Installing Archie Manually
Without an Installation Program

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1. Check out the Server

The first thing you have to do is to check out the server, typically you want to determine 3 thngs:

- a. Is it a Windows NT or Windows 2000 server?
- b. Does it have IIS installed (If not can we install it or should we use Apache?)
- c. Is the regional date setting OK?

Make a not of the answers to these questions as you will need to refer back to them later on. This is how you find the answers:

1.1 Is it a Windows NT or Windows 2000 server?

This is quite easy to determine, typically you can just hit F1 on the desktop.

The help screen that pops up will tell you what version of Windows is running on the server (See illustration on the right of a Windows 2000 help screen..

1.2 Does it have IIS installed (If not can we install it or should we use Apache?)

Normally, all web servers in a large organization will be running Internet Information Services (IIS). This is the normal Microsoft HTTP (or Web) server software.
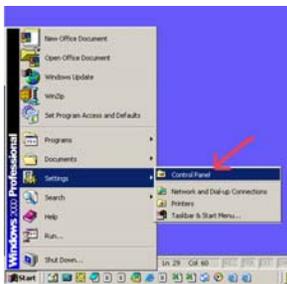
To determine is a server has IIS installed and running, click on the "START" button at the bottom left of the screen, then select "settings", then click on "Control Panel".

The Control Panel will be displayed.

Now click on "Administrative Tools", the "Administrative Tools" screen will appear.

If you can see the "Internet Services Manager" icon on this screen, it means that IIS is installed on the server.

If IIS is not installed on the server, you should ask the Server Administrator to install it. Alternatively, you can install Apache, which is a freeware HTTP server and the Apache install is included on your CD.

To install Apache see point 2 ("Installing your HTTP server") in this document.

1.3 Is the regional date setting OK?

For Archi to properly interpret dates, the Regional Date setting on your server needs to be either YYYY/MM/DD.

To set this setting do the following:

1. Go to your "Control Panel" (see point 1.2). On the Control Panel, double-click on the "Regional Options" icon.

2. The "Regional Options" screen will be displayed, click on the "Date" tab at the top of the screen, and change the "Shot Date Format" and "Long Date Format" as shown in the example on the right.

3. Click on the "Apply" button, then click on the "OK" button, the window will disappear.
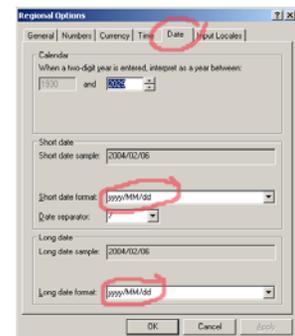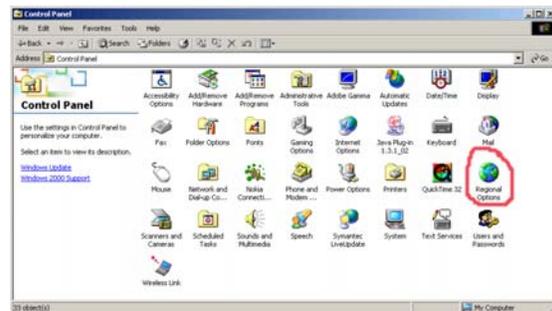
2. Installing your HTTP server

If you have determined that there is no HTTP server on the destination machine, you should now install the HTTP server. At this stage you should already know whether you want to install IIS or Apache.

2.1 Installing IIS

Before you start installing IIS, you should make sure that you have the original Windows 2000 or Windows NT CD handy, as you will be asked for it during the install process.

To install IIS, navigate to the "Control Panel" (see point 1.2 in this document), then double-click on the "Add/Remove Programs" icon on the Control Panel window.

The Add/Remove Programs screen will be displayed. On the Left (Vertically), you will notice a number of buttons, click on the "Add/Remove Windows Components" button.

The "Windows Components Wizard" dialog will be displayed, check the "Internet information Services (IIS)" checkbox and click on the "Next" button. Then follow the wizard and accept all defaults.

You will probably be requested to re-boot the server before the installation is completed.

Once you have completed the whole installation, navigate to the 'Control Panel' again, and double-click on the "Internet Services Manager" icon (see point 1.2 in this document). The "Internet Information Services" screen will be displayed.
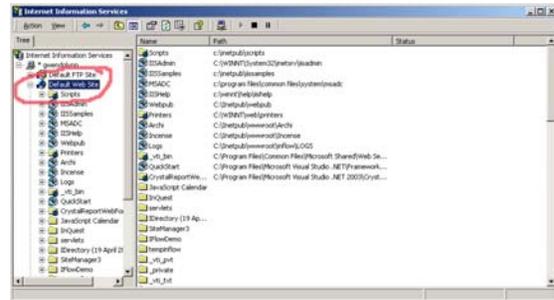
Make sure the "Default Web Site" is running, right-click on it and select 'Properties" from the pop-up menu. The "Default Web Site Properties" window will appear. Click on the "Home Directory" tab and write down the "Local Path".

Usually it will be something like "C:\inetpub\wwwroot". This is your web root *and **is very important*** in subsequent installation steps.

OK, now go to "2.3 Testing your HTTP server" for instructions on how to test whether your IIS installation was successful or not.

2.2 Installing Apache

To install Apache, locate the "apache_1_3_12_win32.exe" file under the "\Installation Files\Apache\" directory of your Archi Installation CD.

Double-click on this file to start the installation. Accept all default settings during the installation process. You will not be asked to re-boot your server.

