Пример настройки DHCP Relay option 82 (DAS-3248 rev.B) в двух различных топологиях.

Топология с использованием
маршрутизатора между DHCP сервером
и DSLAM

DHCP server
IP 192.168.10.100/32
Route to 192.168.11.0 via
192.168.10.103

L3 router (DGS-3324SR)

DAS-3248 rev.B
IP 192.168.11.1/32
Route to 192.168.10.0
via 192.168.11.2

Iface1:
IP 192.168.10.103/
32

Iface2:
IP 192.168.11.2/32

Modem (DHCP
client)
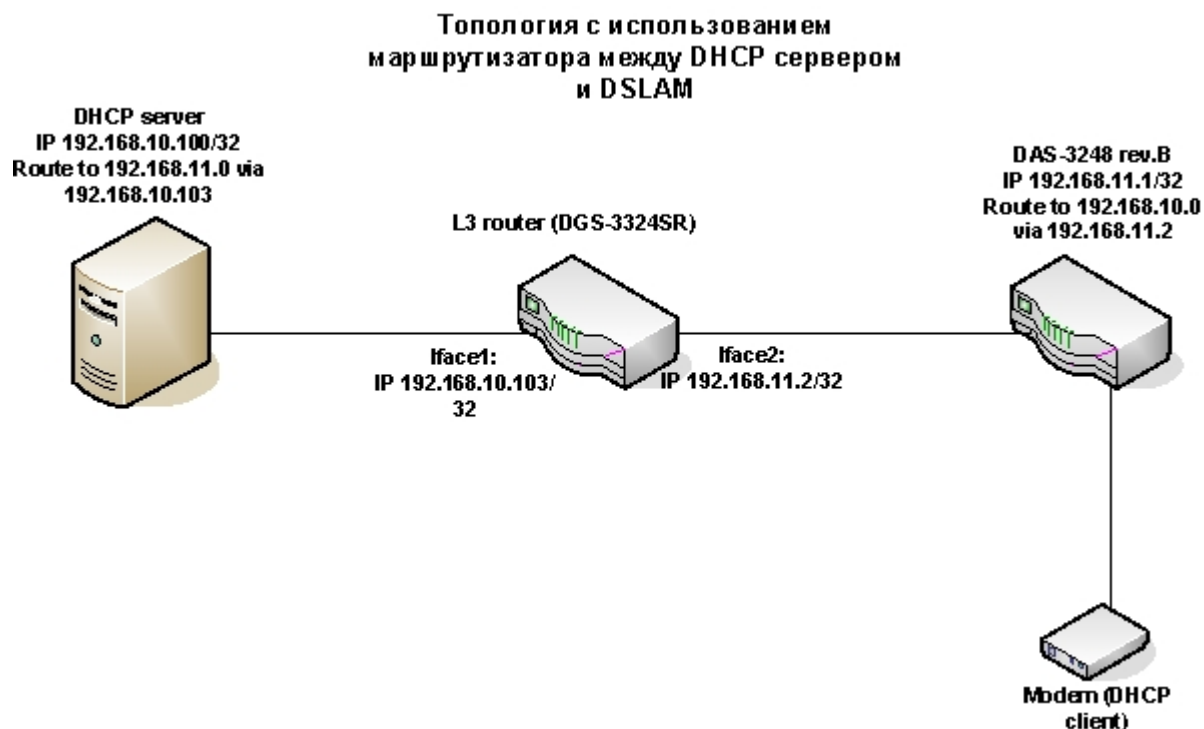
Пример настройки DHCP сервера (FreeBSD 6.0, isc-dhcp3-server-3.0.3):

Добавление маршрута к 192.168.11.0 подсети:

