# A Guide to QuarkXPress Server 8.5

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# About this Guide

You do not need to read this guide from cover to cover. Instead, use this guide to quickly look up information, find out what you need to know, and proceed with your work. Use the detailed table of contents at the beginning of the guide to find information quickly.

## What we're assuming about you

In writing this guide, we assume that you are familiar with your computer and know how to:

- Launch an application
- Open, save, and close files
- Use menus, dialog boxes, and palettes
- Work within a networked computing environment
- Use the mouse, keyboard commands, and modifier keys

Consult the documentation provided with your computer or other resources if you need more information in any of these areas.

## Where to go for help

If you're new to QuarkXPress® Server, or if you want to explore one of its other longstanding features, consult the following resources:

- *A Guide to QuarkXPress Server*
- The QuarkXPress Server *Web Integration Guide*
- Third-party books
- General books about desktop publishing

If your issues are at the system level — saving files, moving files, activating fonts, for example — consult the documentation resources provided with your computer.

## Conventions

Formatting conventions highlight information to help you quickly find what you need.

- Bold type style: The names of all dialog boxes, fields, and other controls are set in bold type. For example: "Click **OK**."

- References: In descriptions of features, parenthetical references guide you in accessing those features. For example: "The **Find/Change** dialog box (**Edit** menu) lets you find and replace text."

- Arrows: You will often see arrows (>), which map out the menu path to a feature. For example: "Choose **Edit > Style Sheets** to display the **Style Sheets** dialog box."

- Icons: Although many tools and buttons are referenced by name, which you can see by displaying ToolTips, in some cases icons are shown for easy identification. For example, "Click the ☰ button on the **Measurements** palette to center text."

- Cross-platform issues: This application is quite consistent across operating systems. However, some labels, buttons, key combinations, and other aspects of the application must differ between Mac OS® and Windows® because of user interface conventions or other factors. In such cases, both the Mac OS and Windows versions are presented, separated by a slash, with the Mac OS version presented first. For example, if the Mac OS version of a button is labeled **Select**, and the Windows version is labeled **Browse**, you are directed to "Click **Select/Browse**." More complex cross-platform differences are mentioned in notes or parenthetical statements.

# Getting started with QuarkXPress Server

QuarkXPress Server lets you render QuarkXPress projects in a variety of formats.

## Understanding QuarkXPress Server

QuarkXPress Server lets you output customized QuarkXPress layouts in a variety of formats — including JPEG, Portable Document Format (PDF), and PostScript® — from a centralized QuarkXPress Server application. To send a request to a QuarkXPress Server application, all you need to do is enter a URL into your Web browser's address field. For example, the following URL instructs the QuarkXPress Server application named "QXPServer" to return the file "MyProject.qxp" as a PDF file:

```
http://QXPServer:8080/pdf/MyProject.qxp
```

The QuarkXPress Server application receives these requests, renders (creates) the requested projects in the requested formats, and then returns the rendered file to the client application (in this case, the Web browser).

➡ The format of QuarkXPress Server URL requests is described in detail in "*Creating URL requests*" and in the QuarkXPress Server *Web Integration Guide*.

➡ You can also create custom applications that communicate with a QuarkXPress Server application using HTTP, Simple Object Access Protocol (SOAP), or another protocol. For more information, see the QuarkXPress Server *Web Integration Guide*.

You can think of QuarkXPress Server as a special version of QuarkXPress that runs on a server with the following main differences:

- Instead of accepting input from a keyboard and mouse, QuarkXPress Server accepts input in the form of URLs and other types of requests.

- Instead of sending a project to a printer, QuarkXPress Server renders (creates) output in a particular format and sends the rendered file to a client.

### Server templates and static projects

QuarkXPress Server can open, render, and serve two types of projects:

- *Static projects* are QuarkXPress projects that can be rendered and served as-is in a variety of formats by the QuarkXPress Server application. For example, you might make a product manual available as a static project and allow customers to download that manual in a variety of formats.

- *Server templates* are QuarkXPress projects that can be manipulated by the QuarkXPress Server application before being rendered and served. For example, you might make a sales piece available as a server template so that each person who downloads it receives a personalized copy.

➡ QuarkXPress Server can open QuarkXPress documents, projects, and templates created in any language edition of QuarkXPress 5.0 or later. QuarkXPress Server can save and export projects in QuarkXPress 7.x and QuarkXPress 8.x format. QuarkXPress Server can also export projects in QuarkXPress 6.x Japanese format and QuarkXPress 6.x Korean format.

### The document pool

QuarkXPress Server reads server templates and static projects from a directory called the *document pool*. The document pool can be any directory that is available to QuarkXPress Server through a file system or an FTP server. You can use any of the following methods to place files in the document pool:

- Drag the files to the document pool directory.

- Upload the files using FTP to the document pool directory.

- Use Telegraph XTensions® software to upload the files to the document pool from within QuarkXPress. (For more information about Telegraph XTensions software, see "*Telegraph XTensions software*.")

For more information about the document pool, see "*Server Configuration dialog box*."

QuarkXPress Server can also serve documents from a database, a content management system, or other sources. Collectively, the document pool and any other source of files to be served are referred to as *document providers*.

### Projects and layouts

QuarkXPress projects can contain one or more layouts, and only one layout can be rendered at any given time. If you do not specify a layout when you send a rendering request, QuarkXPress Server renders the first layout in the project.

### Caching

To maximize efficiency, QuarkXPress Server uses cached versions of all rendered projects whenever possible. You can configure projects so that they are never cached, so that they are cached for a particular amount of time, or so that they are rendered every time they are served. For more information about caching, see "*Server Configuration dialog box*

### QuarkXPress Server preferences

When you launch QuarkXPress Server, the application creates preferences files that are functionally and structurally equivalent to the preferences files created by QuarkXPress. These preferences files reside in the QuarkXPress Server "Preferences" folder. QuarkXPress Server also creates a "QuarkXPress Server.prf" file in the "Preferences" folder. This file contains preference settings that are specific to QuarkXPress Server.

QuarkXPress Server uses these preferences the same way QuarkXPress uses them. If an XTensions module creates a project in QuarkXPress Server, that project draws its settings from the QuarkXPress Server preferences just as a new QuarkXPress project draws its settings from the QuarkXPress preferences.

Preferences files are stored in the following locations:

- Mac OS: `[User]/Library/Preferences/Quark`

- Windows 2003 and Windows XP: `C:\Documents and Settings\[username]\Application Data\Quark\QuarkXPress Server 8\Preferences`

- Windows 2008 and Windows Vista, when QuarkXPress Server is running as a service under the "local system user" account: `C:\ProgramData\Quark\QuarkXPress Server 8\Preferences`

- Windows 2008 and Windows Vista, when QuarkXPress Server is running normally or as a service under the "Domain user" account : `C:\Users\Administrator\AppData\Local\Quark\QuarkXPress Server 8`

For more information about preferences, see "*Server preferences*."

### Quark License Administrator

To prevent unauthorized use, QuarkXPress Server requires the presence of a Quark® License Administrator (QLA) server to launch. QuarkXPress Server follows the configuration and control rules that are enforced by QLA. For more information about QLA, see the QLA documentation included with QuarkXPress Server.

### Master-subrenderer environment

Requests for project renders are stored in a *connection queue*. The requests in the rendering queue can be processed by a single QuarkXPress Server application, or by a master QuarkXPress Server application and several subrenderers (additional instances of QuarkXPress Server). The master QuarkXPress Server application launches the available number of subrenderers and then passes the requests in the connection queue to those subrenderers as they become available. The number of subrenderers available for launch is determined by the number of licenses available from the QLA server.

The master QuarkXPress Server application and all of the subrenderers it launches share the following elements:

- The same application preferences (each subrenderer has its own preferences files, but QuarkXPress Server keeps them synchronized)

- The same document cache in memory

- The same memory cache

- The same server XTensions modules (a separate instance of each XTensions module runs with each subrenderer)

- The same server document pool (if defined in the QuarkXPress Server preferences or if a document provider is used in place of the document pool)

If a subrenderer unexpectedly quits, the master QuarkXPress Server restarts the subrenderer without requiring any action from you.

By default, QuarkXPress Server launches in master-subrenderer mode. You can change this setting by changing the parameters in the "QuarkXPress Server.config" file. For more information, see "*Launching QuarkXPress Server*."

### The Keepalive script

A script called the *keepalive script* can monitor a QuarkXPress Server application and restart the application if it fails. To use this feature, launch QuarkXPress Server by running the "keepalive.sh" script (Mac OS) or "keepalive.bat" (Windows) script. Note that the keepalive script works only if you run it before you launch QuarkXPress Server. You can also manually restart QuarkXPress Server using this script.

On both platforms, information about unexpected shutdowns (including the error date, time, code, and description) is stored in an error log file. For more information about logging, see "*Logging (Tab)*"

## Understanding QuarkXPress Server XTensions software

QuarkXPress Server ships with a collection of XTensions software that adds capabilities to QuarkXPress Server. For example, PDF Export XTensions software lets QuarkXPress Server serve content in PDF format; Modifier XTensions software lets you retrieve, manipulate, and reconstruct XML representations of projects; and QuarkCopyDesk® Renderer XTensions software lets you create QuarkCopyDesk articles. Telegraph XTensions software works with QuarkXPress to allow designers to name boxes in template files so that those boxes can be addressed by URLs.

For more information about XTensions software included with QuarkXPress Server, see "*QuarkXPress Server XTensions software*" and "*Telegraph XTensions software*."

### The QuarkXPress Server XTensions API

In addition to the XTensions modules included with QuarkXPress Server, developers can create custom XTensions software that add features. The complete server XTensions Application Programming Interface (API) documentation is available in the QuarkXPress Server XTensions Developer's Kit (XDK).

➡ As of version 8.0, the QuarkXPress Server XDK is Unicode-compliant.

The QuarkXPress Server XDK lets you create XTensions modules that provide the following abilities:

- The ability to register request handlers

- The ability to register project providers

- The ability to register new render formats

- The ability to add items to the list of response properties, cookies, and HTTP header items

- The ability to log messages in log files and in the status monitor

- The ability to initiate a new transaction to be processed by the server

- The ability to completely control how projects are processed by the server

In addition, QuarkXPress Server XTensions software can register for the following basic callbacks:

- Pre-processing

- Content loading

- Layout modification

- Post-processing

- Removing slugs while running the QuarkXPress project renderer

- Analyzing the server after a transaction is complete

- Pre- and post-transaction callback

### Launching QuarkXPress Server

QuarkXPress Server consists of a single executable that can be executed in two modes. Both modes are available on Mac OS and Windows.

- When executed in *console mode*, QuarkXPress Server displays a limited user interface for configuring the server. To access QuarkXPress Server in console mode, double-click the program icon.

- When executed in *no-UI mode*, QuarkXPress Server displays no visible user interface and must be controlled (started and stopped) from a command prompt. Running QuarkXPress Server in no-UI mode will slightly improve its performance.

To control which mode QuarkXPress Server launches in, edit the "QuarkXPress Server.config" file, which is located at the root level of the QuarkXPress Server application folder. This file supports the following options:

- The `-noui` option makes the server run without any user interface. This is the normal mode for production use of QuarkXPress Server.

- The `-nonetwork` parameter makes the server run without loading any network interfaces; in this mode, the only transactions a server can run are those passed to it by another process.

- The `-subrenders` parameter lets you specify how many subrenderers to use.

- The `-tm` parameter makes the transaction layer of the server mask exceptions into transaction errors.

- The `-tt` parameter makes the transaction layer of the server throw exceptions to the server layer.

- The `-monitorsubrenders` option turns on subrenderer monitoring.

  To use the subrenderer monitoring feature, add the following command line parameters to the "QuarkXPress Server.config" file:

  ```
  -monitorsubrenders -queryinterval x -noofretries y -recycle
  ```

  If a subrenderer process has been attempting to fulfill a request for the specified number of retries (with the specified query interval in seconds between retries), the subrenderer monitor recyles that process.

  *Windows only:* If the `recycle` parameter is not supplied, the subrenderer monitor performs a periodic memory check on all subrenderer processes. If the memory used by a subrenderer process does not change within the specified number of retries with the specified query interval, that process is recycled.

  By default, the contents of the "QuarkXPress Server.config" file are as follows:

  ```
  COMMANDLINE=-subrenders 1
  ```

  To launch QuarkXPress Server with the options specified in the "QuarkXPress Server.config" file, double-click the "QuarkXPress Server" icon.

### Exit Codes

When the server shuts down, QuarkXPress Server returns exit codes. The "keepalive.sh" file (Mac OS) or "keepalive.bat" file (Windows) uses these codes to check the type of QuarkXPress Server shutdown. If the exit code indicates that QuarkXPress Server shut down unexpectedly, the "keepalive" utilities automatically relaunch QuarkXPress Server.

Valid exit codes are as follows:

- QUARKXPRESS SERVER_EXIT_NORMAL (0): The server exited normally.

- QUARKXPRESS SERVER_EXIT_EXCEPTION (6969): The server exited as a result of an exception that was handled by the server layer.

- QUARKXPRESS SERVER_EXIT_STARTUP (6970): The server exited as a result of a startup problem. In this case, restarting does not solve the problem. You must relaunch QLA.

- QUARKXPRESS SERVER_EXIT_RESTART (6971): The server exited as a result of a remotely requested restart.
- QUARKXPRESS SERVER_EXIT_SHUTDOWN (6972): The server exited as a result of a remotely requested shutdown.

# The QuarkXPress Server user interface

This chapter describes the QuarkXPress Server user interface and explains how you can use it to configure and customize your QuarkXPress Server application and manage your server XTensions modules. Menu items are covered in the same order they display in the user interface, from left to right and top to bottom.

When you open a dialog box in the QuarkXPress Server user interface, the HTTP server pauses to prevent conflicts with any jobs that are being processed. When you close the dialog box, the HTTP server starts again.

## Server Configuration dialog box

The **Server Configuration** dialog box (**Server/QuarkXPress Server** menu) lets you specify the document pool location and control cache memory sizes, log options, HTTP settings, and other options related to the functioning of QuarkXPress Server.

### Server (Tab)

The **Server** tab in the **Server Configuration** dialog box (**QuarkXPress Server > Server Configuration**) lets you control memory and timing settings. You can also define the location of the document pool and designate default documents for display.
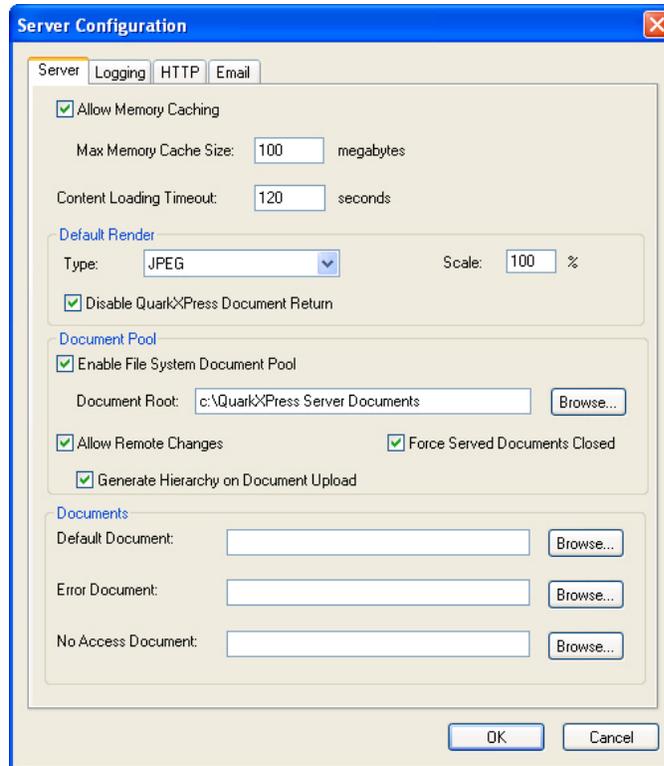
**Server** tab of **Server Configuration** dialog box

Check **Allow Memory Caching** to store disk-based documents in a memory-resident cache. Documents from external document providers also use this cache. **Allow Memory Caching** is checked by default.