Once you have completed the installation, locate the "\Installation Files\Apache\conf\" directory on your Archi Installation CD, copy this entire directory from the CD to the "C:\Program Files\Apache Group\Apache\" directory on the server such that the existing "conf" directory on the server including all its files are overwritten by those on the CD.

Now click on the "Start" button at the bottom-left of the screen, then select "Programs" from the menu, then select "Apache Web Server", then select "Start Apache".
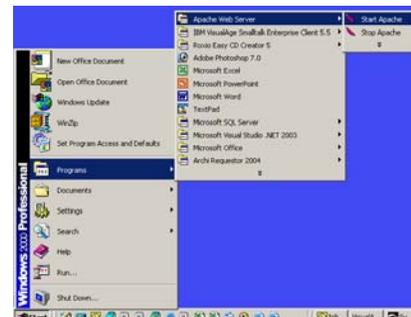
This will start the Apache HTTP server and you will notice the following screen. Don't close this screen as that will stop the HTTP server.
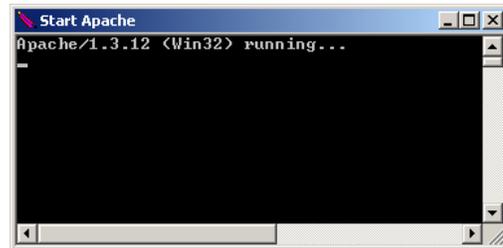
If you have accepted all the default settings during your installation, your web root will now be the "C:\Program Files\Apache Group\Apache\htdocs\" directory on the server. Confirm that this directory exists and make a note of the directory.

This is your web root *and **is very important*** in subsequent installation steps.

OK, now go to "2.3 Testing your HTTP server" for instructions on how to test whether your IIS installation was successful or not.

2.3 Testing your HTTP server

Copy a file called "HTTPTest.html" from the "Installation Files\HTTPTest\" directory of your Archi Installation CD to your web root (for example "C:\inetpub\wwwroot", or "c:\Program Files\Apache Group\Apache\htdocs") determined in 2.1 or 2.2 of this document.

Now open Internet Explorer and type http://localhost/HTTPTest.html in the address field and hit "enter". If your browser displays the same details as illustrated on the right, you have a working HTTP server!!

3. Copy Archi to the server

Once you have successfully completed step one and two, you are now ready to copy all the Archi files to the server.

Locate a directory called "\Installation Files\Archi" on your Archi Installation CD, copy the entire directory into your web root.

Your web root is the directory determined in step 2, but generally it would be "C:\inetpub\wwwroot" for IIS or "C:\Program Files\Apache Group\Apache\htdocs" for Apache.

Once you have copied all your files, you should have a directory structure on the Server that looks as follows:

For IIS:
- Inetpub
  - AdminScripts
  - catalog.wci
  - ftproot
  - iissamples
  - mailroot
  - Scripts
  - webpub
  - wwwroot
    - _private
    - _vti_cnf
    - _vti_log
    - _vti_pvt
    - _vti_script
    - _vti_txt
    - Archi
      - CompDir
      - Content
      - Databases
      - Documents
      - Export
      - Graphics
        - System
      - help
      - js
        - emotion
        - imgedit
        - uploads
      - Temp
      - Templates

For Apache:
- Program Files
  - Accessories
  - Adaptec
  - Adobe
  - Apache Group
    - Apache
      - bin
      - cgi-bin
      - conf
      - htdocs
        - Archi
          - CompDir
          - Content
          - Databases
          - Documents
          - Export
          - Graphics
            - System
          - help
          - js
            - emotion
            - imgedit
            - uploads
          - Temp
          - Templates

4. Check HTTP Server (IIS only)

If you are using Apache, you can skip this step, but unfortunately for the IIS users, there is still some work to do to ensure that IIS will work correctly.

First you must navigate to your "Internet Information Services" screen (see 1.2 in this document).

