Technical Specification

Multiple IP Addresses

Introduction

By default Eclipse networks will issue a single IP address for all our connectivity. If a customer requires more than 1 IP address this can be requested during the provisioning of the connection or by contacting customer service for an IP re-grade.

Usually we can issue an 8 IP range without additional RIPE justification although depending on which carrier we use you may be required to fill in a justification form which outlines what each IP address will be used for.

For more than 8 IP Addresses a RIPE form will be needed and there will be an additional setup / rental charge depending on the product

Important Notes:

- Multiple IP addresses are not supported on Eclipse supplied Netgear or Thompson routers.
- If you are re-grading from a single IP address to a multiple IP addresses you will lose your original IP address.
- Usual subnet rules apply. This means that several IP addresses in a block are not usable as they're reserved for the network and broadcast address.
- IPv6 is currently not supported

Customer supplied router

If you are using your own router / firewall you will need to ensure it is compatible with routed subnets. We will supply the IP addresses details and you can configure your network as you see fit.

The last usable IP address in your subnet will be issued to your equipment automatically on ADSL and Fibre connections. Your equipment should always use this IP address to ensure there are no routing issues.

Eclipse support up to the NTE and do not assist in configuring your internal network.

Eclipse Supplied Router

If you need Eclipse to supply a router then we will supply a Draytek router such as a Draytek 2830.

The last usable IP address will be issued to the WAN interface for the purpose of NAT. This IP address will be used by any hosts connected directly to the router that don't have their own public IP address.

The first usable IP address will be issued to the LAN interface of the Draytek router for the purpose of public routing. This will be the default gateway for any devices configured with a public IP address.

Any other IP addresses will be available for customer equipment such as PBX's, servers and firewalls.

Example Scenario

A customer has an office with 10 members of staff in one room. They have an email server that needs to be externally accessible and they sub-let a room next door to a business that wishes to have their own IP address and firewall.

Eclipse have issued a Draytek Vigor 2830 router to the customer and the address range 164.39.75.0/29

IP address usage is as follows:

164.39.75.0	Network Address
164.39.75.1	Customer Router public LAN address
164.39.75.2	Email Server
164.39.75.3	Sub Tenant router address
164.39.75.4	Spare
164.39.75.5	Spare
164.39.75.6	Customer Edge WAN Address / NAT
164.39.75.7	Broadcast Address