Masterbus 300 OPC Server

The OPC Server for ABB Masterbus 300 provides fast and reliable communication interface for OPC Clients to ABB Advant and Masterpiece Controllers via Ethernet. The Server handles Data Exchange with all major objects in the ABB Controllers.

INTRODUCTION

The Masterbus 300 OPC Server is designed for installation in large applications and features options such as performance optimization, redundancy, and tools for trouble-shooting. To assist in the development and commissioning of an application there is an auto-configuration functionality and a status display of symbolic name translations that can be used.

THE MASTERBUS 300 AND OPC SERVER HISTORY

The Masterbus 300 communi-cation was originally developed by ABB, a global supplier in systems commonly used in Pulp & Paper, Metals & Minerals, Power distribution and Power generation control applications.
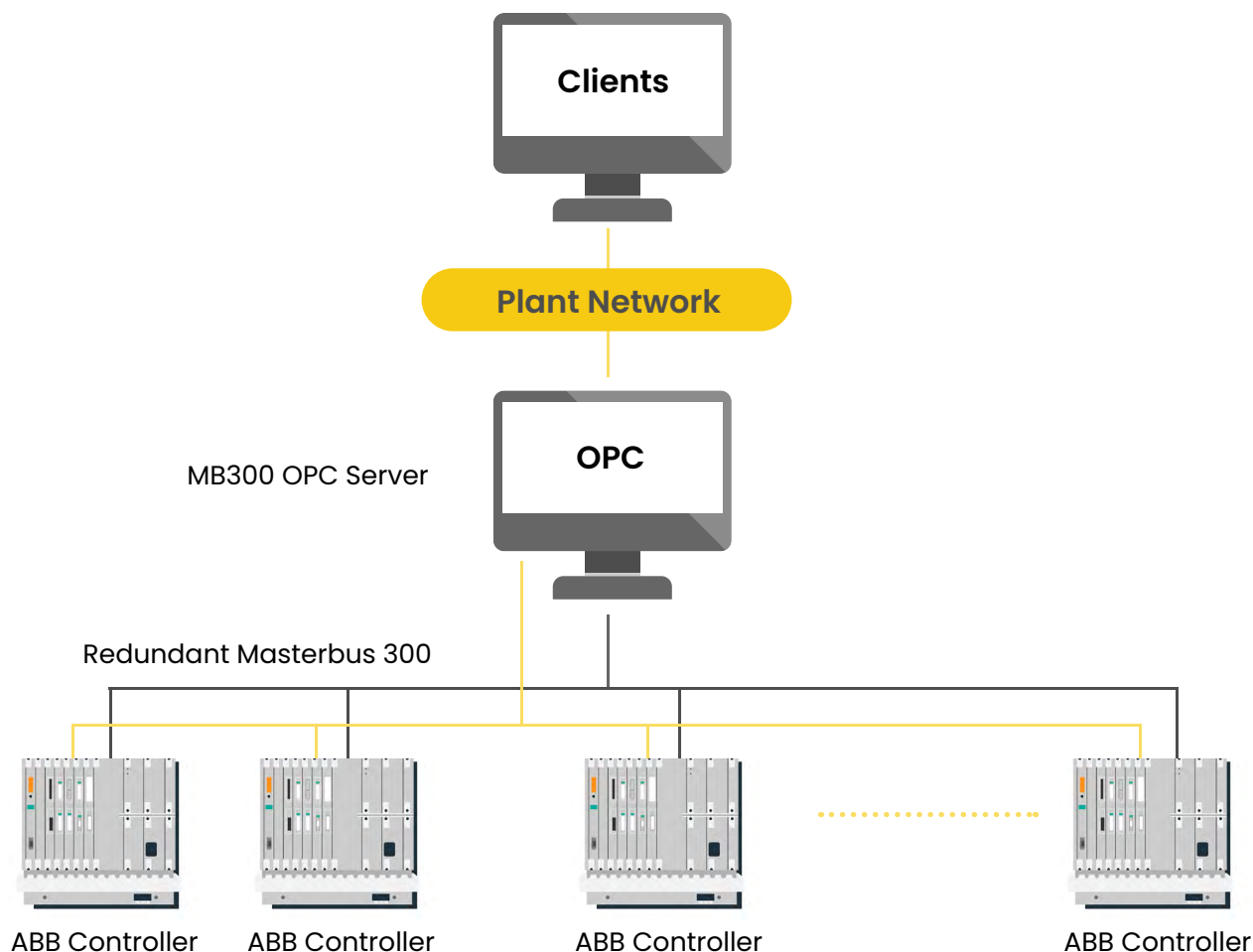
In the 1980's ABB developed the Masterpiece DCS system and along with its 1990's successor Advant OCS there is a large number of these systems installed over the world and still in operation today.

The original operator interfaces supplied with the ABB DCS systems are now obsolete and spare parts are hard to come by. In addition modern operation of a production facility require connections to other systems like Historians to address these issues and to provide an open standardized interface Novotek started the development of the OPC server for Masterbus 300.

Since original development in 2005 a large number of licenses have been delivered to plants all over the world. The OPC Server is continuously being developed and improved with more functionality and support for newer platforms.

MB 300 OPC SERVER FUNCTIONS

- Supports Data Subscription and Data Change of AI, AO, DI, DO, DAT, PIDCON, MANSTN, RATIOSTN, VALVECON, MOTCON, MMCX, TEXT, GENBIN, GENUSD 1-6, TANKCON, GENCON SEQ and Dataset Objects.
- Supports Advant Controller System Status Objects.
- Supports QCS Functions through Multidata Objects
- Supports Historical Data through TTD Logs
- Uses Event, Cyclic or Demand Subscription
- Only one Data Block per object even if multiple subscription types are used.
- Symbolic name translation with status indication.
- Logical database references are stored in a server configuration for rapid start-up
- Status and system information available in the tree browser of the power tool
- Automatic configuration of server from client
- Support for redundant masterbus 300 networks in one OPC Server
- Support for any OPC Client
- OPC Data Access 2.05
- OPC Alarms & Events
- Server Browsing
- Display of process and system events with time stamp from controller
- Advanced optimization capabilities to minimize bus load

Clients

Plant Network

MB300 OPC Server | **OPC**

Redundant Masterbus 300

ABB Controller   ABB Controller   ABB Controller   ABB Controller

SUPPORTED ABB HARDWARE:

MasterBus 300 Communication Board:
- ABB CS 513 with standard settings for Network Elements and variable framesize
- ABB DSCS 140 with standard settings for Network Elements and variable framesize

Controller Hardware:
- ABB Advant Controllers AC410 and AC450
- ABB Masterpiece 280/1

OPERATING SYSTEMS SUPPORTED:

- Microsoft Windows XP
- Microsoft Windows 2003 Server
- Microsoft Windows 7 Professional (32- & 64-bit)
- Microsoft Windows 2008 and 2008 R2 Server
- Microsoft Windows 2012 R2 Server
- Windows 10
- Windows Server 2016
- Windows Server 2019

NETWORK ADAPTER REQUIREMENTS:

- Any standard IEE 802.3 Ethernet adapter to connect to the physical Masterbus 300

Novotek Sverige AB
Höjdrodergatan 18, 212 39 Malmö
Phone 0046 (0)40 31 69 00

www.novotek.se
info@novotek.se

NOVOTEK