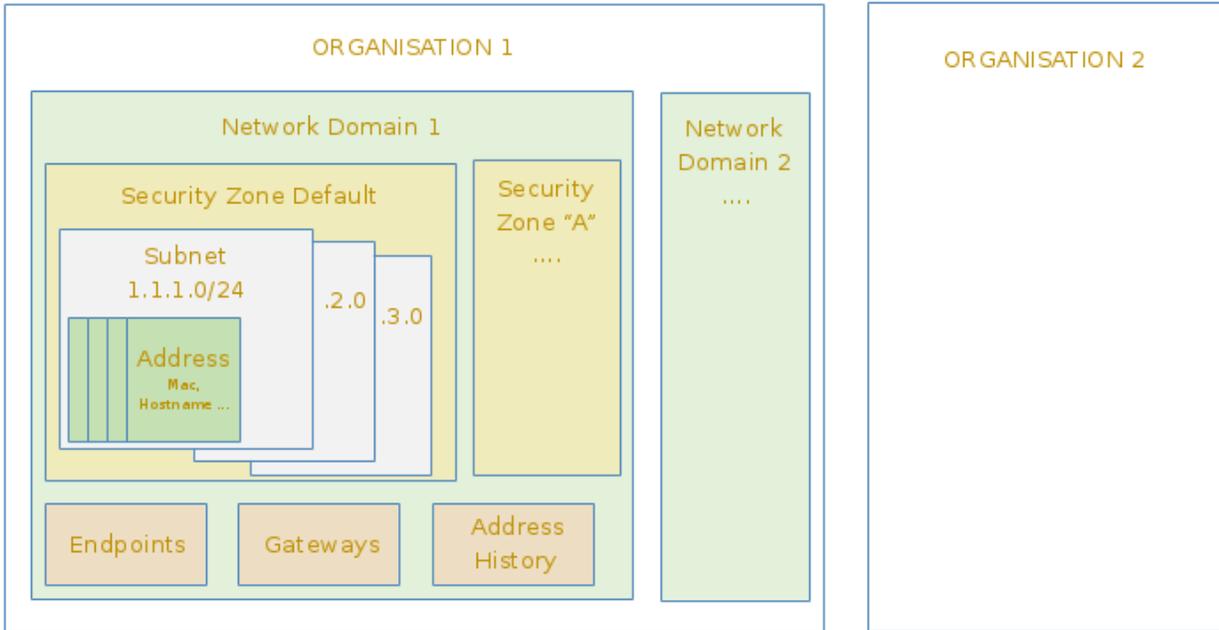


# opAddress Concepts

## Administrative Structure



- Organisation(s)

This is an administrative division for example a company, a customer, a business unit etc. mostly used for Managed Service Providers to allocate separate customers

The org has a Name, a Type, e.g. Company, Customer, Business Unit,

Defaults to default and not required to add.

Which contains:

- Network Domain(s)

A routing domain or address space where the IP addresses and MAC addresses are unique.

Used where an Organisation has overlapping address spaces, routing domains etc. The Addresses, subnets, MAC addresses, Hostnames, Security Zones in it must be unique to this domain

Defaults to default and not required to add.

Which contains:

- Security Zones

A security zone is a administrative domain or policy domain within the Network Domain.

Defaults to default and not required to add.

Which contains:

- Subnets

CIDR notated subnets. These are either manually entered or discovered from hosts Interface configuration. Discovery is through NMIS or Open-Audit Enterprise interface information. A subnet is associated with Addresses and Gateways see below.

Which contains:

- Addresses

These are the individual IP addresses, initially these are simply inferred from the Subnet and it's mask.

The IP address entry starts as inferred information from the subnets and once network audits (ping sweeps etc) and the import of information from NMIS, and Open-Audit Enterprise is available the Addresses gain more information such as, a Name, Admin Status, Operational Status, Endpoint(s), Type (static or dynamic).

The other information collected and recorded into the above structure is as follows, these entities are associated with a particular Network Domain.

- **Endpoints**

These are discovered interfaces / MAC addresses. An endpoint is a Network Attachment, in the majority of cases this is the MAC address. These are discovered through NMIS, Open-Audit Enterprise or the hosts own ARP table if that subnet is directly attached. An endpoint could in some cases not have a MAC, if the interface does not have a MAC, it would then only have an interface name. Endpoints are associated with an Address (potentially a history of addresses if the device changes IP). Endpoints also record other information found from the device such as, interface name, interface description, speed and the manufacturer (taken from the MAC's OUI).

- **Gateways**

These are devices discovered from NMIS and Open-Audit which have more than one IP interface. The devices are automatically associated with the subnets they are attached to. A Gateway is associated with two or more subnets. A subnet can have one or many gateways. NOTE: For a gateway discovered from NMIS to be imported as a gateway the node must have a location assigned to it. You will find each of a routers interfaces as an endpoint also (there is no associations between the endpoints and gateways).