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IDi 40 Data Importer Software Upgrade Application Guide

Software Version 4.4.7

597-2010-007, Revision B
04/28/2016

IDI 40 Data Importer

Software Upgrade Application Guide

Software Version 4.4.7

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Table of Contents

Software Upgrade Application Guide	2
Software Version 4.4.7	2
1. Purpose of this Document.....	4
2. Tools / Items Needed	4
3. Estimated Completion Time	4
4. IDi 40 Software Overview	4
4.1 Preparation	4
5. IDi 40 Software Installation Prerequisites	5
5.1 Internet Information Services Install (IIS)	5
5.2 ASP.NET Setting	7
6. Install the New IDi 40 software	8
6.2 Importer Setup Install	8
7. Creating Capture Clients	10
8. Licensing	12
9. Set the IP Address for the IDi 40.....	12
10. Importer Control Panel and Client Configuration Tools.....	14
11. Web Admin and Channel Configurations.....	15
12. Capture Client Configuration	18
13. Notes on Switching Configurations via the IDi 40	19
14. Switching the Configurations in the IDi 40	21
15. Re-configure the Exciter Link of the XPi 10	23
16. Database Backup	24
17. Help.....	27
18. Technical Service Contact Information	27

1. Purpose of this Document

The following document explains how to perform the Importer software upgrade process to iBiquity version 4.4.7. This process converts an existing IDi 20 Importer to an IDi 40 Importer.

2. Tools / Items Needed

- ☐ Windows XP Professional Install CD or Windows 7 Professional CD
- ☐ Importer v4.4.7 installation CD or downloaded exe file

3. Estimated Completion Time

Proving that you have the tools listed above, it will take approximately 30 minutes to complete the upgrade procedure to iBiquity version 4.4.7.

4. IDi 40 Software Overview

This document must be read to its entirety before installing this new version. The difference between an IDi 20 and IDi 40 is the ability of how many secondary HD channels it can run. An IDi 20 can only run HD2 and HD3 when an IDi 40 can also run HD4.

To run the Artist Experience Importer v4.3.1p1 on Windows XP must be installed.

**Your Exporter, Exciter and Exgine card must be upgrade first to the following versions.
Exporter 4.3.2p1, Exciter 2.00.41, Exgine 4.0.0**

The v4.3.1 software can be upgraded to v4.4.7. If running Windows 7 32-Bit or 64-Bit version 4.4.7 must be installed.

What is the current version of your Exporter? _____

What is the current version of your Exciter? _____

What is the current version of your Exgine card? _____

What is the current Importer Configuration? _____

Note: If you are using B.E.'s The Radio Experience Software for PAD data, **you will need to be running TRE 2.9.0. Build 18 or higher.** The HD RADIO mode in TRE must be set to Version 4.

4.1 Preparation

1. Gather Importer and Exporter IP Address settings
2. **Reformat the C drive and install fresh copy of Windows if running 3.0.5 or previous.**
3. **Can Upgrade from v4.3.1, a new iBiquity License is required.**
4. All hardware installations needed should be completed prior to Importer software install. (soundcards and network adapters)

5. The available importer sound devices are listed below.
 - a. Audio Science: <http://www.audioscience.com>
 - i. 5041 - 4 channels PCI only AES
 - ii. 5044 - 4 channels PCI Analog/AES
 - iii. 5111 - 1 channel PCI Analog/AES
 - iv. 5211 - 1 channel PCI-e Analog/AES
 - v. 6622 - 2 channels PCI-e only AES
 - vi. 5641 - 4 channels PCI-e only AES
 - b. Orban: <http://www.orban.com/>
 - i. 1100 - PCI Analog / AES data shift issue (obsolete)
 - ii. 1101(PCI) and 1101e(PCIe) Analog/AES data shift fixed
6. The latest audio drivers are available in the software suite and should be verified.
7. All Windows updates or patches should be completed prior to install.
8. Run the self extracting executable to the local C: drive.
9. Verify the Importer and Exporter hardware has the latest available software.

10. Upgrade in the following order:

- a. Exporter 4.3.2p1
- b. Exciter 2.00.41
- c. Exgine 4.0.0
- d. Importer 4.4.7

For additional information on preparation including drivers and hardware reference document STS-05-0002_Importer_IDi40_FAQ.pdf, or contact Technical Services at 217-224-4700 or service@bdcast.com

5. IDi 40 Software Installation Prerequisites

The Importer 4.4.7 software includes all installation files, audio drivers, and documentation needed to install and operate the Importer.

The Importer can only be installed on a computer running **Windows 7 Professional 32-Bit / 64-Bit** or **Windows XP Professional SP3** with Internet Explorer version 6.0 or above and these should be installed prior to installation of the importer software.

5.1 Internet Information Services Install (IIS)

The Importer Web Admin is going to be used as a management tool in replacement of the Broadcast Electronics Dashboard.

To use the "Web Admin" client for synchronization, then IIS must be installed. This must be done before installing v4.4.7.

DO NOT RE-INSTLL IIS if UPGRADING from v4.3.1!!