In the **Max Memory Cache Size** field, enter the maximum memory size allocated to the cache memory. The default value is 100MB. The acceptable range of values is from 10MB to 1024MB.

All subrenderers in a master-subrenderer environment share the same memory cache.

In the **Content Loading Timeout** field, enter the amount of time (in seconds) the server should wait for a server XTensions module (or another document provider) to load content asynchronously before timing out the transaction. The default value is 120 seconds. Valid values are from 1 second to 3600 seconds.

Use the **Default Render** area to specify the format in which QuarkXPress Server renders QuarkXPress projects if the client does not specify a format. You can change the render type using URL parameters in the HTTP request.

To indicate the default rendering format for the server, choose an option from the **Default Rendering Type** drop-down menu:

• **EPS Document**: Returns an Encapsulated PostScript (EPS) file

• **JPEG**: Returns a JPEG file

- **PDF**: Returns a PDF file

- **PNG**: Returns a Portable Network Graphics (PNG) file

- **PostScript**: Returns a PostScript file

- **PPML**: Returns a PPML file

- **QCDDOC**: Returns a QuarkCopyDesk article

- **QuarkXPress Document**: Returns a QuarkXPress project

- **Raw Custom**: Returns a file in internal QuarkXPress format for use by server XTensions software developers

- **RLE Raw Custom**: Returns a file in internal QuarkXPress format (compressed using Run Length Encoding) for use by server XTensions software developers

➡ If a copy of QuarkXPress Server running on Mac OS renders a project that was created in Mac OS and returns the project in QuarkXPress format, the resulting project has no resource fork. (A resource fork is a hidden file that contains information about the application that created a file.) You cannot preview a project that does not have a resource fork, but such projects function normally in all other respects.

➡ You can set up helper applications on local systems to display files in formats such as PostScript on the screen, but this feature is not built into QuarkXPress Server.

In the **Scale** field, enter the default scale at which QuarkXPress Server should render projects.

➡ **Scale** is not available for PDF, PostScript, Personalized Print Markup Language (PPML), and QuarkXPress project rendering formats.

Check **Disable QuarkXPress Document Return** to prevent QuarkXPress Server from returning QuarkXPress projects to clients.

Use the **Document Pool** area to control location and configuration of the document pool.

Check **Enable File System Document Pool** to enable the **Document Root** field and the **Browse** button. This box is checked by default. To specify the document pool directory, click **Browse** or enter a path in the **Document Root** field.

➡ The document pool directory can be on the same computer as the QuarkXPress Server application or on a file server that is accessible on a Local Area Network (LAN) or a Wide Area Network (WAN), as long as the drive containing the pool can be mounted.

➡ You cannot specify the QuarkXPress Server application folder as the document pool directory.

Check **Allow Remote Changes** to allow other applications to upload items to or delete items from the document pool. You can upload or delete QuarkXPress projects and their associated files. This box is checked by default.

Check **Force Served Documents Closed** to make QuarkXPress Server close projects from the document pool after it renders them, regardless of the Telegraph XTensions software setting. Uncheck **Force Served Documents Closed** to keep such projects open on the server. This box is checked by default.

➡ The ability of project to remain open is determined by whether **Allow Document to Stay Open** is checked in the **QuarkXPress Server** pane of the QuarkXPress **Preferences** dialog box when Telegraph XTensions software uploads the file. (For more information, see Chapter 5, "Telegraph XTensions software.") If a project is not set to remain open by the Telegraph XTensions software, unchecking **Force Served Documents Closed** does not cause the project to remain open.

➡ Setting a project to remain open does not guarantee that the project will be left open. This is because server memory and load requirements are also involved. For example, if the server requires memory to open additional projects, it might close a project that has been left open. The maximum number of open projects is 32. This feature enhances performance, and the cache can be cleared at any moment.

Check **Generate Hierarchy on Document Upload** to make QuarkXPress Server automatically generate any file hierarchy that is requested when a user uploads content to the document pool from Telegraph XTensions software. For more information, see Chapter 5, "Telegraph XTensions software." This box is checked by default.

Use the **Documents** area of the **Server** tab to specify which HTML files should display by default when a client accesses QuarkXPress Server, when errors occur, and when access is denied to a client.

To specify which HTML file should display by default when a client accesses QuarkXPress Server, enter the file's path in the **Default Document** field or click **Browse** and navigate to the file. This file must be an HTML file.

To specify which HTML file should display by default when QuarkXPress Server cannot process a request, enter the file's path in the **Error Document** field or click **Browse** and navigate to the file. This file must be an HTML file.

Your error document can contain whatever information you like. QuarkXPress Server also supports the following special tags:

• If you include an `<!--ERRORNUMBER —  >` comment in the file, QuarkXPress Server replaces that comment with a number that identifies the particular error that occurred.

• If you include an `<!--ERRORSTRING —  >` comment in the file, QuarkXPress Server replaces that comment with details about the particular error that occurred.

To specify which HTML file should display by default when a client is denied access to a server function or project, enter the file path in the **No Access Document** field or click **Browse** and navigate to the file. This file can contain whatever information you like, but it must be an HTML file.

### Logging (Tab)

Click the **Logging** tab in the **Server Configuration** dialog box (**QuarkXPress Server > Server Configuration**) to control how errors and transactions are logged.
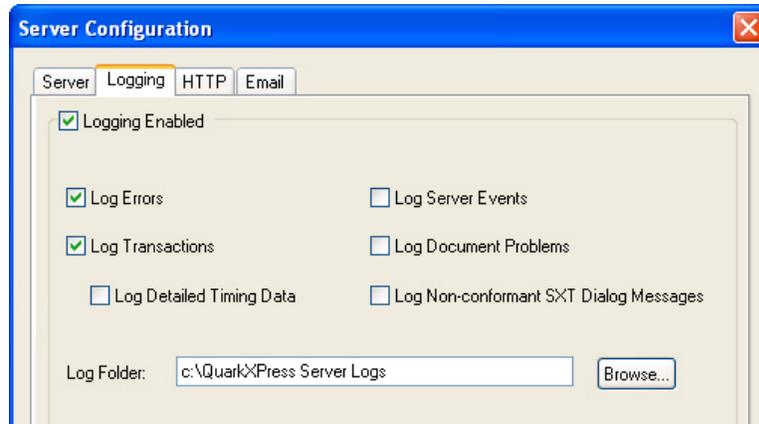


**Logging** tab of **Server Configuration** dialog box

The log folder contains two log files: The transaction log and the error log. You can configure the system to save the log folder to your computer or to a file server that is accessible over a LAN or a WAN, as long as the drive containing the folder can be mounted.

Check **Logging Enabled** to enable the **Log Folder** field and then enter the path to the folder or click **Browse** and navigate to the folder.

➡ You cannot specify the QuarkXPress Server application folder as the document pool directory.

Check **Log Errors** to log PDF-generation and PostScript-generation errors. Checking this box enables the **Use Log Folder** check box.

Check **Log Transactions** to enter every non-error response returned from transactions on QuarkXPress Server into the transaction log.

Depending on the render type, certain transactions must include transaction timing data. Check **Log Detailed Timing Data** to include the following transaction timing data (measured in milliseconds) in the transaction log for each transaction:

• **Connection acceptance and closure time**: The duration between the network connection opening and closing time.

• **HTTP request and body parsed time**: The total time duration in which the following operations are performed: The client connects to the server and sends a request, timing starts, a request is parsed, QuarkXPress Server processes the request, and timing stops.

• **QuarkXPress Server request processing time**: Same as **Connection acceptance and closure time**, but timing starts after request parsing is complete.

• **Opening QuarkXPress document time**: The time required to open a QuarkXPress project for rendering.

- **Instantiate document time**: The time required to carry out the dynamic publishing process.

- **Total of rendering process time**: The total amount of time spent rendering a project.

- **Time required to generate an image of the QuarkXPress document**: The time required for the generation of files that use JPEG, PNG, or any other compressed format.

- **Closing QuarkXPress document time**: The time required to close a QuarkXPress project.

- **Data ready and all sent to client**: The difference between the time when all data for the page return has been processed and is ready to be sent and the time when the last bit of data is sent to the client.

➡ Server XTensions software can be configured to add module-specific timing entries to the transaction log.

Check **Log Server Events** to record QuarkXPress Server events that are not related to error conditions in the transaction log. Server events include the following:

- **Server Started**: The date and time at which the server was started.

- **Server Stopped**: The date and time at which the server was stopped.

- **Errors Starting Up**: The server records errors, such as issues loading XTensions software, in the error log. In no-UI mode, errors that cause an alert to display in the console mode are recorded in the error log.

- **Exceptions Caught (Windows only)**: Any exceptions logged by the server.

- **Application exception-type errors**: An "exception masked" notice and a code. You can use this information for troubleshooting.

Check **Log Document Problems** to include problem descriptions in transaction log files. Logged problems include the following:

- **Missing Fonts**: If fonts are missing from a project that has been requested for rendering, a one-line description of each missing font is added to the error log. If QuarkXPress Server receives a request to render a project and does not have access to the fonts required by the project, it uses the font specified in the **Fonts** tab of the **Preferences** dialog box (see "*Preferences — Application — Fonts*"). If this font is also unavailable, QuarkXPress Server substitutes Helvetica (Mac OS) or Arial (Windows). This behavior is the same as it is in QuarkXPress.

- **Missing SXTs**: If a required server XTensions module is missing when a rendering request is received, a one-line description of each missing module is added to the error log. If the name of the missing module is not returnable, the XTensions module ID number is returned.

- **Text Encoding/Character Set Problems**: If text is sent to a text box in the template and the system does not have access to the correct font glyph, the issue is logged. The log data indicates the character set that the system attempted to convert. For example, the log entry might show that a request for Japanese characters was sent to an English project.

Check **Log Non-conformant SXT Dialog Messages** to prevent server XTensions modules from displaying dialog boxes.

## HTTP (Tab)

Click the **HTTP** tab in the **Server Configuration** dialog box (**QuarkXPress Server > Server Configuration**) to control port and connection settings.
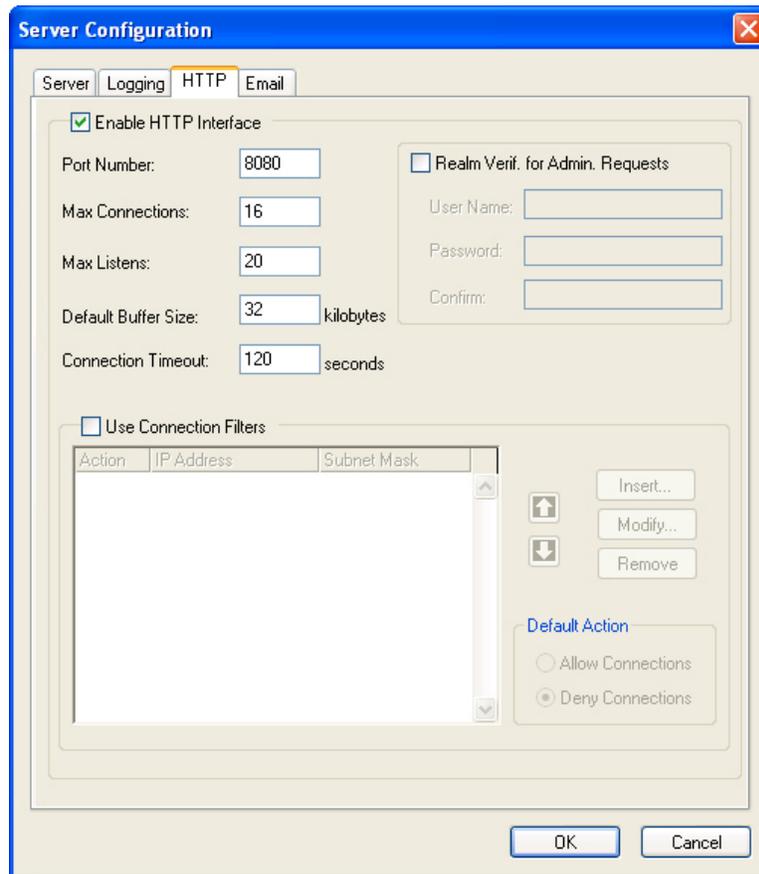
**HTTP** tab

Check **Enable HTTP Interface** to activate the HTTP 1.0 server that is built in to QuarkXPress Server and enable the other controls in this area.

In the **Port Number** field, enter the port number of the HTTP server. The acceptable range of values is from 1024 to 65,535 (Mac OS) or from 1 to 65,535 (Windows). When the HTTP server is initialized, an alert displays if this value falls outside this range or if the specified port number is already in use. If QuarkXPress Server is running in no-UI mode, an entry regarding this alert is made in the log file. The default value for this field is 8080.

In the **Max Connections** field, enter the maximum number of rendering requests to be recognized and processed by the QuarkXPress Server connection queue. The acceptable range of values is from 1 to 16. The default value for this field is 16.

In the **Max Listens** field, enter the maximum number of requests to be queued up for processing while waiting for an open connection. An alert displays if this value exceeds the maximum number of listens. The acceptable range of values is from 1 to 32. The default value for this field is 20.

In the **Default Buffer Size** field, enter the total size (in kilobytes) of the HTTP buffer. The HTTP buffer is the size of the data block that is sent to the client from the server as part of the HTTP response. The smaller the block size, the less memory consumed by the application. Large blocks facilitate faster performance, but might cause memory shortages in other parts of the application. The acceptable range of values is from 16KB to 256KB. The default value for this field is 32KB.

In the **Connection Timeout** field, enter the total time in seconds before an HTTP connection should time out. The client must send a request within this period. The acceptable range of values is from 1 second to 32,767 seconds. The default value for this field is 120 seconds.

Check **Realm Verif. for Admin. Requests** to enable the **User Name**, **Password**, and **Confirm** fields. These fields let youcontrol access to administrative parameters and features. You must enter valid values that contain at least four characters in the **User Name**, **Password**, and **Confirm fields**, and you can enter up to 32 characters. This box is unchecked by default.

Check **Use Connection Filters** to enable controls that let you enter and modify IP addresses and subnet masks in the connection filters list. This box is unchecked by default.

- Click **Insert** to display the **Insert Connection Filter** dialog box, in which you can enter an IP address between 1 and 254 and a subnet mask between 0 and 255. The maximum number of allowed IP addresses/subnet masks is 128.

- Click **Modify** to display the **Modify Connection Filter** dialog box, in which you can specify an action for a particular IP address, edit an IP address, and edit a subnet mask. Each field in the **Modify Connection Filter** dialog box accepts a value between 0 and 255. The default setting is **Deny Connection**.

- Click **Remove** to delete the selected IP address from the connection filters list.

- Click ⬆ or ⬇ to move the selected IP address up or down in the connection filters list.

- If no rules have been applied to an IP address, you can select the IP address and click **Allow Connections** to allow the IP address to be used or click **Deny Connections** to prevent the IP address from being used. The "allow" and "deny" actions are performed on IP addresses in the order they display in the connection filters list.