`$ sudo route add 192.168.11.0/24 192.168.10.103`

Пример настройки dhcpd.conf:

```
option domain-name-servers 192.168.100.1, 212.46.0.3;
default-lease-time 600;
max-lease-time 600;
authoritative;
ddns-update-style none;
log-facility local7;

class "client1" {
match if option agent.remote-id = "modem1" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client2" {
match if option agent.remote-id = "modem2" and option agent.circuit-id = "dslam_das-
3248_1";
}
```

```
class "client3" {
match if option agent.remote-id = "modem3" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client4" {
match if option agent.remote-id = "modem4" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client5" {
match if option agent.remote-id = "modem5" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client6" {
match if option agent.remote-id = "modem6" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client7" {
match if option agent.remote-id = "modem7" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client8" {
match if option agent.remote-id = "modem8" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client9" {
match if option agent.remote-id = "modem9" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client10" {
match if option agent.remote-id = "modem10" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client11" {
match if option agent.remote-id = "modem11" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client12" {
match if option agent.remote-id = "modem12" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client13" {
match if option agent.remote-id = "modem13" and option agent.circuit-id = "dslam_das-
3248_1";
}
```

```
class "client14" {
match if option agent.remote-id = "modem14" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client15" {
match if option agent.remote-id = "modem15" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client16" {
match if option agent.remote-id = "modem16" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client17" {
match if option agent.remote-id = "modem17" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client18" {
match if option agent.remote-id = "modem18" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client19" {
match if option agent.remote-id = "modem19" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client20" {
match if option agent.remote-id = "modem20" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client21" {
match if option agent.remote-id = "modem21" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client22" {
match if option agent.remote-id = "modem22" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client23" {
match if option agent.remote-id = "modem23" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client24" {
match if option agent.remote-id = "modem24" and option agent.circuit-id = "dslam_das-
3248_1";
```

```
}

class "client25" {
match if option agent.remote-id = "modem25" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client26" {
match if option agent.remote-id = "modem26" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client27" {
match if option agent.remote-id = "modem27" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client28" {
match if option agent.remote-id = "modem28" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client29" {
match if option agent.remote-id = "modem29" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client30" {
match if option agent.remote-id = "modem30" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client31" {
match if option agent.remote-id = "modem31" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client32" {
match if option agent.remote-id = "modem32" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client33" {
match if option agent.remote-id = "modem33" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client34" {
match if option agent.remote-id = "modem34" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client35" {
match if option agent.remote-id = "modem35" and option agent.circuit-id = "dslam_das-
```

3248_1";
}

class "client36" {
match if option agent.remote-id = "modem36" and option agent.circuit-id = "dslam_das-3248_1";
}

class "client37" {
match if option agent.remote-id = "modem37" and option agent.circuit-id = "dslam_das-3248_1";
}

class "client38" {
match if option agent.remote-id = "modem38" and option agent.circuit-id = "dslam_das-3248_1";
}

class "client39" {
match if option agent.remote-id = "modem39" and option agent.circuit-id = "dslam_das-3248_1";
}

class "client40" {
match if option agent.remote-id = "modem40" and option agent.circuit-id = "dslam_das-3248_1";
}

class "client41" {
match if option agent.remote-id = "modem41" and option agent.circuit-id = "dslam_das-3248_1";
}

class "client42" {
match if option agent.remote-id = "modem42" and option agent.circuit-id = "dslam_das-3248_1";
}

class "client43" {
match if option agent.remote-id = "modem43" and option agent.circuit-id = "dslam_das-3248_1";
}

class "client44" {
match if option agent.remote-id = "modem44" and option agent.circuit-id = "dslam_das-3248_1";
}

class "client45" {
match if option agent.remote-id = "modem45" and option agent.circuit-id = "dslam_das-3248_1";
}