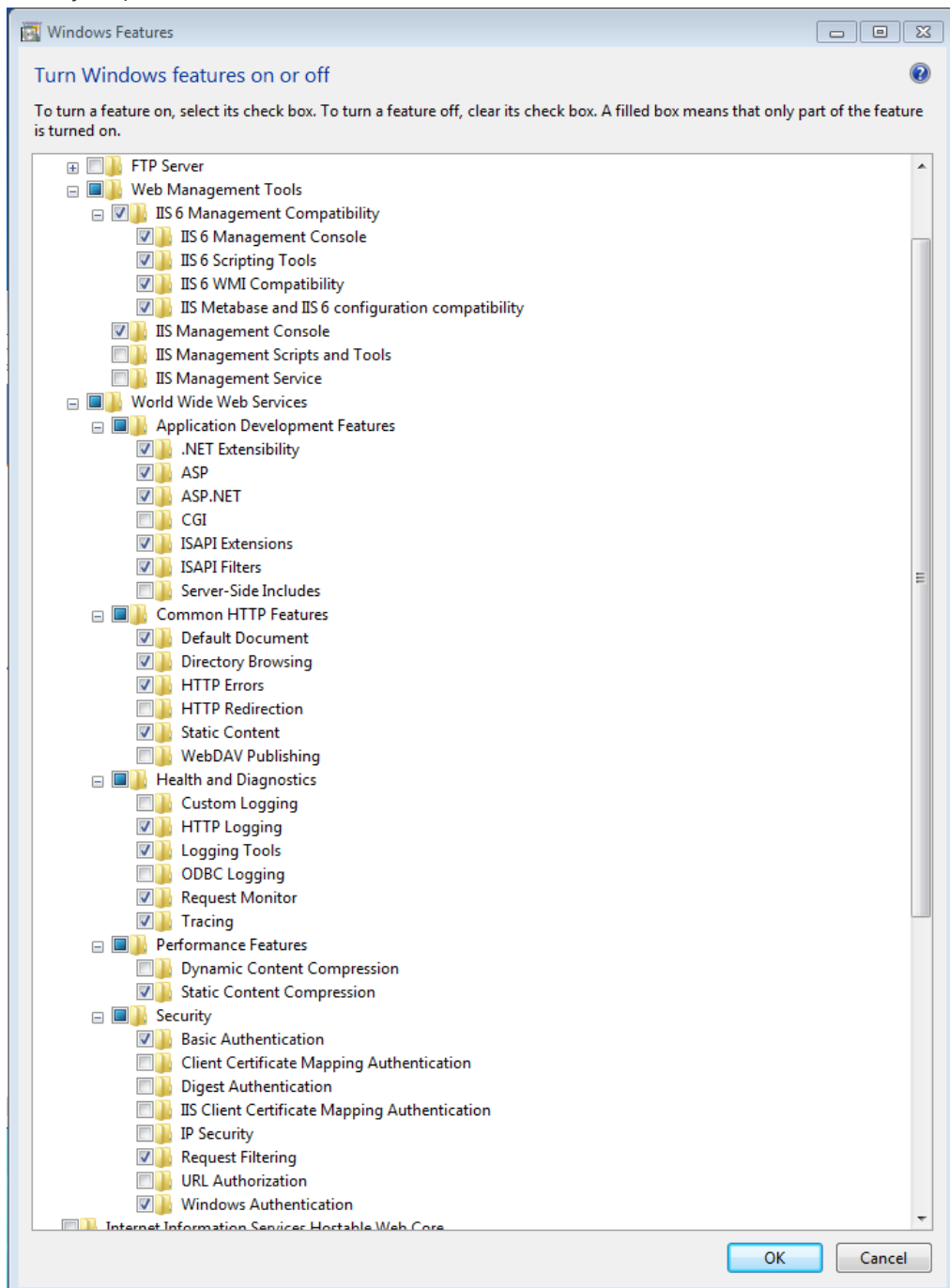


Windows XP

From the Control Panel window | Add/Remove Programs, on the left toolbar select “add windows components”. Then select internet Information Services (IIS). Windows may request the XP installation CD if it does not have the services core installed.

Windows 7

From the Control Panel window | Programs and Features, on the left toolbar select “Turn Windows Features on or off”. Then select Internet Information Services (IIS) and expand Web Management Tools and World Wide Web Services to ensure the following options are selected as shown below. Windows may request the Windows 7 installation CD if it does not have the services core installed.

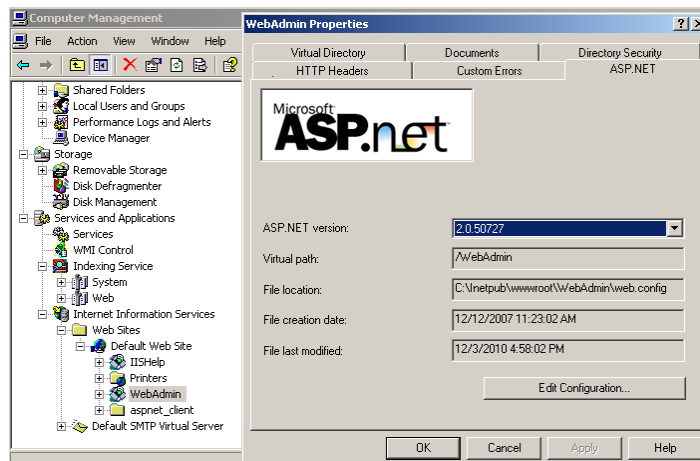


5.2 ASP.NET Setting

In order for tabs and buttons to work properly in Web Admin ASP.NET version must be set to 2.0.50727. **This step to be executed after the install of the v4.4.7 software.**

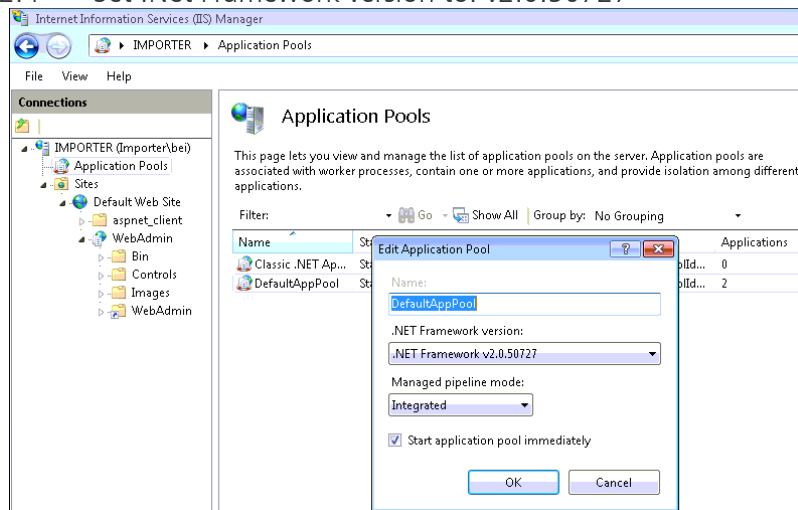
5.2.1 Windows XP

- 5.2.1.1 Open Computer Management | Services and Applications | Internet Information Services
- 5.2.1.2 Open Web Sites | Default Web Site
- 5.2.1.3 Right click on WebAdmin and click Properties
- 5.2.1.4 Set the ASP.NET version to 2.0.50727



