

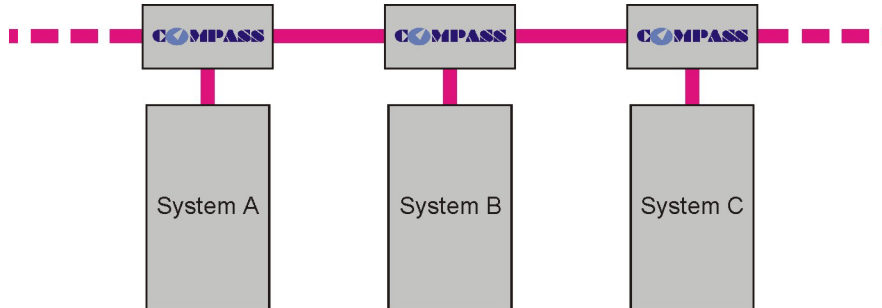
Compass NetLinks

Introduction

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The Compass System

Compass is a distributed protocol conversion system, and allows control systems from several different manufacturers to be linked together to form one complete building control system that can share values over the Compass Network. The Compass Network is made up of nodes, called Compass Points, and each Compass Point connects a particular device or system to the network. A maximum of 63 Compass Points can be linked together on network.



Compass NetLinks

If more than 63 points are required or the distribution of Compass Points is over a large area, it is possible to link Compass Network's together using NetLink Compass Points. These points are designed to provide either temporary or permanent links over a variety of mediums such as RS232, RS422 or Modems. The ability to separate Compass Points into different Compass Networks has several advantages, including:

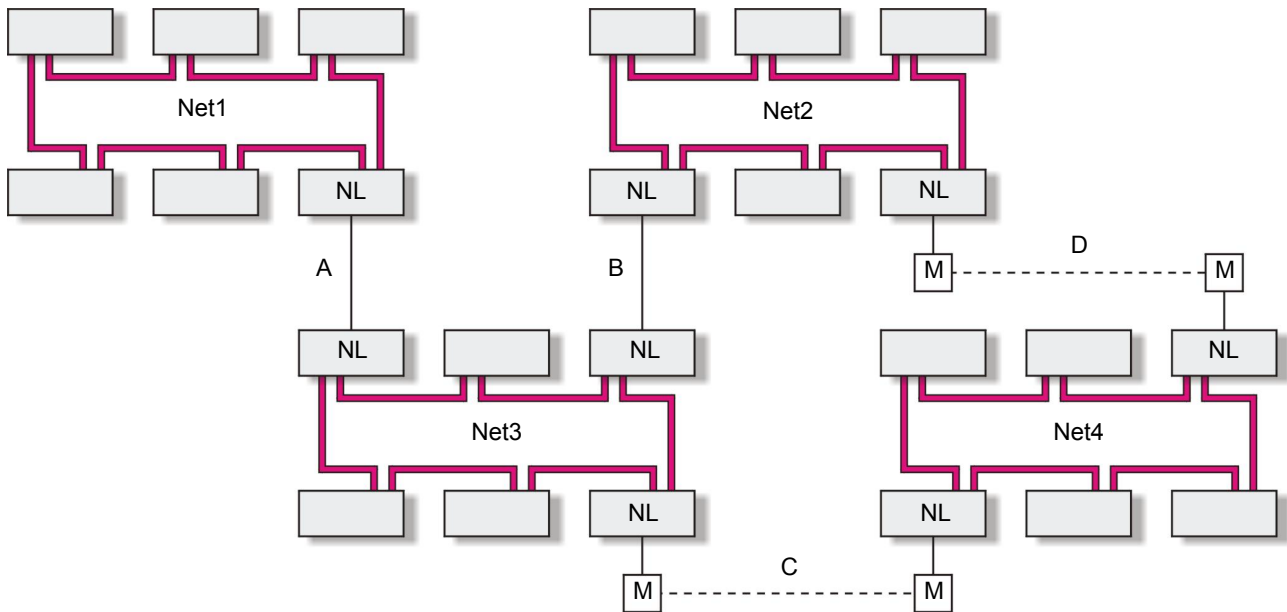
Isolation - if one network fails, other networks continue to operate.

Separation - if one network is quite distant, that network can be accessed over a wide-area network.

Redundancy - messages to networks can be routed via operational links if other links fail.

Example

In this example, the 4 Compass Networks are connected using NetLink (NL) Points. Each network can communicate with all of the others via one or more NetLink Points. For example, Net4 can communicate directly with Net3 using NetLink C and via Net3 can communicate with Net1 via NetLinks A.



A NetLink Compass Point holds routes to 127 other networks. It is also possible to have more than one route between Compass Networks. This allows a secondary route for network communication if the primary route is either busy, or has failed. For example Net3 can communicate with Net4 via Netlink C. If for some reason Netlink C fails then Net3 can use its secondary route via Net2 and Netlinks B and D. Primary routes will tend to be the fastest and cheapest, while secondary tend to be more complex.