



BU CT Heritage Evolution 2020

MasterGate 230/1 Evolution

Advant Master to System 800xA

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MasterGate 230/1 Evolution

Advant Master to System 800xA

MG230 is based on the MP200/1 ABB Master generation and is obsolete.

Depending on used functionality there are several upgrade paths available.

MG230 for Dataset communication between MBB300 Control Networks.

This function will be fulfilled by replacing the MG230/1 with an AC800M Controller equipped with CI855 MB300 communication boards.

Dataset, the most important function, and the main reason for using the MG230 today.

The Dataset configuration.

You have to direct all Dataset to the AC800M and in a simple move application transfer data from one MB300 network to another and then create Send blocks to send the data to the final destination.

Meaning that you need to have a good and well maintained cross reference list.

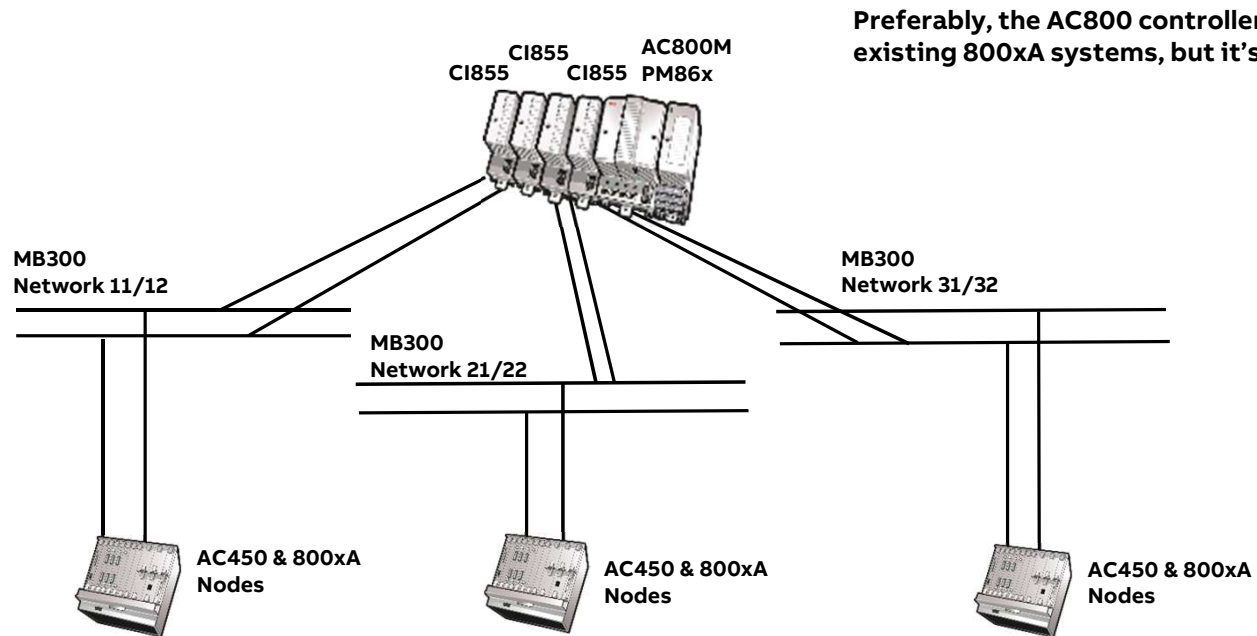
There is some engineering work involved to reconfigure the sending & receiving side of all Dataset, and to create the receive and send application in the AC800M.

Data have to be moved between the MB300 Send and Receive blocks.

You can use the same internal data variable for this purpose.

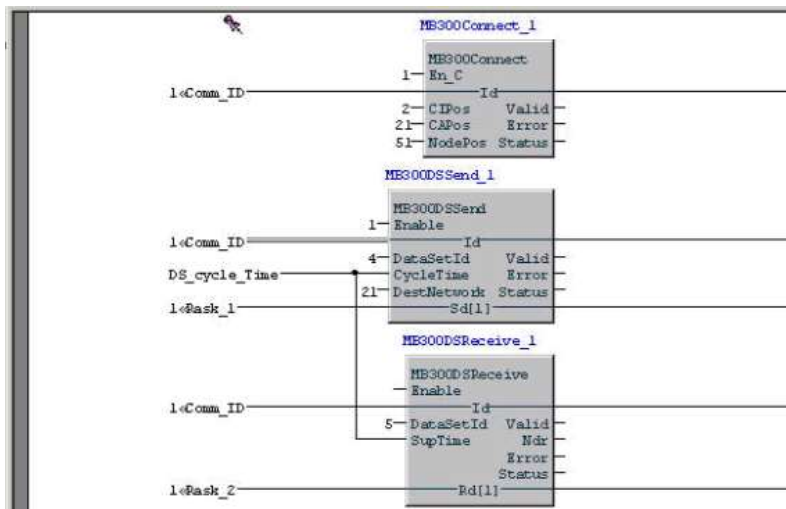
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MasterGate 230/1 replaced with AC800M & CI855 MasterBus 300 boards



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Program - Rask_DS_Test

Name	Data Type	Attributes	Initial Value	I/O Address	Access Variables
1 Real1_from_MP	real	retain			
2 Real1_to_MP	real	retain			
3 Comm_ID	Comm_Channel	retain			
4 Rask_1	real	retain			
5 Rask_2	real	retain			
6 DS_cycle_Time	time	retain	TIME#2s		
7					
8					
9					
10					
11					
12					
13					

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MG230 & Engineering

You can no longer do engineering from plant network, as the AC800M controller don't have any engineering tool routing function.

This is no big issue as most customers have an engineering tool on each control network and remote desktop is the workaround, already used at many sites.

MG230 & Operation from a common Plant Network

Operation from a common Plant network are no longer possible when using the AC800M controller for dataset communication.

If you request Operator display access from a common plant network you have to use 800xA and MI, (Multi System Integration) and upload each control networks control system into the MI subscriber system.

MG230 & GCOM connections to third party computers.

This function, if used, can be easily be transferred to an AC450 which have higher performance, by implementing a GCOM CI543 board in one AC450

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MG230 & Clock synchronisation

This function can be achieved in different ways when using AC800M and 800xA in combination with MasterBus 300

One way is to configure the AC800M "Mastergate" as clock master and let it synchronise the time in all connected MB300 Network via its CI855 boards.

The AC800M may be located under an 800xA system and synchronise it's time with that system.

The AC800M can have a GPS clock connected to it's control network as a primary time source.



ABB