



Contents

Please select your IntraBuilder version from the list below. This one-time* selection is required to tailor the information in Server Help to match the features available in your product. If you choose the wrong version, you can get back to this selection topic later by choosing "Version selection" in the Server Help Index.

IntraBuilder Client/Server

IntraBuilder Professional

IntraBuilder Standard

* Selection is one-time only if you are running SERVER.HLP from its installed location (default c:\program files\borland\intrabuilder). If you run it from your CD or another location, you must reselect your version each time you open the file.

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[12/06/96 11:29 AM]



Contents

Server setup and troubleshooting

Deploying IntraBuilder applications

Overview

Where the Web server looks for document files

Where the CGI Broker is located

Where the IntraBuilder Agent looks for its form and report files

Where the forms and reports look for their files

Files to deploy

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[12/06/96 11:29 AM]



Contents

Server setup and troubleshooting

Test instructions

Supported web server applications

Adding or reinstalling a web server application

Overview

Adding or reinstalling Netscape FastTrack or Enterprise servers

Adding or reinstalling the Borland Web Server

Adding or reinstalling WebSite

Adding or reinstalling Microsoft IIS or PWS

Deploying IntraBuilder applications

Overview

Where the Web server looks for document files

Where the CGI Broker is located

Where the IntraBuilder Agent looks for its form and report files

Where the forms and reports look for their files

Files to deploy

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[12/06/96 11:29 AM]



Contents

Server setup and troubleshooting

Test instructions

Supported web server applications

Adding or reinstalling a web server application

Overview

Adding or reinstalling Netscape FastTrack or Enterprise servers

Adding or reinstalling the Borland Web Server

Adding or reinstalling WebSite

Adding or reinstalling Microsoft IIS or PWS

Remote agents

Overview

Rules, caveats and preparation

Installation

Using SERVER.JFM to add or remove remote agents

Deploying IntraBuilder applications

Overview

Where the Web server looks for document files

Where the CGI Broker is located

Where the IntraBuilder Agent looks for its form and report files

Where the forms and reports look for their files

Files to deploy



Server setup, testing and troubleshooting

The IntraBuilder Server is a process management system that is made up of the IntraBuilder Broker (INTRASRV.DLL and INTRASRV.ISV) and the IntraBuilder Agent. It surfaces through the Agent, which appears as a minimized icon on your desktop. When active, the IntraBuilder Server works with your Borland Web Server (BWS) application to respond to requests from web browsers.

The Borland Web Server and the configuration information required for automatic connection to the IntraBuilder Server is put into place during installation. No further configuration or setup is required in order to test your connection using the prebuilt business solution applications (instructions below).

After testing your connection, however, you may wish to create additional document or directory aliases when deploying new applications. [Click here](#) to find out how to create additional directory aliases for BWS. For a detailed discussion of application deployment and directory structuring issues, see [Deploying IntraBuilder applications](#).

Testing your IntraBuilder Server connection

These steps let you test your IntraBuilder Server connection with the supplied prebuilt business solution applications.

- 1 In your IntraBuilder program group, double-click the IntraBuilder Server icon (if the IntraBuilder Server is not already running). The IntraBuilder Server starts and an IntraBuilder Agent icon appears on your desktop.
- 2 From any connected web browser, type the following URL to the server machine and target test page:

```
http://serverbox.domain.com/ibapps/index.htm
```

where serverbox.domain.com is the IP address of your server.

If you assigned a different port to your web server (other than the default port 80), you must also include the port number in the URL, as shown here:

```
http://serverbox.domain.com:XX/ibapps/index.htm
```

where XX is the port number assigned to your web server.

TIP: If you don't have a TCP/IP connection or you want to test the connection from your local machine, you can use the following URL convention:

```
http://localhost/ibapps/index.htm
```

- 3 The IntraBuilder Home Page appears in your web browser. From the home page you can navigate among all of the prebuilt business solution applications. If the applications are delivering all requested data and all navigation buttons are working normally, you can proceed to the Quick Tour chapter of the Getting Started guide to create and test a simple application of your own.

For details on how the prebuilt business solutions work and the IntraBuilder processes and procedures they demonstrate, see the README.TXT file in your IntraBuilder/Apps folder.

More Help

Before using your IntraBuilder Designer to create and deploy applications, you should also read the [Borland Web Server online Help file](#) for more information on using that application.



Server setup, testing and troubleshooting

[Supported Web server applications](#) [Adding or reinstalling a Web server application](#)

The IntraBuilder Server is a process management system that is made up of the IntraBuilder Broker (INTRASRV.DLL and INTRASRV.ISV) and one or more IntraBuilder Agents. It surfaces through the Agents, which appear as minimized icons on your desktop. When active, the IntraBuilder Server works with your web server application to respond to requests from web browsers.

For many popular web server applications, the configuration information required to test your connection is put into place during IntraBuilder setup.

For instance, if you elected to install the Borland Web Server (included with your IntraBuilder package), or you already have WebSite by O'Reilly and Associates installed, you're ready to begin testing.

If you have [Netscape FastTrack*](#), you must stop and then restart the FastTrack server—through the Control Panel's Services utility—after installing IntraBuilder in order to complete the needed IntraBuilder/FastTrack configuration process.

Microsoft Internet Information Server/Peer Web Server users should read [IIS/PWS Setup Note](#) before proceeding with these instructions.

If you don't yet have a web server application installed, or if you're adding a new web server or reinstalling a previously installed server, see [Adding or Reinstalling Web Server Applications](#) before proceeding with the testing instructions.

Also, if you use the Borland Web Server as your server application, you may wish to create additional document or directory aliases when deploying new applications. [Click here](#) to find out how to create additional directory aliases for BWS. For a detailed discussion of application deployment and directory structuring issues, see [Deploying IntraBuilder applications](#).

Testing your IntraBuilder Server connection

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For details on how the prebuilt business solutions work and the IntraBuilder processes and procedures they demonstrate, see the README.TXT file in your IntraBuilder/Apps folder.

Since it is still a beta product, FastTrack for Windows 95 is not currently certified for use with IntraBuilder. It has run successfully on test machines, however, and though IntraBuilder installation does not automatically configure IntraBuilder to work with FastTrack for Windows 95, you can set it up manually by following the instructions in the topic [Adding or reinstalling Netscape FastTrack](#).



