CFMX 7.01 Installation Screen Snapshots
by Steve Seaquist

This is a companion paper to my article "CFMX 7.01 for Mac OS X", published in the Washington Apple Pi Journal. It took a while to produce this paper, because I didn't want to uninstall ColdFusion, just so I could get the first-time-ever installation screens. (Basically, it had to wait until my sister let me run the installer on her iMac.)

As mentioned in the previous article, you're going to be running several servers, and that takes up some memory. So installing CFMX is not something you should enter into lightly with an underpowered computer or too little memory. Presumably, if you read that in the previous article and moved on to read this paper, you've made up your mind that you want to run ColdFusion and that your computer can handle it.

Again, my advice is to turn **on** the Web Server before you begin this installation, in case it helps the installer find it.

That said, let's dive into it, shall we?
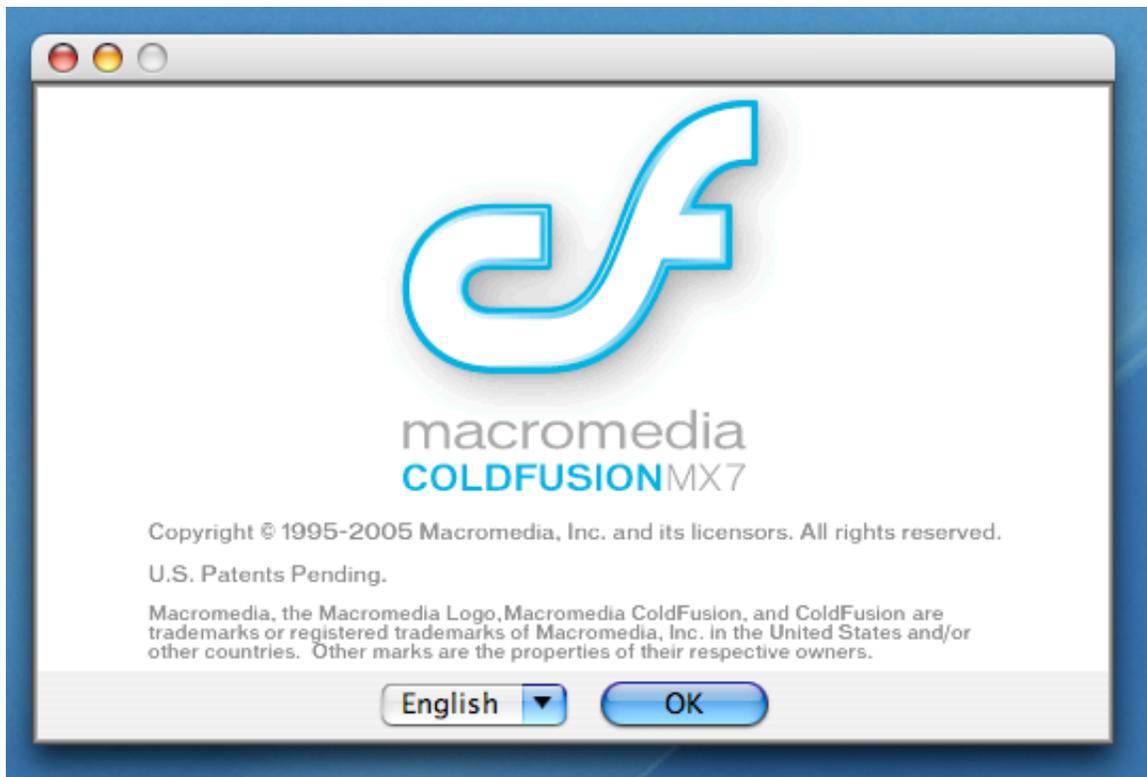
This screen is pretty self-explanatory. You can install in other languages.
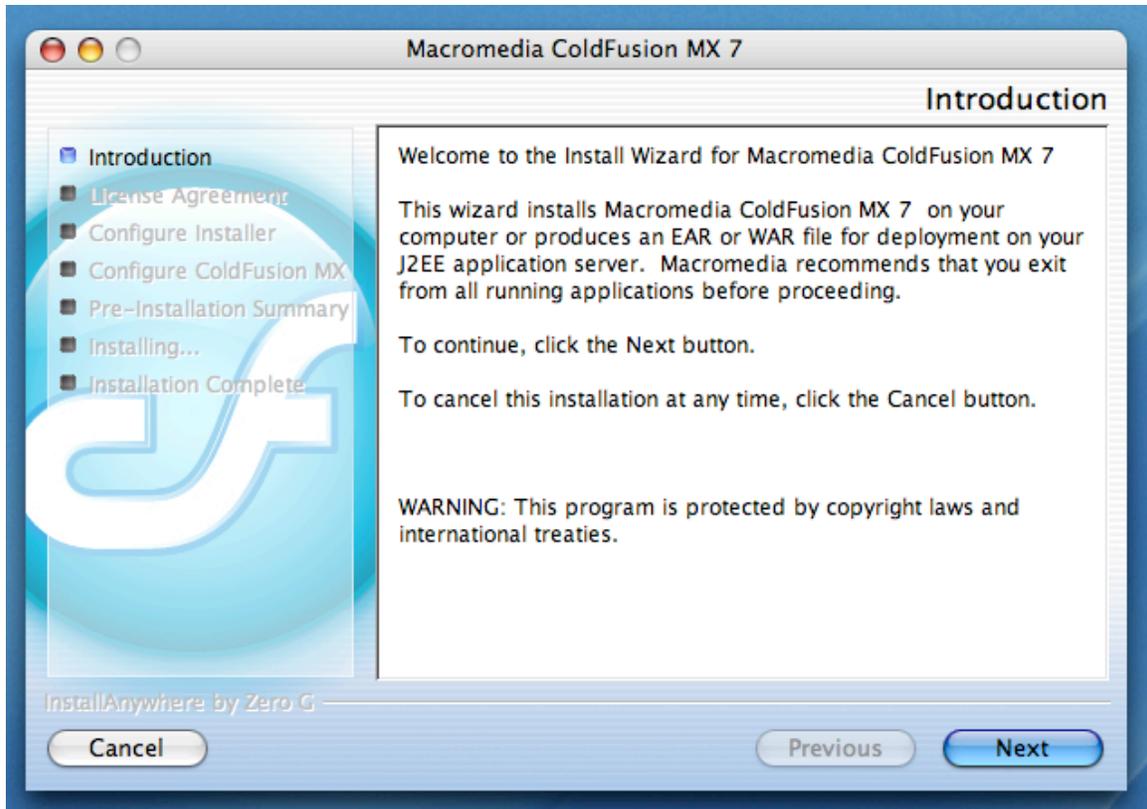
Again, pretty self-explanatory. Next or Cancel, check. Got it.
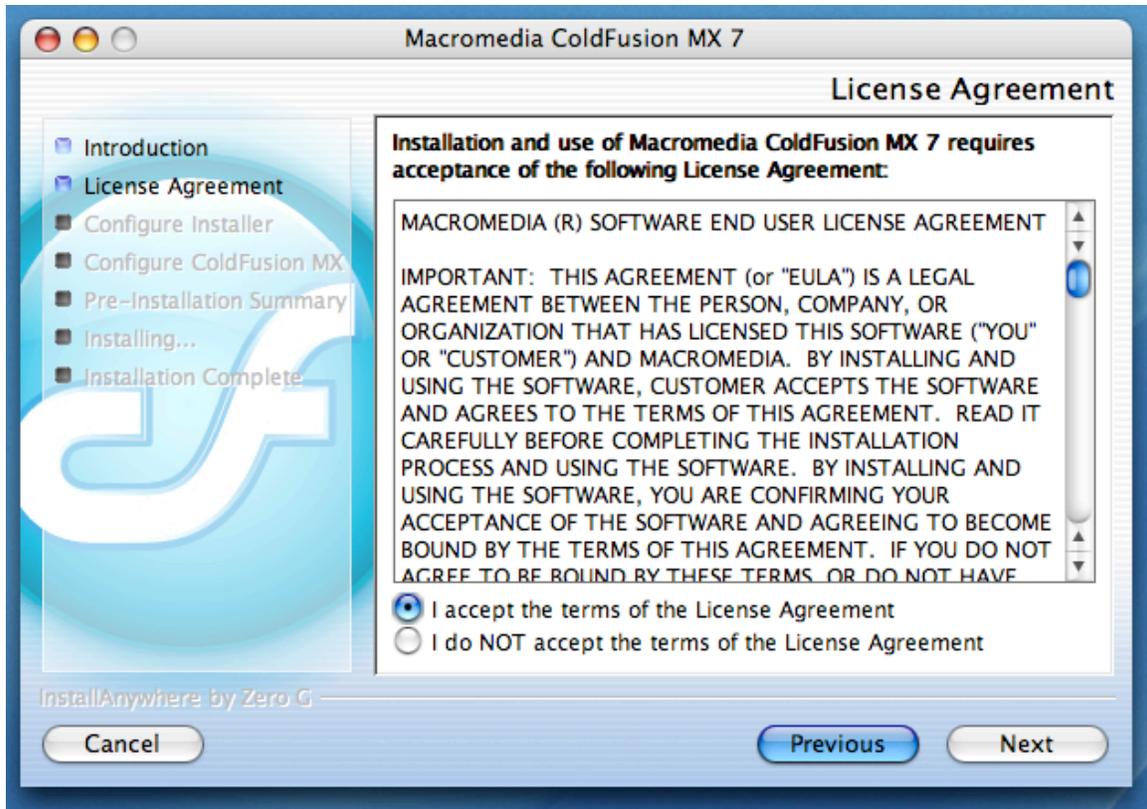
Not much to get excited about so far…
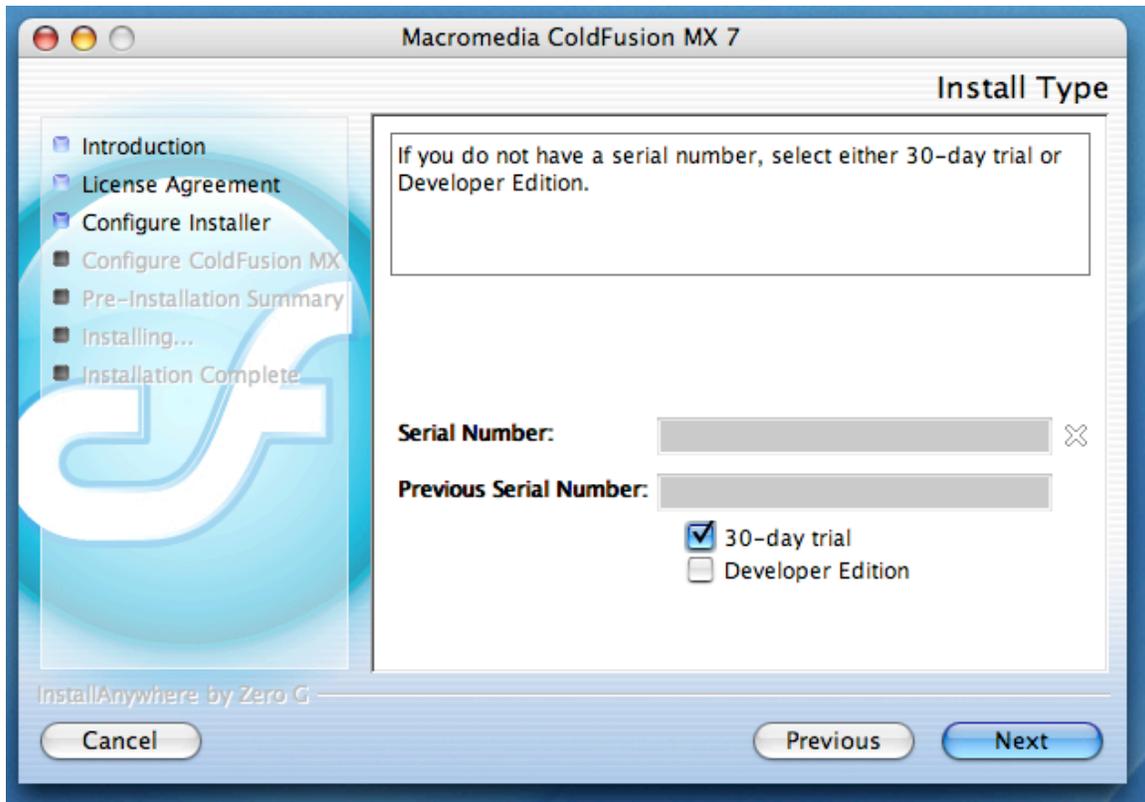
Ah, at last, something to comment on.

