 216 | 17754 217 0 0 217 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 06:57:12 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 06:57:18 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Mar 29 06:57:12 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: CONNECTED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.28.188.69 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 10.155.33.67 with 32 bytes of data:***  ***Reply from 10.155.33.67: bytes=32 time=1ms TTL=126***  ***Reply from 10.155.33.67: bytes=32 time=1ms TTL=126***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - After failover - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2291***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***13701 113 0 0 0 0 113 | 14101 124 0 0 124 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: down***  ***UP: 1 times (since Wed Apr 4 08:58:19 2012)***  ***DOWN: 1 times (since Wed Apr 4 09:03:29 2012)***  ***Local Link State:***  ***UP: 0 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 1 times (since Wed Apr 4 09:03:24 2012)***  ***Active: no***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 1 times (since Wed Apr 4 08:58:26 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Wed Apr 4 08:58:18 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: FAILOVER***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 D***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.40.57.15 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***172.18.0.1 0.0.0.0 255.255.255.255 UH 0 0 0 tunnel0***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***192.168.30.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***10.155.33.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***192.168.10.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***172.28.0.0 0.0.0.0 255.255.0.0 U 1 0 0 tunnel0***  ***172.18.0.0 0.0.0.0 255.255.0.0 U 1 0 0 tunnel0***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 10.155.33.67: bytes=32 time=142ms TTL=126***  ***Reply from 10.155.33.67: bytes=32 time=139ms TTL=126***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - After failback - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 2 times (since Wed Mar 28 09:57:31 2012)***  ***DOWN: 2 times (since Wed Mar 28 09:57:22 2012)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:03:38 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 2 times (since Wed Mar 28 09:57:38 2012)***  ***DOWN: 4 times (since Wed Mar 28 10:17:18 2012)***  ***Local Link State:***  ***UP: 2 times (since Wed Mar 28 09:57:33 2012)***  ***DOWN: 2 times (since Wed Mar 28 10:17:08 2012)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: ATTACHED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 10.155.33.67: bytes=32 time=1ms TTL=126***  ***Reply from 10.155.33.67: bytes=32 time=1ms TTL=126*** | | |
| Test Result |  | | |

### UsbModem\_AlwaysConnected\_9

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_AlwaysConnected\_9 | | |
| Priority | Middle | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Play video through vpn tunnel when WAN is usbmodem | | |
| Pre-condition | 1) Config usbmodem mode as always-connected  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  5) VPN tunnel for usbmodem WAN has been configured  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan\_failover\_test ip 8.8.8.8***  ***track wan\_failover\_test interval 5***  ***track wan\_failover\_test use-for-wan-testing***  ***vpn client-ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 vpn-mode layer-3***  ***vpn ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 gateway 115.236.187.186 client-name 7FJRFnPmu9LA894kZB7GSKzJGWZtNLwJ password \*\*\****  ***vpn tunnel-policy vpn\_tunnel\_policy client ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 primary***  ***routing route-request enable***  ***routing internal-sub-network 192.168.85.0/24***  ***usbmodem mode always-connected***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) Check the WAN status as eth0 is the default WAN  2) Access the video on HQ server,  ***\\10.155.33.67\share\cctv.rm***  3) Try to play the video from client  4) Trigger failover to usbmodem WAN via shut eth0  5) Continue playing the video through vpn tunnel  6) Trigger failback to eth0 WAN via enable eth0  7) Continue playing the video | | |
| Expect result | 1) Play the video through vpn tunnel from client successfully  2) Have to replay the video after failover/ failback  3) failover/ failback without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Before failover - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2307***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***17748 216 0 0 0 0 216 | 17754 217 0 0 217 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 06:57:12 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 06:57:18 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Mar 29 06:57:12 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: CONNECTED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.28.188.69 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - After failover - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2291***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***13701 113 0 0 0 0 113 | 14101 124 0 0 124 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: down***  ***UP: 1 times (since Wed Apr 4 08:58:19 2012)***  ***DOWN: 1 times (since Wed Apr 4 09:03:29 2012)***  ***Local Link State:***  ***UP: 0 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 1 times (since Wed Apr 4 09:03:24 2012)***  ***Active: no***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 1 times (since Wed Apr 4 08:58:26 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Wed Apr 4 08:58:18 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: FAILOVER***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 D***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.40.57.15 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***172.18.0.1 0.0.0.0 255.255.255.255 UH 0 0 0 tunnel0***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***192.168.30.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***10.155.33.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***192.168.10.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***172.28.0.0 0.0.0.0 255.255.0.0 U 1 0 0 tunnel0***  ***172.18.0.0 0.0.0.0 255.255.0.0 U 1 0 0 tunnel0***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***Have to replay the video since the WAN connection has changed***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - After failback - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 2 times (since Wed Mar 28 09:57:31 2012)***  ***DOWN: 2 times (since Wed Mar 28 09:57:22 2012)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:03:38 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 2 times (since Wed Mar 28 09:57:38 2012)***  ***DOWN: 4 times (since Wed Mar 28 10:17:18 2012)***  ***Local Link State:***  ***UP: 2 times (since Wed Mar 28 09:57:33 2012)***  ***DOWN: 2 times (since Wed Mar 28 10:17:08 2012)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: ATTACHED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***Have to replay the video since the WAN connection has changed*** | | |
| Test Result |  | | |

### UsbModem\_AlwaysConnected\_10

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_AlwaysConnected\_10 | | |
| Priority | Middle | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | FTP download file through vpn tunnel when WAN is usbmodem | | |
| Pre-condition | 1) Config usbmodem mode as always-connected  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  5) VPN tunnel for usbmodem WAN has been configured  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan\_failover\_test ip 8.8.8.8***  ***track wan\_failover\_test interval 5***  ***track wan\_failover\_test use-for-wan-testing***  ***vpn client-ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 vpn-mode layer-3***  ***vpn ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 gateway 115.236.187.186 client-name 7FJRFnPmu9LA894kZB7GSKzJGWZtNLwJ password \*\*\****  ***vpn tunnel-policy vpn\_tunnel\_policy client ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 primary***  ***routing route-request enable***  ***routing internal-sub-network 192.168.85.0/24***  ***usbmodem mode always-connected***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) Check the WAN status as eth0 is the default WAN  2) Access HQ FTP server,  ***ftp 10.155.33.67***  3) Download file “hivemanager-5.0r3-beta-1-1U-patch-20120217.tar.gz” to client  4) Trigger failover to usbmodem WAN via shut eth0  5) Continue downloading through vpn tunnel  6) Trigger failback to eth0 WAN via enable eth0  7) Continue downloading the file | | |
| Expect result | 1) Download file through vpn tunnel from client successfully  2) FTP resume file transfer after failover/ failback  3) failover/ failback without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Before failover - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2307***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***17748 216 0 0 0 0 216 | 17754 217 0 0 217 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 06:57:12 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 06:57:18 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Mar 29 06:57:12 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: CONNECTED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.28.188.69 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - After failover - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2291***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***13701 113 0 0 0 0 113 | 14101 124 0 0 124 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: down***  ***UP: 1 times (since Wed Apr 4 08:58:19 2012)***  ***DOWN: 1 times (since Wed Apr 4 09:03:29 2012)***  ***Local Link State:***  ***UP: 0 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 1 times (since Wed Apr 4 09:03:24 2012)***  ***Active: no***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 1 times (since Wed Apr 4 08:58:26 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Wed Apr 4 08:58:18 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: FAILOVER***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 D***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.40.57.15 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***172.18.0.1 0.0.0.0 255.255.255.255 UH 0 0 0 tunnel0***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***192.168.30.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***10.155.33.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***192.168.10.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***172.28.0.0 0.0.0.0 255.255.0.0 U 1 0 0 tunnel0***  ***172.18.0.0 0.0.0.0 255.255.0.0 U 1 0 0 tunnel0***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***Continue FTP process since FTP support resuming transfer***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - After failback - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 2 times (since Wed Mar 28 09:57:31 2012)***  ***DOWN: 2 times (since Wed Mar 28 09:57:22 2012)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:03:38 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 2 times (since Wed Mar 28 09:57:38 2012)***  ***DOWN: 4 times (since Wed Mar 28 10:17:18 2012)***  ***Local Link State:***  ***UP: 2 times (since Wed Mar 28 09:57:33 2012)***  ***DOWN: 2 times (since Wed Mar 28 10:17:08 2012)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: ATTACHED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***Continue FTP process since FTP support resuming transfer*** | | |
| Test Result |  | | |

### UsbModem\_AlwaysConnected\_11

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_AlwaysConnected\_11 | | |
| Priority | High | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Delta switch from always-connect to on-demand mode | | |
| Pre-condition | 1) Config usbmodem mode as always-connect  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem mode always-connected***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) From client, ping an external endpoint that is outside of the BR's vlan, while WAN is eth0 by default  2) Delta config usbmodem mode to on-demand without reboot BR  ***no usbm mode***  3) Continue ping process and check the WAN and usbmodem status  4) Switch usbmodem mode back to always-connect  ***usbm mode a***  5) Repeat step 3) | | |
| Expect result | 1) WAN is eth0 by default, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=34ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=33ms TTL=44***  2) WAN is eth0 once config usbmodem mode to on-demand, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm sUSB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=127ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=139ms TTL=44***  3) WAN is eth0 after switch its mode back to always-connect, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=32ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=32ms TTL=44*** | | |
| Test Result |  | | |

### UsbModem\_AlwaysConnected\_12

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_AlwaysConnected\_12 | | |
| Priority | Middle | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Delta switch from always-connect to primary-wan mode | | |
| Pre-condition | 1) Config usbmodem mode as always-connect  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem mode always-connected***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) From client, ping an external endpoint that is outside of the BR's vlan, while WAN is eth0 by default  2) Delta config usbmodem mode to primary-wan without reboot BR  ***usbm mode p***  3) Continue ping process and check the WAN and usbmodem status  4) Switch usbmodem mode back to always-connect  ***usbm mode a***  5) Repeat step 3) | | |
| Expect result | 1) WAN is eth0 by default, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=34ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=33ms TTL=44***  2) WAN is usbmodem once config its mode to primary-wan, and ping without error  ***AH-8c66c0#sh usbm mode***  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: primary-wan***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.35.64.96 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:30555 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:30703 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:2566496 (2.4 MiB) TX bytes:2581432 (2.4 MiB)***  ***PPP Process Status:***  ***PID: 1952***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***2566496 30555 0 0 0 0 30555 | 2581432 30703 0 0 30703 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 03:27:59 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 88***  ***ifmon\_up\_time: Sat Mar 23 20:35:01 2013***  ***ifmon\_down\_count: 84***  ***ifmon\_down\_time: Sat Mar 23 20:34:55 2013***  ***dft\_ifmon\_up\_count: 4***  ***dft\_ifmon\_up\_time: Sat Mar 23 03:30:57 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 0 0 0 ppp0***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=127ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=139ms TTL=44***  3) WAN is eth0 after switch its mode back to always-connect, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=32ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=32ms TTL=44*** | | |
| Test Result |  | | |

## UsbModem\_PrimaryWan

### UsbModem\_PrimaryWan\_1

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_PrimaryWan\_1 | | |
| Priority | Accept | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | 3g connection status | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) eth0 WAN is available and healthy  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem mode primary-wan***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) Check the usbmodem status while WAN is usbmodem as configured | | |
| Expect result | 1) WAN is usbmodem by default, and 3g connection is "Primary" and "CONNECTED"  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: primary-wan***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.35.64.96 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:30555 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:30703 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:2566496 (2.4 MiB) TX bytes:2581432 (2.4 MiB)***  ***PPP Process Status:***  ***PID: 1952***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***2566496 30555 0 0 0 0 30555 | 2581432 30703 0 0 30703 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 03:27:59 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 88***  ***ifmon\_up\_time: Sat Mar 23 20:35:01 2013***  ***ifmon\_down\_count: 84***  ***ifmon\_down\_time: Sat Mar 23 20:34:55 2013***  ***dft\_ifmon\_up\_count: 4***  ***dft\_ifmon\_up\_time: Sat Mar 23 03:30:57 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Sat Mar 23 20:34:55 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 20:35:01 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 0 0 0 ppp0***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0*** | | |
| Test Result |  | | |

### UsbModem\_PrimaryWan\_2

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_PrimaryWan\_2 | | |
| Priority | Accept | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Failover eth0 via unplug usbmodem | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  5) eth0 WAN is available and healthy  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem mode primary-wan***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) From client, ping an external endpoint that is outside of the BR's vlan, and check the DNS of BR,while WAN is usbmodem by default  2) Trigger failover to eth0 WAN via shut usbmodem  ***unplug usbmodem from BR (Or with CLI “no usbm en”)***  3) Continue ping processand check the DNS of BR, and check the WAN and usbmodem status  4) Trigger failback to usbmodem WAN via enable usbmodem  ***plug usbmodem back to BR (Or with CLI “usbm en”)***  5) Repeat step 3) | | |
| Expect result | 1) WAN is usbmodem by default, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: primary-wan***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.35.64.96 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:30555 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:30703 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:2566496 (2.4 MiB) TX bytes:2581432 (2.4 MiB)***  ***PPP Process Status:***  ***PID: 1952***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***2566496 30555 0 0 0 0 30555 | 2581432 30703 0 0 30703 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 03:27:59 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 88***  ***ifmon\_up\_time: Sat Mar 23 20:35:01 2013***  ***ifmon\_down\_count: 84***  ***ifmon\_down\_time: Sat Mar 23 20:34:55 2013***  ***dft\_ifmon\_up\_count: 4***  ***dft\_ifmon\_up\_time: Sat Mar 23 03:30:57 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Sat Mar 23 20:34:55 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 20:35:01 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 0 0 0 ppp0***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=122ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=132ms TTL=45***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh dns***  ***DNS server from DHCP:***  ***Domain name suffix:***  ***Primary : 221.12.1.227***  ***Secondary : 221.12.33.227***  ***Tertiary : 0.0.0.0***  2) WAN is eth0 once failover, and ping without error, and DNS changed accordingly  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 03:27:59 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 88***  ***ifmon\_up\_time: Sat Mar 23 20:35:01 2013***  ***ifmon\_down\_count: 84***  ***ifmon\_down\_time: Sat Mar 23 20:34:55 2013***  ***dft\_ifmon\_up\_count: 4***  ***dft\_ifmon\_up\_time: Sat Mar 23 03:30:57 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: FAILOVER***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Sat Mar 23 20:35:01 2013***  ***last\_event: PRIMARY\_WAN\_DOWN***  ***last\_evt\_time: Sat Mar 23 20:58:57 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Ping during failover - - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 192.168.85.1: Destination net unreachable.***  ***Reply from 192.168.85.1: Destination net unreachable.***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Ping after failover - - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=33ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=33ms TTL=45***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh dns***  ***DNS server from DHCP:***  ***Domain name suffix: RF&Driver***  ***Primary : 10.155.3.222***  ***Secondary : 0.0.0.0***  ***Tertiary : 0.0.0.0***  3) WAN is usbmodem after failback, and ping without error, and DNS changed accordingly  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.35.64.96 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:30555 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:30703 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:2566496 (2.4 MiB) TX bytes:2581432 (2.4 MiB)***  ***PPP Process Status:***  ***PID: 1952***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***2566496 30555 0 0 0 0 30555 | 2581432 30703 0 0 30703 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 03:27:59 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 88***  ***ifmon\_up\_time: Sat Mar 23 20:35:01 2013***  ***ifmon\_down\_count: 84***  ***ifmon\_down\_time: Sat Mar 23 20:34:55 2013***  ***dft\_ifmon\_up\_count: 4***  ***dft\_ifmon\_up\_time: Sat Mar 23 03:30:57 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Sat Mar 23 20:34:55 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 20:35:01 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 0 0 0 ppp0***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=122ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=132ms TTL=45***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh dns***  ***DNS server from DHCP:***  ***Domain name suffix:***  ***Primary : 221.12.1.227***  ***Secondary : 221.12.33.227***  ***Tertiary : 0.0.0.0*** | | |
| Test Result |  | | |

### UsbModem\_PrimaryWan\_3

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_PrimaryWan\_3 | | |
| Priority | Accept | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Failover eth0 when 3g service is unavailable | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  5) eth0 WAN is available and healthy  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan\_failover\_test default-gateway***  ***track wan\_failover\_test interval 5***  ***track wan\_failover\_test use-for-wan-testing***  ***capwap client server name 10.155.33.220***  ***capwap client vhm-name JingLi-VHM***  ***vpn client-ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 vpn-mode layer-3***  ***vpn ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 gateway 115.236.187.186 client-name 7FJRFnPmu9LA894kZB7GSKzJGWZtNLwJ password \*\*\****  ***vpn tunnel-policy vpn\_tunnel\_policy client ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 primary***  ***routing route-request enable***  ***routing internal-sub-network 192.168.85.0/24***  ***usbmodem mode primary-wan***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) From client, ping an external endpoint that is outside of the BR's vlan, while WAN is usbmodem by default  2) Trigger failover to eth0 WAN when internet access through 3g is unavailable  ***go to shield room where no 3g signal***  3) Continue ping process and check the WAN and usbmodem status  4) Trigger failback to usbmodem WAN when internet access through 3g is restored  5) Repeat step 3) | | |
| Expect result | 1) WAN is usbmodem by default, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: primary-wan***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2304***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***39242 184 0 0 0 0 184 | 20268 115 0 0 115 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 08:38:35 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Mar 29 08:38:33 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***[Backup]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 08:38:35 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: no***  ***Cached Gateway IP: 10.155.30.254***  ***Failover SM Snapshot:***  ***Current State: CONNECTED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.25.138.74 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=122ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=132ms TTL=45***  2) WAN is eth0 once failover, and ping without error  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2290***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***22948 174 0 0 0 0 174 | 39731 454 0 0 454 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 1 times (since Thu Apr 5 11:40:10 2012)***  ***DOWN: 1 times (since Thu Apr 5 11:43:20 2012)***  ***Local Link State:***  ***UP: 1 times (since Thu Apr 5 11:39:58 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***[Backup]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Apr 5 11:40:04 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.35.254***  ***Failover SM Snapshot:***  ***Current State: FAILOVER***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - debug console - - - - - - - - - - - - - - - - - - - - - - - -*  ***2012-03-29 11:07:37 debug ah\_brd: [brd\_wanmon]: WFOIFM: Ping 8.8.8.8 via eth0: 0% packet loss***  ***2012-03-29 11:07:37 debug ah\_brd: [brd\_wanmon]: WFOIFM: Ping 8.8.8.8 via eth0: RTT min/avg/max = 32.004002/32.004002/32.004002***  ***2012-03-29 11:07:39 debug ah\_brd: [brd\_wanmon]: WFOIFM: Ping cmd [/bin/ping -q -c 1 -I eth0 -w 2 8.8.8.8] executing***  ***2012-03-29 11:07:40 debug ah\_brd: [brd\_wanmon]: WFOIFM: Ping 8.8.8.8 via eth0: 0% packet loss***  ***2012-03-29 11:07:40 debug ah\_brd: [brd\_wanmon]: WFOIFM: Ping 8.8.8.8 via eth0: RTT min/avg/max = 32.841000/32.841000/32.841000***  ***2012-03-29 11:07:42 debug ah\_brd: [brd\_wanmon]: WFOIFM: Interface eth0: 1 targets tested, result: PASS***  ***2012-03-29 11:07:42 debug ah\_brd: [brd\_wanmon]: WFOIFM: Interface ppp0 does not exist***  3) WAN is usbmodem after failback, and ping without error  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 4126***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***4896 79 0 0 0 0 79 | 5314 88 0 0 88 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 2 times (since Thu Mar 29 11:09:35 2012)***  ***DOWN: 3 times (since Thu Mar 29 11:06:12 2012)***  ***Local Link State:***  ***UP: 2 times (since Thu Mar 29 11:09:30 2012)***  ***DOWN: 1 times (since Thu Mar 29 11:04:30 2012)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***[Backup]***  ***Interface: eth0***  ***WAN Monitor State: down***  ***UP: 4 times (since Thu Mar 29 11:00:14 2012)***  ***DOWN: 4 times (since Thu Mar 29 11:09:43 2012)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: no***  ***Cached Gateway IP: 10.155.30.254***  ***Failover SM Snapshot:***  ***Current State: CONNECTED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.25.138.74 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=122ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=132ms TTL=45*** | | |
| Test Result |  | | |

### UsbModem\_PrimaryWan\_4

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_PrimaryWan\_4 | | |
| Priority | High | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Failover eth0 via track-wanfailure | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  5) eth0 WAN is available and healthy  6) Open debug toggle,  ***\_deb brd wanmon***  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem mode primary-wan***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) From client, ping an external endpoint that is outside of the BR's vlan, while WAN is usbmodem by default  2) Track-wan fail on usbnet0 via config invalid ip for tracking  ***track-wan use-for-wan-usbnet0 ip 1.1.1.1***  3) Continue ping process and check the WAN and usbmodem status  4) Trigger failback to usbnet0 via remove invalid ip for tracking  ***no track-wan use-for-wan-usbnet0 ip 1.1.1.1***  5) Repeat step 3) | | |
| Expect result | 1) WAN is usbmodem by default, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: primary-wan***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.35.64.96 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:30555 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:30703 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:2566496 (2.4 MiB) TX bytes:2581432 (2.4 MiB)***  ***PPP Process Status:***  ***PID: 1952***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***2566496 30555 0 0 0 0 30555 | 2581432 30703 0 0 30703 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 03:27:59 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 88***  ***ifmon\_up\_time: Sat Mar 23 20:35:01 2013***  ***ifmon\_down\_count: 84***  ***ifmon\_down\_time: Sat Mar 23 20:34:55 2013***  ***dft\_ifmon\_up\_count: 4***  ***dft\_ifmon\_up\_time: Sat Mar 23 03:30:57 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Sat Mar 23 20:34:55 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 20:35:01 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 0 0 0 ppp0***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=156ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=172ms TTL=44***  2) WAN is eth0 once failover, and ping without error  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.35.64.96 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:30555 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:30703 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:2566496 (2.4 MiB) TX bytes:2581432 (2.4 MiB)***  ***PPP Process Status:***  ***PID: 1952***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***2566496 30555 0 0 0 0 30555 | 2581432 30703 0 0 30703 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 03:27:59 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 88***  ***ifmon\_up\_time: Sat Mar 23 20:35:01 2013***  ***ifmon\_down\_count: 84***  ***ifmon\_down\_time: Sat Mar 23 20:34:55 2013***  ***dft\_ifmon\_up\_count: 4***  ***dft\_ifmon\_up\_time: Sat Mar 23 03:30:57 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 24***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 5***  ***lkup\_time: Sat Mar 23 21:01:28 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 5***  ***ifmon\_up\_time: Sat Mar 23 21:01:39 2013***  ***ifmon\_down\_count: 3***  ***ifmon\_down\_time: Sat Mar 23 21:06:49 2013***  ***dft\_ifmon\_up\_count: 4***  ***dft\_ifmon\_up\_time: Sat Mar 23 21:01:30 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: FAILOVER***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Sat Mar 23 21:01:39 2013***  ***last\_event: PRIMARY\_WAN\_DOWN***  ***last\_evt\_time: Sat Mar 23 21:06:49 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 10000 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - debug console - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh lo b | i wanmon***  ***2013-03-23 21:11:25 debug ah\_brd: [brd\_wanmon]: WFOIFM: [use-for-wan-eth0]: Interface eth0: 1 targets tested, result: PASS***  ***……***  ***2013-03-23 21:11:16 debug ah\_brd: [brd\_wanmon]: WFOIFM: [use-for-wan-usbnet0]: Interface ppp0: 2 targets tested, result: FAIL***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=36ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=33ms TTL=44***  3) WAN is usbmodem after failback, and ping without error  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.35.64.96 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:30555 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:30703 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:2566496 (2.4 MiB) TX bytes:2581432 (2.4 MiB)***  ***PPP Process Status:***  ***PID: 1952***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***2566496 30555 0 0 0 0 30555 | 2581432 30703 0 0 30703 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 03:27:59 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 88***  ***ifmon\_up\_time: Sat Mar 23 20:35:01 2013***  ***ifmon\_down\_count: 84***  ***ifmon\_down\_time: Sat Mar 23 20:34:55 2013***  ***dft\_ifmon\_up\_count: 4***  ***dft\_ifmon\_up\_time: Sat Mar 23 03:30:57 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Sat Mar 23 20:34:55 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 20:35:01 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 0 0 0 ppp0***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - debug console - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh lo b | i wanmon***  ***2013-03-23 21:11:25 debug ah\_brd: [brd\_wanmon]: WFOIFM: [use-for-wan-eth0]: Interface eth0: 1 targets tested, result: PASS***  ***……***  ***2013-03-23 21:14:53 debug ah\_brd: [brd\_wanmon]: WFOIFM: [use-for-wan-usbnet0]: Interface ppp0: 1 targets tested, result: PASS***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=156ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=172ms TTL=44*** | | |
| Test Result |  | | |

### UsbModem\_PrimaryWan\_5

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| --- | --- | --- | --- |
| Case ID | UsbModem\_PrimaryWan\_5 | | |
| Priority | Low | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Ping with different pkt size through usbmodem WAN | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) MTU of each peer of network (Client/ BR/ Switch) is 1518  5) Client get association with BR either by eth or wifi  6) eth0 WAN is available and healthy | | |
| Test procedure | 1) From client, ping an external endpoint that is outside of the BR's vlan, with pkt size 64, while WAN is usbmodem by default  2) Trigger failover to eth0 WAN via shut usbmodem  3) Continue ping process and check the WAN and usbmodem status  4) Trigger failback to usbmodem WAN via enable usbmodem  5) Repeat step 3)  6) Repeat step 1)-5) with ping pkt size 1472  7) Repeat step 1)-5) with ping pkt size 1473 | | |
| Expect result | 1) WAN is usbmodem by default, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: primary-wan***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2304***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***39242 184 0 0 0 0 184 | 20268 115 0 0 115 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 08:38:35 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Mar 29 08:38:33 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***[Backup]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 08:38:35 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: no***  ***Cached Gateway IP: 10.155.30.254***  ***Failover SM Snapshot:***  ***Current State: CONNECTED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.25.138.74 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***172.18.0.1 0.0.0.0 255.255.255.255 UH 0 0 0 tunnel0***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***192.168.30.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***10.155.33.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***192.168.10.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***172.28.0.0 0.0.0.0 255.255.0.0 U 1 0 0 tunnel0***  ***172.18.0.0 0.0.0.0 255.255.0.0 U 1 0 0 tunnel0***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 10.155.33.67 with 1473 bytes of data:***  ***Reply from 10.155.33.67: bytes=1473 time=385ms TTL=126***  ***Reply from 10.155.33.67: bytes=1473 time=391ms TTL=126***  2) WAN is eth0 once failover, and ping without error  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 3 times (since Thu Mar 29 08:58:04 2012)***  ***DOWN: 3 times (since Thu Mar 29 08:58:48 2012)***  ***Local Link State:***  ***UP: 3 times (since Thu Mar 29 08:57:59 2012)***  ***DOWN: 3 times (since Thu Mar 29 08:58:38 2012)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***[Backup]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 08:38:35 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***Failover SM Snapshot:***  ***Current State: FAILOVER***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - -*  ***Reply from 10.155.33.67: bytes=32 time<1ms TTL=126***  ***Reply from 10.155.33.67: bytes=32 time<1ms TTL=126***  3) WAN is usbmodem after failback, and ping without error  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2304***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***39242 184 0 0 0 0 184 | 20268 115 0 0 115 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 08:38:35 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Mar 29 08:38:33 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***[Backup]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 08:38:35 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: no***  ***Cached Gateway IP: 10.155.30.254***  ***Failover SM Snapshot:***  ***Current State: CONNECTED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.25.138.74 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***172.18.0.1 0.0.0.0 255.255.255.255 UH 0 0 0 tunnel0***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***192.168.30.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***10.155.33.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***192.168.10.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***172.28.0.0 0.0.0.0 255.255.0.0 U 1 0 0 tunnel0***  ***172.18.0.0 0.0.0.0 255.255.0.0 U 1 0 0 tunnel0***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 10.155.33.67: bytes=1473 time=385ms TTL=126***  ***Reply from 10.155.33.67: bytes=1473 time=391ms TTL=126***  4) When ping pkt size < 1473, there is no ip fragment    5) When ping pkt size ≥ 1473, there is ip fragment | | |
| Test Result |  | | |

