DNMCIS – DeviceNET Master Scanner

DNMCIS is a COM based server. It implements the DeviceNET master scanner protocol for Polled slave devices.

Installation

If you are installing the CIS server, the DNMCIS is automatically installed by the SetupCIS.exe program.

Manual Installation:
DNMCIS is self-register software. Copy DNMCIS exe in your system folder. Run the following command from the same folder.

> DNMCIS /RegServer

Most of the install programs like Install Shield and Wise, automatically perform the above step when used to install the software.

The DNMCOM.lib and DNMCOM.h provides the interface for client applications.

Methods

The server provide methods for DeviceNET communication. The server uses DNETCIS server for accessing the network.

The DeviceNET methods are as follows:

AddSlaveDevice
GetDeviceState
SetConsumeData
GetProduceData
GetDeviceErrorString
PurgeDeviceList

AddSlaveDevice Method

Description
This method adds a slave device to the master scan list.

Return Values

dn_BAD_CHANNEL_NUMBER	The Channel number is out of valid range
dn_BAD_MAC_ID	The MAC id number is out of valid range
dn_CHANNEL_NOT_ENABLED	The Channel is not configured for DeviceNET
dn_SUCCESS	The method was successful

GetDeviceState Method

Description

Retrieves the Online/Offline state of the slave device. The device state returned can be one of the following:
        dn_DEVICE_ONLINE
        dn_DEVICE_OFFLINE

Return Values

dn_BAD_CHANNEL_NUMBER	The Channel number is out of valid range
dn_BAD_MAC_ID	The MAC id number is out of valid range
dn_CHANNEL_NOT_ENABLED	The Channel is not configured for DeviceNET
dn_DEVICE_NOT_CONFIGURED	Device is not added to the master scan list
dn_SUCCESS	The method was successful

SetConsumeData Method

Description
The method writes the user supplied data to one of the byte in consume data buffer for the slave device. The data is sent to the device as part of the poll message.

Return Values

dn_BAD_CHANNEL_NUMBER	The Channel number is out of valid range
dn_BAD_MAC_ID	The MAC id number is out of valid range
dn_CHANNEL_NOT_ENABLED	The Channel is not configured for DeviceNET
dn_DEVICE_NOT_CONFIGURED	Device is not added to the master scan list
dn_BAD_INDEX_VALUE	The data index is outside the max/min limits
dn_SUCCESS	The method was successful

GetProduceData Method

Description

This method retrieves the data from the produce data buffer of a slave device.

Return Values

dn_BAD_CHANNEL_NUMBER	The Channel number is out of valid range
dn_BAD_MAC_ID	The MAC id number is out of valid range
dn_CHANNEL_NOT_ENABLED	The Channel is not configured for DeviceNET
dn_DEVICE_NOT_CONFIGURED	Device is not added to the master scan list
dn_BAD_INDEX_VALUE	The data index is outside the max/min limits
dn_SUCCESS	The method was successful

GetDeviceErrorString Method

Description

This method retrieves the status string for a slave device.

Return Values

dn_BAD_CHANNEL_NUMBER	The Channel number is out of valid range
dn_BAD_MAC_ID	The MAC id number is out of valid range
dn_CHANNEL_NOT_ENABLED	The Channel is not configured for DeviceNET
dn_DEVICE_NOT_CONFIGURED	Device is not added to the master scan list
dn_SUCCESS	The method was successful

PurgeDeviceList Method

Description

This method deletes all slave devices from the master scan list for the specified channel.

Return Values: None