Given that this was the first-ever release of CFMX to directly support the Mac, you won't have a Previous Serial Number to qualify for upgrade pricing, obviously.

As explained in CFMX 7.01 for Mac OS X, the 30-day trial is the full Enterprise version for 30 days. After that, it turns into the Developer Edition, which serves CF pages to only 2 IP addresses, making it useless for any sort of production application. Therefore, it's silly to choose anything other than the 30-day trial version. Macromedia knows this. They don't mind. They want you to see what it can do. So go ahead and enjoy 30 days of serving any number of IP addresses.
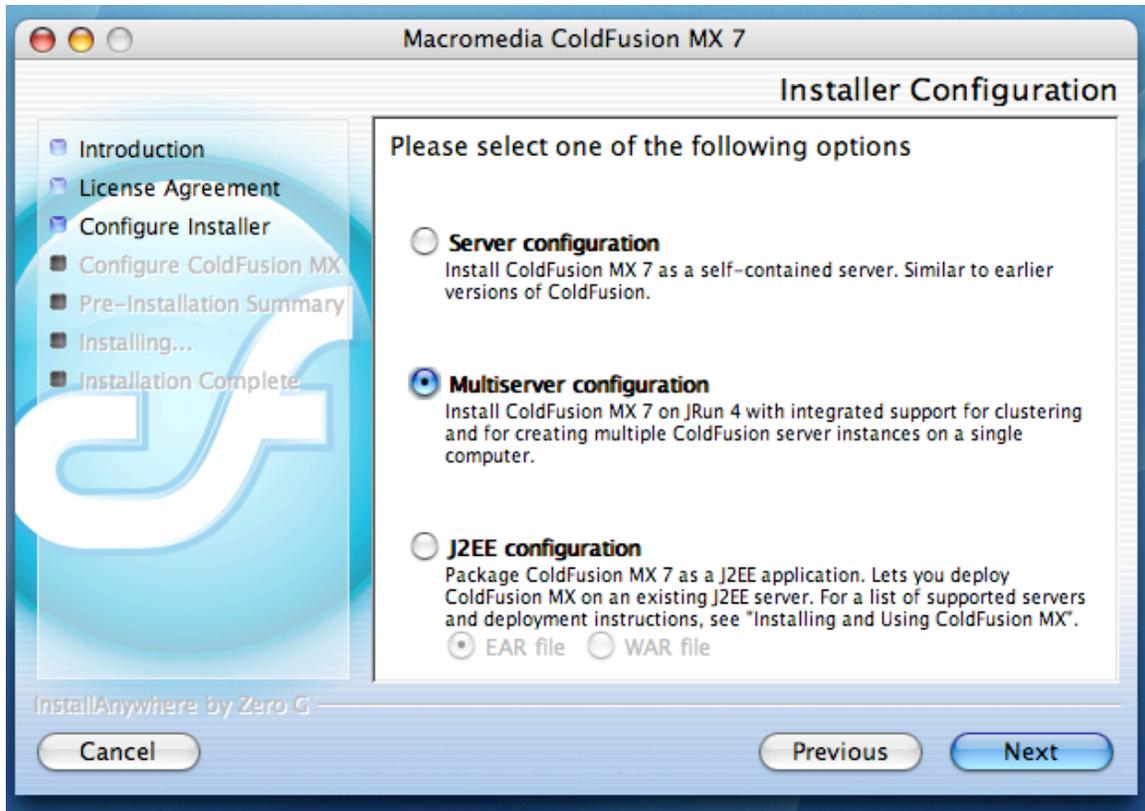
This is one of the critical screens, in that it could make a big difference which one you choose.

The main difference between the top 2 options is whether or not you can easily install multiple instances. Installing multiple instances is a rather advanced usage. So, if you're a newbie, chances are you won't be doing that anytime soon. On the other hand, both of the top 2 options install only one instance. So my feeling is, choosing Server configuration limits your future options, but choosing Multiserver configuration doesn't. Maybe someday you'll want to play around with multiple instances, so why limit yourself? Therefore, I wouldn't recommend Server configuration unless you're trying to get by with a minimal installation.

Given that you're probably not a J2EE expert, and given that you would already have to have an installation of J2EE up and running, you probably won't want to choose the bottom option either.
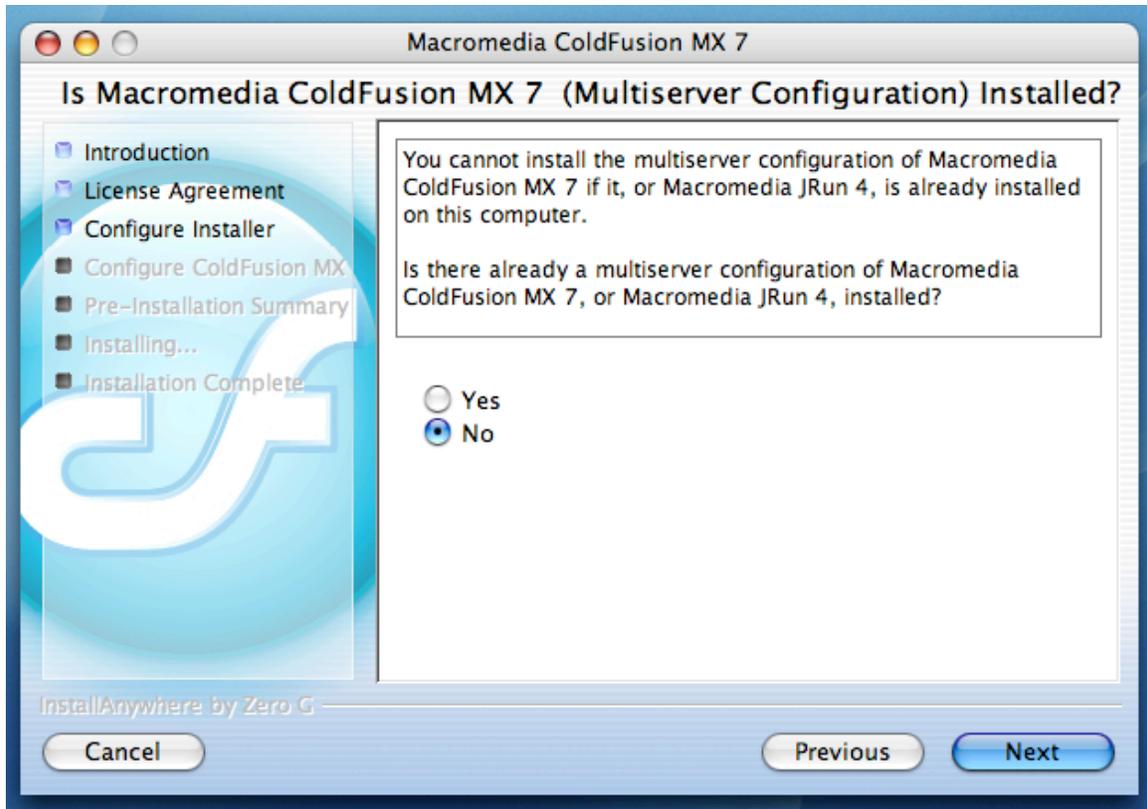
This one puzzles me. I think the folks at Macromedia are smart enough to figure out whether you already have an installation of the chosen type already installed. Maybe they're trying to avoid overlaying files of an existing configuration before they detect it.

Oh well, anyway, since you're installing CFMX for the first time, the answer is No.
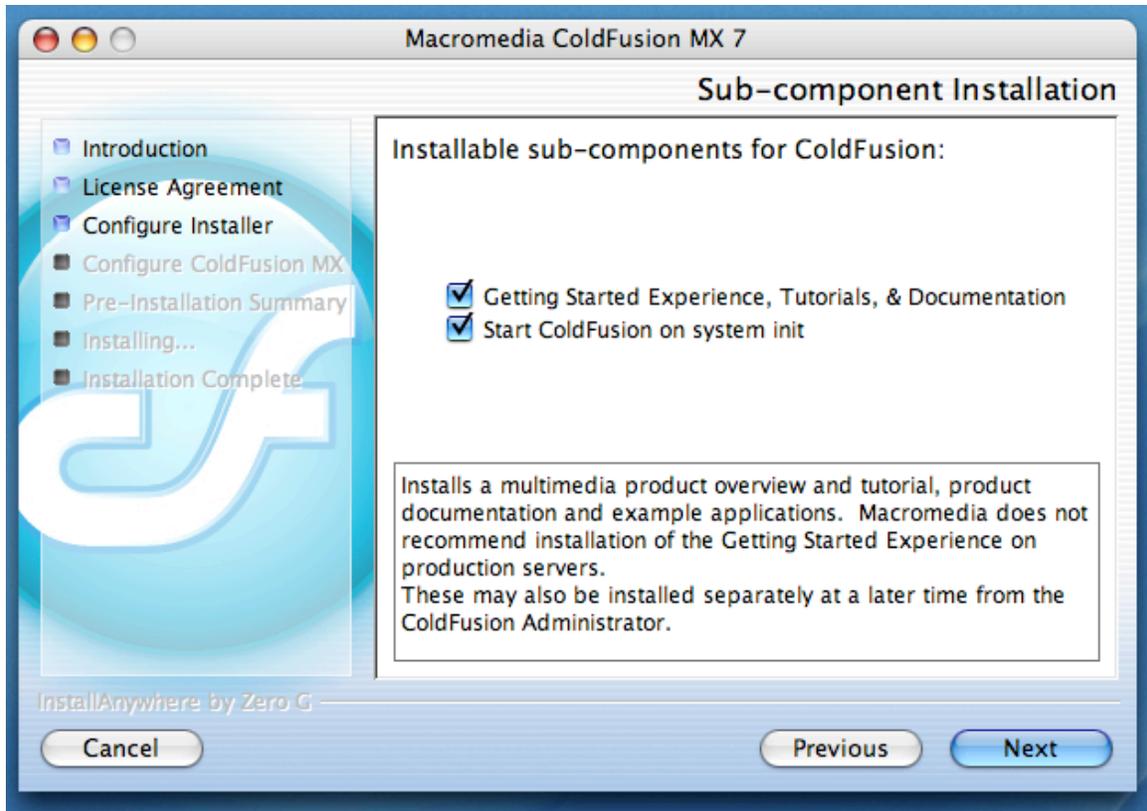
By all means, install the Getting Started Experience, Tutorials and Documentation.