### UsbModem\_PrimaryWan\_6

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| --- | --- | --- | --- |
| Case ID | UsbModem\_PrimaryWan\_6 | | |
| Priority | Accept | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Upgrade HiveOS for BR with scp through usbmodem WAN | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) VPN tunnel for usbmodem WAN has been configured  ***AH-8c66c0#sh ru***  ***ssid usb***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface wifi0 ssid usb***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan\_failover\_test ip 8.8.8.8***  ***track wan\_failover\_test interval 1***  ***track wan\_failover\_test use-for-wan-testing***  ***capwap client server port 80***  ***vpn client-ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 vpn-mode layer-3***  ***vpn ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 gateway 115.236.187.186 client-name 7FJRFnPmu9LA894kZB7GSKzJGWZtNLwJ password \*\*\****  ***vpn tunnel-policy vpn\_tunnel\_policy client ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 primary***  ***routing route-request enable***  ***routing internal-sub-network 192.168.85.0/24***  ***usbmodem mode primary-wan***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) Check the WAN and usbmodem status from both HM and console  2) Upgrade BR with scp CLI in console  ***save image scp://Administrator@10.155.33.67:/tmp/***  ***br200-HiveOS-040212044119-0848.img***  3) From HM, upgrade BR through usbmodem WAN | | |
| Expect result | 1) WAN is usbmodem initially by default  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: primary-wan***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2304***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***39242 184 0 0 0 0 184 | 20268 115 0 0 115 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 08:38:35 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Mar 29 08:38:33 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***[Backup]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 08:38:35 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: no***  ***Cached Gateway IP: 10.155.30.254***  ***Failover SM Snapshot:***  ***Current State: CONNECTED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.25.138.74 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***172.18.0.1 0.0.0.0 255.255.255.255 UH 0 0 0 tunnel0***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***192.168.30.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***10.155.33.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***192.168.10.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***172.28.0.0 0.0.0.0 255.255.0.0 U 1 0 0 tunnel0***  ***172.18.0.0 0.0.0.0 255.255.0.0 U 1 0 0 tunnel0***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  2) Upgrade through usbmodem WAN successfully  ***AH-8c66c0#save image scp://Administrator@10.155.33.67:/tmp/br200-HiveOS-040212044119-0848.img***  ***Do you really want to update image?(Y/N)y***  ***Warning: Permanently added '10.155.33.67' (ECDSA) to the list of known hosts.***  ***Administrator@10.155.33.67's password:***  ***br200-HiveOS-040212044119-0848.img 8% 1664KB 10.1KB/s 29:08 ETA***  ***br200-HiveOS-040212044119-0848.img 97% 18MB 7.9KB/s 00:57 ETA***  ***br200-HiveOS-040212044119-0848.img 100% 19MB 9.5KB/s 34:00***  ***The bootloader image currently in flash is the same as the image you are attempting to load.***  ***Programming DTB ...***  ***Erasing blocks: 1/1 (100%)***  ***Writing data: 8k/8k (100%)***  ***Verifying data: 8k/8k (100%)***  ***Program DTB finished.***  ***Programming kernel image ...***  ***Erasing blocks: 16/16 (100%)***  ***Writing data: 2026k/2026k (100%)***  ***Verifying data: 2026k/2026k (100%)***  ***Program kernel finished.***  ***Programming application ...***  ***Erasing blocks: 83/132 (62%)***  ***Erasing blocks: 132/132 (100%)***  ***Writing data: 16784k/16784k (100%)***  ***Verifying data: 16784k/16784k (100%)***  ***Program application finished.***  3) From HM, Upgrade through usbmodem WAN successfully | | |
| Test Result |  | | |

### UsbModem\_PrimaryWan\_7

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_PrimaryWan\_7 | | |
| Priority | High | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Http video through usbmodem WAN | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  5) eth0 WAN is available and healthy | | |
| Test procedure | 1) Check the WAN status as usbmodem is the default WAN  2) Try to play http video from client,  [***http://www.letv.com/ptv/vplay/1257936.html***](http://www.letv.com/ptv/vplay/1257936.html)  3) Trigger failover to eth0 WAN via shut usbmodem  4) Continue playing the http video  5) Trigger failback to usbmodem WAN via enable usbmodem  6) Repeat step 4) | | |
| Expect result | 1) Play http video successfully before/ after faiover/ failback  2) failover/ failback without error  3) Have to replay the video after failover/ failback | | |
| Test Result |  | | |

### UsbModem\_PrimaryWan\_8

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_PrimaryWan\_8 | | |
| Priority | High | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Http download through usbmodem WAN | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  5) eth0 WAN is available and healthy | | |
| Test procedure | 1) Check the WAN status as usbmodem is the default WAN  2) Try to download file “QQ2012Beta1\_QQProtect2.5.exe” from client  [***http://im.qq.com/qq/2012/safe/***](http://im.qq.com/qq/2012/safe/)  3) Trigger failover to eth0 WAN via shut usbmodem  4) Continue downloading the file  5) Trigger failback to usbmodem WAN via enable usbmodem  6) Repeat step 4) | | |
| Expect result | 1) Http download successfully before/ after faiover/ failback  2) failover/ failback without error  3) Have to re-download the file after failover/ failback | | |
| Test Result |  | | |

### UsbModem\_PrimaryWan\_9

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_PrimaryWan\_9 | | |
| Priority | Accept | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | VPN tunnel accessibility | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  5) VPN tunnel for usbmodem WAN has been configured  6) eth0 WAN is available and healthy  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan\_failover\_test ip 8.8.8.8***  ***track wan\_failover\_test interval 5***  ***track wan\_failover\_test use-for-wan-testing***  ***capwap client server name 10.155.33.220***  ***capwap client vhm-name JingLi-VHM***  ***vpn client-ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 vpn-mode layer-3***  ***vpn ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 gateway 115.236.187.186 client-name 7FJRFnPmu9LA894kZB7GSKzJGWZtNLwJ password \*\*\****  ***vpn tunnel-policy vpn\_tunnel\_policy client ipsec-tunnel 0019778C66C0\_client\_ipsec\_1 primary***  ***routing route-request enable***  ***routing internal-sub-network 192.168.85.0/24***  ***usbmodem mode primary-wan***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) Ping another VPN endpoint through tunnel  2) Trigger failover to eth0 WAN via shut usbmodem, continue ping process  3) Continue ping process and check the WAN and usbmodem status from both HM and console  4) Trigger failback to usbmodem WAN via enable usbmodem, continue ping process  5) Repeat step 3) | | |
| Expect result | 1) Ping through VPN tunnel successfully with failover and failback  2) failover/ failback without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: primary-wan***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - -Before failover - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 23269***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***7108072 47033 0 0 0 0 47033 | 7822641 53851 0 0 53851 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 41 times (since Thu Mar 29 02:05:21 2012)***  ***DOWN: 48 times (since Thu Mar 29 02:05:07 2012)***  ***Local Link State:***  ***UP: 14 times (since Wed Mar 28 12:13:32 2012)***  ***DOWN: 13 times (since Wed Mar 28 12:12:29 2012)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***[Backup]***  ***Interface: eth0***  ***WAN Monitor State: down***  ***UP: 37 times (since Thu Mar 29 02:05:15 2012)***  ***DOWN: 38 times (since Thu Mar 29 02:05:29 2012)***  ***Local Link State:***  ***UP: 4 times (since Wed Mar 28 11:06:16 2012)***  ***DOWN: 3 times (since Wed Mar 28 11:04:57 2012)***  ***Active: no***  ***Cached Gateway IP: 10.155.30.254***  ***Failover SM Snapshot:***  ***Current State: CONNECTED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 172.27.33.130 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***172.18.0.1 0.0.0.0 255.255.255.255 UH 0 0 0 tunnel0***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***192.168.30.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***10.155.33.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***192.168.10.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***172.28.0.0 0.0.0.0 255.255.0.0 U 1 0 0 tunnel0***  ***172.18.0.0 0.0.0.0 255.255.0.0 U 1 0 0 tunnel0***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh vpn ipsec-tunnel***  ***IPsec Tunnel Duration:***  ***Source Destination Created Duration***  ***------------------------ ------------------------ -------------------- ----------------------------------------***  ***172.27.33.130[4500] 115.236.187.186[4500] 2012-03-29 02:05:54 0 days 0 hours 10 minutes 30 seconds***  ***Total IPsec Tunnel Sessions: 1***  ***Tunnel Statistic Information::***  ***Src IP Dst IP Pkts Bytes Auth-Err Other-Err SPI Remaining-Lifetime***  ***------------------------ ------------------------ ---------- ---------- ---------- ---------- ---------- ------------------***  ***172.27.33.130[4500] 115.236.187.186[4500] 211 28399 0 0 0x09faf4d3 2251(s) rekey***  ***115.236.187.186[4500] 172.27.33.130[4500] 181 25244 0 0 0x0b3011e8 2251(s) rekey***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 10.155.33.67 with 32 bytes of data:***  ***Reply from 10.155.33.67: bytes=32 time=334ms TTL=126***  ***Reply from 10.155.33.67: bytes=32 time=335ms TTL=126***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - After failover - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 41 times (since Thu Mar 29 02:05:21 2012)***  ***DOWN: 50 times (since Thu Mar 29 02:18:10 2012)***  ***Local Link State:***  ***UP: 14 times (since Wed Mar 28 12:13:32 2012)***  ***DOWN: 14 times (since Thu Mar 29 02:18:01 2012)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***[Backup]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 38 times (since Thu Mar 29 02:18:10 2012)***  ***DOWN: 38 times (since Thu Mar 29 02:05:29 2012)***  ***Local Link State:***  ***UP: 4 times (since Wed Mar 28 11:06:16 2012)***  ***DOWN: 3 times (since Wed Mar 28 11:04:57 2012)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***Failover SM Snapshot:***  ***Current State: FAILOVER***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 10.155.33.67: bytes=32 time=3ms TTL=126***  ***Reply from 10.155.33.67: bytes=32 time=1ms TTL=126***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - After failback - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 23269***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***7108072 47033 0 0 0 0 47033 | 7822641 53851 0 0 53851 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 41 times (since Thu Mar 29 02:05:21 2012)***  ***DOWN: 48 times (since Thu Mar 29 02:05:07 2012)***  ***Local Link State:***  ***UP: 14 times (since Wed Mar 28 12:13:32 2012)***  ***DOWN: 13 times (since Wed Mar 28 12:12:29 2012)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***[Backup]***  ***Interface: eth0***  ***WAN Monitor State: down***  ***UP: 37 times (since Thu Mar 29 02:05:15 2012)***  ***DOWN: 38 times (since Thu Mar 29 02:05:29 2012)***  ***Local Link State:***  ***UP: 4 times (since Wed Mar 28 11:06:16 2012)***  ***DOWN: 3 times (since Wed Mar 28 11:04:57 2012)***  ***Active: no***  ***Cached Gateway IP: 10.155.30.254***  ***Failover SM Snapshot:***  ***Current State: CONNECTED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 172.27.33.130 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***172.18.0.1 0.0.0.0 255.255.255.255 UH 0 0 0 tunnel0***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***192.168.30.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***10.155.33.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***192.168.10.0 0.0.0.0 255.255.255.0 U 1 0 0 tunnel0***  ***172.28.0.0 0.0.0.0 255.255.0.0 U 1 0 0 tunnel0***  ***172.18.0.0 0.0.0.0 255.255.0.0 U 1 0 0 tunnel0***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh vpn ipsec-tunnel***  ***IPsec Tunnel Duration:***  ***Source Destination Created Duration***  ***------------------------ ------------------------ -------------------- ----------------------------------------***  ***172.27.33.130[4500] 115.236.187.186[4500] 2012-03-29 02:05:54 0 days 0 hours 10 minutes 30 seconds***  ***Total IPsec Tunnel Sessions: 1***  ***Tunnel Statistic Information::***  ***Src IP Dst IP Pkts Bytes Auth-Err Other-Err SPI Remaining-Lifetime***  ***------------------------ ------------------------ ---------- ---------- ---------- ---------- ---------- ------------------***  ***172.27.33.130[4500] 115.236.187.186[4500] 211 28399 0 0 0x09faf4d3 2251(s) rekey***  ***115.236.187.186[4500] 172.27.33.130[4500] 181 25244 0 0 0x0b3011e8 2251(s) rekey***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 10.155.33.67: bytes=32 time=334ms TTL=126***  ***Reply from 10.155.33.67: bytes=32 time=335ms TTL=126*** | | |
| Test Result |  | | |

### UsbModem\_PrimaryWan\_10

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_PrimaryWan\_10 | | |
| Priority | Middle | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Play video through vpn tunnel when WAN is usbmodem | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  5) VPN tunnel for usbmodem WAN has been configured  6) eth0 WAN is available and healthy | | |
| Test procedure | 1) Check the WAN status as usbmodem is the default WAN  2) Access the video on remote HQ server through vpn tunnel  ***\\10.155.33.67\share\cctv.rm***  3) Try to play the video from client  4) Trigger failover to eth0 WAN via shut usbmodem  5) Continue playing the video  6) Trigger failback to usbmodem WAN via enable usbmodem  7) Repeat step 5) | | |
| Expect result | 1) Play the video through vpn tunnel from client successfully  2) Have to replay the video after failover/ failback  3) failover/ failback without error | | |
| Test Result |  | | |

### UsbModem\_PrimaryWan\_11

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_PrimaryWan\_11 | | |
| Priority | Middle | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | FTP download file through vpn tunnel when WAN is usbmodem | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  5) VPN tunnel for usbmodem WAN has been configured  6) eth0 WAN is available and healthy | | |
| Test procedure | 1) Check the WAN status as usbmodem is the default WAN  2) Access remote HQ FTP server through vpn tunnel  ***ftp 10.155.33.67***  3) Download file “hivemanager-5.0r3-beta-1-1U-patch-20120217.tar.gz”to client  4) Trigger failover to eth0 WAN via shut usbmodem  5) Continue downloading  6) Trigger failback to usbmodem WAN via enable usbmodem  7) Repeat step 5) | | |
| Expect result | 1) Download file through vpn tunnel from client successfully  2) FTP resume file transfer after failover/ failback  3) failover/ failback without error | | |
| Test Result |  | | |

### UsbModem\_PrimaryWan\_12

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_PrimaryWan\_12 | | |
| Priority | High | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Delta switch from primary-wan to on-demand mode | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem mode primary-wan***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) From client, ping an external endpoint that is outside of the BR's vlan, while WAN is usbmodem by default  2) Delta config usbmodem mode to on-demand without reboot BR  ***no usbm mode***  3) Continue ping process and check the WAN and usbmodem status  4) Switch usbmodem mode back to primary-wan  ***usbm mode p***  5) Repeat step 3) | | |
| Expect result | 1) WAN is usbmodem by default, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: primary-wan***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.35.64.96 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:30555 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:30703 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:2566496 (2.4 MiB) TX bytes:2581432 (2.4 MiB)***  ***PPP Process Status:***  ***PID: 1952***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***2566496 30555 0 0 0 0 30555 | 2581432 30703 0 0 30703 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 03:27:59 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 88***  ***ifmon\_up\_time: Sat Mar 23 20:35:01 2013***  ***ifmon\_down\_count: 84***  ***ifmon\_down\_time: Sat Mar 23 20:34:55 2013***  ***dft\_ifmon\_up\_count: 4***  ***dft\_ifmon\_up\_time: Sat Mar 23 03:30:57 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 0 0 0 ppp0***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=34ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=33ms TTL=44***  2) WAN is eth0 once config usbmodem mode to on-demand, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm sUSB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=127ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=139ms TTL=44***  3) WAN is usbmodem after switch its mode back to primary-wan, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: primary-wan***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.35.64.96 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:30555 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:30703 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:2566496 (2.4 MiB) TX bytes:2581432 (2.4 MiB)***  ***PPP Process Status:***  ***PID: 1952***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***2566496 30555 0 0 0 0 30555 | 2581432 30703 0 0 30703 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 03:27:59 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 88***  ***ifmon\_up\_time: Sat Mar 23 20:35:01 2013***  ***ifmon\_down\_count: 84***  ***ifmon\_down\_time: Sat Mar 23 20:34:55 2013***  ***dft\_ifmon\_up\_count: 4***  ***dft\_ifmon\_up\_time: Sat Mar 23 03:30:57 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 0 0 0 ppp0***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=127ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=139ms TTL=44*** | | |
| Test Result |  | | |

### UsbModem\_PrimaryWan\_13

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_PrimaryWan\_13 | | |
| Priority | Middle | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Delta switch from primary-wan to always-connect mode | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Client get association with BR either by eth or wifi  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem mode primary-wan***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) From client, ping an external endpoint that is outside of the BR's vlan, while WAN is usbmodem by default  2) Delta config usbmodem mode to always-connect without reboot BR  ***usbm mode a***  3) Continue ping process and check the WAN and usbmodem status  4) Switch usbmodem mode back to primary-wan  ***usbm mode p***  5) Repeat step 3) | | |
| Expect result | 1) WAN is usbmodem by default, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: primary-wan***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.35.64.96 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:30555 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:30703 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:2566496 (2.4 MiB) TX bytes:2581432 (2.4 MiB)***  ***PPP Process Status:***  ***PID: 1952***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***2566496 30555 0 0 0 0 30555 | 2581432 30703 0 0 30703 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 03:27:59 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 88***  ***ifmon\_up\_time: Sat Mar 23 20:35:01 2013***  ***ifmon\_down\_count: 84***  ***ifmon\_down\_time: Sat Mar 23 20:34:55 2013***  ***dft\_ifmon\_up\_count: 4***  ***dft\_ifmon\_up\_time: Sat Mar 23 03:30:57 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 0 0 0 ppp0***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=34ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=33ms TTL=44***  2) WAN is eth0 once config usbmodem mode to always-connect, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=32ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=32ms TTL=44***  3) WAN is usbmodem after switch its mode back to primary-wan, and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: primary-wan***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.35.64.96 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:30555 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:30703 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:2566496 (2.4 MiB) TX bytes:2581432 (2.4 MiB)***  ***PPP Process Status:***  ***PID: 1952***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***2566496 30555 0 0 0 0 30555 | 2581432 30703 0 0 30703 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 03:27:59 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 88***  ***ifmon\_up\_time: Sat Mar 23 20:35:01 2013***  ***ifmon\_down\_count: 84***  ***ifmon\_down\_time: Sat Mar 23 20:34:55 2013***  ***dft\_ifmon\_up\_count: 4***  ***dft\_ifmon\_up\_time: Sat Mar 23 03:30:57 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 0 0 0 ppp0***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=127ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=139ms TTL=44*** | | |
| Test Result |  | | |

## UsbModem\_Eth0IsPPPoE

### UsbModem\_Eth0IsPPPoE\_1

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_Eth0IsPPPoE\_1 | | |
| Priority | Accept | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Check the ppp state for eth0 and usbmodem, on-demand mode | | |
| Pre-condition | 1) Config usbmodem mode as on-demand  2) eth0 WAN is working as PPPoE  3) The 3g service is activated and available  4) Configured the dialup username/ passwd/ number if the modem if necessary  5) Ping through eth0 WAN works well  ***AH-218cc0#sh ru pppoe***  ***interface eth0 pppoe username wcai password aerohive***  ***interface eth0 pppoe enable***  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) Trigger failover to usbmodem WAN via unplug eth0  ***in eth0 sh***  2) Continue ping process and check the WAN and usbmodem status  3) Trigger failback to eth0 WAN via plug eth0 back  ***no in eth0 sh***  4) Repeat step 3) | | |
| Expect result | 1) WAN is eth0 by default, and ping without error  ***AH-218cc0#sh usbm modem-id huawei\_e1752***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e1752***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x140c***  ***Vendor Id: 0x12d1, Product Id: 0x141b***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-218cc0#sh in e0 pp***  ***PPPoE status: enabled***  ***Username: wcai***  ***Password: \*\*\****  ***Authentication: ANY***  ***Connection status: connected***  ***Local IP: 10.5.16.23***  ***Remote IP: 10.5.16.1***  ***DNS server: 10.155.3.250***  ***DNS server: 10.155.32.190***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm sUSB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: ppp1***  ***kifname: ppp1***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Fri Mar 22 20:10:01 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Fri Mar 22 20:10:11 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 0.0.0.0 wan - 4018:b18c:66c0 U***  ***mgt0 192.168.85.1 - 1 4018:b18c:66c0 U***  ***ppp1 10.5.16.49 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.5.16.1 0.0.0.0 255.255.255.255 UH 0 0 0 ppp1***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.5.16.1 0.0.0.0 UG 1 0 0 ppp1***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=94ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=37ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=48ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=51ms TTL=45***  ***Ping statistics for 8.8.8.8:***  ***Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),***  ***Approximate round trip times in milli-seconds:***  ***Minimum = 37ms, Maximum = 94ms, Average = 57ms***  2) WAN is usbmodem once failover, and ping without error  ***AH-218cc0#sh in e0 pp***  ***PPPoE status: enabled***  ***Username: wcai***  ***Password: \*\*\****  ***Authentication: ANY***  ***Connection status: unconnect***  ***Local IP: 0.0.0.0***  ***Remote IP: 0.0.0.0***  ***DNS server: 0.0.0.0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: FAILOVER***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Fri Mar 22 20:10:01 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Fri Mar 22 20:10:11 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 0.0.0.0 wan - 08ea:440c:32c0 D***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.27.46.155 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=94ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=37ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=48ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=51ms TTL=45***  ***Ping statistics for 8.8.8.8:***  ***Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),***  ***Approximate round trip times in milli-seconds:***  ***Minimum = 37ms, Maximum = 94ms, Average = 57ms***  3) WAN is eth0 after failback, and ping without error  ***AH-218cc0#sh in e0 pp***  ***PPPoE status: enabled***  ***Username: wcai***  ***Password: \*\*\****  ***Authentication: ANY***  ***Connection status: connected***  ***Local IP: 10.5.16.23***  ***Remote IP: 10.5.16.1***  ***DNS server: 10.155.3.250***  ***DNS server: 10.155.32.190***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm sUSB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: ppp1***  ***kifname: ppp1***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Fri Mar 22 20:10:01 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Fri Mar 22 20:10:11 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 0.0.0.0 wan - 4018:b18c:66c0 U***  ***mgt0 192.168.85.1 - 1 4018:b18c:66c0 U***  ***ppp1 10.5.16.49 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.5.16.1 0.0.0.0 255.255.255.255 UH 0 0 0 ppp1***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.5.16.1 0.0.0.0 UG 1 0 0 ppp1***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=94ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=37ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=48ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=51ms TTL=45***  ***Ping statistics for 8.8.8.8:***  ***Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),***  ***Approximate round trip times in milli-seconds:***  ***Minimum = 37ms, Maximum = 94ms, Average = 57ms*** | | |
| Test Result |  | | |

### UsbModem\_Eth0IsPPPoE\_2

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_Eth0IsPPPoE\_2 | | |
| Priority | Accept | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Check the ppp state for eth0 and usbmodem, always-connected mode | | |
| Pre-condition | 1) Config usbmodem mode as always-connected  2) eth0 WAN is working as PPPoE  3) The 3g service is activated and available  4) Configured the dialup username/ passwd/ number if the modem if necessary  5) Ping through eth0 WAN works well  ***AH-218cc0#sh ru pppoe***  ***interface eth0 pppoe username wcai password aerohive***  ***interface eth0 pppoe enable***  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem mode always-connected***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) Trigger failover to usbmodem WAN via unplug eth0  2) Continue ping process and check the WAN and usbmodem status  3) Trigger failback to eth0 WAN via plug eth0 back  4) Repeat step 3) | | |
| Expect result | 1) WAN is eth0 by default, and ping without error  ***AH-218cc0#sh usbm modem-id huawei\_e1752***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e1752***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x140c***  ***Vendor Id: 0x12d1, Product Id: 0x141b***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-218cc0#sh in e0 pp***  ***PPPoE status: enabled***  ***Username: wcai***  ***Password: \*\*\****  ***Authentication: ANY***  ***Connection status: connected***  ***Local IP: 10.5.16.29***  ***Remote IP: 10.5.16.1***  ***DNS server: 10.155.3.250***  ***DNS server: 10.155.32.190***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: ppp1***  ***kifname: ppp1***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 2***  ***lkdn\_time: Fri Mar 22 22:54:34 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - 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0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.5.16.1 0.0.0.0 UG 1 0 0 ppp1***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=94ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=37ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=48ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=51ms TTL=45***  ***Ping statistics for 8.8.8.8:***  ***Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),***  ***Approximate round trip times in milli-seconds:***  ***Minimum = 37ms, Maximum = 94ms, Average = 57ms***  2) WAN is usbmodem once failover, and ping without error  ***AH-218cc0#sh in e0 pp***  ***PPPoE status: enabled***  ***Username: wcai***  ***Password: \*\*\****  ***Authentication: ANY***  ***Connection status: unconnect***  ***Local IP: 0.0.0.0***  ***Remote IP: 0.0.0.0***  ***DNS server: 0.0.0.0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: FAILOVER***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Sat Mar 23 02:14:25 2013***  ***last\_event: PRIMARY\_WAN\_DOWN***  ***last\_evt\_time: Sat Mar 23 03:25:06 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 0.0.0.0 wan - 08ea:440c:32c0 D***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=94ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=37ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=48ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=51ms TTL=45***  ***Ping statistics for 8.8.8.8:***  ***Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),***  ***Approximate round trip times in milli-seconds:***  ***Minimum = 37ms, Maximum = 94ms, Average = 57ms***  3) WAN is eth0 after failback, and ping without error  ***AH-218cc0#sh in e0 pp***  ***PPPoE status: enabled***  ***Username: wcai***  ***Password: \*\*\****  ***Authentication: ANY***  ***Connection status: connected***  ***Local IP: 10.5.16.29***  ***Remote IP: 10.5.16.1***  ***DNS server: 10.155.3.250***  ***DNS server: 10.155.32.190***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: ppp1***  ***kifname: ppp1***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 2***  ***lkdn\_time: Fri Mar 22 22:54:34 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sat Mar 23 02:14:19 2013***  ***last\_event: PRIMARY\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 02:14:25 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp1 10.5.16.49 wan - 0000:0000:0000 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.5.16.1 0.0.0.0 UG 1 0 0 ppp1***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=94ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=37ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=48ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=51ms TTL=45***  ***Ping statistics for 8.8.8.8:***  ***Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),***  ***Approximate round trip times in milli-seconds:***  ***Minimum = 37ms, Maximum = 94ms, Average = 57ms*** | | |
| Test Result |  | | |