Once you have this screen displayed, open up the tree browser on the left completely. Right-click on the "Default web Site" item and select "New" and "Virtual Directory".
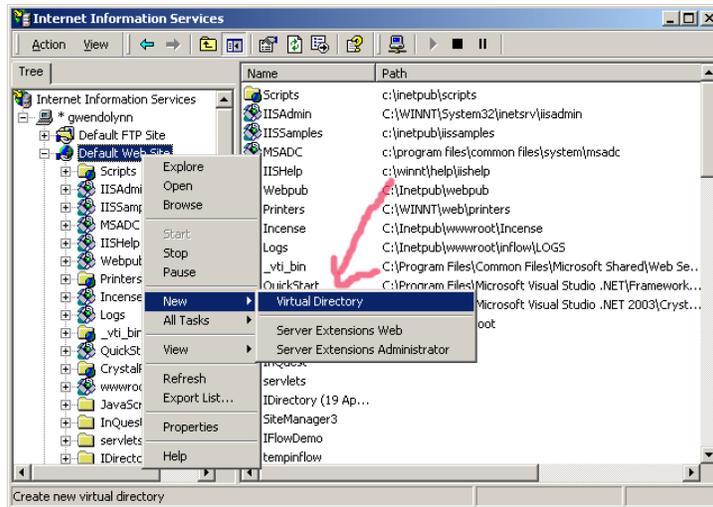
Create a new virtual directory as displayed in the illustrations below:
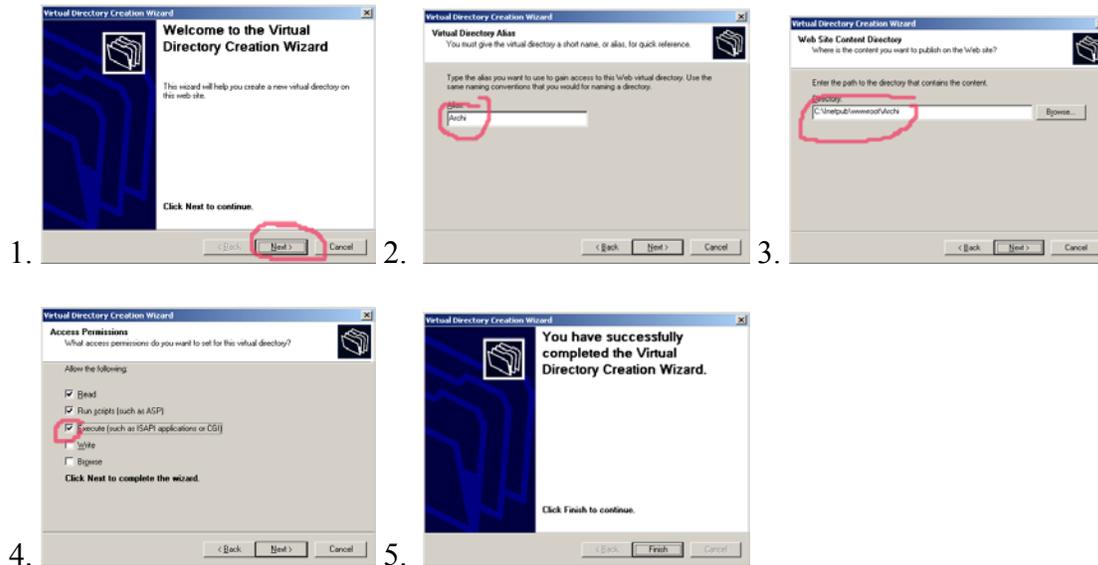
OK, that's it for IIS, your HTTP server is now configured and ready for action!

5. Create Database

Before we can start using Archi, we have to make sure that we have a Database to connect to. The Archi installation CD contains an Access Database, a Backup of a SQL server 2000 database, PLUS SQL scripts for creating a database for non-SQL 2000 DBMS's.

Follow the instructions in this section for the database you want to install:

5.1 Access DB

If you have copied all the Archi files to the server, the Access database should already be there under the "..\Archi\Databases\" directory. The actual file is called "Archi.mdb".

You will notice there is also another database file called ArchiVirgin2_3_12.mdb. This is a clean database backup just in case it is needed as some later stage.

Foe Access, the only thing you have to do is ensure that the read-only property of the Archi.mdb file is off. Do do this, right-click on the file and select 'Properties" from the pop-up menu. When the "Properties" screen appears, make sure the "Read-Only" checkbox at the bottom of the screen is not checked, then click on "Apply" and "OK".

5.2 SQL Server DB

If you are installing a SQL server database, the destination machine (database server) may be a different machine from the web server (where you copied the Archi files). This is OK and the installation doesn't change as long as you perform step 5 on the Database Server and ALL the other steps on the Web Server.

The SQL server installation varies depending on whether you are installing on SQL Server 2000 or another version of SQL server.

5.2.1 SQL Server 2000

This is the simplest SQL database installation, there is a SQL Server 2000 backup of the Archi Database on the Archi Installation CD (in the "\Installation Files\Archi\Databases\" directory. The file is called "ArchiSQL2000".

All you have to do to install this database is to restore the file in SQL Server by following these instructions:

First Open "Sql Server Enterprise Manager" from your Windows Start Menu. Connect to the desired SQL Server machine.

Now click on the "Tools" menu at the top of the screen and select "Restore Database".

The "Restore Database" dialog will be displayed, change the "Restore as database" field value to "Archi", and select the "From device" radio button, then click on the "Select Devices" button.
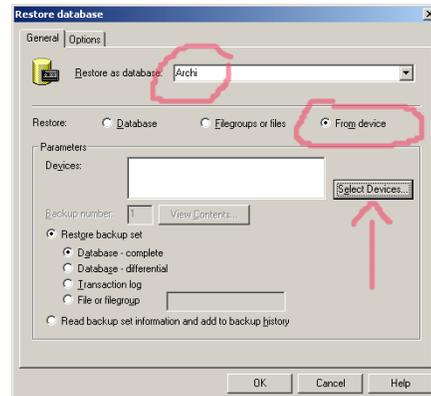
The "Choose Restore Devices" dialog will be displayed, click on the "Add" button.
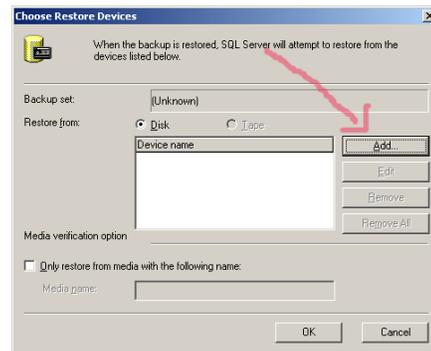
The "Choose Restore Destination" dialog will be displayed, click on the "browse" button (i.e. "…").