class "client46" {

```
match if option agent.remote-id = "modem46" and option agent.circuit-id = "dslam_das-
3248_1";
}

class "client47" {
match if option agent.remote-id = "modem47" and option agent.circuit-id = "dslam_das-
3248_1";
}
class "client48" {
match if option agent.remote-id = "modem48" and option agent.circuit-id = "dslam_das-
3248_1";
}


shared-network test {
subnet 192.168.10.0 netmask 255.255.255.0 { not authoritative; }
subnet 192.168.11.0 netmask 255.255.255.0 {
option routers 192.168.11.2;
}


pool {
range 192.168.11.51 192.168.11.51;
allow members of "client1";
}

pool {
range 192.168.11.52 192.168.11.52;
allow members of "client2";
}

pool {
range 192.168.11.53 192.168.11.53;
allow members of "client3";
}

pool {
range 192.168.11.54 192.168.11.54;
allow members of "client4";
}

pool {
range 192.168.11.55 192.168.11.55;
allow members of "client5";
}

pool {
range 192.168.11.56 192.168.11.56;
allow members of "client6";
}

pool {
range 192.168.11.57 192.168.11.57;
allow members of "client7";
```

```
}

pool {
range 192.168.11.58 192.168.11.58;
allow members of "client8";
}

pool {
range 192.168.11.59 192.168.11.59;
allow members of "client9";
}

pool {
range 192.168.11.60 192.168.11.60;
allow members of "client10";
}

pool {
range 192.168.11.61 192.168.11.61;
allow members of "client11";
}

pool {
range 192.168.11.62 192.168.11.62;
allow members of "client12";
}

pool {
range 192.168.11.63 192.168.11.63;
allow members of "client13";
}

pool {
range 192.168.11.64 192.168.11.64;
allow members of "client14";
}

pool {
range 192.168.11.65 192.168.11.65;
allow members of "client15";
}

pool {
range 192.168.11.66 192.168.11.66;
allow members of "client16";
}

pool {
range 192.168.11.67 192.168.11.67;
allow members of "client17";
}

pool {
range 192.168.11.68 192.168.11.68;
```

```
allow members of "client18";
}

pool {
range 192.168.11.69 192.168.11.69;
allow members of "client19";
}

pool {
range 192.168.11.70 192.168.11.70;
allow members of "client20";
}

pool {
range 192.168.11.71 192.168.11.71;
allow members of "client21";
}

pool {
range 192.168.11.72 192.168.11.72;
allow members of "client22";
}

pool {
range 192.168.11.73 192.168.11.73;
allow members of "client23";
}

pool {
range 192.168.11.74 192.168.11.74;
allow members of "client24";
}

pool {
range 192.168.11.75 192.168.11.75;
allow members of "client25";
}
pool {
range 192.168.11.76 192.168.11.76;
allow members of "client26";
}

pool {
range 192.168.11.77 192.168.11.77;
allow members of "client27";
}

pool {
range 192.168.11.78 192.168.11.78;
allow members of "client28";
}

pool {
range 192.168.11.79 192.168.11.79;
```

```
allow members of "client29";
}

pool {
range 192.168.11.80 192.168.11.80;
allow members of "client30";
}

pool {
range 192.168.11.81 192.168.11.81;
allow members of "client31";
}

pool {
range 192.168.11.82 192.168.11.82;
allow members of "client32";
}

pool {
range 192.168.11.83 192.168.11.83;
allow members of "client33";
}

pool {
range 192.168.11.84 192.168.11.84;
allow members of "client34";
}
pool {
range 192.168.11.85 192.168.11.85;
allow members of "client35";
}

pool {
range 192.168.11.86 192.168.11.86;
allow members of "client36";
}

pool {
range 192.168.11.87 192.168.11.87;
allow members of "client37";
}

pool {
range 192.168.11.88 192.168.11.88;
allow members of "client38";
}

pool {
range 192.168.11.89 192.168.11.89;
allow members of "client39";
}

pool {
range 192.168.11.90 192.168.11.90;
```

```
allow members of "client40";
}

pool {
range 192.168.11.91 192.168.11.91;
allow members of "client41";
}

pool {
range 192.168.11.92 192.168.11.92;
allow members of "client42";
}

pool {
range 192.168.11.93 192.168.11.93;
allow members of "client43";
}
pool {
range 192.168.11.94 192.168.11.94;
allow members of "client44";
}

pool {
range 192.168.11.95 192.168.11.95;
allow members of "client45";
}

pool {
range 192.168.11.96 192.168.11.96;
allow members of "client46";
}

pool {
range 192.168.11.97 192.168.11.97;
allow members of "client47";
}

pool {
range 192.168.11.98 192.168.11.98;
allow members of "client48";
}
}
```

Настройка маршрутизатора (DGS-3324SR):

```
config vlan default delete 1:1-1:2

create vlan vlan2 tag 2
create vlan vlan3 tag 3

config vlan vlan2 add untagged 1:1 advertisement enable
config vlan vlan3 add untagged 1:2 advertisement enable
```

```
create ipif vlan2 192.168.10.103/24 vlan2
create ipif vlan3 192.168.11.2/24 vlan3
save
```

