CHARLES©

College Housing and Residence Life
for Education Systems

SETUP MANUAL
Step by Step

R DS co.
ROUNDOG SOFTWARE COMPANY

1. Choose Your Database Back-End

First of all, we'd like to thank you for your purchase of the *CHARLES* system. We hope you will have years of trouble-free productive use.

But, we're sure you are probably anxious to install the program, get it set up and begin using it. We've tried to make the installation and set up as easy and as straight-forward as possible. With that said, however, there are several steps you may need to undertake before you double-click that installer you've just downloaded. Let's walk through them in an orderly fashion.

1.1 DECIDING WHICH BACK-END DATABASE TO USE

CHARLES is not actually a database. It is the front-end of the database and the look and feel of your database. Your data will actually reside in some other area of your institution's network infrastructure - on a machine in your technology area (or under you own desk if you wish). This machine needs to be connected to the internet with a known network address to allow your CHARLES workstations to connect to it.

In many cases, housing departments do not have their own networks or network administrators. If yours does, you will be able to set up everything yourself. If not, you will have to contact your institution's internet technology (IT) department to help decide where this back-end database will be installed, what its network address will be and ensure that its security and firewall protections are configured to enable your users to gain access.

So in order to know what to tell your IT department, you've got to decide which back-end to choose. This may be an easy or a difficult decision. If you don't know much about such things, have a discussion with someone who does. Your choice should be made with whoever will be responsible for maintaining the machine and its connection to the internet. A good rule of thumb is to choose the most robust and reliable back-end database you can afford.

Once that decision is made, you should have it installed (if it isn't already) and configured so you can gain access. For any choice you make, you will have to have a database file or schema started on the back-end. This usually consists of your IT people issuing a CREATE DATABASE command in your database server. When this happens, the database is given a name, a user name to log in with and a password. Your IT department can then inform you the address of the machine and the name of the database you will be connecting and logging into

The current selection of choices for your database back-end are shown in the following list*:

- Frontbase
- MySql version 5 or better
- PostgreSQL
- Oracle 9i, Oracle 10.1, Oracle 11.1

*(All of these relational database management systems (RDMS) are currently certified to work with *CHARLES*. We intend to provide access in future releases to Sybase, MS Sequel Server and OpenBase. We have no particular bias for or against any of the available choices. The ordering of the above list is merely alphabetical and should not imply any bias.)

1.2 GATHERING INFORMATION ABOUT YOUR BACK-END DATABASE

Once your back-end database choice has been determined, you must retrieve the information from your IT department about how *CHARLES* will connect to it. The pieces of information that will be required are outlined in the following table (which you can use as a worksheet).

Required Information	Value
Your Database Vendor	
DNS name or IP address of your DB server	
Database Name	
Database User Name	
Database User Password	
Test Database Name	
Path to Oracle Home* (*only required for Oracle back-ends)	

Table 1.1 - Information required for system setup.

As you can see from this table, you will need to collect these pieces of information from your IT department. Your database vendor is simply the choice made in section 1.1. The DNS name of your database server (or IP address) is the server's internet location (like "myserver.mycollege.edu"). The database name will be the name of the back-end database that was created with the CREATE DATABASE command (it should be something like "HOUSING" or "RESIDENTS" but it's really up to you). The User Name and Password entries pertain to your database, not to the server.

The Test Database Name may or may not be relevant to your institution but we suggest that you create a test database on your server for testing and training purposes. (You could call this "HOUSINGTEST" or something similar.) The Path to Oracle Home is only used in Oracle installations. (Please refer to the appendix for the discussion on Oracle in the appendix.)

Once you have collected all of these parameters, you are ready to install your *CHARLES* software.

2. Install Your *CHARLES* Software

CHARLES software comes in a package which you install on each of your client machines. It contains all of the programs, functions and connection mechanisms to allow it to connect to your back-end database server. Installation is fairly simple but we'll walk through it for each of the desktop operating systems you may be using.

2.1 MACINTOSH INSTALLATION

When you download *CHARLES* from our website, you will receive a .dmg file. Double-click the file to mount the disk image. Figure 2.1 shows what you will see when the disk image is mounted.
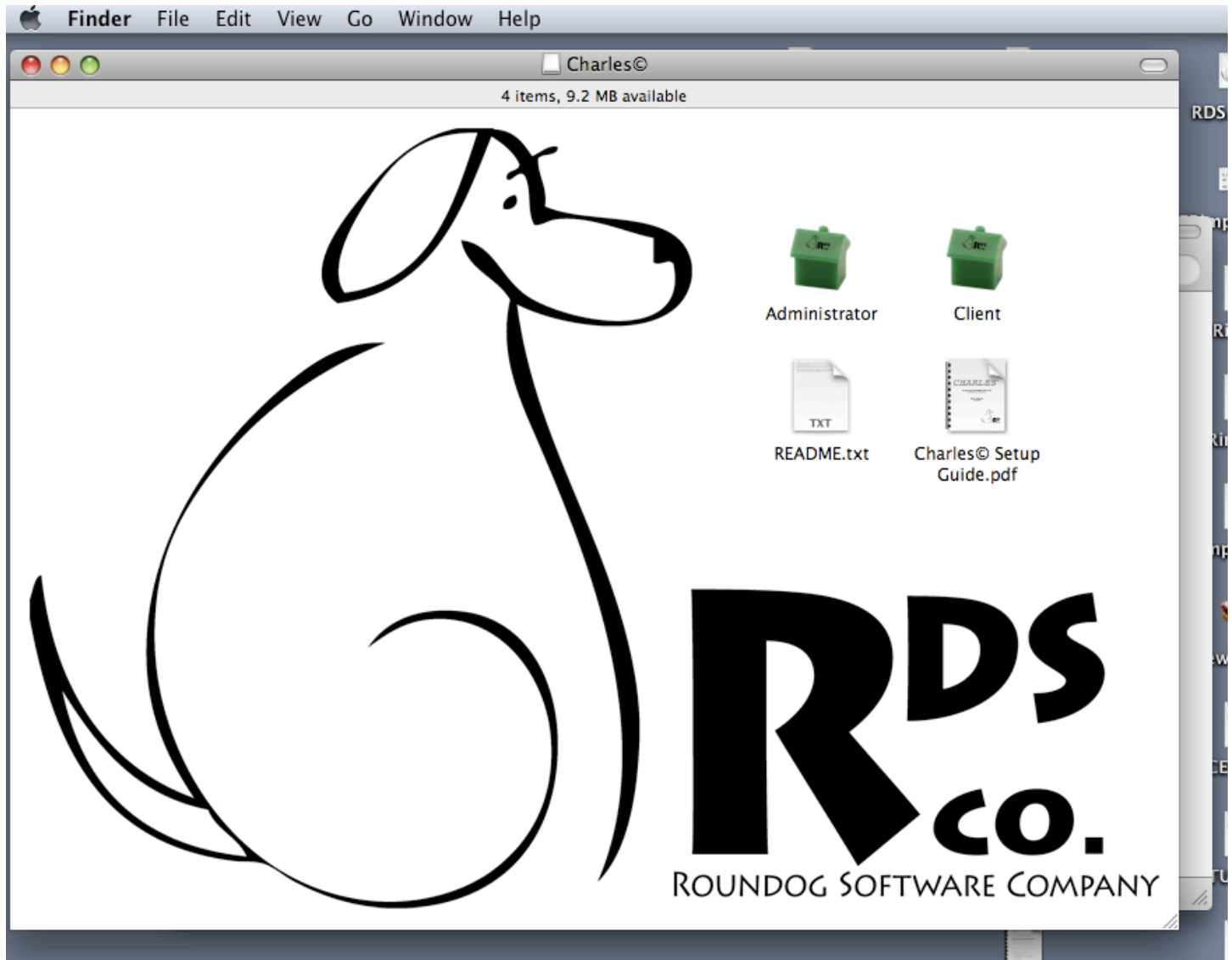

Figure 2.1 - A Macintosh mounted disk image of the *Charles©* Installer Disk.

If you acquired a CD release of CHARLES, you would be seeing the same thing when the disk is inserted.

Notice that there are two versions you may install, an Administrator and a Client. If you are installing *CHARLES* for the first time, you are probably the administrator and should install the Administrator version. If not, refer to the Client Installation section further on in this chapter.