Now navigate to the "ArchiSQL2000" file in the "\Installation Files\Archi\Databases" directory of your Archi Installation CD and click on the "OK" button.
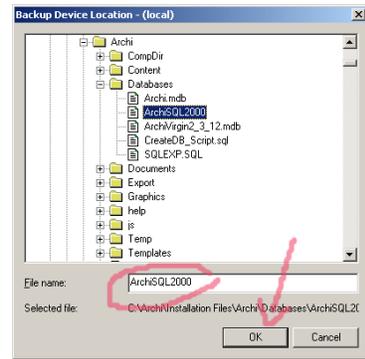
The files location will be displayed on the "Choose Restore Destination" dialog, click on the "OK" button to close this dialog, then close the "Choose Restore Devices" dialog by clicking on that "OK" button.
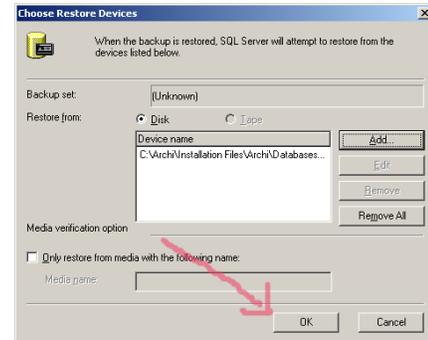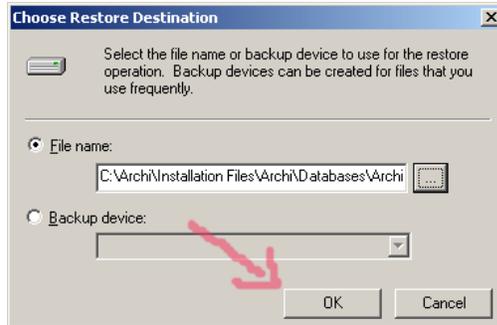
When you are returned to the "Restore database" dialog, click on the "Options" tag and make sure the destination file paths are correct for that server, then click on the "OK" button.
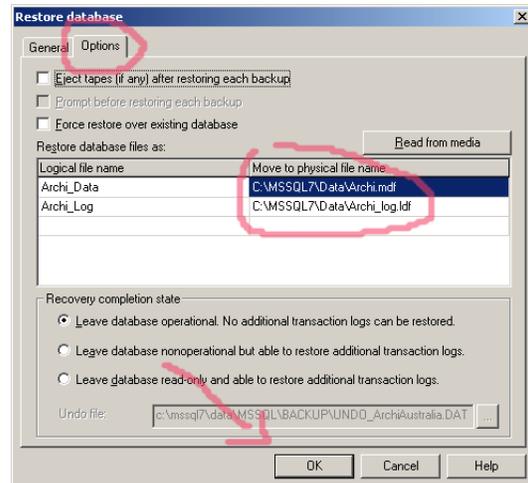
Once the restore has completed successfully, the following message will pop up.
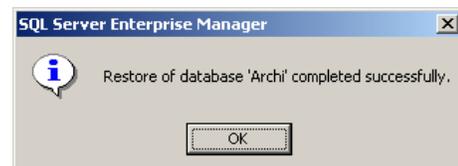
5.2.2 SQL Server (Other)

In order to create an Archi database for a non SQL 2000 database server, you need to run two SQL script files, both these files are located in the "\Installation Files\Archi\Databases\" directory of your Archi Installation CD.

First Open "Sql Server Enterprise Manager" from your Windows Start Menu. Connect to the desired SQL Server machine.

Now click on the "Tools" menu at the top of the screen and select "SQL Query Analyser". This will launch the "SQL Query Analyser" program, which will already be connected to the desired database server.

Make sure you are pointing to the "Master" database. Now select "File" and "Open" from the top menu, navigate to the "CreateDB_Script.sql" file in the "\Installation Files\Archi\Databases\" directory of your Archi Installation CD and click "Open".

Once the file is open I n your SQL Query Analyser window, select "Query" and "Execute" from the menu at the top. This will cause the script to be executed.

The script will now create a new database on the relevant server called "Archi". Once it is completed, make sure the "Master" in the dropdown box at the top of the screen (See above illustration) has changed to "Archi", if it hasn't changed automatically, do so manually.

Now select "File" and "Open" from the top menu, navigate to the "SQLEXP.sql" file in the "\Installation Files\Archi\Databases\" directory of your Archi Installation CD and click "Open".

Once the file is open I n your SQL Query Analyser window, select "Query" and "Execute" from the menu at the top. This will cause the script to be executed.

The script will now populate the Archi database with all the data needed for Archi to run.

When the script has executed successfully, you may close the "SQl Query Analyser" program.

6. Create DSN

In order for Archi to connect to your database, you need to create a DSN by following these steps:

Navigate to "Data Sources (ODBC)" under "Administrative Tools" in your "Control Panel". If you are unsure about how to do this, see point 1.2 in this document.