Remote agents overview

[Related topics](#)

Remote agents allow other machines on your network to share the IntraBuilder Server resource load. They work the same way agents work on your local server machine: The IntraBuilder Broker receives a request from a browser and passes it to an available agent; the agent then processes the request and transfers the needed data back to the server, which in turn delivers it to the browser.

Clearly, the most efficient way to handle such communication is on a single machine. That isn't always possible, however. Large numbers of simultaneous requests can cause severe bottlenecks on a server with only one, two, or even three available agents.

Nor is it always possible to simply add more agents to a single machine to deal with heavy server traffic. Depending on its workload, each agent can consume as much as 10MB of system memory. In other words, it wouldn't be prudent to install more than one or two agents on a 32MB machine, even if that machine is dedicated to IntraBuilder service.

The answer is remote agents. Installed as a separate option to other Windows NT machines on your network, remote agents allow you to scale your configuration to match changes in server traffic. You can turn them on or off, add more whenever they're needed, or remove them from any machine in your system.

Rules and setup

To use remote agents you need three things: a local server machine (your primary IntraBuilder server machine), at least one other machine with a network connection to your local server, and your IntraBuilder Client/Server CD.

The topics in this series explain the [rules, caveats and preparation](#) for remote agents, [how to install them](#), how to use a supplied IntraBuilder application called [SERVER.JFM](#) to easily set up and maintain your local/remote IntraBuilder server system, and how to [remove unneeded agents](#).

First, though, let's look at the [remote agent rules, caveats and preparation](#).



Remote agent rules, caveats and preparation

[Related topics](#)

Remote agents permit scalable distribution of server workload across several machines on your network. The following rules govern their use:

- Both the local server machine (your primary IntraBuilder server) and all remote machines (on which you install remote agents only) must be running Windows NT. The machines can be NT Servers or Workstations, running version 3.51 or 4.0, in any combination. Note: Your primary (local) server machine need not be running NT Server, though certain access restrictions may apply if you choose to use an NT Workstation as your primary machine. Consult your NT Workstation documentation for information on any such restrictions.
 - If you are **not** using the supplied Borland Web Server as your web server, your local server machine must be running as a member of a workgroup—NOT a domain. Remote machines can be members of either a workgroup or a domain. [See Checking Your NT Network ID](#) to find out how to determine or change your network membership configuration.
 - If you are using a Netscape Web server application (FastTrack or Enterprise) as your web server, you must modify the server's Service panel to match your current logon name and password. See [Modifying Your Web Service](#) for details and instructions.
 - Your local server machine must be set up for [manual network logon](#).
 - You must [verify or add rights for the logon user](#) on your local server machine.
 - You must be able to [map a drive](#) on your remote machine to your local server machine. Even if you haven't installed a remote agent on your remote machine, you should verify now that you are able to map drives and directories between the two. If a connection cannot be made from the remote machine to a shared drive or directory on the local server machine, your local/remote agent system will not work.
(After installation of a remote agent, you have two choices regarding how applications are addressed: either by mapping the local server machine's IntraBuilder directory to the remote machine or mirroring your applications on both machines. Either way, you must first ensure that a network connection exists between the two machines.)
 - INTRASRV.DLL must be present ONLY in your NT System32 directory (normally c:/winnt/system32) on your local server machine. This caveat generally applies only to machines on which previous version of IntraBuilder have been installed. In most cases, if a second or older copy of INTRASRV.DLL is present, you'll find it in your /IntraBuilder/Server directory.
 - Allow 10MB of system memory for each agent on each machine (local or remote).
- If your system setup satisfies all of the above conditions and you're able to prepare your local server machine as noted above, you're ready to [install your remote agents](#) on your connected machines.



Checking your NT network ID

[Related topics](#)

Note: This topic applies only to local/remote system setup. If you're not setting up remote agents, or you are using the Borland Web Server as your Web server, you don't need to change your NT network ID.

If you're not using Borland Web Server as your Web server, remote agent operation requires that your local server machine be part of an NT workgroup and not a member of a domain.

If you are using Borland Web Server as your Web server, your local server machine network ID is not an issue and can remain as is. You should, however, review the rest of the [remote agent checklist](#) items before proceeding with installation of a remote agent.

To check your NT network ID

To check your local server machine's network membership, open Control Panel, click the Networks applet, then choose the Identification tab.

If Workgroup membership is specified on the Identification page, you can close the Networks dialog without making any changes.

If only Domain membership is specified on the Identification page, you have two choices in order to properly configure your local/remote system:

- Change local server machines. That is, choose another NT machine on your network that does have NT workgroup membership and make that machine your local server by running a full installation of IntraBuilder on it.
- Reinstall NT. You can't switch a machine's network membership from Domain to Workgroup once it has been set up as a member of a domain. Thus, if the Domain member machine is the one you must use as your local server machine in your local/remote configuration, you must reassign the local machine membership by reinstalling NT and choosing the Workgroup network assignment during setup.

After establishing that your local server machine is a member of a workgroup, review the rest of the [remote agent preparation checklist](#) items before installing a remote agent.



Modifying your Web Service

[Related topics](#)

Note: This topic applies only to local/remote system setup. If you're not setting up remote agents, you don't need to change the Services for your Web server. Also, modifying server Services only applies to Netscape servers (FastTrack and Enterprise). The step is not required if you use the Microsoft Internet Information Server (IIS) or the Borland Web Server as your server application.

To change your Netscape Web Service logon option

- 1 On your local server machine, open Control Panel.
- 2 Click the Services applet.
- 3 Scroll to locate the Netscape Web server (FastTrack or Enterprise) item.
- 4 Click Stop to stop your server. Close any local IntraBuilder agents that may be running by right-clicking the Agent icons and choosing Close.
- 5 In the Services list, double-click the Netscape Web server item to open its Service configuration panel.
- 6 Click the This Account option in the Log On As portion of the panel.
- 7 Click the More button (...) to the right of the option field. A list of users appears.
- 8 Choose your logon user name, then click OK to dismiss the list.
- 9 Type your logon password in the Password and Confirm Password fields, then click OK to dismiss the Services dialog.
- 10 Close the Services dialog to apply the change.

If you have After modifying your Netscape Web Service, review the rest of the [remote agent preparation checklist](#) items before installing a remote agent.



Setting network logon to manual

[Related topics](#)

Note: This topic applies only to local/remote system setup. If you're not setting up remote agents, you don't need to change your network logon setting.