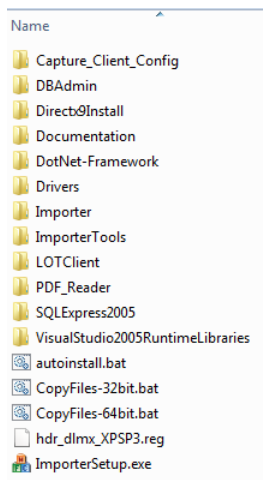
5.2.2 Windows 7

- 5.2.2.1 Click Start | Search | Type IIS | Open Internet Information Services
- 5.2.2.2 Select Application Pools
- 5.2.2.3 On the right hand side Right Click on DefaultAppPool and choose Basic Settings
- 5.2.2.4 Set .Net Framework version to: v2.0.50727



6. Install the New IDi 40 software

6.1 Extract the contents of the self-extracting executable file. It will create a c:\Importer_v4.4.7_Install\ directory. **This Directory must be maintained.**

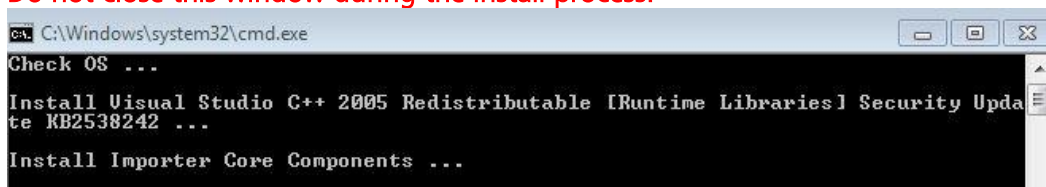


6.2 Importer Setup Install

6.2.1 Run the Autoinstall.bat from the install directory

6.2.2 The Autoinstall.bat installs the prerequisites needed, not including ISS. You will see a DOS screen launching all required installs to complete the Importer v4.4.7 install.

Do not close this window during the install process.



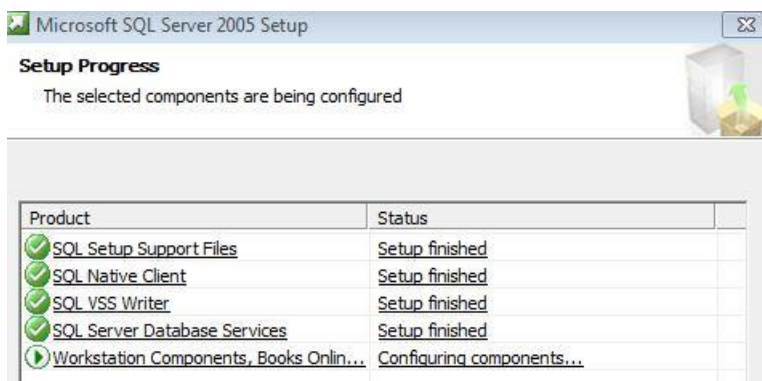
6.2.3 Click OK to Launch Importer Setup



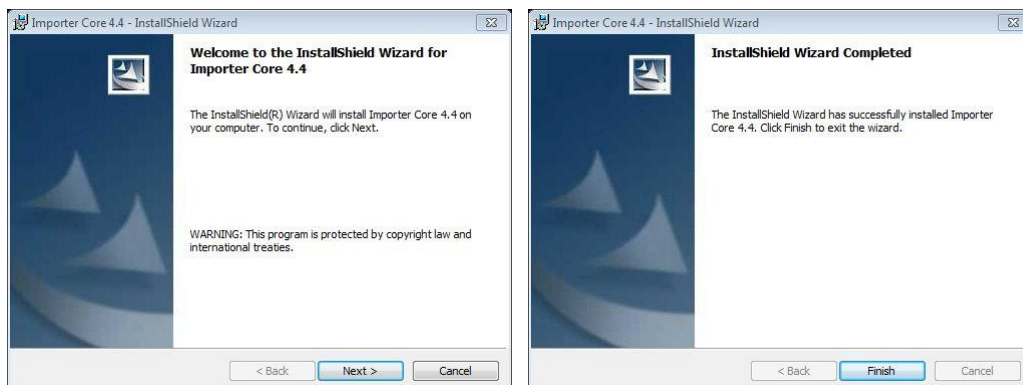
6.2.4 If upgrading from v4.3.1 click Yes and continue with the install.



6.2.5 2005 SQL Server Express will install next.



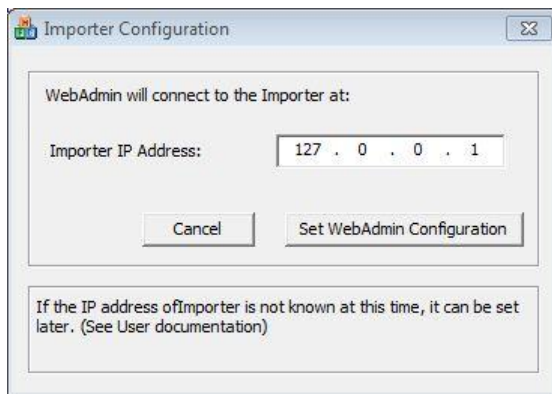
6.2.6 Importer Core 4.4 will prompt to click Next and then select Finish when completed.



6.2.7 Next the Importer Tools 4.4 will prompt to be install, click Next and choose Complete.



- a. Click "Set WebAdmin Configuration" button with IP set to 127.0.0.1



- b. Please select "Finish" to exit

6.2.8 The Importer setup will create desktop shortcuts for the Importer Control Panel, WebAdmin, CaptureClient, StreamingClient and DataClient. When choosing a Complete Install.



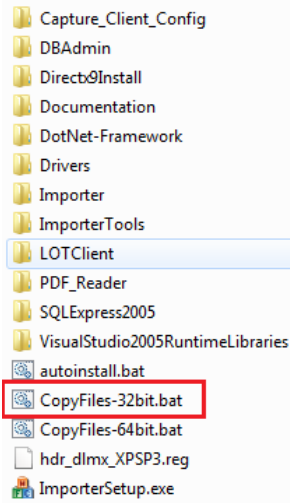
7. Creating Capture Clients

To utilize the additional channels available to you with this upgrade, you will need to create the capture clients for each channel.