The "ODBC Data Source Administrator" window will be displayed. **Make sure you click on the "System DSN" tag** first, then click on the "ADD" button.
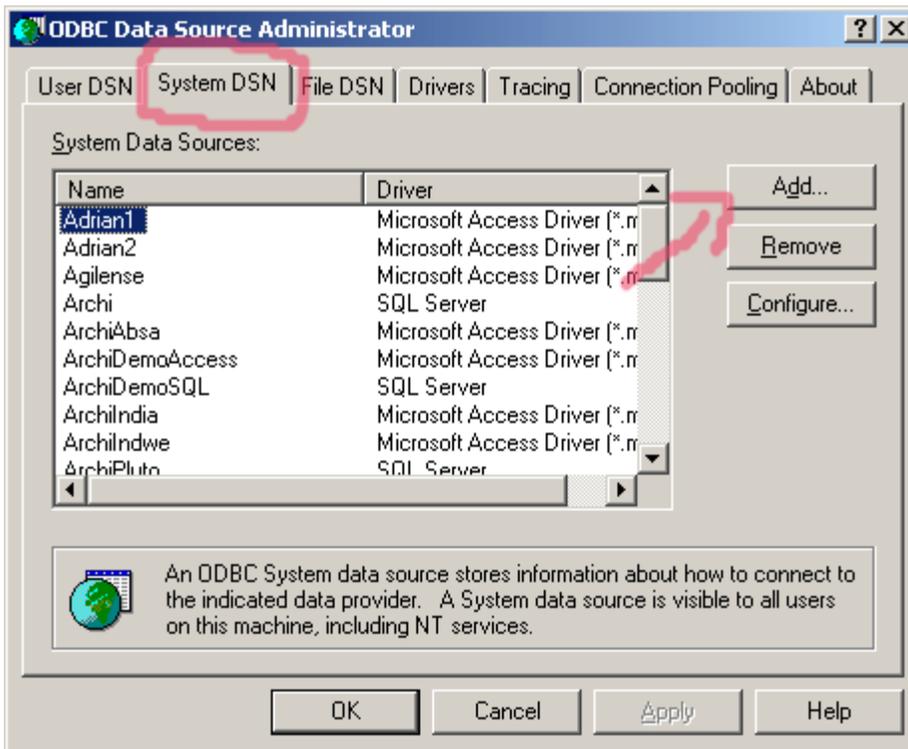
If you are going to use an Access Database, follow the steps in 6.1 from here. If you are going to use a SQL Server database, follow the steps in 6.2 from here….

6.1 Create an Access DSN

In step 6, once you have clicked on the "Add" button of the "ODBC Data Source Administrator" screen, the "Create New Data Source" screen will appear, select "Microsoft Access Driver (*.mdb)" from the list on this screen and **double-click** on it.
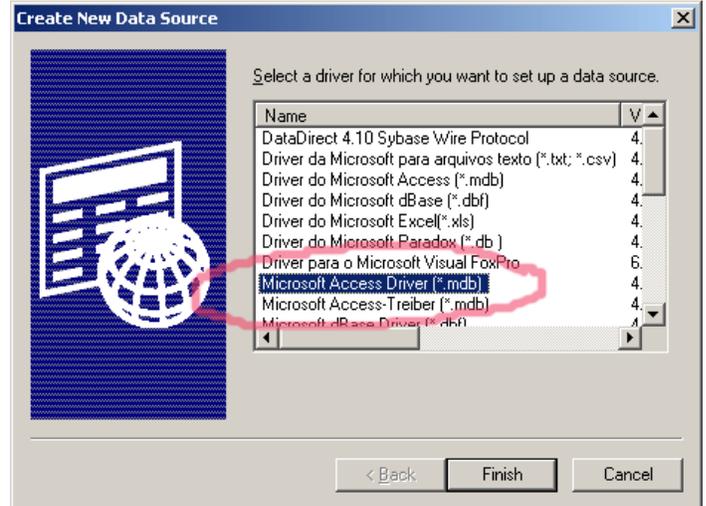
The "ODBC Microsoft Access Setup" screen will be displayed. Type the word "Archi" in both the "Data Source Name" and "Description" fields, then click on the "Select" button.

Navigate to the "Archi.mdb" file on your web server, select the file and click on the "OK" button.
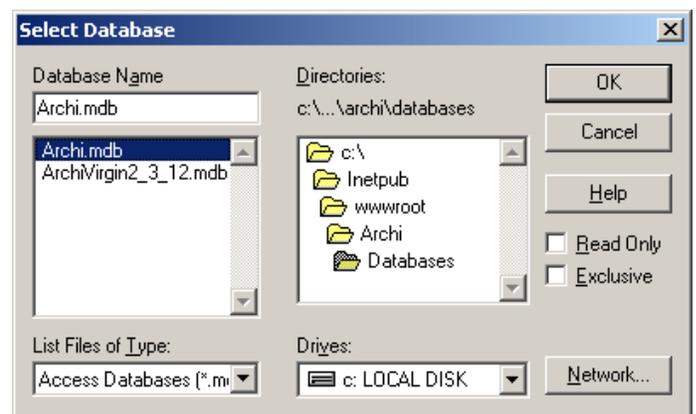
Now click "OK" or "Finish" until all screens have disappeared, you have successfully created your DSN.