When you choose "Start ColdFusion on system init", the installer sets up a variety of hidden background processes to run automatically when you start up your computer (the JRun J2EE server, the Verity full text search engine, the ODBC bridge, the CF server itself, etc). The easy way to bring up all the components in the correct order is to let the installer set up the startup scripts for you.

Of course, this means that it's going to be truly a server, always on, always available, always taking up memory. If you intend to use this installation to learn ColdFusion and claim it on your résumé, this is the world you're trying to learn.
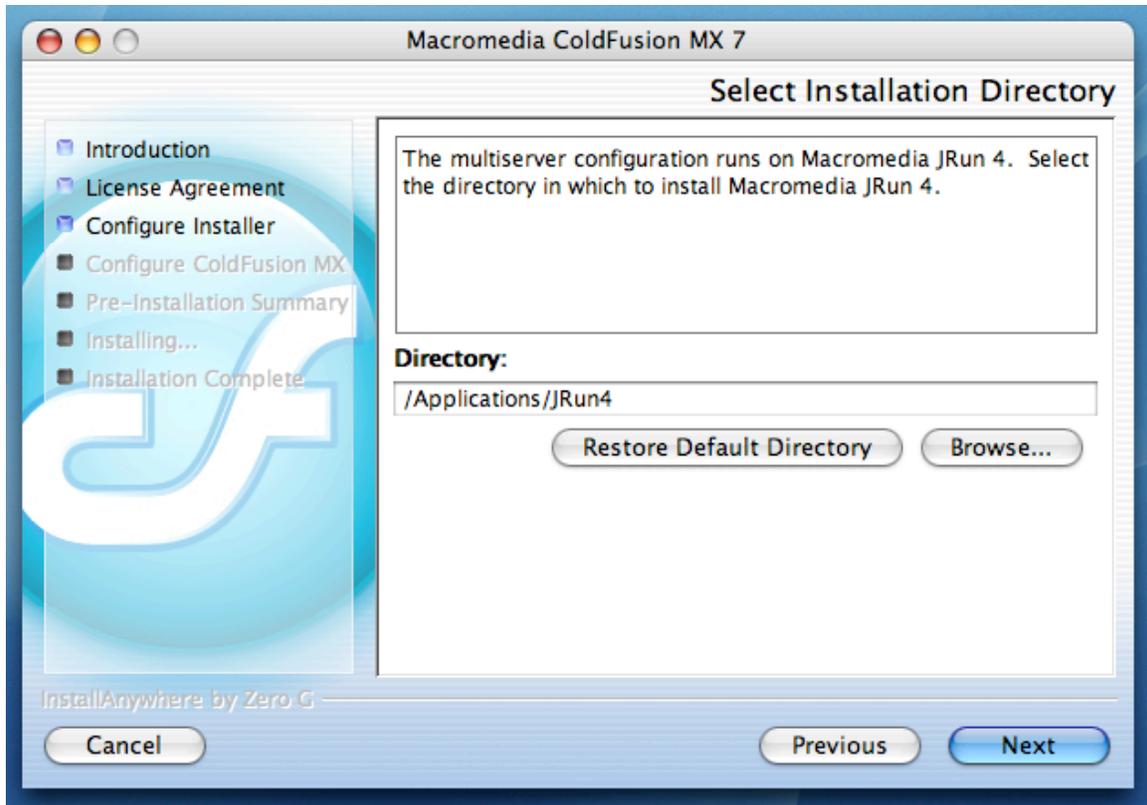
I always like to go with directory defaults. This is the directory default for JRun.
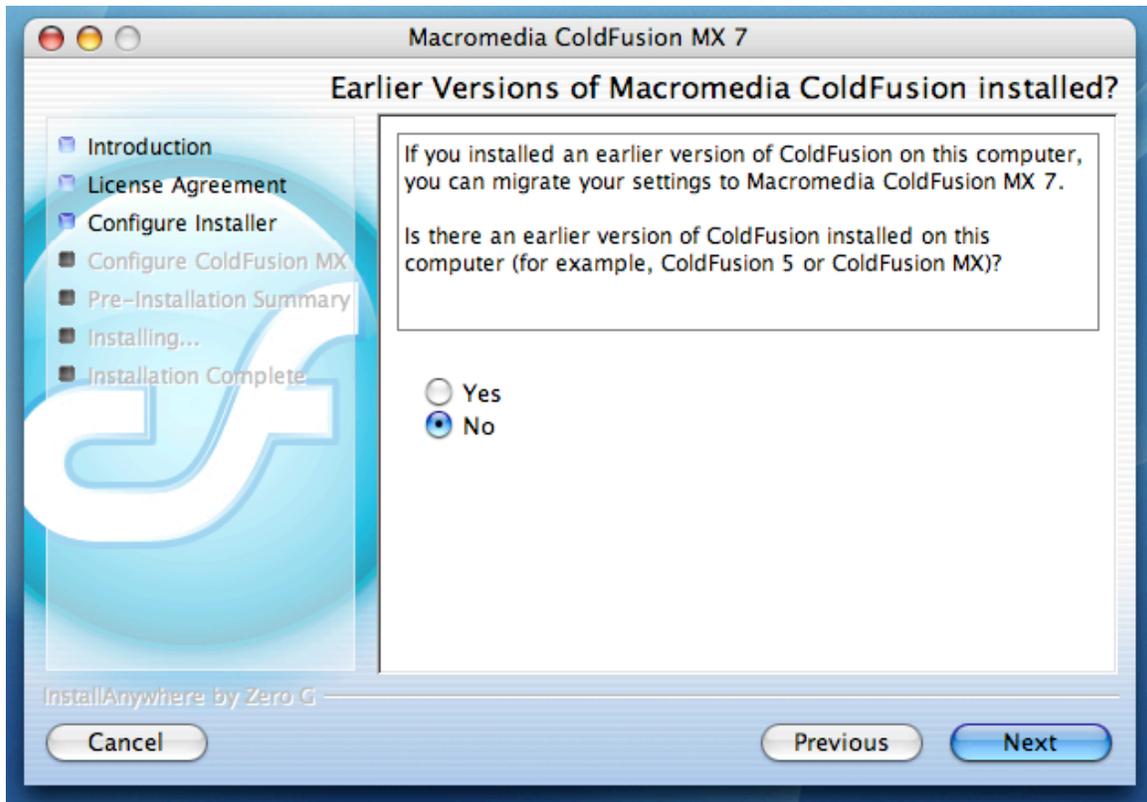
This is more for Window and Unix users, who might have versions 5 and/or 6 installed. Since this is the first-ever release for the Mac, the answer is No.
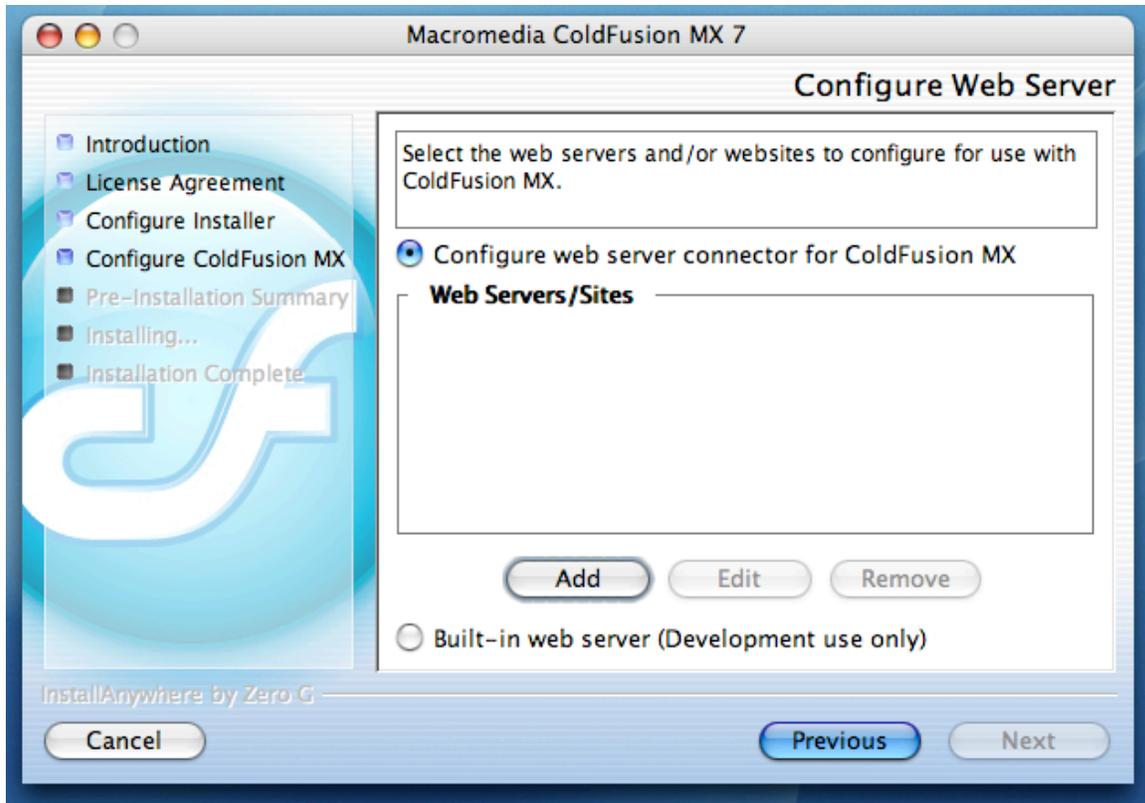
This begins the multi-step process of connecting up ColdFusion MX 7.01 to the Web Server.