### UsbModem\_Eth0IsPPPoE\_3

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_Eth0IsPPPoE\_3 | | |
| Priority | Accept | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Check the ppp state for eth0 and usbmodem, primary-wan mode | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) eth0 WAN is working as PPPoE  3) The 3g service is activated and available  4) Configured the dialup username/ passwd/ number if the modem if necessary  5) Ping through usbmodem WAN works well  ***AH-218cc0#sh ru pppoe***  ***interface eth0 pppoe username wcai password aerohive***  ***interface eth0 pppoe enable***  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem mode primary-wan***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) Trigger failover to eth0 WAN via unplug usb modem  ***no usbm en***  2) Continue ping process and check the WAN and usb modem status  3) Trigger failback to usbmodem WAN via plug usb modem back  ***usbm en***  4) Repeat step 3) | | |
| Expect result | 1) WAN is usbmodem by default, and ping without error  ***AH-218cc0#sh usbm modem-id huawei\_e1752***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: primary-wan***  ***-----------------***  ***Modem Id: huawei\_e1752***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x140c***  ***Vendor Id: 0x12d1, Product Id: 0x141b***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-218cc0#sh in e0 pp***  ***PPPoE status: enabled***  ***Username: wcai***  ***Password: \*\*\****  ***Authentication: ANY***  ***Connection status: connected***  ***Local IP: 10.5.16.30***  ***Remote IP: 10.5.16.1***  ***DNS server: 10.155.3.250***  ***DNS server: 10.155.32.190***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.35.64.96 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:30555 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:30703 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:2566496 (2.4 MiB) TX bytes:2581432 (2.4 MiB)***  ***PPP Process Status:***  ***PID: 1952***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***2566496 30555 0 0 0 0 30555 | 2581432 30703 0 0 30703 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: ppp1***  ***kifname: ppp1***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 03:27:59 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 88***  ***ifmon\_up\_time: Sat Mar 23 20:35:01 2013***  ***ifmon\_down\_count: 84***  ***ifmon\_down\_time: Sat Mar 23 20:34:55 2013***  ***dft\_ifmon\_up\_count: 4***  ***dft\_ifmon\_up\_time: Sat Mar 23 03:30:57 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Sat Mar 23 20:34:55 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 20:35:01 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp1 10.5.16.49 wan - 0000:0000:0000 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 0 0 0 ppp0***  ***0.0.0.0 10.5.16.1 0.0.0.0 UG 1 0 0 ppp1***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=94ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=37ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=48ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=51ms TTL=45***  ***Ping statistics for 8.8.8.8:***  ***Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),***  ***Approximate round trip times in milli-seconds:***  ***Minimum = 37ms, Maximum = 94ms, Average = 57ms***  2) WAN is eth0 once failover, and ping without error  ***AH-218cc0#sh in e0 pp***  ***PPPoE status: enabled***  ***Username: wcai***  ***Password: \*\*\****  ***Authentication: ANY***  ***Connection status: connected***  ***Local IP: 10.5.16.30***  ***Remote IP: 10.5.16.1***  ***DNS server: 10.155.3.250***  ***DNS server: 10.155.32.190***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: ppp1***  ***kifname: ppp1***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 03:27:59 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 88***  ***ifmon\_up\_time: Sat Mar 23 20:35:01 2013***  ***ifmon\_down\_count: 84***  ***ifmon\_down\_time: Sat Mar 23 20:34:55 2013***  ***dft\_ifmon\_up\_count: 4***  ***dft\_ifmon\_up\_time: Sat Mar 23 03:30:57 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: FAILOVER***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Sat Mar 23 20:35:01 2013***  ***last\_event: PRIMARY\_WAN\_DOWN***  ***last\_evt\_time: Sat Mar 23 20:58:57 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp1 10.5.16.49 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.5.16.1 0.0.0.0 UG 1 0 0 ppp1***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=94ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=37ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=48ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=51ms TTL=45***  ***Ping statistics for 8.8.8.8:***  ***Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),***  ***Approximate round trip times in milli-seconds:***  ***Minimum = 37ms, Maximum = 94ms, Average = 57ms***  3) WAN is usbmodem after failback, and ping without error  ***AH-218cc0#sh in e0 pp***  ***PPPoE status: enabled***  ***Username: wcai***  ***Password: \*\*\****  ***Authentication: ANY***  ***Connection status: connected***  ***Local IP: 10.5.16.30***  ***Remote IP: 10.5.16.1***  ***DNS server: 10.155.3.250***  ***DNS server: 10.155.32.190***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.35.64.96 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:30555 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:30703 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:2566496 (2.4 MiB) TX bytes:2581432 (2.4 MiB)***  ***PPP Process Status:***  ***PID: 1952***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***2566496 30555 0 0 0 0 30555 | 2581432 30703 0 0 30703 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: ppp1***  ***kifname: ppp1***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 03:27:59 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 88***  ***ifmon\_up\_time: Sat Mar 23 20:35:01 2013***  ***ifmon\_down\_count: 84***  ***ifmon\_down\_time: Sat Mar 23 20:34:55 2013***  ***dft\_ifmon\_up\_count: 4***  ***dft\_ifmon\_up\_time: Sat Mar 23 03:30:57 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Sat Mar 23 20:34:55 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 20:35:01 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp1 10.5.16.49 wan - 0000:0000:0000 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 0 0 0 ppp0***  ***0.0.0.0 10.5.16.1 0.0.0.0 UG 1 0 0 ppp1***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=94ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=37ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=48ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=51ms TTL=45***  ***Ping statistics for 8.8.8.8:***  ***Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),***  ***Approximate round trip times in milli-seconds:***  ***Minimum = 37ms, Maximum = 94ms, Average = 57ms*** | | |
| Test Result |  | | |

## UsbModem\_ErrorReport

### UsbModem\_ErrorReport\_1

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_ErrorReport\_1 | | |
| Priority | High | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Store modem error messages | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary | | |
| Test procedure | 1) Unplug usbmodem from BR  2) Check the error msg from the console log | | |
| Expect result | 1) The related error msg is printd in the console of BR  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Before unplug usbmodem - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh log bu | in fosm***  ***2012-04-01 02:32:09 debug ah\_brd: [brd\_fosm]: WFO: PPP ifchk timer: PPP is UP (IP:0xa26d9a8, netmask:0xffffffff)***  ***2012-04-01 02:32:09 debug ah\_brd: [brd\_fosm]: WFO: Interface ppp0 status is UP (ifr\_flags = 0x10d1)***  ***2012-04-01 02:32:09 debug ah\_brd: [brd\_fosm]: WFO: PPP ifchk timer popped ...***  ***2012-04-01 02:31:42 info ah\_cli: admin:<\_debug brd fosm>***  ***2012-04-01 02:31:22 debug ah\_brd: WFOSM: state IDLE -> IDLE***  ***2012-04-01 02:31:22 debug ah\_brd: WFOSM: Added event MAIN\_WAN\_IF\_UP***  ***2012-04-01 02:31:15 debug ah\_brd: WFOSM: state IDLE -> IDLE***  ***2012-04-01 02:31:15 debug ah\_brd: WFOSM: Added event PPP\_IF\_UP***  ***2012-04-01 02:31:10 debug ah\_brd: WFOSM: state IDLE -> IDLE***  ***2012-04-01 02:31:10 debug ah\_brd: WFOSM: state FAILOVER -> IDLE***  ***2012-04-01 02:31:10 debug ah\_brd: WFOSM: state ATTACHED -> FAILOVER***  ***2012-04-01 02:31:10 debug ah\_brd: WFOSM: state CONNECTING -> ATTACHED***  ***2012-04-01 02:31:10 debug ah\_brd: WFOSM: Added event START\_PPP***  ***2012-04-01 02:31:10 debug ah\_brd: WFOSM: state ATTACHED -> CONNECTING***  ***2012-04-01 02:31:10 debug ah\_brd: WFOSM: state ATTACHED -> ATTACHED***  ***2012-04-01 02:31:10 debug ah\_brd: WFOSM: state ATTACHED -> ATTACHED***  ***2012-04-01 02:31:10 debug ah\_brd: WFOSM: Added event PPP\_STARTED***  ***2012-04-01 02:31:07 debug ah\_brd: WFOSM: Added event BKUP\_WAN\_IF\_UP***  ***2012-04-01 02:31:04 debug ah\_brd: WFOSM: Added event PPP\_STOPPED***  ***2012-04-01 02:31:04 debug ah\_brd: WFOSM: state CONNECTING -> ATTACHED***  ***2012-04-01 02:31:04 debug ah\_brd: WFOSM: Added event PPP\_STARTED***  ***2012-04-01 02:30:58 debug ah\_brd: WFOSM: Added event PPP\_STOPPED***  ***2012-04-01 02:30:58 debug ah\_brd: WFOSM: state ATTACHED -> CONNECTING***  ***2012-04-01 02:30:58 debug ah\_brd: WFOSM: state CONNECTING -> ATTACHED***  ***2012-04-01 02:30:58 debug ah\_brd: WFOSM: Added event START\_PPP***  ***2012-04-01 02:30:58 debug ah\_brd: WFOSM: state ATTACHED -> CONNECTING***  ***2012-04-01 02:30:58 debug ah\_brd: WFOSM: state CONNECTING -> ATTACHED***  ***2012-04-01 02:30:58 debug ah\_brd: WFOSM: Added event START\_PPP***  ***2012-04-01 02:30:58 debug ah\_brd: WFOSM: state ATTACHED -> CONNECTING***  ***2012-04-01 02:30:58 debug ah\_brd: WFOSM: state ATTACHED -> ATTACHED***  ***2012-04-01 02:30:58 debug ah\_brd: WFOSM: state ATTACHED -> ATTACHED***  ***2012-04-01 02:30:58 debug ah\_brd: WFOSM: Added event PPP\_STARTED***  ***2012-04-01 02:30:52 debug ah\_brd: WFOSM: Added event PPP\_STOPPED***  ***2012-04-01 02:30:52 debug ah\_brd: WFOSM: state CONNECTING -> ATTACHED***  ***2012-04-01 02:30:52 debug ah\_brd: WFOSM: Added event PPP\_STARTED***  ***1970-01-01 00:00:24 debug ah\_brd: WFOSM: Added event PPP\_STOPPED***  ***1970-01-01 00:00:24 debug ah\_brd: WFOSM: state CONNECTING -> CONNECTING***  ***1970-01-01 00:00:24 debug ah\_brd: WFOSM: state ATTACHED -> CONNECTING***  ***1970-01-01 00:00:24 debug ah\_brd: WFOSM: Added event PPP\_STARTED***  ***1970-01-01 00:00:24 debug ah\_brd: WFOSM: Added event USB\_DEV\_ADD***  ***1970-01-01 00:00:20 debug ah\_brd: WFOSM: Added event START\_PPP***  ***1970-01-01 00:00:20 debug ah\_brd: WFOSM: Added event START\_PPP***  ***1970-01-01 00:00:19 debug ah\_brd: WFOSM: Added event USB\_DEV\_ADD***  ***1970-01-01 00:00:19 debug ah\_brd: WFOSM: Added event USB\_DEV\_ADD***  ***1970-01-01 00:00:19 debug ah\_brd: WFOSM: Added event USB\_DEV\_ADD***  ***1970-01-01 00:00:19 debug ah\_brd: WFOSM: Added event USB\_DEV\_ADD***  ***1970-01-01 00:00:19 debug ah\_brd: WFOSM: Added event USB\_DEV\_ADD***  ***1970-01-01 00:00:19 debug ah\_brd: WFOSM: Added event USB\_DEV\_ADD***  ***1970-01-01 00:00:19 debug ah\_brd: WFOSM: Added event USB\_DEV\_ADD***  ***1970-01-01 00:00:19 debug ah\_brd: WFOSM: state IDLE -> ATTACHED***  ***1970-01-01 00:00:19 debug ah\_brd: WFOSM: Added event MAIN\_WAN\_IF\_DOWN***  ***1970-01-01 00:00:19 debug ah\_brd: WFOSM: Added event USB\_DEV\_ADD***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh log bu | in hot***  ***2012-04-01 02:31:42 info ah\_cli: admin:<\_debug brd hotplug>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - After unplug usbmodem - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh log bu | in fosm***  ***2012-04-01 02:33:18 debug ah\_brd: WFOSM: state IDLE -> FAILOVER***  ***2012-04-01 02:33:18 debug ah\_brd: [brd\_fosm]: WFO: Failover OK***  ***2012-04-01 02:33:18 debug ah\_brd: [brd\_fosm]: WFO: Switch route: dft route (gw: cur=0xa9b1efe cached=0xa9b1efe) via eth0 existed***  ***2012-04-01 02:33:18 debug ah\_brd: [brd\_fosm]: WFO: Switch route: ppp0 dft gw IP 0x0 now cached***  ***2012-04-01 02:33:18 debug ah\_brd: [brd\_fosm]: WFO: >>> Enter state: IDLE***  ***2012-04-01 02:33:18 debug ah\_brd: [brd\_fosm]: WFO: Engine: @ state:IDLE + event:MAIN\_WAN\_IF\_DOWN [0x200]***  ***2012-04-01 02:33:18 debug ah\_brd: WFOSM: Added event MAIN\_WAN\_IF\_DOWN***  ***2012-04-01 02:33:13 debug ah\_brd: WFOSM: state IDLE -> IDLE***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_fosm]: WFO: >>> Enter state: IDLE***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_fosm]: WFO: Engine: @ state:IDLE + event:USB\_DEV\_REMOVE [0x2]***  ***2012-04-01 02:33:13 debug ah\_brd: WFOSM: Added event USB\_DEV\_REMOVE***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_fosm]: WFO: USB device id is set (vid=0x0 pid=0x0)***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_fosm]: WFO: Retrieved USB device id (vid=0x12d1 pid=0x1003)***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_fosm]: WFO: Retrieved USB device id (vid=0x12d1 pid=0x1003)***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_fosm]: WFO: Retrieved USB device id (vid=0x12d1 pid=0x1003)***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_fosm]: WFO: Retrieved USB device id (vid=0x12d1 pid=0x1003)***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_fosm]: WFO: Retrieved USB device id (vid=0x12d1 pid=0x1003)***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_fosm]: WFO: Retrieved USB device id (vid=0x12d1 pid=0x1003)***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_fosm]: WFO: Retrieved USB device id (vid=0x12d1 pid=0x1003)***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_fosm]: WFO: Retrieved USB device id (vid=0x12d1 pid=0x1003)***  ***2012-04-01 02:33:13 debug ah\_brd: WFOSM: state IDLE -> IDLE***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_fosm]: WFO: >>> Enter state: IDLE***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_fosm]: WFO: Engine: @ state:IDLE + event:PPP\_IF\_DOWN [0x80]***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_fosm]: WFO: ppp0: Interface DOWN :-(***  ***2012-04-01 02:33:13 debug ah\_brd: WFOSM: Added event PPP\_IF\_DOWN***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh log bu | in hot***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [USB dev list end]***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [0]: USB id=0x1d6b0002 vid=0x1d6b pid=0x2***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [USB dev list begin (count:1)]***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Skip sysfs entry [/sys/bus/usb/devices/../uevent] ...***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Skip sysfs entry [/sys/bus/usb/devices/./uevent] ...***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Hotplug event REMOVE trapped***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Found USB hotplug event remove@ for dev usb1***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [USB dev list end]***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Found USB dev vid=0x12d1 pid=0x1003 attached***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [1]: USB id=0x12d11003 vid=0x12d1 pid=0x1003***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [0]: USB id=0x1d6b0002 vid=0x1d6b pid=0x2***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [USB dev list begin (count:2)]***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Skip sysfs entry [/sys/bus/usb/devices/../uevent] ...***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Skip sysfs entry [/sys/bus/usb/devices/./uevent] ...***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Hotplug event REMOVE trapped***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Found USB hotplug event remove@ for dev usb1***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [USB dev list end]***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Found USB dev vid=0x12d1 pid=0x1003 attached***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [1]: USB id=0x12d11003 vid=0x12d1 pid=0x1003***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [0]: USB id=0x1d6b0002 vid=0x1d6b pid=0x2***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [USB dev list begin (count:2)]***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Skip sysfs entry [/sys/bus/usb/devices/../uevent] ...***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Skip sysfs entry [/sys/bus/usb/devices/./uevent] ...***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Hotplug event REMOVE trapped***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Found USB hotplug event remove@ for dev usb1***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [USB dev list end]***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Found USB dev vid=0x12d1 pid=0x1003 attached***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [1]: USB id=0x12d11003 vid=0x12d1 pid=0x1003***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [0]: USB id=0x1d6b0002 vid=0x1d6b pid=0x2***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [USB dev list begin (count:2)]***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Skip sysfs entry [/sys/bus/usb/devices/../uevent] ...***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Skip sysfs entry [/sys/bus/usb/devices/./uevent] ...***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Hotplug event REMOVE trapped***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Found USB hotplug event remove@ for dev usb1***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [USB dev list end]***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Found USB dev vid=0x12d1 pid=0x1003 attached***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [1]: USB id=0x12d11003 vid=0x12d1 pid=0x1003***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [0]: USB id=0x1d6b0002 vid=0x1d6b pid=0x2***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [USB dev list begin (count:2)]***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Skip sysfs entry [/sys/bus/usb/devices/../uevent] ...***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Skip sysfs entry [/sys/bus/usb/devices/./uevent] ...***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Hotplug event REMOVE trapped***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Found USB hotplug event remove@ for dev usb1***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [USB dev list end]***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Found USB dev vid=0x12d1 pid=0x1003 attached***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [1]: USB id=0x12d11003 vid=0x12d1 pid=0x1003***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [0]: USB id=0x1d6b0002 vid=0x1d6b pid=0x2***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [USB dev list begin (count:2)]***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Skip sysfs entry [/sys/bus/usb/devices/../uevent] ...***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Skip sysfs entry [/sys/bus/usb/devices/./uevent] ...***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Hotplug event REMOVE trapped***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Found USB hotplug event remove@ for dev USB1***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [USB dev list end]***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Found USB dev vid=0x12d1 pid=0x1003 attached***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [1]: USB id=0x12d11003 vid=0x12d1 pid=0x1003***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [0]: USB id=0x1d6b0002 vid=0x1d6b pid=0x2***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [USB dev list begin (count:2)]***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Skip sysfs entry [/sys/bus/usb/devices/../uevent] ...***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Skip sysfs entry [/sys/bus/usb/devices/./uevent] ...***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Hotplug event REMOVE trapped***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Found USB hotplug event remove@ for dev usb1***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [USB dev list end]***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Found USB dev vid=0x12d1 pid=0x1003 attached***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [1]: USB id=0x12d11003 vid=0x12d1 pid=0x1003***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [0]: USB id=0x1d6b0002 vid=0x1d6b pid=0x2***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [USB dev list begin (count:2)]***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Skip sysfs entry [/sys/bus/usb/devices/../uevent] ...***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Skip sysfs entry [/sys/bus/usb/devices/./uevent] ...***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Hotplug event REMOVE trapped***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Found USB hotplug event remove@ for dev usb1***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [USB dev list end]***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Found USB dev vid=0x12d1 pid=0x1003 attached***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [1]: USB id=0x12d11003 vid=0x12d1 pid=0x1003***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [0]: USB id=0x1d6b0002 vid=0x1d6b pid=0x2***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: [USB dev list begin (count:2)]***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Skip sysfs entry [/sys/bus/usb/devices/../uevent] ...***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Skip sysfs entry [/sys/bus/usb/devices/./uevent] ...***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Hotplug event REMOVE trapped***  ***2012-04-01 02:33:13 debug ah\_brd: [brd\_hotplug]: WFOHP: Found USB hotplug event remove@ for dev USB0*** | | |
| Test Result |  | | |

### UsbModem\_ErrorReport\_2

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_ErrorReport\_2 | | |
| Priority | High | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Report modem errors to HiveManager | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary | | |
| Test procedure | 1) Run some illegal action to trigger modem error  2) Check the error msg of modem on HM | | |
| Expect result | 1) There are errors displayed in HM for this BR/ modem  2) The error msg is the same as the error printed in BR console  3) The error msg will be updated according to the retrieve period of HM  4) The history error msg can still be displayed in HM, after BR reboot and restore the connection with HM | | |
| Test Result |  | | |

## UsbModem\_Electric

### UsbModem\_Electric\_1

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_Electric\_1 | | |
| Priority | High | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Status of LED when 3g modem mode is on-demand | | |
| Pre-condition | 1) WAN is available by eth0  2) The 3g service is activated and available  3) capwap connection works well by either eth0 or usbmodem WAN  4) Configured the dialup username/ passwd/ number if the modem if necessary  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) Set the mode of USB modem as on-demand in BR  2) Unplug the cable of eth0 from BR  ***in eth0 sh***  3) Unplug the USB modem from BR  ***no usbm en*** | | |
| Expect result | 1) When WAN through eth0 is available, LED is white solid  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm sUSB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Fri Mar 22 20:10:01 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Fri Mar 22 20:10:11 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh capw c***  ***CAPWAP client: Enabled***  ***CAPWAP transport mode: UDP***  ***RUN state: Connected securely to the CAPWAP server***  ***CAPWAP client IP: 172.18.1.129***  ***CAPWAP server IP: 172.16.20.213***  ***HiveManager Primary Name:172.16.20.213***  ***HiveManager Backup Name:***  ***CAPWAP Default Server Name: redirector.aerohive.com***  ***Virtual HiveManager Name: zhxu-vhm01***  ***Server destination Port: 12222***  ***CAPWAP send event: Enabled***  ***CAPWAP DTLS state: Enabled***  ***CAPWAP DTLS negotiation: Disabled***  ***DTLS next connect status: Enable***  ***DTLS always accept bootstrap passphrase: Enabled***  ***DTLS session status: Connected***  ***DTLS key type: passphrase***  ***DTLS session cut interval: 5 seconds***  ***DTLS handshake wait interval: 60 seconds***  ***DTLS Max retry count: 3***  ***DTLS authorize failed: 0***  ***DTLS reconnect count: 0***  ***Discovery interval: 5 seconds***  ***Heartbeat interval: 30 seconds***  ***Max discovery interval: 10 seconds***  ***Neighbor dead interval:105 seconds***  ***Silent interval: 15 seconds***  ***Wait join interval: 60 seconds***  ***Discovery count: 0***  ***Max discovery count: 3***  ***Retransmit count: 0***  ***Max retransmit count: 2***  ***Keepalives lost/sent: 79/65955***  ***Event packet drop due to buffer shortage: 0***  ***Event packet drop due to loss connection: 15***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh sys led***  ***Brightness configuration: bright***  ***System LED status:***  ***No Led Colour Blinking***  ***---------------------------------------------------------***  ***1 Power Off No blinking***  ***2 Status White No blinking***  2) When WAN through 3g instead of eth0, LED is white blinking  ***AH-8c66c0#in eth0 sh***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#shwan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: FAILOVER***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Fri Mar 22 20:10:01 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Fri Mar 22 20:10:11 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 0.0.0.0 wan - 08ea:440c:32c0 D***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.27.46.155 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh capw c***  ***CAPWAP client: Enabled***  ***CAPWAP transport mode: UDP***  ***CAPWAP client IP: 0.0.0.0***  ***CAPWAP server IP: 0.0.0.0***  ***HiveManager Primary Name:172.16.20.213***  ***HiveManager Backup Name:***  ***CAPWAP Default Server Name: redirector.aerohive.com***  ***Virtual HiveManager Name: zhxu-vhm01***  ***Server destination Port: 80***  ***CAPWAP send event: Enabled***  ***CAPWAP DTLS state: Enabled***  ***CAPWAP DTLS negotiation: Disabled***  ***DTLS next connect status: Enable***  ***DTLS always accept bootstrap passphrase: Enabled***  ***DTLS session status: Connected***  ***DTLS key type: passphrase***  ***DTLS session cut interval: 5 seconds***  ***DTLS handshake wait interval: 60 seconds***  ***DTLS Max retry count: 3***  ***DTLS authorize failed: 0***  ***DTLS reconnect count: 0***  ***Discovery interval: 5 seconds***  ***Heartbeat interval: 30 seconds***  ***Max discovery interval: 10 seconds***  ***Neighbor dead interval:105 seconds***  ***Silent interval: 15 seconds***  ***Wait join interval: 60 seconds***  ***Discovery count: 0***  ***Max discovery count: 3***  ***Retransmit count: 0***  ***Max retransmit count: 2***  ***Keepalives lost/sent: 82/65979***  ***Event packet drop due to buffer shortage: 0***  ***Event packet drop due to loss connection: 15***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh sys led***  ***Brightness configuration: bright***  ***System LED status:***  ***No Led Colour Blinking***  ***---------------------------------------------------------***  ***1 Power Off No blinking***  ***2 Status White Slow blinking***  3) When WAN is unavailalbe either through 3g or eth0, LED is amber solid  ***no usbm en***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm sUSB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: NOWAN***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Fri Mar 22 20:10:01 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Fri Mar 22 20:10:11 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 0.0.0.0 wan - 4018:b18c:66c0 D***  ***Mgt0 172.18.1.129 - 1 4018:b18c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***172.18.1.128 0.0.0.0 255.255.255.128 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh capw c***  ***CAPWAP client: Enabled***  ***CAPWAP transport mode: UDP***  ***DISCOVERY state: Sending Discovery packets to find the CAPWAP server***  ***CAPWAP client IP: 172.18.1.129***  ***CAPWAP server IP: 172.16.20.213***  ***HiveManager Primary Name:172.16.20.213***  ***HiveManager Backup Name:***  ***CAPWAP Default Server Name: redirector.aerohive.com***  ***Virtual HiveManager Name: zhxu-vhm01***  ***Server destination Port: 12222***  ***CAPWAP send event: Enabled***  ***CAPWAP DTLS state: Enabled***  ***CAPWAP DTLS negotiation: Disabled***  ***DTLS next connect status: Enable***  ***DTLS always accept bootstrap passphrase: Enabled***  ***DTLS session status: Disconnect***  ***DTLS key type: passphrase***  ***DTLS session cut interval: 5 seconds***  ***DTLS handshake wait interval: 60 seconds***  ***DTLS Max retry count: 3***  ***DTLS authorize failed: 0***  ***DTLS reconnect count: 0***  ***Discovery interval: 5 seconds***  ***Heartbeat interval: 30 seconds***  ***Max discovery interval: 10 seconds***  ***Neighbor dead interval:105 seconds***  ***Silent interval: 15 seconds***  ***Wait join interval: 60 seconds***  ***Discovery count: 3***  ***Max discovery count: 3***  ***Retransmit count: 0***  ***Max retransmit count: 2***  ***Keepalives lost/sent: 82/65979***  ***Event packet drop due to buffer shortage: 0***  ***Event packet drop due to loss connection: 16***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh sys led***  ***Brightness configuration: bright***  ***System LED status:***  ***No Led Colour Blinking***  ***---------------------------------------------------------***  ***1 Power Amber No blinking***  ***2 Status Off No blinking*** | | |
| Test Result |  | | |