2.1.1 Macintosh Administrator Installer

The Administrator Installer Icon is a folder containing what appears in figure 2.2.
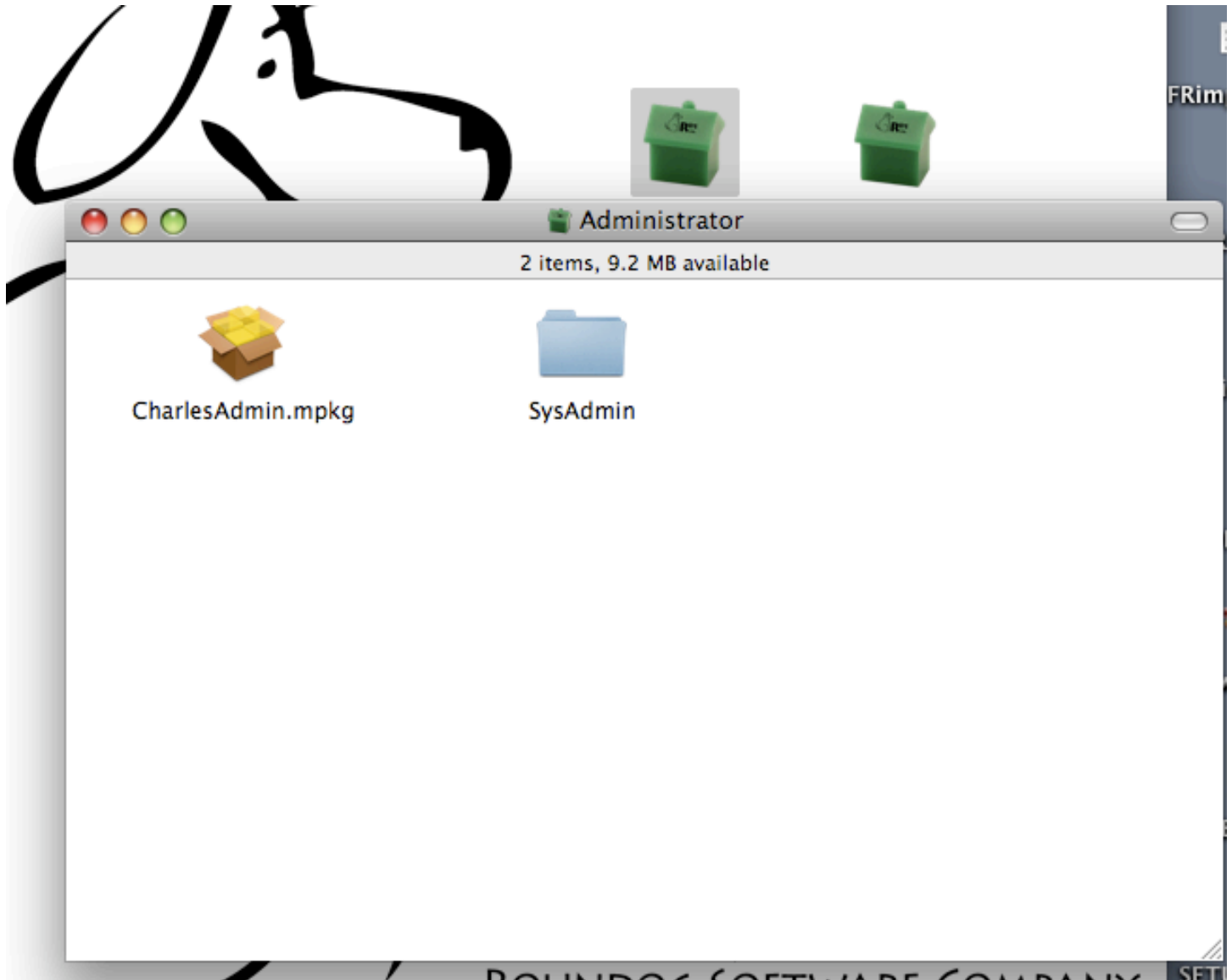

Figure 2.2 - The Administrator folder of the *Charles©* Installer Disk.

The file called CharlesAdmin.mpkg is a double-clickable installer that will place all the necessary files on your computer. This package contains the administrator version of *CHARLES*. It should be noted that the Administrator Version does not differ from the Client Version, except in the fact that the Administrator Version behaves a bit differently upon first launch due to the method *CHARLES* uses to keep your clients updated.

If you have not read the version control section of the Concepts manual, *CHARLES* maintains a copy of its code inside of your database. Each time you, or one of your users launches the program,

CHARLES rebuilds itself with the current copy of its code from your database. The Administrator Version allows you to attach to your database and place the current version of CHARLES code into your database. Once you, as administrator, are connected to your database, this will be your first job.

Once you have installed the Administrator Version, you will find it in your Applications folder. Double-click the CharlesAdmin program to start.

The first *CHARLES* window we encounter is where you enter your user name, institution name and serial number. Do this and press the OK button. (figure 2.3)
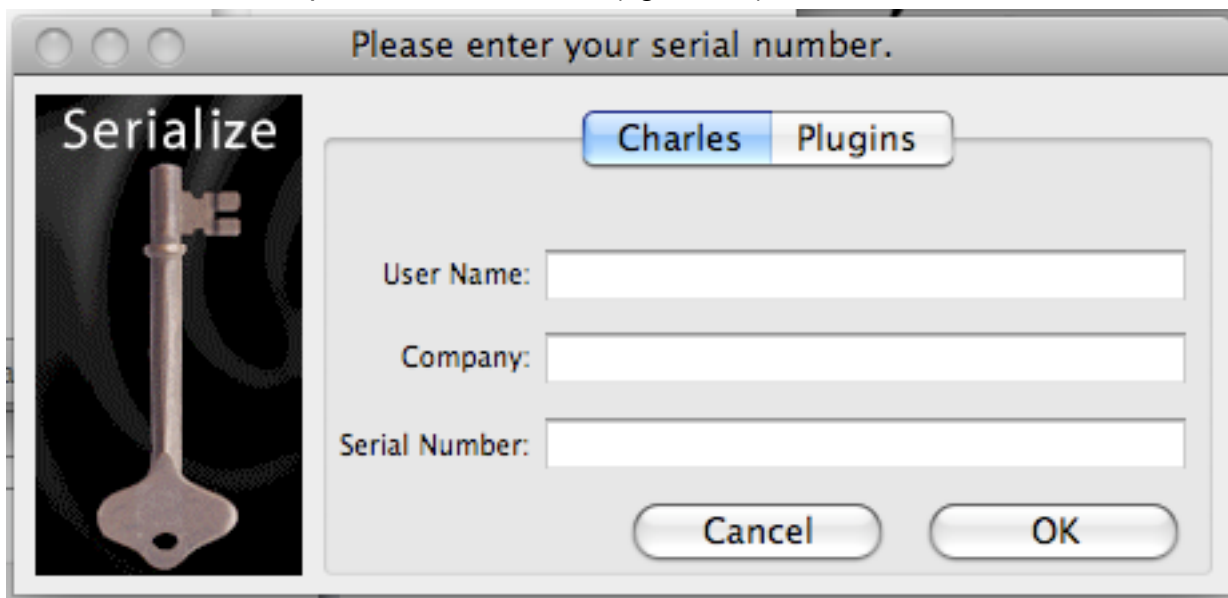

Figure 2.3 - Your name, company and serial number must be entered.

Once you have entered this information, you are warned that your system needs a directive file. The directive file is stored within your version of *CHARLES* and will point your program to your database. You create your directive file using the information you collected using table 1.1 in the prior chapter.

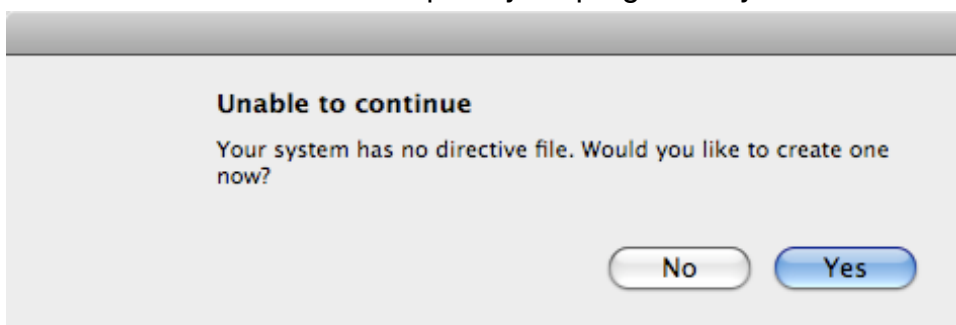Figure 2.5 shows the window into which you should enter that information.

Figure 2.4 - After entering serialization details, we need a directive file.

Once you have entered your directive information, *CHARLES* will attempt to connect to your database. If it is successful, and is connecting for the first time, *CHARLES* will create all the database tables needed to run your operation.

After creating the tables, you will be prompted to provide some information about your institution and you are on your way. The Concepts manual discusses Institution Specifics in chapter 12. The window you see is to enter your institution's specifics. At the very least, you should enter your institution's name. You will be allowed, once you've finished the setup, to return and update all of your institution's information. Please refer to the Concepts manual for further instruction.

Figure 2.5 - The information needed to create your system's directive file.

Figure 2.6 shows the Institution Specifics window for you to enter this information.

Figure 2.6 - The type of information you should enter as your institution's specifics.

