

Borland Web Server overview

[See also](#)

The Borland Web Server executable file (.EXE) is a fully functional web server with these features:

- HTTP support (version 1.0 plus many 1.1 elements)
- File caching
- Contact (access) logging using the CERN/NCSA Common Log Format plus transaction logging (see [The Borland Web Server access log](#) for details)
- Custom MIME types
- Multi-threaded; supports multiple IntraBuilder sessions

The Borland Web Server acts as an intermediary between web browsers and compatible applications, such as IntraBuilder and Paradox, to transfer requests and responses between them.

For information on starting up and using the Borland Web Server, see [Using the Borland Web Server](#).

Using the Borland Web Server

[See also](#)

When you install the Borland Web Server as part of an application installation, the installation program copies the web server application and documentation files into the same directory. The default is C:\Program Files\Borland\Server.

These topics contain information on setting up and using the Borland Web Server:

[Starting and stopping the Borland Web Server](#)

[Setting the working directory and base path](#)

[The Borland Web Server window](#)

[Customizing the Borland Web Server](#)

[The Borland Web Server access log](#)

[Saving memory](#)

Starting and stopping the Borland Web Server

[See also](#)

You can start the Borland Web Server by double-clicking its icon in its program group or the Windows Explorer. When started, it appears as an icon or minimized window button at the bottom of the Windows Desktop:



When started and active, the Borland Web Server is ready to handle client browser requests. If you're using a compatible application such as IntraBuilder or Paradox, the web server finds application data by checking the Windows registry. If you want to access data that is not automatically entered in the registry, you need to enter a working directory or base path, so the web server will know where to look for requested information (see [Setting the working directory or base path](#)).

Deactivating and reactivating the web server

You can inactivate the Borland Web Server by right-clicking its icon or minimized window button at the bottom of the Windows Desktop and choosing Shutdown. To reactivate it, choose Startup.

Terminating the web server

To exit the Borland Web Server and remove its icon or button from the Windows Desktop tray, right-click the icon or button and choose Exit.

Restarting the web server

Once you exit the Borland Web Server, you can open it again by clicking its icon in the Borland Web Server program group or double-clicking it in the Windows Explorer.

Viewing the web server connection list

For information on viewing the Borland Web Server connection list, see [The Borland Web Server window](#).

Setting the working directory and base path

[See also](#)

Any requests for IntraBuilder files (with extensions .isv, .jfm, .jrp, or .js) are received by the Borland Web Server, then handled by IntraBuilder.

IntraBuilder looks for these documents in its working directory. So, be sure IntraBuilder points to the desired URL path containing these files. Choose View|IntraBuilder Explorer or Properties|Desktop Properties in IntraBuilder to enter the path in the appropriate text box.

Requests for Paradox HTML documents are also handled automatically by the Web Server.

Requests for documents with other extensions are handled only by the Borland Web Server. Be sure the Borland Web Server points to the appropriate web site base path for those documents. If you have not already set the base path in a popup dialog box, set it on the web server [Pages](#) property page.

The Borland Web Server window

[See also](#)

Opening the Borland Web Server window

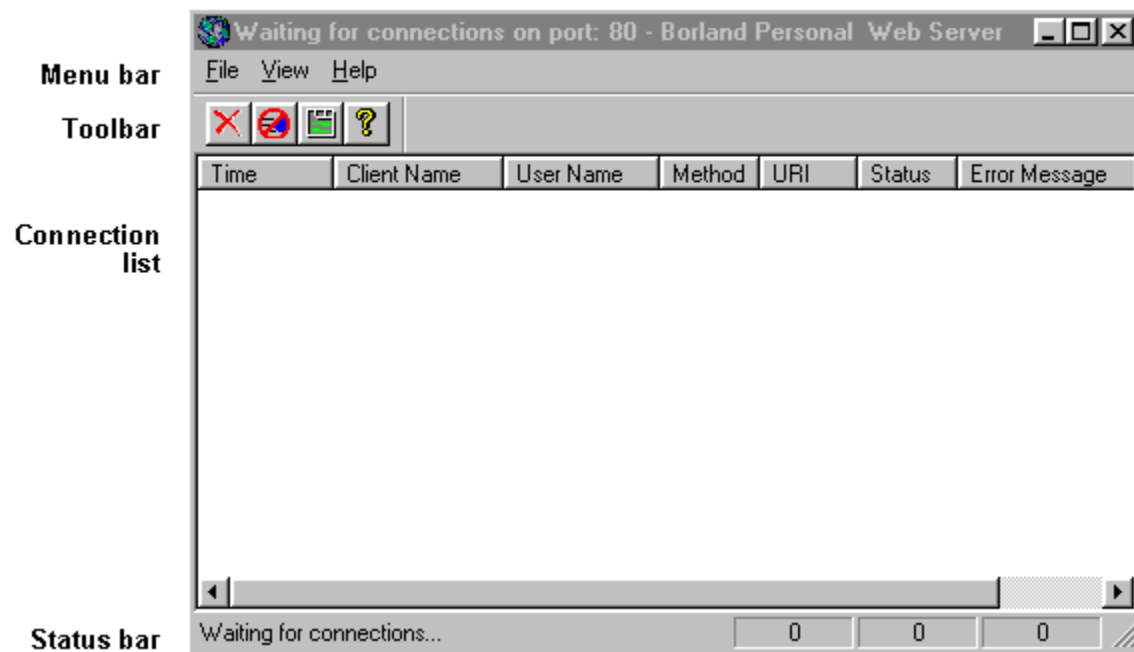
When you run the Borland Web Server, you have a fully functional web server that can pass information between a client web browser and Intranet or Internet URLs. To open the Borland Web Server window and display a list of active and completed connections:

