DHCP Option 82 SNR

- DHCP Snooping Option 82
  - Agent Circuit ID
    - Standard
    - Self-defined
    - Self-defined Agent Circuit ID SNR S2962, S2965, S2982G S2985G
    - Agent Circuit ID
  - Agent Remote ID
    - Standard
    - Self-defined
    - Self-defined Agent Remote ID SNR S2962, S2965, S2982G S2985G
    - Agent Remote ID
  - IP DHCP Snooping Information Option allow-untrusted
  - IP DHCP Snooping Information Option reply keep
- DHCP Relay Option 82
  - Agent Circuit ID
    - Standard
    - Self-defined
    - Agent Circuit ID
  - Agent Remote ID
    - Standard
    - Self-defined
    - Agent Remote ID
- (Delimiter) IP DHCP Option 82

DHCP Option 82 - DHCP, DHCP- , DHCP- . IP- .

SNR DHCP Option 82 DHCP Snooping (ip dhcp snooping information option), DHCP Relay (ip dhcp relay information option).

> !
>
> DHCP Snooping Information Option DHCP Relay Information Option !

Option 82 suboptions:

- Agent Circuit ID - , ;
- Agent Remote ID - .

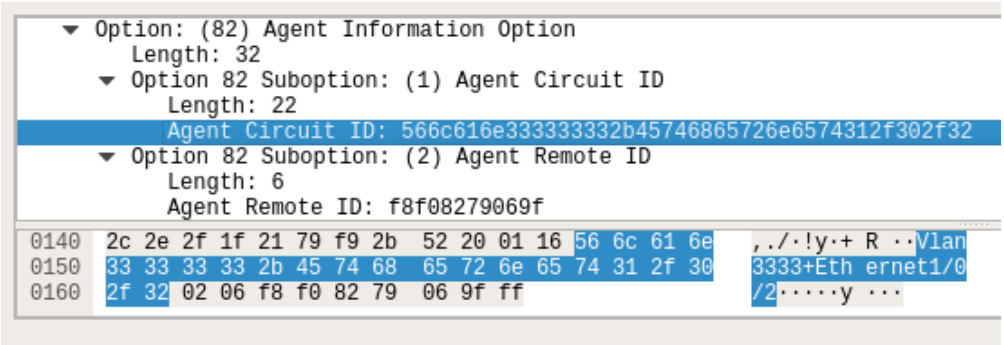
DHCP Snooping Option 82

Option 82 DHCP Snooping SNR.

Agent Circuit ID

Standard

Agent Circuit ID. , SNR Agent Circuit ID VLAN + Interface name ASCII:



:

```
ip dhcp snooping information option subscriber-id format {ascii | hex | vs-hp | vs-huawei | vs-cisco}
```

!

Subscriber ID = Circuit ID

. HEX:

```
▼ Option: (82) Agent Information Option
    Length: 18
  ▼ Option 82 Suboption: (1) Agent Circuit ID
      Length: 8
      Agent Circuit ID: 00060d0501000002
  ▼ Option 82 Suboption: (2) Agent Remote ID
      Length: 6
      Agent Remote ID: f8f08279069f

0120  1c 75 08 f4 2d 3b 0c 08  4b 61 74 79 61 2d 8f 8a   ·u··-;·· Katya-··
0130  3c 08 4d 53 46 54 20 35  2e 30 37 0c 01 0f 03 06   <·MSFT 5 .07·····
0140  2c 2e 2f 1f 21 79 f9 2b  52 12 01 08 00 06 0d 05   ,./·!y·+ R·····
0150  01 00 00 02 02 06 f8 f0  82 79 06 9f ff            ····· ·y···
```

:

- 00 - ;
- 06 - ;
- 0d05 - VLAN ID;
- 01 - ( );
- 00 - ( );
- 0002 - .

VS-HP:

```
  ▼ Option 82 Suboption: (1) Agent Circuit ID
      Length: 2
      Agent Circuit ID: 0002
  ▼ Option 82 Suboption: (2) Agent Remote ID
      Length: 6
      Agent Remote ID: f8f08279069f

0130  3c 08 4d 53 46 54 20 35  2e 30 37 0c 01 0f 03 06   <·MSFT 5 .07·····
0140  2c 2e 2f 1f 21 79 f9 2b  52 0c 01 02 00 02 02 06   ,./·!y·+ R·····
0150  f8 f0 82 79 06 9f ff                               ···y···
```

:

- 0002 - .