### UsbModem\_Electric\_2

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_Electric\_2 | | |
| Priority | High | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Status of LED when 3g modem mode is always-connected | | |
| Pre-condition | 1) WAN is available by eth0  2) The 3g service is activated and available  3) capwap connection works well by either eth0 or usbmodem WAN  4) Configured the dialup username/ passwd/ number if the modem if necessary  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem mode always-connected***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) Set the mode of USB modem as always-connected in BR  2) Unplug the cable of eth0 from BR  ***in e0 sh***  3) Unplug the USB modem from BR  ***no usbm en*** | | |
| Expect result | 1) When WAN through eth0 is available, LED is white solid  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 2***  ***lkdn\_time: Fri Mar 22 22:54:34 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sat Mar 23 02:14:19 2013***  ***last\_event: PRIMARY\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 02:14:25 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh capw c***  ***CAPWAP client: Enabled***  ***CAPWAP transport mode: UDP***  ***RUN state: Connected securely to the CAPWAP server***  ***CAPWAP client IP: 172.18.1.129***  ***CAPWAP server IP: 172.16.20.213***  ***HiveManager Primary Name:172.16.20.213***  ***HiveManager Backup Name:***  ***CAPWAP Default Server Name: redirector.aerohive.com***  ***Virtual HiveManager Name: zhxu-vhm01***  ***Server destination Port: 12222***  ***CAPWAP send event: Enabled***  ***CAPWAP DTLS state: Enabled***  ***CAPWAP DTLS negotiation: Disabled***  ***DTLS next connect status: Enable***  ***DTLS always accept bootstrap passphrase: Enabled***  ***DTLS session status: Connected***  ***DTLS key type: passphrase***  ***DTLS session cut interval: 5 seconds***  ***DTLS handshake wait interval: 60 seconds***  ***DTLS Max retry count: 3***  ***DTLS authorize failed: 0***  ***DTLS reconnect count: 0***  ***Discovery interval: 5 seconds***  ***Heartbeat interval: 30 seconds***  ***Max discovery interval: 10 seconds***  ***Neighbor dead interval:105 seconds***  ***Silent interval: 15 seconds***  ***Wait join interval: 60 seconds***  ***Discovery count: 0***  ***Max discovery count: 3***  ***Retransmit count: 0***  ***Max retransmit count: 2***  ***Keepalives lost/sent: 79/65955***  ***Event packet drop due to buffer shortage: 0***  ***Event packet drop due to loss connection: 15***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh sys led***  ***Brightness configuration: bright***  ***System LED status:***  ***No Led Colour Blinking***  ***---------------------------------------------------------***  ***1 Power Off No blinking***  ***2 Status White No blinking***  2) When WAN through 3g instead of eth0, LED is white blinking  ***in e0 sh***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: FAILOVER***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Sat Mar 23 02:14:25 2013***  ***last\_event: PRIMARY\_WAN\_DOWN***  ***last\_evt\_time: Sat Mar 23 03:25:06 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 0.0.0.0 wan - 08ea:440c:32c0 D***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh capw c***  ***CAPWAP client: Enabled***  ***CAPWAP transport mode: UDP***  ***CAPWAP client IP: 0.0.0.0***  ***CAPWAP server IP: 0.0.0.0***  ***HiveManager Primary Name:172.16.20.213***  ***HiveManager Backup Name:***  ***CAPWAP Default Server Name: redirector.aerohive.com***  ***Virtual HiveManager Name: zhxu-vhm01***  ***Server destination Port: 80***  ***CAPWAP send event: Enabled***  ***CAPWAP DTLS state: Enabled***  ***CAPWAP DTLS negotiation: Disabled***  ***DTLS next connect status: Enable***  ***DTLS always accept bootstrap passphrase: Enabled***  ***DTLS session status: Connected***  ***DTLS key type: passphrase***  ***DTLS session cut interval: 5 seconds***  ***DTLS handshake wait interval: 60 seconds***  ***DTLS Max retry count: 3***  ***DTLS authorize failed: 0***  ***DTLS reconnect count: 0***  ***Discovery interval: 5 seconds***  ***Heartbeat interval: 30 seconds***  ***Max discovery interval: 10 seconds***  ***Neighbor dead interval:105 seconds***  ***Silent interval: 15 seconds***  ***Wait join interval: 60 seconds***  ***Discovery count: 0***  ***Max discovery count: 3***  ***Retransmit count: 0***  ***Max retransmit count: 2***  ***Keepalives lost/sent: 82/65979***  ***Event packet drop due to buffer shortage: 0***  ***Event packet drop due to loss connection: 15***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh sys led***  ***Brightness configuration: bright***  ***System LED status:***  ***No Led Colour Blinking***  ***---------------------------------------------------------***  ***1 Power Off No blinking***  ***2 Status White Slow blinking***  3) When WAN is unavailalbe either through 3g or eth0, LED is amber solid  ***no usbm en***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm sUSB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: NOWAN***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Fri Mar 22 20:10:01 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Fri Mar 22 20:10:11 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 0.0.0.0 wan - 4018:b18c:66c0 D***  ***Mgt0 172.18.1.129 - 1 4018:b18c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***172.18.1.128 0.0.0.0 255.255.255.128 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh capw c***  ***CAPWAP client: Enabled***  ***CAPWAP transport mode: UDP***  ***DISCOVERY state: Sending Discovery packets to find the CAPWAP server***  ***CAPWAP client IP: 172.18.1.129***  ***CAPWAP server IP: 172.16.20.213***  ***HiveManager Primary Name:172.16.20.213***  ***HiveManager Backup Name:***  ***CAPWAP Default Server Name: redirector.aerohive.com***  ***Virtual HiveManager Name: zhxu-vhm01***  ***Server destination Port: 12222***  ***CAPWAP send event: Enabled***  ***CAPWAP DTLS state: Enabled***  ***CAPWAP DTLS negotiation: Disabled***  ***DTLS next connect status: Enable***  ***DTLS always accept bootstrap passphrase: Enabled***  ***DTLS session status: Disconnect***  ***DTLS key type: passphrase***  ***DTLS session cut interval: 5 seconds***  ***DTLS handshake wait interval: 60 seconds***  ***DTLS Max retry count: 3***  ***DTLS authorize failed: 0***  ***DTLS reconnect count: 0***  ***Discovery interval: 5 seconds***  ***Heartbeat interval: 30 seconds***  ***Max discovery interval: 10 seconds***  ***Neighbor dead interval:105 seconds***  ***Silent interval: 15 seconds***  ***Wait join interval: 60 seconds***  ***Discovery count: 3***  ***Max discovery count: 3***  ***Retransmit count: 0***  ***Max retransmit count: 2***  ***Keepalives lost/sent: 82/65979***  ***Event packet drop due to buffer shortage: 0***  ***Event packet drop due to loss connection: 16***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh sys led***  ***Brightness configuration: bright***  ***System LED status:***  ***No Led Colour Blinking***  ***---------------------------------------------------------***  ***1 Power Amber No blinking***  ***2 Status Off No blinking*** | | |
| Test Result |  | | |

### UsbModem\_Electric\_3

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_Electric\_3 | | |
| Priority | High | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Status of LED when 3g modem mode is primary-wan | | |
| Pre-condition | 1) WAN is available by eth0  2) The 3g service is activated and available  3) capwap connection works well by either eth0 or usbmodem WAN  4) Configured the dialup username/ passwd/ number if the modem if necessary  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan\_failover\_test ip 8.8.8.8***  ***track wan\_failover\_test default-gateway***  ***track wan\_failover\_test interval 1***  ***track wan\_failover\_test timeout 1***  ***track wan\_failover\_test retry 0***  ***track wan\_failover\_test multi-dst-logic and***  ***track wan\_failover\_test use-for-wan-testing***  ***capwap client server name 10.155.33.220***  ***capwap client vhm-name JingLi-VHM***  ***routing route-request enable***  ***usbmodem mode primary-wan***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) Set the mode of USB modem as primary-wan in BR  2) Unplug the USB modem from BR  3) Unplug the cable of eth0 from BR | | |
| Expect result | 1) When WAN through 3g is available, LED is white solid  2) When WAN through eth0 instead of 3g is available, LED is white blinking  3) When WAN is unavailalbe either through 3g or eth0, LED is amber solid | | |
| Test Result |  | | |

### UsbModem\_Electric\_4

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_Electric\_4 | | |
| Priority | Middle | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Status of LED when track invalid ip and eth0 is primary wan | | |
| Pre-condition | 1) WAN is available by eth0  2) capwap connection works well by eth0WAN  3) Unplug usbmodem  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem mode always-connected***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) Set the mode of USB modem as always-connected in BR  ***zhxu-8c66c0#sh usbm | in mode:***  ***Mode: always-connected***  2) Track invalid ip for both eth0 and usbnet0  ***track-wan use-for-wan-eth0 ip 1.1.1.1***  ***track-wan use-for-wan-usbnet0 ip 1.1.1.1***  3) Check the state of WAN and LED  ***sh sys l*** | | |
| Expect result | 1) Before track invalid ip, both WAN and capwap connection are up, LED is white solid  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 2***  ***lkdn\_time: Fri Mar 22 22:54:34 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sat Mar 23 02:14:19 2013***  ***last\_event: PRIMARY\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 02:14:25 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh capw c***  ***CAPWAP client: Enabled***  ***CAPWAP transport mode: UDP***  ***RUN state: Connected securely to the CAPWAP server***  ***CAPWAP client IP: 172.18.1.129***  ***CAPWAP server IP: 172.16.20.213***  ***HiveManager Primary Name:172.16.20.213***  ***HiveManager Backup Name:***  ***CAPWAP Default Server Name: redirector.aerohive.com***  ***Virtual HiveManager Name: zhxu-vhm01***  ***Server destination Port: 12222***  ***CAPWAP send event: Enabled***  ***CAPWAP DTLS state: Enabled***  ***CAPWAP DTLS negotiation: Disabled***  ***DTLS next connect status: Enable***  ***DTLS always accept bootstrap passphrase: Enabled***  ***DTLS session status: Connected***  ***DTLS key type: passphrase***  ***DTLS session cut interval: 5 seconds***  ***DTLS handshake wait interval: 60 seconds***  ***DTLS Max retry count: 3***  ***DTLS authorize failed: 0***  ***DTLS reconnect count: 0***  ***Discovery interval: 5 seconds***  ***Heartbeat interval: 30 seconds***  ***Max discovery interval: 10 seconds***  ***Neighbor dead interval:105 seconds***  ***Silent interval: 15 seconds***  ***Wait join interval: 60 seconds***  ***Discovery count: 0***  ***Max discovery count: 3***  ***Retransmit count: 0***  ***Max retransmit count: 2***  ***Keepalives lost/sent: 79/65955***  ***Event packet drop due to buffer shortage: 0***  ***Event packet drop due to loss connection: 15***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh sys l***  ***Brightness configuration: bright***  ***System LED status:***  ***No Led Colour Blinking***  ***---------------------------------------------------------***  ***1 Power Off No blinking***  ***2 Status White No blinking***  2) After track invalid ip, WAN monitor state is down, LED is amber solid  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 2***  ***lkdn\_time: Fri Mar 22 22:54:34 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: NOWAN***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sat Mar 23 02:14:19 2013***  ***last\_event: PRIMARY\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 02:14:25 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 10001 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 10600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh capw c***  ***CAPWAP client: Enabled***  ***CAPWAP transport mode: UDP***  ***DISCOVERY state: Sending Discovery packets to find the CAPWAP server***  ***CAPWAP client IP: 172.18.1.129***  ***CAPWAP server IP: 0.0.0.0***  ***HiveManager Primary Name:172.16.20.213***  ***HiveManager Backup Name:***  ***CAPWAP Default Server Name: redirector.aerohive.com***  ***Virtual HiveManager Name: zhxu-vhm01***  ***Server destination Port: 12222***  ***CAPWAP send event: Enabled***  ***CAPWAP DTLS state: Enabled***  ***CAPWAP DTLS negotiation: Disabled***  ***DTLS next connect status: Enable***  ***DTLS always accept bootstrap passphrase: Enabled***  ***DTLS session status: Disconnect***  ***DTLS key type: passphrase***  ***DTLS session cut interval: 5 seconds***  ***DTLS handshake wait interval: 60 seconds***  ***DTLS Max retry count: 3***  ***DTLS authorize failed: 0***  ***DTLS reconnect count: 0***  ***Discovery interval: 5 seconds***  ***Heartbeat interval: 30 seconds***  ***Max discovery interval: 10 seconds***  ***Neighbor dead interval:105 seconds***  ***Silent interval: 15 seconds***  ***Wait join interval: 60 seconds***  ***Discovery count: 2***  ***Max discovery count: 3***  ***Retransmit count: 0***  ***Max retransmit count: 2***  ***Keepalives lost/sent: 6/164***  ***Event packet drop due to buffer shortage: 0***  ***Event packet drop due to loss connection: 31***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh sys led***  ***Brightness configuration: bright***  ***System LED status:***  ***No Led Colour Blinking***  ***---------------------------------------------------------***  ***1 Power Amber No blinking***  ***2 Status Off No blinking*** | | |
| Test Result |  | | |

### UsbModem\_Electric\_5

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_Electric\_5 | | |
| Priority | Middle | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Status of LED when track invalid ip and usbmodem is primary wan | | |
| Pre-condition | 1) WAN is available by usbmodem  2) capwap connection works well by usbmodem WAN  3) Unplug eth0  ***zhxu-8c66c0#sh ru | in track***  ***track QS-IP-Track-Router default-gateway***  ***track QS-IP-Track-Router ip 206.80.44.205***  ***track QS-IP-Track-Router ip 206.80.44.206***  ***track QS-IP-Track-Router interval 30***  ***track QS-IP-Track-Router timeout 5***  ***track QS-IP-Track-Router multi-dst-logic and***  ***track QS-IP-Track-Router use-for-wan-testing*** | | |
| Test procedure | 1) Set the mode of USB modem as primary-wan in BR  ***zhxu-8c66c0#sh usbm | in mode:***  ***Mode: primary-wan***  2) Track invalid ip  ***track QS-IP-Track-Router ip 1.1.1.1***  3) Check the state of WAN and LED | | |
| Expect result | 1) Before track invalid ip, both WAN and capwap connection are up, LED is white solid  ***zhxu-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 0.0.0.0 wan - 0019:778c:66c0 D***  ***Mgt0 172.18.255.129 - 1 0019:778c:66c0 U***  ***Mgt0.16 192.168.1.249 - 10 0019:778c:66c0 U***  ***Ppp0 10.32.136.87 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.1.248 0.0.0.0 255.255.255.248 U 0 0 0 mgt0.16***  ***172.18.255.128 0.0.0.0 255.255.255.128 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x141b***  ***USB Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***PID: 2597***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***920228 4301 0 0 0 0 4301 | 1640737 18426 0 0 18426 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Jan 1 08:39:11 1970)***  ***DOWN: 1 times (since Thu Jan 1 08:02:27 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 08:01:40 1970)***  ***DOWN: 0 times (since Thu Jan 1 08:00:10 1970)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***[Backup]***  ***Interface: eth0***  ***WAN Monitor State: down***  ***UP: 0 times (since Thu Jan 1 08:00:10 1970)***  ***DOWN: 0 times (since Thu Jan 1 08:00:10 1970)***  ***Local Link State:***  ***UP: 0 times (since Thu Jan 1 08:00:10 1970)***  ***DOWN: 0 times (since Thu Jan 1 08:00:10 1970)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: CONNECTED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh capw c | in RUN***  ***RUN state: Connected securely to the CAPWAP server***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh sys l***  ***Brightness configuration: bright***  ***System LED status:***  ***No Led Colour Blinking***  ***---------------------------------------------------------***  ***1 Power Off No blinking***  ***2 Status White No blinking***  2) After track invalid ip, WAN monitor state is down, LED is amber solid, though capwap connection still is ok.  ***zhxu-8c66c0#sh ru | in track***  ***track QS-IP-Track-Router default-gateway***  ***track QS-IP-Track-Router ip 206.80.44.205***  ***track QS-IP-Track-Router ip 206.80.44.206***  ***track QS-IP-Track-Router ip 1.1.1.1***  ***track QS-IP-Track-Router interval 30***  ***track QS-IP-Track-Router timeout 5***  ***track QS-IP-Track-Router use-for-wan-testing*** | | |
| Test Result |  | | |

### UsbModem\_Electric\_6

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| --- | --- | --- | --- |
| Case ID | UsbModem\_Electric\_6 | | |
| Priority | Low | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Status of LED when disable/ enable capwap connection, eth0 is prim WAN | | |
| Pre-condition | 1) WAN is available by eth0  2) Set the mode of USB modem as on-demand or always-connecte  3) capwap is disabled initially  4) Unplug usbmodem  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***no capwap client enable***  ***usbmodem mode always-connected***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) Startup BR with track valid ip  2) Check the state of WAN and LED  3) Enable capwap  ***capw c en***  4) Repeat step 2)  5) Track invalid ip  ***track-wan use-for-wan-eth0 ip 1.1.1.1***  ***track-wan use-for-wan-usbnet0 ip 1.1.1.1***  6) Repeat step 2)  7) Disable capwap  ***no capw c en***  8) Repeat step 2)  9) Enable capwap again  ***capw c en***  10) Repeat step 2) | | |
| Expect result | 1) Before track invalid ip, WAN is up, but no capwap connection, and LED is amber solid  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 2***  ***lkdn\_time: Fri Mar 22 22:54:34 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sat Mar 23 02:14:19 2013***  ***last\_event: PRIMARY\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 02:14:25 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh capw c***  ***CAPWAP client: Disabled***  ***Discovery interval: 5 seconds***  ***Heartbeat interval: 30 seconds***  ***Max discovery interval: 10 seconds***  ***Neighbor dead interval:105 seconds***  ***Silent interval: 15 seconds***  ***Wait join interval: 60 seconds***  ***Discovery count: 0***  ***Max discovery count: 3***  ***Retransmit count: 0***  ***Max retransmit count: 2***  ***Keepalives lost/sent: 0/0***  ***Event packet drop due to buffer shortage: 0***  ***Event packet drop due to loss connection: 6***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh sy l***  ***Brightness configuration: bright***  ***System LED status:***  ***No Led Colour Blinking***  ***---------------------------------------------------------***  ***1 Power Amber No blinking***  ***2 Status Off No blinking***  2) After enable capwap, both WAN and capwap connection are up, and LED is white solid  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 2***  ***lkdn\_time: Fri Mar 22 22:54:34 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sat Mar 23 02:14:19 2013***  ***last\_event: PRIMARY\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 02:14:25 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - 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- - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh capw c***  ***CAPWAP client: Enabled***  ***CAPWAP transport mode: UDP***  ***RUN state: Connected securely to the CAPWAP server***  ***CAPWAP client IP: 172.18.255.129***  ***CAPWAP server IP: 10.155.33.220***  ***HiveManager Primary Name:10.155.33.220***  ***HiveManager Backup Name:***  ***CAPWAP Default Server Name: staging.aerohive.com***  ***Virtual HiveManager Name: JingLi-VHM***  ***Server destination Port: 12222***  ***CAPWAP send event: Enabled***  ***CAPWAP DTLS state: Enabled***  ***CAPWAP DTLS negotiation: Disabled***  ***DTLS next connect status: Enable***  ***DTLS always accept bootstrap passphrase: Enabled***  ***DTLS session status: Connected***  ***DTLS key type: passphrase***  ***DTLS session cut interval: 5 seconds***  ***DTLS handshake wait interval: 60 seconds***  ***DTLS Max retry count: 3***  ***DTLS authorize failed: 0***  ***DTLS reconnect count: 0***  ***Discovery interval: 5 seconds***  ***Heartbeat interval: 30 seconds***  ***Max discovery interval: 10 seconds***  ***Neighbor dead interval:105 seconds***  ***Silent interval: 15 seconds***  ***Wait join interval: 60 seconds***  ***Discovery count: 0***  ***Max discovery count: 3***  ***Retransmit count: 0***  ***Max retransmit count: 2***  ***Keepalives lost/sent: 0/133***  ***Event packet drop due to buffer shortage: 0***  ***Event packet drop due to loss connection: 7***  *- - 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- - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh capw c***  ***CAPWAP client: Enabled***  ***CAPWAP transport mode: UDP***  ***RUN state: Connected securely to the CAPWAP server***  ***CAPWAP client IP: 172.18.255.129***  ***CAPWAP server IP: 10.155.33.220***  ***HiveManager Primary Name:10.155.33.220***  ***HiveManager Backup Name:***  ***CAPWAP Default Server Name: staging.aerohive.com***  ***Virtual HiveManager Name: JingLi-VHM***  ***Server destination Port: 12222***  ***CAPWAP send event: Enabled***  ***CAPWAP DTLS state: Enabled***  ***CAPWAP DTLS negotiation: Disabled***  ***DTLS next connect status: Enable***  ***DTLS always accept bootstrap passphrase: Enabled***  ***DTLS session status: Connected***  ***DTLS key type: passphrase***  ***DTLS session cut interval: 5 seconds***  ***DTLS handshake wait interval: 60 seconds***  ***DTLS Max retry count: 3***  ***DTLS authorize failed: 0***  ***DTLS reconnect count: 0***  ***Discovery interval: 5 seconds***  ***Heartbeat interval: 30 seconds***  ***Max discovery interval: 10 seconds***  ***Neighbor dead interval:105 seconds***  ***Silent interval: 15 seconds***  ***Wait join interval: 60 seconds***  ***Discovery count: 0***  ***Max discovery count: 3***  ***Retransmit count: 0***  ***Max retransmit count: 2***  ***Keepalives lost/sent: 0/133***  ***Event packet drop due to buffer shortage: 0***  ***Event packet drop due to loss connection: 7***  *- - 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- - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh capw c***  ***CAPWAP client: Disabled***  ***Discovery interval: 5 seconds***  ***Heartbeat interval: 30 seconds***  ***Max discovery interval: 10 seconds***  ***Neighbor dead interval:105 seconds***  ***Silent interval: 15 seconds***  ***Wait join interval: 60 seconds***  ***Discovery count: 0***  ***Max discovery count: 3***  ***Retransmit count: 0***  ***Max retransmit count: 2***  ***Keepalives lost/sent: 0/240***  ***Event packet drop due to buffer shortage: 0***  ***Event packet drop due to loss connection: 7***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh sy l***  ***Brightness configuration: bright***  ***System LED status:***  ***No Led Colour Blinking***  ***---------------------------------------------------------***  ***1 Power Amber No blinking***  ***2 Status Off No blinking***  5) After enable capwap again, WAN still is down, and LED is amber solid though capwap connection is up  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 2***  ***lkdn\_time: Fri Mar 22 22:54:34 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - 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- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 10001 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 10600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh capw c***  ***CAPWAP client: Enabled***  ***CAPWAP transport mode: UDP***  ***RUN state: Connected securely to the CAPWAP server***  ***CAPWAP client IP: 172.18.255.129***  ***CAPWAP server IP: 10.155.33.220***  ***HiveManager Primary Name:10.155.33.220***  ***HiveManager Backup Name:***  ***CAPWAP Default Server Name: staging.aerohive.com***  ***Virtual HiveManager Name: JingLi-VHM***  ***Server destination Port: 12222***  ***CAPWAP send event: Enabled***  ***CAPWAP DTLS state: Enabled***  ***CAPWAP DTLS negotiation: Disabled***  ***DTLS next connect status: Enable***  ***DTLS always accept bootstrap passphrase: Enabled***  ***DTLS session status: Connected***  ***DTLS key type: passphrase***  ***DTLS session cut interval: 5 seconds***  ***DTLS handshake wait interval: 60 seconds***  ***DTLS Max retry count: 3***  ***DTLS authorize failed: 0***  ***DTLS reconnect count: 0***  ***Discovery interval: 5 seconds***  ***Heartbeat interval: 30 seconds***  ***Max discovery interval: 10 seconds***  ***Neighbor dead interval:105 seconds***  ***Silent interval: 15 seconds***  ***Wait join interval: 60 seconds***  ***Discovery count: 0***  ***Max discovery count: 3***  ***Retransmit count: 0***  ***Max retransmit count: 2***  ***Keepalives lost/sent: 0/133***  ***Event packet drop due to buffer shortage: 0***  ***Event packet drop due to loss connection: 7***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh sys led***  ***Brightness configuration: bright***  ***System LED status:***  ***No Led Colour Blinking***  ***---------------------------------------------------------***  ***1 Power Amber No blinking***  ***2 Status Off No blinking*** | | |
| Test Result |  | | |

### UsbModem\_Electric\_7

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| --- | --- | --- | --- |
| Case ID | UsbModem\_Electric\_7 | | |
| Priority | Low | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Status of LED when disable/ enable capwap connection, usbmodem is prim WAN | | |
| Pre-condition | 1) WAN is available by usbmodem  2) Set the mode of USB modem as primary-wan  3) capwap is disabled initially  4) Unplug eth0 | | |
| Test procedure | 1) Startup BR with track valid ip  2) Check the state of WAN and LED  3) Enable capwap  ***capw c en***  4) Repeat step 2)  5) Track invalid ip  ***track QS-IP-Track-Router ip 1.1.1.1***  6) Repeat step 2)  7) Disable capwap  ***no capw c en***  8) Repeat step 2)  9) Enable capwap again  ***capw c en***  10) Repeat step 2) | | |
| Expect result | 1) Before track invalid ip, WAN is up, but no capwap connection, and LED is amber solid  2) After enable capwap, both WAN and capwap connection are up, and LED is white solid  3) After track invalid ip, WAN is down, and LED is amber solid  4) After disable capwap again, both WAN and capwap connection are down, and LED is amber solid  5) After enable capwap again, WAN still is down, and LED is amber solid though capwap connection is up | | |
| Test Result |  | | |

### UsbModem\_Electric\_8

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_Electric\_8 | | |
| Priority | Low | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Status of LED with/ without track invalid ip after capwap is disabled, eth0 is prim WAN | | |
| Pre-condition | 1) WAN is available by eth0  2) Set the mode of USB modem as on-demand or always-connected  3) capwap is disabled initially  4) Unplug usbmodem  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***no capwap client enable***  ***usbmodem mode always-connected***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) Startup BR with track valid ip  2) Check the state of WAN and LED  3) Track invalid ip  ***track-wan use-for-wan-eth0 ip 1.1.1.1***  ***track-wan use-for-wan-usbnet0 ip 1.1.1.1***  4) Repeat step 2)  5) Stop track invalid ip  ***no track-wan use-for-wan-eth0 ip 1.1.1.1***  ***no track-wan use-for-wan-usbnet0 ip 1.1.1.1***  6) Repeat step 2) | | |
| Expect result | 1) Before track invalid ip , capwap connection is down, and LED is amber solid though WAN is up  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 2***  ***lkdn\_time: Fri Mar 22 22:54:34 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sat Mar 23 02:14:19 2013***  ***last\_event: PRIMARY\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 02:14:25 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - 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- - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh capw c***  ***CAPWAP client: Disabled***  ***Discovery interval: 5 seconds***  ***Heartbeat interval: 30 seconds***  ***Max discovery interval: 10 seconds***  ***Neighbor dead interval:105 seconds***  ***Silent interval: 15 seconds***  ***Wait join interval: 60 seconds***  ***Discovery count: 0***  ***Max discovery count: 3***  ***Retransmit count: 0***  ***Max retransmit count: 2***  ***Keepalives lost/sent: 0/0***  ***Event packet drop due to buffer shortage: 0***  ***Event packet drop due to loss connection: 6***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh sy l***  ***Brightness configuration: bright***  ***System LED status:***  ***No Led Colour Blinking***  ***---------------------------------------------------------***  ***1 Power Amber No blinking***  ***2 Status Off No blinking***  2) After track invalid ip, both WAN and capwap connection are down, and LED is amber solid  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 2***  ***lkdn\_time: Fri Mar 22 22:54:34 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: NOWAN***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sat Mar 23 02:14:19 2013***  ***last\_event: PRIMARY\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 02:14:25 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 10001 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 10600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh capw c***  ***CAPWAP client: Disabled***  ***Discovery interval: 5 seconds***  ***Heartbeat interval: 30 seconds***  ***Max discovery interval: 10 seconds***  ***Neighbor dead interval:105 seconds***  ***Silent interval: 15 seconds***  ***Wait join interval: 60 seconds***  ***Discovery count: 0***  ***Max discovery count: 3***  ***Retransmit count: 0***  ***Max retransmit count: 2***  ***Keepalives lost/sent: 0/0***  ***Event packet drop due to buffer shortage: 0***  ***Event packet drop due to loss connection: 6***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh sy l***  ***Brightness configuration: bright***  ***System LED status:***  ***No Led Colour Blinking***  ***---------------------------------------------------------***  ***1 Power Amber No blinking***  ***2 Status Off No blinking***  3) After stop track invalid ip, WAN is up, and LED is amber solid since capwap connection is still down  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 2***  ***lkdn\_time: Fri Mar 22 22:54:34 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sat Mar 23 02:14:19 2013***  ***last\_event: PRIMARY\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 02:14:25 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh capw c***  ***CAPWAP client: Disabled***  ***Discovery interval: 5 seconds***  ***Heartbeat interval: 30 seconds***  ***Max discovery interval: 10 seconds***  ***Neighbor dead interval:105 seconds***  ***Silent interval: 15 seconds***  ***Wait join interval: 60 seconds***  ***Discovery count: 0***  ***Max discovery count: 3***  ***Retransmit count: 0***  ***Max retransmit count: 2***  ***Keepalives lost/sent: 0/0***  ***Event packet drop due to buffer shortage: 0***  ***Event packet drop due to loss connection: 6***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh sy l***  ***Brightness configuration: bright***  ***System LED status:***  ***No Led Colour Blinking***  ***---------------------------------------------------------***  ***1 Power Amber No blinking***  ***2 Status Off No blinking*** | | |
| Test Result |  | | |