The Web Server has to know that pages with the suffix ".cfm" or ".cfml" are supposed to be handled by ColdFusion. It has to know where ColdFusion is. The installer can do this for you, even for multiple Web Servers. So you have to tell the installer which Web Servers you want to use ColdFusion.

You probably don't want to use the "Built-in web server" option, because it won't be the same sort of full-featured Web Server that typifies real world application development. It's intended for folks who want to do a minimal configuration.

Click "Add".
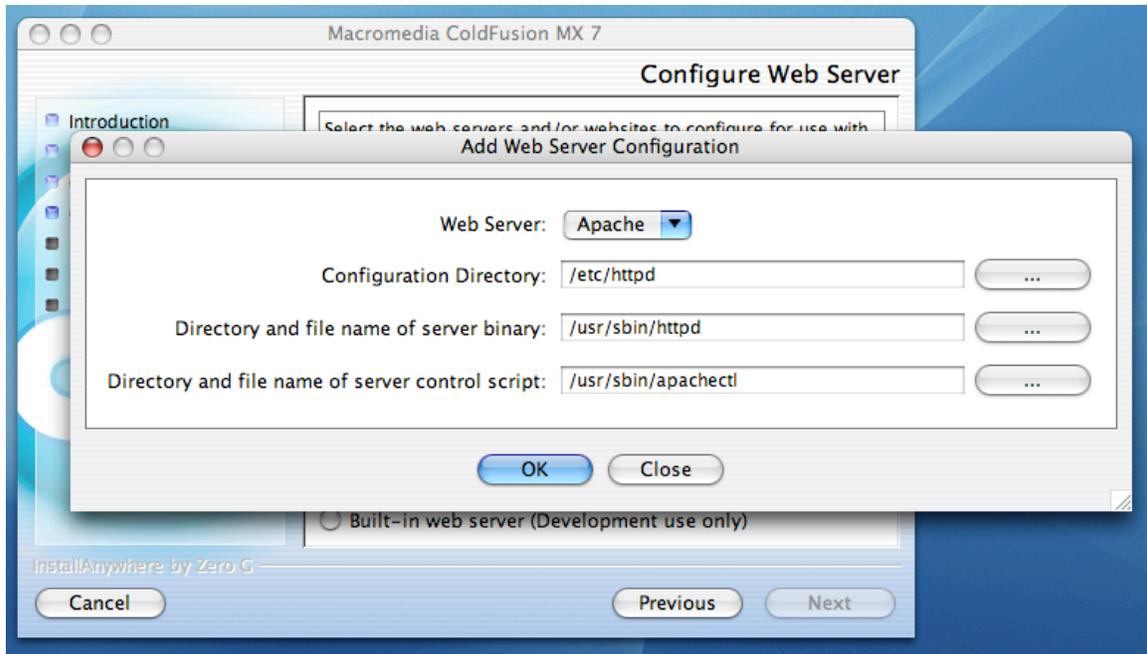
Ah, the installer has found Apache, the built-in Web Server that comes with Mac OS X.

