DAQBench 32-bit ActiveX controls for Measurement and Automation Distribution Application Guide



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Distribution of DAQBench Applications

1.1 Files and Registries

To install an application using DAQBench controls on another computer, you also must install the necessary control files and supporting libraries on the target machine. You can redistribute the OCX files and related files located in \Software\DAQBench\redist on ADLINK All-In-One CD. You can create an automatic installer to install your program and all of the files needed to run that program or you can manually install the program and program files. Whichever installation method you choose, you must install the following files:

1.1.1 Files

Any OCX file for the DAQBench controls that you used in your program. The OCX files enable your program to create the controls on the target computer. You must register all OCXs with the operating system. Following is a list of the DAQBench controls and the OCX files that you need to redistribute if you use the control in your program. All of the needed ocx, dll, and lb files are copied to System directory (Windows system for Windows 95/98, Winntsystem32 for Windows NT/2000). The places where the PCI driver related files should be copied are described below.

User Interface	Controls
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Controls	OCX files
DKnob, DSlide, DBoolean, D7Segment,	dbui.ocx
DLEDMeter	
Dchart, DGraph, DXYGraph, DintenChart,	dbgraph.ocx
DintenGraph	

Equipment Symbol Controls

Controls	OCX files
DMotor, DPipe, DPump, DTank, DValve	dbequip.ocx

NuDAQ PCI Controls

Controls	OCX files
Pci7200, Pci7230, Pci7233, Pci7234, Pci7248,	digital.ocx
Pci7249, Pci7250, Pci7252, Pci7296, Pci7300,	
Pci7348, Pci7396, Pci7432, Pci7433, Pci7434	
Pci6208, Pci6308, Pci9111, Pci9112, Pci9113,	multiple.ocx
Pci9114, Pci9118, Pci9812	

NuDAM Controls

Controls	OCX files
NDHost	ndhost.ocx
ND6011, ND6012, ND6013, ND6014, ND6017,	ndanalog.ocx
ND6018, ND6021, ND6024	-
ND6050, ND6052, ND6053, ND6054, ND6056,	nddigital.ocx
ND6058, ND6060, ND6063	
ND6080	ndcounter.ocx

Information Integration Controls

Controls	OCX files
DBRead, DBWrite, DBDelete	dbaccess.ocx
ExcelLinker	excellinker.ocx
WebSnapshot	websnapshot.ocx
ThermoCouple	ThermoCouple.ocx
OPC Client	opcclient.ocx

Analysis Controls

Controls	OCX files
DQAnalysis	dqanalysis.ocx

Once the DAQBench OCX files are installed and registered on a target computer, your program can create the controls as necessary.

Required support DLLs to use any DAQBench OCX:

- asycfilt.dll
- comcat.dll
- mfc42.dll

- msvbvm50.dll
- msvcrt.dll
- oleaut32.dll
- olepro32.dll
- stdole2.tlb
- mscomm32.ocx if you use NuDAM controls in your program.
- odbc32.dll and odbcint.dll if you use DBRead, DBWrite, or DBDelete controls in your program.
- opcproxy.dll and opccomn_ps.dll if you use OPC Client control in your program. Please copy them to Windows System directory. And they need to be registered.
- Driver software if you use NuDAQ PCI controls in your program.

Windows 98

- The corresponding driver files in \Software \DAQBench\redist\PCI-98, e.g. pci7200.sys for Pci7200 controls. These files should be copied to Windows \system32 \drivers directory.
- The corresponding INF files in \Software\DAQBench\redist\PCI-98, e.g. p7200.inf for Pci7200 controls. These files should be copied to Windows\inf directory.
- The corresponding utility and files in \Software\DAQBench\redist\DeviceMgr.
 - * DAQDevice.dll, pciw95.vxd : copy to Windows\system
 - DAQDevMgr.exe, DMProxyStub.dll : copy to Windows system, and they need to be registered
 - * NuDAQCfg.exe: NuDAQ configuration utility
 - RDASvr.exe (option) : RDA server, needed for remote device access
 - * DAQCvt.exe (option) : Data file converter

Windows NT 4.0

- adldask.sys in \Software\DAQBench\redist\PCI-NT4. This file should be copied to Winnt\system32\drivers directory.
- The corresponding driver files in \Software\DAQBench\redist\PCI-NT4, e.g. pci7200.sys for Pci7200 controls. These files should be copied to Winnt\system32\drivers directory.
- The corresponding utility and files in \Software\DAQBench\redist\DeviceMgr.
 - * DAQDevice.dll : copy to winnt\system32
 - DAQDevMgr.exe, DMProxyStub.dll : copy to winnt\system32, and they need to be registered
 - FdNuDAQ.sys : copy to winnt\system32\drivers, and it needs to be registered

- * NuDAQCfg.exe: NuDAQ configuration utility
- RDASvr.exe (option) : RDA server, needed for remote device access
- * DAQCvt.exe (option) : Data file converter

Windows 2000

- The corresponding driver file in \Software\DAQBench\redist\PCI-2000, e.g. pci7200.sys for Pci7200 controls. These files should be copied to Winnt\system32\drivers directory.
- The corresponding INF file in \Software\DAQBench\redist\PCI-2000, e.g. p7200.inf for Pci7200 controls. These files should be copied to Winnt\inf directory.
- The corresponding utility and files in \Software\DAQBench\redist\DeviceMgr.
 - * DAQDevice.dll : copy to winnt\system32
 - DAQDevMgr.exe, DMProxyStub.dll : copy to winnt\system32, and they need to be registered
 - FdNuDAQ.sys: copy to winnt\system32\drivers, and it needs to be registered
 - * NuDAQCfg.exe: NuDAQ configuration utility
 - RDASvr.exe (option) : RDA server, needed for remote device access
 - * DAQCvt.exe (option) : Data file converter
- **Note:** If the program is not able to find an OCX file or is not able to create a control, try the following suggestions:

The OCX or support files were not copied to the computer. Verify that the correct OCX files and all their supporting libraries are copied on the computer.