To check or change your NT network logon setting

- 1 Open Control Panel.
- 2 Click the Services applet.
- 3 Scroll and choose the Network Logon item. If the Network Logon item is already specified as Manual, you can close the Services dialog without making any changes. If it is set to Automatic or Disabled, click the Startup button, then choose the Manual option. Then close the Services dialog and apply the change.

After establishing that your local server machine is set to manual network logon, review the rest of the [remote agent preparation checklist](#) items before installing a remote agent.



NT user rights for local/remote systems

[Related topics](#)

Note: This topic applies only to local/remote system setup. If you're not setting up remote agents, your NT user rights can remain as is.

To set NT user rights for local/remote configuration

- 1 If using NT 4.0, click Start, then from the flyout menus choose Programs, Administrative Tools, then User Manager. If using NT 3.51, open the Administrative Tools group in Program Manager, then click the User Manager icon. The User Manager utility appears.
- 2 Select the User Name that you use to log on to this machine.
- 3 Choose User Rights from the Policies menu. The User Rights Policy dialog appears.
- 4 Check the Show Advanced User Rights checkbox at the bottom of the dialog.
- 5 Choose "Act as part of the operating system" from the dropdown Rights listbox, then click Add. The Add Users and Groups dialog appears.
- 6 Click Show Users, then scroll and select your logon user name.
- 7 Click Add. The Local Group Membership dialog is dismissed and your user name now appears in the Add Names portion of the Add Users and Groups dialog. Click OK to return to the User Rights Policy dialog.
- 8 Repeat Steps 5 through 7, choosing the following additional Rights from the dropdown Rights listbox in the User Rights Policy dialog:
 - Increase quotas
 - Replace a process level token
- 9 After assigning all three rights to your user name, click OK to save your changes and dismiss the User Rights Policy dialog, then close the User Manager utility.

After modifying your NT user rights, review the rest of the [remote agent preparation checklist](#) items before installing a remote agent.

- Mapping your server machine location

[Related topics](#)

Note: This topic applies only to local/remote system setup. If you're not setting up remote agents, you don't need to change your machine network mappings.

Also note that this is one of the two alternative means of establishing communication between your local and remote machines. The other method is to mirror your IntraBuilder applications on all machines in your local/remote system, using common data through separate machine mappings and aliases.

Before installing a remote agent, however, you should also carefully review all other [remote agent preparation checklist](#) items.

To map your local server location to your remote machine

- 1 On your local machine, open Windows Explorer (NT 4.0 only) or File Manager on your local server machine.
- 2 Expand the directory containing IntraBuilder (normally C:\Program Files\Borland\IntraBuilder\), right-click to select the IntraBuilder root directory, and choose Sharing from the popup menu. The IntraBuilder Properties dialog appears.
- 3 Click the Sharing tab, then click the Shared As option and enter a name for the share. You can then specify any limits or permissions you wish (defaults are Maximum and Everyone). Click Apply, then OK to dismiss the IntraBuilder properties dialog.
- 4 On your remote machine, open Windows Explorer (NT 4.0 only) or File Manager.
- 5 If using Windows Explorer, choose Map Network Drive from the Tools menu. If using File Manager, choose Connect Network Drive from the Disk menu. The Map Network Drive dialog appears.
- 6 Choose an available drive letter for the mapping, then enter:
`\\MAINMACHINE\INTRABUILDER`
where MAINMACHINE is the machine name of your local server machine.
- 7 Enter the logon user name for the local server machine (*not* the remote machine logon name, as you would normally specify).

If the network connection cannot be made, consult your network system administrator before proceeding with remote agent installation.

- Installing a remote agent

[Related topics](#)

Important: Before installing a remote agent, please review the topic [Remote Agent Rules, Caveats and Preparation](#).

To install a remote agent

- 1 Insert the IntraBuilder installation CD into the CD-ROM drive on the remote machine.
- 2 From Windows Explorer (on NT 4.0) or File Manager, choose Run from the File menu. Type D:setup (substituting your CD-ROM drive letter if it is not drive "D").
- 3 Press Next until you reach the Setup Type dialog box. Choose the Remote Agents option.
- 4 Press Next at each screen to continue the installation, choosing the appropriate options. When you reach the screen that lets you specify the number of Agents to run on the remote machine, keep in mind that each Agent can consume up to 10MB of system memory.
- 5 When setup is complete, run the remote agent(s) on the remote machine by choosing IntraBuilder Remote Agent from the IntraBuilder program group (in NT 3.51 Program Manager or Start/Programs/IntraBuilder in NT 4.0). When the agent(s) appear, you're ready to test the remote connection.

Testing the remote agent connection

IMPORTANT: This test will **not** work if all conditions and preparations are not met as described in [Remote Agent Rules, Caveats and Preparation](#).

- 1 On your local server machine, open IntraBuilder Designer from the IntraBuilder program group (in NT 3.51 Program Manager or Start/Programs/IntraBuilder in NT 4.0).
- 2 If the IntraBuilder Explorer isn't already open, choose it from the View menu.
- 3 Change to the IntraBuilder\Server directory by typing the following into the Look In listbox:
`C:\Program Files\Borland\IntraBuilder\Server`
(modify if your installation path is different.)
- 4 Double-click the SERVER.JFM icon. The IntraBuilder Server Configuration application appears.
- 5 The Path to IntraBuilder Server Agent field should read C:\Program Files\Borland\IntraBuilder\Bin (with a different drive letter, if you installed to another drive). If it doesn't, correct it by typing in the path to your IntraBuilder\Bin directory.
- 6 Specify 1 for the Number of IntraBuilder Server Agents. Leave the Maximum Number of Sessions and Session Timeout settings as they are.
- 7 Click the Define Remote Agents... button. The Remote Agent Configuration window appears.
- 8 Click Add. A set of fields appears in the lower portion of the window, with Agent ID field containing the value 0 (zero).
- 9 In the User Name box, type the logon user name for the remote agent machine. In the Machine Name box, type the computer name for the remote agent machine (may be either the short name, as in "mymachine", or the full machine address, as in "mymachine.borland.com").
- 10 Click Save Agent. The new agent assignment appears in the configuration list above.
- 11 Click Back, then Save, then close the configuration manager. The agent is now ready to receive server assignments.
- 12 If it's not already stopped, stop your Web server application. To stop BWS, right-click the minimized "globe" and choose Shutdown; Netscape and Microsoft servers may be stopped and started from their administration utilities or from the NT Services applet in Control Panel (leave the Services list open; you'll return to it in a second).
- 13 Still at your local server machine, start the IntraBuilder Server from the IntraBuilder program group

(in NT 3.51 Program Manager or Start/Programs/IntraBuilder in NT 4.0). A message box appears and lets you know that the server is now waiting for your Web server application to start. Note that no IntraBuilder agent appears, though you probably specified one or more agents when you installed the product. That's because now the remote machine is assuming the full agent duties (of course, you can change this later, using SERVER.JFM).

