

VRRP Presentation

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The Problem

- Hardware failure
- Client gateway failure
- Layer 2 to Layer 3 mapping
- ARP for the gateway
- ARP Table Refresh periods
- Downtime

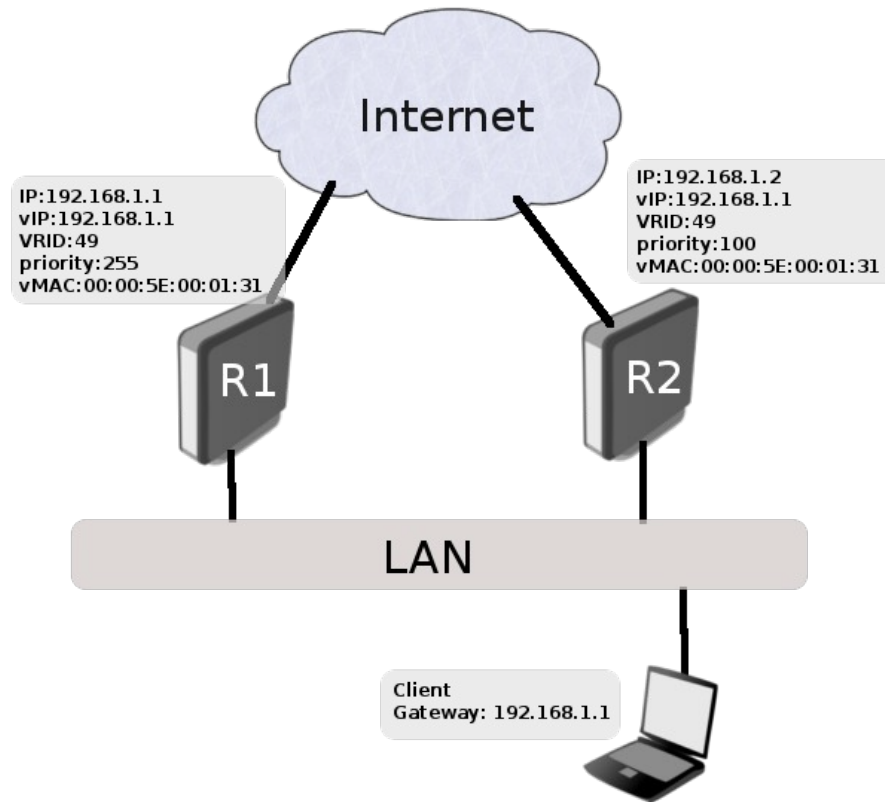
Layer 2 Solution

- Client gateway preservation
- Gateway IP MAC never changes
- Hardware transparency
- Minimize downtime
- Fewer re-ARP gratuitous ARP

VRRP Definition

- What is VRRP?
- Virtual Router Redundancy Protocol
- RFC 2883 Standard plus updates for IPv6
- Implemented as interface in Mikrotik
- Simple setup, few simple steps to get running
- Solves Layer 2 redundancy, Virtual MAC
- Typical uses, router gateway redundancy

VRRP Graphic



Implement VRRP in RouterOS

- A few simple steps to create redundancy
- Create VRRP interface with same parameters on two or more Router OS instances
- Give 'Master' the higher VRRP priority
- Give 'Backup' lower VRRP priority number
- Give IP address to 'physical' interface
- Assign same IP to VRRP gateway on instances

Uses of VRRP Interfaces

- Normally set close together behind a switch
- Can be geographically separate however
- Split network architecture
- What happens to devices between clients ARP
- Poor mans ISP Public IP Redundancy

VRRP Q/A

- Any Questions?

Reference Links

- <http://wiki.mikrotik.com/wiki/Manual:Interface/Vrrp>
- <http://wiki.mikrotik.com/wiki/VRRP-examples>
- <http://www.faqs.org/rfcs/rfc2338.html>
- http://en.wikipedia.org/wiki/Virtual_Router_Redundancy_Protocol