### Email (Tab)

Click the **Email** tab in the **Server Configuration** dialog box (**QuarkXPress Server > Server Configuration**) to display controls that let you set up automatic e-mail messages to warn of license expiration.
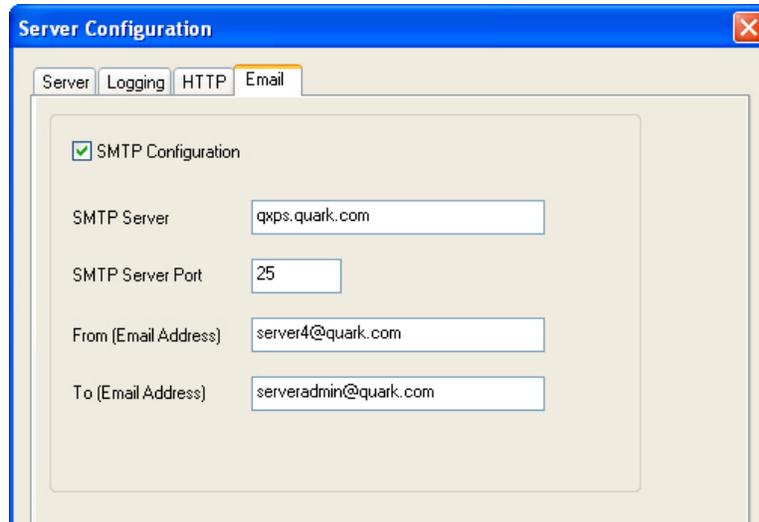
**Email** tab

Check **SMTP Configuration** to enable QuarkXPress Server to send an e-mail to an administrator when the application's QLA license expires. Checking this box enables the other controls in this area. This box is unchecked by default.

In the **SMTP Server** field, enter the domain name or IP address of the e-mail server that QuarkXPress Server should use to send messages (for example, `mail.quark.com`).

In the **SMTP Server Port** field, enter the port number of the e-mail server that QuarkXPress Server should use to send messages. The acceptable range of values is from 0 to 255. The default value for this field is 25.

In the **From (Email Address)** field, enter the source e-mail address the QuarkXPress Server application should use to send messages (for example, `QXPSserver1@quark.com`).

In the **To (Email Address)** field, enter the e-mail address to which the QuarkXPress Server application should send messages (for example, `QXPServerAdmin@quark.com`).

## Server preferences

Use the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to set up default preferences for use when projects are created in QuarkXPress Server.

➡ Many of these preferences come into play only when you create a project in QuarkXPress Server. You cannot directly create projects in the QuarkXPress Server user interface, but XTensions software can create projects.

Changes to preferences in the **Application** category affect all projects. For example, when you create a project using a server XTensions module or other external software, preference settings in the **Application** category are applied to the new project.

Changes to preferences in the **Project** category affect all layouts in the active project. If you change project preferences with no projects open, the new preferences become the default settings for all new projects.

Changes to preferences in the **Default Layout** categories affect all layouts of that type created in QuarkXPress Server.

### Preferences — Application — Display

Use the **Display** pane of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to specify how TIFF files display on screen for all projects.

Use the **Color TIFFs** drop-down list to specify the color depth of screen previews created for color TIFFs when they are imported.

Use the **Gray TIFFs** drop-down list to specify the resolution of screen previews created for grayscale TIFFs when they are imported.

Choose a profile that corresponds to your monitor from the **Monitor Profile** drop-down menu, or choose **Automatic**. Profiles can be placed in the "Profiles" folder in the QuarkXPress Server application folder.

### Preferences — Application — Input Settings

Use the **Input Settings** pane of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to customize the display of quotation marks and the selection of characters used to specify page ranges.

Use the **Quotes** area to choose a style for converting and entering quotation marks. The preferences set in the **Quotes** area of QuarkXPress Server override the preferences set for a project.

Use the **Format** drop-down menu to specify the default characters to be used with the **Smart Quotes** feature and **Convert Quotes** option in the **Get Text** dialog box (**File > Get Text**).

Check **Smart Quotes** to force QuarkXPress to replace feet (')and inches (") marks automatically with the specified quotation marks.

Hyphens and commas are the default separators for indicating sequential and nonsequential ranges in the **Pages** field of the **Print** dialog box for a print project. In the **Sequential** and **Nonsequential** fields, enter new characters to be used as separators when the project is rendered by QuarkXPress Server. The preferences set in the **Page Range Separators** area of QuarkXPress Server override the preferences set for a project.

Check **Maintain Picture Box Attributes** to make a picture box "remember" its scaling and other attributes by default when you import a new picture into the box.

By default, you can input text directly into text boxes the same way you would in a system-supplied input window for East Asian characters. To disable this feature, uncheck **Inline Input** .

To also allow OpenType® fonts to be scanned at print, check **Enable OTF Printer Font Scan**.

### Preferences — Application — Font Fallback

Use the **Font Fallback** pane of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to control what happens when the application opens a project that uses missing fonts.

Check **Font Fallback** to activate the Font Fallback feature. When this feature is active, if the application encounters a character it cannot display in the current font, it attempts to find a font that can display the character.

If the application encounters a missing font when opening a project, it uses the preferences in this pane to determine which substitute fonts to use.

➡ If you add characters to an exising project and the font cannot support those characters, the application will search the system for a font that can display the characters.

Check **Search** to have the application search for a suitable font that is used in the active project. To restrict the search to a particular range, check **Last** and then enter a number in the **Paragraphs** field. To expand the search to the entire story where a missing font occurs, check **Entire Story**.

To indicate which fallback fonts should be used when no other font can be found (taking the **Search** settings into account), choose an option in the **Font** column for each script/language listed in the **Script/Lang** column.

To indicate which font should be used for the slug line when a layout is printed with registration marks turned on, choose an option from the **Slug Line Font** drop-down menu.

### Preferences — Application — Open and Save

Use the **Save** pane of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to control Unicode options.

Under **Non-Unicode Support**, choose an option from the **Encoding** drop-down menu to indicate how the applications should display characters in non-Unicode text.

### Preferences — Application — XTensions Manager

Use the **XTensions Manager** pane of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to control when the **XTensions Manager** dialog box displays.

➡ If the **XTensions Manager** dialog box displays as a result of the **When > Error occurs while loading XTensions** setting, the server stops (as it does when any dialog box displays). This can be a problem during an automatic restart, because it will prevent the server from completely restarting.

### Preferences — Application — Fonts

Use the **Fonts** pane of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to specify the following preferences.

In the **Font Mapping** area:

- To specify default replacement fonts, check **Specify Default Replacement Font** and choose options from the **Roman** and **East Asian** drop-down menu.

- To highlight characters that are in a Traditional Chinese encoding's UDA/VDA (User Defined Area/Vendor Defined Area) range so that these characters can be visually verified, check **Highlight character ranges defined by Traditional Chinese font vendors**.

### Preferences — Application — EPS

Use the **EPS** pane of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to specify options related to imported EPS pictures.

To control whether the application should generate a preview of an EPS file or use the preview (if any) embedded in the file, choose an option from the **Preview** drop-down list. The option specified in this pane is used only when the EPS preview is being created. If you change the preference, you need to reimport the EPS file.

*Mac OS only:* To increase the amount of virtual memory available for rendering large EPS files during a **Save Page as EPS** operation, increase the value in the **Virtual Memory** field.

### Preferences — Application — Error Reporting

Use the **Error Reporting** pane of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to control how the application reports problems to Quark.

To have the application send error reports to Quark directly over the Internet, check **Send Error Report via Internet**. To have the application send error reports to Quark in e-mail if direct Internet connection fails, check **On Internet Failure, Send Error Report via Email**.

### Preferences — Application — Full Res Preview

Use the **Full Res Preview** pane of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to control where QuarkXPress Server caches high-resolution images.

To control where the application caches high-resolution images for display, either click **QuarkXPress Server Preferences Folder** or click **Other Folder** and then indicate a different location.

To indicate a maximum size for the preview cache folder, enter a value in the **Maximum Cache Folder Size** field.

In the **Display Full Resolution Previews For** area:

- When **All Full Resolution Previews** is selected, all pictures in the project that are set to display at full resolution are displayed at full resolution.

- When **Selected Full Resolution Previews** is checked, pictures set to display at full resolution will only do so when they are selected.

You may want to turn off Full Resolution Preview if you are experiencing a performance issue that you think might be related to this XTensions module. To turn off Full Resolution Preview when opening a project, check **Disable Full Resolution Previews on Open**.

### Preferences — Application — Job Jackets

Use the **Job Jackets** pane of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to specify preferences for automatic layout evaluation and to indicate a default location for Job Jackets® files.

Use the options in the **Layout Evaluation** area to control when the application automatically executes the **File > Evaluate Layout** command. For example, by checking **On Output**, you can make sure that you always evaluate a layout before you send it to output. The options are:

- **At Open**
- **At Save**
- **At Output**
- **At Close**

Use the options in the **Job Jacket Location** area to specify where Job Jackets files are stored by default. To save Job Jackets files in the default location, click **Use Default Path for Shared Jackets**. The default location is the "Documents" folder on Mac OS and the "My Documents" folder on Windows.

### Preferences — Application — Modifier

Use the **Modifier** pane of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to set preferences pertaining to the way Modifier XTensions software updates text in projects.

The **Modifier** pane displays only if Modifier XTensions software is loaded. For more information, see "*Modifier XTensions software.*"

In the **Amount by which Text will Increase/Decrease** field, enter the percentage by which Modifier XTensions software can increase or decrease text size when the parameter `<FITTEXTTOBOX>` is used. Valid values for this field are from 0% to 20%. For example, if the font size in use is 10pt, and you enter 20% in this field, the font size can vary from 8pt to 12pt when `<FITTEXTTOBOX>` is used.

In the **Font Size Min** and **Max** fields, enter the minimum and maximum font size that the Modifier parameter `<SIZE>` can apply to text in a text box. The default values are "2pt" **(Min)** and "720pt" **(Max)**.

➡ The value of the `<SIZE>` parameter does not override the value in the **Amount by which the Text will Increase/Decrease** field.

Check **Allow Text to Grow** to allow the Modifier parameter `<FITTEXTTOBOX>` to increase the font size of text in a text box.

Check **Adjust Other Font Attributes** to enable the font attributes in this area. You can then use the check the boxes to allow Modifier XTensions software to set **Horizontal Vertical Scale**, **Tracking Amount**, and **Baseline Shift** for text.

To use a particular default XSLT file, check **Use default XSLT** and then click **Browse** and navigate to the XSLT file.

### Preferences — Application — PDF

Use the **PDF** pane of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to set preferences for rendering in PDF format.

➡ The **PDF** pane displays only if PDF Filter XTensions software is loaded. For more information, see "*PDF Filter XTensions software*"

Use the **PDF Workflow** area to set a location for PDF files:

- Click **PDF Direct** to generate PDF output in the browser. This is the default option.

- Click **PDF to Folder** to generate and save PDF files to a folder. Click **Select/Browse** to specify a location for the folder in the **Watched Folder** field, and choose a default name for PDF files from the **Default Name** scroll list.

- Click **PostScript File for Later Distilling** to generate a PostScript file. Click **Select/Browse** to specify a location for the folder in the **Watched Folder** field, and choose a default name for PostScript files from the **Default Name** scroll list.

Use the **Error Settings** area to specify whether and where PDF-generation and PostScript-generation errors are logged.

Check **Log Errors** to log PDF-generation and PostScript-generation errors. Checking this box enables the **Use Log Folder** check box.

To specify where errors should be logged, check **Use Log Folder** and then click **Select/Browse** and navigate to the target folder. If you do not check this box, log files are stored in the watched folder for PDF generation, as defined in the **PDF** pane.

➡ In Mac OS, you can define the amount of memory your system allocates for rendering PDF files by entering a value in the **Virtual Memory** field.

### Preferences — Application — PSD Import

Use the **PSD Import** pane of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to control where previews of imported PSD files are cached and how large the cache is allowed to become.

To create the cache in the preferences folder, click **QuarkXPress Server Preferences**. To create the cache in a different folder, click **Other Folder** and select a different folder. To set the size of the cache folder, enter a value in the **Maximum Cache Folder Size** field.

You may want to clear the PSD Import cache if previews look incorrect. To clear this cache, click **Clear Cache**.

### Preferences — Application — Placeholders

Use the **Placeholders** pane of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to set text placeholder display preferences.

Use the **Color** button in the **Text Placeholder** area to specify the color of the text placeholders in the layout. Choose a shade percentage for the color from the **Shade** drop-down menu.

Use the **Color** button in the **TextNode Placeholder** area to specify the color of the text node placeholders in the layout. Choose a shade percentage for the color from the **Shade** drop-down menu.

### Preferences — Application — Fraction/Price

Use the **Fraction/Price** pane of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to format fractions and prices automatically.

In the **Numerator** area, the **Offset** option positions the numerator in relation to the baseline; the **VScale** option determines the height of the numerator as a percentage of font size; the **HScale** option determines the width of the numerator as a percentage of normal character width; and the **Kern** option adjusts the spacing between the characters and the forward slash.

In the **Denominator** area, the **Offset** option positions the denominator in relation to the baseline; the **VScale** option determines the height of the denominator as a percentage of font size; the **HScale** option determines the width of the denominator as a percentage of normal character width; and the **Kern** option adjusts the spacing between the characters and the forward slash.

In the **Slash** area, the **Offset** option positions the forward slash in relation to the baseline; the **VScale** option determines the height of the forward slash as a percentage of font size; the **HScale** option determines the width of the forward slash as a percentage of normal character width; and the **Kern** option adjusts the spacing between the characters and the forward slash. Check **Fraction Slash** to retain type size when you choose **Style > Type Style > Make Fraction**.

In the **Price** area, the **Underline cents** option places an underline beneath the cents characters and the **Delete Radix** option removes the decimal or comma character from the price.

### Preferences — Application — Picture Effects

You can sometimes get improved performance by specifying a cache folder located on a different drive from the drive or drives where the application and project are located. Use the **Picture Effects** pane of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to specify the location of the cache folder for picture editing.

➡ The **Picture Effects** pane displays only if QuarkVista XTensions software is loaded. For more information, see "*QuarkVista XTensions software*."

### Preferences — Project — General

Use the **Project** version of the **General** pane of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to specify default settings for auto picture import, single layout mode, and OpenType kerning (for OpenType fonts).

Use the **Auto Picture Import** area to control whether QuarkXPress automatically updates pictures that have been modified since you last opened a layout.

• To enable the **Auto Picture Import** feature, click **On**. When you open a project, the application automatically reimports modified pictures into each layout using the modified files.

• To disable the **Auto Picture Import** feature, click **Off**.

• To receive an alert before the application imports modified pictures, click **Verify**. Note that if the **Missing/Modified** dialog box displays as a result of **Verify** being checked, the server stops (as it does whenever any dialog box displays). This can be a problem during an automatic restart, because it will prevent the server from completely restarting.

Checking **Single Layout Mode** will cause new projects to be created in single-layout mode. Only the project name is used when saving PDF files or in AppleScript references.

Check **Use OpenType Kerning** to activate the default kerning values for OpenType fonts. When OpenType kerning is active, it overrides any kerning specified through **Kerning Table Edit** (**Utilities** menu) for OpenType fonts. To disable kerning for full-width characters when using OpenType kerning, check **Do Not Kern Full Width Characters**.

### Preferences — Project — XML Import

The controls in the **XML Import** pane of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) are not relevant to QuarkXPress Server and should be ignored.

### Preferences — Layout — General

Use the **Layout** versions of the **General** pane of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to specify various default settings for page layout, such as the colors of hyperlinks and anchors.

Use the **Hyperlinks** area to choose the color for anchor icons and hyperlinks. You might want to choose anchor and hyperlink colors for a Print layout if you are planning to export that layout as a PDF file.

Use the **Master Page Items** area to control what happens to master items when master pages are applied. New master pages are applied to layout pages whenever you (1) drag and drop a master page icon from the master page area in the **Layout** palette onto a layout page icon in the **Layout** palette (**Window > Show Layout**); (2) delete a master page that is applied to layout pages using the **Layout** palette; or (3) add, delete, or move an odd number of pages in a facing-page layout.

- Click **Keep Changes** if you intend modified master items on your layout pages to remain when a new master page is applied. The items that are kept are no longer master items.