- ▶ Right-click the Borland Web Server icon or minimized window button at the bottom of your Windows Desktop and choose View Connections.

The Borland Web Server window appears.

Window features

The Borland Web Server contains a menu bar, a toolbar, a connection list, and a status bar. The window looks like this before any connections have occurred:



The Borland Web Server menu bar

[See also](#)

The Borland Web Server menu bar offers three main commands, File, View, and Help:

File	Properties	Displays the Borland Web Server property sheet for customizing features and performance. For more information, see Customizing the Borland Web Server .
	Shutdown/Startup	Inactivates and reactivates the Borland Web Server. This command is a toggle; you only see the appropriate icon.
	Exit	Terminates and closes the Borland Web Server.
View	Toolbar	When checked, displays the toolbar beneath the menu bar at the top of the Borland Web Server window. This command is a toggle.
	Status Bar	When checked, displays the status bar at the bottom of the Borland Web Server window. This command is a toggle.
	Clear View Window	Clears all entries from the connection list; useful when debugging.
Help	Help Topics	Displays this online Help file.
	About Web Server	Displays copyright and other information about the Borland Web Server.

The Borland Web Server toolbar

[See also](#)

The Borland Web Server toolbar contains these buttons, which are all shortcuts for menu commands:



Shutdown/Startup—a toggle that inactivates and reactivates the Borland Web Server.



Clear—clears the web server connection list.



Properties—displays the Borland Web Server property sheet for customizing features and performance. For more information, see [Customizing the Borland Web Server](#).



Help—displays this online Help file.

The Borland Web Server connection list

[See also](#)

When a web browser contacts the Borland Web Server with an HTTP request, the server displays the following information:

Time	Contact time, in local time
Client Name	The client Host Name (machine name) if Enable Client Name Lookup is checked on the web server Status property page; otherwise, the client's IP Address.
User Name	The user ID, entered in response to a browser prompt
Method	HTTP method used in the request: GET, POST, or HEAD
URI	The named resource (such as an HTML file) the browser is requesting; this can include the path with respect to the Base Path set on the web server Pages property page
Status	The HTTP connection code for the current status of the contact
Error Message	An error message

Dead connections only show if Show Completed Connections is checked on the web server [Status](#) property page.

The Borland Web Server status bar

[See also](#)

To display status messages on the status bar at the bottom of the Borland Web Server, check Enable Server Status Bar on the web server [Status](#) property page.

When this setting is checked, the first number at the right end of the server status bar shows the number of current connections, the next number shows the total number of connections, and the third number shows the number of failed connections.

Customizing the Borland Web Server

[See also](#)

To set the Borland Web Server's properties:

- Right-click the Borland Web Server icon or minimized window button at the bottom of your Windows Desktop and choose Properties, or
- Choose File|Properties from the web server menu bar, or
- Click the Properties button on the web server toolbar

For details, see [About Borland Web Server properties](#).

One important property to set is Base Path, on the [Pages property](#) page. This property sets the root directory where target web pages are stored (NOT the computer's root directory).

Saving memory

[See also](#)

It is convenient to have a lot of threads waiting for client connections, but this can use a lot of memory. To reduce the number of waiting threads, you can enter a lower value for Min Ready Connections on the web server [Server](#) property page.

The Borland Web Server access log

[See also](#)

The access log contains a record of all completed requests to the Borland Web Server, regardless of returned HTTP status. Requests that were interrupted by the browser or by network errors are not logged in the access log.

Activating the log

To start logging server access records, check Enable Access Logging on the web server [Logging](#) property page and enter a log file name in the Access File Name text box.

(**Note:** You can log transactions as well as access records by setting the appropriate debug logging properties on the Logging property page.)

Format

The access log complies with the the NCSA/CERN Common Log Format (CLF). A sample entry is shown below (each entry is on a single line in the actual log file):

```
146.82.56.219 - - [23/Apr/1996:05:28:13 -0800] "GET
/newinfo/32srvr/newpage.html HTTP/1.0" 200 29764
```

A dash or minus means null or not applicable. The fields are (in order):

- IP address or host name of the client. For host-name logging, Enable Client Name Lookup must be checked on the web server [Status](#) property page. This slows down server performance and is not recommended.
- Unused (placeholder for RFC931/TAP identification; deprecated, not supported).
- Authenticated user name. Present only if the browser sends basic authentication header with the request.
- Date/time per Common Log Format. Local time, with GMT offset
- Quoted string containing the HTTP request line, including method, URL, and HTTP version fields.
- The HTTP/1.0 status/result code for the request.
- The number of bytes, exclusive of HTTP header bytes, returned to the client as a result of the request.