### UsbModem\_Electric\_9

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_Electric\_9 | | |
| Priority | Low | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Status of LED with/ without track invalid ip after capwap is disabled, usbmodem is prim WAN | | |
| Pre-condition | 1) WAN is available by usbmodem  2) Set the mode of USB modem as primary-wan  3) capwap is disabled initially  4) Unplug eth0 | | |
| Test procedure | 1) Startup BR with track valid ip  2) Check the state of WAN and LED  3) Track invalid ip  ***track QS-IP-Track-Router ip 1.1.1.1***  4) Repeat step 2)  5) Stop track invalid ip  ***no track QS-IP-Track-Router ip 1.1.1.1***  6) Repeat step 2) | | |
| Expect result | 1) Before track invalid ip, capwap connection is down, and LED is amber solid though WAN is up  2) After track invalid ip, both WAN and capwap connection are down, and LED is amber solid  3) After stop track invalid ip, WAN is up, and LED is amber solid since capwap connection is still down | | |
| Test Result |  | | |

### UsbModem\_Electric\_10

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_Electric\_10 | | |
| Priority | Low | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Status of LED with/ without track invalid ip after capwap is enabled, eth0 is prim WAN | | |
| Pre-condition | 1) WAN is available by eth0  2) Set the mode of USB modem as on-demand or always-connecte  3) capwap is enabled initially  4) Unplug usbmodem  ***zhxu-8c66c0#sh ru | in track***  ***track wan\_failover\_test default-gateway***  ***track wan\_failover\_test interval 1***  ***track wan\_failover\_test timeout 1***  ***track wan\_failover\_test retry 0***  ***track wan\_failover\_test use-for-wan-testing*** | | |
| Test procedure | 1) Startup BR with track valid ip  2) Check the state of WAN and LED  3) Track invalid ip  ***track wan\_failover\_test ip 1.1.1.1***  4) Repeat step 2)  5) Stop track invalid ip  ***no wan\_failover\_testip 1.1.1.1***  6) Repeat step 2) | | |
| Expect result | 1) Before track invalid ip, both WAN and capwap connection are up, and LED is white solid  ***zhxu-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 172.18.255.129 - 1 0019:778c:66c0 U***  ***Mgt0.16 192.168.1.249 - 10 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.1.248 0.0.0.0 255.255.255.248 U 0 0 0 mgt0.16***  ***172.18.255.128 0.0.0.0 255.255.255.128 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***NONE***  ***USB Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 1 times (since Tue Apr 17 11:22:12 2012)***  ***DOWN: 0 times (since Thu Jan 1 08:00:10 1970)***  ***Local Link State:***  ***UP: 0 times (since Thu Jan 1 08:00:10 1970)***  ***DOWN: 0 times (since Thu Jan 1 08:00:10 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 0 times (since Thu Jan 1 08:00:10 1970)***  ***DOWN: 0 times (since Thu Jan 1 08:00:10 1970)***  ***Local Link State:***  ***UP: 0 times (since Thu Jan 1 08:00:10 1970)***  ***DOWN: 0 times (since Thu Jan 1 08:00:10 1970)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: IDLE***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh capw c | in RUN***  ***RUN state: Connected securely to the CAPWAP server***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh sys l***  ***Brightness configuration: bright***  ***System LED status:***  ***No Led Colour Blinking***  ***---------------------------------------------------------***  ***1 Power Off No blinking***  ***2 Status White No blinking***  2) After track invalid ip, WAN is down, and LED is amber solid though capwap connection is up  ***zhxu-8c66c0#sh ru | in track***  ***track QS-IP-Track-Router default-gateway***  ***track QS-IP-Track-Router ip 206.80.44.205***  ***track QS-IP-Track-Router ip 206.80.44.206***  ***track QS-IP-Track-Router ip 1.1.1.1***  ***track QS-IP-Track-Router interval 30***  ***track QS-IP-Track-Router timeout 5***  ***track QS-IP-Track-Router use-for-wan-testing***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#***  ***zhxu-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 172.18.255.129 - 1 0019:778c:66c0 U***  ***Mgt0.16 192.168.1.249 - 10 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.1.248 0.0.0.0 255.255.255.248 U 0 0 0 mgt0.16***  ***172.18.255.128 0.0.0.0 255.255.255.128 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***NONE***  ***USB Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: down***  ***UP: 1 times (since Tue Apr 17 11:22:12 2012)***  ***DOWN: 1 times (since Tue Apr 17 11:47:32 2012)***  ***Local Link State:***  ***UP: 0 times (since Thu Jan 1 08:00:10 1970)***  ***DOWN: 0 times (since Thu Jan 1 08:00:10 1970)***  ***Active: no***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 0 times (since Thu Jan 1 08:00:10 1970)***  ***DOWN: 0 times (since Thu Jan 1 08:00:10 1970)***  ***Local Link State:***  ***UP: 0 times (since Thu Jan 1 08:00:10 1970)***  ***DOWN: 0 times (since Thu Jan 1 08:00:10 1970)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: IDLE***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh capw c | in RUN***  ***RUN state: Connected securely to the CAPWAP server***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh sys l***  ***Brightness configuration: bright***  ***System LED status:***  ***No Led Colour Blinking***  ***---------------------------------------------------------***  ***1 Power Red No blinking***  ***2 Status Off No blinking***  3) After stop track invalid ip, both WAN and capwap connection are up, and LED is white solid  ***zhxu-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 172.18.255.129 - 1 0019:778c:66c0 U***  ***Mgt0.16 192.168.1.249 - 10 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.1.248 0.0.0.0 255.255.255.248 U 0 0 0 mgt0.16***  ***172.18.255.128 0.0.0.0 255.255.255.128 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***NONE***  ***USB Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 1 times (since Tue Apr 17 11:22:12 2012)***  ***DOWN: 0 times (since Thu Jan 1 08:00:10 1970)***  ***Local Link State:***  ***UP: 0 times (since Thu Jan 1 08:00:10 1970)***  ***DOWN: 0 times (since Thu Jan 1 08:00:10 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 0 times (since Thu Jan 1 08:00:10 1970)***  ***DOWN: 0 times (since Thu Jan 1 08:00:10 1970)***  ***Local Link State:***  ***UP: 0 times (since Thu Jan 1 08:00:10 1970)***  ***DOWN: 0 times (since Thu Jan 1 08:00:10 1970)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: IDLE***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh capw c | in RUN***  ***RUN state: Connected securely to the CAPWAP server***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***zhxu-8c66c0#sh sys l***  ***Brightness configuration: bright***  ***System LED status:***  ***No Led Colour Blinking***  ***---------------------------------------------------------***  ***1 Power Off No blinking***  ***2 Status White No blinking*** | | |
| Test Result |  | | |

### UsbModem\_Electric\_11

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_Electric\_11 | | |
| Priority | Low | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Status of LED with/ without track invalid ip after capwap is enabled, usbmodem is prim WAN | | |
| Pre-condition | 1) WAN is available by usbmodem  2) Set the mode of USB modem as primary-wan  3) capwap is enabled initially  4) Unplug eth0 | | |
| Test procedure | 1) Startup BR with track valid ip  2) Check the state of WAN and LED  3) Track invalid ip  ***track QS-IP-Track-Router ip 1.1.1.1***  4) Repeat step 2)  5) Stop track invalid ip  ***no track QS-IP-Track-Router ip 1.1.1.1***  6) Repeat step 2) | | |
| Expect result | 1) Before track invalid ip, both WAN and capwap connection are up, and LED is white solid  2) After track invalid ip, WAN is down, and LED is amber solid though capwap connection is up  3) After stop track invalid ip, both WAN and capwap connection are up, and LED is white solid | | |
| Test Result |  | | |

### UsbModem\_Electric\_12

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_Electric\_12 | | |
| Priority | Middle | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | DC power is necessary for BR connected with usbmodem | | |
| Pre-condition | 1) Disconnect usbmodem from BR  2) Disconnect DC power from BR | | |
| Test procedure | 1) Connect BR with PoE ethernet port  2) Plug usbmodem in the USB port of BR  3) Plug DC power with BR | | |
| Expect result | 1) BR is powerd up with PoE  2) usbmodem cannot power up when BR is PoE  3) usbmodem will work when BR is DC power supplied | | |
| Test Result |  | | |

## UsbModem\_FailureScenario

### UsbModem\_FailureScenario\_1

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_FailureScenario\_1 | | |
| Priority | Middle | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Abnormal 3g WAN when there is no eth0 WAN, on-demand mode | | |
| Pre-condition | 1) Config usbmodem mode as on-demand  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Ping through eth0 WAN works well  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan\_failover\_test ip 8.8.8.8***  ***track wan\_failover\_test interval 5***  ***track wan\_failover\_test use-for-wan-testing***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) Trigger failover to usbmodem WAN via shut eth0  ***in eth0 shutdown***  2) Continue ping process  3) Disable 3g service (fault the account/ out of service)  4) Check the WAN status | | |
| Expect result | 1) WAN is eth0 initially, and usbmodem state is “Backup” and “Attached”  ***AH-8c66c0#sh usbm m huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 1 times (since Fri Mar 30 10:14:53 2012)***  ***DOWN: 1 times (since Fri Mar 30 09:44:01 2012)***  ***Local Link State:***  ***UP: 1 times (since Fri Mar 30 10:14:33 2012)***  ***DOWN: 1 times (since Fri Mar 30 09:41:22 2012)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 1 times (since Fri Mar 30 09:44:30 2012)***  ***DOWN: 3 times (since Fri Mar 30 10:15:03 2012)***  ***Local Link State:***  ***UP: 1 times (since Fri Mar 30 09:44:12 2012)***  ***DOWN: 1 times (since Fri Mar 30 10:14:53 2012)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: ATTACHED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 23.15.247.43 with 32 bytes of data:***  ***Reply from 23.15.247.43: bytes=32 time=559ms TTL=50***  ***Reply from 23.15.247.43: bytes=32 time=572ms TTL=50***  2) Failover to usbmodem WAN successfully  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 11912***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***1848 33 0 0 0 0 33 | 4106 44 0 0 44 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: down***  ***UP: 5 times (since Wed Mar 28 10:43:15 2012)***  ***DOWN: 6 times (since Wed Mar 28 10:52:03 2012)***  ***Local Link State:***  ***UP: 2 times (since Wed Mar 28 10:34:57 2012)***  ***DOWN: 2 times (since Wed Mar 28 10:51:53 2012)***  ***Active: no***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 6 times (since Wed Mar 28 10:52:18 2012)***  ***DOWN: 10 times (since Wed Mar 28 10:43:23 2012)***  ***Local Link State:***  ***UP: 6 times (since Wed Mar 28 10:52:13 2012)***  ***DOWN: 5 times (since Wed Mar 28 10:43:15 2012)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: FAILOVER***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.35.39 wan - 0019:778c:66c0 D***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.25.57.108 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.35.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  3) Ping works well via usbmodem WAN  ***Reply from 8.8.8.8: bytes=32 time=136ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=138ms TTL=45***  4) Ping break once 3g service is unavailable  ***Reply from 192.168.85.1: Destination net unreachable.***  ***Reply from 192.168.85.1: Destination net unreachable.***  5) Keep ppp connecting and won’t failback to eth0  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 5203***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: down***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***1288 46 0 0 0 0 46 | 542 48 0 0 48 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: down***  ***UP: 2 times (since Thu Apr 5 12:04:56 2012)***  ***DOWN: 3 times (since Thu Apr 5 12:09:20 2012)***  ***Local Link State:***  ***UP: 1 times (since Thu Apr 5 12:04:44 2012)***  ***DOWN: 2 times (since Thu Apr 5 12:09:15 2012)***  ***Active: no***  ***Cached Gateway IP: 10.155.35.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 2 times (since Thu Apr 5 12:09:36 2012)***  ***DOWN: 4 times (since Thu Apr 5 12:12:41 2012)***  ***Local Link State:***  ***UP: 2 times (since Thu Apr 5 12:09:29 2012)***  ***DOWN: 2 times (since Thu Apr 5 12:12:38 2012)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: CONNECTING***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.35.39 wan - 0019:778c:66c0 D***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.25.57.108 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.35.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh log bu | in fosm***  ***2012-04-05 12:15:08 debug ah\_brd: WFOSM: state ATTACHED -> CONNECTING***  ***2012-04-05 12:15:08 debug ah\_brd: WFOSM: state ATTACHED -> ATTACHED***  ***2012-04-05 12:15:08 debug ah\_brd: WFOSM: state CONNECTING -> ATTACHED***  ***2012-04-05 12:15:08 debug ah\_brd: WFOSM: Added event PPP\_STARTED***  ***2012-04-05 12:15:02 debug ah\_brd: WFOSM: Added event PPP\_STOPPED***  ***2012-04-05 12:15:02 debug ah\_brd: WFOSM: Added event START\_L3***  ***2012-04-05 12:14:02 debug ah\_brd: WFOSM: state ATTACHED -> CONNECTING***  ***2012-04-05 12:14:02 debug ah\_brd: WFOSM: state ATTACHED -> ATTACHED***  ***2012-04-05 12:14:02 debug ah\_brd: WFOSM: state CONNECTING -> ATTACHED***  ***2012-04-05 12:14:02 debug ah\_brd: WFOSM: Added event PPP\_STARTED***  ***2012-04-05 12:13:56 debug ah\_brd: WFOSM: Added event PPP\_STOPPED***  ***2012-04-05 12:13:56 debug ah\_brd: WFOSM: Added event START\_L3***  ***2012-04-05 12:12:57 debug ah\_brd: WFOSM: state ATTACHED -> CONNECTING***  ***2012-04-05 12:12:57 debug ah\_brd: WFOSM: state ATTACHED -> ATTACHED***  ***2012-04-05 12:12:57 debug ah\_brd: WFOSM: state CONNECTING -> ATTACHED***  ***2012-04-05 12:12:57 debug ah\_brd: WFOSM: Added event PPP\_STARTED***  ***2012-04-05 12:12:51 debug ah\_brd: WFOSM: Added event PPP\_STOPPED***  ***2012-04-05 12:12:51 debug ah\_brd: WFOSM: state ATTACHED -> CONNECTING***  ***2012-04-05 12:12:51 debug ah\_brd: WFOSM: state ATTACHED -> ATTACHED***  ***2012-04-05 12:12:51 debug ah\_brd: WFOSM: state ATTACHED -> ATTACHED***  ***2012-04-05 12:12:51 debug ah\_brd: WFOSM: state CONNECTING -> ATTACHED***  ***2012-04-05 12:12:51 debug ah\_brd: WFOSM: Added event START\_L3***  ***2012-04-05 12:12:51 debug ah\_brd: WFOSM: state FAILOVER -> CONNECTING***  ***2012-04-05 12:12:51 debug ah\_brd: WFOSM: Added event PPP\_STARTED***  ***2012-04-05 12:12:41 debug ah\_brd: WFOSM: Added event BKUP\_WAN\_IF\_DOWN***  ***2012-04-05 12:12:38 debug ah\_brd: WFOSM: Added event PPP\_STOPPED***  ***2012-04-05 12:12:38 debug ah\_brd: WFOSM: Added event PPP\_STOPPED***  ***2012-04-05 12:12:38 debug ah\_brd: WFOSM: Added event PPP\_IF\_DOWN*** | | |
| Test Result |  | | |

### UsbModem\_FailureScenario\_2

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_FailureScenario\_2 | | |
| Priority | Middle | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Abnormal 3g WAN when there is no eth0 WAN, always-connected mode | | |
| Pre-condition | 1) Config usbmodem mode as always-connected  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Ping through eth0 WAN works well  ***AH-7a2c80#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem mode always-connected***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usbnet0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) Trigger failover to usbmodem WAN via shut eth0  ***in e0 sh***  2) Continue ping process  3) Disable 3g service (fault the account/ out of service)  ***usbmodem modem-id huawei\_e220 dialup-number 1111***  ***no usbm en***  ***usbm en***  4) Check the WAN status | | |
| Expect result | 1) WAN is eth0 initially, and usbmodem state is “Backup” and “Connected”  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh usbm st***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.49.192.126 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:4967 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:5202 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:449917 (439.3 KiB) TX bytes:474894 (463.7 KiB)***  ***PPP Process Status:***  ***PID: 2174***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***449917 4967 0 0 0 0 4967 | 474894 5202 0 0 5202 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: up***  ***Interface: eth0; State: up***  ***Interface: usbnet0; State: up***  ***[use-for-wan-eth0]***  ***WAN Monitor State: up***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: up***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Jan 1 00:00:48 1970***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:31 1970***  ***ifmon\_up\_count: 5***  ***ifmon\_up\_time: Tue Apr 23 11:06:07 2013***  ***ifmon\_down\_count: 4***  ***ifmon\_down\_time: Tue Apr 23 11:06:01 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Tue Apr 23 10:58:50 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:31 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 18***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Tue Apr 23 10:58:44 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:31 1970***  ***ifmon\_up\_count: 1***  ***ifmon\_up\_time: Tue Apr 23 10:58:53 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:31 1970***  ***dft\_ifmon\_up\_count: 0***  ***dft\_ifmon\_up\_time: Thu Jan 1 00:00:31 1970***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:31 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Tue Apr 23 11:06:49 2013***  ***last\_event: PRIMARY\_WAN\_CONNECTED***  ***last\_evt\_time: Tue Apr 23 11:06:56 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.32.27 wan - 0019:777a:2c80 U***  ***mgt0 192.168.85.1 - 1 0019:777a:2c80 U***  ***ppp0 10.26.188.13 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***10.155.32.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***0.0.0.0 10.155.32.254 0.0.0.0 UG 1 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=34ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=33ms TTL=44***  2) Failover to usbmodem WAN successfully  ***AH-7a2c80#sh usbm st***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.49.192.126 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:4967 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:5202 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:449917 (439.3 KiB) TX bytes:474894 (463.7 KiB)***  ***PPP Process Status:***  ***PID: 2174***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***449917 4967 0 0 0 0 4967 | 474894 5202 0 0 5202 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: up***  ***Interface: eth0; State: unknown***  ***Interface: ppp0; State: up***  ***[use-for-wan-eth0]***  ***WAN Monitor State: unknown***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: up***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Jan 1 00:00:48 1970***  ***lkdn\_count: 1***  ***lkdn\_time: Tue Apr 23 11:13:51 2013***  ***ifmon\_up\_count: 7***  ***ifmon\_up\_time: Tue Apr 23 11:10:51 2013***  ***ifmon\_down\_count: 6***  ***ifmon\_down\_time: Tue Apr 23 11:10:45 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Tue Apr 23 10:58:50 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:31 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 18***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Tue Apr 23 10:58:44 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:31 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Tue Apr 23 11:12:25 2013***  ***ifmon\_down\_count: 1***  ***ifmon\_down\_time: Tue Apr 23 11:12:18 2013***  ***dft\_ifmon\_up\_count: 0***  ***dft\_ifmon\_up\_time: Thu Jan 1 00:00:31 1970***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:31 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: FAILOVER***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Tue Apr 23 11:12:25 2013***  ***last\_event: PRIMARY\_WAN\_DOWN***  ***last\_evt\_time: Tue Apr 23 11:13:51 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***sAH-7a2c80#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 0.0.0.0 wan - 0019:777a:2c80 D***  ***mgt0 192.168.85.1 - 1 0019:777a:2c80 U***  ***ppp0 10.26.188.13 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  3) wan won’t failback to eth0  ***AH-7a2c80#sh usbm st***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: down***  ***Interface: eth0; State: unknown***  ***Interface: ppp0; State: unknown***  ***[use-for-wan-eth0]***  ***WAN Monitor State: unknown***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: unknown***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Jan 1 00:00:48 1970***  ***lkdn\_count: 1***  ***lkdn\_time: Tue Apr 23 11:13:51 2013***  ***ifmon\_up\_count: 7***  ***ifmon\_up\_time: Tue Apr 23 11:10:51 2013***  ***ifmon\_down\_count: 6***  ***ifmon\_down\_time: Tue Apr 23 11:10:45 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Tue Apr 23 10:58:50 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:31 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 18***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Tue Apr 23 10:58:44 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:31 1970***  ***ifmon\_up\_count: 50***  ***ifmon\_up\_time: Wed Apr 24 05:40:09 2013***  ***ifmon\_down\_count: 50***  ***ifmon\_down\_time: Wed Apr 24 06:05:23 2013***  ***dft\_ifmon\_up\_count: 0***  ***dft\_ifmon\_up\_time: Thu Jan 1 00:00:31 1970***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:31 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: NOWAN***  ***prev\_state: NOWAN***  ***prev\_state\_time: Wed Apr 24 06:05:25 2013***  ***last\_event: NOWAN***  ***last\_evt\_time: Wed Apr 24 06:06:32 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 0.0.0.0 wan - 0019:777a:2c80 D***  ***mgt0 192.168.85.1 - 1 0019:777a:2c80 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo*** | | |
| Test Result |  | | |

### UsbModem\_FailureScenario\_3

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_FailureScenario\_3 | | |
| Priority | Middle | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Abnormal eth0 WAN when there is no 3g WAN, primary-wan mode | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Ping through usbmodem WAN works well  ***AH-7a2c80#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem mode primary-wan***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usbnet0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) Trigger failover to eth0 WAN via disable 3g service  ***usbmodem modem-id huawei\_e220 dialup-number 1111***  ***no usbm en***  ***usbm en***  2) Continue ping process  3) Disable eth0 WAN via shut eth0  4) Check the WAN status | | |
| Expect result | 1) WAN is usbmodem initially, and usbmodem state is “Primary” and “Connected”  ***AH-7a2c80#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: primary-wan***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh usbm st***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.49.192.126 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:4967 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:5202 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:449917 (439.3 KiB) TX bytes:474894 (463.7 KiB)***  ***PPP Process Status:***  ***PID: 2174***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***449917 4967 0 0 0 0 4967 | 474894 5202 0 0 5202 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: up***  ***Interface: eth0; State: up***  ***Interface: usbnet0; State: up***  ***[use-for-wan-eth0]***  ***WAN Monitor State: up***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: up***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Jan 1 00:00:49 1970***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:30 1970***  ***ifmon\_up\_count: 19***  ***ifmon\_up\_time: Tue Apr 23 07:39:39 2013***  ***ifmon\_down\_count: 18***  ***ifmon\_down\_time: Tue Apr 23 07:39:33 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Tue Apr 23 05:38:48 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:30 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 19***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Tue Apr 23 05:39:51 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:30 1970***  ***ifmon\_up\_count: 1***  ***ifmon\_up\_time: Tue Apr 23 05:40:03 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:30 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Tue Apr 23 05:39:52 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:30 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Tue Apr 23 07:39:33 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Tue Apr 23 07:39:39 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.32.27 wan - 0019:777a:2c80 U***  ***mgt0 192.168.85.1 - 1 0019:777a:2c80 U***  ***ppp0 10.49.192.126 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***10.155.32.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 0 0 0 ppp0***  ***0.0.0.0 10.155.32.254 0.0.0.0 UG 1 0 0 eth0***  2) Failover to eth0 WAN successfully when abnormal usb connection  ***AH-7a2c80#sh usbm st***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: up***  ***Interface: eth0; State: up***  ***[use-for-wan-eth0]***  ***WAN Monitor State: up***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: unknown***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Jan 1 00:00:49 1970***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:30 1970***  ***ifmon\_up\_count: 20***  ***ifmon\_up\_time: Tue Apr 23 08:48:21 2013***  ***ifmon\_down\_count: 19***  ***ifmon\_down\_time: Tue Apr 23 08:48:13 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Tue Apr 23 05:38:48 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:30 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname:***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 0***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Tue Apr 23 08:35:59 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:30 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Tue Apr 23 08:36:08 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Tue Apr 23 08:37:45 2013***  ***dft\_ifmon\_up\_count: 2***  ***dft\_ifmon\_up\_time: Tue Apr 23 08:36:08 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:30 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: FAILOVER***  ***prev\_state: NOWAN***  ***prev\_state\_time: Tue Apr 23 08:48:13 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Tue Apr 23 08:48:21 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.32.27 wan - 0019:777a:2c80 U***  ***mgt0 192.168.85.1 - 1 0019:777a:2c80 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***10.155.32.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***0.0.0.0 10.155.32.254 0.0.0.0 UG 1 0 0 eth0***  3) Unplug eth0, still won’t failback to usbmodem  ***AH-7a2c80#sh usbm st***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***PID: 31431***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: down***  ***Interface: eth0; State: unknown***  ***[use-for-wan-eth0]***  ***WAN Monitor State: unknown***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: unknown***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Jan 1 00:00:49 1970***  ***lkdn\_count: 1***  ***lkdn\_time: Tue Apr 23 09:00:05 2013***  ***ifmon\_up\_count: 20***  ***ifmon\_up\_time: Tue Apr 23 08:48:21 2013***  ***ifmon\_down\_count: 19***  ***ifmon\_down\_time: Tue Apr 23 08:48:13 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Tue Apr 23 05:38:48 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:30 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname:***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 0***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Tue Apr 23 08:35:59 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:30 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Tue Apr 23 08:36:08 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Tue Apr 23 08:37:45 2013***  ***dft\_ifmon\_up\_count: 2***  ***dft\_ifmon\_up\_time: Tue Apr 23 08:36:08 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:30 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: NOWAN***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Tue Apr 23 08:48:21 2013***  ***last\_event: NOWAN***  ***last\_evt\_time: Tue Apr 23 09:00:05 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 0.0.0.0 wan - 0019:777a:2c80 D***  ***mgt0 192.168.85.1 - 1 0019:777a:2c80 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-7a2c80#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo*** | | |
| Test Result |  | | |

