

Mint MT Application Note

AN00157-000 – Installing the Mint ActiveX controls

Related Applications or Terminology

- **ActiveX Components**
- **Host Application Development**
- **3rd Party Programming Languages (VB, C++ for example)**

Overview

The Mint ActiveX controls provide a “Mint-like” interface to Baldor drives and motion-control products for host application developers. They are also a crucial component in the Mint Machine Center and Mint WorkBench applications.

In order for the Mint ActiveX controls (and any host application that relies on them) to work correctly, they need to be installed and registered on the target PC. One way of achieving this is simply to install the Mint WorkBench software on that computer. However, it is recognised that this is not always possible or desirable, and so this application note details exactly what files need to be copied and how they should be registered.

Architecture

The Mint ActiveX controls are made up of two distinct components.

Firstly, there is an “in-place ActiveX control”, **MintControls5xxx.ocx**. It is this component that provides the rich “Mint-like” interfaces that are used by the application developer in their host application.

Secondly, there is an “out-of-process COM server”, **MILServer5x00.exe**. This component is used internally by the ActiveX control and concerns itself with low-level communications to the Baldor drive and motion-control products (over mediums such as PCI, USB, Ethernet and RS232).

Currently, these components are not available in a stand-alone installation; they need to be copied from an installation of the Mint Machine Center or Mint WorkBench software.

These can be freely downloaded from:

Mint WorkBench v5

http://www.baldormotion.com/support/SupportMe/productsupport.asp?ID=WB_50

or

Mint Machine Center and Mint WorkBench v5.5

http://www.baldormotion.com/support/SupportMe/productsupport.asp?ID=WB_55

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Mint WorkBench v5

If Mint WorkBench v5 is to be used the MILServer can normally be found in the following location:

c:\Program Files\WorkBench v5\MILServer5000.exe

and the ActiveX control can be found in:

c:\Program Files\WorkBench v5\MintControls5xxx.ocx

where xxx is the required version of the ActiveX control (less than 500)

Mint Machine Center and Mint WorkBench v5.5

If Mint WorkBench v5.5 is to be used the MILServer can normally be found in the following location:

c:\Program Files\Mint Machine Center\MILServer5500.exe

For Mint Machine Center and Mint WorkBench versions 5560 and later, an additional file is required:

c:\Program Files\Mint Machine Center\VirtualController.dll

This file is just a DLL that is required by the MILServer, and so doesn't need to be registered.

The ActiveX control can be found in:

c:\Program Files\Mint Machine Center\MintControls5xxx.ocx

where xxx is the required version of the ActiveX control (500 or greater)

Building an Installation

If you are using a tool to build an installation for your host application then it may have the facility to scan you host application for dependant components. This should automatically include the correct MILServer and ActiveX control into the installation project. If this facility doesn't exist in your installation tool, try adding the components manually. Most installation tools should detect that these are ActiveX components and include the relevant registration procedures in the resultant installation.

Manual Registration of the Mint ActiveX Controls

If you are not building an installation for your host application then you need to copy the files detailed above to the target PC and register them.

To register the files, open the **Command Prompt** (Start, Run, "Command" or "Cmd" depending on your version of Windows) and navigate to the location of the Mint ActiveX Controls (in our examples, c:\Program Files\My Host Application).

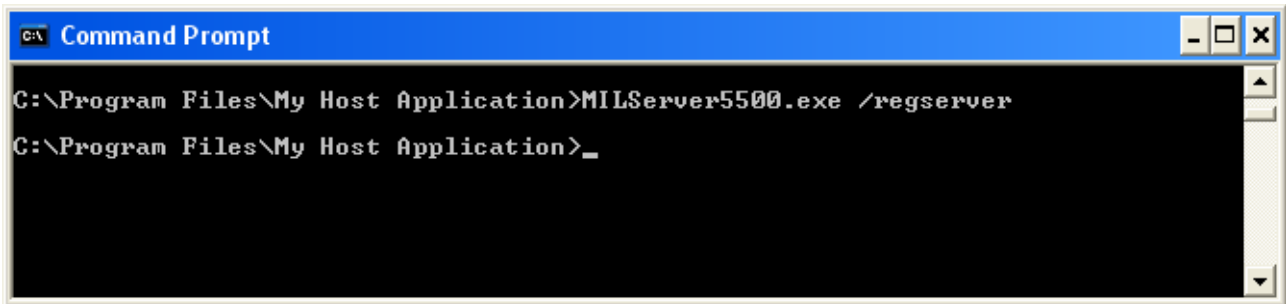
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Register the MILServer

