

# point-2-point Data Sheet

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What if you could effortlessly extend your network and services to remote datacenters without building your own points-of-presence at those datacenters?

## Now you can with the atom86 point-2-point service.

The atom86 point-2-point service offers a WAN that benefits of Ethernet technology normally limited to a LAN. The point-2-point service can be added to any access type end circuit. This allows organizations to use a complete Ethernet network at minimal cost. The point-2-point service enables customers to manage their own routing within their own network and their own network management, allowing ultimate control and safety.

The point-2-point service is a redundant connection service based on Ethernet-over-MPLS (EoMPLS). The service can be used to create multiple high bandwidth connections to e.g. customers, partners, and suppliers at other datacenters without the need to build a Point of Presence at the remote datacenter.

## Benefits

- Creates a trusted L2 Ethernet network interface for customers.
- Integrates easily with existing networks and services.
- Customers retain full control.
- Supports customer assigned IPv4/6
- Supports existing Ethernet protocols.
- Performance monitoring through customer portal.

## point-2-point configurations

- Port-based. This is a point-2-point between two dedicated ports and is completely transparent.
- VLAN-based. The point-2-point service can be delivered next to other atom86 services, allowing a full suite of services on a single port. To transport multiple 'customer owned' VLANs over the VLAN-based point-2-point service the customer premises equipment must support Q-in-Q (802.1ad).

## Redundancy

The point-2-point service is delivered with full redundancy, which means that in case of failure in the atom86 backbone an automatic switchover will take place restoring the point-2-point functionality.

## Interconnections

All interconnections between the customer equipment and the atom86 network are Ethernet based:

- GigE-RJ45 UTP
- GigE-SX MultiMode fiber
- GigE-LX SingleMode fiber
- 10GE-LR SingleMode fiber (on request)

## Technical specifications

- Unlimited LAN MAC addresses for clients.
- Supported encapsulations IEEE 802.3, 802.1Q.
- Maximum supported frame size (MTU) 9000
- Access to multiple logical services on a single port.

## Locations

The atom86 point-2-point service is available between the following locations:

- NIKHEF, Amsterdam
- Schuberg Philis, Schiphol-Rijk
- Interxion AMS1/2/4, Amsterdam
- Interxion AMS3, Amsterdam
- Interxion AMS5, Schiphol-Rijk
- Interxion AMS7, Schiphol-Rijk
- Telecity AMS1, Amsterdam
- Telecity AMS2, Amsterdam
- Telecity AMS3, Amsterdam
- Telecity AMS4, Amsterdam
- Telecity AMS5, Amsterdam via (Telecity AMS2)
- Equinix AM1/2, Amsterdam
- Equinix AM3, Amsterdam (via NIKHEF)
- euNetworks, Amsterdam
- Evoswitch, Haarlem
- GlobalSwitch, Amsterdam
- TDCG, Amsterdam
- SARA, Amsterdam (via NIKHEF)

## Hardware

All locations have Cisco 6509(E) routers/switches and are redundantly connected to our core switches via diversely routed Dark Fiber, creating a double-star topology. xWDM is used to quickly build additional capacity when required.

## Maintenance window

The standard maintenance window for Scheduled Maintenance for the atom86 network is every working day between 00:00-02:00hrs Dutch local time. The length of the maintenance window may vary depending on the activities to be performed during the maintenance window.

The maintenance window will be announced 5 days in advance stating start, end, activities to be performed and the possible impact on customer connections.

Emergency Maintenance will be announced at least 15 minutes in advance - if possible - or directly afterwards, explaining the emergency.