Настройка DSLAM:

1. Изменение настроек Uplink интерфейса (в качестве Management VLAN ID задан VID 200):
```
modify ethernet intf ifname eth-1 disable
modify ethernet intf ifname eth-1 ip 192.168.11.1 mask 255.255.255.0 mgmtvlanid 200 enable
```

2. Создание маршрута к подсети, в которой находится DHCP сервер:
```
create ip route ip 192.168.10.0 gwyip 192.168.11.2 mask 255.255.255.0
```

3. Удаление всех интерфейсов из Default VLAN:
```
modify vlan static vlanid 1 egressports none untaggedports none
```

4. Создание абонентского VLAN (VID 21):
```
create vlan static vlanname vlan21 vlanid 21 egressports 385 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 untaggedports 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
```

5. Создание Management VLAN:
```
create vlan static vlanname Management vlanid 200 egressports 385 untaggedports none
```

6. Изменение PVID для всех абонентских интерфейсов:
```
modify gvrp port info portid 1 portvlanid 21
modify gvrp port info portid 2 portvlanid 21
modify gvrp port info portid 3 portvlanid 21
modify gvrp port info portid 4 portvlanid 21
modify gvrp port info portid 5 portvlanid 21
modify gvrp port info portid 6 portvlanid 21
modify gvrp port info portid 7 portvlanid 21
modify gvrp port info portid 8 portvlanid 21
modify gvrp port info portid 9 portvlanid 21
modify gvrp port info portid 10 portvlanid 21
modify gvrp port info portid 11 portvlanid 21
modify gvrp port info portid 12 portvlanid 21
modify gvrp port info portid 13 portvlanid 21
modify gvrp port info portid 14 portvlanid 21
modify gvrp port info portid 15 portvlanid 21
modify gvrp port info portid 16 portvlanid 21
modify gvrp port info portid 17 portvlanid 21
modify gvrp port info portid 18 portvlanid 21
modify gvrp port info portid 19 portvlanid 21
modify gvrp port info portid 20 portvlanid 21
modify gvrp port info portid 21 portvlanid 21
modify gvrp port info portid 22 portvlanid 21
modify gvrp port info portid 23 portvlanid 21
modify gvrp port info portid 24 portvlanid 21
modify gvrp port info portid 25 portvlanid 21
modify gvrp port info portid 26 portvlanid 21
```

```
modify gvrp port info portid 27 portvlanid 21
modify gvrp port info portid 28 portvlanid 21
modify gvrp port info portid 29 portvlanid 21
modify gvrp port info portid 30 portvlanid 21
modify gvrp port info portid 31 portvlanid 21
modify gvrp port info portid 32 portvlanid 21
modify gvrp port info portid 33 portvlanid 21
modify gvrp port info portid 34 portvlanid 21
modify gvrp port info portid 35 portvlanid 21
modify gvrp port info portid 36 portvlanid 21
modify gvrp port info portid 37 portvlanid 21
modify gvrp port info portid 38 portvlanid 21
modify gvrp port info portid 39 portvlanid 21
modify gvrp port info portid 40 portvlanid 21
modify gvrp port info portid 41 portvlanid 21
modify gvrp port info portid 42 portvlanid 21
modify gvrp port info portid 43 portvlanid 21
modify gvrp port info portid 44 portvlanid 21
modify gvrp port info portid 45 portvlanid 21
modify gvrp port info portid 46 portvlanid 21
modify gvrp port info portid 47 portvlanid 21
modify gvrp port info portid 48 portvlanid 21
```

7. Переключение в режим упрощенной настройки (usermode):
```
usermode
```

8. Конфигурация IP DHCP сервера, Uplink интерфейса, VLAN ID и IP DHCP агента:
```
config relay dhcp server set 192.168.10.100 ge1 21 192.168.11.2
```

9. Включение DHCP Relay на Uplink интерфейсе и глобально:
```
config relay ge enable ge1
config relay dhcp enable
```