### UsbModem\_FailureScenario\_4

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_FailureScenario\_4 | | |
| Priority | High | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | No either eth0 or 3g WAN, on-demand mode | | |
| Pre-condition | 1) Config usbmodem mode as on-demand  2) The 3g service is unavailable  3) Ping through eth0 WAN works well  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan\_failover\_test ip 8.8.8.8***  ***track wan\_failover\_test interval 5***  ***track wan\_failover\_test use-for-wan-testing***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) Trigger failover to usbmodem WAN via shut eth0  2) Continue ping process  3) Check the WAN status | | |
| Expect result | 1) WAN is eth0 initially, and usbmodem state is “Backup” and “Attached”  ***AH-8c66c0#sh usbm m huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 1 times (since Fri Mar 30 10:14:53 2012)***  ***DOWN: 1 times (since Fri Mar 30 09:44:01 2012)***  ***Local Link State:***  ***UP: 1 times (since Fri Mar 30 10:14:33 2012)***  ***DOWN: 1 times (since Fri Mar 30 09:41:22 2012)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 1 times (since Fri Mar 30 09:44:30 2012)***  ***DOWN: 3 times (since Fri Mar 30 10:15:03 2012)***  ***Local Link State:***  ***UP: 1 times (since Fri Mar 30 09:44:12 2012)***  ***DOWN: 1 times (since Fri Mar 30 10:14:53 2012)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: ATTACHED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 23.15.247.43 with 32 bytes of data:***  ***Reply from 23.15.247.43: bytes=32 time=559ms TTL=50***  ***Reply from 23.15.247.43: bytes=32 time=572ms TTL=50***  2) Won’t failover to usbmodem  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 3084***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: down***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***924 33 0 0 0 0 33 | 412 35 0 0 35 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: down***  ***UP: 1 times (since Thu Apr 5 11:49:47 2012)***  ***DOWN: 1 times (since Thu Apr 5 11:55:33 2012)***  ***Local Link State:***  ***UP: 0 times (since Thu Jan 1 00:00:08 1970)***  ***DOWN: 1 times (since Thu Apr 5 11:55:28 2012)***  ***Active: yes***  ***Cached Gateway IP: 10.155.35.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 0 times (since Thu Jan 1 00:00:08 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:08 1970)***  ***Local Link State:***  ***UP: 0 times (since Thu Jan 1 00:00:08 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:08 1970)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: CONNECTING***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.35.39 wan - 0019:778c:66c0 D***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 0.0.0.0 wan - 0000:0000:0000 D***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.35.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.35.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh log bu | in fosm***  ***2012-04-05 11:55:38 debug ah\_brd: WFOSM: state CONNECTING -> CONNECTING***  ***2012-04-05 11:55:38 debug ah\_brd: WFOSM: state ATTACHED -> CONNECTING***  ***2012-04-05 11:55:38 debug ah\_brd: WFOSM: Added event PPP\_STARTED***  ***2012-04-05 11:55:33 debug ah\_brd: WFOSM: Added event MAIN\_WAN\_IF\_DOWN***  3) Ping break since 3g service is either unavailable  ***Reply from 10.155.35.39: Destination host unreachable.***  ***Reply from 10.155.35.39: Destination host unreachable.***  4) Keep ppp connecting  ***AH-8c66c0#sh log bu | in fosm***  ***2012-04-05 12:01:07 debug ah\_brd: WFOSM: state ATTACHED -> CONNECTING***  ***2012-04-05 12:01:07 debug ah\_brd: WFOSM: state ATTACHED -> ATTACHED***  ***2012-04-05 12:01:07 debug ah\_brd: WFOSM: state CONNECTING -> ATTACHED***  ***2012-04-05 12:01:07 debug ah\_brd: WFOSM: Added event PPP\_STARTED***  ***2012-04-05 12:01:01 debug ah\_brd: WFOSM: Added event PPP\_STOPPED***  ***2012-04-05 12:01:01 debug ah\_brd: WFOSM: Added event START\_L3***  ***2012-04-05 12:00:01 debug ah\_brd: WFOSM: state ATTACHED -> CONNECTING***  ***2012-04-05 12:00:01 debug ah\_brd: WFOSM: state ATTACHED -> ATTACHED***  ***2012-04-05 12:00:01 debug ah\_brd: WFOSM: state CONNECTING -> ATTACHED***  ***2012-04-05 12:00:01 debug ah\_brd: WFOSM: Added event PPP\_STARTED***  ***2012-04-05 11:59:55 debug ah\_brd: WFOSM: Added event PPP\_STOPPED***  ***2012-04-05 11:59:55 debug ah\_brd: WFOSM: Added event START\_L3***  ***2012-04-05 11:58:55 debug ah\_brd: WFOSM: state ATTACHED -> CONNECTING*** | | |
| Test Result |  | | |

### UsbModem\_FailureScenario\_5

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_FailureScenario\_5 | | |
| Priority | High | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | No either eth0 or 3g WAN, always-connected mode | | |
| Pre-condition | 1) Config usbmodem mode as always-connected  2) The 3g service is unavailable  3) Ping through eth0 WAN works well  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan\_failover\_test ip 8.8.8.8***  ***track wan\_failover\_test interval 5***  ***track wan\_failover\_test use-for-wan-testing***  ***usbmodem mode always-connected***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) Trigger failover to usbmodem WAN via shut eth0  2) Continue ping process  3) Check the WAN status | | |
| Expect result | 1) WAN is eth0 initially, and usbmodem state is “Backup” and “Connected”  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2287***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: down***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***812 29 0 0 0 0 29 | 372 31 0 0 31 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Apr 5 12:34:03 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 0 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 0 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: CONNECTING***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.28.188.69 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=34ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=33ms TTL=44***  2) Won’t failover to usbmodem WAN  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2536***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: down***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***1400 50 0 0 0 0 50 | 582 52 0 0 52 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: down***  ***UP: 1 times (since Fri Apr 6 02:29:18 2012)***  ***DOWN: 2 times (since Fri Apr 6 02:30:57 2012)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 1 times (since Fri Apr 6 02:30:52 2012)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 0 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 0 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: CONNECTING***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.35.39 wan - 0019:778c:66c0 D***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 0.0.0.0 wan - 0000:0000:0000 D***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.35.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.35.254 0.0.0.0 UG 0 0 0 eth0***  3) Ping break since 3g service is either unavailable  ***Reply from 10.155.35.39: Destination host unreachable.***  ***Reply from 10.155.35.39: Destination host unreachable.***  4) Keep ppp connecting  ***AH-8c66c0#sh log bu | in fosm***  ***2012-04-06 02:31:11 debug ah\_brd: WFOSM: state ATTACHED -> CONNECTING***  ***2012-04-06 02:31:11 debug ah\_brd: [brd\_fosm]: WFO: >>> Enter state: ATTACHED***  ***2012-04-06 02:31:11 debug ah\_brd: [brd\_fosm]: WFO: Engine: @ state:ATTACHED + event:PPP\_STARTED [0x10]***  ***2012-04-06 02:31:11 debug ah\_brd: WFOSM: state ATTACHED -> ATTACHED***  ***2012-04-06 02:31:11 debug ah\_brd: [brd\_fosm]: WFO: >>> Enter state: ATTACHED***  ***2012-04-06 02:31:11 debug ah\_brd: [brd\_fosm]: WFO: Engine: @ state:ATTACHED + event:PPP\_STOPPED [0x20]***  ***2012-04-06 02:31:11 debug ah\_brd: WFOSM: state CONNECTING -> ATTACHED***  ***2012-04-06 02:31:11 debug ah\_brd: [brd\_fosm]: WFO: Requested to start PPP***  ***2012-04-06 02:31:11 debug ah\_brd: [brd\_fosm]: WFO: Start: L3 ifchk timer started: rc=0***  ***2012-04-06 02:31:11 debug ah\_brd: [brd\_fosm]: WFO: Created L3 ifchk timer to expire in 60 secs***  ***2012-04-06 02:31:11 debug ah\_brd: WFOSM: Added event PPP\_STARTED***  ***2012-04-06 02:31:07 debug ah\_brd: [brd\_fosm]: WFO: Ethernet iface eth0 link status is DOWN***  ***2012-04-06 02:31:06 debug ah\_brd: [brd\_fosm]: WFO: Retrieved USB device id (vid=0x12d1 pid=0x1003)***  ***2012-04-06 02:31:05 debug ah\_brd: WFOSM: Added event PPP\_STOPPED***  ***2012-04-06 02:31:05 debug ah\_brd: [brd\_fosm]: WFO: L3 ifchk timer cancelled: rc=0***  ***2012-04-06 02:31:05 debug ah\_brd: [brd\_fosm]: WFO: L3 ifchk timer destroyed***  ***2012-04-06 02:31:05 debug ah\_brd: [brd\_fosm]: WFO: >>> Enter state: CONNECTING***  ***2012-04-06 02:31:05 debug ah\_brd: [brd\_fosm]: WFO: Engine: @ state:CONNECTING + event:START\_L3 [0x4]***  ***2012-04-06 02:31:05 debug ah\_brd: WFOSM: Added event START\_L3***  ***2012-04-06 02:31:05 debug ah\_brd: [brd\_fosm]: WFO: L3 ifchk timer popped ...***  ***2012-04-06 02:31:02 debug ah\_brd: [brd\_fosm]: WFO: Ethernet iface eth0 link status is DOWN***  ***2012-04-06 02:30:59 debug ah\_brd: [brd\_fosm]: WFO: Retrieved USB device id (vid=0x12d1 pid=0x1003)***  ***2012-04-06 02:30:57 debug ah\_brd: WFOSM: state CONNECTING -> CONNECTING***  ***2012-04-06 02:30:57 debug ah\_brd: [brd\_fosm]: WFO: >>> Enter state: CONNECTING***  ***2012-04-06 02:30:57 debug ah\_brd: [brd\_fosm]: WFO: Engine: @ state:CONNECTING + event:MAIN\_WAN\_IF\_DOWN [0x200]***  ***2012-04-06 02:30:57 debug ah\_brd: WFOSM: Added event MAIN\_WAN\_IF\_DOWN***  ***2012-04-06 02:30:57 debug ah\_brd: [brd\_fosm]: WFO: Ethernet iface eth0 link status is DOWN***  ***2012-04-06 02:30:55 debug ah\_brd: WFOSM: state CONNECTING -> CONNECTING***  ***2012-04-06 02:30:55 debug ah\_brd: [brd\_fosm]: WFO: >>> Enter state: CONNECTING***  ***2012-04-06 02:30:55 debug ah\_brd: [brd\_fosm]: WFO: Engine: @ state:CONNECTING + event:MAIN\_WAN\_IF\_DOWN [0x200]***  ***2012-04-06 02:30:55 debug ah\_brd: WFOSM: Added event MAIN\_WAN\_IF\_DOWN***  ***2012-04-06 02:30:54 debug ah\_brd: [brd\_fosm]: WFO: Retrieved USB device id (vid=0x12d1 pid=0x1003)***  ***2012-04-06 02:30:52 debug ah\_brd: [brd\_fosm]: WFO: eth0: Interface DOWN :-(*** | | |
| Test Result |  | | |

### UsbModem\_FailureScenario\_6

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_FailureScenario\_6 | | |
| Priority | High | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | No either eth0 or 3g WAN, primary-wan mode | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) eth0 WAN is unavailable  3) Ping through usbmodem WAN works well  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan\_failover\_test ip 8.8.8.8***  ***track wan\_failover\_test interval 5***  ***track wan\_failover\_test use-for-wan-testing***  ***usbmodem mode primary-wan***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) Trigger failover to eth0 WAN via disable 3g service  ***go to shield room where no 3g signal***  2) Continue ping process  3) Check the WAN status | | |
| Expect result | 1) WAN is usbmodem initially, and usbmodem state is “Primary” and “Connected”  ***AH-8c66c0#sh usbm m huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: primary-wan***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2271***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***7147 100 0 0 0 0 100 | 7090 104 0 0 104 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Jan 1 00:00:55 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:44 1970)***  ***DOWN: 1 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***[Backup]***  ***Interface: eth0***  ***WAN Monitor State: down***  ***UP: 0 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 0 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: CONNECTED***  ***Pending Event(s): NONE*** *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 0.0.0.0 wan - 0019:778c:66c0 D***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.26.176.109 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 23.15.247.43 with 32 bytes of data:***  ***Reply from 23.15.247.43: bytes=32 time=218ms TTL=52***  ***Reply from 23.15.247.43: bytes=32 time=218ms TTL=52***  2) Won’t failover to eth0  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2870***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: down***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***420 15 0 0 0 0 15 | 232 17 0 0 17 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 1 times (since Thu Jan 1 00:00:55 1970)***  ***DOWN: 2 times (since Fri Apr 6 02:18:33 2012)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:44 1970)***  ***DOWN: 2 times (since Fri Apr 6 02:18:31 2012)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***[Backup]***  ***Interface: eth0***  ***WAN Monitor State: down***  ***UP: 0 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 0 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: CONNECTING***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 0.0.0.0 wan - 0019:778c:66c0 D***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 0.0.0.0 wan - 0000:0000:0000 D***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  3) Ping break since eth0 WAN is either unavailable  ***Reply from 192.168.85.1: Destination net unreachable.***  ***Reply from 192.168.85.1: Destination net unreachable.***  4) Keep ppp connecting  ***AH-8c66c0#sh log bu | in fosm***  ***2012-04-06 02:18:50 debug ah\_brd: WFOSM: state ATTACHED -> CONNECTING***  ***2012-04-06 02:18:50 debug ah\_brd: [brd\_fosm]: WFO: >>> Enter state: ATTACHED***  ***2012-04-06 02:18:50 debug ah\_brd: [brd\_fosm]: WFO: Engine: @ state:ATTACHED + event:PPP\_STARTED [0x10]***  ***2012-04-06 02:18:50 debug ah\_brd: WFOSM: state CONNECTING -> ATTACHED***  ***2012-04-06 02:18:50 debug ah\_brd: WFOSM: Added event START\_L3***  ***2012-04-06 02:18:50 debug ah\_brd: [brd\_fosm]: WFO: >>> Enter state: CONNECTING***  ***2012-04-06 02:18:50 debug ah\_brd: [brd\_fosm]: WFO: Engine: @ state:CONNECTING + event:PPP\_STOPPED [0x20]***  ***2012-04-06 02:18:50 debug ah\_brd: WFOSM: state CONNECTING -> CONNECTING***  ***2012-04-06 02:18:50 debug ah\_brd: [brd\_fosm]: WFO: >>> Enter state: CONNECTING***  ***2012-04-06 02:18:50 debug ah\_brd: [brd\_fosm]: WFO: Engine: @ state:CONNECTING + event:PPP\_STARTED [0x10]***  ***2012-04-06 02:18:50 debug ah\_brd: WFOSM: state ATTACHED -> CONNECTING***  ***2012-04-06 02:18:50 debug ah\_brd: [brd\_fosm]: WFO: PPP started***  ***2012-04-06 02:18:50 debug ah\_brd: [brd\_fosm]: WFO: Start: L3 ifchk timer started: rc=0***  ***2012-04-06 02:18:50 debug ah\_brd: [brd\_fosm]: WFO: Created L3 ifchk timer to expire in 60 secs***  ***2012-04-06 02:18:50 debug ah\_brd: WFOSM: Added event PPP\_STARTED***  ***2012-04-06 02:18:48 debug ah\_brd: [brd\_fosm]: WFO: Ethernet iface eth0 link status is DOWN***  ***2012-04-06 02:18:45 debug ah\_brd: [brd\_fosm]: WFO: Retrieved USB device id (vid=0x12d1 pid=0x1003)***  ***2012-04-06 02:18:44 debug ah\_brd: WFOSM: Added event PPP\_STOPPED***  ***2012-04-06 02:18:44 debug ah\_brd: [brd\_fosm]: WFO: L3 ifchk timer cancelled: rc=0***  ***2012-04-06 02:18:44 debug ah\_brd: [brd\_fosm]: WFO: L3 ifchk timer destroyed***  ***2012-04-06 02:18:44 debug ah\_brd: [brd\_fosm]: WFO: >>> Enter state: ATTACHED***  ***2012-04-06 02:18:44 debug ah\_brd: [brd\_fosm]: WFO: Engine: @ state:ATTACHED + event:MAIN\_WAN\_IF\_DOWN [0x200]***  ***2012-04-06 02:18:44 debug ah\_brd: WFOSM: state ATTACHED -> ATTACHED***  ***2012-04-06 02:18:44 debug ah\_brd: [brd\_fosm]: WFO: >>> Enter state: ATTACHED***  ***2012-04-06 02:18:44 debug ah\_brd: [brd\_fosm]: WFO: Engine: @ state:ATTACHED + event:PPP\_STOPPED [0x20]***  ***2012-04-06 02:18:44 debug ah\_brd: WFOSM: state ATTACHED -> ATTACHED***  ***2012-04-06 02:18:44 debug ah\_brd: [brd\_fosm]: WFO: Mode: primary-wan => PPP started***  ***2012-04-06 02:18:44 debug ah\_brd: [brd\_fosm]: WFO: Start: L3 ifchk timer started: rc=0***  ***2012-04-06 02:18:44 debug ah\_brd: [brd\_fosm]: WFO: Created L3 ifchk timer to expire in 60 secs***  ***2012-04-06 02:18:44 debug ah\_brd: WFOSM: Added event PPP\_STARTED***  ***2012-04-06 02:18:43 debug ah\_brd: [brd\_fosm]: WFO: Ethernet iface eth0 link status is DOWN***  ***2012-04-06 02:18:39 debug ah\_brd: [brd\_fosm]: WFO: Retrieved USB device id (vid=0x12d1 pid=0x1003)***  ***2012-04-06 02:18:38 debug ah\_brd: [brd\_fosm]: WFO: Ethernet iface eth0 link status is DOWN***  ***2012-04-06 02:18:33 debug ah\_brd: WFOSM: Added event MAIN\_WAN\_IF\_DOWN***  ***2012-04-06 02:18:33 debug ah\_brd: [brd\_fosm]: WFO: Ethernet iface eth0 link status is DOWN***  ***2012-04-06 02:18:31 debug ah\_brd: WFOSM: Added event PPP\_STOPPED***  ***2012-04-06 02:18:31 debug ah\_brd: [brd\_fosm]: WFO: L3 ifchk timer cancelled: rc=0***  ***2012-04-06 02:18:31 debug ah\_brd: [brd\_fosm]: WFO: L3 ifchk timer not active***  ***2012-04-06 02:18:31 debug ah\_brd: [brd\_fosm]: WFO: >>> Enter state: ATTACHED***  ***2012-04-06 02:18:31 debug ah\_brd: [brd\_fosm]: WFO: Engine: @ state:ATTACHED + event:START\_L3 [0x4]***  ***2012-04-06 02:18:31 debug ah\_brd: WFOSM: state ATTACHED -> ATTACHED***  ***2012-04-06 02:18:31 debug ah\_brd: [brd\_fosm]: WFO: >>> Enter state: ATTACHED***  ***2012-04-06 02:18:31 debug ah\_brd: [brd\_fosm]: WFO: Engine: @ state:ATTACHED + event:PPP\_STOPPED [0x20]***  ***2012-04-06 02:18:31 debug ah\_brd: WFOSM: state CONNECTED -> ATTACHED***  ***2012-04-06 02:18:31 debug ah\_brd: WFOSM: Added event START\_L3***  ***2012-04-06 02:18:31 debug ah\_brd: [brd\_fosm]: WFO: Stopping PPP ...***  ***2012-04-06 02:18:31 debug ah\_brd: WFOSM: Added event PPP\_STOPPED***  ***2012-04-06 02:18:31 debug ah\_brd: [brd\_fosm]: WFO: L3 ifchk timer cancelled: rc=0***  ***2012-04-06 02:18:31 debug ah\_brd: [brd\_fosm]: WFO: L3 ifchk timer destroyed***  ***2012-04-06 02:18:31 debug ah\_brd: [brd\_fosm]: WFO: >>> Enter state: CONNECTED***  ***2012-04-06 02:18:31 debug ah\_brd: [brd\_fosm]: WFO: Engine: @ state:CONNECTED + event:PPP\_IF\_DOWN [0x80]***  ***2012-04-06 02:18:31 debug ah\_brd: [brd\_fosm]: WFO: ppp0: Interface DOWN :-(***  ***2012-04-06 02:18:31 debug ah\_brd: WFOSM: Added event PPP\_IF\_DOWN***  ***2012-04-06 02:18:31 debug ah\_brd: [brd\_fosm]: WFO: ppp0: kevent type=7 is ignored***  ***2012-04-06 02:18:25 debug ah\_brd: [brd\_fosm]: WFO: Ethernet iface eth0 link status is DOWN***  ***2012-04-06 02:18:23 debug ah\_brd: WFOSM: state CONNECTED -> CONNECTED***  ***2012-04-06 02:18:23 debug ah\_brd: [brd\_fosm]: WFO: Switch route: dft route of gw:0x0 via eth0 not added***  ***2012-04-06 02:18:23 debug ah\_brd: [brd\_fosm]: WFO: Switch route: ppp0 dft gw IP 0x0 now cached***  ***2012-04-06 02:18:23 debug ah\_brd: [brd\_fosm]: WFO: Switch route: del dft route via ppp0 (gw:0x0) OK***  ***2012-04-06 02:18:23 debug ah\_brd: [brd\_fosm]: WFO: Del default route (ifname=ppp0 gwip=0x0) OK***  ***2012-04-06 02:18:23 debug ah\_brd: [brd\_fosm]: WFO: >>> Enter state: CONNECTED***  ***2012-04-06 02:18:23 debug ah\_brd: [brd\_fosm]: WFO: Engine: @ state:CONNECTED + event:MAIN\_WAN\_IF\_DOWN [0x200]***  ***2012-04-06 02:18:23 debug ah\_brd: WFOSM: Added event MAIN\_WAN\_IF\_DOWN***  ***2012-04-06 02:18:17 debug ah\_brd: [brd\_fosm]: WFO: Ethernet iface eth0 link status is DOWN*** | | |
| Test Result |  | | |

### UsbModem\_FailureScenario\_7

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_FailureScenario\_7 | | |
| Priority | Low | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Track invalid ip, on-demand mode | | |
| Pre-condition | 1) Config usbmodem mode as on-demand  2) The 3g service is activated and available  3) Ping through eth0 WAN works well  4) Open debug toggle,  ***\_deb brd wanmon***  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) Track an invalid ip  ***track-wan use-for-wan-eth0 ip 1.1.1.1***  ***track-wan use-for-wan-usbnet0 ip 1.1.1.1***  2) Continue ping process  3) Check the WAN status  4) Stop track the invalid ip  ***no track-wan use-for-wan-eth0 ip 1.1.1.1***  ***no track-wan use-for-wan-usbnet0 ip 1.1.1.1*** | | |
| Expect result | 1) Before track invalid ip, WAN is eth0  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm sUSB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: up***  ***Interface: eth0; State: up***  ***Interface: ppp0; State: unknown***  ***[use-for-wan-eth0]***  ***WAN Monitor State: up***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: unknown***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Fri Mar 22 20:10:01 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Fri Mar 22 20:10:11 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - debug console - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh lo b | i wanmon***  ***2012-03-28 11:45:34 debug ah\_brd: [brd\_wanmon]: WFOIFM: Interface eth0: 1 targets tested, result: PASS***  ***2013-03-23 01:34:11 debug ah\_brd: [brd\_wanmon]: WFOIFM: [Mark as unknown]: Skip test for use-for-wan-usbnet0: interface (ppp0 : wifidx=1) is not connected.***  ***2012-03-28 11:45:34 debug ah\_brd: [brd\_wanmon]: WFOIFM: Going to pause for 2 secs before next test***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=122ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=226ms TTL=45***  2) Failover to usbmodem WAN once track invalid ip  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.32.157.180 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:91 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:257 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:7519 (7.3 KiB) TX bytes:21070 (20.5 KiB)***  ***PPP Process Status:***  ***PID: 2265***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***7519 91 0 0 0 0 91 | 21070 257 0 0 257 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: up***  ***Interface: eth0; State: up***  ***Interface: ppp0; State: up***  ***[use-for-wan-eth0]***  ***WAN Monitor State: down***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: down***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Jan 1 00:00:28 1970***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:12 1970***  ***ifmon\_up\_count: 0***  ***ifmon\_up\_time: Thu Jan 1 00:00:12 1970***  ***ifmon\_down\_count: 1***  ***ifmon\_down\_time: Sun Mar 24 00:46:12 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Sun Mar 24 00:46:08 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:12 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 19***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Sun Mar 24 00:46:22 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:12 1970***  ***ifmon\_up\_count: 0***  ***ifmon\_up\_time: Thu Jan 1 00:00:12 1970***  ***ifmon\_down\_count: 1***  ***ifmon\_down\_time: Sun Mar 24 00:46:36 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Sun Mar 24 00:46:26 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:12 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: NOWAN***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sun Mar 24 00:46:22 2013***  ***last\_event: NOWAN***  ***last\_evt\_time: Sun Mar 24 00:46:36 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.32.157.180 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 10001 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 10600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - debug console - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh lo b | i wanmon***  ***2013-03-24 00:57:42 debug ah\_brd: [brd\_wanmon]: WFOIFM: [use-for-wan-eth0]: Interface eth0: 2 targets tested, result: FAIL***  ***……***  ***2013-03-24 00:57:33 debug ah\_brd: [brd\_wanmon]: WFOIFM: [use-for-wan-usbnet0]: Interface ppp0: 2 targets tested, result: FAIL***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=128ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=126ms TTL=45***  3) Failback to eth0 once end track invalid ip  ***AH-0c32c0#sh usbm sUSB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: up***  ***Interface: eth0; State: up***  ***Interface: ppp0; State: unknown***  ***[use-for-wan-eth0]***  ***WAN Monitor State: up***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: unknown***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Fri Mar 22 20:10:01 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Fri Mar 22 20:10:11 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - debug console - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh lo b | i wanmon***  ***2012-03-28 11:45:34 debug ah\_brd: [brd\_wanmon]: WFOIFM: Interface eth0: 1 targets tested, result: PASS***  ***2013-03-23 01:34:11 debug ah\_brd: [brd\_wanmon]: WFOIFM: [Mark as unknown]: Skip test for use-for-wan-usbnet0: interface (ppp0 : wifidx=1) is not connected.***  ***2012-03-28 11:45:34 debug ah\_brd: [brd\_wanmon]: WFOIFM: Going to pause for 2 secs before next test***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=128ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=126ms TTL=45*** | | |
| Test Result |  | | |