To register the MILServer, type:

MILServer5xxx.exe /regserver

(where xxx is the required version of the MILServer - either 000 or 500)



```
C:\> Command Prompt
C:\Program Files\My Host Application>MILServer5500.exe /regserver
C:\Program Files\My Host Application>_
```

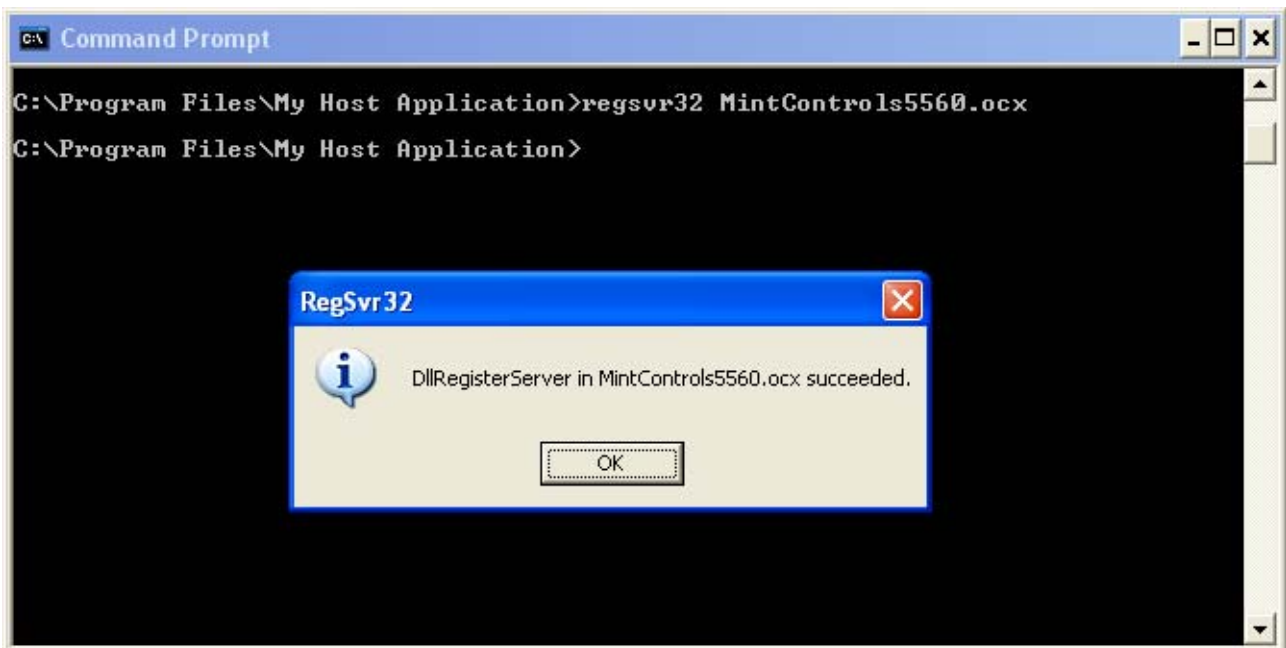
Note: there is no confirmation that this has succeeded (if Windows is unable to run the program it won't hesitate to tell you, so no news is good news).

Register the ActiveX Control

To register the ActiveX control, type:

regsvr32.exe MintControls5xxx.ocx

(where xxx is the required version of the ActiveX control)



A confirmation message will be displayed if the registration succeeds.

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Checking the Installation Has Completed

On completion of the above installation process, the registry of the target PC can be checked to make sure that the process has been carried out successfully.

