**Routing Information Protocol**

The **Routing Information Protocol** (RIP) is a somewhat **old protocol** that is no longer used. There are **two versions**, RIPv1 and RIPv2, and in the few cases where RIP is still used, the latter version is used.

**RIPv1** used to flood the network with **updates** every **30 seconds**. This caused a huge amount of **overhead** for larger networks. RIPv2 overcomes this issue. More information can be found [here](https://www.omnisecu.com/cisco-certified-network-associate-ccna/difference-between-ripv1-and-ripv2.php).

In both versions of RIP, the **distance metric** used is the **hop count**. The **maximum** hop count is set to **15**, in order to avoid the **looping problem**.

## Configuration

Enable RIP:

R1(config)#router rip

CLI

Use RIPv2:

R1(config-router)#version 2

CLI

Set a network to advertise:

R1(config-router)#network 10.0.0.0

CLI

This last command **adds a network** to the list of networks that will be **advertised**. Notice how there is no **subnet mask**. This is because we are using a **network address**, not a subnetwork address. When we add this network, all **interfaces** that have an address that belongs to this network will have RIP enabled on them. If one of the interfaces has a **subnet address** that is under this network address, those will have RIP enabled too. Everything that is one the provided network will now be advertised to **other networks** that are connected to **other interfaces**.