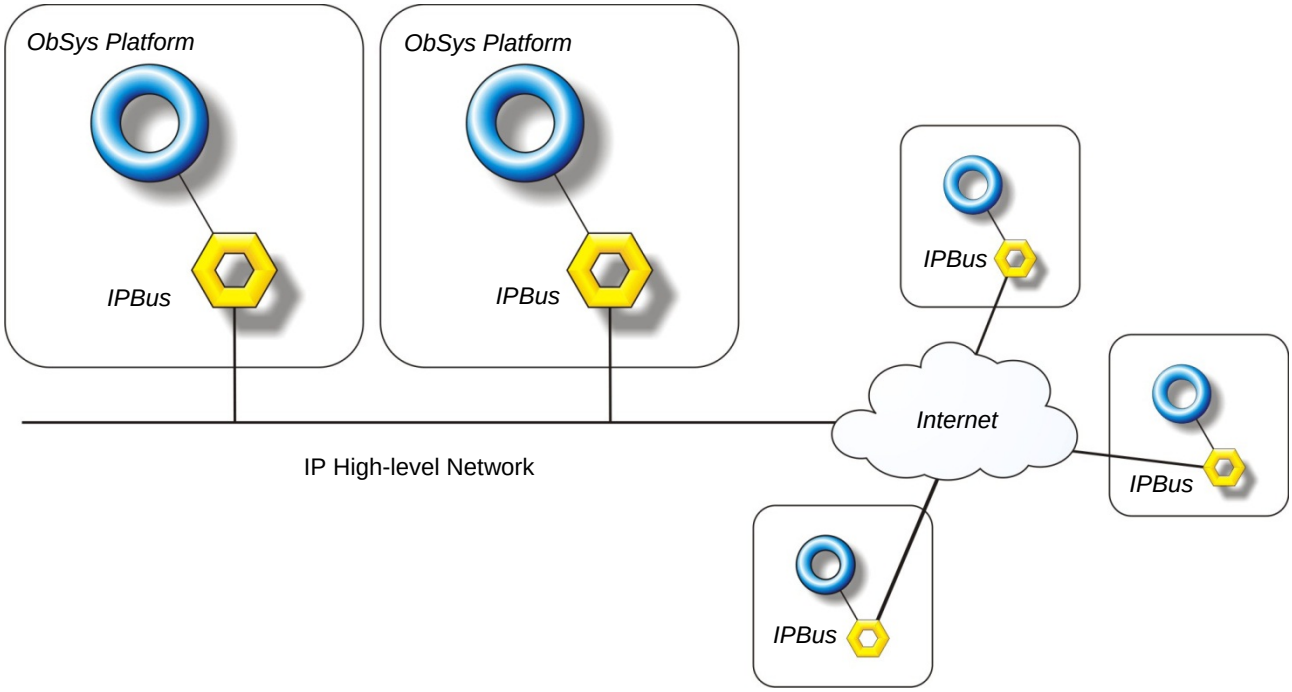
Product Engineering Guide

OSM v20 IPBus v20

Introduction

The IPBus OSM links ObServer via an IP-based network to other XOM/IP devices, such as other ObServer-based PCs, North Integrator, and North Commander.

Using the XOM/IP protocol, a distributed IP-based control system can be implemented.



Each IPBus OSM automatically recognises its own TCP/IP address(es), and a list of aliases for other IPBus devices on the same TCP/IP network, (remote devices have to be entered manually).

Security can be added to the IPBus module in the form a 'Key'. The IPBus driver uses an *open–hidden* encryption for each message. The open key must be present on each North product, and once a message has been validated, the un-encrypted values can be used as required.

Engineering

Step 1 – Install OSM

The IPBus OSM is installed automatically with all ObSys editions.

Step 2 – Configure the IPBus Module

The IPBus OSM needs to know the IP addresses of other XOM/IP devices – including other ObSys PCs, Commander and Integrator. From the module configuration use the Autofill Aliases object to discover local devices on the network.

Use object engineering software to view and modify the module objects within the OSM. If security is required then a key must be set up at both ends of the IP connection. The alias list can be also added to or wiped and re-created.

Note: After configuring the OSM, your engineering software may need to re-scan the XOM/IP Network object to determine which devices are available.

Step 3 – Access Objects within the IPBus System

Values from the IPBus system are made available as objects within ObServer. Any object software that is connected to the ObServer can access these objects. Any other ObSys PCs that communicate with this PC can access any objects within this ObSys.

Engineering Reference

Objects

When the OSM is loaded the following objects are created within ObServer, use object software to access these objects.

Object [1]	***Label***	***R/W***	***Type***
IP	IPBus Network	-	*[IPBus Net]* [2]
O.IP	IPBus Module Configuration	-	*[OSM v20\IPBus v20]*

Notes

[1] The ObServer channel number, *c*, is a number in the range 1…40.

[2] This object has a variable content and as such requires scanning.

IP Specification

The IPBus OSM opens UDP port 37926 on all available network interfaces.

This document is subject to change without notice and does not represent any commitment by North Building Technologies Ltd. ObServer, ObSys and Object System are trademarks of North Building Technologies Ltd. © Copyright 1998-2011 North Building Technologies Limited. All Rights Reserved. Issued 27/04/2011.