For your convenience we have created a batch file, which will create these shortcuts for you. **At this time you can delete the default installed Capture Client shortcut.**

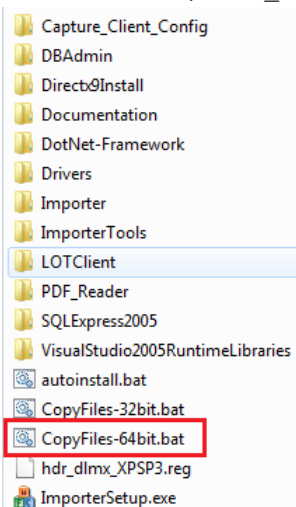
7.1 Windows XP SP3 and Windows 7 32-bit

7.1.1 From C:\Importer_v4.4.7_Install\ Double click CopyFiles-32bit.bat



7.2 Windows 7 64-bit

7.2.1 From C:\Importer_v4.4.7_Install\ Double click on CopyFiles-64bit.bat



7.3 The Command Prompt window will appear and run the script. C:\Importer_v4.4.7_Install

7.4 "Press any key to continue..."

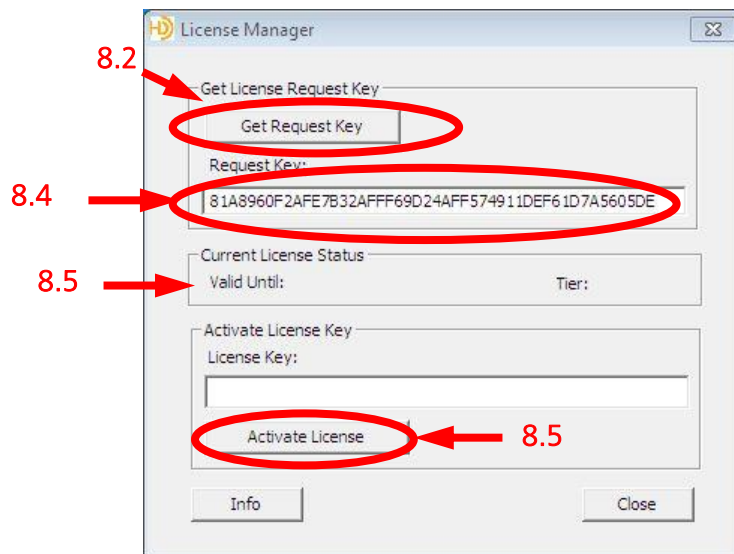
7.5 Three HD Capture Client shortcuts will appear on the Desktop



8. Licensing

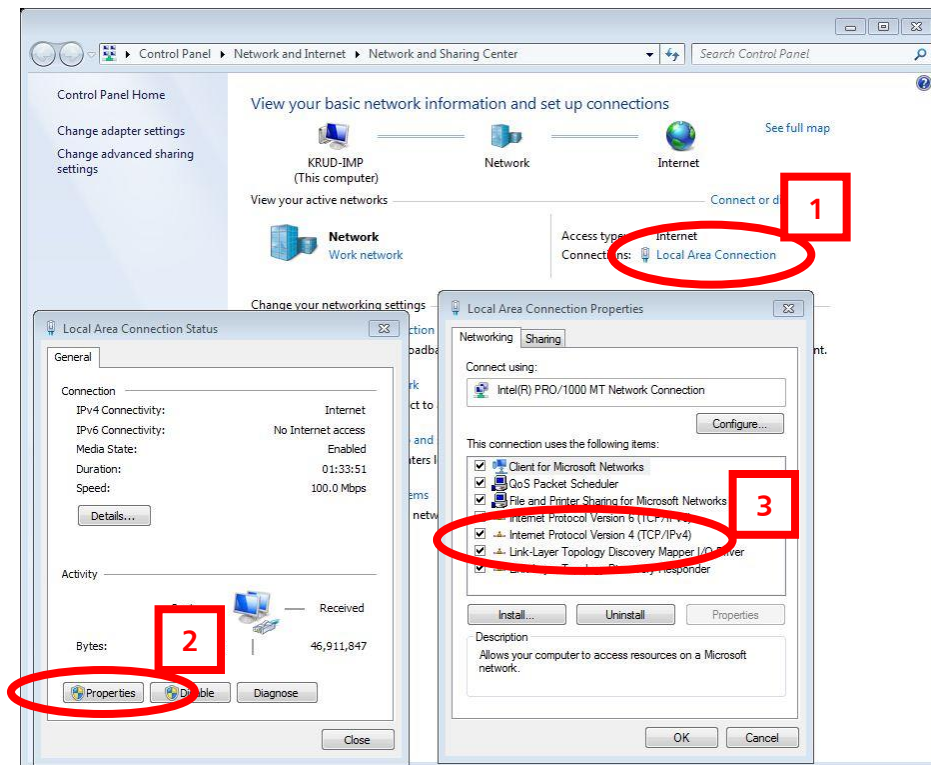
To obtain a new License Key. Start the License Manager, this can be done from the start menu.

- 8.1 Start>iBiquityDigital>Importer>LicenseManager
- 8.2 Press "Get Request Key" and a 48 character key is displayed as shown below. **Do not close this window until you receive the License Key.**
- 8.3 Customers must register at <https://key.ibiquity.com/register> to obtain a license key. Refer to New Importer key instruction_Customer.pdf. In the documentation folder of the software installation directory.
- 8.4 Copy the returned License Key into the Activate Licence Key field. The current license status, valid until date and tier, will be updated upon acceptance of a valid key.
- 8.5 Press Activate License and Click Close to complete the process.

