



Master Control System Database (MCSD)

The Master Control System Database (MCSD) module provides a central source for pre-approved, approved and historical control system parameter settings including alarm system design (rationalization) results. The MCSD is used to configure several modules of AgileOps - Dynamic Management (DM) and List Management (LM) modules. The MCSD greatly enhances your ability to audit, rationalize and control by giving you a unified view of all control system settings.

Features

- Multi-user interface
- Role-based security
- View multiple control systems
- Alarm rationalization data collection
- View and modify dynamically managed parameters
- View and modify audited, notified and enforced parameters
- View history of modifications
- Nomination and acceptance of control changes with proper authority
- Boundary management



The screenshot shows the AgileOps web interface. The top navigation bar includes 'HOME', 'MANAGE SYSTEMS', 'ASSIGN BRANCHES', and 'MANAGE BRANCHES'. The left sidebar shows a tree view with 'APPLICATIONS' expanded to 'MCSD', and sub-items for 'Dynamic Management', 'List Management', 'AutoDiscovery', and 'EventKPI'. The main content area is titled 'Assign Branches' and shows a table of control system parameters. The table has columns for Name, Description, System, and P&ID. The current selected system is '[None]'. The table contains 20 rows of data, each representing a different control system parameter.

Name	Description	System	P&ID
MYN_FIC101	Column Feed Control - NO CAS	Debut	p&id no 12314567890:
MYN_FIC102	Reboiler Steam Flow Control - CAS from TIC101	Debut	p&id no 12314567890:
MYN_FIC103	Column Reflux Control - NO CAS	Debut	p&id no 12314567890:
MYN_FIC104	Distillate Product Flow Control - CAS from LIC103		p&id no 12314567890:
MYN_FIC105	Column Liquid Bottom Control - CAS from LIC101	Debut4	p&id no 12314567890:
MYN_LIC101	Column Sump Level Control - CAS to FIC105	Debut	p&id no 12314567890:
MYN_LIC102	Reboiler Condensate Drum Level Control - NO CAS	Debut	p&id no 12314567890:
MYN_LIC103	Reflux Receiver Level Control - CAS to FIC104	Debut	p&id no 12314567890:
MYN_LIC104	Reflux H2O Boot Drum Level Control - NO CAS	Debut	p&id no 12314567890:
MYN_M101	Bottom Pump Motor Control	Debut	p&id no 12314567890:
MYN_M102	Distillate Pump Motor Control	Debut	p&id no 12314567890:
MYN_PD101	Pressure Differential for PDC101	Debut	p&id no 12314567890:
MYN_PDC101	Reflux Drum Differential Pressure Control - NO CAS	Debut	p&id no 12314567890:
MYN_PIC101	Column Top Pressure Control - NO CAS	Debut	p&id no 12314567890:
MYN_PIC102	Reflux Drum Pressure Control - NO CAS	Debut	p&id no 12314567890:
MYN_PT101	Column Bottom Pressure Transmitter	Debut	p&id no 12314567890:
MYN_TIC103	Column Temperature Control - CAS to FIC102	Debut	p&id no 12314567890:
MYN_TT101	Column Reboiler In Temperature Transmitter	Debut	p&id no 12314567890:
MYN_TT102	Column Reboiler Out Temperature Transmitter	Debut	p&id no 12314567890:
MYN_TT104	Column Feed Temperature Transmitter	Debut	p&id no 12314567890:

AutoDiscovery

After AutoDiscovery is installed and implemented on the control system, it automatically browses the control system and brings all of the information into AgileOps. After the initial sync with the control system, AutoDiscovery can be set to run on a periodic basis in order to verify that no more points have been added. If it finds any changes, it will update the AgileOps database to match what is on the control system. This greatly cuts down on user errors when transferring all of the points on the control system to AgileOps.

In addition to finding new points and tags that have been added to the control system, AutoDiscovery will also document any changes that have been made to existing tags. If these modifications are different than what is already in the database, AutoDiscovery will flag them. A controls engineer can then access the log of changes to the database to ensure that important work has not been overwritten.

Branch and Boundary Management

After gathering all of the tags from the control system, AgileOps offers a user-friendly interface that allows you to view and manage each tag and edit any of its parameters. This allows a user to view any module in AgileOps for a single point. The user can edit any of the alarm parameters through an intuitive interface and add in any comments such as causes, consequences, actions and other alarm data. Any suggested revisions appear in a separate list than the existing database. Before any suggested revisions are implemented, they have to be approved by a user that has permission.

While configuring each branch, the respective boundaries can also be defined. A safety engineer may input a maximum pump safety limit, while the process engineer would input a maximum operating speed. MCSD would catalogue all of these inputted boundary layers and display them in an intuitive format for alarm rationalization members to understand. Once all the boundaries are in place, determining alarm set points, priorities and corrective responses becomes easier to understand and implement.

Each branch in MCSD can also be assigned to a system. These systems are usually designed around pieces of equipment that operate together such as a furnace, a compressor or a pair of towers that run in tandem. These systems can then be dynamically managed individually through the Dynamic Management (DM) module.

AgileOps

HOME | MANAGE SYSTEMS | ASSIGN BRANCHES | **MANAGE BRANCHES**

APPLICATIONS

- MCSD
- Dynamic Management
- List Management
- EventKPI

CONFIGURATION

Manage Branches

System: All

Select	Edit	System	Branch	Description	Keyword	Entity	Status	P&ID	Equipment
		HtrRxtr	43AI0302	LD PEL FX					
		NucRxtr	43AI0672	O3 to Atmosphere					
		SepScrb	43FC0107	H2O TO SCRBR FM NUKE RX					
		HtrRxtr	43FC0507	NAT GAS TO PREHTR					
		HtrRxtr	43FC0527	NAT GAS TO HTR					
		HtrRxtr	43FC0550	MOLTEN PB TO SWT RX					
		NucRxtr	43FC0605	U238 FM STORAGE					
		HtrRxtr	43FC0608	PB FM STORAGE		MANLOAD			
		NucRxtr	43FC0618	H2 FM NUKE RX					
		HtrRxtr	43FC0668	SUGAR FM STORAGE					

43AI0302=>43FC0668

Properties Copy Branches

Parameter Data | DM | Boundaries | **Alarms**

View: By Alarm

Alarms for Selected Point

Select	Promote	Name	Alarm Type	Boundary	Status
		ADVDEV (PIDA) (CDA)	DevOffnormal	[None]	NE
		BADCTL (PIDA) (CDA)	BADGENERR	[None]	NE
		BADPV (DACA) (CDA)	BADIOERR	[None]	NE
		DEVHI (PIDA) (CDA)	DEVHI	[None]	NE
		DEVLO (PIDA) (CDA)	DEVLO	[None]	NE
		OPHI (PIDA) (CDA)	OAH	[None]	NE
		OPLO (PIDA) (CDA)	OAL	[None]	NE
		PVHI (DACA) (CDA)	PVHI	\$-HL / [None]	NE
		PVHIHI (DACA) (CDA)	PVHIHI	[None]	NE
		PVLO (DACA) (CDA)	PVLO	[None]	NE

1) ADVDEV (PIDA) (CDA)=>PVLO (DACA) (CDA)

Property Values for Alarm

Edit	Promote	Name	Last Read	Last Proposed	Last Approved	Details
		Source	49.9999999999994			
		Priority	High	Low		Details
		ManagementStatus	Normal			
		Enabled	Enabled			
		Desired Normal	High		High	Details
		Deadband Units	EU			
		Deadband	1 EU			
		Active	Inactive			

2) Source=>Active

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