Finally, you should see the main *CHARLES* working window. If you get this far, you're ready to go.

The system is configured with a default user and password. The user's name is Admin, Systems and it's user login is Admin. Therefore, the password is SyAd and you will be prompted to change it as soon as you attempt to log in. Change it to something you will remember and something that no one else knows. Otherwise, anyone who knows this password will have total access to all functions of the system.

The final step is to place copies of your programs into the change management section of Systems Administration. Once you are logged in and your password changed, you can access the functions on the left of the working window. Double-click on Systems Administration and click on Version Updates.

When you installed CharlesAdmin.mkpg, a folder was placed on your root drive called CHARLES©. In it you will find a folder called Libraries. These are the two files you must add to your Version Updates working window. (figure 2.7)
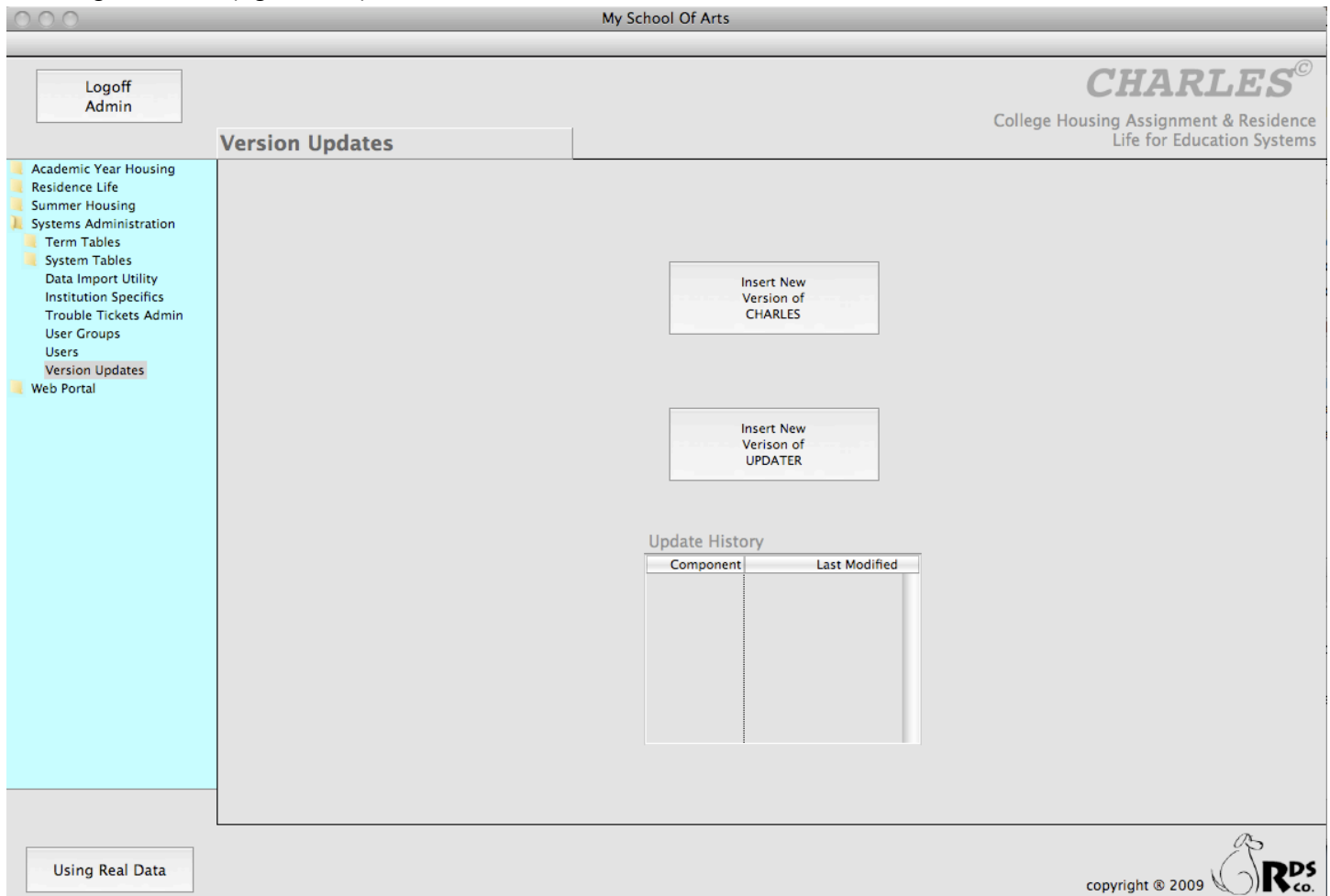

Figure 2.7 - The Version Updates working window.

There are two buttons and a list on this working window. One is to insert a new version of Charles. The other is to insert a new version of something called Updater. Charles versions are named "Charles.lbs" while updater versions are named "acopy.lbs". Click on the Charles button and you will be prompted for a file to insert. Navigate to the CHARLES©:Libraries folder and choose "Charles.lbs". You will be told whether or not the process succeeded.

Now do the same for the Updater button only, this time, select "acopy.lbs" from the same CHARLES©:Libraries folder.

You'll notice that the list will show you the updater libraries you have added to your database. (Figure 2.8)

Version Updates

Insert New
Version of
CHARLES

Insert New
Verison of
UPDATER

Update History

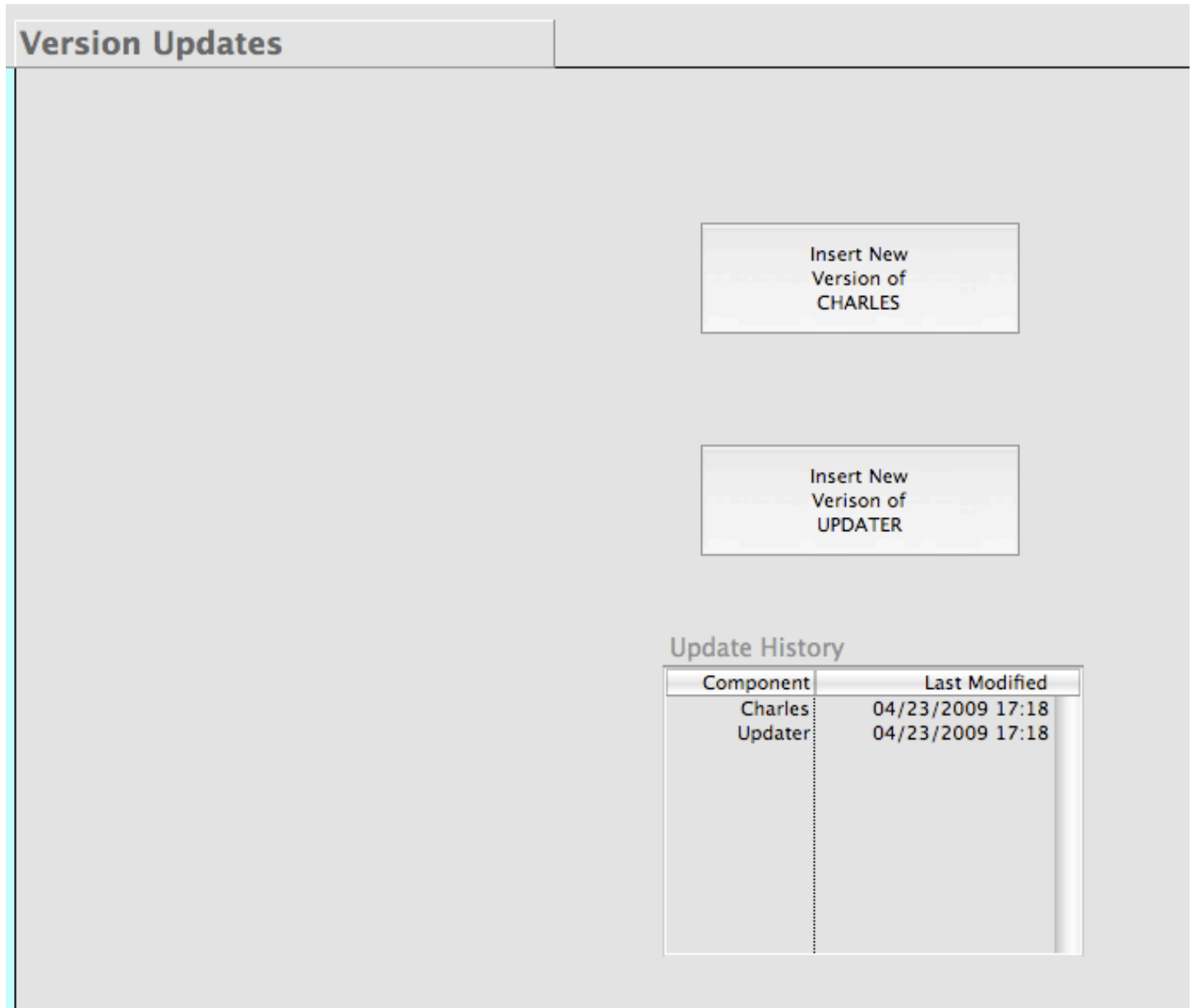| Component	Last Modified
Charles	04/23/2009 17:18
Updater	04/23/2009 17:18

Figure 2.8 - The Version Updates working window show you which components were added and when.