- Click **Delete Changes** if you want modified master items on your layout pages to be deleted when a new master page is applied.

Use the **Framing** area to specify whether frames are placed inside or outside text and picture boxes.

- When you click **Inside**, the distance between the text and the frame is determined by the box's **Text Inset** values (**Item > Modify**). When you place a frame inside a picture box, the frame overlaps the picture.

- When you click **Outside**, the frame is placed outside the box, increasing the box's width and height. The frame cannot extend beyond a constraining box or the pasteboard.

Use the **Auto Page Insertion** options (Print layouts only) to determine whether pages are inserted automatically to contain text overflow from an automatic text box or a chain of text boxes (on a page associated with a master page that contains an automatic text box). The drop-down menu also enables you to determine where any pages will be inserted.

### Preferences — Layout — Measurements

Use the **Measurements** pane of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to specify default measuring units for layout rulers and the **Measurements** palette.

Use the **Horizontal** and **Vertical** drop-down menus to specify the measurement system for the rulers displayed along the top and left of the layout window. **Horizontal** corresponds to the top ruler; **Vertical** corresponds to the left ruler.

Use the **Points/Inch** field to override the default value of 72 points per inch. The application uses the value here as the basis for all point and pica measurements, as well as for all point- and pica-to-inch conversions. The desktop publishing standard for points per inch is 72. However, the traditional typographic standard used on most metal typographic rulers is usually approximately 72.27 or 72.307 points per inch (range = 60 to 80 pt, measurement system = points, smallest increment = .001).

Use the **Ciceros/cm** field to specify a ciceros-to-centimeter conversion value different from the standard 2.1967 (range = 2 to 3 c, measurement system = ciceros, smallest increment = .001).

Use the **Item Coordinates** buttons (Print layouts only) to specify whether the increments of the horizontal ruler repeat from zero for each **Page** or are continuous across a **Spread**. This setting determines the coordinates of items displayed in fields. The default option is **Page**.

Use the **Measurement Units** drop-down menu to set the default measurement unit for new layouts.

### Preferences — Layout — Paragraph

Use the **Paragraph** pane of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to control various paragraph-level settings.

Use the **Auto Leading** feature to automatically set line spacing. You can apply this setting to a paragraph by entering "auto" or "0" in the **Leading** field of the **Paragraph Attributes** dialog box (**Style > Leading**). Unlike paragraphs with absolute leading (identical line spacing above every line), paragraphs with auto leading may include lines with different leading when fonts and font sizes are mixed in the same paragraph.

Auto leading starts with a base amount of leading, which the application calculates by examining the ascent and descent values built into the fonts used in an auto-leaded line and the line above it; however, the user-specified text size (**Style > Size**) plays the largest part in determining this base amount. Finally, a value specified by the user in the **Auto Leading** field is added to the base amount to arrive at the total amount of leading.

To specify percentage-based auto leading, enter a value from 0% to 100% in 1% increments. This value determines the amount of leading between two lines of text as follows: The largest font size in the line above is multiplied by the percentage value. This outcome is added to the base amount of auto leading between the two lines. Although the design of certain fonts complicates the process, here is a simplified example: 10-point text styled consistently in a "standard" font with **Auto Leading** set to 20% has 12 points of leading (10 pts + [20% of 10] = 12 pts). To specify incremental auto leading, enter a value preceded by a plus sign (+) or a minus sign (–) from –63 points to +63 points using any measurement system. Entering "+5" will add 5 points of leading to the base amount of auto leading; entering "+5 mm" will add 5 millimeters.

Use the **Maintain Leading** check box to control the placement of a line of text that falls immediately below an obstruction in a column or box. If **Maintain Leading** is checked, the line's baseline is placed according to its applied leading value. If **Maintain Leading** is unchecked, the ascent of the line will abut the bottom of the obstruction or any applied runaround value (**Item > Runaround**).

In the **Lock to Grid Based On** area:

• Click **Ascent and Descent** to lock text to grid based on the ascenders and descenders of characters.

- Click **Font Size (Em Box)** to lock text to grid based on the size of the em boxes of the characters.

  For each language in the **Hyphenation** list, use the **Method** drop-down menu in the **Hyphenation** area to specify the method the application uses to automatically hyphenate paragraphs when no corresponding entry is found in your Hyphenation Exceptions dictionary. The setting you choose affects only paragraphs for which **Auto Hyphenation** (**Edit > H&Js**) is enabled:

    - Choose **Standard** to hyphenate using the algorithm built into versions of QuarkXPress prior to 3.1. Documents created in versions of QuarkXPress prior to 3.1 default to **Standard** when they are opened in version 3.1 or later.

    - Choose **Enhanced** to hyphenate using the algorithm built into QuarkXPress version 3.1 and later.

- **Extended 2** uses the same algorithm as **Enhanced** but checks any built-in hyphenation dictionaries before resorting to the algorithm. **Extended 2** uses the Dieckmann exception resources and algorithm for hyphenation. This option was first introduced in QuarkXPress 4.11 for German (Reformed) and has been expanded to other languages in more recent versions. If available for a language, it is the default method for projects created in QuarkXPress Server.

### Preferences — Layout — Character

Use the **Character** pane of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to specify how the application constructs typographic styles such as Superscript and Subscript:

- Use the **Superscript** area to control the placement and scale (size) of superscript characters. The **Offset** value determines how far below the baseline the application places a superscript character. The **Offset** value is measured as a percentage of font size. The default value is 33%. The **VScale** value determines the vertical size of the character and is a percentage of font size. The **HScale** value determines width and is a percentage of the normal character width (as specified by the font designer). The default value for both scales is 60% (range = 0 to 100%, measurement system = percentage, smallest increment = .1).

- Use the **Subscript** area to control the placement and scale (size) of subscript characters. The **Offset** value determines how far above the baseline the application places a subscript character. The **Offset** value is measured as a percentage of font size. The default value is 33%. The **VScale** value determines the vertical size of the character and is a percentage of font size. The **HScale** value determines width and is a percentage of the normal character width (as specified by the font designer). The default value for both scales is 100% (range = 0 to 100%, measurement system = percentage, smallest increment = .1).

- Use the **Small Caps** area to control the scale of characters with the **Small Caps** type style applied to them. The **VScale** value determines the vertical size of the character and is measured as a percentage of font size. The **HScale** value determines width and is measured as a percentage of the normal character width (as specified by the font designer). The

default value for both scales is 75% (range = 0 to 100%, measurement system = percentage, smallest increment = .1).

- Use the **Superior** area to control the scale of superior characters. The **VScale** value determines the vertical size of the character and is measured as a percentage of font size. The **HScale** value determines width and is measured as a percentage of the normal character width (as specified by the font designer). The default value for both scales is 60% (range = 0 to 100%, measurement system = percentage, smallest increment = .1).

- Use the **Ligatures** area to use ligatures built into a font. A ligature is a typographic convention in which certain characters are combined into a single glyph. Most fonts contain ligatures for the characters "f" followed by "i" and "f" followed by "l". The **Break Above** field enables you to specify the kerning or tracking value (measured in 1/200 em space increments) above which characters will not be combined into ligatures. For example, a headline with a large tracking value would probably not contain ligatures. The default value is 1 (range = 0 to 10, measurement system = .005 [1/200] em space, smallest increment = .001). To prevent the second two letters in "ffi" and "ffl" (as in office and waffle) from being combined into ligatures, check **Not "ffi" or "ffl"**. Three-character ligatures for these combinations, common in traditional typesetting systems, are not standardized in fonts designed for Mac OS, so some typographers prefer to keep all three letters separate rather than combine only two of them. Note that many PostScript fonts do not have "ffi" and "ffl" ligatures, but most OpenType fonts do. This option is unchecked by default.

- Check **Auto Kern Above** to specify that the application should use kerning tables, which are built into most fonts, to control intercharacter spacing. The **Auto Kern Above** field enables you to specify the point size above which automatic kerning must be used. The **Auto Kern Above** feature also implements custom tracking information specified in the **Tracking Values** dialog box for a selected font (**Utilities > Edit Tracking**). This option is checked by default, with a 4-point threshold (range = 0 to 72 pt, measurement system = various [", pt, cm, etc.], smallest increment = .001).

- Check **Standard Em Space** to specify an em-space equivalent to the point size of the text (for example, 24pt text has a 24pt em space). If **Standard Em Space** is unchecked, the application uses the width of the two zeros in the current font as the em-space width. This option is checked by default. You can insert an em space in text by pressing Option+space/Ctrl+Shift+6.

- Use the **Flex Space Width** field to change the 50% default width of a flexible space. To create a breaking flexible space, press Option+Shift+space/Ctrl+Shift+5; to create a nonbreaking flexible space, press Command+Option+Shift+space/Ctrl+Alt+Shift+5. The **Flex Space Width** value is expressed as a percentage of the normal en space for a given font and font size (range = 0 to 400%, measurement system = percentage, smallest increment = .1).

- Use the **Accents for All Caps** check box to specify whether to include accent marks on accented characters with the All Caps type style applied. This option is checked by default.

- Use the **Space between CJK & R** field to indicate how much space should be included by default between a Chinese, Japanese, or Korean character and an adjacent Roman character.

**Preferences — Layout — Trapping**

Use the **Trapping** pane of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to set default trapping for Print layouts.

Select a **Trapping Method**:

- Click **Absolute** to trap using the values in the **Auto Amount** and **Indeterminate** fields according to the object and background colors involved. If the object color is darker, the object is choked by the background using the **Auto Amount** value. If the object color is lighter, the object is spread into the background using the **Auto Amount** value.

- Click **Proportional** to trap using the value in the **Auto Amount** field multiplied by the difference between the luminance (lightness or brightness) of the object color and the background color.

- Click **Knockout All** to turn off trapping and print objects with a zero trap amount.

- Check **Process Trapping** to trap each process separation plate individually when a page contains overlapping process colors.

- Check **Ignore White** to specify that an object color in front of multiple background colors (including white) does not take white into account when trapping.

Enter a trapping value in the **Auto Amount** field or choose **Overprint**:

- Enter a value in the **Auto Amount** field to control the amount of trapping that QuarkXPress applies to object and background colors that have an **Auto Amount** specified in the **Trap Specifications** dialog box (**Edit > Colors > Edit Trap**), and to control the amount of trapping applied to items with an **Auto Amount (+)**  **Trap Information** or **(–)** specified in the **Trap Information** palette (**Window > Trap Information**).

- Choose **Overprint** to cause overprinting for object and background colors with an **Auto Amount** specified in the **Trap Specifications** dialog box (**Edit > Colors > Edit Trap**), as well as for items with an **Auto Amount (+)** or **(–)** specified in the **Trap Information** palette (**Window > Trap Information**).

Enter a trapping value in the **Indeterminate** field or choose **Overprint**:

- Enter a value in the **Indeterminate** field to control the amount of trapping that QuarkXPress applies to object colors that are in front of indeterminate backgrounds (multiple colors with conflicting trapping relationships).

- Choose **Overprint** to cause an object color to overprint an indeterminate background.

Enter a **Knockout Limit** value. The knockout limit is the value (expressed as a percentage of darkness of the object color) that enables you to control the point at which an object color knocks out a background color.

Enter an **Overprint Limit** value. Overprint limit is a trapping setting that allows an object set to overprint to trap according to the **Auto Amount** value if the object's shade is less than a particular percentage.

### Preferences — Layout — Grid Cell Fill

Use the **Grid Cell Fill** pane of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to control how design grid cells are filled.

To specify which cells will be filled, check **Increment Fill** and enter a value in the field. For example, to fill cells four, eight, and twelve, enter 4.

To restart cell counting at the beginning of each line in a text box, click **Start of Line**. To start cell counting from the beginning of the grid and continue counting regardless of line breaks, click **Start of Story**.

### Preferences — Layout — Color Manager

Use the **Color Manager** panes of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to define colors so they display or output consistently across all devices.

In the **Transformation Method** area:

- To specify an engine for color transformation, choose an option from the **Color Engine** drop-down menu.

- To achieve the darkest possible blacks in all output methods, check **Black Point Compensation**.

In the **Source Options** area:

- Use the **Source Setup** drop-down menu to specify the source color space of pictures and colors used in the application.

- To enable the **Profile Information** command in the **Window** menu and the **Color Management** tab in the **Import Picture** dialog box, check **Enable access to image profiles**. This option allows you to view information about profiles.

*Print layouts only:* To specify how layouts display when you use the **View > Proof Output** submenu, use the options in the **Soft Proofing** area (Print layouts only):

- To specify a default proof output setup, choose an option from the **Proof Output** drop-down menu.

- To specify a rendering intent for soft proofing, choose an option from the **Rendering Intent** drop-down list. **Perceptual** scales all the colors in the source gamut so that they all fit within the destination gamut. **Relative Colorimetric** retains colors that are in both the source gamut and the destination gamut. The only source colors that are changed are those that are not within the destination gamut. **Saturation** considers the saturation of source colors and changes them to colors with the same relative saturation in the destination gamut. **Absolute Colorimetric** retains colors that are in both the source gamut and the destination gamut. Colors that are outside the destination gamut are adjusted in relation to how they would look when printed on white paper. **Defined by Sources** uses the rendering intents defined in source setup for all colors and images.

*Print layouts only:* In the **Vector EPS/PDF Files** area:

- To color manage vector content in imported EPS and PDF files, check **Color Manage Vector EPS/PDF**. Note that this preference applies only to EPS and PDF files imported after this box is checked.

- To color manage vector content in EPS and PDF files that have already been imported in the active project, check **Include Existing Vector EPS/PDF in Layout**.

*Interactive layouts only:* To specify an output profile for SWF export, choose an option from the **SWF Export** drop-down menu.

### Preferences — Layout — Layers

Use the **Layers** pane of the **Preferences** dialog box (**Server/QuarkXPress Server > Preferences**) to specify the settings used when a new layer is created.

- To make new layers visible by default, check **Visible**.

- To suppress the printout of new layers by default, check **Suppress Output**.

- To make new layers locked by default, check **Locked**.

- To maintain runaround on new layers so that text on visible layers flows around items on hidden layers, click **Keep Runaround**.

## Style sheets

The **Style Sheets** command (**Server/QuarkXPress Server > Document Controls > Style Sheets**) displays the **Default Style Sheets** dialog box, which lets you create and manage paragraph and character style sheets.
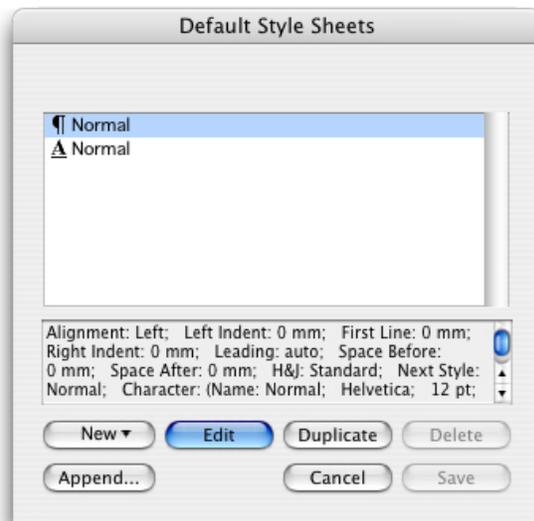


**Default Style Sheets** dialog box

➡ Default style sheets can be applied to content in projects using Modifier XTensions software. For more information, see "*Modifier XTensions software*."

### Creating and editing character style sheets

A character style sheet is a named package of character attributes. You can apply all of a character style sheet's formatting attributes to text by simply applying the style sheet to the text. To create, edit, or delete character style sheets, use the **Default Style Sheets** dialog box (**Server/QuarkXPress Server > Document Controls > Style Sheets**).