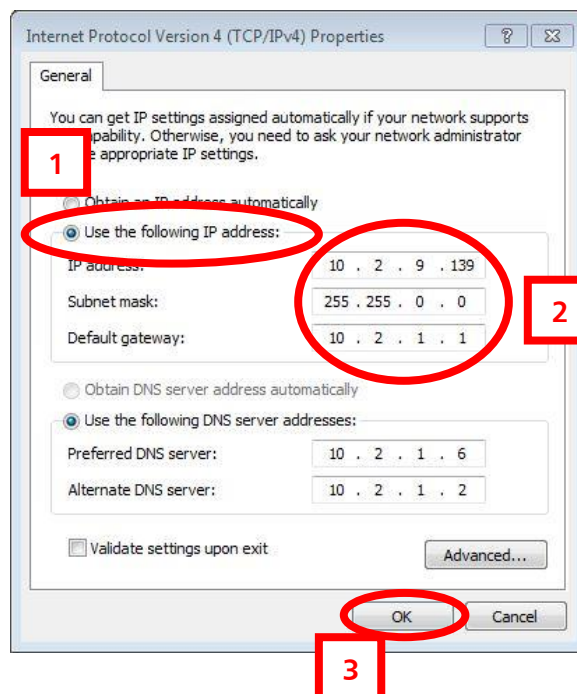


9. Set the IP Address for the IDi 40

- 9.1 If this is an update from a recent software version, you should not need to change the ip address. But if needed the information is provided here.
 - 9.1.1 **Step 1**- Go to **Start->Network and Sharing Center**. Left click on the "connected" **Local Area Connection**, and **Step 2** select **Properties**.
 - 9.1.2 **Step 3** Click on **Internet Protocol Version 4** and select **Properties**



9.1.3 Select **Use the following IP Address**, then enter the IP Address and the Subnet mask of the IDi Importer. The Subnet mask **MUST** be the same as the FSi 10 and XPi 10.

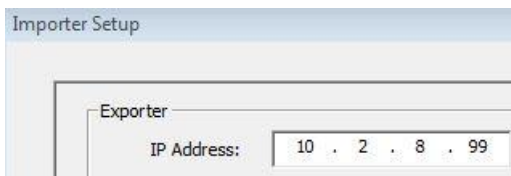


10. Importer Control Panel and Client Configuration Tools

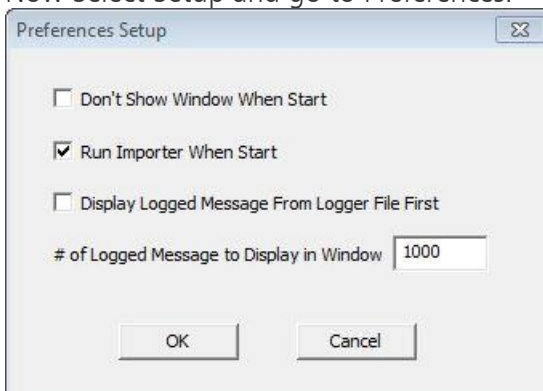
- 10.1 Next we have to configure the Importer Control Panel. To begin double click the provided shortcut for access to the Importer Control panel.
- 10.2 Go to Setup and select Importer.



- 10.3 Enter the Exporter IP Address, and then click Ok. The ports shown are default and should not be changed.

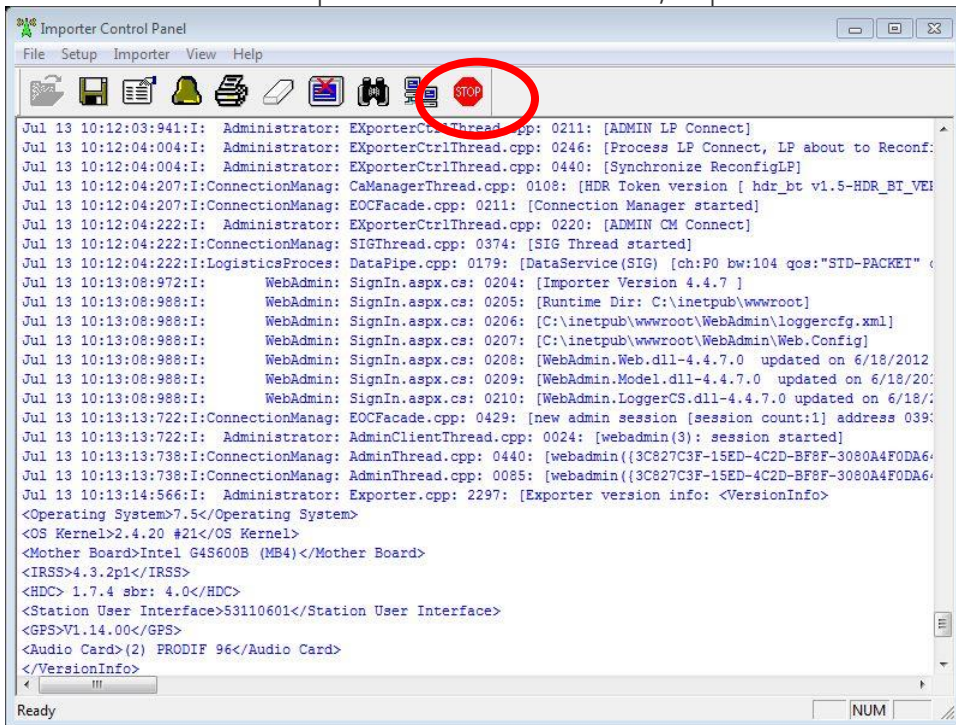


- 10.4 Now Select Setup and go to Preferences.



- 10.4.1 Here we Select option 2 "Run Importer When Start", this starts the application with windows. The notification below will appear.

10.5 From the Menu select Importer and then select Start, or press the Green Running Guy icon.



10.6 The Green guy running is "Start"; this will change to a "Stop" sign while running

11. Web Admin and Channel Configurations

11.1 We now have to configure your bandwidth allocation by selecting and activating your configuration through the WebAdmin.

11.2 Launch the WebAdmin shortcut on the Desktop

User ID: "admin" and Password: "admin" to log into the WebAdmin client.

The image shows the WebAdmin login interface. At the top, there is a blue banner with the 'HD Radio' logo and the text 'Pure Digital. Clear Radio.' Below the banner, there is a login form with the following fields: 'User ID:' with the value 'admin', 'Password:' with an empty field, and a 'Submit' button. The background is a light blue gradient.

11.3 The Idi-40 can be configured for three modes of operation:

11.3.1 MP1 – has a bandwidth of 96kbps.

11.3.2 MP2 – has a bandwidth of 108kbps

11.3.3 MP3- has a bandwidth of 120kbps

11.4 The Web Admin interface has 5 different tabs:

11.4.1 **Exporter** tab shows current Exporter status.

11.4.2 **Importer** tab shows the Importer's status and will be used to change configurations.

11.4.3 **Monitor** tab is for a future feature.

11.4.4 **Administration** tab is where our services are configured and edited.

11.4.5 **Client Configuration** tab is where the password is changed and the license information is located.