It may be important to point out that you may have many copies of the updaters in your database. You should know that when launching the *CHARLES* application, *CHARLES* will always refresh your local copy of both the Updater and the *CHARLES* code based upon the newest edition that exists in your database. If you have entered something in error, you need only double-click the line in the Update History list to delete it from your database. So, over time, if you wanted to go back in time to a prior version of *CHARLES*, simple double-click your way through the list until you are using the version you wanted. For maintenance purposes, you may want to delete old versions upon entry of a newer version. We leave that up to you.

Another thing we should point out here. The Admin user (out of the box) has only full access to Systems Administrator functions. In order for the Admin user to have additional access, you will need to use the User Groups functions to grant further access. While you're there, you may want to create other groups to attach all of your users to.

2.1.2 Macintosh Client Installer

The Macintosh Client installation is very much the same as that of the administrator - but is lacking in all the *CHARLES* set up functions. Basically, if you follow these instructions, your database will already be running and your clients should be able to immediately connect once they have entered their user information, serial number and completed the directive file information window. Figure 2.9 shows what is in the mounted disk image if you open the Client folder.
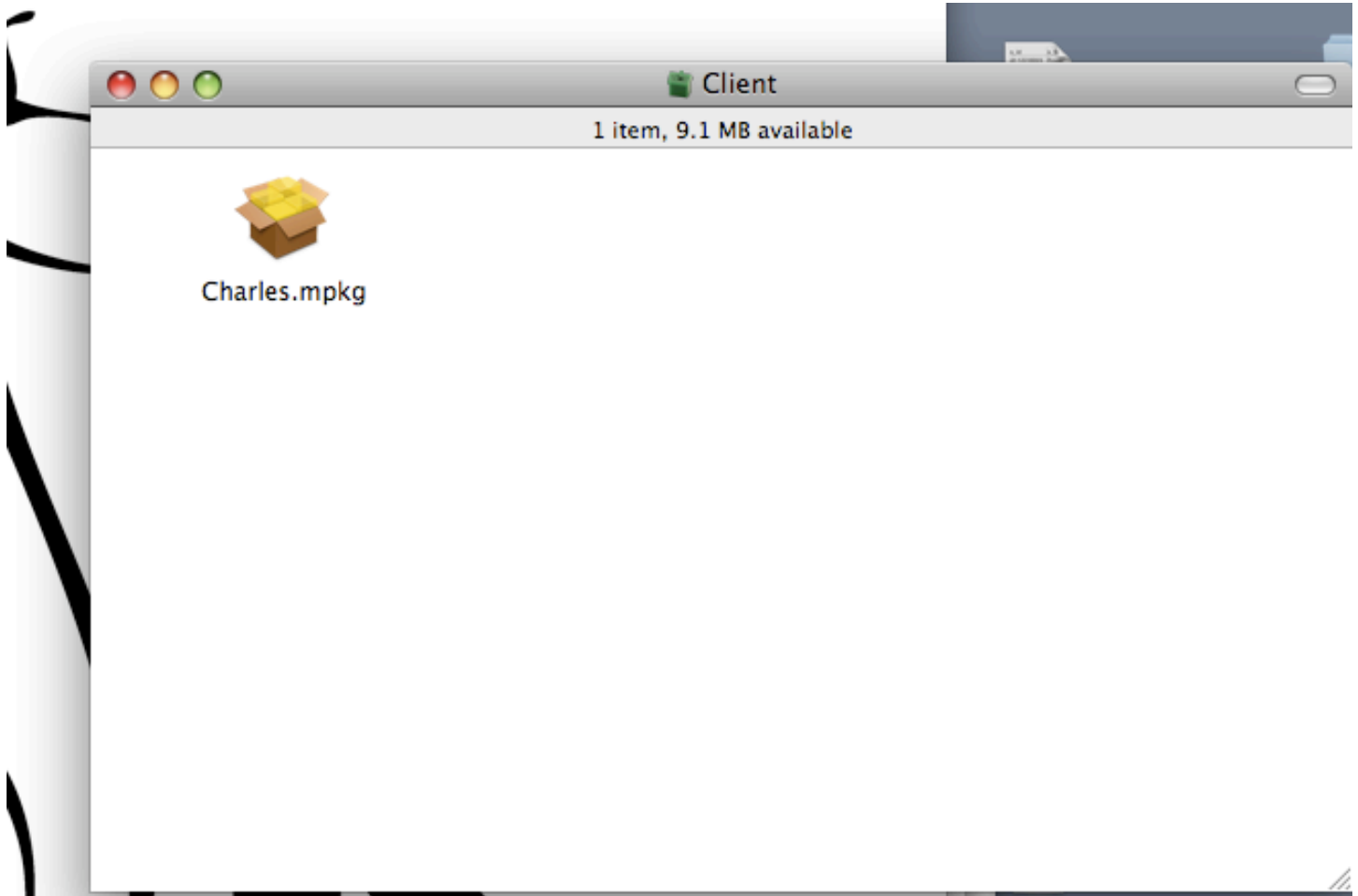

Figure 2.9 - The client folder of the install disk image.

When you double-click the Charles.mpkg, *CHARLES* will be installed into your Applications folder, and its documentation will be installed on the root of your system drive in a folder called CHARLES©.

Upon initial launch of *CHARLES*, you will be prompted for your name, institution and serial number. You will then be told that there is no directive file so you'll have to complete the Setup DB Links window we saw in figure 2.5. Once these things are done, your client will be connected to your database. Once the window appears showing your institution's name, you will know that the connection was successful. Of course, your users will need their own password to log into *CHARLES* and begin working.

2.2 WINDOWS INSTALLATION

2.1.1 Windows Administrator Installer

When you download CHARLES from our website, you will receive a folder containing two installer programs; the CharlesAdmin.msi and the Charles.msi (figure 2.10).
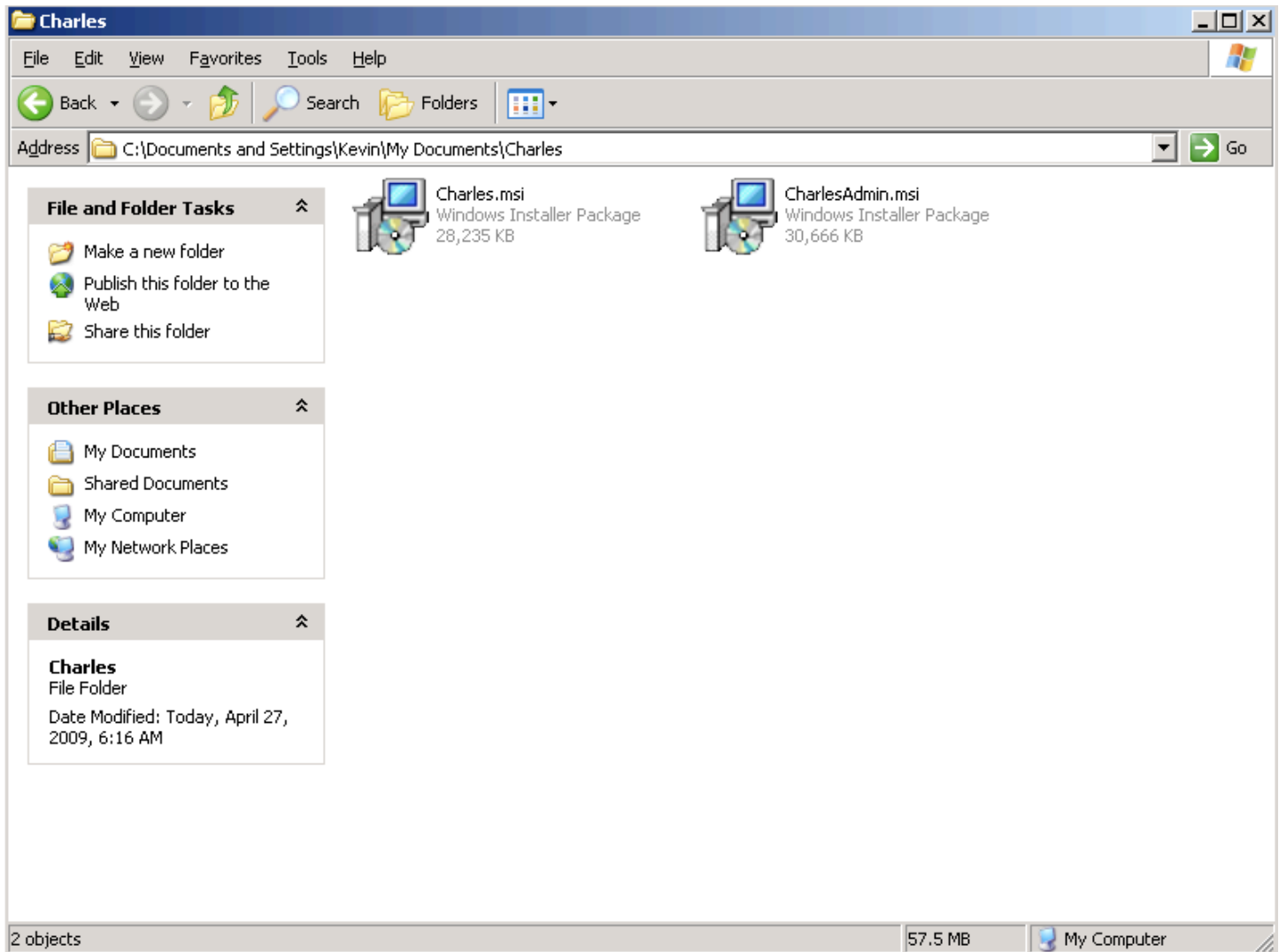

Figure 2.10 - The downloaded folder containing the two *Charles* installers.