To create a character style sheet, choose **Character** from the **New** drop-down button. The **Edit Character Style Sheet** dialog box displays. Use the controls in this dialog box to configure the attributes of the style sheet.
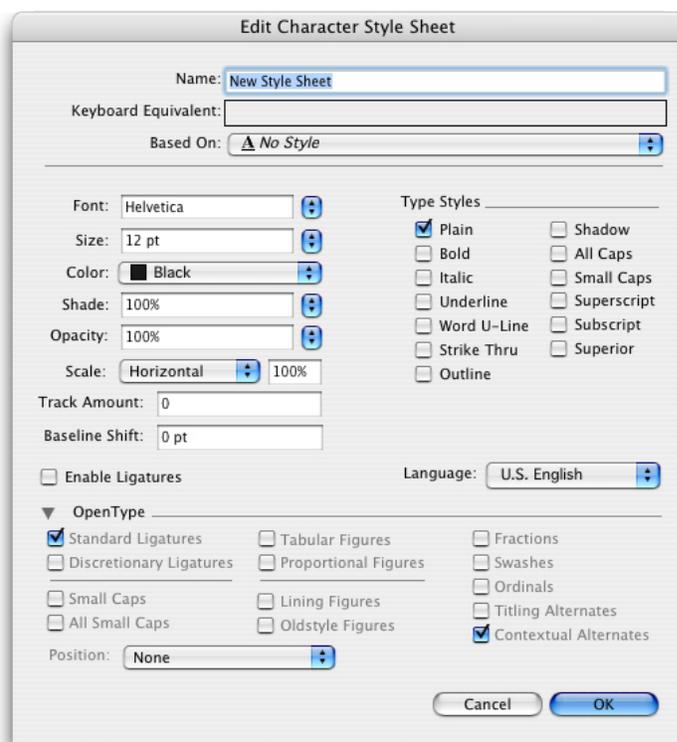


**Edit Character Style Sheet** dialog box

First, configure the controls in the **General** tab:

- **Name**: Enter a name in this field, or the application will use the default "New Style Sheet" name.

- **Keyboard Equivalent**: To define a keyboard command for the style sheet, enter one in the **Keyboard Equivalent** field. You can enter any combination of Command, Option, Shift, or Control/Ctrl or Ctrl+Alt, along with a function or keypad key.

- **Based On**: To base the attributes of a new style sheet on an existing one, choose a style sheet from the **Based On** drop-down menu.

Next, choose character attributes from the lower section of the **Edit Character Style Sheet** dialog box. When you're done, click **OK**.

### Creating and editing paragraph style sheets

A paragraph style sheet is a named package of paragraph and character attributes. You can apply all of a paragraph style sheet's formatting attributes to text by simply applying the style sheet to the text. To create, edit, duplicate, or delete paragraph style sheets, use the **Default Style Sheets** dialog box (**Server/QuarkXPress Server > Document Controls > Style Sheets**).

To create a paragraph style sheet, choose **Paragraph** from the **New** drop-down button. The **Edit Paragraph Style Sheet** dialog box displays. Use the controls in this dialog box to configure the attributes of the style sheet.
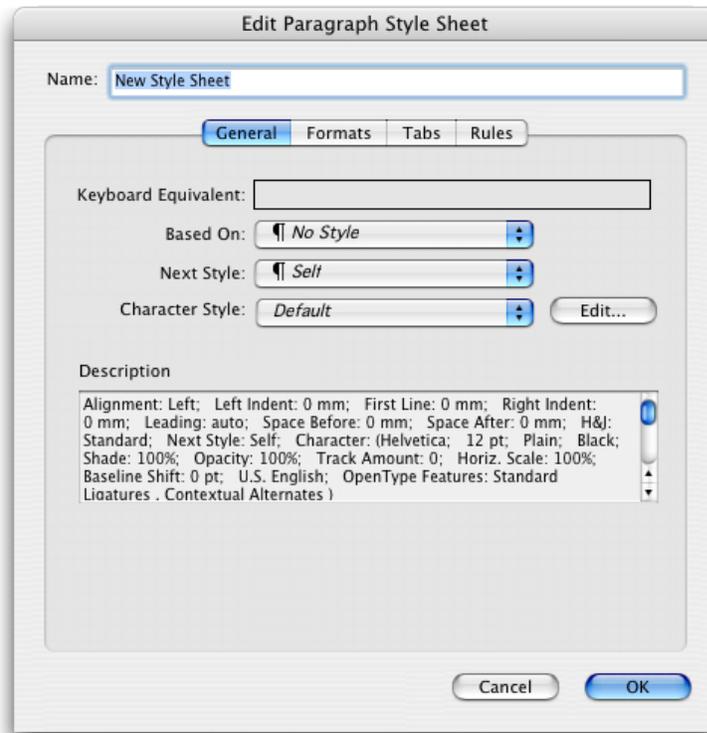


**Edit Paragraph Style Sheet** dialog box

First, configure the controls in the **General** tab:

- **Name**: Enter a name in this field, or the application will use a default "New Style Sheet" name.

- **Keyboard Equivalent**: To define a keyboard command for the style sheet, enter one in the **Keyboard Equivalent** field. You can enter any combination of Command, Option, Shift, or Control/Ctrl or Ctrl+Alt, along with a function or keypad key.

- If you define a keyboard equivalent for a style sheet with a key sequence that also defines an existing command, the style sheet command will override the existing command when the **Content** tool is selected and a text box is active.

- **Based on**: To base the attributes of a new style sheet on an existing one, click the **Based on** drop-down menu and choose a style sheet from the list. Note that if you use the **Based on** drop-down menu in the **Edit Paragraph Style Sheet** dialog box to base a style sheet on an existing one, changes you make to the original style sheet are automatically applied to those based on it.

- **Next Style**: To select a transition from one paragraph style sheet to another after entering a carriage return, choose a paragraph style sheet from the **Next Style** drop-down menu.

- **Style**: To associate a character style sheet with the paragraph style sheet, choose an option from the **Style** drop-down menu in the **Character Attributes** area. To create a character style sheet, see "*Creating and editing character style sheets*."

Next, use the **Formats**, **Tabs**, and **Rules** tabs to specify additional attributes for your paragraph style sheet. When you're done, click **OK**.

## Colors

The **Colors** command (**Server/QuarkXPress Server > Document Controls > Colors**) displays the **Colors** dialog box, which enables you to create and manage colors. You can also change the way a color traps to other colors.
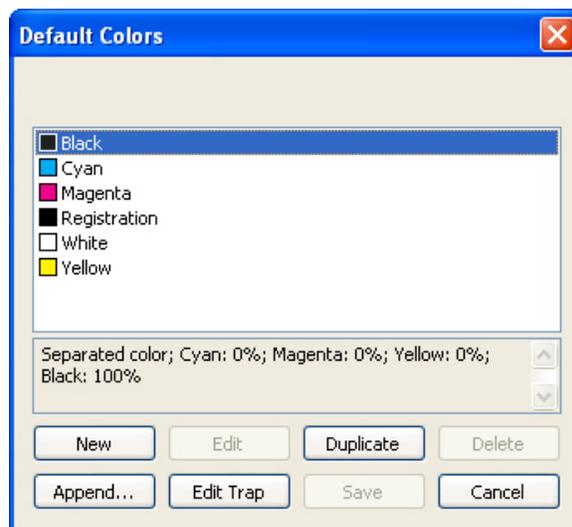


**Default Colors** dialog box

➡ Default colors can be applied to content in projects using Modifier XTensions software. For more information, see "*Modifier XTensions software*."

**Creating a color**

To create a color, choose (**Server/QuarkXPress Server > Document Controls > Colors**) to display the **Default Colors** dialog box, and click **New** to display the **Edit Color** dialog box. Then, enter a name in the **Name** field and specify the color model for your new color.
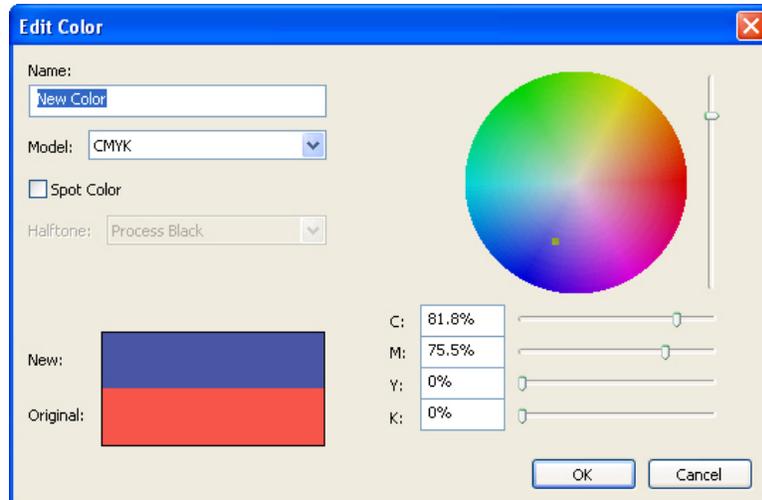


**Edit Color** dialog box

- **RGB**: This additive color system is most often used with slide recorders or color video monitors, and also works well for Web pages. Red, green, and blue light is mixed to represent colors on a video screen.

- **HSB**: This color model is often used by artists because it resembles the manner in which they mix colors. Hue describes color pigment; saturation measures the amount of color pigment; and brightness measures the amount of black in a color.

- **LAB**: This color space is designed to be independent of differing interpretations imposed by monitor or printer manufacturers. The LAB color model, also referred to as LAB color space, is a standard three-dimensional model for representing colors. Colors are specified by a luminance coordinate (**L**) and two chrominance coordinates (**A** for green-red), and (**B** for blue-yellow).

- **Multi-Ink**: This color model is color based on tint percentages of existing process or spot inks.

- **CMYK**: CMYK is a subtractive color model used by professional printers to reproduce colors by combining cyan, magenta, yellow, and black inks on a press.

- **Web Safe or Web Named Colors**: Web-safe colors are used for color consistency in Web layouts.

- To select a color from a color matching system and add it to your color list, choose one of the standardized color matching systems from the **Model** drop-down menu.

### Trap Specifications

Click **Edit Trap** in the **Default Colors** dialog box (**Server/QuarkXPress Server > Document Controls > Colors**) to display the **Trap Specifications** dialog box for a chosen color. Use the **Trap Specifications** dialog box to specify trapping values for any object color relative to any background color. By specifying **Overprint**, **Knockout**, **Auto Amount (+)** for spreads, **Auto Amount (–)** for chokes, or **Custom trap** values in the **Trap** drop-down menu, you can control the trapping relationships for every color except **White and Registration**.
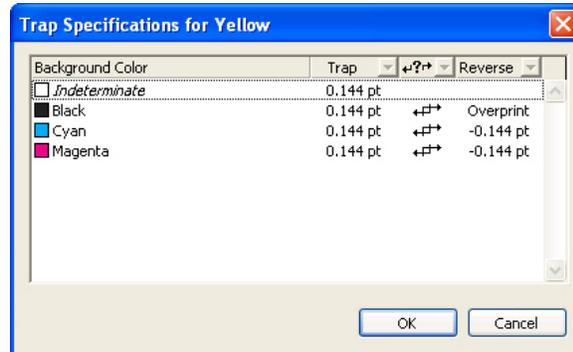


**Trap Specifications** dialog box

➡ Color-specific trapping values you specify in the **Trap Specifications** dialog box directly affect color relationships and override all default trapping preferences.

A **spread** occurs when items with a lighter color enlarge slightly to overlap a darker background color. A **choke** occurs when items with a darker color are trapped by a slight reduction in the size of the "knocked out" area in a lighter background color.

The **Background Color** column displays all the colors defined for the project, with the exception of White, Registration, and the object color. When the object color is placed against a background of more than one color with which the object color has conflicting trapping relationships or against a color QuarkXPress is unable to identify, the program traps according to the value specified for the **Indeterminate** background color.

The **Trap** drop-down menu determines the trapping relationship when the selected **Background Color** occurs behind the object color selected in the **Default Colors** dialog box. The Trap column displays the current setting. Entries different from the default values are marked with an asterisk (*).
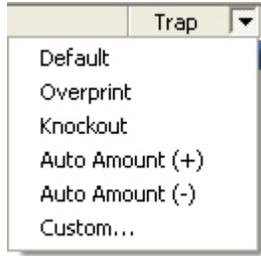
**Trap** drop-down menu

- The **Default** option works like the **Auto Amount** (+/–) settings, but when **Default** is chosen, an algorithm determines which colors choke, which colors spread, and which colors overprint or knock out. The amount of a choke or spread is based on the **Auto Amount** value specified in the **Trapping** pane of the **Preferences** dialog box **(QuarkXPress Server > Preferences)**. However, when **Default** is chosen, black always overprints and white always knocks out.

- The **Overprint** option specifies that the object color named in the dialog box title overprints the selected background color in all instances where the shade value of the object color is greater than the percentage entered in the **Overprint Limit** field of the **Trapping** pane of the **Preferences** dialog box **(QuarkXPress Server > Preferences)**.

➡ Even with **Overprint** specified, overprinting occurs only when an object color has a shade value greater than the **Overprint Limit** value specified in the **Trapping** pane of the **Preferences** dialog box **(QuarkXPress Server > Preferences)**.

- The **Knockout** option specifies that the object color named in the dialog box title knocks out the selected background color using no trapping.

- The **Auto Amount (+)** option assigns the default spread value (the value specified in the **Auto Amount** field of the **Trapping** pane of the **Preferences** dialog box) to the object color named in the dialog box **title**.

- The **Auto Amount (–)** option assigns the default choke value (the negative of the value specified in the **Auto Amount** field of the **Trapping** pane of the **Preferences** dialog box) to the object color named in the dialog box title.

- The **Custom** option displays the **Custom** dialog box, which enables you to specify a custom trapping value for the object and background color. Enter a value and click **OK**. A negative value causes the background color to choke. A positive value causes the object color to spread. A value of zero knocks out the object from the selected background color with no trapping.

| Range | Measurement System | Smallest Increment |
|---|---|---|
| ±36pt | points | .001 |

➡ If you specify a negative **Custom** value between the object color named in the dialog box title and the **Indeterminate** background color, text to which the object color is applied is not choked; instead, it is knocked out of the background without any trapping.

The **Dependent Traps/Independent Traps** drop-down menu determines whether the **Trap** and **Reverse** drop-down menu settings directly affect each other. The **Reverse** column indicates how trapping occurs when the selected **Background Color** takes on the role of object color and vice versa.
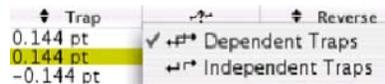


**Dependent/Independent** drop-down menu

- Choose **Dependent Traps** for QuarkXPress Server to calculate a reverse trap value automatically.

- Choose **Independent Traps** to specify a custom reverse trap value.

The **Reverse** drop-down menu determines how trapping occurs when the selected **Background Color** takes on the role of object color, and the color identified in the name of the dialog box takes on the role of background color. The **Reverse** value is calculated automatically when you choose **Dependent Traps**. If you change the **Reverse** value when **Dependent Traps** is chosen, the corresponding opposite trap is calculated automatically.
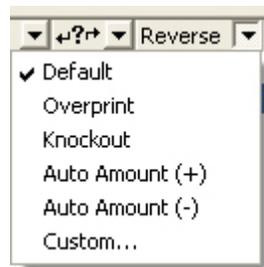


**Reverse** drop-down menu

The **Reverse** column displays the current setting. When an entry is different from the default values, it is marked with an asterisk (**\***). The options available in the **Reverse** drop-down menu are the same as those in the **Trap** drop-down menu.