11.5 iBiquity HD Naming Relationships

11.5.1 **MPS** = HD1

11.5.2 **SPS1** = HD2

11.5.3 **SPS2** = HD3

11.5.4 **SPS3** = HD4

11.6 Exporter Configuration Tab

11.7 Importer Tab

11.7.1 Here we select our channel configuration by selecting Next, Previous or Jump To ID.

11.7.2 Click the Set button once a configuration is chosen.

11.7.3 Once we have set the appropriate bandwidth configuration it will return to the **Exporter** tab to **Synchronize** the Exporter.

Exporter Configuration			
Current Exporter Mode: MP1 Dynamic			
Current Exporter Channel Configuration			
Channel	Total Size*	Fixed Size*	MPA Size*
P1	18269	0	18011
PIDS	10	0	10
*Size Units: Bytes/PDU			
Messages/Warnings:			
Not synchronized - bandwidth mismatch			
Synchronize			

11.7.4 Select Synchronize

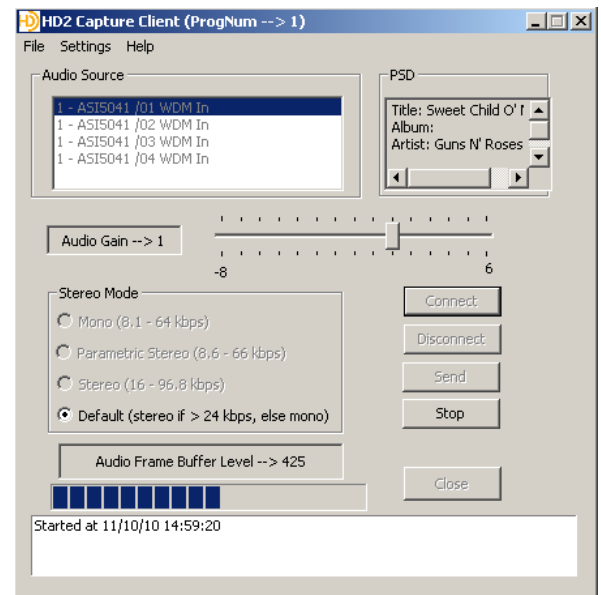
If this is not the case please review your settings and the previous configuration pages. You may also refer to (STS-02-2059) the Importer v.4.X.X WebAdmin document for help with adding or editing your current configuration. This and other informational documents can be found in the Importer_4.4.7_Install directory under documents. More information is also available from BE Technical Services at 217-224-4700 or by emailing service@bdcast.com.

12. Capture Client Configuration

HD2 Capture Client defaults to sound card input 1

HD3 Capture Client defaults to sound card input 2

HD4 Capture Client defaults to sound card input 3



12.1 Launch your HDx Capture Client shortcut

12.2 Choose File | Settings

12.2.1 These settings are not to be changed.

12.3 Choose Settings | SPS Settings

12.3.1 PAD port

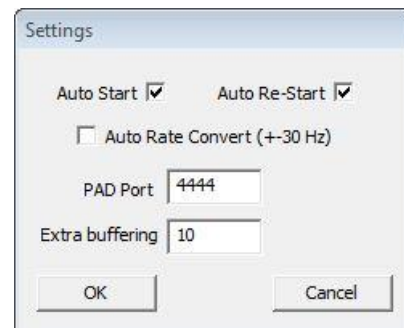
12.3.1.1 HD2 PAD port 4444

12.3.1.1 HD3 PAD port 4446

12.3.1.1 HD4 PAD port 4448

12.3.2 Extra Buffering Default is 10

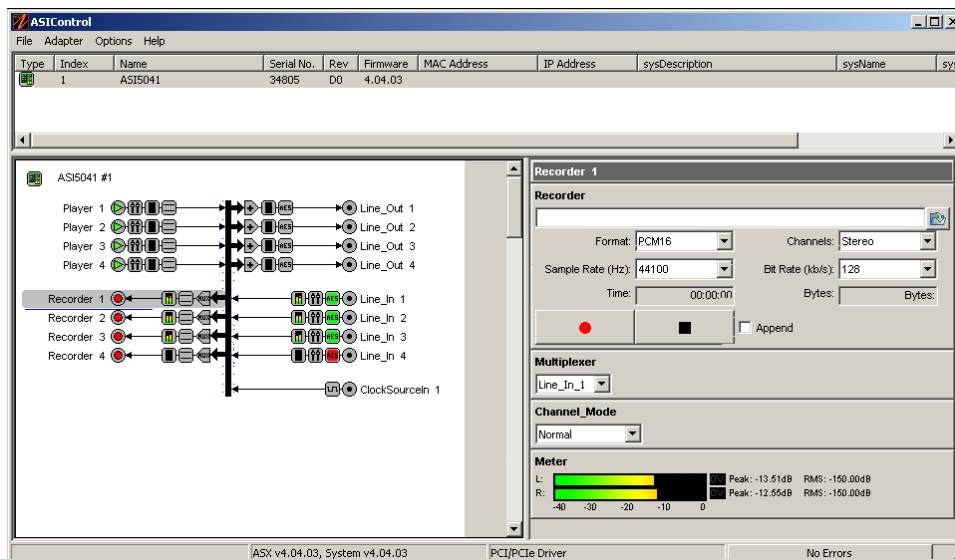
NOTE: Choose Auto Start and Auto Re-Start to be able to recover from a Windows restart automatically.



12.4 If the proper sound card channel is not selected Choose Disconnect and then Reconnect.

12.5 Click Send to start capturing audio and PAD data. If Auto Start and Auto Re-start is selected then clicking Send is not necessary.

- 12.6 If having audio problems, launch the ASI Control desktop shortcut
 12.61 Verify audio levels by selecting the appropriate Recorder.
 For additional information go to www.audioscience.com



13. Notes on Switching Configurations via the IDi 40

13.1 If you have an XPi 10 in Your System

For systems running version 4.4.7 on the IDi 40 and version 4.3.2 of XPi software please note that upon switching MPX Modes via the IDi 40, the XPi 10 may re-booted and loose its Exciter Link address information!