Of course, the CharlesAdmin.msi is for the Administrator installation, leaving Charles.msi for your client installations.

If you are the administrator, and your system has not yet been set up, double-click on the CharlesAdmin.msi package. You will be guided through the installation.

It is important to note that these installer packages will suggest that you restart your Windows environment. While this is not entirely necessary for Charles to operate, there are four fonts that are installed into your Windows environment that CHARLES requires to maintain its look and feel. CHARLES will behave normally without restarting your computer - but it may not look entirely right until you restart.

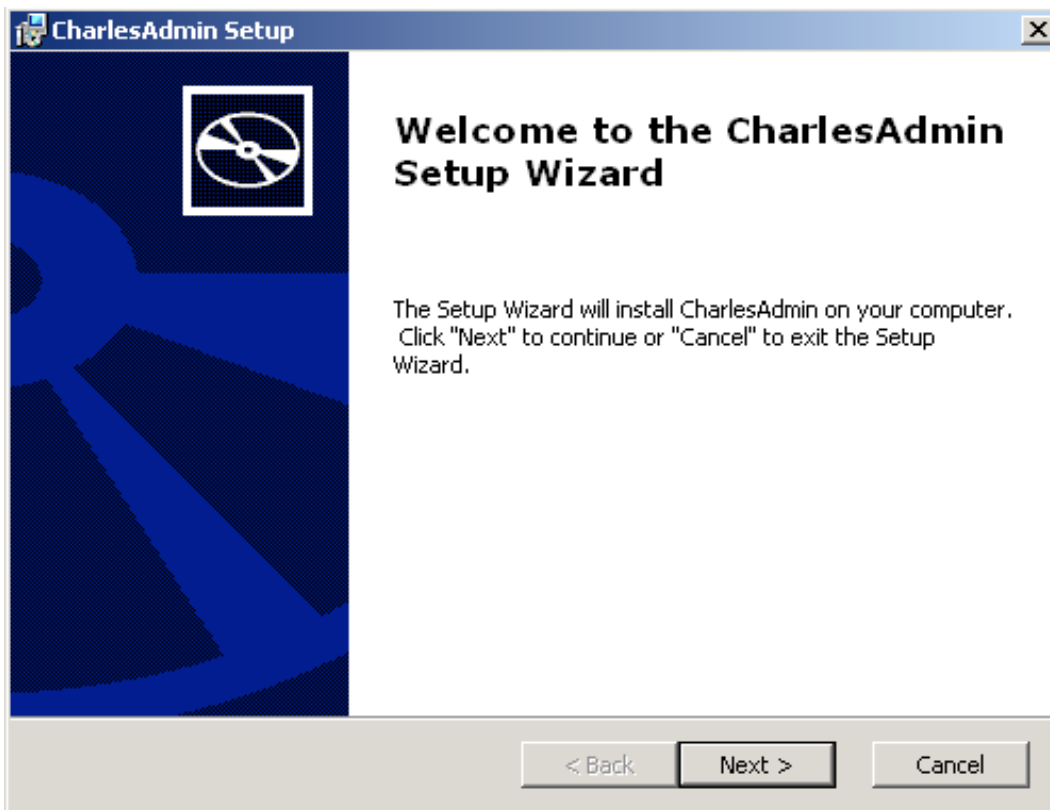Figures 2.11 through 2.14 show you the steps along the installation path.

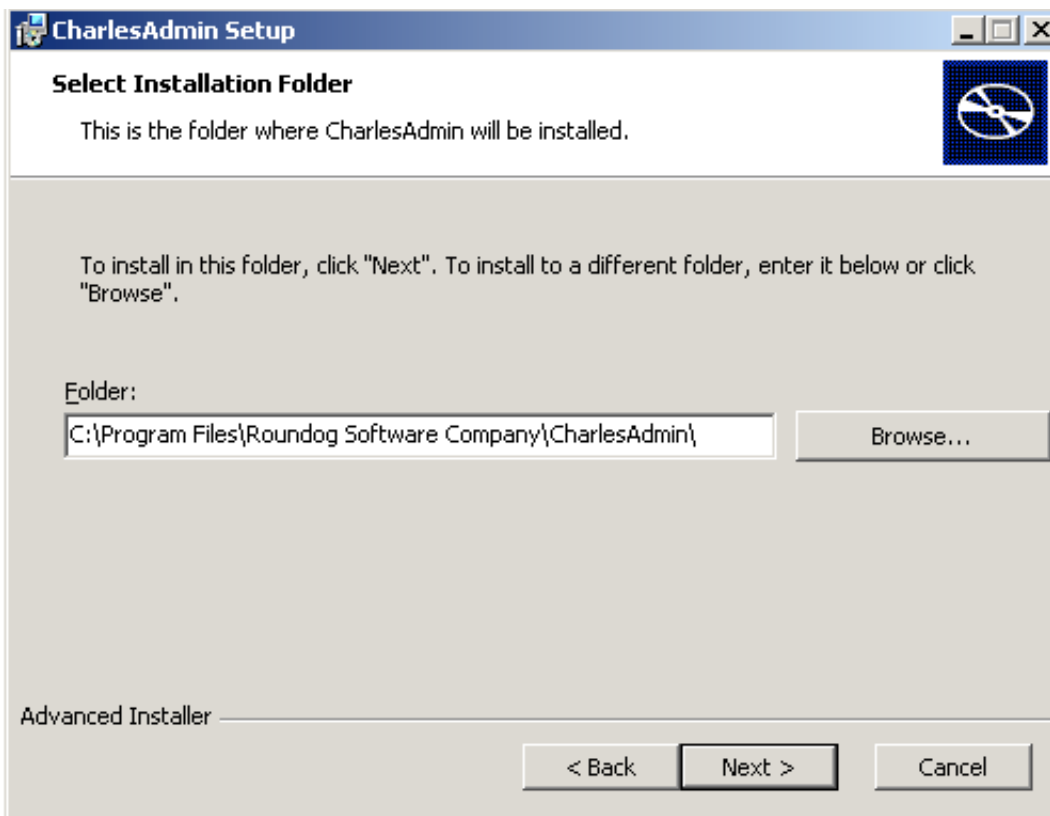Figure 2.11 - The CharlesAdmin installer process.