10. Включение DHCP Relay на каждом абонентском интерфейсе:
```
config relay dhcp pvc enable 1 8 35
config relay dhcp pvc enable 2 8 35
config relay dhcp pvc enable 3 8 35
config relay dhcp pvc enable 4 8 35
config relay dhcp pvc enable 5 8 35
config relay dhcp pvc enable 6 8 35
config relay dhcp pvc enable 7 8 35
config relay dhcp pvc enable 8 8 35
config relay dhcp pvc enable 9 8 35
config relay dhcp pvc enable 10 8 35
config relay dhcp pvc enable 11 8 35
config relay dhcp pvc enable 12 8 35
config relay dhcp pvc enable 13 8 35
config relay dhcp pvc enable 14 8 35
config relay dhcp pvc enable 15 8 35
config relay dhcp pvc enable 16 8 35
config relay dhcp pvc enable 17 8 35
config relay dhcp pvc enable 18 8 35
config relay dhcp pvc enable 19 8 35
config relay dhcp pvc enable 20 8 35
```

config relay dhcp pvc enable 21 8 35
config relay dhcp pvc enable 22 8 35
config relay dhcp pvc enable 23 8 35
config relay dhcp pvc enable 24 8 35
config relay dhcp pvc enable 25 8 35
config relay dhcp pvc enable 26 8 35
config relay dhcp pvc enable 27 8 35
config relay dhcp pvc enable 28 8 35
config relay dhcp pvc enable 29 8 35
config relay dhcp pvc enable 30 8 35
config relay dhcp pvc enable 31 8 35
config relay dhcp pvc enable 32 8 35
config relay dhcp pvc enable 33 8 35
config relay dhcp pvc enable 34 8 35
config relay dhcp pvc enable 35 8 35
config relay dhcp pvc enable 36 8 35
config relay dhcp pvc enable 37 8 35
config relay dhcp pvc enable 38 8 35
config relay dhcp pvc enable 39 8 35
config relay dhcp pvc enable 40 8 35
config relay dhcp pvc enable 41 8 35
config relay dhcp pvc enable 42 8 35
config relay dhcp pvc enable 43 8 35
config relay dhcp pvc enable 44 8 35
config relay dhcp pvc enable 45 8 35
config relay dhcp pvc enable 46 8 35
config relay dhcp pvc enable 47 8 35
config relay dhcp pvc enable 48 8 35

11. Конфигурация CircuitID и типа передаваемых значений (cid – CircuitID, rid – RemoteID):
config relay cidformat set prefix dslam_das-3248_1
config relay suboption set type cid rid