6.2 Create a SQL Server DSN

In step 6, once you have clicked on the "Add" button of the "ODBC Data Source Administrator" screen, the "Create New Data Source" screen will appear, select "SQL Server" from the list on this screen and **double-click** on
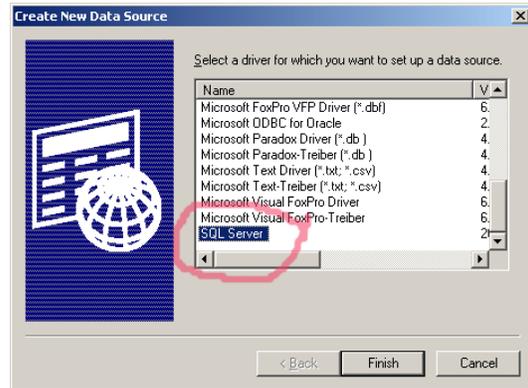
The "Create a New Data Source to SQL Server" screen will be displayed, change the "Name" and "Description" fields to "Archi", select the correct Server from the drop-down box and click on the "Next" button.
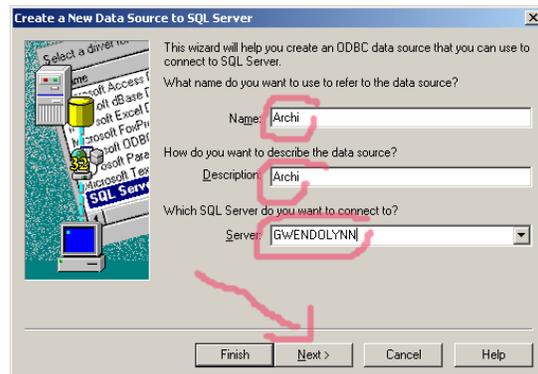
Now click on the "With SQL Server authentication" radio button, and type in the Logon ID ("ArchiUser") and Password ("ArchiUser").

Please note these are case sensitive. Now click on the "Next" button.
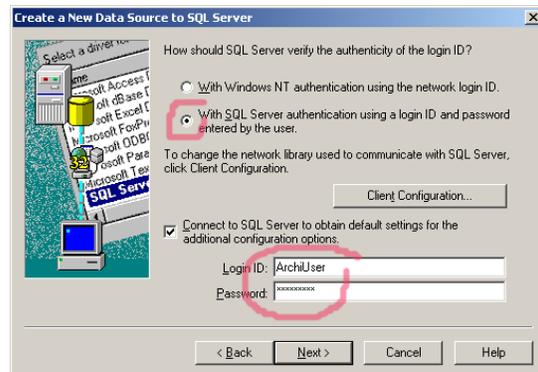
Now make sure that the "Change default database" checkbox is on and the Drop-down points to the "Archi" database.

Then click the "Next" button….
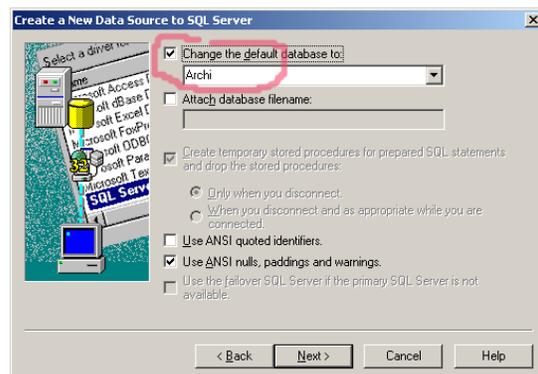
On this screen, just ensure is looks like the image to the right, but all defaults should look like this, click on the "Finish" button.
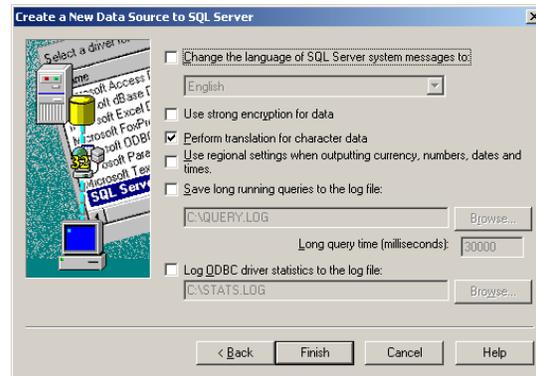
A summary screen will now be shown, click on the "Test" button. If everything went OK, you will see the "TESTS COMPLETED SUCCESSFULLY" dialog on the right….
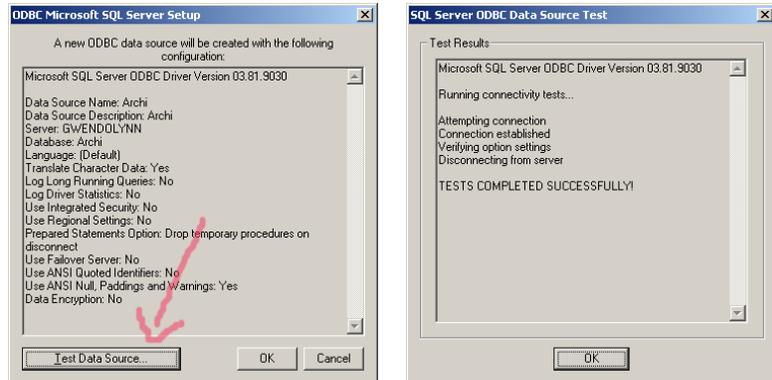
7. Test Archi

Congratulations! You have now put everything in place for Archi to work successfully.

We now come to the crucial part of our installation where we have to decide whether to install Archi as a Windows service or not.

Should you wish to have Archi as a service, simply execute the steps in point 8 in this document. But in the meantime, let's just run Archi as a normal app and test to see if it really works.