Figure 2.12 - The standard location on your drive for the CharlesAdmin program to reside.
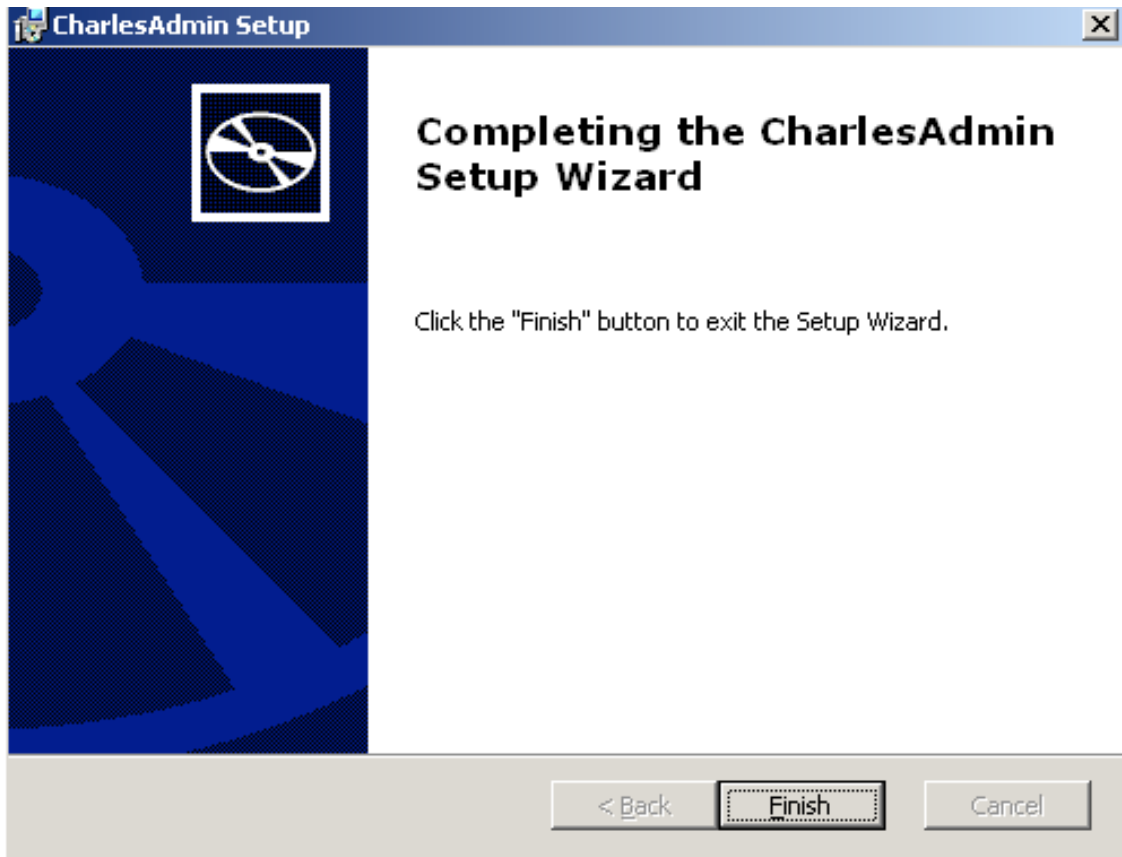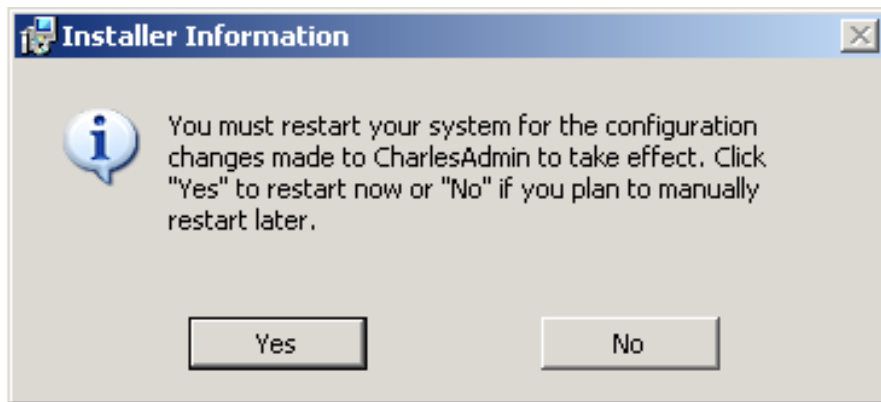
Figure 2.13 - CharlesAdmin is now installed.

Figure 2.14 - CharlesAdmin installer suggests you restart your system.

Once you have finished this process, you will find a copy of the Charles.exe program in your Start Menu and a shortcut on your desktop. The CharlesAdmin.msi package will also have installed four fonts into your fonts folder, and placed copies of the documentation into

It should be noted that the Administrator Version does not differ from the Client Version, except in the fact that the Administrator Version behaves a bit differently upon first launch due to the method *CHARLES* uses to keep your clients updated.

If you have not read the version control section of the Concepts manual, *CHARLES* maintains a copy of its code inside of your database. Each time you, or one of your users launches the program, *CHARLES* rebuilds itself with the current copy of its code from your database. The Administrator

Version allows you to attach to your database and place the current version of *CHARLES* code into your database. Once you, as administrator, are connected to your database, this will be your first job.

The first *CHARLES* window we encounter is where you enter your user name, institution name and serial number. Do this and press the OK button. (figure 2.15)
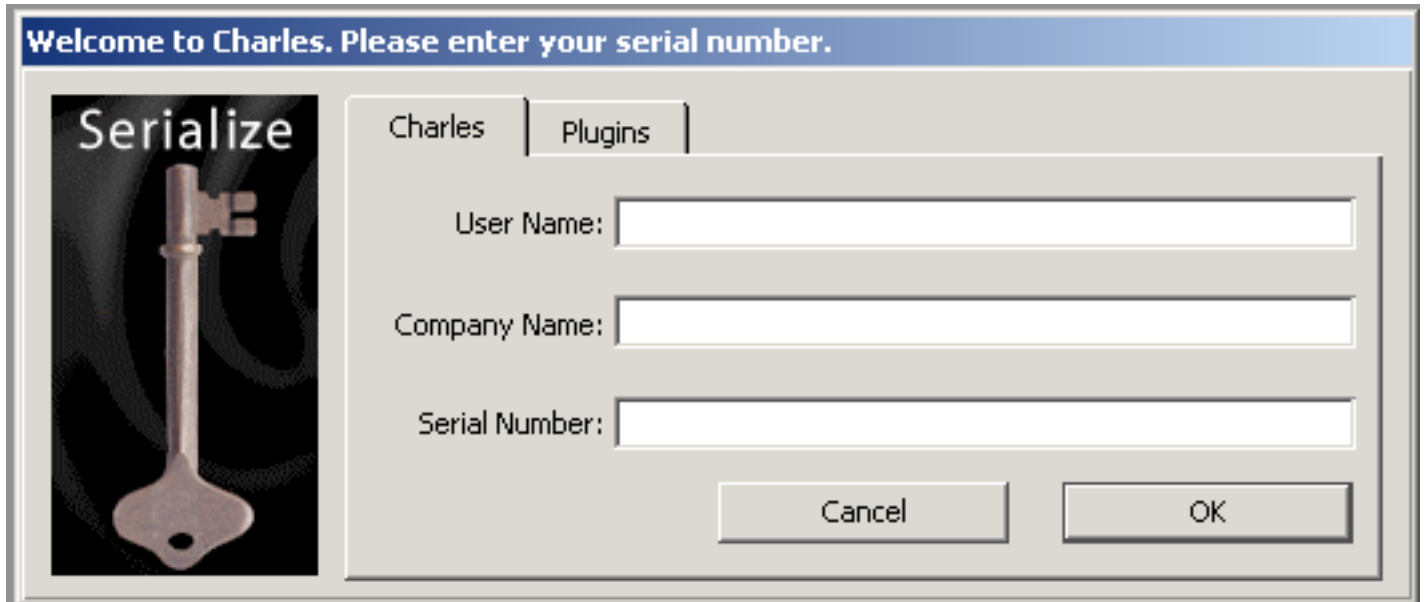

Figure 2.15 - The *CHARLES* serialization window.

Once you have entered this information, you are warned that your system needs a directive file. The directive file is stored within your version of *CHARLES* and will point your program to your database. You create your directive file using the information you collected using table 1.1 in the prior chapter.

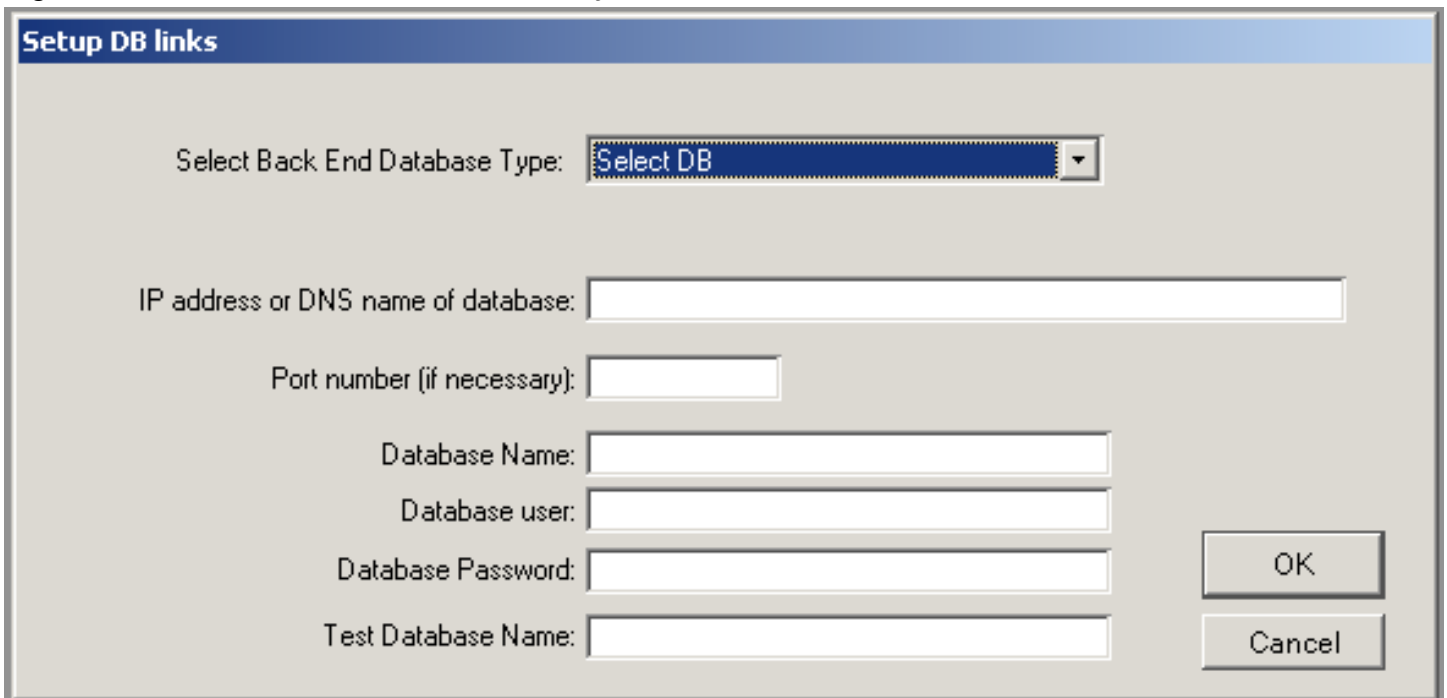Figure 2.16 shows the window into which you should enter that information.