12. Конфигурация RemoteID для каждого абонентского интерфейса:
config relay dhcp pvc set 1 8 35 remoteid modem1 opt82 always-add
config relay dhcp pvc set 2 8 35 remoteid modem2 opt82 always-add
config relay dhcp pvc set 3 8 35 remoteid modem3 opt82 always-add
config relay dhcp pvc set 4 8 35 remoteid modem4 opt82 always-add
config relay dhcp pvc set 5 8 35 remoteid modem5 opt82 always-add
config relay dhcp pvc set 6 8 35 remoteid modem6 opt82 always-add
config relay dhcp pvc set 7 8 35 remoteid modem7 opt82 always-add
config relay dhcp pvc set 8 8 35 remoteid modem8 opt82 always-add
config relay dhcp pvc set 9 8 35 remoteid modem9 opt82 always-add
config relay dhcp pvc set 10 8 35 remoteid modem10 opt82 always-add
config relay dhcp pvc set 11 8 35 remoteid modem11 opt82 always-add
config relay dhcp pvc set 12 8 35 remoteid modem12 opt82 always-add
config relay dhcp pvc set 13 8 35 remoteid modem13 opt82 always-add
config relay dhcp pvc set 14 8 35 remoteid modem14 opt82 always-add
config relay dhcp pvc set 15 8 35 remoteid modem15 opt82 always-add
config relay dhcp pvc set 16 8 35 remoteid modem16 opt82 always-add
config relay dhcp pvc set 17 8 35 remoteid modem17 opt82 always-add
config relay dhcp pvc set 18 8 35 remoteid modem18 opt82 always-add
config relay dhcp pvc set 19 8 35 remoteid modem19 opt82 always-add

```
config relay dhcp pvc set 20 8 35 remoteid modem20 opt82 always-add
config relay dhcp pvc set 21 8 35 remoteid modem21 opt82 always-add
config relay dhcp pvc set 22 8 35 remoteid modem22 opt82 always-add
config relay dhcp pvc set 23 8 35 remoteid modem23 opt82 always-add
config relay dhcp pvc set 24 8 35 remoteid modem24 opt82 always-add
config relay dhcp pvc set 25 8 35 remoteid modem25 opt82 always-add
config relay dhcp pvc set 26 8 35 remoteid modem26 opt82 always-add
config relay dhcp pvc set 27 8 35 remoteid modem27 opt82 always-add
config relay dhcp pvc set 28 8 35 remoteid modem28 opt82 always-add
config relay dhcp pvc set 29 8 35 remoteid modem29 opt82 always-add
config relay dhcp pvc set 30 8 35 remoteid modem30 opt82 always-add
config relay dhcp pvc set 31 8 35 remoteid modem31 opt82 always-add
config relay dhcp pvc set 32 8 35 remoteid modem32 opt82 always-add
config relay dhcp pvc set 33 8 35 remoteid modem33 opt82 always-add
config relay dhcp pvc set 34 8 35 remoteid modem34 opt82 always-add
config relay dhcp pvc set 35 8 35 remoteid modem35 opt82 always-add
config relay dhcp pvc set 36 8 35 remoteid modem36 opt82 always-add
config relay dhcp pvc set 37 8 35 remoteid modem37 opt82 always-add
config relay dhcp pvc set 38 8 35 remoteid modem38 opt82 always-add
config relay dhcp pvc set 39 8 35 remoteid modem39 opt82 always-add
config relay dhcp pvc set 40 8 35 remoteid modem40 opt82 always-add
config relay dhcp pvc set 41 8 35 remoteid modem41 opt82 always-add
config relay dhcp pvc set 42 8 35 remoteid modem42 opt82 always-add
config relay dhcp pvc set 43 8 35 remoteid modem43 opt82 always-add
config relay dhcp pvc set 44 8 35 remoteid modem44 opt82 always-add
config relay dhcp pvc set 45 8 35 remoteid modem45 opt82 always-add
config relay dhcp pvc set 46 8 35 remoteid modem46 opt82 always-add
config relay dhcp pvc set 47 8 35 remoteid modem47 opt82 always-add
config relay dhcp pvc set 48 8 35 remoteid modem48 opt82 always-add
```

13. Сохранение настроек и выход из режима упрощенной настройки:
```
config save
engmode
```

Топология без использования
маршрутизатора между DHCP сервером
и DSLAM

DHCP server
IP 192.168.10.100/32

DAS-3248 rev.B
IP 192.168.10.103/32

Modem (DHCP
client)

Настройка DSLAM:

1. Изменение настроек Uplink интерфейса (в качестве Management VLAN ID задан VID 200):
modify ethernet intf ifname eth-1 disable
modify ethernet intf ifname eth-1 ip 192.168.10.103 mask 255.255.255.0 mgmtvlanid 200 enable

2. Удаление всех интерфейсов из Default VLAN:
modify vlan static vlanid 1 egressports none untaggedports none

3. Создание абонентского VLAN (VID 21):
create vlan static vlanname vlan21 vlanid 21 egressports 385 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 untaggedports 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48

4. Создание Management VLAN:
create vlan static vlanname Management vlanid 200 egressports 385 untaggedports none

5. Изменение PVID для всех абонентских интерфейсов:
modify gvrp port info portid 1 portvlanid 21
modify gvrp port info portid 2 portvlanid 21
modify gvrp port info portid 3 portvlanid 21
modify gvrp port info portid 4 portvlanid 21
modify gvrp port info portid 5 portvlanid 21
modify gvrp port info portid 6 portvlanid 21
modify gvrp port info portid 7 portvlanid 21
modify gvrp port info portid 8 portvlanid 21
modify gvrp port info portid 9 portvlanid 21