### H&Js

Hyphenation and justification specifications (H&Js) are sets of automatic hyphenation rules and justification settings that you can apply to paragraphs. The **H&Js** command (**Server/QuarkXPress Server > Document Controls > H&Js**) displays the **H&Js** dialog box, which enables you to create and manage hyphenation and justification specifications. You apply hyphenation and justification specifications to selected paragraphs using the

**H&J** drop-down menu in the **Formats** tab of the **Edit Paragraph Style Sheet** dialog box. Hyphenation and justification specifications are included in paragraph style sheets.
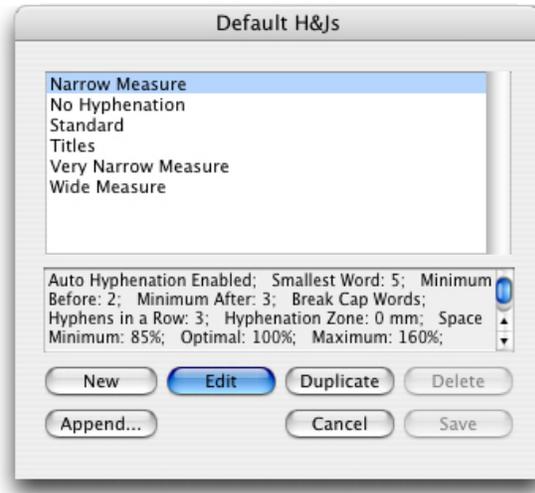


**Default H&Js** dialog box

➡ Default H&Js come into play only when you create a project in QuarkXPress Server. You cannot directly create projects in the QuarkXPress Server user interface, but client requests can trigger the creation of projects.

### Controlling hyphenation and justification

A hyphenation and justification (H&J) specification is a named package of settings for hyphenating words that go over the margin of a line of text and for justifying spaces between words and characters. You can apply H&Js to individual paragraphs, or you can associate an H&J with a paragraph style sheet. Use the **Edit Hyphenation & Justification** dialog box (**QuarkXPress Server/Edit > Document Controls > H&Js > New**) to control these settings.
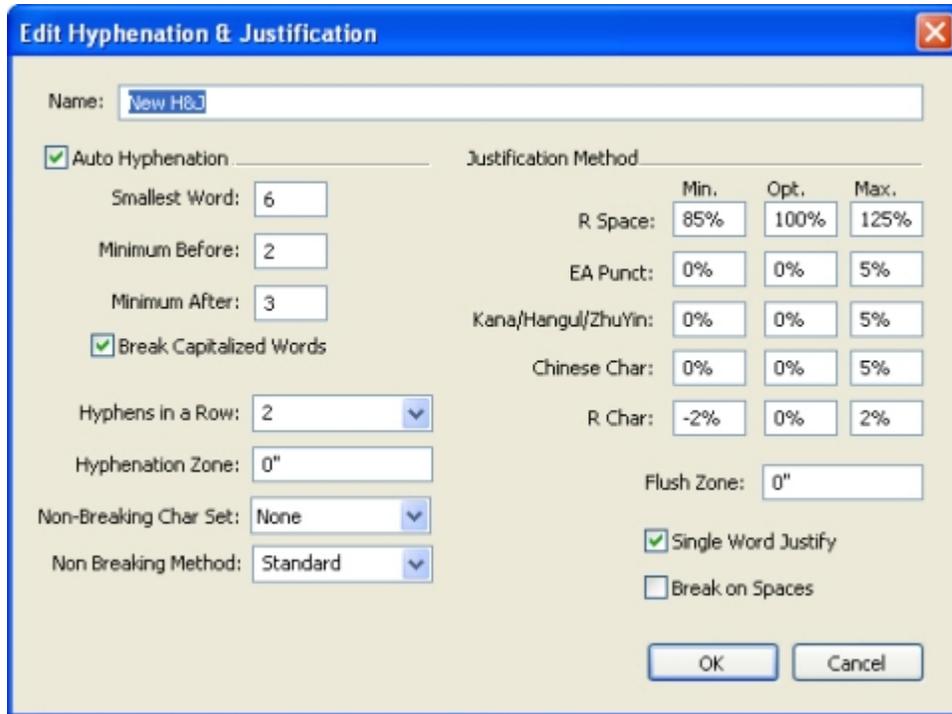
The **Edit Hyphenation & Justification** dialog box

- **Auto Hyphenation**: Specify whether automatic hyphenation is allowed.

- **Smallest Word**: Specify the minimum number of characters a word must contain to allow hyphenation.

- **Minimum Before**: Specify the minimum number of characters before a hyphen.

- **Minimum After**: Specify the minimum number of characters after a hyphen.

- **Break Capitalized Words**: Specify whether hyphenation of capitalized words is allowed.

- **Hyphens in a Row**: Specify how many words can be hyphenated in consecutive line ends.

- **Hyphenation Zone**: For words containing Roman characters, specify the area before the right indentation in which hyphenation can occur. For example, if you set the hyphenation zone to .05", the word is hyphenated when an acceptable hyphenation point falls within .05" of the right indentation. The word preceding the hyphenated word must not fall within the hyphenation zone.

- **Justification Method**: Specify how words and characters are spaced.

- **Non-Breaking Char Set**: Choose a non-breaking character set from the drop-down menu.

- **Non Breaking Method**: Choose a non-breaking method from the drop-down menu. When the last character in a line of justified text is a non-breaking character that cannot end a line, **Run Back** pulls the first character of the next line up to the current line, based on the value in the **Max.** field. When the last character in a line of justified text is a non-breaking character that cannot begin a line, **Run Down** pushes the character to the next line, based on the value in the **Min.** field.

- **R Space**: Specify the amount of space between words containing Roman characters in justified paragraphs. Specify the optimum amount of space between words containing Roman characters in all paragraphs, regardless of their alignment.

- **EA Punct**: Specify the minimum and maximum amount of space between East Asian punctuation characters in justified paragraphs. Specify the optimum amount of space between East Asian punctuation characters in all paragraphs, regardless of their alignment.

- **Kana/Hangul/ZhuYin**: Specify the minimum and maximum amount of space between Kana, Hangul, or Zhu Yin characters in justified paragraphs. Specify the optimum amount of space between Kana, Hangul, or Zhu Yin characters in all paragraphs, regardless of their alignment.

- **Han**: Specify the minimum and maximum amount of space between Han characters in justified paragraphs. Specify the optimum amount of space between Han characters in all paragraphs, regardless of their alignment.

- **R Char**: Specify the minimum and maximum amount of space between Roman characters in justified paragraphs. Specify the optimum amount of space between Roman characters in all paragraphs, regardless of their alignment.

- **Flush Zone**: Specify the area before the right indentation within which the last word in the last line of a justified paragraph must fall in order to justify that line. For example, if you enter 1", the last line of a paragraph to which the hyphenation and justification specification is applied will not be justified until the last word in the line falls within 1" of the right indentation.

- **Single Word Justify**: Specify whether a single word on a line in a justified paragraph extends from the left indentation to the right indentation. When the box is unchecked, a single word on a line is left-aligned.

- **Break on Spaces**: Specify whether Chinese, Japanese, and Korean text breaks on spaces.

## Output styles

The **Output Styles** dialog box (**Server/QuarkXPress Server > Document Controls > Output Styles**) enables you to create and manage custom output styles. An output style is a group of print settings that you implement at output. Using output styles eliminates the need to re-create complex or frequently used print settings every time you print. Output styles are available when rendering a project in EPS, PDF, PPML, and PostScript format.

When QuarkXPress Server renders a project, any output style that was applied by QuarkXPress is overridden. If the client specifies an output style in the request, that output style is used; otherwise, the default QuarkXPress Server output style is applied instead.

**Output Styles** dialog box

### Working with EPS styles

Use the the **Edit EPS Style** dialog box to create or edit EPS output styles. To display the **Edit EPS Style** dialog box, choose **EPS** from the **New** drop-down button or click **Edit** or **Duplicate** in the **Default Output Styles** dialog box (**Server/QuarkXPress Server > Document Controls > Output Styles**).
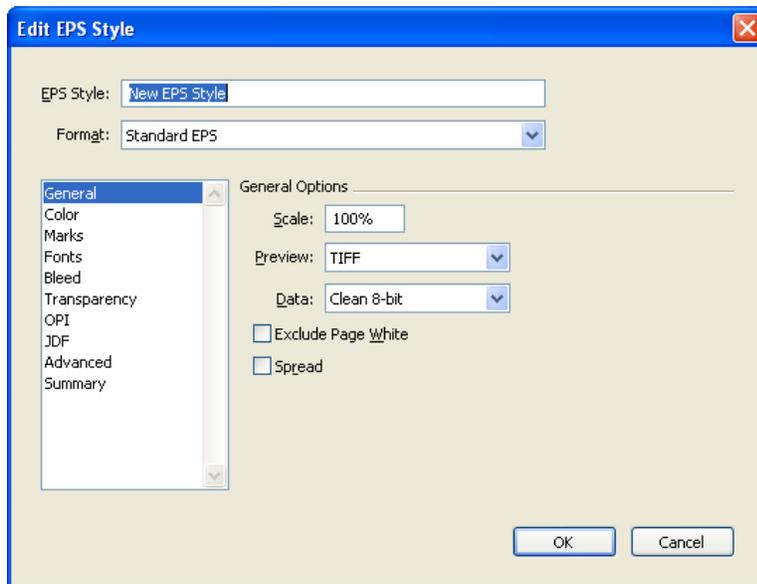


**Edit EPS Style** dialog box

To specify a name for the EPS style, enter the name in the **EPS Style** drop-down menu.

To specify a format for the EPS file, choose an option from the **Format** drop-down menu.

Use the **General** pane to specify the scale of the EPS file, the format of the EPS file's preview, whether to treat the page's white areas as transparent or opaque in the EPS file, and whether to output the EPS file as a spread.

Use the **Color** pane to choose an output setup for the EPS file and to select which plates should be included in the output.

Use the **Fonts** pane to specify which fonts are embedded within the exported EPS file.

Use the **Marks** pane to specify the positioning, width, and length of registration marks in the EPS file.

Use the **Bleed** pane to designate a symmetric or asymmetric bleed type and specify bleed distance around the EPS file.

Use the **Transparency** pane to turn transparency on or off, and to control the resolution of flattened items in the EPS file.

Use the **OPI** pane to specify options for including high-resolution original images in the EPS file, and to control TIFF and EPS options separately.

Use the **JDF** pane to indicate whether a Job Definition Format (JDF) file should be created at the same time as the EPS file. You might choose to do this if you're using Job Jackets in a JDF workflow.

Use the **Advanced** pane to choose whether the EPS adheres to PostScript Level 2 or PostScript Level 3.

Use the **Summary** pane to view a summary of the settings in the other panes.

### Working with PPML Styles

Use the the **Edit PPML Style** dialog box to create or edit PPML output styles. To display the **Edit PPML Style** dialog box, choose **PPML** from the **New** drop-down button or click **Edit** or **Duplicate** in the **Default Output Styles** dialog box (**Server/QuarkXPress Server > Document Controls > Output Styles**).
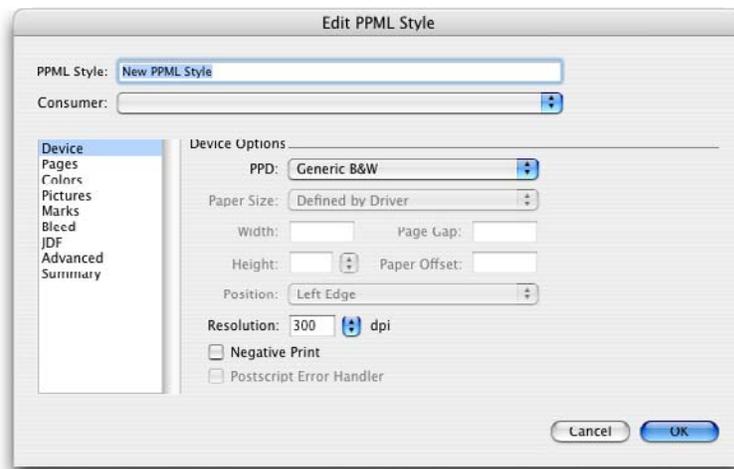
**Edit PPML Style** dialog box

In the **PPML Style** field, enter a name for a new PPML output style or rename an existing PPML output style.

Choose the target PPML consumer from the **Consumer** drop-down menu.

Use the **Device** pane to control device-specific settings, including PostScript Printer Description (PPD) selection and page positioning.

Use the **Pages** pane to specify various methods of rendering pages.

Use the **Colors** pane to specify whether output will be created in composite format or as separations.

Use the **Pictures** pane to specify whether fonts will be embedded in the exported output:

Use the **Marks** pane to include crop marks and registration marks in the output. Crop marks are short vertical and horizontal lines printed outside the page's final trim size to indicate where to cut the page. Registration marks are symbols that are used to align overlaying plates.

Use the **Bleed** pane to define different bleed values for each edge of the page, or to use layout items such as boxes and lines to define the bleed. Bleed settings apply to every page in the layout.

➡ The **Bleed** pane displays only if Custom Bleeds XTensions software is loaded. For more information, see "*QuarkXPress Server XTensions software*."

Use the **JDF** pane to specify whether to save a JDF file from the project's Job Jackets structure at rendering.

Use the **Advanced** pane to set the level of PostScript used in embedded EPS files.

Use the **Summary** pane to view a summary of the settings in the other panes.

### Working with PDF Styles

Use the the **Edit PDF Style** dialog box to create or edit EPS output styles. To display the **Edit PDF Style** dialog box, choose **PDF** from the **New** drop-down button or click **Edit** or **Duplicate** in the **Default Output Styles** dialog box (**Server/QuarkXPress Server > Document Controls > Output Styles**).
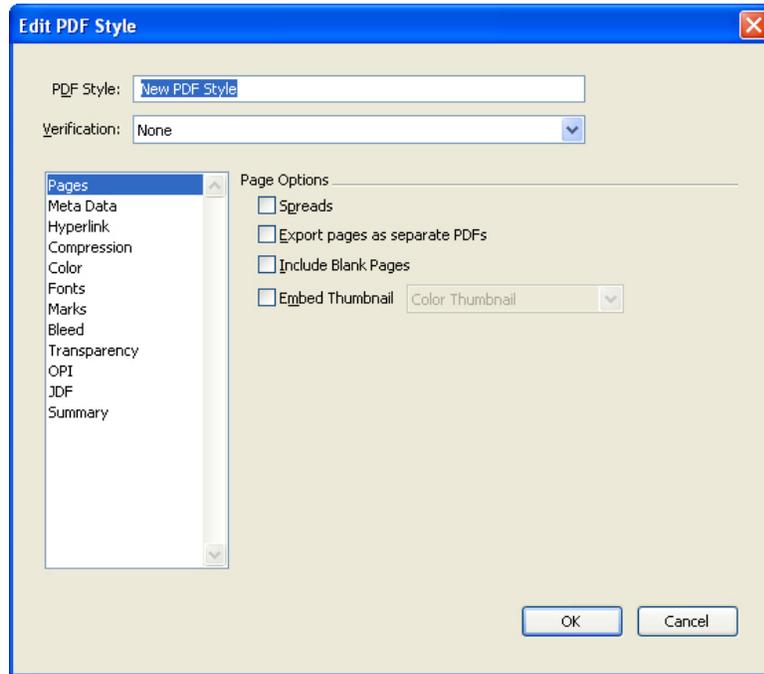


**Edit PDF Style** dialog box

In the **PDF Style** field, enter a name for a new PDF output style or rename an existing PDF output style.

To create PDF files that adhere to the PDF/X standard, choose an option from the **Verification** drop-down menu:

- **PDF/X–1a: 2001**: Choose this option to create PDF files that adhere to the PDF/X–1a specification.

- **PDF/X–3: 2002**: Choose this option to create PDF files that adhere to the PDF/X–3 specification.