Figure 2.16 - After entering serialization details, we need a directive file.

Once you have entered your directive information, *CHARLES* will attempt to connect to your database. If it is successful, and is connecting for the first time, *CHARLES* will create all the database tables needed to run your operation (figure 2.17).

After creating the tables, you will be prompted to provide some information about your institution and you are on your way.
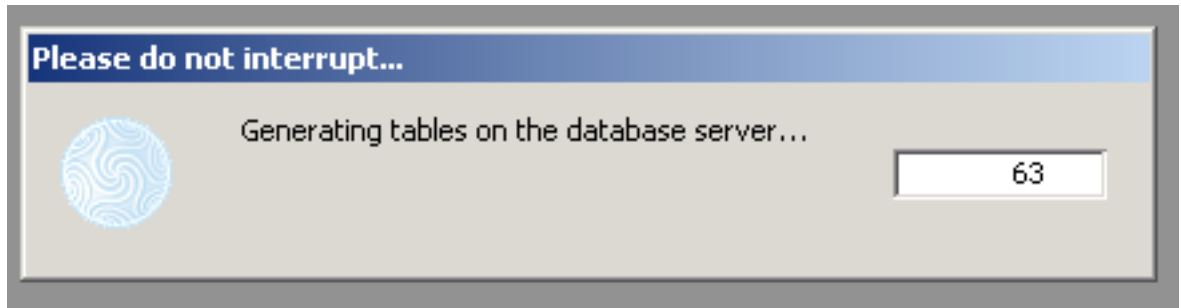

Figure 2.17 - *CHARLES* generates the necessary database tables.

The Concepts manual discusses Institution Specifics in chapter 12. The window you see is to enter your institution's specifics. At the very least, you should enter your institution's name. You will be allowed, once you've finished the setup, to return and update all of your institution's information. Please refer to the Concepts manual for further instruction.

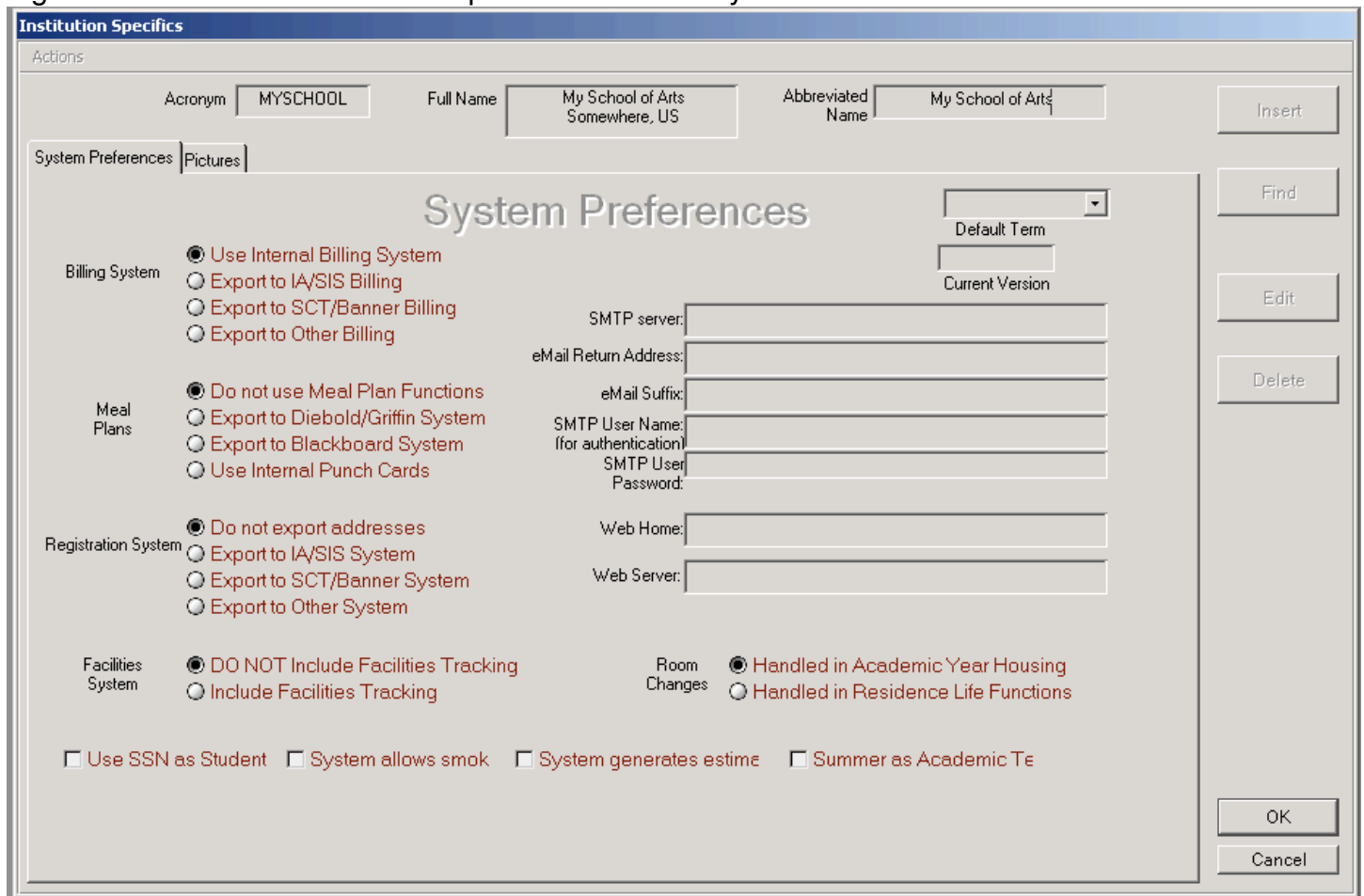Figure 2.18 shows the Institution Specifics window for you to enter this information.

Figure 2.18 - The type of information you should enter as your institution's specifics.

Finally, you should see the main *CHARLES* working window. If you get this far, you're ready to go.

The system is configured with a default user and password. The user's name is Admin, Systems and it's user login is Admin. Therefore, the password is SyAd and you will be prompted to change it as soon as you attempt to log in. Change it to something you will remember and something that no one else knows. Otherwise, anyone who knows this password will have total access to all functions of the system.

The final step is to place copies of your programs into the change management section of Systems Administration. Once you are logged in and your password changed, you can access the functions on the left of the working window. Double-click on Systems Administration and click on Version Updates.