Click OK.
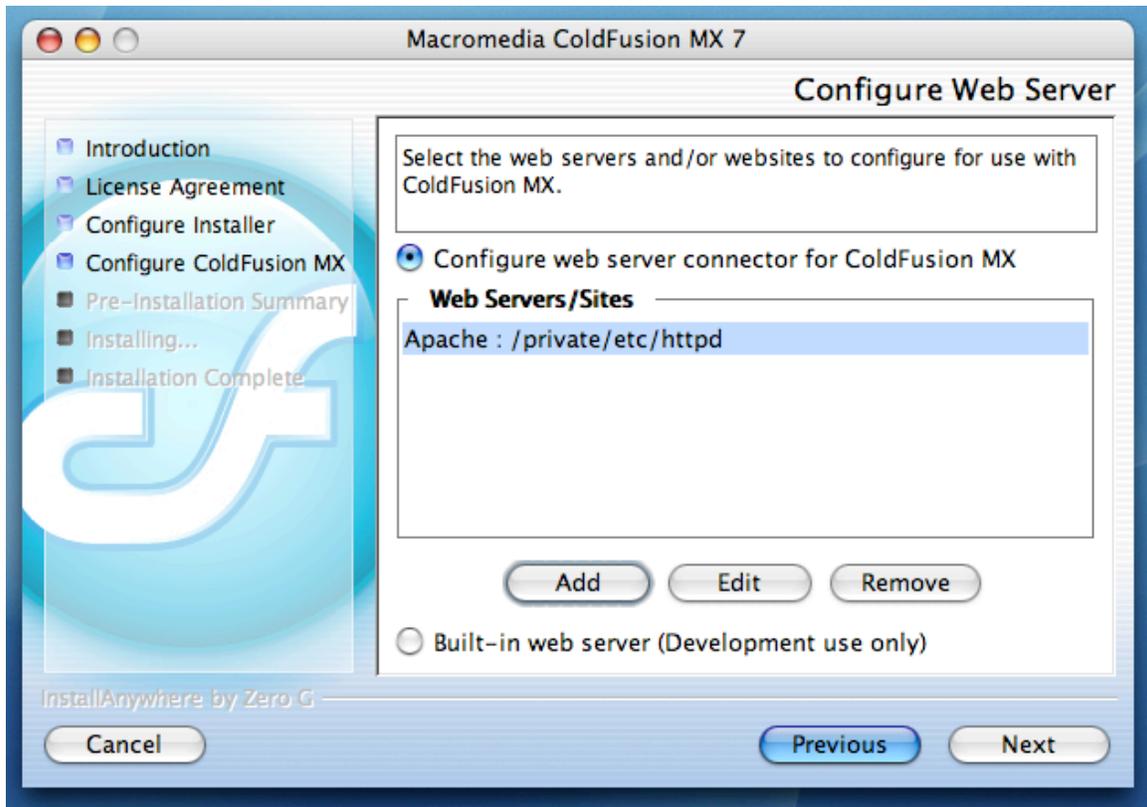
Click "Next".
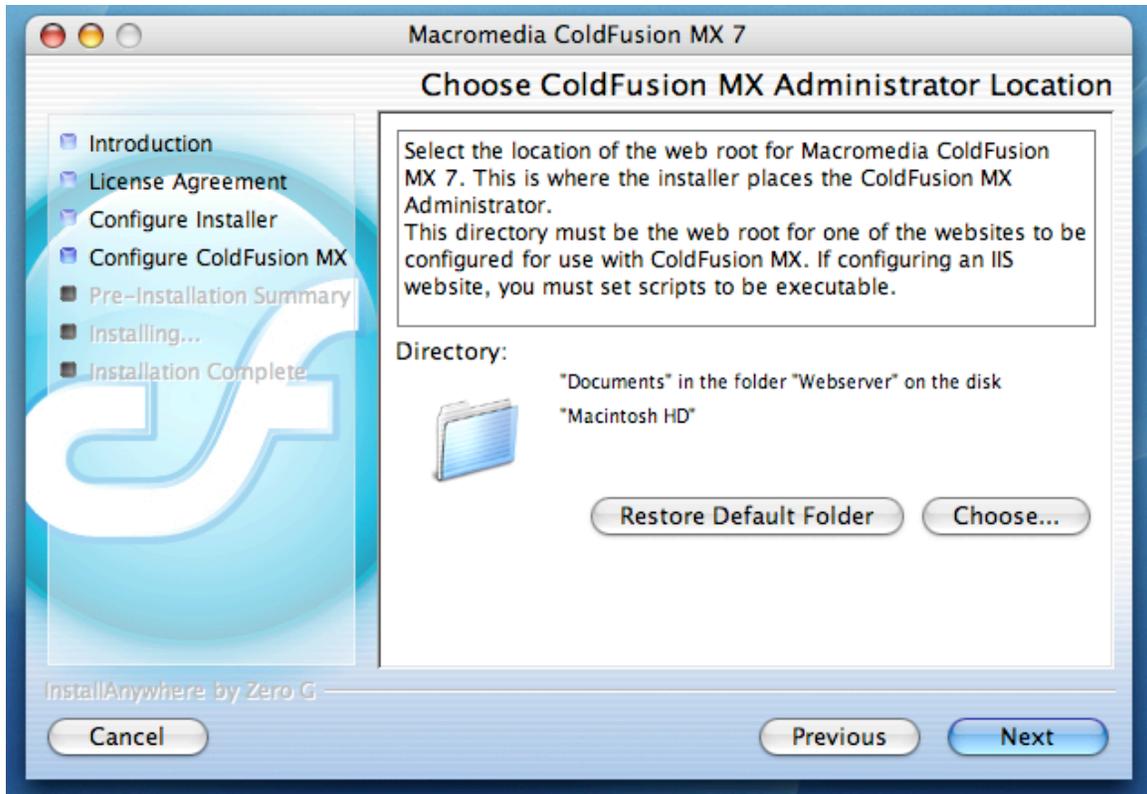
Again, I can't think of a good reason not to go with the default directory.