14 Now restart your Web server application (using the BWS icon or Services applet).

15 Open a browser on your local server machine and type the following URL:

```
http://localhost/svr/intrasrv.isv?apps/knowledge/kbsearch.jfm
```

The Knowledge Base Search (an IntraBuilder prebuilt application) should appear in your browser. Note that although the processing is occurring on your remote machine only, the form and data are delivered as if you had an agent running on your local server.

See Running SERVER.JFM for complete instructions in running the utility.

- Using SERVER.JFM to configure remote agents

[Related topics](#)

After installing one or more remote agents on a remote server machine, you must configure your local server machine to recognize the new agent(s).

To do that, use the supplied IntraBuilder Server/Remote Agent Configuration application (SERVER.JFM, located in your IntraBuilder/Server directory).

The configuration utility also allows you to remove agent references (though not the remote agent installations themselves) and reallocate your agent resources among machines. It immediately writes your specifications to the local server machine's registration database. Each time you make a change, however, you must restart your local server (though not your remote agents) to effect the change.

To configure remote agents with SERVER.JFM, click the Define Remote Agents button on the opening screen, then click Add on the next screen to add each new remote agent, specifying the remote machine's logon user name and computer name for each. A test sequence for a single remote agent and no local agents is provided in [Testing Your Remote Agent Connection](#). The following is an example of a more extensive local/remote system.

Sample multi-agent configuration

To set up a local/remote system with two agents running on the local server and five installed agents running on two machines, you would use SERVER.JFM as follows:

- 1 In the opening window (IntraBuilder Server Agents), set the Number of IntraBuilder Server Agents to 7.
- 2 Click Define Remote Agents.... The Remote Agent Configuration window appears. Click Add. Additional fields appear in the lower portion of the window, with the first remote Agent number set to 0.
- 3 Type in the user logon name (let's use "BSmith") and computer name (let's say "machine1") for the first remote machine.
- 4 Click Save Agent. The assignment appears in the assignment list above.
- 5 Click Add again, then, once again, type in the user logon name and computer name for the first remote machine.
- 6 Repeat Step 5 three more times, but for these three agents, use the user logon name and computer name for the second remote machine (for this example, "JDoe" and "machine2").
- 7 When all agents are configured, click Back, then Save at the first window. You can then close the IntraBuilder Agent Configuration utility.

The registration database entries created by SERVER.JFM would look like this:

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Borland\IntraBuilder\1.0\Server]
"Agents"="7"
"Remote0"="BSmith@machine1"
"Remote1"="BSmith@machine1"
"Remote2"="JDoe@machine2"
"Remote3"="JDoe@machine2"
"Remote4"="JDoe@machine2"
```

Note that local agents need no user name or machine specification. The two local agents are configured automatically, and are started automatically when you start the IntraBuilder Server on your local machine. These two will also be the first agents to process data passed from the IntraBuilder Broker. As the number of simultaneous accesses grows, however, requests will be passed to the remote agents on the two machines, in order of their appearance on the remote configuration list.

▪ **Removing remote agents**

[Related topics](#)

To uninstall IntraBuilder remote agents

- In Windows NT 4.0: Use the Add/Remove Programs applet in Control Panel.
- In Windows NT 3.51: Click the Uninstall icon in your IntraBuilder program group in Program Manager.

- **Creating additional directory aliases for the Borland Web Server**

After testing your IntraBuilder/Borland Web Server connection, you may wish to create additional document or directory aliases when deploying new applications.

To create additional document or directory aliases for BWS:

- 1 Open Notepad and insert the following lines, editing the "NEWALIAS" line to reflect the name for your new directory alias and the full path to the aliased directory:

```
REGEDIT4
```

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Borland\Web Server\1.0\Alias Manager\Map]  
"NEWALIAS"="C:\\Program Files\\Borland\\IntraBuilder\\APPS\\"
```

Important: Make sure you add a blank new line (carriage return) after the "NEWALIAS" line before saving the file.

- 2 Save the file as c:\program files\borland\intrabuilder\server\bws.reg
- 3 Run the new BWS.REG file by double-clicking on it in File Manager or Windows Explorer. A registry update confirmation message appears. You can now use your new aliased directories.

For a detailed discussion of application deployment and directory structuring issues, see [Deploying IntraBuilder applications](#).

Sorry. Help was unable to locate the Borland Web Server Help file (the link target). To correct the problem, open your Windows Help initialization file (WINHELP.INI on Windows 95 or WINHLP32.INI on Windows NT) and add this line to the [Files] section:

```
BWS.HLP=c:\program files\borland\intrabuilder\server
```

Note that the path points to the default installation location for the BWS.HLP file. If you didn't install into the default directory, or you moved the BWS.HLP file elsewhere, change the path to the appropriate folder.

If you don't have a Windows Help initialization file, you can create one using Notepad (don't forget to add a [Files] section to the new file). Add the line above to the new file, and save it to your windows\system (as winhelp.ini) or winnt\system32 (as winhlp32.ini) folder.

To print this topic, choose Print from the right-click popup menu.

IMPORTANT: When using IntraBuilder with the Internet Server API (ISAPI) servers—**Microsoft Internet Information Server** (IIS) or **Peer Web Services** (PWS)—your system logon username and password must match the Anonymous Connections username in your Internet Service Manager setup. If the logon information doesn't match, the system may hang when the IIS or PWS server attempts to load the IntraBuilder Server. For instructions on checking or changing your logon information in the Internet Service Manager, [click here](#).

Web server applications on the net

<http://software.ora.com/download/> for WebSite 1.1e (Windows 95 or Windows NT).

<ftp://serverftp1.netscape.com/pub/server/webserver/fasttrack/2.0/nt/> for the Netscape FastTrack Server (version 2.0; for Windows NT only; 32MB RAM required).

<http://www.microsoft.com/Infoserv/IISInfo.htm> for the Internet Information Server (Windows NT Server only).

Note: Providers of these products may, at their discretion, change the download locations noted above, or may withdraw beta or evaluation offers without notice.