13.1.1 Prior to switching configurations from the IDi 40, it is recommended that you record the Exciter Link Config settings of the XPi 10

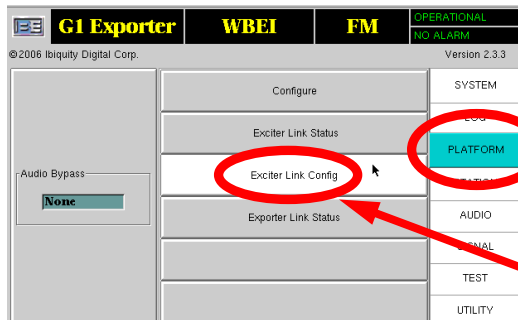
13.1.2 If the XPi 10 is re-booted after switching configurations via the IDi 40, you will have to re-enter the Exciter Link Config settings back into the XPi 10.

Please note that HD operation will be off of the air during this process. .

13.1.3 If it is unable to synchronize, you will need to login to the Importer WebAdmin to configure.

13.2 If you have an FSi 10 in Your System

13.2.1 For systems running version 4.4.7 of IDi and version 4.3.2 of FSi software please note that upon switching configurations via the IDi 40, the FSi 10 may be rebooted. As a result, HD Operation will be off of the air during this process.



Step 1 – Select PLATFORM

Step 2 – Select Exciter Link Config

Step 3 – Record the Exciter Link Protocol

Step 5 – Record the MAC Address

Step 6 – Click the Enable

The screenshot shows the 'Exciter Link' configuration dialog box. It has a 'Protocol' section with 'Uni-directional' selected and 'Bi-directional' unselected. Below that is an 'IP Address' section with four input fields containing '10', '2', '1', and '53'. Below that is a 'MAC Address' section with a checked 'Enable' checkbox and six input fields containing '00', 'D0', 'B7', 'B8', 'D5', and '60'. At the bottom, there's an 'Exciter Reset Delay' section with a value of '20' and a '(seconds)' label. At the very bottom, there are 'OK' and 'Cancel' buttons. The 'OK' button is circled in red.

Step 4 – Record the Exciter Link I.P. Address

Protocol

IP Address

MAC Address

14. Switching the Configurations in the IDi 40

14.1 Log on to the WebAdmin and select Administrator for available configurations

14.2 Select the Importer tab

Main Menu: Exporter **Importer** Monitor Administrator Client Configuration

Importer Configuration

Channel configuration (Bytes/PDU)

Channel	Total Size	Fixed Size	MPA Size
P1	18269	6076	12177
P3	0	0	0

Active Status: FM_HYBRID_MP1_SPS1 ID:2 Dynamic

Active Exporter Mode: MP1
Display Exporter Mode: MP1

Services (Bits/Sec; mouseover for Bytes/PDU)

Channel	Service Name	BW	Stream
P1	audio	MPS	65555 Core
P1	audio	SPS1	31962 Core
P1	data	SIG	559 Standard-Packet

Display Importer Config: FM_HYBRID_MP1_SPS1 ID:2

Next **Previous** **JumpTo ID:**

14.3 Use the available **Next** and **Previous** buttons, to toggle through the Presets and your Custom configurations.

14.4 If know the Configuration ID, this can be typed in where you see "Jump To ID". Once you have found your desired configuration. Select "Set" as shown below.

JumpTo ID:

Services (Bits/Sec; mouseover for Bytes/PDU)

Channel	Service Name	BW	Stream
P1	audio	MPS	65383 Core
P1	audio	SPS1	15940 Core
P1	audio	SPS2	15940 Core
P1	data	SIG	839 Standard-Packet


Display Importer Config: FM_HYBRID_MP1_SPS2 ID:3

Next **Previous** **JumpTo ID:**

Set

14.5 Select "Set", you will see a notification of the impending change.

14.6 Select Change if you wish to continue, Cancel if not.



Main Menu:
Exporter
Importer
Monitor
Administration
Client Configuration

Exporter Configuration

Current Exporter Mode: MP3 Dynamic

Current Exporter Channel Configuration

Channel	Total Size*	Fixed Size*	MPA Size*
P1	18269	12118	5969
P3	573	573	0
PIDS	10	0	10

*Size Units: Bytes/PDU

Messages/Warnings:

Not synchronized - bandwidth mismatch

Synchronize

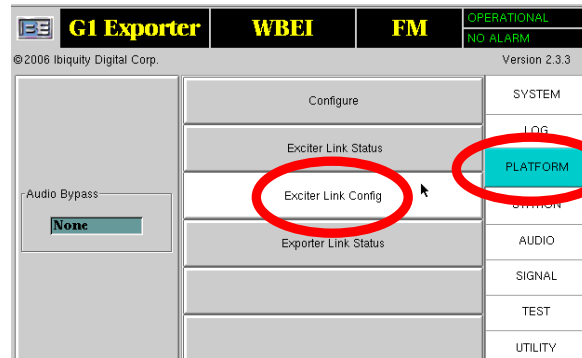
14.7 Select "Synchronize" to complete this action.

11.7.1 A message will display "Your channel bandwidth is now set".

14.8 You may be prompted to restart the Importer or other hardware.

Note: Once your configuration is set and synchronized, Restart the Importer Control Panel and Connect and Capture Clients.

15. Re-configure the Exciter Link of the XPi 10



Step 1 – Select PLATFORM

Step 2 – Select Exciter Link Config

Step 3 – Set the Communication protocol to Uni-directional

Step 5 – Click the Enable
Step 6 – Enter the MAC

Step 7 – Click OK

The screenshot shows the 'Exciter Link' configuration dialog box. It has several sections: 'Protocol' with radio buttons for 'Uni-directional' (selected) and 'Bi-directional'; 'IP Address' with four input fields containing '10', '2', '1', and '53'; 'MAC Address' with a checked 'Enable' checkbox and six input fields containing '00', 'D0', 'B7', 'B8', 'D5', and '60'; and 'Exciter Reset Delay' with a slider set to '20' seconds. At the bottom, there are 'OK' and 'Cancel' buttons. Red circles highlight the 'Uni-directional' radio button, the IP address fields, the 'Enable' checkbox and MAC address fields, and the 'OK' button.

Step 4 – Enter the Exciter Link I.P. Address of the Exciter

16. Database Backup

16.1 The 4.4.7 DB Admin tool allows users to save their user configuration settings to an xml file and then merge it back into the database. This is recommended after the IDi has been setup.