About Borland Web Server properties

To set Borland Web Server executable file (.EXE) properties:

- Right-click the Borland Web Server icon or minimized window button at the bottom of your Windows Desktop and choose Properties, or
- Choose Configuration|Properties from the web server menu bar, or
- Click the Properties button on the web server toolbar

When the tabbed property sheet appears, click a page tab to set each kind of property:

Server properties—control how the Borland Web Server handles connections

Pages properties—indicate the location of web pages accessed by the Borland Web Server

Logging properties—indicate whether you want to keep log files of connections and transactions and the names of these files, if kept

MIME properties—are records in the Borland Web Server MIME Types database (you can add, edit, and remove MIME media-type records on the MIME property page)

Status properties—control client identification detail and status display

Web Server Properties dialog box (Server page)

[See also](#)

The settings on this box control how the Borland Web Server handles connections.

Dialog box options

HTTP Port

The port the server listens to for connections; no two servers can have the same port on the same machine. Values are 1 to 32767; default = 80.

Min Ready Connections

The number of threads to prepare for connection at startup and keep waiting after startup. The number must be equal to or less than Max Connections. A higher number speeds connections but uses much more memory. Values are 0-255 (Default = 25).

Max Connections

Total number of connections allowed at one moment. Values are 1-255 (Default = 100).

Connection Timeout

The number of seconds to wait before issuing a time-out and breaking the connection. This property is used in both reading requests and sending responses. It also specifies how long to keep a keep-alive connection open. Values are 1-600.

Keep Alive Connections

Allow Keep Alive Connections

If checked, permits a request to keep the connection open. This allows a browser quicker access on its second request; it doesn't need to wait for a connection to open.

Checking Allow Keep Alive Connections uses up more of the server's available connections.

Max Requests Per Connection

The number of request/response transactions allowed for each keep-alive connection (if Allow Keep Alive Connections is checked). Values are 1-1024 (Default = 5).

Web Server Properties dialog box (Pages page)

[See also](#)

The settings on this page indicate the location of web pages accessed by the Borland Web Server.

Dialog box options

Base Path

The root directory where the web pages are stored. (**Caution:** For security reasons, don't use your own root directory. Choose a directory with only subdirectories that users are allowed to access.)

Default Page

The default web page name in each directory.

Footer Page

The full path plus a page with the information to appear at the bottom of each transferred page; like a template for the page footer.

Header Page

The full path plus a page with the information to appear at the top of each transferred page; like a template for the page header.

Web Server Properties dialog box (Logging page)

[See also](#)

The settings on this page indicate whether you want to keep log files of connections and transactions and the names of these files, if kept.

Dialog box options

Access Logging

These settings enable and name a log file of who connected to the server. The access log file is written in Common Log Format. For more information, see [About the Borland Web Server access log.](#)

Enable Access Logging

When checked, logs connection history to a file in Common Log Format.

Access File Name

When checked, logs connection history to a file in Common Log Format.

Debug Logging

These settings enable and name a debug log file of debug information for transactions handled by the server.

Enable Debug Logging

When checked, logs debug information for transactions to a file for later tracing and debugging.

Debug File Name

The name of the Debug Log file where transaction records are stored for later tracing and debugging.

The log includes the buffer received from the browser, the buffer sent to the browser, and a dump of the variables from both the request and response.

Web Server Properties dialog box (Mime page)

[See also](#)

This page displays records in the Borland Web Server MIME Types database. You can use the buttons to add, edit, and remove MIME media-type records.

Add

Displays the New MIME Type dialog box where you can enter a file extension with associated media type and subtype.

Extension

The extension used for a certain media type—for example, `txt`.

MIME Type

The main media type associated with Extension—for example, `text`.

MIME Subtype

The category of the main media type associated with Extension—for example, `plain`.

Edit

Displays the Change MIME Type dialog box where you can change the MIME Type or MIME Subtype associated with the selected extension.

Remove

Deletes the selected extension's record.

Web Server Properties dialog box (Status page)

[See also](#)

The settings on this page control client identification detail and status display.

Dialog box options

Enable Client Name Lookup

If checked, attempts to convert an IP address to an Internet machine name. This takes more time than when Enable Client Name Lookup is not checked, but more connection information is obtained.

Enable Server Status Bar

When checked the server status bar shows information about the current status of the server and its connections. Enable Server Status Bar must be checked before these updates are made, but updates are independent of other properties.

Show Active Connections

When checked, active threads appear in the server list (state = New/Recv, Processing, Sending).

Show Completed Connections

When checked, completed thread connections (status = Dead) appear in the server list.

Number of Completed Connections

If Show Completed Connections is checked, the number of connections with status = Dead to show in the Borland Web Server connection list.