- Supported web server applications

IntraBuilder supports the following web server applications on the following platforms:

<i>Web server application (with API)</i>	Win95	WinNT 3.51 Workstation	WinNT 4.0 Workstation	WinNT 3.51 Server	WinNT 4.0 Server
Borland Web Server*	Yes	Yes	Yes	Yes	Yes
Netscape FastTrack 2.0 (NSAPI)**	No	Yes	Yes	Yes	Yes
Microsoft Internet Information Server or Peer Web Server (ISAPI)	No	No	Yes	Yes	Yes
WebSite 1.1e by O'Reilly & Associates (CGI)	Yes	Yes	Yes	Yes	Yes

* Included and installed with all editions of IntraBuilder. Before using your IntraBuilder Designer to create and deploy applications, you should also read the [Borland Web Server online Help file](#) for more information on using that application.

** Netscape FastTrack 2.0 for Windows NT is included only with the retail versions of the Professional and Client/Server editions of IntraBuilder (not with the Professional 30-Day Trial Version). Also note that since it is still a beta product, Netscape FastTrack for Windows 95 is not currently certified for use with IntraBuilder and is not automatically configured for use with IntraBuilder, even if detected. It has been run successfully on test machines, however. If you wish to test FastTrack for Windows 95 with IntraBuilder, you must follow the instructions in the topic [Adding or Reinstalling Netscape FastTrack](#).

Notes:

- Additional web servers and interfaces may have been confirmed for support after release of this document. As new servers are tested and confirmed, information about how to configure and test them on your system will be made available through the [IntraBuilder home site \(www.borland.com/intrabuilder\)](http://www.borland.com/intrabuilder).
- For a list of links to Internet download sites for web server application updates, [click here](#).

- Adding or reinstalling a web server application

When you install IntraBuilder, certain configuration information is put in place by the setup program to allow certain detected or supplied web servers to work with IntraBuilder. The settings depend on the web server selection(s) you made during installation. The current server/interface choices are NSAPI, ISAPI, CGI and the BWS (Borland Web Server).

However, if you choose to add or update a web server after your IntraBuilder installation, you must configure certain settings manually in order to make the new or updated server work correctly with IntraBuilder. The instructions that follow describe these configuration settings and show how to implement them.

You can also use this section as a reference to check your web server settings should any communications problems arise between IntraBuilder and your web server application.

Note: since it is still a beta product, FastTrack for Windows 95 is not currently certified for use with IntraBuilder. It has run successfully on test machines, however, and though IntraBuilder installation does not automatically configure IntraBuilder to work with FastTrack for Windows 95, you can set it up manually by following the instructions in the topic [Adding or reinstalling Netscape FastTrack \(NSAPI\)](#).

To add, update or reinstall a web server:

Choose the name of your preferred web server or server interface from the list below:

[Borland Web Server](#)

[Netscape FastTrack 2.0 \(NSAPI\)](#)

[Microsoft Internet Information Server/Peer Web Server \(ISAPI\)](#)

[WebSite 1.1e \(WinCGI\)](#)

Note: Additional web servers and interfaces may have been confirmed for support after release of this document. As new servers are confirmed for support, information about how to configure and test them will be available from the IntraBuilder home site (www.borland.com/intrabuilder).

- Adding or reinstalling WebSite

Platform: Windows 95 or Windows NT (Server or Workstation).

1 If it's not already running, start WebSite and use the following instructions to add three new directory aliases:

- Choose Properties from the Control menu.
- Choose the Mapping tab.
- Click the Windows CGI radio button.
- In the Win CGI URL Path field, type this:
`/svr/`
- In the Directory field, type this:
`c:\program files\borland\intrabuilder\server\
(If you installed to a different directory, then type the path that matches your installation.)`
- Click Add, then Apply.
- Still in the Mapping tab, click the Documents radio button.
- In the Document URL Path field, type this:
`/ibapps/`
- In the Directory field, type this:
`c:\program files\borland\intrabuilder\apps\
Click Add.`
- Still in the Document URL Path field, type this:
`/ibserver/`
- In the Directory field, type this:
`c:\program files\borland\intrabuilder\server\
Click Add, then Apply.`
- Click Close to dismiss the Properties dialog and register the new mappings (WebSite issues a beep to confirm the change).

2 In your IntraBuilder program group, double-click the IntraBuilder Server icon. The IntraBuilder Server starts and an IntraBuilder Agent icon appears on your desktop.

3 Test your connection with the supplied prebuilt business solution applications by following the instructions in **Testing your IntraBuilder Server connection.**

- Adding or reinstalling the Internet Information Server/Peer Web Services

Platform: Windows NT Server (3.51 or 4.0) or Workstation (4.0 only).

IMPORTANT:

When using IntraBuilder with the ISAPI servers—Microsoft Internet Information Server (IIS) or Peer Web Services (PWS)—your system logon username and password must match the Anonymous Connections username in your Internet Service Manager setup. If the logon information doesn't match, the system may hang when the IIS or PWS server attempts to load the IntraBuilder Server. For instructions on checking or changing your logon information in the Internet Service Manager, [click here](#) or scroll to the instructions at the bottom of this topic.

To test the Internet Information Server (IIS) or Peer Web Server (PWS):

- 1 Open Notepad and insert the following lines (replacing the directory paths with your own Windows NT system path, if different from that shown):

```
REGEDIT4
[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\W3SVC\Parameters\Script
Map]
".isv" = "c:\\winnt\\system32\\intrasrv.dll"
".jfm" = "c:\\winnt\\system32\\intrasrv.dll"
".jrp" = "c:\\winnt\\system32\\intrasrv.dll"
```

Important: Make sure you add a blank new line (carriage return) after the last line before saving the file.

- 2 Save the file as c:\program files\borland\intrabuilder\server\iis.reg
- 3 Run the new IIS.REG file by double-clicking on it in File Manager or Windows Explorer. A registry update confirmation message appears.
- 4 Open your Microsoft Internet Service Manager as follows:
If using NT 3.51 Server, open your the Microsoft Internet Server group in Program Manager (NT 3.51).
If using NT 4.0 Server, click Start, choose Programs, then choose the Internet Service Manager icon.
If using NT 4.0 Workstation, click Start, choose Programs, then choose the Microsoft Peer Web Services icon.
- 5 When the Microsoft Internet Service Manager window appears, double-click the icon that represents your WWW server. If asked to start the server, click OK. The Service Properties dialog appears.
Important: If you don't see a service icon in the main pane of your Microsoft Internet Service Manager window, your IIS/PWS server may not be properly installed and these instructions will not apply. For installation and troubleshooting information, see your IIS documentation.
- 6 Choose the Directories tab, then click the Add button.
- 7 In the Directory field, type the path to your IntraBuilder apps directory (default is c:\program files\borland\intrabuilder\apps).
- 8 In the Alias field, type this:
/ibapps
- 9 Check the Execute checkbox.
- 10 Click OK, then Apply.
- 11 Click the Add button again. This time, type the path to your IntraBuilder server directory into the Directory field (default is c:\program files\borland\intrabuilder\server). Select and copy the string you just typed (you'll use it again in a moment). Then, type:
/ibserver
into the Alias field, and check the Execute checkbox.