1. First create a shortcut to Archi on the desktop, to do this copy either the "Archi (Apache)" or the "Archi (IIS)" shortcut from the "\Installation Files\ShortCuts\" directory on the Archi Installation CD to the server desktop.
2. Now right-click on the shortcut and select 'Properties" from the pop-up menu, make sure that your web root (determined in step 2) agrees with the path on this screen in both the "Target" and "Start in" fields
3. If you are running Apache, make sure it is running (see 2.2 in this doc).
4. Now double-click on the Archi Shortcut, this will start the Archi Server Program (Illustrated Below)
5. Wait until it says "Done Activating Data Store" (about 1 minute). This means Archi has started up , connected to the Database (via your DSN) and loaded all the information from there it needs to run.
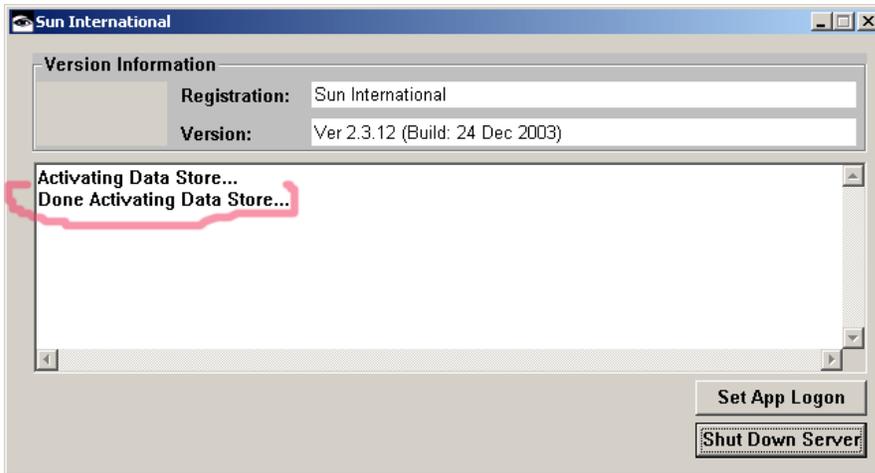
1. Now Start a web browser and type http://localhost/Archi/ABTWSAC.EXE/Archie into the "Address" field and hit "Enter".
2. If the browser displays the logon screen (below), you have successfully installed Archi thus far, now you simply need to follow steps 8 and 9 to complete your installation. (Step 7 if you want to install Archi as a service).
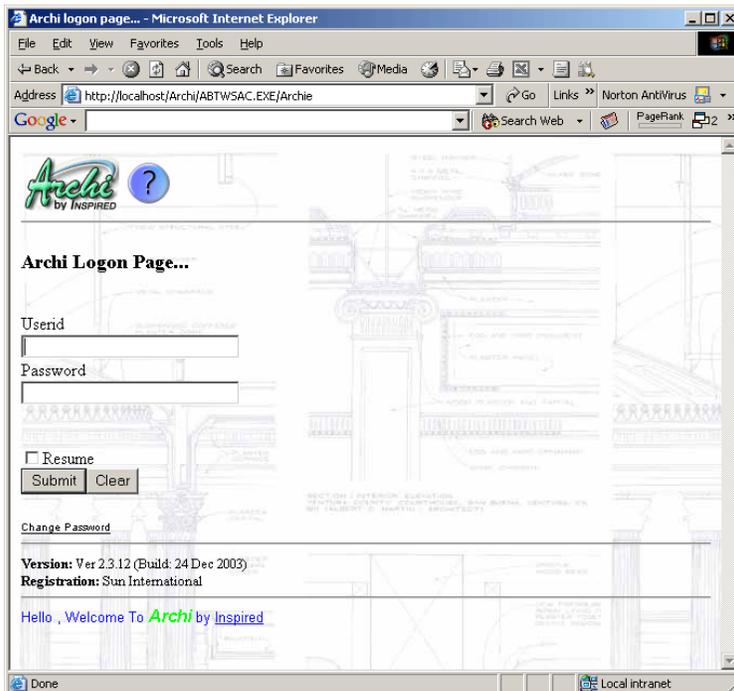
8. Create Archi Service

1. Set the Windows system Path

The first step is to set the Windows System Path so that Windows will be able to find all the Smalltalk DLL's and other necessary executables.

1. Open the "Control Panel"
2. Double-Click on the "System" icon. The "System Properties" window is displayed.
3. Click on the "Advanced" tag.
4. Click on the "Environment Variables" button, the "Environment Variables" dialog is displayed.
5. Locate and click on the "Path" variable in the list at the bottom of the dialog, the "Edit System Variable" dialog is displayed.
6. Add the Archi root directory to the existing path (e.g. ";C:\Program Files\Apache Group\Apache\htdocs;"). It is important to note that paths are separated by semi-colons.
7. Click "OK" until all dialogs are closed. Your path is now set.

2. Re-localize your .ini file
Although the Archi service is started within the Archi root directory, it will only recognize .ini files in your WINNT\SYSTEM32\ directory, you must therefore copy the "Archi.INI" file into the WINNT\SYSTEM32\ directory.

3. Install the service
You are now ready to install your service, please note that I am assuming (for the sake of simplicity an IIS installation with an Archi Root Directory of "C:\inetpub\wwwroot\Archi", if you are using Apache, you may want to use "C:\Program Files\Apache Group\Apache\htdocs" instead:

1. At a MS-DOS command prompt(running CMD.EXE), type the following command:

   C:\inetpub\wwwroot\Archi \INSTSRV.EXE Archi C:\inetpub\wwwroot\Archi \SRVANY.EXE

2. Run Registry Editor (Regedt32.exe)and locate the following subkey:

   HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Archi

3. From the Edit menu, click Add Key. Type the following and click OK:

Key Name: Parameters
Class : <leave blank>

4. Select the Parameters key.

5. From the Edit menu, click Add Value. Type the following and click OK:

    Value Name: Application
    Data Type : REG_SZ

    When you click on "OK", enter the following value for this parameter:

    C:\inetpub\wwwroot\Archi\Archie2WebApp.EXE

6. Close Registry Editor.

4. Start the service

The Archi service is now installed and can be started by going into "Control Panel", then into "Administrative Tools" and double-clicking on "Services". Then right-click on the "Archi" service and select "Start".