The PDF/X 1a and PDF/X 3 specifications are subsets of the widely accepted PDF/X standard for print submission. Each PDF/X type contains its own set of restrictions as to what is or is not acceptable in a PDF. The PDF/X 3 standard is a superset of PDF/X–1a (a PDF/X–1a file meets all of the requirements of PDF/X–3), and all of the tools designed to read PDF/X–3 are also able to read PDF/X 1a files. A major distinction between the two is that a PDF/X 3 file can also contain color-managed data.

To use a PDF output style, choose an option from the **PDF Style** drop-down menu. To create a PDF output style using the current settings, choose **New PDF Output Style**.

To use PDF/X verification, choose an option from the **Verification** drop-down menu. Available options include **PDF/X 1a** and **PDF/X 3**. Note that **PDF/X 1a** verification permits only CMYK and spot colors, while **PDF/X 3** verification allows you to include colors and pictures that use other color spaces, along with ICC color profiles (which are defined in the source and output setups for color management).

Use the **Color** pane to specify whether to create composite output or separations, to choose an output setup for the PDF file, and to select which plates should be included in the output.

Use the **Compression** pane to specify compression options for different image types in the PDF file.

Use the **Pages** pane to specify whether to export spreads, whether to export each page as a separate PDF file, whether to include blank pages, and whether to embed a thumbnail of the PDF file.

Use the **Marks** pane to specify the positioning, width, and length of registration marks in the PDF file.

Use the **Hyperlink** pane to specify how links and lists from the layout export and how hyperlinks should appear in the PDF. You can also use this pane to specify the default zoom of the PDF file.

Use the **Meta Data** pane to provide the details that display in the **Description** tab of the **Document Properties** dialog box in Adobe Acrobat Reader.

Use the **Fonts** pane to specify which fonts are embedded within the exported PDF file.

Use the **Bleed** pane to specify how bleeds are handled in the PDF file.

Use the **Layers** pane to specify which layers to include in the PDF file.

Use the **Transparency** pane to turn transparency on or off, and to control the resolution of flattened items in the PDF file.

Use the **OPI** pane to specify options for including high-resolution original images in the PDF file (not available when you choose **PDF/X 1a** or **PDF/X 3** from the **Verification** drop-down menu).

Use the **JDF** pane to indicate whether a Job Definition Format (JDF) file should be created at the same time as the PDF file. You might choose to do this if you're using Job Jackets in a JDF workflow.

Use the **Summary** pane to view a summary of the settings in the other panes.

### Working with print styles

Use the the **Edit Print Style** dialog box to create or edit print output styles. To display the **Edit Print Style** dialog box, choose **Print** from the **New** drop-down button or click **Edit** or **Duplicate** in the **Default Output Styles** dialog box (**Server/QuarkXPress Server > Document Controls > Output Styles**).
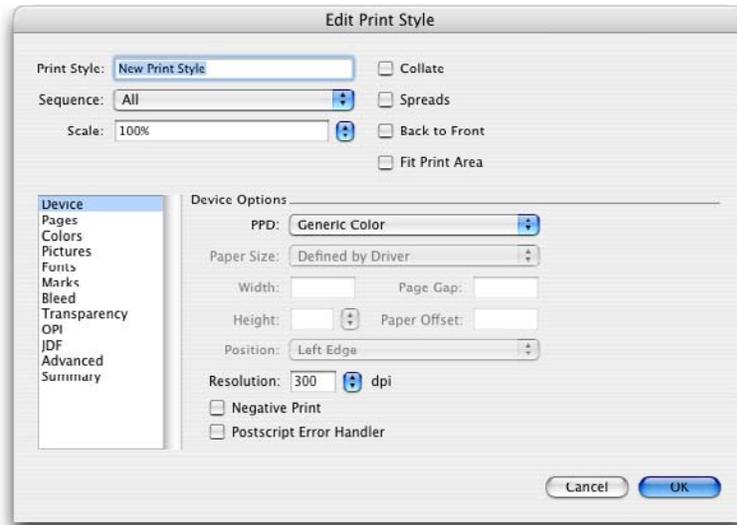
**Edit Print Style** dialog box

In the **Print Style** field, enter a name for a new print output style or rename an existing print output style.

From the **Sequence** drop-down menu, choose one of the following options:

- **All** to print all related pages

- **Odd** to print only odd-numbered pages

- **Even** to print only even-numbered pages

To make output smaller or larger than the original, enter a percentage in the **Scale** field. The default is 100%.

Check **Collate** to print more than one copy of a layout so that they output with all pages in the correct order for binding.

If you print three copies of a layout and check **Collate**, QuarkXPress Server prints one complete copy of the layout before beginning the second copy. Uncheck **Collate** to print three copies of the first page, then three copies of the second page, and so on.

Check **Spreads** to print two or more adjoining pages side-by-side on the film or paper.

Check **Back to Front** to print a multiple-page layout in reverse order. The last page in the layout prints first.

Check **Fit Print Area** to reduce or enlarge the size of pages to fit the imageable area of the output media.

Use the **Device** pane to control device-specific settings, including PPD selection and page positioning.

Use the **Pages** pane to specify page orientation, tiling, page flipping, and related options.

Use the **Pictures** pane to control the way pictures are printed.

Use the **Fonts** pane to specify which fonts are included in output. Note that many of the options in this pane are available only when printing to a PostScript output device.

Use the **Color** pane to control color output.

Use the **Marks** pane to include crop marks, registration marks, and bleed marks in the output. *Crop marks* are short vertical and horizontal lines printed outside the page's final trim size, indicating where to cut the page. *Registration marks* are symbols that are used to align overlaying plates. *Bleed marks* indicate where page bleeds end.

Use the **Layers** pane to specify which layers to output and which layouts to suppress.

Use the **Bleed** pane to allow items to bleed (extend beyond the page edges) at printout. Bleed settings apply to every page in the layout.

Use the **Transparency** pane to specify how transparency is handled at export.

Use the **JDF** pane to specify whether to save a JDF file from the project's Job Jackets structure. When you check **Output JDF**, the **Include Job Jacket Contact** drop-down list becomes available; choose a contact from among the Contact Resources in the project's Job Jacket structure.

Use the **OPI** pane to control settings for Open Prepress Interface (OPI).

In the **Advanced** pane, you can specify the PostScript level of the output device.

Use the **Summary** pane to view a summary of the settings in the other panes.

### Font mapping

Use the **Font Mapping** dialog box (**Server/QuarkXPress Server > Document Controls > Font Mapping**) to set rules for missing fonts on the server. If required fonts are not available to QuarkXPress Server, rendered layouts display a substitute font.
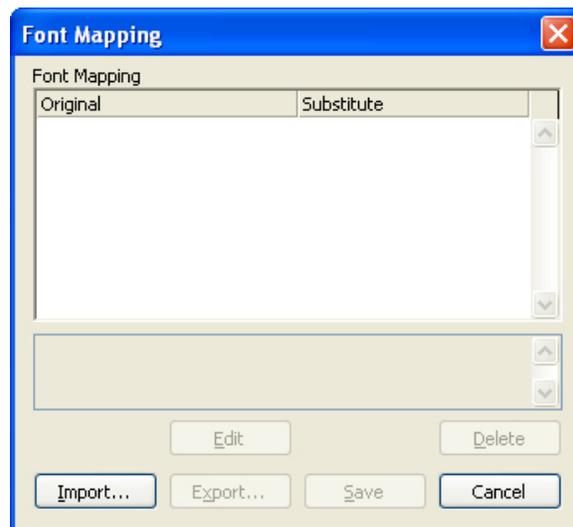


The **Font Mapping** dialog box

To edit a font-mapping rule, select the rule and click **Edit** to display the **Edit Font Mapping** dialog box, then choose a replacement font from the **Replacement** drop-down menu.

Click **Export** to export the current set of font mapping rules as an XML file. Click **Import** to import an XML file that contains font-replacement rules.

## Source setups

The **Source** command (**Server/QuarkXPress Server > Document Controls > Color Setups > Source**) displays the **Default Source Setups** dialog box, which enables you to create and manage source setups.
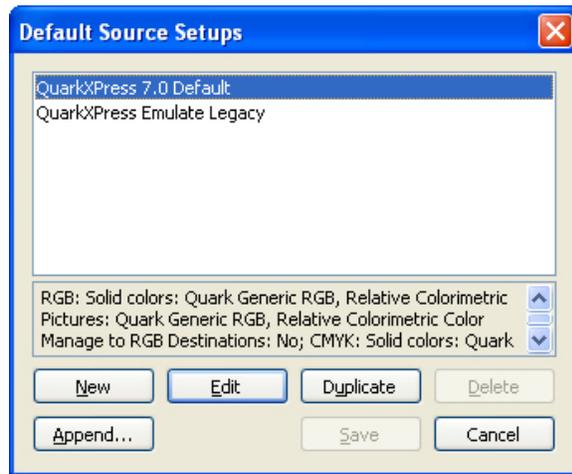


**Default Source Setups** dialog box

A source setup describes colors in a layout as they exist prior to output — in other words, where the colors came from. A source setup contains profiles and rendering intents for both solid colors and pictures in RGB, CMYK, LAB, and grayscale. In addition, it includes information about the underlying color space for named colors (such as Pantone Process Coated colors) and inks (such as cyan, magenta, yellow, black, and multi-inks). You might create source setups for clients based on their standard workflows, or you might create source setups for a specific project.

To get started in creating a source setup, you will need to know some details about the hardware and software involved in a client's workflow — what type of digital camera and scanner they use, for example — and you'll need to make sure the relevant profiles are available. It's also helpful to see sample projects so you know what types of pictures, colors, inks, and devices they're working with, such as logos, charts and graphs, photographs, duotones, etc., output to SWOP or displayed on the Web.

### Creating a source setup

To configure a source setup:

1  Click **New** in the **Default Source Setups** dialog box to display the **Edit Source Setup** dialog box.
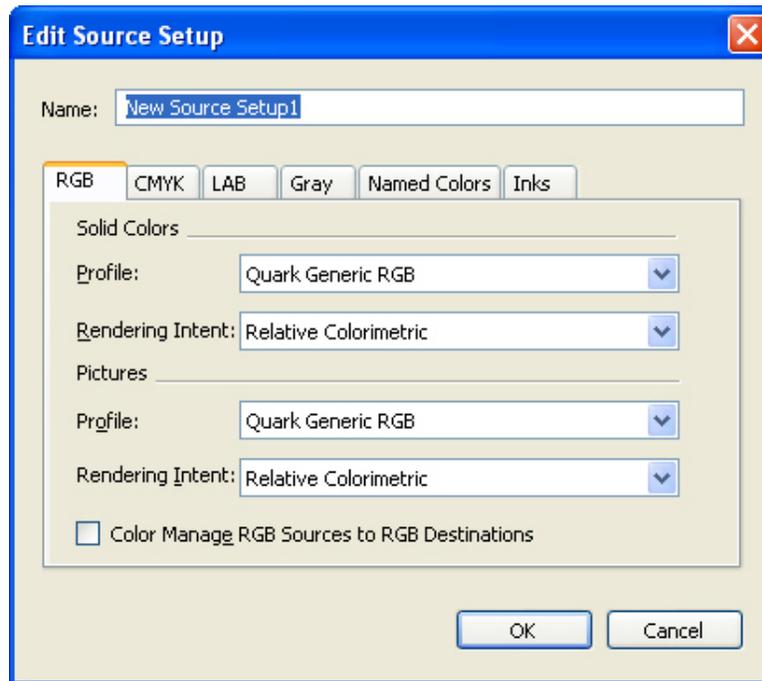


**Edit Source Setup** dialog box

2  In the **Name** field, enter a name.

3  In the **RGB, CMYK, LAB**, and **Gray** tabs, review and make changes to the **Profile** and **Rendering Intent** selected for **Solid Colors** and **Images**.

4  In the **RGB** and **CMYK** tabs, if you want color management transformations to occur even within the same color space, check **Color Manage RGB Sources to RGB Destinations** or **Color Manage CMYK Sources to CMYK Destinations**, respectively.

5  In the **Named Colors** tab, specify the source color space for each of the named default colors stored in your preferences. To do this, select a color and choose an option from the **Source Space** drop-down menu: **LAB, RGB**, or **CMYK**. The default setting, **Automatic**, uses the largest color space available to describe the color.

6  In the **Inks** tab, specify the source color space for each ink that might be output from the layout. To do this, select an ink and choose an option from the **Underlying Color Space** drop-down menu. You cannot modify Black, Cyan, Magenta, and Yellow because their source color space will always be **CMYK**. You can, however, change the setting for **Any New Ink** or for any inks you create, such as a custom varnish plate. The **Automatic** setting uses the largest color space available to describe the color, first considering LAB, then RGB, and finally CMYK.

7  To finish the source setup, click **OK**.

### Output setups

The **Source** command (**Server/QuarkXPress Server > Document Controls > Color Setups > Source**) displays the **Default Output Setups** dialog box, which enables you to create and manage output setups.
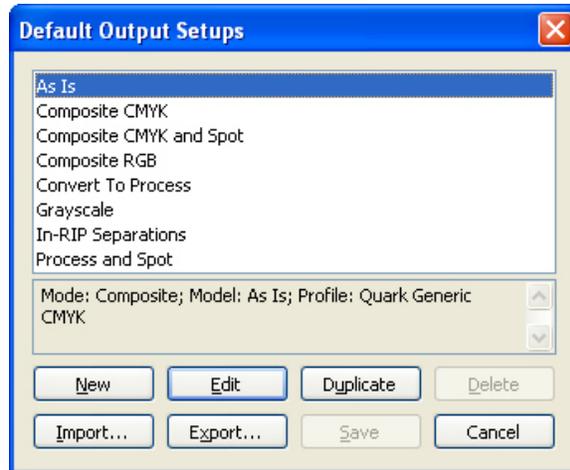


**Default Output Setups** dialog box

An output setup describes the capabilities of various types of output devices and determines how colors are handled in various output scenarios. You can think of an output setup as "where colors are going." An output setup specifies composite or separation output, the output mode, and an output profile. In QuarkXPress Server, you create output setups for output in print, PDF, and other formats.

As with source setups, to get started in creating an output setup, you need to know details about typical jobs, output methods, and equipment. For example, it's helpful to know the name and have the profiles for any composite printing devices. QuarkXPress Server provides default output setups for various workflows.

#### Creating an output setup

To create an output setup:

1  Click **New**, **Edit**, or **Duplicate** in the **Default Output Setups** dialog box to display the **Edit Output Setup** dialog box.
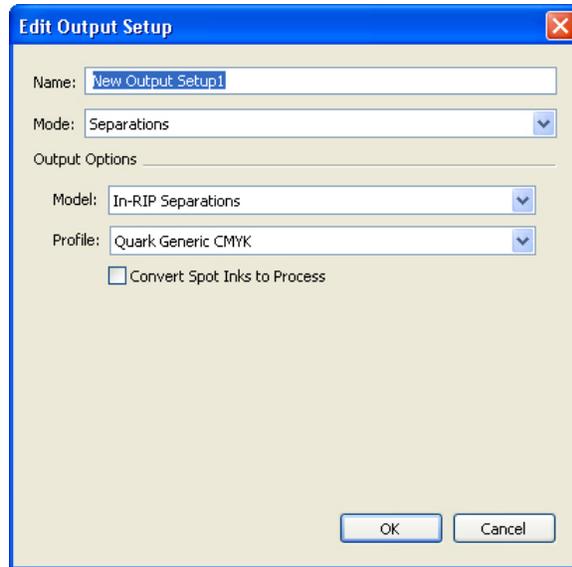
**Edit Output Setup** dialog box

**2** In the **Name** field, enter a name.

**3** Select an option from the **Mode** drop-down menu to specify the type of output: **Composite** or **Separations**.

**4** If you select **Composite** mode, you can specify an output color space from the **Model** drop-down menu: **Grayscale**, **RGB**, **CMYK**, **As Is**, or **DeviceN**. If you select **Separations** mode, you can select **Host-based Separations** or **In-RIP Separations** from the **Model** drop-down menu.