VS-Huawei:

```
▼ Option: (82) Agent Information Option
    Length: 46
  ▼ Option 82 Suboption: (1) Agent Circuit ID
      Length: 36
      Agent Circuit ID: 45746865726e6574312f302f323a333333332e3020534e52...
  ▼ Option 82 Suboption: (2) Agent Remote ID
      Length: 6
      Agent Remote ID: f8f08279069f

0140  2c 2e 2f 1f 21 79 f9 2b  52 2e 01 24 45 74 68 65   ,./·!y·+ R.·$Ethe
0150  72 6e 65 74 31 2f 30 2f  32 3a 33 33 33 33 2e 30   rnet1/0/ 2:3333.0
0160  20 53 4e 52 2d 53 32 39  39 35 47 2d 32 34 54 58    SNR-S29 95G-24TX
```

, Ethernet1/0/2:3333.0 SNR-S2995G-24TX + ':' + VLAN.0 + Hostname.

VS-Cisco:

```
    ▾ Option 82 Suboption: (1) Agent Circuit ID
        Length: 6
        Agent Circuit ID: 0004014d0003
    ▾ Option 82 Suboption: (2) Agent Remote ID
        Length: 6
        Agent Remote ID: f8f0827a8e93
  ▾ Option: (255) End
      Option End: 255
    Padding: 00

0120  0a 0a 01 32 04 0a 0a 0a  0a 0c 08 73 6e 72 2d 74   ···2···· ···snr-t
0130  65 61 6d 37 0d 01 1c 02  03 0f 06 77 0c 2c 2f 1a   eam7···· ···w·,/·
0140  79 2a 52 10 01 06 00 04  01 4d 00 03 02 06 f8 f0   y*R····· ·M·····
0150  82 7a 8e 93 ff 00                                  ·z····
```

:

- 00 - ;
- 04 - ;
- 014d - VLAN ID;
- 0003 -

Self-defined

, Agent Circuit ID Self-defined. Agent Circuit ID Self-defined :

```
ip dhcp snooping information option self-defined subscriber-id {id | port | vlan | string}
```

:

- port - , Ethernet;
- id remote-mac - MAC- ;
- id switch-id ma - VLAN MAC- ;
- switch-id - hostname, ASCII, - ;
- vlan - VLAN ID, 'Vlan';
- string - ASCII.

:

```
port                -    Ethernet1/0/2
id remote-mac       -    1c-75-08-f4-2d-3b
id switch-id ma     -    f8-f0-82-79-06-9f
switch-id           -    SNR-S2995G-24TX
vlan                -    Vlan3333
string              -    test
```

, :

```
ip dhcp snooping information option self-defined subscriber-id port vlan id remote-mac
```

Self-defined - ASCII, :

```
ip dhcp snooping information option self-defined subscriber-id format {ASCII | HEX}
```

HEX, 'port' 'VLAN' :

- vlan - VLAN ID;
- port - '01' - ( ) + '00' - ( ) + .

, Ethernet1/0/2 '01000002'

> **!**
>
> String/Hostname Self-defined ASCII-!

String . , , :

```
ip dhcp snooping information option subscriber-id 1/0/2
```

Self-defined Agent Circuit ID SNR S2962, S2965, S2982G S2985G

SNR S2962, S2965, S2982G S2985G Self-defined :

```
ip dhcp snooping information option subscriber-id {%h | %v | %M | %m | %R | %r | %s | %p | %i}
```

:

- %h - hostname;
- %v - VLAN ID;
- %M - VLAN MAC- ;
- %m - VLAN MAC- ;
- %R - MAC- ;
- %r - MAC- ;
- %s - ;
- %p - ;
- %i - IP- .

:

```
%h    -    SNR-S2995G-24TX
%v    -    3333
%M    -    F8-F0-82-79-06-9F
%m    -    f8-f0-82-79-06-9f
%R    -    1C-75-08-F4-2D-3B
%r    -    1c-75-08-f4-2d-3b
%s    -          - 1
%p    -    5
%i    -     DHCP Discover  0.0.0.0
```

.

```
ip dhcp snooping information option subscriber-id "%v%p"
```

!

subscriber-id , "%v%r".

ASCII, :

```
ip dhcp snooping information option subscriber-id format {ASCII | HEX}
```

Agent Circuit ID

, Information Option Subscriber ID , . Information Option Self-defined Subscriber ID Information Option Subscriber ID, Self-defined . :

1. Information Option Subscriber ID ;
2. Information Option Self-defined Subscriber ID ;
3. Information Option Subscriber ID .