When you installed CharlesAdmin.msi, a folder was placed in your Documents folder called Charles Libraries. In it you will find two files. These are the two files you must add to your Version Updates working window. (figure 2.19)
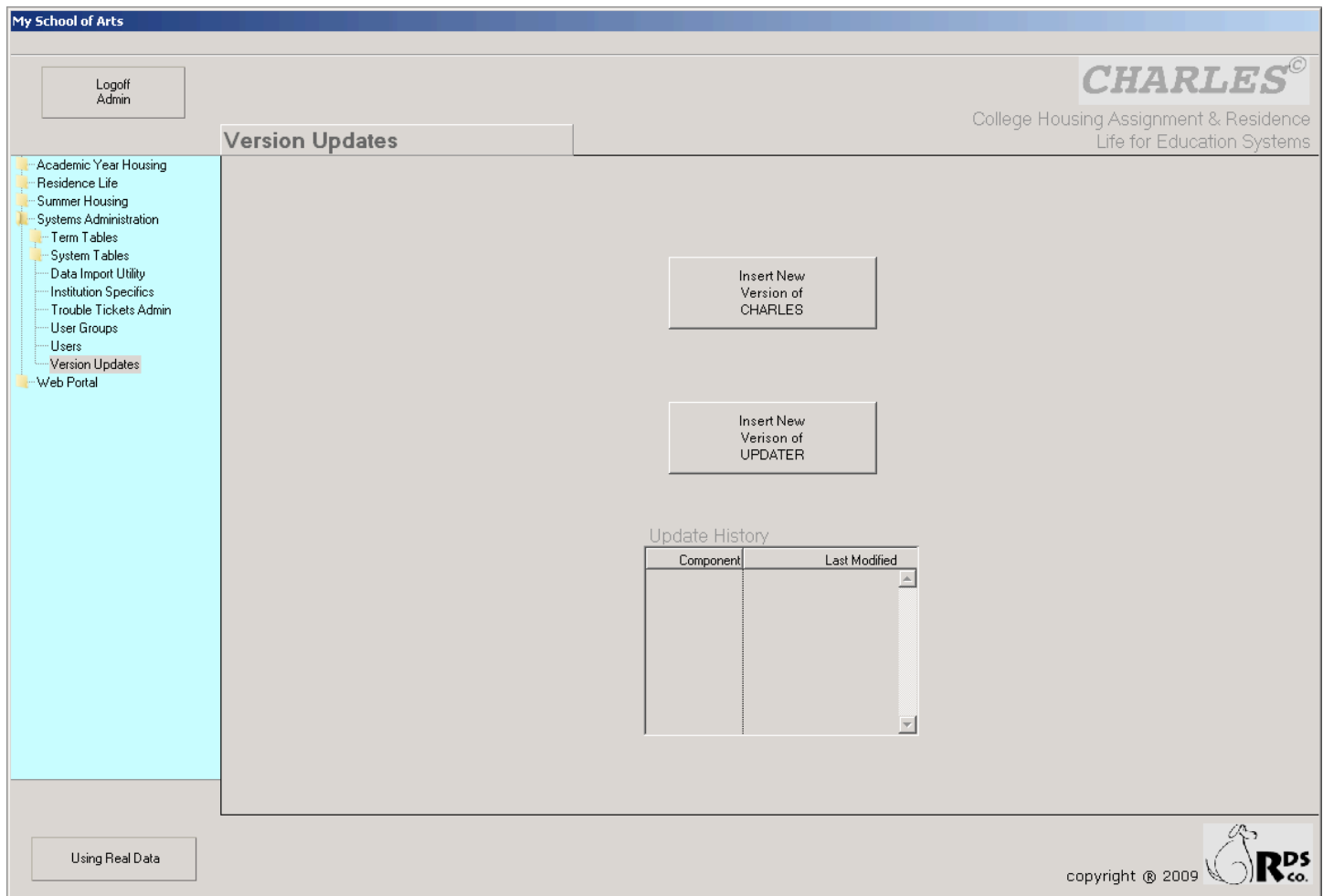

Figure 2.19 - The Version Updates working window.

There are two buttons and a list on this working window. One is to insert a new version of Charles. The other is to insert a new version of something called Updater. Charles versions are named "Charles.lbs" while updater versions are named "acopy.lbs". Click on the Charles button and you will be prompted for a file to insert. Navigate to the Charles Libraries folder and choose "Charles.lbs". You will be told whether or not the process succeeded.

Now do the same for the Updater button only, this time, select "acopy.lbs" from the same Charles Libraries folder.

You'll notice that the list will show you the updater libraries you have added to your database. (Figure 2.20)
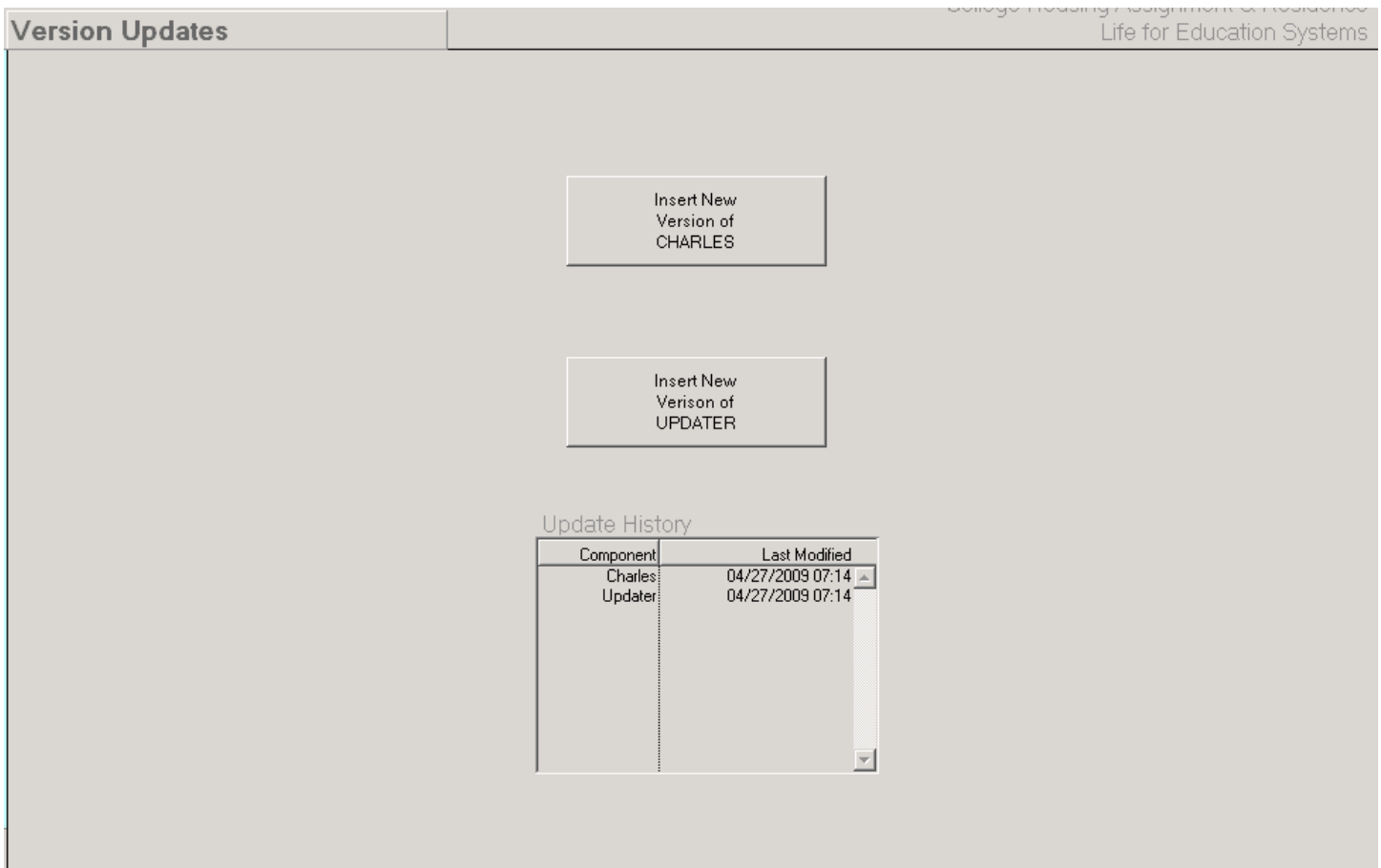

Figure 2.20 - The Version Updates working window show you which components were added and when.

It may be important to point out that you may have many copies of the updaters in your database. You should know that when launching the *CHARLES* application, *CHARLES* will always refresh your local copy of both the Updater and the *CHARLES* code based upon the newest edition that exists in your database. If you have entered something in error, you need only double-click the line in the Update History list to delete it from your database. So, over time, if you wanted to go back in time to a prior version of *CHARLES*, simple double-click your way through the list until you are using the version you wanted. For maintenance purposes, you may want to delete old versions upon entry of a newer version. We leave that up to you.

2.2.2 Windows Client Installer

The Windows Client installation is very much the same as that of the administrator - but is lacking in all the *CHARLES* set up functions. Basically, if you follow these instructions, your database will already be running and your clients should be able to immediately connect once they have entered their user information, serial number and completed the directive file information window.

When you double-click the Charles.msi, *CHARLES* will be installed into your Programs folder, and its documentation will be installed in your documents folder in a folder called Charles Documentation.

Upon initial launch of *CHARLES*, you will be prompted for your name, institution and serial number. You will then be told that there is no directive file so you'll have to complete the Setup DB Links

window we saw in figure 2.16. Once these things are done, your client will be connected to your database. Once the window appears showing your institution's name, you will know that the connection was successful. Of course, your users will need their own password to log into *CHARLES* and begin working.