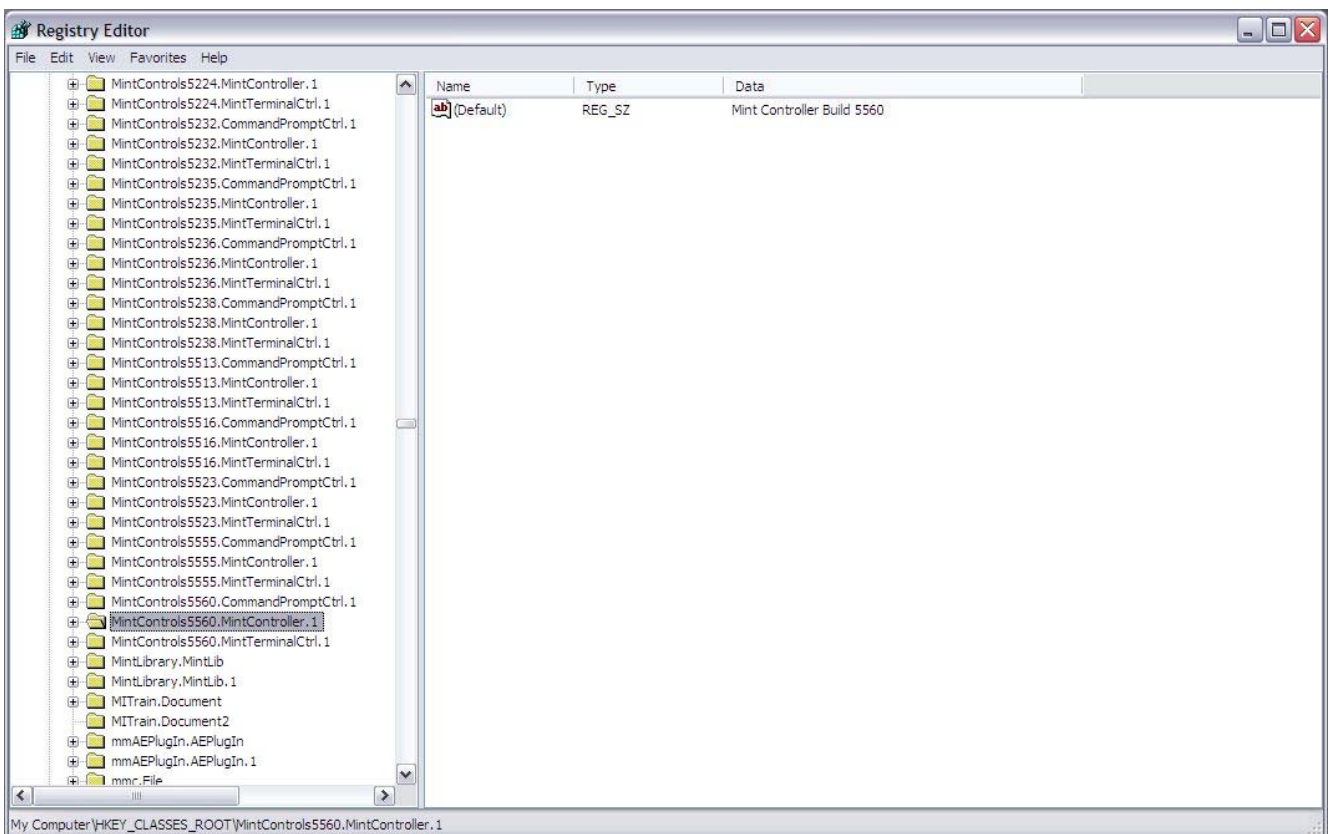
Use is made of the **Windows Registry Editor** to perform this check, please note that it is not recommended that you edit any data found in the system registry as this could seriously harm the operation of the PC in question.

To run the Registry Editor, select the "Run" command from the Start menu and type in "Regedit". This will launch a Windows Explorer type window and tree view. Installation of the Mint ActiveX Controls will have created the following registry keys:

HKEY_CLASSES_ROOT\MintControls5xxx.MintController.1

HKEY_CLASSES_ROOT\MILServer5xxx.MintServer.1

Where, in both cases the "xxx" is the version of each file that was installed, see below for an example showing the ActiveX registry key:



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Advanced Installation

Compilers

If your host application uses the **Mint Command Prompt** interface for command-line access to a controller, or if you use any of the *DoCompileMintProgram* functions, then you will also need to include one or more Mint Compiler components. These can be found in the same directory as your Mint Machine Center or Mint WorkBench install, and are named

MintCompilerxx.dll

Where xx represents the target format of the program (please see the firmware release notes for details on which target format is used by a specific firmware version).

This is a COM component and should be registered in the same way as the ActiveX control.

Device Drivers

In order to communicate with Baldor drives or motion-controllers connected to the target PC via USB or PCI then the relevant device driver must also be installed. The device drivers can be found on the same web-page as the Mint Machine Center and Mint WorkBench installations.

Further Dependencies

The ActiveX control is also dependant on a number of run-time files that are part of most Windows operating systems. However, for older operating systems (NT4, Win95 and 98), these files are available from Microsoft.

Please see Knowledge Base article 259403 for more information,
<http://support.microsoft.com/kb/259403>