

Joint use of the dynamic routing protocols



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In the scenarios where different dynamic routing protocols are used in the same network, it is necessary to exchange routing information between these protocols (Figure 1). Since each protocol has its own operational algorithm, they cannot work together, therefore the redistribution of the routes from one protocol to another must take place. The route redistribution between 2 different protocols is performed according to the following principles:

- The redistribution function is performed by one of the routers in the network. Both dynamic routing protocols must be running on the router. In the example below, the redistribution is performed by the BS2 router.
- The redistribution is a one-way process. In the example below, Protocol 1 is configured on BS1 so that it transmits the routing information received by BS2 via Protocol 2.
- To make the redistribution bi-directional, it is necessary to configure it for both protocols used by BS1
- The different dynamic routing protocols have also different distance values and metrics that must be transformed during the redistribution:
 - **distance:** the value is assigned to the protocol to which the redistribution is performed. In this example, for the routes towards the networks 172.16.2.0/29 and 10.10.30.0/24 the distance value 1 will be set;
 - **metric:** each route imported into a dynamic routing protocol from external sources has a fixed metric value. During the routing information distribution about the networks 172.16.2.0/29 and 10.10.30.0/24 by protocol 1, BS2 will set for them a certain metric value used by protocol 1. In this case, the metric values used by protocol 2 will be ignored.

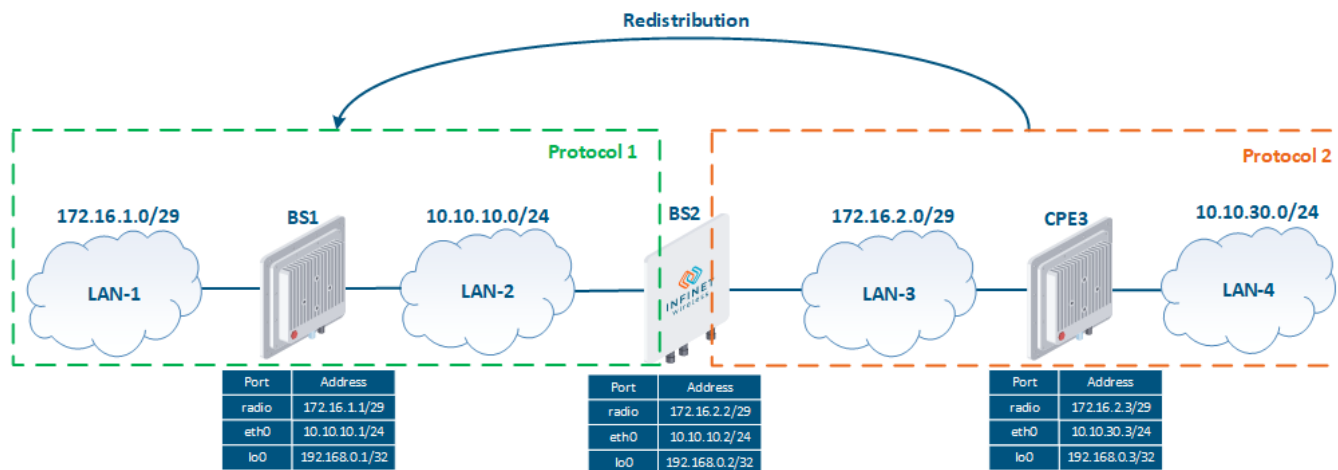


Figure 1 - Routing information redistribution



Configuration examples

The configuration examples for route redistribution between dynamic routing protocols are described in the attached documents:

- [Redistribution to the OSPF protocol](#)
- [Redistribution to the RIP protocol](#)

Note that ODR does not support the ability to redistribute routing information from other dynamic routing protocols. On the other hand, the routing information from ODR can be imported into OSPF and RIP.

Additional materials

Webinars

1. [Typical scenario of routing setting using Infinet Wireless devices. Part I.](#)
2. [Typical scenario of routing setting using Infinet Wireless devices. Part II](#)

Other

1. [Ifconfig command \(interfaces configuration\)](#)

Title

2. [mint command \(MINT version\)](#)
3. [mint command \(TDMA version\)](#)
4. [ARDA \(Aqua Router Daemon\)](#)
5. [OSPF command](#)
6. [arip command](#)