- 12 Click OK, then Apply.
- 13 Click the Add button again. Then either paste the path string you copied from Step 11 or type type it once again into the Directory field (c:\program files\borland\intrabuilder\server), then type:
 /svr
into the Alias field, and check the Execute checkbox.
- 14 Click OK, then Apply, then OK again to close the Service Properties dialog.
- 15 Stop the WWW server by choosing Stop Service on the Properties menu.
- 16 In your IntraBuilder program group, choose the IntraBuilder Server icon. One or more minimized instances of the IntraBuilder Agent appear.
- 17 Select your WWW server again in the Internet Service Manager window. Restart it by choosing Start Service from the Properties menu.
- 18 Test your connection with the supplied prebuilt business solution applications by following the instructions in **Testing your IntraBuilder Server connection.**

To check or change your IIS/PWS username to match your system logon name:

Your system logon username is the name you type into the Logon Information box when NT starts. If you're not sure of the logon name, restart NT and make a note of the name you use in the Logon Information box.

- 1 If using NT 3.51 Server, open your the Microsoft Internet Server group in Program Manager (NT 3.51).
 If using NT 4.0 Server, click Start, choose Programs, then choose the Internet Service Manager icon.
 If using NT 4.0 Workstation, click Start, choose Programs, then choose the Microsoft Peer Web Services icon.
- 2 When the Microsoft Internet Service Manager window appears, double-click on the computer name for your WWW service in the main pane. If asked if you want to start the service, click Yes. The WWW Service Properties dialog appears.
- 3 Choose the Service tab.
- 4 In the Anonymous Logon section of the Service page, type your system logon username into the Username edit field, replacing whatever username is there.
- 5 In the Password section of the Service page, type the same password you use for system logon.
- 6 Click Apply, then OK to dismiss the WWW Service Properties dialog.

Your connection is now ready for testing. To conduct the test, follow the instructions from the [top of this topic.](#)

- Adding or reinstalling the Borland Web Server

Platform: Windows 95 or Windows NT (Server or Workstation).

The Borland Web Server is supplied with all editions of IntraBuilder. Unless you deselect it during the installation process, it is installed and configured for immediate availability.

To reinstall BWS at a later time, run the IntraBuilder setup program again, but use the **Custom Install** option and **deselect** all options *except* the Borland Web Server.

After testing your IntraBuilder/BWS connection, you may wish to create additional document or directory aliases when deploying new applications. [Click here](#) to find out how to create additional directory aliases for BWS. For a detailed discussion of general application deployment and directory structuring issues, see [Deploying IntraBuilder applications](#).

For details on how the Borland Web Server works with IntraBuilder, see the [Borland Web Server online Help file](#)

- Adding or reinstalling Netscape FastTrack Server 2.0 for NT or Netscape Enterprise Server 2.0

Platform: Windows NT (Server or Workstation) only.

Note: Since it is still a beta product, FastTrack for Windows 95 is not currently certified for use with IntraBuilder. It has run successfully on test machines, however, and though IntraBuilder installation does not automatically configure IntraBuilder to work with FastTrack for Windows 95, you can set it up manually using the instructions in this topic. **Caution:** If you configure FastTrack for Windows 95 using these instructions and later choose to remove IntraBuilder, you must also remove the IntraBuilder items from the FastTrack configuration files; if you don't, you may experience problems running FastTrack. This caution does not apply to FastTrack Server 2.0 for NT or Enterprise Server 2.0.

1 After installing FastTrack or Enterprise, use Notepad or any text editor to modify your FastTrack or Enterprise configuration files as follows:

- For FastTrack, open the configuration file MIME.TYPES, located in your \netscape\server\HTTPD-dnsname\config folder (where "dnsname" is the domain name for your computer).
 - For Enterprise, open the configuration file MIME.TYPES, located in your \netscape\server\HTTPS-dnsname\config folder (where "dnsname" is the domain name for your computer).
 - Add these lines to the file:

```
#added by IntraBuilder
type=magnus-internal/intra-form exts=jfm,jrp
type=magnus-internal/intra-urlencoded exts=isv
#end of IntraBuilder addition
```
 - Save MIME.TYPES. (Note: check to ensure that your editor did *not* truncate the file name to MIME~1.TYP when you saved it.)
 - Open the configuration file OBJ.CONF (located in the same directory as MIME.TYPES).
 - Insert these lines into the area near the beginning of the file after other "Init" lines:

```
#added by IntraBuilder
Init fn="load-modules" funcs="intra-render-form,intra-submit-form,intra-get-
-urlencoded" shlib="intrasrv.dll"
#end of IntraBuilder addition
```
 - Insert these lines anywhere into the section that begins <Object name="default">:

```
#added by IntraBuilder
Service fn="intra-render-form" method="(GET|HEAD) "
type="magnus-internal/intra-form"
Service fn="intra-get-urlencoded" method="(GET|HEAD) "
type="magnus-internal/intra-urlencoded"
Service fn="intra-submit-form" method="POST" type="magnus-internal/intra-
form"
Service fn="intra-submit-form" method="POST" type="magnus-internal/intra-
-urlencoded"
NameTrans from="/ibapps" fn="pfx2dir" dir="C:/Program
Files/Borland/IntraBuilder/APPS"
NameTrans from="/ibserver" fn="pfx2dir" dir="C:/Program
Files/Borland/IntraBuilder/SERVER"
#end of IntraBuilder addition
```

(If you installed to a different directory, then use the path that matches your installation at the end of the two NameTrans lines.)
 - Save OBJ.CONF (Note: check to ensure that your editor did *not* truncate the file name to OBJ~1.CON when you saved it.)
- 2 Use your NT Control Panel Services utility to stop and then restart your Netscape server (no need to stop the Netscape Admin Server, only the FastTrack or Enterprise Server).
- 3 In your IntraBuilder program group, double-click the IntraBuilder Server icon. The IntraBuilder Server starts and an IntraBuilder Agent icon appears on your desktop.
- 4 The required IBAPPS and IBSERVER directory aliases are set by the NameTrans lines that were

added to the OBJ.CONF file earlier. To add the document directory aliases manually (or to add additional document aliases) use the Netscape server administration program (default location c:\netscape\server\admserv\admin.exe) as follows:

- When the administration program opens in your Netscape browser, click on the green link on the left that represents your server.