### UsbModem\_FailureScenario\_8

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_FailureScenario\_8 | | |
| Priority | Low | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Track invalid ip, always-connected mode | | |
| Pre-condition | 1) Config usbmodem mode as always-connected  2) The 3g service is activated and available  3) Ping through eth0 WAN works well  4) Open debug toggle,  ***\_deb brd wanmon***  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem mode always-connected***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) Track an invalid ip  ***track-wan use-for-wan-eth0 ip 1.1.1.1***  ***track-wan use-for-wan-usbnet0 ip 1.1.1.1***  2) Continue ping process  3) Check the WAN status  4) Stop track the invalid ip  ***no track-wan use-for-wan-eth0 ip 1.1.1.1***  ***no track-wan use-for-wan-usbnet0 ip 1.1.1.1*** | | |
| Expect result | 1) Before track invalid ip, WAN is eth0  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: up***  ***Interface: eth0; State: up***  ***Interface: ppp0; State: up***  ***[use-for-wan-eth0]***  ***WAN Monitor State: up***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: up***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 2***  ***lkdn\_time: Fri Mar 22 22:54:34 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sat Mar 23 02:14:19 2013***  ***last\_event: PRIMARY\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 02:14:25 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - debug console - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh lo b | i wanmon***  ***……***  ***2012-03-29 08:04:22 debug ah\_brd: [brd\_wanmon]: WFOIFM: Interface eth0: 1 targets tested, result: PASS***  ***2012-03-29 08:04:22 debug ah\_brd: [brd\_wanmon]: WFOIFM: Use cached gw IP 0x0 for ppp0***  ***2012-03-29 08:04:22 debug ah\_brd: [brd\_wanmon]: WFOIFM: Interface ppp0 disallows ARP (ifr\_flags = 0x10d1)***  ***2013-03-23 03:41:25 debug ah\_brd: [brd\_wanmon]: WFOIFM: [use-for-wan-usbnet0]: Interface ppp0: 1 targets tested, result: PASS***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 23.15.247.43 with 32 bytes of data:***  ***Reply from 23.15.247.43: bytes=32 time=366ms TTL=50***  ***Reply from 23.15.247.43: bytes=32 time=367ms TTL=50***  2) Failover to usbmodem WAN once track invalid ip  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.32.157.180 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:91 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:257 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:7519 (7.3 KiB) TX bytes:21070 (20.5 KiB)***  ***PPP Process Status:***  ***PID: 2265***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***7519 91 0 0 0 0 91 | 21070 257 0 0 257 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: up***  ***Interface: eth0; State: up***  ***Interface: ppp0; State: up***  ***[use-for-wan-eth0]***  ***WAN Monitor State: down***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: down***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Jan 1 00:00:28 1970***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:12 1970***  ***ifmon\_up\_count: 0***  ***ifmon\_up\_time: Thu Jan 1 00:00:12 1970***  ***ifmon\_down\_count: 1***  ***ifmon\_down\_time: Sun Mar 24 00:46:12 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Sun Mar 24 00:46:08 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:12 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 19***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Sun Mar 24 00:46:22 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:12 1970***  ***ifmon\_up\_count: 0***  ***ifmon\_up\_time: Thu Jan 1 00:00:12 1970***  ***ifmon\_down\_count: 1***  ***ifmon\_down\_time: Sun Mar 24 00:46:36 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Sun Mar 24 00:46:26 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:12 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: NOWAN***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sun Mar 24 00:46:22 2013***  ***last\_event: NOWAN***  ***last\_evt\_time: Sun Mar 24 00:46:36 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.32.157.180 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 10001 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 10600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - debug console - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh lo b | i wanmon***  ***2013-03-24 00:57:42 debug ah\_brd: [brd\_wanmon]: WFOIFM: [use-for-wan-eth0]: Interface eth0: 2 targets tested, result: FAIL***  ***……***  ***2013-03-24 00:57:33 debug ah\_brd: [brd\_wanmon]: WFOIFM: [use-for-wan-usbnet0]: Interface ppp0: 2 targets tested, result: FAIL***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Pinging 23.15.247.43 with 32 bytes of data:***  ***Reply from 23.15.247.43: bytes=32 time=366ms TTL=50***  ***Reply from 23.15.247.43: bytes=32 time=367ms TTL=50***  3) Failback to eth0 once end track invalid ip  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: up***  ***Interface: eth0; State: up***  ***Interface: ppp0; State: up***  ***[use-for-wan-eth0]***  ***WAN Monitor State: up***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: up***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 2***  ***lkdn\_time: Fri Mar 22 22:54:34 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sat Mar 23 02:14:19 2013***  ***last\_event: PRIMARY\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 02:14:25 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - debug console - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh lo b | i wanmon***  ***……***  ***2012-03-29 08:04:22 debug ah\_brd: [brd\_wanmon]: WFOIFM: Interface eth0: 1 targets tested, result: PASS***  ***2012-03-29 08:04:22 debug ah\_brd: [brd\_wanmon]: WFOIFM: Use cached gw IP 0x0 for ppp0***  ***2012-03-29 08:04:22 debug ah\_brd: [brd\_wanmon]: WFOIFM: Interface ppp0 disallows ARP (ifr\_flags = 0x10d1)***  ***2013-03-23 03:41:25 debug ah\_brd: [brd\_wanmon]: WFOIFM: [use-for-wan-usbnet0]: Interface ppp0: 1 targets tested, result: PASS***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Pinging 23.15.247.43 with 32 bytes of data:***  ***Reply from 23.15.247.43: bytes=32 time=366ms TTL=50***  ***Reply from 23.15.247.43: bytes=32 time=367ms TTL=50*** | | |
| Test Result |  | | |

### UsbModem\_FailureScenario\_9

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_FailureScenario\_9 | | |
| Priority | Low | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Track invalid ip, primary-wan mode | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) The 3g service is activated and available  3) Ping through usbmodem WAN works well  4) Open debug toggle,  ***\_deb brd wanmon***  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem mode primary-wan***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) Track an invalid ip  ***track-wan use-for-wan-eth0 ip 1.1.1.1***  ***track-wan use-for-wan-usbnet0 ip 1.1.1.1***  2) Continue ping process  3) Check the WAN status  4) Stop track the invalid ip  ***no track-wan use-for-wan-eth0 ip 1.1.1.1***  ***no track-wan use-for-wan-usbnet0 ip 1.1.1.1*** | | |
| Expect result | 1) Before track invalid ip, WAN is usbmodem  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: primary-wan***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.35.64.96 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:30555 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:30703 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:2566496 (2.4 MiB) TX bytes:2581432 (2.4 MiB)***  ***PPP Process Status:***  ***PID: 1952***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***2566496 30555 0 0 0 0 30555 | 2581432 30703 0 0 30703 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 03:27:59 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 88***  ***ifmon\_up\_time: Sat Mar 23 20:35:01 2013***  ***ifmon\_down\_count: 84***  ***ifmon\_down\_time: Sat Mar 23 20:34:55 2013***  ***dft\_ifmon\_up\_count: 4***  ***dft\_ifmon\_up\_time: Sat Mar 23 03:30:57 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Sat Mar 23 20:34:55 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 20:35:01 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 0 0 0 ppp0***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - debug console - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh lo b | i wanmon***  ***2013-03-24 01:07:03 debug ah\_brd: [brd\_wanmon]: WFOIFM: [DFT\_GW\_TRACK\_IP]: Interface eth0: 1 targets tested, result: PASS***  ***……***  ***2013-03-24 01:07:01 debug ah\_brd: [brd\_wanmon]: WFOIFM: [use-for-wan-usbnet0]: Interface ppp0: 1 targets tested, result: PASS***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 23.15.247.43 with 32 bytes of data:***  ***Reply from 23.15.247.43: bytes=32 time=218ms TTL=52***  ***Reply from 23.15.247.43: bytes=32 time=218ms TTL=52***  2) WAN priority is updated once track invalid ip  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.35.64.96 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:30555 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:30703 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:2566496 (2.4 MiB) TX bytes:2581432 (2.4 MiB)***  ***PPP Process Status:***  ***PID: 1952***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***2566496 30555 0 0 0 0 30555 | 2581432 30703 0 0 30703 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Jan 1 00:00:28 1970***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:12 1970***  ***ifmon\_up\_count: 1***  ***ifmon\_up\_time: Sun Mar 24 01:04:54 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Sun Mar 24 01:10:46 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Sun Mar 24 00:46:08 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:12 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 19***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Sun Mar 24 00:46:22 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:12 1970***  ***ifmon\_up\_count: 1***  ***ifmon\_up\_time: Sun Mar 24 01:04:49 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Sun Mar 24 01:10:52 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Sun Mar 24 00:46:26 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:12 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: NOWAN***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Sat Mar 23 20:34:55 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 20:35:01 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 10000 0 0 ppp0***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 10001 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - debug console - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh lo b | i wanmon***  ***2013-03-24 00:57:42 debug ah\_brd: [brd\_wanmon]: WFOIFM: [use-for-wan-eth0]: Interface eth0: 2 targets tested, result: FAIL***  ***……***  ***2013-03-24 00:57:33 debug ah\_brd: [brd\_wanmon]: WFOIFM: [use-for-wan-usbnet0]: Interface ppp0: 2 targets tested, result: FAIL***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Pinging 23.15.247.43 with 32 bytes of data:***  ***Reply from 23.15.247.43: bytes=32 time=366ms TTL=50***  ***Reply from 23.15.247.43: bytes=32 time=367ms TTL=50***  3) Failback to usbmodem once end track invalid ip  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.35.64.96 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:30555 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:30703 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:2566496 (2.4 MiB) TX bytes:2581432 (2.4 MiB)***  ***PPP Process Status:***  ***PID: 1952***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***2566496 30555 0 0 0 0 30555 | 2581432 30703 0 0 30703 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 03:27:59 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 88***  ***ifmon\_up\_time: Sat Mar 23 20:35:01 2013***  ***ifmon\_down\_count: 84***  ***ifmon\_down\_time: Sat Mar 23 20:34:55 2013***  ***dft\_ifmon\_up\_count: 4***  ***dft\_ifmon\_up\_time: Sat Mar 23 03:30:57 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Sat Mar 23 20:34:55 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 20:35:01 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 0 0 0 ppp0***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - debug console - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh lo b | i wanmon***  ***2013-03-24 01:07:03 debug ah\_brd: [brd\_wanmon]: WFOIFM: [DFT\_GW\_TRACK\_IP]: Interface eth0: 1 targets tested, result: PASS***  ***……***  ***2013-03-24 01:07:01 debug ah\_brd: [brd\_wanmon]: WFOIFM: [use-for-wan-usbnet0]: Interface ppp0: 1 targets tested, result: PASS***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Pinging 23.15.247.43 with 32 bytes of data:***  ***Reply from 23.15.247.43: bytes=32 time=366ms TTL=50***  ***Reply from 23.15.247.43: bytes=32 time=367ms TTL=50*** | | |
| Test Result |  | | |

### UsbModem\_FailureScenario\_10

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| --- | --- | --- | --- |
| Case ID | UsbModem\_FailureScenario\_10 | | |
| Priority | Low | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Check the WAN state once crash usbmodem process, on-demand mode | | |
| Pre-condition | 1) Config usbmodem mode as on-demand  2) The 3g service is activated and available  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan ip 23.15.247.43***  ***track wan use-for-wan-testing***  ***routing route-request enable***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) Check the usbmodem config initially  2) Crash the usbmodem process  3) Check usbmodem config after recover usbmodem process | | |
| Expect result | 1) usbmodem is configured as on-demand mode initially  ***AH-8c66c0#sh usbm m huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 1 times (since Sat Mar 31 09:44:29 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 0 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 2 times (since Sat Mar 31 09:44:38 2012)***  ***Local Link State:***  ***UP: 1 times (since Sat Mar 31 09:44:15 2012)***  ***DOWN: 1 times (since Sat Mar 31 09:44:29 2012)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: ATTACHED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#\_shell***  ***password:***  ***BusyBox v1.18.3 (2011-07-11 10:52:56 PDT) built-in shell (ash)***  ***Enter 'help' for a list of built-in commands.***  ***AH-8c66c0:/tmp/home/admin$ ps | grep brd***  ***1441 root 104m S /opt/ah/bin/ah\_brd***  2) There is no brd process once kill process ah\_brd  ***AH-8c66c0:/tmp/home/admin$ killall ah\_brd***  ***AH-8c66c0:/tmp/home/admin$ ps | grep brd***  ***AH-8c66c0:/tmp/home/admin$***  3) usbmodem config does not lost  ***AH-8c66c0#sh usbm m huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  4) WAN is still eth0 after restore brd process  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 1 times (since Sat Mar 31 09:44:29 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 0 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 2 times (since Sat Mar 31 09:44:38 2012)***  ***Local Link State:***  ***UP: 1 times (since Sat Mar 31 09:44:15 2012)***  ***DOWN: 1 times (since Sat Mar 31 09:44:29 2012)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: ATTACHED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#\_shell***  ***password:***  ***BusyBox v1.18.3 (2011-07-11 10:52:56 PDT) built-in shell (ash)***  ***Enter 'help' for a list of built-in commands.***  ***AH-8c66c0:/tmp/home/admin$ ps | grep brd***  ***2842 root 104m S /opt/ah/bin/ah\_brd***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - debug console - - - - - - - - - - - - - - - - - - - - - - - -*  ***2012-03-31 08:53:21 debug ah\_brd: [brd\_wanmon]: WFOIFM: Use cached gw IP 0x0 for eth0***  ***2012-03-31 08:53:21 debug ah\_brd: [brd\_wanmon]: WFOIFM: Skip test for eth0: no targets defined***  ***2012-03-31 08:53:21 debug ah\_brd: [brd\_wanmon]: WFOIFM: Use cached gw IP 0x0 for ppp0***  ***2012-03-31 08:53:21 debug ah\_brd: [brd\_wanmon]: WFOIFM: Skip test for ppp0: no targets defined***  ***2012-03-31 08:53:21 debug ah\_brd: [brd\_wanmon]: WFOIFM: Going to pause for 30 secs before next test*** | | |
| Test Result |  | | |

### UsbModem\_FailureScenario\_11

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| --- | --- | --- | --- |
| Case ID | UsbModem\_FailureScenario\_11 | | |
| Priority | Low | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Check the WAN state once crash usbmodem process, always-connected mode | | |
| Pre-condition | 1) Config usbmodem mode as always-connected  2) The 3g service is activated and available  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan ip 23.15.247.43***  ***track wan use-for-wan-testing***  ***routing route-request enable***  ***usbmodem mode always-connected***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) Check the usbmodem config initially  2) Crash the usbmodem process  3) Check usbmodem config after recover usbmodem process | | |
| Expect result | 1) usbmodem is configured as always-connected mode initially  ***AH-8c66c0#sh usbm m huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2366***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***1872 27 0 0 0 0 27 | 1878 28 0 0 28 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 1 times (since Sat Mar 31 09:31:00 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 1 times (since Sat Mar 31 09:31:07 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Sat Mar 31 09:30:58 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: CONNECTED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.26.86.120 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#\_shell***  ***password:***  ***BusyBox v1.18.3 (2011-07-11 10:52:56 PDT) built-in shell (ash)***  ***Enter 'help' for a list of built-in commands.***  ***AH-8c66c0:/tmp/home/admin$ ps | grep brd***  ***1441 root 104m S /opt/ah/bin/ah\_brd***  ***AH-8c66c0:/tmp/home/admin$ ps | grep pppd***  ***2275 root 4108 S /sbin/pppd noaccomp nopcomp novj nobsdcomp noipdefau***  2) There is no brd/ ppd process once kill process ah\_brd/ pppd  ***AH-8c66c0:/tmp/home/admin$ killall ah\_brd***  ***AH-8c66c0:/tmp/home/admin$ killall pppd***  ***AH-8c66c0:/tmp/home/admin$ ps | grep brd***  ***AH-8c66c0:/tmp/home/admin$ ps | grep pppd***  ***AH-8c66c0:/tmp/home/admin$***  3) usbmodem config does not lost  ***AH-8c66c0#sh usbm m huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  4) WAN is still eth0after restore brd/ pppd process  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2366***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***1872 27 0 0 0 0 27 | 1878 28 0 0 28 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 1 times (since Sat Mar 31 09:31:00 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 10.155.30.254***  ***[Backup]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 1 times (since Sat Mar 31 09:31:07 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Sat Mar 31 09:30:58 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: CONNECTED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.26.86.120 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.30.254 0.0.0.0 UG 0 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#\_shell***  ***password:***  ***BusyBox v1.18.3 (2011-07-11 10:52:56 PDT) built-in shell (ash)***  ***Enter 'help' for a list of built-in commands.***  ***AH-8c66c0:/tmp/home/admin$ ps | grep brd***  ***2989 root 104m S /opt/ah/bin/ah\_brd***  ***AH-8c66c0:/tmp/home/admin$ ps | grep pppd***  ***3196 root 4108 S /sbin/pppd noaccomp nopcomp novj nobsdcomp noipdefau***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - debug console - - - - - - - - - - - - - - - - - - - - - - - -*  ***2012-03-31 08:53:21 debug ah\_brd: [brd\_wanmon]: WFOIFM: Use cached gw IP 0x0 for eth0***  ***2012-03-31 08:53:21 debug ah\_brd: [brd\_wanmon]: WFOIFM: Skip test for eth0: no targets defined***  ***2012-03-31 08:53:21 debug ah\_brd: [brd\_wanmon]: WFOIFM: Use cached gw IP 0x0 for ppp0***  ***2012-03-31 08:53:21 debug ah\_brd: [brd\_wanmon]: WFOIFM: Skip test for ppp0: no targets defined***  ***2012-03-31 08:53:21 debug ah\_brd: [brd\_wanmon]: WFOIFM: Going to pause for 30 secs before next test*** | | |
| Test Result |  | | |

### UsbModem\_FailureScenario\_12

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_FailureScenario\_12 | | |
| Priority | Low | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Check the WAN state once crash usbmodem process, primary-wan mode | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) The 3g service is activated and available  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan ip 23.15.247.43***  ***track wan use-for-wan-testing***  ***routing route-request enable***  ***usbmodem mode primary-wan***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) Check the usbmodem config initially  2) Crash the usbmodem process  3) Check usbmodem config after recover usbmodem process | | |
| Expect result | 1) usbmodem is configured as primary-wan mode initially  ***AH-8c66c0#sh usbm m huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: primary-wan***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2275***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***612 12 0 0 0 0 12 | 852 14 0 0 14 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 1 times (since Sat Mar 31 08:45:39 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Sat Mar 31 08:45:30 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***[Backup]***  ***Interface: eth0***  ***WAN Monitor State: down***  ***UP: 1 times (since Sat Mar 31 08:45:33 2012)***  ***DOWN: 1 times (since Sat Mar 31 08:45:47 2012)***  ***Local Link State:***  ***UP: 0 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: no***  ***Cached Gateway IP: 10.155.30.254***  ***Failover SM Snapshot:***  ***Current State: CONNECTED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.41.125.72 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#\_shell***  ***password:***  ***BusyBox v1.18.3 (2011-07-11 10:52:56 PDT) built-in shell (ash)***  ***Enter 'help' for a list of built-in commands.***  ***AH-8c66c0:/tmp/home/admin$ ps | grep brd***  ***1441 root 104m S /opt/ah/bin/ah\_brd***  ***AH-8c66c0:/tmp/home/admin$ ps | grep pppd***  ***2275 root 4108 S /sbin/pppd noaccomp nopcomp novj nobsdcomp noipdefau***  2) There is no brd/ ppd process once kill process ah\_brd/ pppd  ***AH-8c66c0:/tmp/home/admin$ killall ah\_brd***  ***AH-8c66c0:/tmp/home/admin$ killall pppd***  ***AH-8c66c0:/tmp/home/admin$ ps | grep brd***  ***AH-8c66c0:/tmp/home/admin$ ps | grep pppd***  ***AH-8c66c0:/tmp/home/admin$***  3) usbmodem config does not lost  ***AH-8c66c0#sh usbm m huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: primary-wan***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  4) WAN is still down even restore brd/ pppd process  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 3091***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***108 6 0 0 0 0 6 | 114 7 0 0 7 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: ppp0***  ***WAN Monitor State: down***  ***UP: 0 times (since Sat Mar 31 08:50:21 2012)***  ***DOWN: 0 times (since Sat Mar 31 08:50:21 2012)***  ***Local Link State:***  ***UP: 1 times (since Sat Mar 31 08:50:32 2012)***  ***DOWN: 0 times (since Sat Mar 31 08:50:21 2012)***  ***Active: no***  ***Cached Gateway IP: 0.0.0.0***  ***[Backup]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 0 times (since Sat Mar 31 08:50:21 2012)***  ***DOWN: 0 times (since Sat Mar 31 08:50:21 2012)***  ***Local Link State:***  ***UP: 0 times (since Sat Mar 31 08:50:21 2012)***  ***DOWN: 0 times (since Sat Mar 31 08:50:21 2012)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***Failover SM Snapshot:***  ***Current State: CONNECTED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.30.41.171 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#deb co***  ***2012-03-31 08:53:21 debug ah\_brd: [brd\_wanmon]: WFOIFM: Use cached gw IP 0x0 for eth0***  ***2012-03-31 08:53:21 debug ah\_brd: [brd\_wanmon]: WFOIFM: Skip test for eth0: no targets defined***  ***2012-03-31 08:53:21 debug ah\_brd: [brd\_wanmon]: WFOIFM: Use cached gw IP 0x0 for ppp0***  ***2012-03-31 08:53:21 debug ah\_brd: [brd\_wanmon]: WFOIFM: Skip test for ppp0: no targets defined***  ***2012-03-31 08:53:21 debug ah\_brd: [brd\_wanmon]: WFOIFM: Going to pause for 30 secs before next test***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#\_shell***  ***password:***  ***BusyBox v1.18.3 (2011-07-11 10:52:56 PDT) built-in shell (ash)***  ***Enter 'help' for a list of built-in commands.***  ***AH-8c66c0:/tmp/home/admin$ ps | grep brd***  ***2888 root 104m S /opt/ah/bin/ah\_brd***  ***AH-8c66c0:/tmp/home/admin$ ps | grep pppd***  ***3091 root 4108 S /sbin/pppd noaccomp nopcomp novj nobsdcomp noipdefau***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0:/tmp/home/admin$ ping 8.8.8.8***  ***PING 8.8.8.8 (8.8.8.8): 56 data bytes***  ***ping: sendto: Network is unreachable*** | | |
| Test Result |  | | |

### UsbModem\_FailureScenario\_13

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_FailureScenario\_13 | | |
| Priority | Low | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Invalid track-wan parameter | | |
| Pre-condition | 1) Config a track-wan group  ***track-wan use-for-wan-eth0*** | | |
| Test procedure | 1) Config track-wan with interval (6s)/ timeout (2s)/ retry (2times)  2) Conifg track-wan interval as 181  3) Conifg track-wan timeout as 181  4) Conifg track-wan retry as 1025 | | |
| Expect result | 1) Config track ip successfully with valid para value  interval, 1-180  ***track-wan use-for-wan-eth0 in 1***  ***AH-0c32c0#sh ru | i use-for-wan-eth0***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 1***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***track-wan use-for-wan-eth0 in 180***  ***AH-0c32c0#sh ru | i use-for-wan-eth0***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 180***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  timeout, 1-180  ***track-wan use-for-wan-eth0 ti 1***  ***AH-0c32c0#sh ru | i use-for-wan-eth0***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 180***  ***track-wan use-for-wan-eth0 timeout 1***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***track-wan use-for-wan-eth0 ti 180***  ***AH-0c32c0#sh ru | i use-for-wan-eth0***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 180***  ***track-wan use-for-wan-eth0 timeout 180***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  retry, 0-1024  ***track-wan use-for-wan-eth0 re 0***  ***AH-0c32c0#sh ru | i use-for-wan-eth0***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 180***  ***track-wan use-for-wan-eth0 timeout 180***  ***track-wan use-for-wan-eth0 retry 0***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***track-wan use-for-wan-eth0 re 1024***  ***AH-0c32c0#sh ru | i use-for-wan-eth0***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 180***  ***track-wan use-for-wan-eth0 timeout 180***  ***track-wan use-for-wan-eth0 retry 1024***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  2) Fail to config paras with invalid value  interval,  ***AH-8c66c0#track-wan use-for-wan-eth0 interval 0***  ***^-- unknown keyword or invalid input***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#track-wan use-for-wan-eth0 interval 181***  ***^-- unknown keyword or invalid input***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#track-wan use-for-wan-eth0 interval 1800***  ***^-- unknown keyword or invalid input***  timeout,  ***AH-8c66c0#track-wan use-for-wan-eth0 ti 0***  ***^-- unknown keyword or invalid input***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#track-wan use-for-wan-eth0 ti 181***  ***^-- unknown keyword or invalid input***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#track-wan use-for-wan-eth0 ti 1800***  ***^-- unknown keyword or invalid input***  retry,  ***AH-8c66c0#track-wan use-for-wan-eth0 re 1025***  ***^-- unknown keyword or invalid input***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#track-wan use-for-wan-eth0 re 10240***  ***^-- unknown keyword or invalid input*** | | |
| Test Result |  | | |

## UsbModem\_Stress

### UsbModem\_Stress\_1

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_Stress\_1 | | |
| Priority | Accept | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Ping duration via 3g WAN | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary | | |
| Test procedure | 1) Client get association via eth1  2) Ping an internal address which is in the vlan of BR for 24 hours  3) Ping an internet address for 24 hours  4) Repeat step 2)-3) for a client associated via wifi0 | | |
| Expect result | 1) Client get association via eth1 or wifi0 successfully  2) No error with duration ping | | |
| Test Result |  | | |

### UsbModem\_Stress\_2

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_Stress\_2 | | |
| Priority | Low | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | All eth ports connected via 3g WAN | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan\_failover\_test ip 8.8.8.8***  ***track wan\_failover\_test interval 5***  ***track wan\_failover\_test use-for-wan-testing***  ***capwap client server port 80***  ***usbmodem mode primary-wan***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) Check the WAN status as usbmodem is the default WAN  2) Get clients connected with eth port  3) On each client, try to download file “QQ2012Beta1\_QQProtect2.5.exe”  [***http://im.qq.com/qq/2012/safe/***](http://im.qq.com/qq/2012/safe/) | | |
| Expect result | 1) All clients get connection successfully  2) Http download successfully on each client  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: primary-wan***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - WAN is usbmodem - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2304***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***39242 184 0 0 0 0 184 | 20268 115 0 0 115 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 08:38:35 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Mar 29 08:38:33 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***[Backup]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 08:38:35 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: no***  ***Cached Gateway IP: 10.155.30.254***  ***Failover SM Snapshot:***  ***Current State: CONNECTED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.25.138.74 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - 2 clients connected - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh in eth1 mac-learning al***  ***NO mac address Vlan ageout***  ***1 d067:e533:8dd0 1 148***  ***AH-8c66c0#sh in eth2 mac-learning al***  ***NO mac address Vlan ageout***  ***1 d067:e531:4cf3 1 171***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh arp-cache | in 192***  ***0019:778c:66c0 862 MGT0 192.168.85.1***  ***d067:e531:4cf3 880 ETH 192.168.85.11***  ***d067:e533:8dd0 804 ETH 192.168.85.12***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - Download file on clients successfully- - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -* | | |
| Test Result |  | | |

### UsbModem\_Stress\_3

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_Stress\_3 | | |
| Priority | Low | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Wifi connected via 3g WAN with filled ssid | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Config 16 ssid for wifi0  ***AH-8c66c0#sh ru***  ***ssid usb***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface wifi0 ssid usb***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan\_failover\_test ip 23.15.247.43***  ***track wan\_failover\_test interval 1***  ***track wan\_failover\_test use-for-wan-testing***  ***usbmodem mode primary-wan***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) Check the WAN status as usbmodem is the default WAN  2) Get clients associated with ssid  3) On each client, try to download file “QQ2012Beta1\_QQProtect2.5.exe”  [***http://im.qq.com/qq/2012/safe/***](http://im.qq.com/qq/2012/safe/) | | |
| Expect result | 1) All clients get association successfully  2) Http download successfully on each client  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: primary-wan***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - WAN is usbmodem - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2304***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***39242 184 0 0 0 0 184 | 20268 115 0 0 115 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 08:38:35 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Mar 29 08:38:33 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***[Backup]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 08:38:35 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: no***  ***Cached Gateway IP: 10.155.30.254***  ***Failover SM Snapshot:***  ***Current State: CONNECTED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.25.138.74 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - 2 clients associated - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh st***  ***Chan=channel number; Pow=Power in dBm;***  ***A-Mode=Authentication mode; Cipher=Encryption mode;***  ***A-Time=Associated time; Auth=Authenticated;***  ***UPID=User profile Identifier; Phymode=Physical mode;***  ***Ifname=wifi0.1, Ifindex=17, SSID=usb:***  ***Mac Addr IP Addr Chan Tx Rate Rx Rate Pow(SNR) A-Mode Cipher A-Time VLAN Auth UPID Phymode SM-PS Chan-width Release Station-State***  ***-------------- --------------- ---- ------- ------- --- ---------- -------- -------- ---- ---- ---- ------- --------- ---------- -------***  ***0024:d7f4:26a8 192.168.85.13 1 195M 175.5M -25(59) open none 00:04:49 1 Yes 0 11ng disabled 20MHz No Good***  ***0024:d7f4:3114 192.168.85.14 1 195M 6M -26(58) open none 00:04:42 1 Yes 0 11ng disabled 20MHz No Good***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - Download file on clients successfully- - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -* | | |
| Test Result |  | | |