modify gvrp port info portid 10 portvlanid 21
modify gvrp port info portid 11 portvlanid 21
modify gvrp port info portid 12 portvlanid 21
modify gvrp port info portid 13 portvlanid 21
modify gvrp port info portid 14 portvlanid 21
modify gvrp port info portid 15 portvlanid 21
modify gvrp port info portid 16 portvlanid 21
modify gvrp port info portid 17 portvlanid 21
modify gvrp port info portid 18 portvlanid 21
modify gvrp port info portid 19 portvlanid 21
modify gvrp port info portid 20 portvlanid 21
modify gvrp port info portid 21 portvlanid 21
modify gvrp port info portid 22 portvlanid 21
modify gvrp port info portid 23 portvlanid 21
modify gvrp port info portid 24 portvlanid 21
modify gvrp port info portid 25 portvlanid 21
modify gvrp port info portid 26 portvlanid 21
modify gvrp port info portid 27 portvlanid 21
modify gvrp port info portid 28 portvlanid 21
modify gvrp port info portid 29 portvlanid 21
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modify gvrp port info portid 35 portvlanid 21
modify gvrp port info portid 36 portvlanid 21
modify gvrp port info portid 37 portvlanid 21
modify gvrp port info portid 38 portvlanid 21
modify gvrp port info portid 39 portvlanid 21
modify gvrp port info portid 40 portvlanid 21
modify gvrp port info portid 41 portvlanid 21
modify gvrp port info portid 42 portvlanid 21
modify gvrp port info portid 43 portvlanid 21
modify gvrp port info portid 44 portvlanid 21
modify gvrp port info portid 45 portvlanid 21
modify gvrp port info portid 46 portvlanid 21
modify gvrp port info portid 47 portvlanid 21
modify gvrp port info portid 48 portvlanid 21

6. Переключение в режим упрощенной настройки (usermode):
usermode

7. Конфигурация IP DHCP сервера, Uplink интерфейса и VLAN ID:
config relay dhcp server set 192.168.10.100 ge1 21

8. Включение DHCP Relay на Uplink интерфейсе и глобально:
config relay ge enable ge1
config relay dhcp enable

9. Включение DHCP Relay на каждом абонентском интерфейсе:
config relay dhcp pvc enable 1 8 35
config relay dhcp pvc enable 2 8 35
config relay dhcp pvc enable 3 8 35

config relay dhcp pvc enable 4 8 35
config relay dhcp pvc enable 5 8 35
config relay dhcp pvc enable 6 8 35
config relay dhcp pvc enable 7 8 35
config relay dhcp pvc enable 8 8 35
config relay dhcp pvc enable 9 8 35
config relay dhcp pvc enable 10 8 35
config relay dhcp pvc enable 11 8 35
config relay dhcp pvc enable 12 8 35
config relay dhcp pvc enable 13 8 35
config relay dhcp pvc enable 14 8 35
config relay dhcp pvc enable 15 8 35
config relay dhcp pvc enable 16 8 35
config relay dhcp pvc enable 17 8 35
config relay dhcp pvc enable 18 8 35
config relay dhcp pvc enable 19 8 35
config relay dhcp pvc enable 20 8 35
config relay dhcp pvc enable 21 8 35
config relay dhcp pvc enable 22 8 35
config relay dhcp pvc enable 23 8 35
config relay dhcp pvc enable 24 8 35
config relay dhcp pvc enable 25 8 35
config relay dhcp pvc enable 26 8 35
config relay dhcp pvc enable 27 8 35
config relay dhcp pvc enable 28 8 35
config relay dhcp pvc enable 29 8 35
config relay dhcp pvc enable 30 8 35
config relay dhcp pvc enable 31 8 35
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config relay dhcp pvc enable 40 8 35
config relay dhcp pvc enable 41 8 35
config relay dhcp pvc enable 42 8 35
config relay dhcp pvc enable 43 8 35
config relay dhcp pvc enable 44 8 35
config relay dhcp pvc enable 45 8 35
config relay dhcp pvc enable 46 8 35
config relay dhcp pvc enable 47 8 35
config relay dhcp pvc enable 48 8 35

10. Конфигурация CircuitID и типа передаваемых значений (cid – CircuitID, rid – RemoteID):
config relay cidformat set prefix dslam_das-3248_1
config relay suboption set type cid rid