Agent Remote ID

Standard

Agent Remote ID. , SNR Agent Remote ID VLAN MAC- :

```
▼ Option: (82) Agent Information Option
    Length: 32
  ▶ Option 82 Suboption: (1) Agent Circuit ID
  ▼ Option 82 Suboption: (2) Agent Remote ID
      Length: 6
      Agent Remote ID: f8f08279069f
```

:

```
ip dhcp snooping information option remote-id format {'WORD' | vs-cisco | vs-huawei}
```

. VS-Cisco VLAN MAC- :

```
▼ Option: (82) Agent Information Option
    Length: 34
  ▶ Option 82 Suboption: (1) Agent Circuit ID
  ▼ Option 82 Suboption: (2) Agent Remote ID
      Length: 8
      Agent Remote ID: 0006f8f08279069f
```

:

- 00 - ;
- 06 - ;

VS-Cisco HEX-.

VS-Huawei:

```
▼ Option: (82) Agent Information Option
    Length: 40
  ▶ Option 82 Suboption: (1) Agent Circuit ID
  ▼ Option 82 Suboption: (2) Agent Remote ID
      Length: 14
      Agent Remote ID: 663866302d383237392d30363966

0150  33 30 30 30 2b 45 74 68  65 72 6e 65 74 31 2f 30   3000+Eth ernet1/0
0160  2f 31 02 0e 66 38 66 30  2d 38 32 37 39 2d 30 36   /1··f8f0 -8279-06
0170  39 66 ff                                           9f·
```

VS-Huawei HEX-, MAC-.

Remote ID:

```
▼ Option: (82) Agent Information Option
    Length: 30
  ▶ Option 82 Suboption: (1) Agent Circuit ID
  ▼ Option 82 Suboption: (2) Agent Remote ID
      Length: 4
      Agent Remote ID: 74657374
▼ Option: (255) End
    Option End: 255

0140  2c 2e 2f 1f 21 79 f9 2b  52 1e 01 16 56 6c 61 6e   ,./·!y·+ R···Vlan
0150  33 30 30 30 2b 45 74 68  65 72 6e 65 74 31 2f 30   3000+Eth ernet1/0
0160  2f 31 02 04 74 65 73 74  ff                        /1··test ·
```

Self-defined

, Agent Remote ID Self-defined. Agent Remote ID Self-defined :

```
ip dhcp snooping information option self-defined remote-id {hostname | mac | string}
```

:

- mac - VLAN MAC- ;
- hostname - ASCII, - ;
- string - ASCII.

:

```
ma          -     f8-f0-82-79-06-9f
hostname     -     SNR-S2995G-24TX
string       -     test
```

, :

```
ip dhcp snooping information option self-defined remote-id port hostname mac string
```

Self-defined ASCII, :

```
ip dhcp snooping information option self-defined subscriber-id format {ASCII | HEX}
```

!

String/Hostname Self-defined ASCII-!

Self-defined Agent Remote ID SNR S2962, S2965, S2982G S2985G

SNR S2962, S2965, S2982G S2985G Self-defined :

```
ip dhcp snooping information option self-defined remote-id {%h | %v | %M | %m | %R | %r | %s | %p | %i}
```

:

- %h - hostname;
- %v - VLAN ID;
- %M - VLAN MAC- ;
- %m - VLAN MAC- ;
- %R - MAC- ;
- %r - MAC- ;
- %s - ;
- %p - ;
- %i - IP- .

:

```
%h    -    SNR-S2985G-24T
%v    -    3333
%M    -    F8-F0-82-79-06-9F
%m    -    f8-f0-82-79-06-9f
%R    -    1C-75-08-F4-2D-3B
%r    -    1c-75-08-f4-2d-3b
%s    -          - 1
%p    -    5
%i    -     DHCP Discover  0.0.0.0
```

!

remote-id , "%v%r".

. , , 2 , "-" ("/"):

```
ip dhcp snooping information option self-defined remote-id "-%p"
```

Agent Remote ID

Information Option Self-defined Remote ID Information Option Remote ID, Self-defined . :

1. Information Option Self-defined Remote ID;
2. Information Option Remote ID.

IP DHCP Snooping Information Option allow-untrusted

DHCP Snooping SNR DHCP- Discover Request , Option 82. , DHCP Snooping, Trust-. - , , DHCP- Discover Request Option 82.

```
ip dhcp snooping information option allow-untrusted
```

82 , :

```
ip dhcp snooping information option allow-untrusted replace
```

IP DHCP Snooping Information Option reply keep

, DHCP- Offer Ack Option 82, . :

```
ip dhcp snooping information option reply keep
```