As mentioned in "CFMX 7.01 for Mac OS X", you're entering a newly made-up password here to protect access to the configuration utility called ColdFusion Administrator. If no one has access to your computer over the network, it can be pretty simple, but if anyone else does, it should be a strong password.
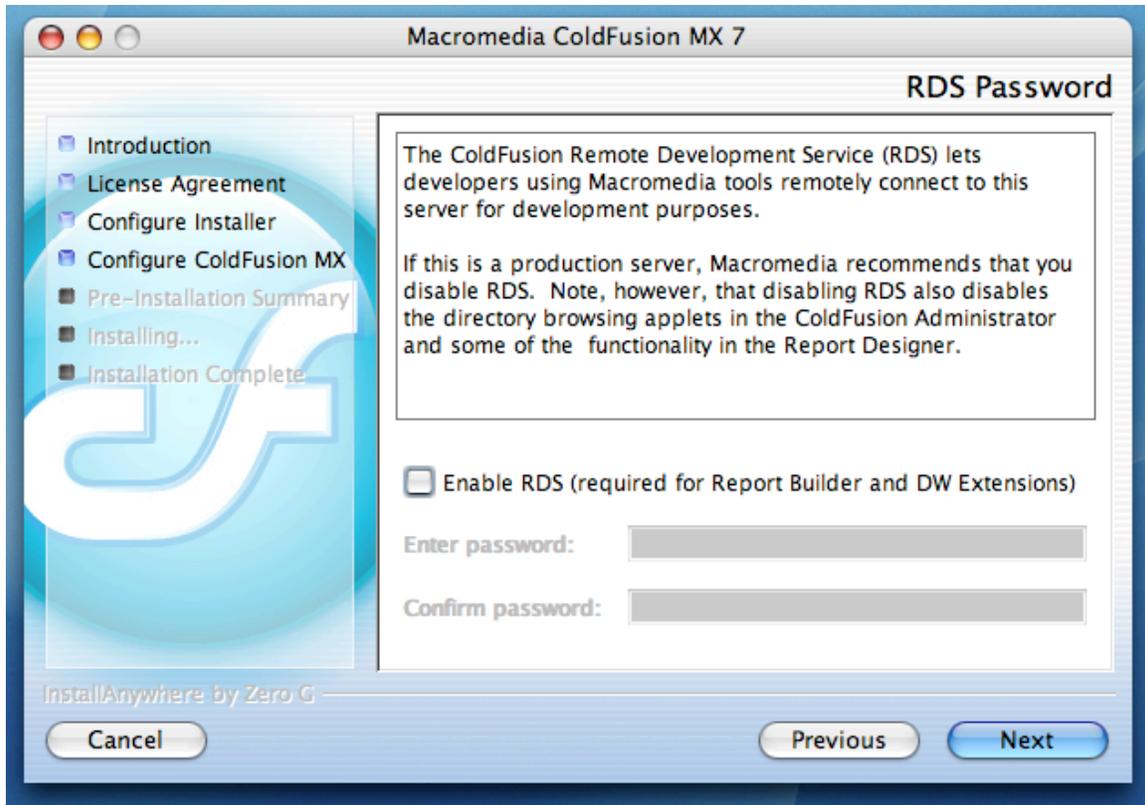
Also as mentioned in "CFMX 7.01 for Mac OS X", I recommend **NOT** checking "Enable RDS". It enables anyone who has Dreamweaver and knows the password to have full access to your computer, including deleting files. It's intended for use only in a trusted, cooperative environment.

Don't enable it unless you know what you're doing and don't mind that it can be a major security vulnerability to your system.
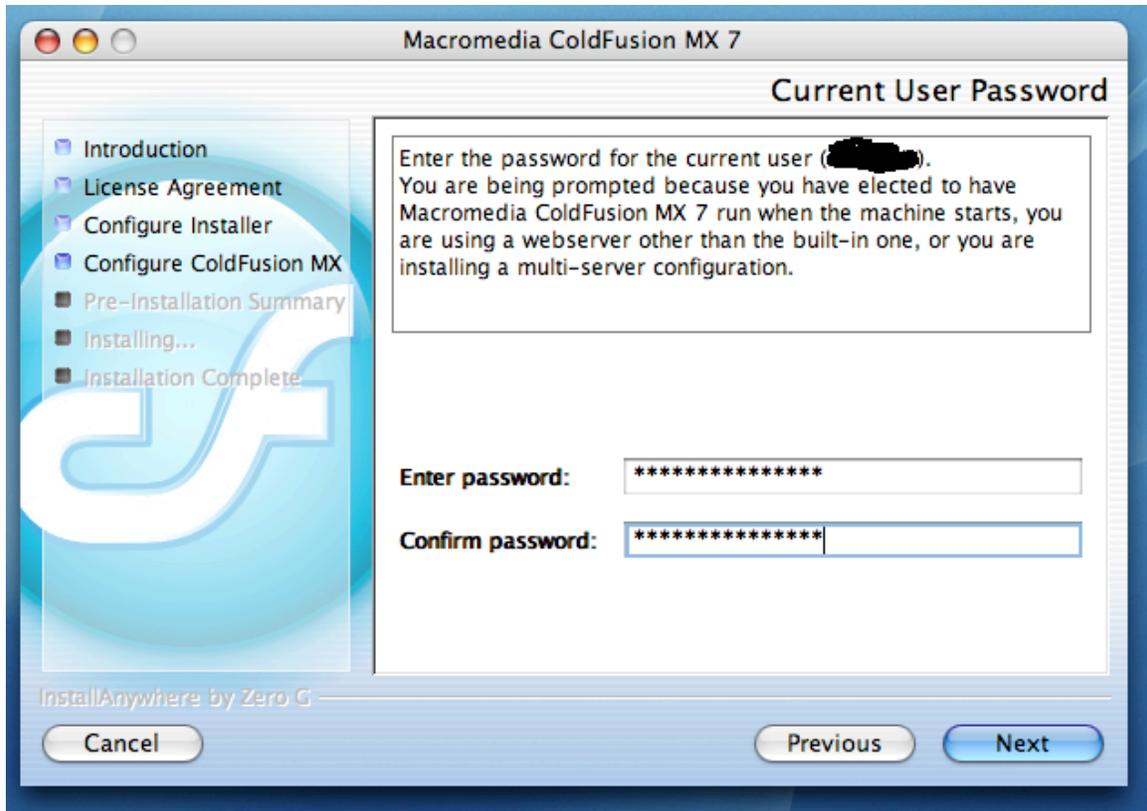
Sorry for blotting out my admin user name from this graphic, but it's for obvious security reasons.

Note, this is your personal login, the login you use when you start up your computer.
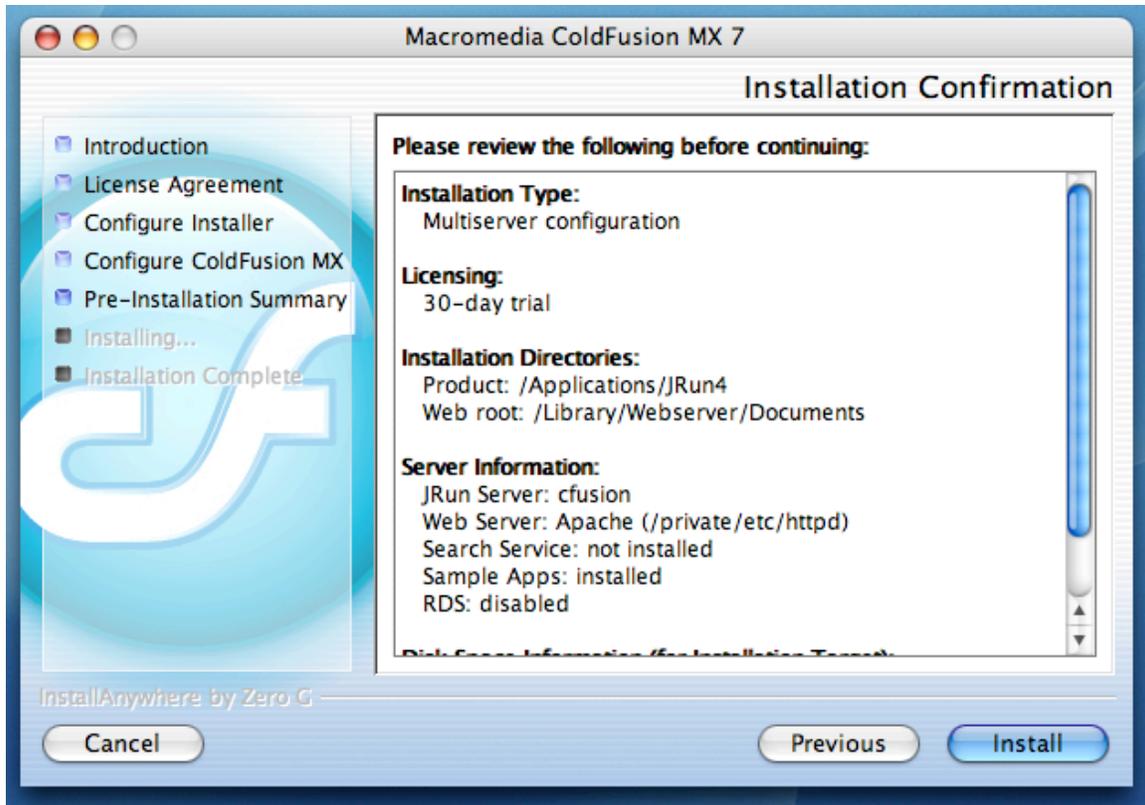
Last but not least, press "Install".