The control is not properly registered on the computer. Make sure you run the registration utility and that it registers the control.

1.1.2 Registries

In addition to install the above files, you have to register the following data or objects on the target machine:

1. DAQBench serial number

You have to make the following registry value (string type) on the target machine:

HKEY_LOCAL_MACHINE\Software\ADLink\DAQBench\CurrentVersion\Serial

And set the value of this string to your DAQBench serial number.

- 2. If you use NuDAQ PCI controls in your program
 - DAQDevMgr.exe and DMProxyStub.dll
 - Windows NT or Windows 2000: FdNuDAQ.sys

3. If you use OPC Client control in your program

Opcproxy.dll and opccomn_ps.dll

1.2 Automatic Installers

Many programming environments include some form of setup or distribution kit tool. This tool automatically creates an installation program for your program so that you can easily install it on another computer. To function successfully, this tool must recognize which control files and supporting libraries are required by your program and include these in the installation program it creates. The resulting installation program also must register the controls on the target computer.

Some of these tools, such as the Visual Basic 5 Setup Wizard, use dependency files to determine which libraries are required by an OCX file. Each of the DAQBench OCX files includes a corresponding dependency file located in the Windows System directory (Windows \System for Windows 95/98, \Winnt\System32 for Windows NT/2000) after you install the DAQBench software.

If your programming environment does not provide a tool or wizard for building an installation program, you can use third-party tools such as InstallShield. Some programming environments provide simplified or trial versions of third-party installer creation tools on their installation CDs.

Some setup tools might not automatically recognize which files are required by a program but provide an option to add additional files to the installation program. In this case, verify that all necessary OCX files (corresponding to the controls used in your program) as well as all the other needed files described in the previous section are included. You also should verify that the resulting installation program does not copy older versions of a file over a newer version on the target computer.

Registries

Most of the tools can let you make the registry to the system. You can use it to make the registry of the serial number. If it does not have the capability, you can use the registry file Daqbench.reg in \Software\DAQBench\redist\serialno to make the registry. Please edit the file Daqbench.reg. Add your DAQBench serial number to the last line "serial"=""

For example

"Serial"="A04-12345678"

Then you can make the registry of the serial number by opening the registry file.

If you use NuDAQ PCI controls in your program, DAQDevMgr.exe and DMProxyStub.dll objects need to be registered. Some of the tools automatically register them for you. However the others do not. To register DAQDevMgr.exe manually, please execute it with /Regserver option:

DAQDevMgr /Regserver

To register DMProxyStub.dll, you need a utility such as REGSVR32.EXE. This utility should be located in your System directory. Use this utility to register DMProxyStub.dll with the operating system, as in the following example:

regsvr32 c:\windows\system\DMProxyStub.dll

In Windows NT or Windows 2000, you have to further register the driver FdNuDAQ.sys. You can use the registry file FdNuDAQ.reg in \Software\DAQBench\redist\DeviceMgr to make the registry.

♦ If you use OPC Client control in your program, opcproxy.dll and opccomn_ps.dll objects need to be registered. Some of the tools automatically register them for you. However the others do not. To register them manually, you need a utility such as REGSVR32.EXE. This utility should be located in your System directory. Use this utility to register them with the operating system, as in the following example:

regsvr32 c:\windows\system\opcproxy.dll regsvr32 c:\windows\system\opccomn ps.dll

1.3 Manual Installation

If your programming environment does not include a setup or distribution kit tool, you can perform the installation task manually. To install your program on another computer, follow these steps:

- 1. Copy the program executable to the target computer.
- 2. Copy all required DAQBench OCX files (corresponding to the controls used in your program) to the System directory (Windows \System for Windows 95/98, \Winnt\System32 for Windows NT/2000) on the target computer.
- 3. Copy the other required files to the correct directories on the target computer.

Note:Do not replace any files on the target computer if the file on the target computer has a newer version than the file you are installing.

Registries

You must register all OCX files with the operating system. To register an OCX file, you need a utility such as REGSVR32.EXE. This utility should be located in your System directory. Use this utility to register each OCX file with the operating system, as in the following example:

regsvr32 c:\windows\system\dbui.ocx

Please use the registry file Daqbench.reg in \Software\DAQBench\redist\serialno to make the registry of serial number. Please edit the file Daqbench.reg. Add your DAQBench serial number to the last line "serial"=""

For example

"Serial"="A04-12345678"

Then you can make the registry of the serial number by opening the registry file.

 If you use NuDAQ PCI controls in your program, DAQDevMgr.exe and DMProxyStub.dll objects need to be registered. To register DAQDevMgr.exe manually, please execute it with /Regserver option:

DAQDevMgr /Regserver

To register DMProxyStub.dll, you need a utility such as REGSVR32.EXE. This utility should be located in your System directory. Use this utility to register DMProxyStub.dll with the operating system, as in the following example:

regsvr32 c:\windows\system\DMProxyStub.dll

In Windows NT or Windows 2000, you have to further register the driver FdNuDAQ.sys. You can use the registry file FdNuDAQ.reg in \Software\DAQBench\redist\DeviceMgr to make the registry.

If you use OPC Client control in your program, opcproxy.dll and opccomn_ps.dll objects need to be registered. Some of the tools automatically register them for you. However the others do not. To register them manually, you need a utility such as REGSVR32.EXE. This utility should be located in your System directory. Use this utility to register them with the operating system, as in the following example:

regsvr32 c:\windows\system\opcproxy.dll

regsvr32 c:\windows\system\opccomn_ps.dll