### UsbModem\_Stress\_4

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_Stress\_4 | | |
| Priority | Low | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | All eth ports and wifi connected via 3g WAN | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Config 16 ssid for wifi0  ***AH-8c66c0#sh ru***  ***ssid usb***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth2 mode bridge-access***  ***interface eth2 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface wifi0 ssid usb***  ***report statistic period 1***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***track wan\_failover\_test ip 23.15.247.43***  ***track wan\_failover\_test interval 1***  ***track wan\_failover\_test use-for-wan-testing***  ***usbmodem mode primary-wan***  ***usbmodem modem-id huawei\_e220 apn 3gnet*** | | |
| Test procedure | 1) Check the WAN status as usbmodem is the default WAN  2) Get clients connected with each eth port (eth1-eth4)  3) Get clients associated with ssid (wifi0.1-wifi0.4)  4) On each client, try to download file “QQ2012Beta1\_QQProtect2.5.exe”  [***http://im.qq.com/qq/2012/safe/***](http://im.qq.com/qq/2012/safe/) | | |
| Expect result | 1) All clients get connection/ association successfully  2) Http download successfully on each client  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: primary-wan***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - WAN is usbmodem - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Process Status:***  ***PID: 2304***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***39242 184 0 0 0 0 184 | 20268 115 0 0 115 0 0***  ***WAN Interface(s) Status:***  ***[Primary]***  ***Interface: ppp0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 08:38:35 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Mar 29 08:38:33 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: yes***  ***Cached Gateway IP: 0.0.0.0***  ***[Backup]***  ***Interface: eth0***  ***WAN Monitor State: up***  ***UP: 1 times (since Thu Mar 29 08:38:35 2012)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Local Link State:***  ***UP: 1 times (since Thu Jan 1 00:00:09 1970)***  ***DOWN: 0 times (since Thu Jan 1 00:00:09 1970)***  ***Active: no***  ***Cached Gateway IP: 10.155.30.254***  ***Failover SM Snapshot:***  ***Current State: CONNECTED***  ***Pending Event(s): NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh l3 in***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***Eth0 10.155.30.55 wan - 0019:778c:66c0 U***  ***Mgt0 192.168.85.1 - 1 0019:778c:66c0 U***  ***Ppp0 10.25.138.74 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.30.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 0.0.0.0 0.0.0.0 U 0 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - 2 clients associated - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh in eth2 mac-learning al***  ***NO mac address Vlan ageout***  ***1 d067:e533:8d7e 1 163***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh arp-cache | in 8d7e***  ***d067:e533:8d7e 844 ETH 192.168.85.10***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-8c66c0#sh st***  ***Chan=channel number; Pow=Power in dBm;***  ***A-Mode=Authentication mode; Cipher=Encryption mode;***  ***A-Time=Associated time; Auth=Authenticated;***  ***UPID=User profile Identifier; Phymode=Physical mode;***  ***Ifname=wifi0.1, Ifindex=17, SSID=usb:***  ***Mac Addr IP Addr Chan Tx Rate Rx Rate Pow(SNR) A-Mode Cipher A-Time VLAN Auth UPID Phymode SM-PS Chan-width Release Station-State***  ***-------------- --------------- ---- ------- ------- --- ---------- -------- -------- ---- ---- ---- ------- --------- ---------- -------***  ***0024:d7f4:26a8 192.168.85.13 1 195M 195M -25(59) open none 00:11:04 1 Yes 0 11ng disabled 20MHz No Good***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - Download file on clients successfully- - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -* | | |
| Test Result |  | | |

### UsbModem\_Stress\_5

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| --- | --- | --- | --- |
| Case ID | UsbModem\_Stress\_5 | | |
| Priority | Middle | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Repetition failover and back, on-demand mode | | |
| Pre-condition | 1) Config usbmodem mode as on-demand  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) Trigger failover to usbmodem WAN via shut eth0  ***in eth0 sh***  2) Trigger failback to eth WAN via enable eth0  ***no in eth0 sh***  3) Repeat step 1)-2) for 100 times | | |
| Expect result | 1) No error with failover  2) No error with failback  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Before failover - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm sUSB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Fri Mar 22 20:10:01 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Fri Mar 22 20:10:11 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - After failover - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#shwan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: FAILOVER***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Fri Mar 22 20:10:01 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Fri Mar 22 20:10:11 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 0.0.0.0 wan - 08ea:440c:32c0 D***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.27.46.155 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - After failback - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm sUSB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Fri Mar 22 20:10:01 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Fri Mar 22 20:10:11 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0*** | | |
| Test Result |  | | |

### UsbModem\_Stress\_6

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_Stress\_6 | | |
| Priority | Middle | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Repetition failover and back, always-connected mode | | |
| Pre-condition | 1) Config usbmodem mode as always-connected  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem mode always-connected***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) Trigger failover to usbmodem WAN via shut eth0  ***in eth0 sh***  2) Trigger failback to eth WAN via enable eth0  ***no in eth0 sh***  3) Repeat step 1)-2) for 100 times | | |
| Expect result | 1) No error with failover  2) No error with failback  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Before failover - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 2***  ***lkdn\_time: Fri Mar 22 22:54:34 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sat Mar 23 02:14:19 2013***  ***last\_event: PRIMARY\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 02:14:25 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - After failover - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: FAILOVER***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Sat Mar 23 02:14:25 2013***  ***last\_event: PRIMARY\_WAN\_DOWN***  ***last\_evt\_time: Sat Mar 23 03:25:06 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 0.0.0.0 wan - 08ea:440c:32c0 D***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - After failback - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 2***  ***lkdn\_time: Fri Mar 22 22:54:34 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sat Mar 23 02:14:19 2013***  ***last\_event: PRIMARY\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 02:14:25 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0*** | | |
| Test Result |  | | |

### UsbModem\_Stress\_7

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_Stress\_7 | | |
| Priority | High | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Repetition failover and back, primary-wan mode | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem mode primary-wan***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) Trigger failover to eth WAN via shut usbmodem  ***no usbm en***  2) Trigger failback to usbmodem WAN via enable usbmodem  ***usbm en***  3) Repeat step 1)-2) for 100 times | | |
| Expect result | 1) No error with failover  2) No error with failback  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: primary-wan***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Before failover - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.35.64.96 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:30555 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:30703 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:2566496 (2.4 MiB) TX bytes:2581432 (2.4 MiB)***  ***PPP Process Status:***  ***PID: 1952***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***2566496 30555 0 0 0 0 30555 | 2581432 30703 0 0 30703 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 03:27:59 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 88***  ***ifmon\_up\_time: Sat Mar 23 20:35:01 2013***  ***ifmon\_down\_count: 84***  ***ifmon\_down\_time: Sat Mar 23 20:34:55 2013***  ***dft\_ifmon\_up\_count: 4***  ***dft\_ifmon\_up\_time: Sat Mar 23 03:30:57 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Sat Mar 23 20:34:55 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 20:35:01 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 0 0 0 ppp0***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - After failover - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 03:27:59 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 88***  ***ifmon\_up\_time: Sat Mar 23 20:35:01 2013***  ***ifmon\_down\_count: 84***  ***ifmon\_down\_time: Sat Mar 23 20:34:55 2013***  ***dft\_ifmon\_up\_count: 4***  ***dft\_ifmon\_up\_time: Sat Mar 23 03:30:57 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: FAILOVER***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Sat Mar 23 20:35:01 2013***  ***last\_event: PRIMARY\_WAN\_DOWN***  ***last\_evt\_time: Sat Mar 23 20:58:57 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - After failback - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.35.64.96 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:30555 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:30703 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:2566496 (2.4 MiB) TX bytes:2581432 (2.4 MiB)***  ***PPP Process Status:***  ***PID: 1952***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***2566496 30555 0 0 0 0 30555 | 2581432 30703 0 0 30703 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 03:27:59 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 88***  ***ifmon\_up\_time: Sat Mar 23 20:35:01 2013***  ***ifmon\_down\_count: 84***  ***ifmon\_down\_time: Sat Mar 23 20:34:55 2013***  ***dft\_ifmon\_up\_count: 4***  ***dft\_ifmon\_up\_time: Sat Mar 23 03:30:57 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Sat Mar 23 20:34:55 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 20:35:01 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 0 0 0 ppp0***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0*** | | |
| Test Result |  | | |

### UsbModem\_Stress\_8

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_Stress\_8 | | |
| Priority | Low | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Track an invalid ip for long time then track a valid ip, on-demand mode | | |
| Pre-condition | 1) Config usbmodem mode as on-demand  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Ping through eth0 WAN works well  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) Track an invalid ip as well as ping internet from client  ***track-wan use-for-wan-eth0 ip 1.1.1.1***  ***track-wan use-for-wan-usbnet0 ip 1.1.1.1***  2) Check the usbmodem/ WAN status and continue ping process  3) After 30mins, stop track ip 1.1.1.1  ***no track-wan use-for-wan-eth0 ip 1.1.1.1***  ***no track-wan use-for-wan-usbnet0 ip 1.1.1.1***  4) Repeat step 2) | | |
| Expect result | 1) WAN is eth0 initially before track invalid ip,and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: on-demand***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm sUSB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: up***  ***Interface: eth0; State: up***  ***Interface: ppp0; State: unknown***  ***[use-for-wan-eth0]***  ***WAN Monitor State: up***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: unknown***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Fri Mar 22 20:10:01 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Fri Mar 22 20:10:11 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=127ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=139ms TTL=44***  2) WAN failover to usbmodem once track invalid ip  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.32.157.180 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:91 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:257 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:7519 (7.3 KiB) TX bytes:21070 (20.5 KiB)***  ***PPP Process Status:***  ***PID: 2265***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***7519 91 0 0 0 0 91 | 21070 257 0 0 257 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: up***  ***Interface: eth0; State: up***  ***Interface: ppp0; State: up***  ***[use-for-wan-eth0]***  ***WAN Monitor State: down***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: down***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Jan 1 00:00:28 1970***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:12 1970***  ***ifmon\_up\_count: 0***  ***ifmon\_up\_time: Thu Jan 1 00:00:12 1970***  ***ifmon\_down\_count: 1***  ***ifmon\_down\_time: Sun Mar 24 00:46:12 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Sun Mar 24 00:46:08 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:12 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 19***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Sun Mar 24 00:46:22 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:12 1970***  ***ifmon\_up\_count: 0***  ***ifmon\_up\_time: Thu Jan 1 00:00:12 1970***  ***ifmon\_down\_count: 1***  ***ifmon\_down\_time: Sun Mar 24 00:46:36 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Sun Mar 24 00:46:26 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:12 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: NOWAN***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sun Mar 24 00:46:22 2013***  ***last\_event: NOWAN***  ***last\_evt\_time: Sun Mar 24 00:46:36 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.32.157.180 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 10001 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 10600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Ping after failover - - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=136ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=138ms TTL=45***  3) Keep WAN as usbmodem during track invalid ip,and ping without error  ***Reply from 8.8.8.8: bytes=32 time=136ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=138ms TTL=45***  4) WAN failback to eth0 once track valid ip,and ping without error  ***AH-0c32c0#sh usbm sUSB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***NONE***  ***PPP Process Status:***  ***NONE***  ***PPP Interface Status:***  ***NONE***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: up***  ***Interface: eth0; State: up***  ***Interface: ppp0; State: unknown***  ***[use-for-wan-eth0]***  ***WAN Monitor State: up***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: unknown***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Mar 21 16:44:55 2013***  ***lkdn\_count: 1***  ***lkdn\_time: Fri Mar 22 20:09:51 2013***  ***ifmon\_up\_count: 79***  ***ifmon\_up\_time: Fri Mar 22 19:55:48 2013***  ***ifmon\_down\_count: 78***  ***ifmon\_down\_time: Fri Mar 22 19:55:42 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Thu Mar 21 16:45:05 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 21***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Fri Mar 22 20:10:01 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 2***  ***ifmon\_up\_time: Fri Mar 22 20:10:11 2013***  ***ifmon\_down\_count: 0***  ***ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Fri Mar 22 20:10:06 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Fri Mar 22 20:10:01 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Fri Mar 22 20:10:11 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=32ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=32ms TTL=44*** | | |
| Test Result |  | | |

### UsbModem\_Stress\_9

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_Stress\_9 | | |
| Priority | Low | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Track an invalid ip for long time then track a valid ip, always-connected mode | | |
| Pre-condition | 1) Config usbmodem mode as always-connected  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Ping through eth0 WAN works well  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem mode always-connected***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) Track an invalid ip as well as ping internet from client  ***track-wan use-for-wan-eth0 ip 1.1.1.1***  ***track-wan use-for-wan-usbnet0 ip 1.1.1.1***  2) Check the usbmodem/ WAN status and continue ping process  3) After 30mins, stop track ip 1.1.1.1  ***no track-wan use-for-wan-eth0 ip 1.1.1.1***  ***no track-wan use-for-wan-usbnet0 ip 1.1.1.1***  4) Repeat step 2) | | |
| Expect result | 1) WAN is eth0 initially before track invalid ip,and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: always-connected***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: up***  ***Interface: eth0; State: up***  ***Interface: ppp0; State: up***  ***[use-for-wan-eth0]***  ***WAN Monitor State: up***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: up***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 2***  ***lkdn\_time: Fri Mar 22 22:54:34 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sat Mar 23 02:14:19 2013***  ***last\_event: PRIMARY\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 02:14:25 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=34ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=33ms TTL=44***  2) WAN failover to usbmodem once track invalid ip  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.32.157.180 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:91 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:257 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:7519 (7.3 KiB) TX bytes:21070 (20.5 KiB)***  ***PPP Process Status:***  ***PID: 2265***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***7519 91 0 0 0 0 91 | 21070 257 0 0 257 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: up***  ***Interface: eth0; State: up***  ***Interface: ppp0; State: up***  ***[use-for-wan-eth0]***  ***WAN Monitor State: down***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: down***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Jan 1 00:00:28 1970***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:12 1970***  ***ifmon\_up\_count: 0***  ***ifmon\_up\_time: Thu Jan 1 00:00:12 1970***  ***ifmon\_down\_count: 1***  ***ifmon\_down\_time: Sun Mar 24 00:46:12 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Sun Mar 24 00:46:08 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:12 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 19***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Sun Mar 24 00:46:22 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:12 1970***  ***ifmon\_up\_count: 0***  ***ifmon\_up\_time: Thu Jan 1 00:00:12 1970***  ***ifmon\_down\_count: 1***  ***ifmon\_down\_time: Sun Mar 24 00:46:36 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Sun Mar 24 00:46:26 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:12 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: NOWAN***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sun Mar 24 00:46:22 2013***  ***last\_event: NOWAN***  ***last\_evt\_time: Sun Mar 24 00:46:36 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.32.157.180 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 10001 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 10600 0 0 ppp0***  3) Keep WAN as usbmodem during track invalid ip,and ping without error  ***Reply from 8.8.8.8: bytes=32 time=136ms TTL=45***  ***Reply from 8.8.8.8: bytes=32 time=138ms TTL=45***  4) WAN failback to eth0 once track valid ip,and ping without error  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.27.46.155 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:11 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:20 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:528 (528.0 B) TX bytes:2028 (1.9 KiB)***  ***PPP Process Status:***  ***PID: 8041***  ***State: R (running)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***528 11 0 0 0 0 11 | 2028 20 0 0 20 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh track-***  ***[Default Track IP]***  ***-------------------------------***  ***Result: up***  ***Interface: eth0; State: up***  ***Interface: ppp0; State: up***  ***[use-for-wan-eth0]***  ***WAN Monitor State: up***  ***Interface: eth0 (eth0)***  ***[use-for-wan-usbnet0]***  ***WAN Monitor State: up***  ***Interface: usbnet0 (ppp0)***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 3***  ***lkup\_time: Fri Mar 22 22:57:35 2013***  ***lkdn\_count: 2***  ***lkdn\_time: Fri Mar 22 22:54:34 2013***  ***ifmon\_up\_count: 85***  ***ifmon\_up\_time: Sat Mar 23 02:14:25 2013***  ***ifmon\_down\_count: 82***  ***ifmon\_down\_time: Sat Mar 23 02:14:19 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Fri Mar 22 22:57:53 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 600***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: FAILOVER***  ***prev\_state\_time: Sat Mar 23 02:14:19 2013***  ***last\_event: PRIMARY\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 02:14:25 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 600 0 0 ppp0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=32ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=32ms TTL=44*** | | |
| Test Result |  | | |

### UsbModem\_Stress\_10

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_Stress\_10 | | |
| Priority | Low | Automation Flag | Yes |
| Topology to use | Topo1/ Topo2 | | |
| Description | Track an invalid ip for long time then track a valid ip, primary-wan mode | | |
| Pre-condition | 1) Config usbmodem mode as primary-wan  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary  4) Ping through usbmodem WAN works well  ***AH-8c66c0#sh ru***  ***interface eth0 mode wan***  ***interface eth1 mode bridge-access***  ***interface eth1 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface eth3 mode bridge-access***  ***interface eth3 mac-learning enable***  ***interface eth4 mode bridge-access***  ***interface eth4 mac-learning enable***  ***interface mgt0 ip 192.168.85.1 255.255.255.0***  ***no interface mgt0 dhcp client***  ***interface mgt0 dhcp-server options default-gateway 192.168.85.1***  ***interface mgt0 dhcp-server options dns1 192.168.85.1***  ***interface mgt0 dhcp-server ip-pool 192.168.85.10 192.168.85.99***  ***interface mgt0 dhcp-server enable***  ***interface mgt0 dns-server enable***  ***usbmodem mode primary-wan***  ***usbmodem modem-id huawei\_e220 apn 3gnet***  ***track-wan use-for-wan-eth0***  ***track-wan use-for-wan-eth0 ip 8.8.8.8***  ***track-wan use-for-wan-eth0 interval 5***  ***track-wan use-for-wan-eth0 interface eth0***  ***track-wan use-for-wan-eth0 enable***  ***track-wan use-for-wan-usbnet0***  ***track-wan use-for-wan-usbnet0 ip 8.8.8.8***  ***track-wan use-for-wan-usbnet0 interval 5***  ***track-wan use-for-wan-usbnet0 interface usb0***  ***track-wan use-for-wan-usbnet0 enable*** | | |
| Test procedure | 1) Track an invalid ip as well as ping internet from client  ***track-wan use-for-wan-eth0 ip 1.1.1.1***  ***track-wan use-for-wan-usbnet0 ip 1.1.1.1***  2) Check the usbmodem/ WAN status and continue ping process  3) After 30mins, stop track ip 1.1.1.1  ***no track-wan use-for-wan-eth0 ip 1.1.1.1***  ***no track-wan use-for-wan-usbnet0 ip 1.1.1.1***  4) Repeat step 2) | | |
| Expect result | 1) WAN is usbmodem initially before track invalid ip,and ping without error  ***AH-8c66c0#sh usbm modem-id huawei\_e220***  ***<Begin of USB modem configuration>***  ***Enabled: yes***  ***Mode: primary-wan***  ***-----------------***  ***Modem Id: huawei\_e220***  ***USB Id(s): Vendor Id: 0x12d1, Product Id: 0x1003***  ***APN: 3gnet***  ***Dialup Username:***  ***Dialup Password:***  ***Dialup Number: ATD\*99\*\*\*1#***  ***<End of USB modem configuration>***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.35.64.96 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:30555 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:30703 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:2566496 (2.4 MiB) TX bytes:2581432 (2.4 MiB)***  ***PPP Process Status:***  ***PID: 1952***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***2566496 30555 0 0 0 0 30555 | 2581432 30703 0 0 30703 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 03:27:59 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 88***  ***ifmon\_up\_time: Sat Mar 23 20:35:01 2013***  ***ifmon\_down\_count: 84***  ***ifmon\_down\_time: Sat Mar 23 20:34:55 2013***  ***dft\_ifmon\_up\_count: 4***  ***dft\_ifmon\_up\_time: Sat Mar 23 03:30:57 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Sat Mar 23 20:34:55 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 20:35:01 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 0 0 0 ppp0***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - Ping Internet from Client - - - - - - - - - - - - - - - - - -*  ***Pinging 8.8.8.8 with 32 bytes of data:***  ***Reply from 8.8.8.8: bytes=32 time=156ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=172ms TTL=44***  2) WAN priority is updated once track invalid ip  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.35.64.96 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:30555 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:30703 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:2566496 (2.4 MiB) TX bytes:2581432 (2.4 MiB)***  ***PPP Process Status:***  ***PID: 1952***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***2566496 30555 0 0 0 0 30555 | 2581432 30703 0 0 30703 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 1***  ***lkup\_time: Thu Jan 1 00:00:28 1970***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:12 1970***  ***ifmon\_up\_count: 1***  ***ifmon\_up\_time: Sun Mar 24 01:04:54 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Sun Mar 24 01:10:46 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Sun Mar 24 00:46:08 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:12 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 19***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 2***  ***lkup\_time: Sun Mar 24 00:46:22 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:12 1970***  ***ifmon\_up\_count: 1***  ***ifmon\_up\_time: Sun Mar 24 01:04:49 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Sun Mar 24 01:10:52 2013***  ***dft\_ifmon\_up\_count: 1***  ***dft\_ifmon\_up\_time: Sun Mar 24 00:46:26 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:12 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: NOWAN***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Sat Mar 23 20:34:55 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 20:35:01 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 10000 0 0 ppp0***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 10001 0 0 eth0***  3) Keep WAN as eth0 during track invalid ip,and ping without error  ***Reply from 8.8.8.8: bytes=32 time=36ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=33ms TTL=44***  4) WAN failback to usbmodem once track valid ip,and ping without error  ***AH-0c32c0#sh usbm s***  ***USB Modem Attached:***  ***Vendor ID: 0x12d1***  ***Product ID: 0x1003***  ***PPP Network Interface Status:***  ***ppp0 Link encap:Point-to-Point Protocol***  ***inet addr:10.35.64.96 P-t-P:10.64.64.64 Mask:255.255.255.255***  ***UP POINTOPOINT RUNNING NOARP MULTICAST MTU:1500 Metric:1***  ***RX packets:30555 errors:0 dropped:0 overruns:0 frame:0***  ***TX packets:30703 errors:0 dropped:0 overruns:0 carrier:0***  ***collisions:0 txqueuelen:3***  ***RX bytes:2566496 (2.4 MiB) TX bytes:2581432 (2.4 MiB)***  ***PPP Process Status:***  ***PID: 1952***  ***State: S (sleeping)***  ***PPP Interface Status:***  ***State: up***  ***Statistics:***  ***IN PACK VJCOMP VJUNC VJERR VJTOSS NON-VJ | OUT PACK VJCOMP VJUNC NON-VJ VJSRCH VJMISS***  ***2566496 30555 0 0 0 0 30555 | 2581432 30703 0 0 30703 0 0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan in***  ***ifname: eth0***  ***kifname: eth0***  ***wanif\_type: 0***  ***wifidx: 0***  ***kifidx: 3***  ***priority: 1***  ***is\_wan: 1***  ***is\_default\_wan: 0***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 03:27:59 2013***  ***lkdn\_count: 3***  ***lkdn\_time: Sat Mar 23 03:25:06 2013***  ***ifmon\_up\_count: 88***  ***ifmon\_up\_time: Sat Mar 23 20:35:01 2013***  ***ifmon\_down\_count: 84***  ***ifmon\_down\_time: Sat Mar 23 20:34:55 2013***  ***dft\_ifmon\_up\_count: 4***  ***dft\_ifmon\_up\_time: Sat Mar 23 03:30:57 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  ***ifname: usbnet0***  ***kifname: ppp0***  ***wanif\_type: 1***  ***wifidx: 1***  ***kifidx: 23***  ***priority: 0***  ***is\_wan: 1***  ***is\_default\_wan: 1***  ***cached\_gwip: 0***  ***lkup\_count: 4***  ***lkup\_time: Sat Mar 23 01:42:30 2013***  ***lkdn\_count: 0***  ***lkdn\_time: Thu Jan 1 00:00:11 1970***  ***ifmon\_up\_count: 4***  ***ifmon\_up\_time: Sat Mar 23 01:42:38 2013***  ***ifmon\_down\_count: 2***  ***ifmon\_down\_time: Fri Mar 22 22:57:39 2013***  ***dft\_ifmon\_up\_count: 3***  ***dft\_ifmon\_up\_time: Sat Mar 23 01:42:33 2013***  ***dft\_ifmon\_down\_count: 0***  ***dft\_ifmon\_down\_time: Thu Jan 1 00:00:11 1970***  ***nat\_policy\_id:***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh wan f***  ***WAN Failover Status:***  ***sm\_name: WANFO SM***  ***curr\_state: CONNECTED***  ***prev\_state: CONNECTED***  ***prev\_state\_time: Sat Mar 23 20:34:55 2013***  ***last\_event: BACKUP\_WAN\_CONNECTED***  ***last\_evt\_time: Sat Mar 23 20:35:01 2013***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh l3 i***  ***Name IP Address Mode VLAN MAC State***  ***----------- --------------- -------- ------ -------------- -----***  ***eth0 10.155.31.39 wan - 08ea:440c:32c0 U***  ***mgt0 192.168.85.1 - 1 08ea:440c:32c0 U***  ***ppp0 10.35.64.96 wan - 0000:0000:0000 U***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  ***AH-0c32c0#sh ip ro***  ***Ref=references; Iface=interface;***  ***U=route is up;H=target is a host; G=use gateway;***  ***Destination Gateway Netmask Flags Metric Ref Use Iface***  ***--------------- --------------- --------------- ----- ------ ------ --- -----***  ***10.64.64.64 0.0.0.0 255.255.255.255 UH 0 0 0 ppp0***  ***192.168.85.0 0.0.0.0 255.255.255.0 U 0 0 0 mgt0***  ***10.155.31.0 0.0.0.0 255.255.255.0 U 0 0 0 eth0***  ***127.0.0.0 0.0.0.0 255.255.255.0 U 0 0 0 lo***  ***0.0.0.0 10.64.64.64 0.0.0.0 UG 0 0 0 ppp0***  ***0.0.0.0 10.155.31.254 0.0.0.0 UG 1 0 0 eth0***  *- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -*  *- - - - - - - - - - - - - - - - - - Continue Ping Process - - - - - - - - - - - - - - - - - - - - -*  ***Reply from 8.8.8.8: bytes=32 time=156ms TTL=44***  ***Reply from 8.8.8.8: bytes=32 time=172ms TTL=44*** | | |
| Test Result |  | | |

## UsbModem\_TypicalIssue

### UsbModem\_TypicalIssue\_1

|  |  |  |  |
| --- | --- | --- | --- |
| Case ID | UsbModem\_TypicalIssue\_1 | | |
| Priority | Accept | Automation Flag | No |
| Topology to use | Topo1/ Topo2 | | |
| Description | Http visit redirection during failover (18369) | | |
| Pre-condition | 1) Config usbmodem mode as on-demand  2) The 3g service is activated and available  3) Configured the dialup username/ passwd/ number if the modem if necessary | | |
| Test procedure | 1) Config track ip group with interval 60s, result 1  2) Check the wan monitor status, result 2  3) Visit http on client, result 3  4) Trigger failover to usbmodem WAN via shut eth0  5) Repeat Step 2), result 4  6) Repeat Step 3) within track interval, result 5  7) After track interval, repeat Step 2), result 6  8) Repeat Step 3), result 7 | | |
| Expect result | Result 1: Track ip is configured with interval 60s  Result 2: WAN is eth0 initially and state of failover state is “ATTACHED”  Result 3: Visit http successfully on client  Result 4: WAN monitor state is “down” for eth0, as well as for ppp0, and failover state is “FAILOVER”  Result 5: Http visit on client will not be redirected to HiveUI page  Result 6: WAN monitor state is “down” for eth0, “up” for ppp0, and failover state is “FAILOVER”  Result 7: Visit http successfully on client | | |
| Test Result | Customer issue, 18369 | | |