This is the point at which I quit the installer to avoid actually installing CFMX on my sister's iMac. But I can tell you what happened when I actually went through with the installation on my own Mac earlier: The rest of the process is nothing but pretty screens and files being copied. No decisions to be made.

Pretty simple, eh?

It's just the same on Sun Solaris or Windows. Windows is slightly different, in that it's not Unix, as Mac OS X and Solaris are. So for Windows, the default directory for JRun is C:\JRun4 and the typical Web Server is IIS (Windows 2000 and XP) or PWS (Windows 95 and 98).

EPILOGUE: Configuring index.cfm as a Default Page of a Directory

This may require some explanation if you're a newbie just learning to run a Web Server:

If you enter a URL without a filename (just a directory), the Web Server looks to see if there's a "default page" in the directory. If none of the potential default page names are there, it indexes the directory and produces a list of files as hotlinks. Here's an example:
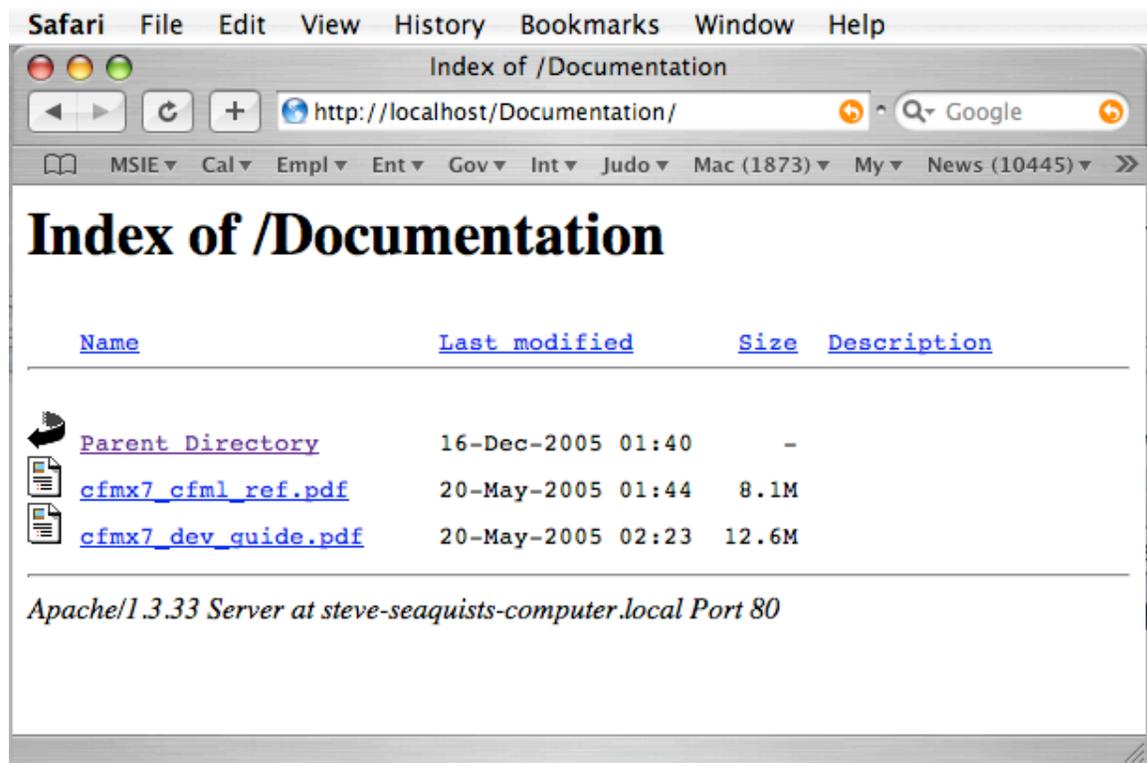
Because I requested http://localhost/Documentation/ (without a filename), Apache indexed the directory. Each of the filenames in the index is a hotlink to that file, and if there's a subdirectory, it will be a hotlink to that subdirectory.

If you want to override this behavior, you can put an "index.html" file in the directory that you don't want indexed. The Web Server will see this file and display it, rather than building and displaying its own index of the directory. That's how it got the name "index.html". It substitutes for the index dynamically built by the Web Server.

Because you can have multiple default pages for a directory, they're typically configured as a list, such as "index.html, index.htm, default.html, default.htm". The first name in the list that matches a file in the directory is used. It varies from Web Server to Web Server whether the list is comma-delimited, space-delimited, or whatever. The ColdFusion installer typically adds "index.cfm" to the list, according to the rules of the Web Server.

Some weeks after I installed CFMX on my Mac, I noticed that Apache wasn't treating index.cfm as a default page for a directory. So I had to manually modify the Apache configuration, but how do you do that?

Unlike Netscape's commercial Web Server (now called iPlanet) or Microsoft's IIS Web Server, Apache doesn't have a Web page configuration tool to modify its configuration. (One of the advantages of Open Source software is that it's free and stable, but one of the disadvantages is that it can be user-unfriendly like that.) After some searches of the Internet, I found out how to do it, so I'm sharing that with you now.

To configure Apache to serve up index.cfm files when a directory is requested, if the installer didn't do it correctly for you, you will have to edit the following file:

/etc/httpd/httpd.conf

Basically, every DirectoryIndex line in that file has to have index.cfm added to it. The CFMX 7.01 installation did this on my system, but only to the one DirectoryIndex line I **don't** use (the one for PHP users)! The line I had to edit said

DirectoryIndex index.html

I changed it to say

DirectoryIndex index.cfm index.html

I put index.cfm first because I wanted index.cfm files to have priority over index.html files. Note that the Apache file name list is space-delimited.

It's outside the scope of this discussion to teach you how to edit Unix files with Unix editors, such as "vi" or "emacs", but I'd like to recommend the Nirvana Editor (nedit) for X11, available from http://www.nedit.org/ for free. It's the most Mac-like Unix text editor. Most of the keyboard shortcuts are the same as the Mac, except that you use the control key instead of the command key. It's also very much like the Windows editor WordPad.

Of course, you should make a backup before you edit httpd.conf, in case you mess it up.

Finally, you go to Apple Menu > System Preferences > Internet & Network > Sharing > Services > Personal Web Sharing, turn it off, and turn it back on again. This causes Apache to re-read the new httpd.conf file.

Fortunately, this is the sort of thing you typically have to do only once.