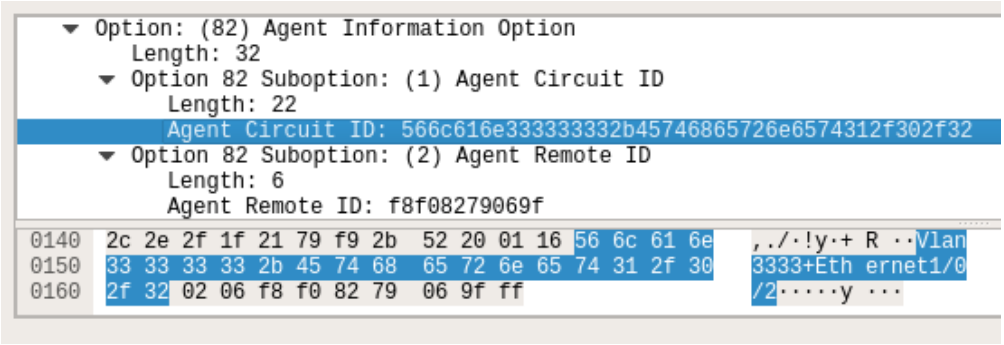
DHCP Relay Option 82

Option 82 DHCP Relay SNR.

Agent Circuit ID

Standard

Agent Circuit ID. , SNR Agent Circuit ID VLAN + Interface name ASCII:



:

```
ip dhcp relay information option subscriber-id format {ascii | hex | vs-hp | vs-cisco}
```

> **!**
>
> Subscriber ID = Circuit ID

. HEX:

```
▼ Option: (82) Agent Information Option
    Length: 18
  ▼ Option 82 Suboption: (1) Agent Circuit ID
      Length: 8
      Agent Circuit ID: 00060d0501000002
  ▼ Option 82 Suboption: (2) Agent Remote ID
      Length: 6
      Agent Remote ID: f8f08279069f

0120  1c 75 08 f4 2d 3b 0c 08  4b 61 74 79 61 2d 8f 8a   ·u··-;·· Katya-··
0130  3c 08 4d 53 46 54 20 35  2e 30 37 0c 01 0f 03 06   <·MSFT 5 .07·····
0140  2c 2e 2f 1f 21 79 f9 2b  52 12 01 08 00 06 0d 05   ,./·!y·+ R·····
0150  01 00 00 02 02 06 f8 f0  82 79 06 9f ff            ····· ·y···
```

:

- 00 - ;
- 06 - ;
- 0d05 - VLAN ID;
- 01 - ( );
- 00 - ( );
- 0002 - .

VS-HP:

```
  ▼ Option 82 Suboption: (1) Agent Circuit ID
      Length: 2
      Agent Circuit ID: 0002
  ▼ Option 82 Suboption: (2) Agent Remote ID
      Length: 6
      Agent Remote ID: f8f08279069f

0130  3c 08 4d 53 46 54 20 35  2e 30 37 0c 01 0f 03 06   <·MSFT 5 .07·····
0140  2c 2e 2f 1f 21 79 f9 2b  52 0c 01 02 00 02 02 06   ,./·!y·+ R·····
0150  f8 f0 82 79 06 9f ff                               ···y···
```

:

- 0002 - .

VS-Cisco:

```
  ▼ Option 82 Suboption: (1) Agent Circuit ID
      Length: 6
      Agent Circuit ID: 0004014d0003
  ▸ Option 82 Suboption: (2) Agent Remote ID
▸ Option: (255) End
  Padding: 00000000000000

0130  1c 02 03 0f 06 77 0c 2c  2f 1a 79 2a 52 10 01 06   ·····w·, /·y*R···
0140  00 04 01 4d 00 03 02 06  f8 f0 82 7a 8e 93 ff 00   ···M····  ···z····
0150  00 00 00 00 00 00                                  ······
```

:

- 00 - ;
- 04 - ;
- 014d - VLAN ID;
- 0003 -

SNR S2962, S2965, S2982G S2985G Agent Circuit ID SVI- :

```
ip dhcp relay information option subscriber-id {%h | %v | %M | %m | %R | %r | %s | %p | %i}
```

:

- %h - hostname;
- %v - VLAN ID;
- %M - VLAN MAC- ;

- %m - VLAN MAC- ;
- %R - MAC- ;
- %r - MAC- ;
- %s - ;
- %p - ;
- %i - IP- .