By default, the "Startup Type" will be set to "Automatic" and the "Logon" to "Local System Account". This is fine if you want Archi to start every time the system is booted up. To change these settings, right-click on the 'Archi" service and select "Properties".

9. Change Bulk Settings

In order to complete the installation, we have to tell Archi about its new environment. Essentially we have to tell it two things:

1. The logical path to Archi and all its directories (for example, the logical path to google is http://www.google.com). It is the address you have to type in if you are accessing that web site from another machine. For a company this could be something like http://<<servername>>/Archi
2. The physical path to Archi and all its directories. This is simply the actual file path (e.g. "C:\inetpub\wwwroot\Archi\" or IIS users, or "C:\Program Files\Apache Group\Apache\htdocs\Archi\" for Apache users)

So first we log on to Archi (using the http://localhost….) address we used in step 7. Use "Administrator" for a Userid and "Archie" for a password. Watch out because they are case sensitive…

Once you are logged on, click on the Archi Logo at the top left of the screen, the following main manu will be displayed….
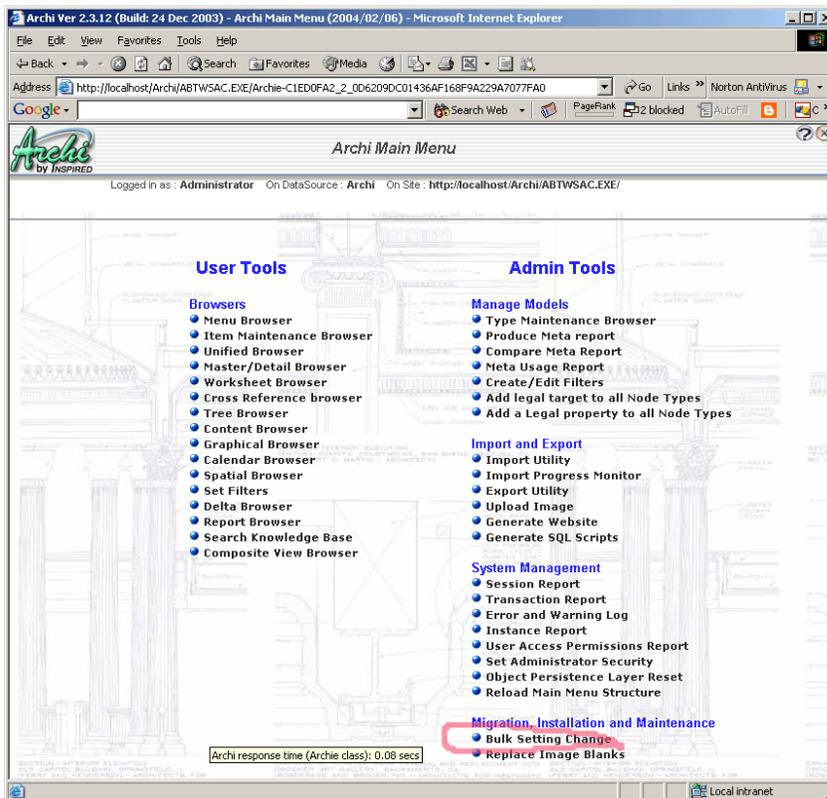
Now click on "Bulk Settings Change", the following screen will be displayed…..

On this screen, type "http://localhost/" into the "Change Values From" field and type your new logical address in the "change values to" field and then click on "Submit Query".

Once that query is done, type "c:\inetpub\wwwroot\Archi" into the "Change Values From" field and type your new physical address (if it differs) into the "change values to" field and then click on "Submit Query"
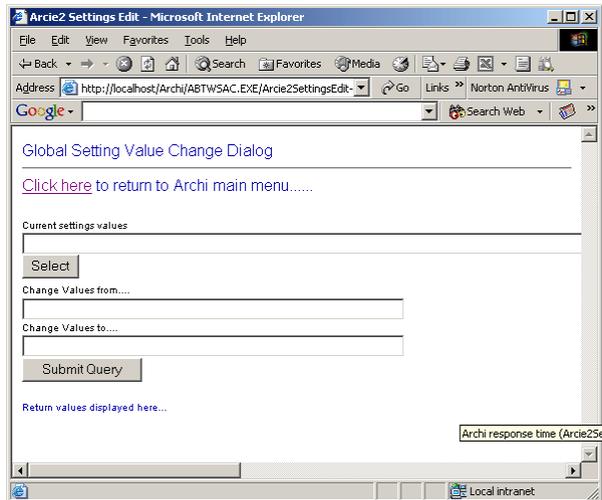
10. Test Archi (Final)

You have now finally completed your Archi install, now you must test whether you can access Archi from a machine other than the web server:

1. Re-start Archi
2. Go to another machine and open a web browser.
3. Type the new logical Archi address (probably http://<<servername>>/Archi/ABTWSAC.EXE/Archie) into the "Address" field of the browser and hit enter.
4. If you see the Archi logon screen, you are done!!!