Note: When you open the Netscape server administration program after installing IntraBuilder, you may receive a message informing you that manual edits have been made to your Netscape server configuration files. If you see this message, follow its lead to apply and reload the configuration information.

- Click the Content Mgmt button in the administration top frame.
- Click the Additional Documents link in the left frame.
- In the URL Prefix field, type this:

ibapps

- In the Map to Directory field, type this:

c:\program files\borland\intrabuilder\apps

(If you installed to a different directory, then type the path that matches your installation.)

- Click the OK button.
- Then, in the URL Prefix field, type this:

ibserver

- In the Map to Directory field, type this:

c:\program files\borland\intrabuilder\server

(If you installed to a different directory, then type the path that matches your installation.)

- Click the OK button.
- Click the Save and Apply button.

After a few moments a confirmation message appears. Click OK to dismiss the message.

- 5 Test your connection with the supplied prebuilt business solution applications by following the instructions in **Testing your IntraBuilder Server connection.**

If the Help-to-browser link doesn't work

If your web browser doesn't open and display the requested page or FTP site, the problem may be one of the following:

- The URL file type is not registered in Windows. In Windows Explorer, choose Options from the View menu, then search the File Types list for a series of types that begin URL:. If these types are not present, you may need to update your web browser. You can, however, still copy and paste the URL from your Help topic to your browser, or type the URL directly into your browser.
- You may not be connected to the Internet. Open your Internet connection (or contact your system administrator to check that your connection is working), then try the link again.

▪ **Sorry...**

The topic you requested describes features available only in the Client/Server edition. For upgrade information and a complete Client/Server edition feature list, see the inserts in your IntraBuilder package.

[Return to Index](#)

▪ **Sorry...**

The topic you requested describes features available only in the Client/Server and Professional editions. For upgrade information and a complete Client/Server and Professional edition feature lists, see the inserts in your IntraBuilder package.

[Return to Index](#)

▪ **Deploying IntraBuilder applications**

Ideally, you use the same directory to develop your IntraBuilder applications, test them through a browser, and deploy them for actual use. It's convenient because you don't have to move the applications to test them during the development process; and once they're tested you know they will work, since they haven't been moved. But you can develop and deploy in different directories.

Whether or not the ideal situation applies, the files must be located so that they are accessible to the web server, the IntraBuilder Agent, and your IntraBuilder application, for both testing and deployment. There are four directories to consider:

- Where the Web server looks for document (HTM and HTML) files
- Where the CGI Broker is located
- Where the IntraBuilder Agent looks for its form and report (JFM and JRP) files
- Where the forms and reports look for their files (tables, bitmaps, etc.)

If you need to move files to another directory for actual use, you'll need to know what files you need to move.

• Where the Web server looks for document files

This issue is not unique to IntraBuilder; it applies for plain HTML pages. It's a concern with IntraBuilder only if you're using an HTML home page to organize your Web applications (as the prebuilt solution applications do), or if you're using frames, in which case browsers request frameset documents. If you're using a home page created with IntraBuilder's Home Page Expert, that's a JFM form, which doesn't apply here.

Setup a separate document mapping for your IntraBuilder documents. For example, installing the prebuilt solution applications creates an IBAPPS alias that points to IntraBuilder's APPS subdirectory. The INDEX.HTM home page is located there, so the URL looks like:

```
http://serverbox.domain.com/ibapps/index.htm
```

In an intranet where everyone is in the same domain, you don't have to specify the domain name, so that URL could be expressed as:

```
http://serverbox/ibapps/index.htm
```

The Borland Web Server installs with the APPS subdirectory as its base document path, and the INDEX.HTM file as the default page. If you're using another Web server, you could configure it the same way. To get the home page of the prebuilt solution applications, the URL is simply:

```
http://serverbox/
```

The same rules apply for a frameset document. For example, if the frameset document is named TMD.HTM, and it is located in the directory mapped to by the IBAPPS alias, the URL would be:

```
http://serverbox/ibapps/tmd.htm
```

Inside the frameset document, the SRC attribute of the <FRAME> tag would contain URLs to the contents of each frame: other HTML documents and IntraBuilder forms and reports. URLs for other HTML documents are relative to the document's directory, but URLs to IntraBuilder forms and reports must be valid by themselves, as if there was no frameset document. For example, if one frame contains an HTML document named SPLASH.HTM that's in the same directory as TMD.HTM, and the other frame contains an IntraBuilder form named LOGIN.JFM that's in a subdirectory (of the directory that TMD.HTM is in, APPS) named TMD, then the frameset document would look like:

```
<HTML>
<HEAD>
<TITLE>Threaded Message Database</TITLE>
</HEAD>
<FRAMESET COLS="30%,*">
  <FRAME NAME="reportFrame" SRC="splash.htm">
  <FRAME NAME="formFrame" SRC="apps/tmd/login.jfm">
</FRAMESET>
</HTML>
```

The base directory for the JFM file is separate from the one for the HTML file. Also, the path to the JFM file (as shown here) is not sufficient if you're using CGI, as detailed next.

• Where the CGI Broker is located

The CGI Broker, INTRASRV.ISV, is required if you're running your IntraBuilder applications through CGI. Even if you're not using CGI, you might want to include the CGI Broker in the URL anyway; the URLs will then work whether you're using CGI, NSAPI, ISAPI, or BWS. The prebuilt solution applications do this.

The Web server must be able to locate the INTRASRV.ISV file. Installing the CGI Broker creates an alias named SVR (not SRV) that is mapped to IntraBuilder's SERVER subdirectory, where the INTRASRV.ISV file is located. The URL for any IntraBuilder form or report would start with:

`http://serverbox.domain.com/svr/intrasrv.isv?`

(If the Web server is in the same domain, you don't need to specify the domain.) The path to the IntraBuilder form or report would follow the question mark. For example, if the path to the IntraBuilder form LOGIN.JFM is APPS/TMD/LOGIN.JFM, then the URL would be:

`http://serverbox.domain.com/svr/intrasrv.isv?apps/tmd/login.jfm`

In the frameset document in the [previous topic](#), the <FRAME> tag would be:

```
<FRAME NAME="formFrame" SRC="/svr/intrasrv.isv?apps/tmd/login.jfm">
```

If you're using CGI, when the Web server sees the SVR alias, it recognizes it as a CGI (actually WinCGI) request, and passes the value after the question mark to the CGI Broker.

