

# 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:

```

▼ Option: (82) Agent Information Option
  Length: 32
  ▼ Option 82 Suboption: (1) Agent Circuit ID
    Length: 22
    Agent Circuit ID: 566c616e333333332b45746865726e6574312f302f32
  ▼ Option 82 Suboption: (2) Agent Remote ID
    Length: 6
    Agent Remote ID: f8f08279069f
0140 2c 2e 2f 1f 21 79 f9 2b 52 20 01 16 56 6c 61 6e ,./!y.+ R ..Vlan
0150 33 33 33 33 2b 45 74 68 65 72 6e 65 74 31 2f 30 3333+Eth ernet1/0
0160 2f 32 02 06 f8 f0 82 79 06 9f ff /2.....y ...
  
```

:

```
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%p".

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:

```

  ▼ Option: (82) Agent Information Option
    Length: 32
    ▼ Option 82 Suboption: (1) Agent Circuit ID
      Length: 22
      Agent Circuit ID: 566c616e333333332b45746865726e6574312f302f32
    ▼ Option 82 Suboption: (2) Agent Remote ID
      Length: 6
      Agent Remote ID: f8f08279069f

```

0140	2c 2e 2f 1f 21 79 f9 2b 52 20 01 16	56 6c 61 6e	, ./ .!y .+ R ..Vlan
0150	33 33 33 33 2b 45 74 68 65 72 6e 65 74 31 2f 30		3333+Eth ernet1/0
0160	2f 32 02 06 f8 f0 82 79 06 9f ff		/2.....y ...

:

```
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: 0000000000000000
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.