16.2 Launch DBAdmin from:

Start > All Programs > IBiquity Digital > Importer > DBAdmin

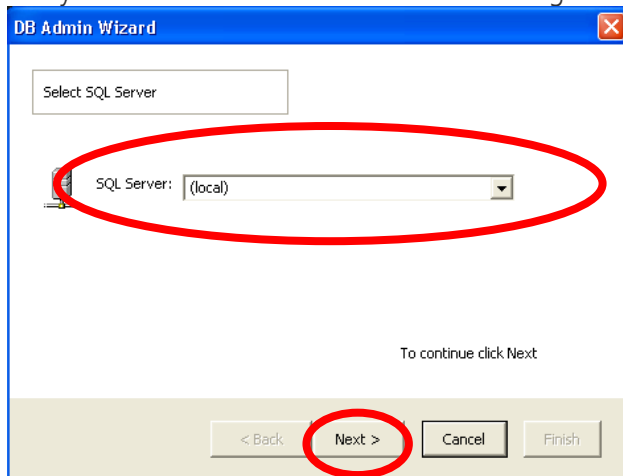
16.3 Select Backup Complete Database

16.4 Select Start

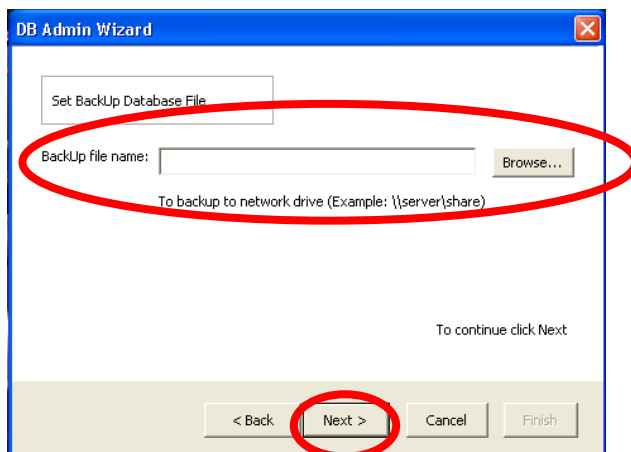


NOTE: If you need to backup or restore the Database, the Importer control Panel MUST be shutdown.

16.5 When you select Start from the window to begin the backup the window below appears.

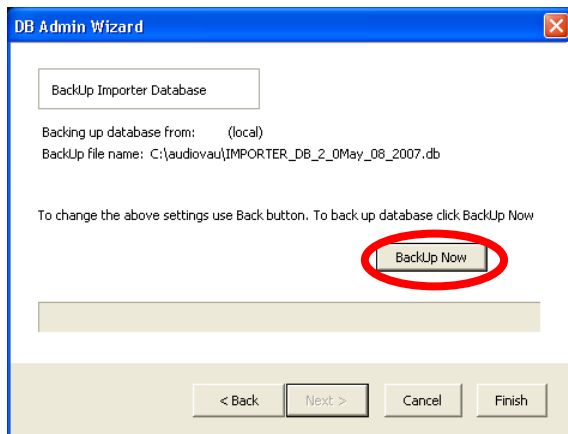


16.6 Here you will need to select the location to save your backup to. You can select a local location or browse to a network location. **Select Next when finished.**

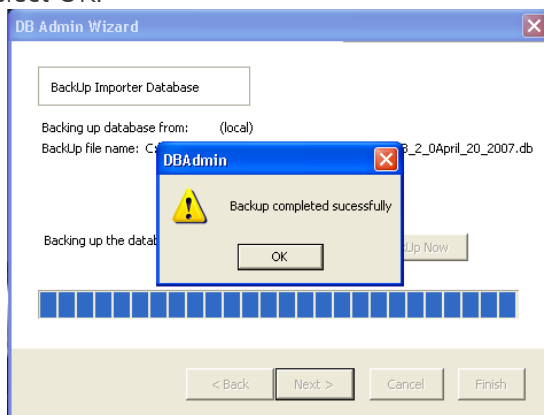


16.7 We now enter the backup name and its location on the network if applicable, and select Next.

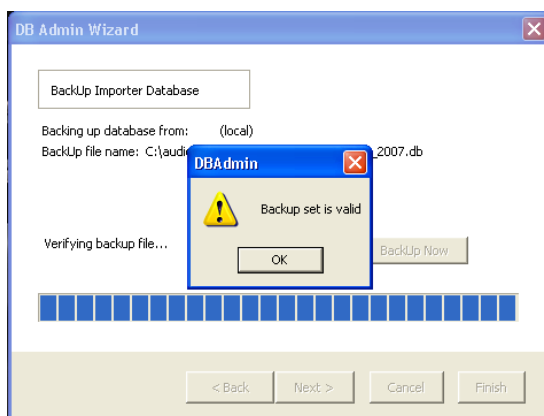
16.8 A verification of the location will now show in the window.
If correct, select BackUp Now.



16.9 Select OK.



16.10 Select OK.



16.11 When the operation is complete, we select Finish.

17. Help

17.1 Help is available in all applications, just go to “Help’ and “About” within the application.



WebAdmin Build Information

BUILD Time Info:

Build Directory c:\Importer\Importer4.4.7\Projects\Clients\WebAdmin\Install
Date Mon 06/18/2012
Time 03:33 PM
Username dab
Computer Name DSPSTATION9
Visual Studio "C:\Program Files\Microsoft Visual Studio 8\
Framework Version "v2.0.50727"

RUN Time Info:

Importer Version 4.4.7
Runtime Dir: C:\inetpub\wwwroot
WebAdmin.Web.dll-4.4.7.0 updated on 6/18/2012 3:33:40 PM
WebAdmin.Model.dll-4.4.7.0 updated on 6/18/2012 3:33:38 PM
WebAdmin.LoggerCS.dll-4.4.7.0 updated on 6/18/2012 3:33:32 PM
Importer Database Built Mar 12 2012 5:17PM on MDMATTSONDELL\SQLEXPRESS under sa
Web.Config: C:\inetpub\wwwroot\WebAdmin\Web.Config
Logger Cfg: C:\inetpub\wwwroot\WebAdmin\loggercfg.xml

18. Technical Service Contact Information

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