If you're not using CGI, then the ISV file-name extension, which was configured in the Web server as a MIME type during installation, is recognized as an IntraBuilder request, and the value after the question mark is used by the IntraBuilder Broker. (Everything before the ISV is ignored, so you don't need an SVR alias.)

In either case, the value after the question mark must be a valid path to an IntraBuilder form or report, as detailed [next](#).

• Where the IntraBuilder Agent looks for its form and report files

The IntraBuilder Agent has a base directory that is configured in the INTRASRV.INI file. By default, it's the IntraBuilder home directory, that is:

```
C:\Program Files\Borland\IntraBuilder
```

if you install to the default directory.

Every time the IntraBuilder Agent receives a request for a new form or report, for example:

```
apps/tmd/login.jfm
```

it internally changes to the named directory, for example:

```
apps/tmd
```

runs the named form or report, for example:

```
login.jfm
```

and then switches back to the base directory. Because the path did not start with a slash (or backslash) or drive/volume name, the path is relative to the IntraBuilder Agent's base directory. In the example, that would be:

```
C:\Program Files\Borland\IntraBuilder\apps\tmd
```

and that is the directory where the named JFM or JRP file must be located.

Therefore, the path to your IntraBuilder forms and reports is a combination of the base directory of the IntraBuilder agent, and the relative path used in the URL. It's easiest to use the default base directory and place your IntraBuilder application in a subdirectory; perhaps in a subdirectory of the APPS subdirectory, as the prebuilt solution applications are, and as shown in the example above.

Another approach is to create a completely separate directory for your IntraBuilder application, and make that the base directory for the IntraBuilder Agent. For example, you could create a directory named WEBAPPS off the root directory of the C drive. To specify that as the base directory for the IntraBuilder Agent, modify (or create) the [Directories] entry in the INTRASRV.INI file. For example:

```
[Directories]
0=C:\Program Files\Borland\IntraBuilder
1=C:\webapps
Current=1
```

This change preserves the original base directory (in case you want to restore it), while creating a new directory entry and making it the current base directory. With all your JFM and JRP files in the WEBAPPS directory, the URLs will be concise. For example if HOMEPAGE.JFM is a home page form created with IntraBuilder's Home Page Expert, the URL when running in the same domain with NSAPI, ISAPI, or BWS would be:

```
http://serverbox/homepage.jfm
```

For CGI, you would need to include the CGI Broker in the URL:

```
http://serverbox/svr/intrasrv.isv?homepage.jfm
```

Once you've located the form or report, IntraBuilder will have to find the files that it uses, as detailed next.

• Where the forms and reports look for their files

An IntraBuilder form or report typically uses several other files, including:

- Base class files for forms (JCF files)
- Custom component files (CC files) that are loaded with `_sys.scripts.load()`.
- Table files that are opened directly, instead of through a BDE alias (DBF and DB files)
- Bitmap files for backgrounds, images, etc. (GIF, JPG, etc. files)

In the JFM or JRP script file, these files may be referenced with an absolute file path, including a drive and full path; or with relative paths—in most cases the file is in the same directory, so just the file name is used.

When the IntraBuilder Agent runs the form or report, it switches to the directory where the JFM or JRP is located. It will then try to find the other files as they are specified in the script file, with absolute or relative paths. For example, if the other files are in the same directory and are specified in the script with just the file name, they will be found.

The question then is whether you develop in your deployment directory, or you develop in one place and move the files to deploy them.

- If you develop in your deployment directory—in the same directory on the same machine—then you shouldn't have to do anything extra for deployment. As files are used in the development process, absolute and relative paths will be created in the script files. If the application works during testing, then it should work in actual use, since you haven't moved anything.
- If you develop and deploy on two different machines, you can simplify matters by creating the same directory structure in both machines. For example, you might develop on a Windows 95 machine and deploy on a Windows NT machine. On both machines, you install IntraBuilder to the default directory:

```
C:\Program Files\Borland\IntraBuilder
```

and create the application in the same subdirectory of the IntraBuilder home directory. When you move the application to the other machine, everything should work the same, because all the paths, whether they're relative or absolute, should refer to the copies of the files in the deployment machine.

- If you develop and deploy in different directories, whether they're on the same machine or different machines, you must be strict about whether you use absolute or relative paths. For example, if a table is on the network, you would use an absolute path; but for a bitmap that's in the same directory as the form that uses it, you would use a relative path. That way, no matter what directory the files are in, they can be found.

You will need to edit the script file and verify that all the file references are correct, adjusting them if needed. For example, you might have an absolute reference to a table file in the `sql` property of a Query object in a form. If that file is in the same directory as the form, you should remove all the path information so that only the file name remains.

If you're moving your application to deploy it, you need to know what files you have to move, as detailed [next](#).

▪ **Files to deploy**

During the development process, many different file types are created. If you need to move files to another directory to deploy the application, you don't need to move all of them. The following files types are needed for an IntraBuilder application:

- Form (JFM)
- Report (JRP)
- Base form (JCF)
- Custom component (CC)
- Scripts (JS)
- HTML (HTM, HTML)
- Bitmaps (GIF, JPG, etc.)

If your application does not use a particular type of file, then you don't need to move it. For example, if the application has no reports (even though you may have a report in the development directory that you used for testing purposes), you don't need to move any JRP files.

JFO, JRO, JCO, CO, and JO files are all JavaScript byte code files. You shouldn't move those; the IntraBuilder Agent will recompile the script files. You also don't need to move all the backups of the script files.

You will also need to deploy the tables. If you're using a BDE alias (for an SQL server, for example), you need to setup the alias on the deployment machine. If the location of the files has moved, you will have to update the alias in the BDE Configuration Utility. If you're moving Standard tables (as opposed to Standard tables that don't need to be moved; for example on the network), you need to move the following files:

- For DBF files, you also need to move DBT, and MDX files with the same name.
- For DB files, you also need to move MB, PX, VAL, X?? and Y?? files with the same name.

If the tables contain test data, you may want to empty the deployed copies.