:

```
%h    -    SNR-S2985G-24T
%v    -    3333
%M    -    F8-F0-82-79-06-9F
%m    -    f8-f0-82-79-06-9f
%R    -    1C-75-08-F4-2D-3B
%r    -    1c-75-08-f4-2d-3b
%s    -          - 1
%p    -    5
%i    -     DHCP Discover  0.0.0.0
```

Self-defined

, Agent Circuit ID Self-defined. Agent Circuit ID Self-defined :

```
ip dhcp relay information option self-defined subscriber-id {id | port | vlan | string}
```

:

- port - , Ethernet;
- id remote-mac - MAC- ;
- id switch-id ma - VLAN MAC- ;
- switch-id - hostname, ASCII, - ;
- vlan - VLAN ID, 'Vlan';
- string - ASCII.

:

```
port                -    Ethernet1/0/2
id remote-mac       -    1c-75-08-f4-2d-3b
id switch-id ma    -    f8-f0-82-79-06-9f
switch-id           -    SNR-S2995G-24TX
vlan                -    Vlan3333
string              -    test
```

, :

```
ip dhcp relay option self-defined subscriber-id port vlan id remote-mac
```

Self-defined - ASCII, :

```
ip dhcp relay information option self-defined subscriber-id format {ASCII | HEX}
```

HEX, 'port' 'VLAN' :

- vlan - VLAN ID;
- port - '01' - ( ) + '00' - ( ) + .

, Ethernet1/0/2 '01000002'

> **!**
>
> String/Hostname Self-defined ASCII-!

Agent Circuit ID

, Information Option Self-defined Subscriber ID Information Option Subscriber ID, Self-defined . :

1. Information Option Self-defined Subscriber ID;
2. Information Option Subscriber ID.

Agent Remote ID

Standard

Agent Remote ID. , SNR Agent Remote ID VLAN MAC- :

```
▼ Option: (82) Agent Information Option
    Length: 32
  ▶ Option 82 Suboption: (1) Agent Circuit ID
  ▼ Option 82 Suboption: (2) Agent Remote ID
      Length: 6
      Agent Remote ID: f8f08279069f
```

:

```
ip dhcp relay information option remote-id format {default | vs-hp}
```

VS-HP Remote ID IP- , Helper-address (10.10.10.10):

```
▼ Option: (82) Agent Information Option
    Length: 30
  ▶ Option 82 Suboption: (1) Agent Circuit ID
  ▼ Option 82 Suboption: (2) Agent Remote ID
      Length: 4
      Agent Remote ID: 0a0a0a0a
```

Self-defined

, Agent Remote ID Self-defined. Agent Remote ID Self-defined :

```
ip dhcp relay information option self-defined remote-id {hostname | mac | string}
```

:

- mac - VLAN MAC- ;
- hostname - ASCII, - ;
- string - ASCII.

:

```
ma          -     f8-f0-82-79-06-9f
hostname     -     SNR-S2995G-24TX
string       -     test
```

, :

```
ip dhcp snooping information option self-defined remote-id port hostname mac string
```

Self-defined ASCII, :

```
ip dhcp snooping information option self-defined subscriber-id format {ASCII | HEX}
```

> **!**
>
> String/Hostname Self-defined ASCII-!

Agent Remote ID

Information Option Self-defined Remote ID Information Option Remote ID, Self-defined . :

1. Information Option Self-defined Remote ID;

2. Information Option Remote ID.

(Delimiter) IP DHCP Option 82

Self-defined, () "/":

```
▼ Option: (82) Agent Information Option
    Length: 84
  ▼ Option 82 Suboption: (1) Agent Circuit ID
      Length: 40
      Agent Circuit ID: 566c616e333030302f45746865726e6574312f302f312f31...
  ▼ Option 82 Suboption: (2) Agent Remote ID
      Length: 40
      Agent Remote ID: 66382d66302d38322d37392d30362d39662f534e522d5332...

0140  2c 2e 2f 1f 21 79 f9 2b  52 54 01 28 56 6c 61 6e   ,./·!y·+ RT·(Vlan
0150  33 30 30 30 2f 45 74 68  65 72 6e 65 74 31 2f 30   3000/Eth ernet1/0
0160  2f 31 2f 31 63 2d 37 35  2d 30 38 2d 66 34 2d 32   /1/1c-75 -08-f4-2
0170  64 2d 33 62 02 28 66 38  2d 66 30 2d 38 32 2d 37   d-3b·(f8 -f0-82-7
0180  39 2d 30 36 2d 39 66 2f  53 4e 52 2d 53 32 39 39   9-06-9f/ SNR-S299
0190  35 47 2d 32 34 54 58 2f  22 74 65 73 74 22 ff      5G-24TX/ "test"·
```

, :

```
ip dhcp {snooping | relay} information option delimiter <>
```

:

- colon(':');
- dot('.');
- none;
- slash('/');
- space(' ').

> **!**
>
> 'none' SNR S2962, S2965, S2982G S2985G.