11. Конфигурация RemoteID для каждого абонентского интерфейса:
config relay dhcp pvc set 1 8 35 remoteid modem1 opt82 always-add
config relay dhcp pvc set 2 8 35 remoteid modem2 opt82 always-add

```
config relay dhcp pvc set 3 8 35 remoteid modem3 opt82 always-add
config relay dhcp pvc set 4 8 35 remoteid modem4 opt82 always-add
config relay dhcp pvc set 5 8 35 remoteid modem5 opt82 always-add
config relay dhcp pvc set 6 8 35 remoteid modem6 opt82 always-add
config relay dhcp pvc set 7 8 35 remoteid modem7 opt82 always-add
config relay dhcp pvc set 8 8 35 remoteid modem8 opt82 always-add
config relay dhcp pvc set 9 8 35 remoteid modem9 opt82 always-add
config relay dhcp pvc set 10 8 35 remoteid modem10 opt82 always-add
config relay dhcp pvc set 11 8 35 remoteid modem11 opt82 always-add
config relay dhcp pvc set 12 8 35 remoteid modem12 opt82 always-add
config relay dhcp pvc set 13 8 35 remoteid modem13 opt82 always-add
config relay dhcp pvc set 14 8 35 remoteid modem14 opt82 always-add
config relay dhcp pvc set 15 8 35 remoteid modem15 opt82 always-add
config relay dhcp pvc set 16 8 35 remoteid modem16 opt82 always-add
config relay dhcp pvc set 17 8 35 remoteid modem17 opt82 always-add
config relay dhcp pvc set 18 8 35 remoteid modem18 opt82 always-add
config relay dhcp pvc set 19 8 35 remoteid modem19 opt82 always-add
config relay dhcp pvc set 20 8 35 remoteid modem20 opt82 always-add
config relay dhcp pvc set 21 8 35 remoteid modem21 opt82 always-add
config relay dhcp pvc set 22 8 35 remoteid modem22 opt82 always-add
config relay dhcp pvc set 23 8 35 remoteid modem23 opt82 always-add
config relay dhcp pvc set 24 8 35 remoteid modem24 opt82 always-add
config relay dhcp pvc set 25 8 35 remoteid modem25 opt82 always-add
config relay dhcp pvc set 26 8 35 remoteid modem26 opt82 always-add
config relay dhcp pvc set 27 8 35 remoteid modem27 opt82 always-add
config relay dhcp pvc set 28 8 35 remoteid modem28 opt82 always-add
config relay dhcp pvc set 29 8 35 remoteid modem29 opt82 always-add
config relay dhcp pvc set 30 8 35 remoteid modem30 opt82 always-add
config relay dhcp pvc set 31 8 35 remoteid modem31 opt82 always-add
config relay dhcp pvc set 32 8 35 remoteid modem32 opt82 always-add
config relay dhcp pvc set 33 8 35 remoteid modem33 opt82 always-add
config relay dhcp pvc set 34 8 35 remoteid modem34 opt82 always-add
config relay dhcp pvc set 35 8 35 remoteid modem35 opt82 always-add
config relay dhcp pvc set 36 8 35 remoteid modem36 opt82 always-add
config relay dhcp pvc set 37 8 35 remoteid modem37 opt82 always-add
config relay dhcp pvc set 38 8 35 remoteid modem38 opt82 always-add
config relay dhcp pvc set 39 8 35 remoteid modem39 opt82 always-add
config relay dhcp pvc set 40 8 35 remoteid modem40 opt82 always-add
config relay dhcp pvc set 41 8 35 remoteid modem41 opt82 always-add
config relay dhcp pvc set 42 8 35 remoteid modem42 opt82 always-add
config relay dhcp pvc set 43 8 35 remoteid modem43 opt82 always-add
config relay dhcp pvc set 44 8 35 remoteid modem44 opt82 always-add
config relay dhcp pvc set 45 8 35 remoteid modem45 opt82 always-add
config relay dhcp pvc set 46 8 35 remoteid modem46 opt82 always-add
config relay dhcp pvc set 47 8 35 remoteid modem47 opt82 always-add
config relay dhcp pvc set 48 8 35 remoteid modem48 opt82 always-add
```

12. Сохранение настроек и выход из режима упрощенной настройки:
```
config save
engmode
```