**5** Based on the **Model** you specify, select an output profile from the **Profile** drop-down menu. If you need to load custom profiles, use the **Profile Manager** dialog box (**Utilities** menu).

**6** If you choose **CMYK** or **RGB** from the **Model** drop-down menu, you can configure the output setup to simulate output to a particular output device (output setup) and rendering intent. You might choose to do this, for example, if you want to use an RGB output device to simulate a layout's appearance when printed to a CMYK press. To make use of this feature, check **Proof Separations** and then choose options from the **Output Simulation** and **Rendering Intent** drop-down menus.

**7** To finish the output setup, click **OK**.

**PPML consumers**

To edit the list of consumers for PPML output, choose **Server/QuarkXPress Server > Edit PPML Consumers**. The **PPML Consumers** dialog box displays.
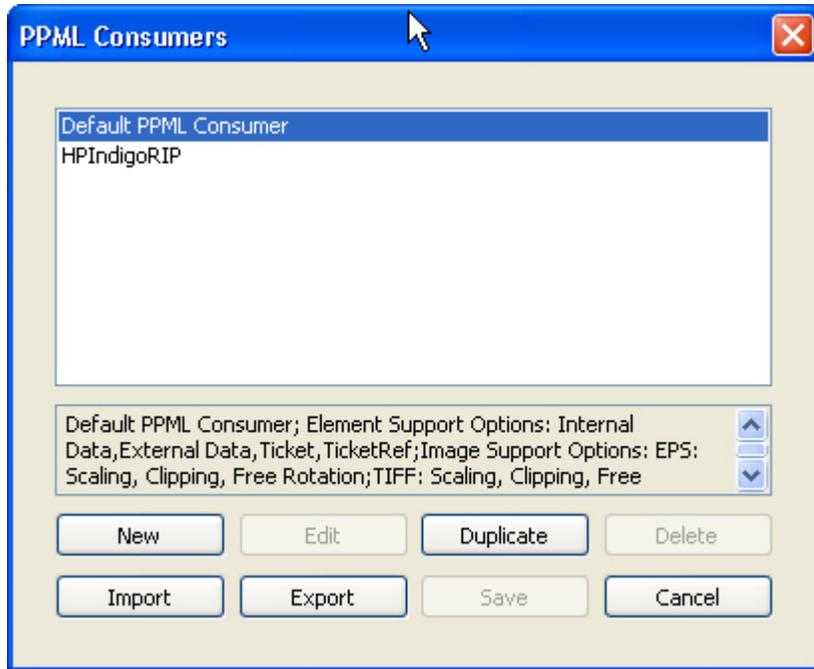
**PPML Consumers** dialog box

### Working with PPML consumers

A PPML consumer describes a particular application or device that accepts PPML input. Use the the **Edit PPML Consumers** dialog box to create or edit PPML consumers. To display the **Edit PPML Consumers** dialog box, click **New**, **Edit**, or **Duplicate** in the **PPML Consumers** dialog box (**Server/QuarkXPress Server > Edit PPML Consumers**).
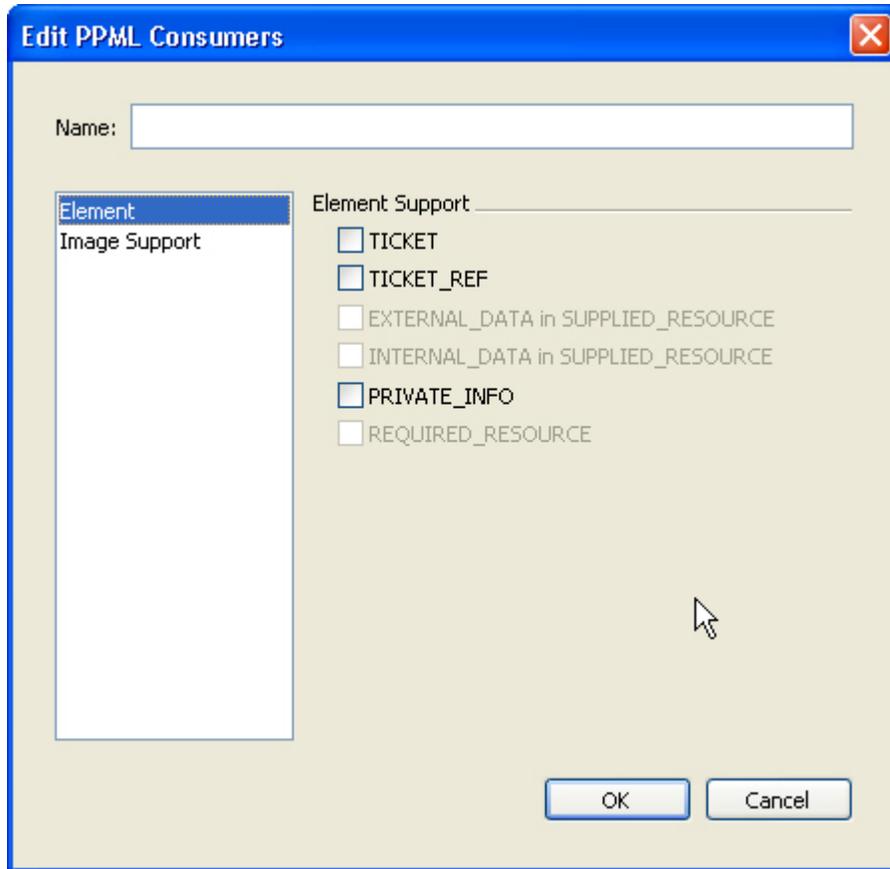
**Edit PPML Consumers** dialog box

In the **Name** field, enter a name for the PPML consumer.

In the **Element** pane, check the options that are appropriate for this PPML consumer.

In the **Edit PPML Consumers** pane, check options to determine how various types of pictures are handled by the PPML consumer.

## Server XTensions Manager

The **Server XTensions Manager** command (**Server/QuarkXPress Server** menu ) displays the **Server XTensions Manager** dialog box. Use the **Server XTensions Manager** dialog box to control which XTensions modules load and to create and modify sets of XTensions modules.
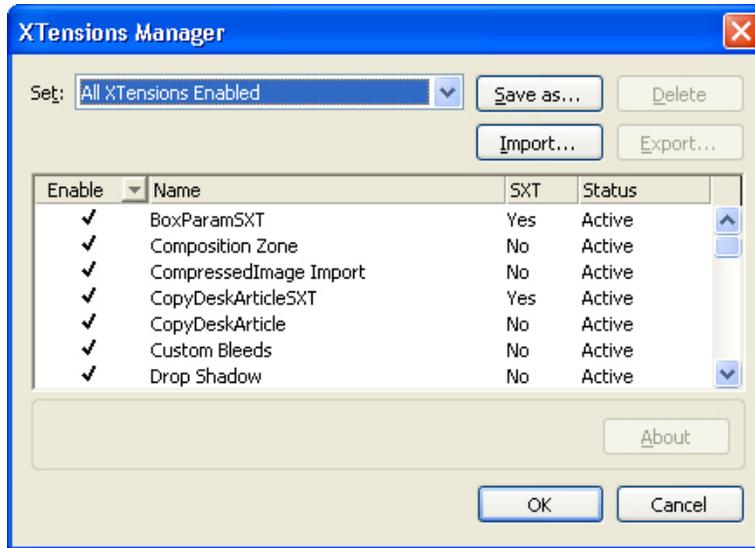
**XTensions Manager** dialog box

A set is a group of specific XTensions modules that load together. For example, you might make sets of third-party XTensions software that are required only for specific projects or for certain clients. From the **Set** drop-down menu, choose an XTensions software set to load:

• **All XTensions Enabled** loads all your XTensions software.

• **All XTensions Disabled** does not load any XTensions software.

• **QuarkXPress Server XTensions** loads all your server XTensions software.

Click **Save As** to create a set from the XTensions software that are currently checked in the **Enable** column. The **Save As** button displays the **Save Set** dialog box, which enables you to name and save the new XTensions software set. XTensions software sets are saved in the "XPressServer Preferences.prf" file, in the QuarkXPress Server "Preferences" folder.

Click **Delete** to delete the set displayed in the **Set** drop-down menu.

Click **Import** to import a set of XTensions software from an exported file. Click **Export** to export the current set of XTensions software as a file.

Check **Enable** to include an Xtensions software among the software that is loaded.

The **Name** column displays all the XTensions software in the "XTensions" and "XTensions Disabled" folders within the QuarkXPress Server application folder.

The **SXT** column indicates the type of XTensions software: If **Yes** displays in the **SXT** column, that XTensions software is written specifically for QuarkXPress Server. If **No** displays in the column, the XTensions software was written for QuarkXPress, but it can be used with QuarkXPress Server.

The **Status** column defines whether the XTensions software is **Active** (currently loaded) or **Inactive** (disabled). If QuarkXPress Server was unable to load the XTensions software, the **Status** is **Error**.

Click **About** to display detailed information about the selected XTensions software.

### Status Monitor

The **Status Monitor** command (**Server/QuarkXPress Server** menu) displays the **Status Monitor** dialog box, which shows the status of the server.

➡ Because the status monitor consumes resources, Quark recommends that you use it for debugging and investigating specific issues rather than leaving it open at all times.
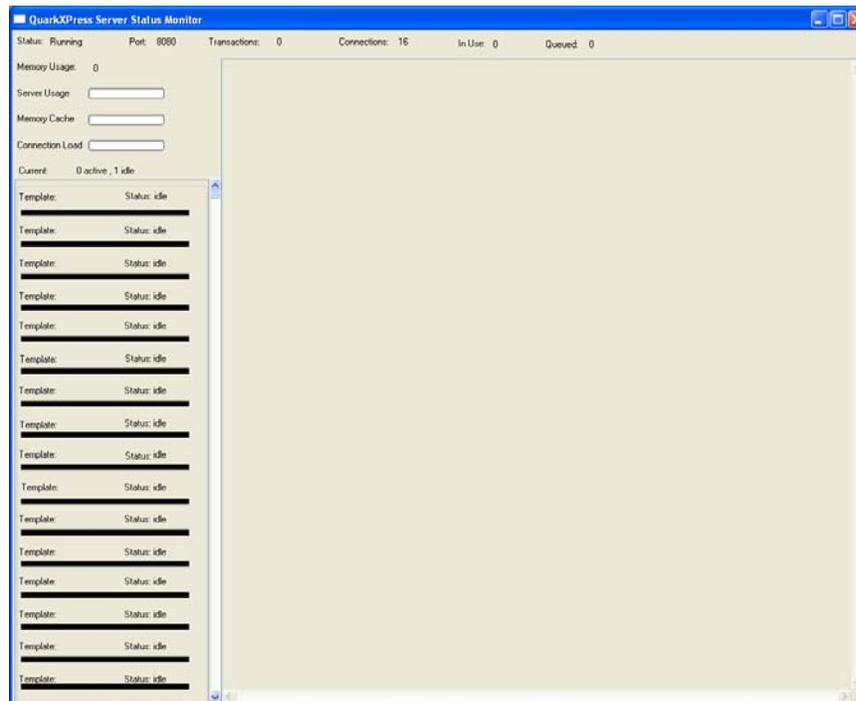


**QuarkXPress Server Status Monitor** window

When the **Status Monitor** dialog box is open, you can choose **Verbose Status Monitoring** from the **QuarkXPress Server** menu for more detailed monitoring options.

The **Status** field shows the current status of the QuarkXPress Server. The **Status** field displays a status of **Running**, **Paused**, or **Stopped**.

The **Port** field displays the port number QuarkXPress Server is using. You can set the port number in the **HTTP** tab of the **Server Configuration** dialog box (**QuarkXPress Server** menu).

The **Transactions** field displays the number of transactions completed by QuarkXPress Server since its start. It makes no difference whether the status monitor is on or off; all transactions are counted.

The **Connections** field displays the maximum number of simultaneous connections that are allowed. Set this value in the **HTTP** tab of the **Server Configuration** dialog box (**QuarkXPress Server** menu).

The **In Use** field displays the current number of simultaneous connections.

The **Queued** field displays the current number of connections waiting for a renderer to become available.

The **Memory Usage** field displays the amount of memory used by memory-cached projects.

The **Server Usage** bar displays the length of time from when the server was started (the time from when the server had at least one renderer working).

The **Memory Cache** bar displays the percentage of allocated memory cache space in use.

The **Connection Load** bar displays the percentage of connections being used. This percentage is based on connections used since the start of QuarkXPress Server and is time sensitive. For example, if all connections have been used since the server started, the load is 100%. If the number of connections used drops to half the maximum value, instead of dropping immediately to 50%, the percentage load gradually declines over time.

The **Current** field displays the rendering operations that are currently active. When QuarkXPress Server is running in master-subrenderer mode, the **Current** field displays the number of active and idle QuarkXPress Server subrenderers.

The **Connection Status** area displays the status for each active connection. The information that displays for each connection includes the name of the project being processed and a progress bar that displays the relative completion of the transaction. When the transaction is complete, the status displays as idle until the connection is used to process another transaction.

The **Status Monitor** dialog box displays a total of 16 status areas. The number of active displays is determined by the number of available connections as specified in the **HTTP** tab of the **Server Configuration** dialog box (**QuarkXPress Server** menu).

The information displayed in the **Text Area for Transaction Status** area depends on whether **Verbose Status Monitoring** has been chosen. Regardless, all transactions generate an entry in the status monitor, and the entry provides information about successful transactions or errors.

To display more detailed information in the **Status Monitor** dialog box, check **Verbose Status Monitoring**. Note that Verbose status monitoring slightly degrades the performance of QuarkXPress Server.

## Other QuarkXPress Server menu items

To display the QuarkXPress Server splash screen, choose **Server/QuarkXPress Server > About QuarkXPress Server**.

To check the QuarkXPress Server license out of Quark License Administrator, choose the **Check Out License** command.

To pause the QuarkXPress Server HTTP server, choose the **Pause Server** command. To start the server again, choose **Server/QuarkXPress Server > HTTP Server > Start Server**.

To start the HTTP server, choose **Server/QuarkXPress Server > HTTP Server > Start Server**.

To stop the QuarkXPress Server HTTP server without closing the QuarkXPress Server application, choose **Stop Server**.

To shut down the QuarkXPress Server HTTP server and close the QuarkXPress Server application, choose **Shut Down Server**.

# Creating URL requests

You can use URL requests to make QuarkXPress Server render projects in a variety of formats, to use the features of server XTensions modules, and to control the server. The topics below provide an overview of how to construct server requests and use URL parameters.

This chapter also lists functions that let you control the server. For detailed information about constructing other types of URL requests, see the QuarkXPress Server *Web Integration Guide*.

## Understanding URL requests

QuarkXPress Server URL requests should use the following format:

`http://server:port/namespace/path/projectname?parameter=value`

- `server`: Indicates the name or IP address of the QuarkXPress Server computer.
- `port`: Indicates the QuarkXPress Server application's port number. The default port number is 8080.
- `namespace`: Sets the render type (or indicates another server functionality to access). For more information, see "*Understanding QuarkXPress Server namespaces*"
- `path`: Indicates the path to the directory where the target project file is stored. Paths are evaluated relative to the document pool directory.
- `projectname`: Identifies the project to be rendered.
- `parameter=value`: Optional parameters that provide more detailed control over how the target project should be rendered. Multiple parameter/value pairs, separated by the "&" character, can be included. For more information, see "*URL parameters for PDF rendering*"and "*URL parameters for PPML rendering.*"

For example, the following URL asks the QuarkXPress Server application named "QXPServer" to return the file "MyProject.qxp" as a PDF file with hyperlinks and all fonts embedded:

```
http://QXPServer:8080/PDF/MyProject.qxp?includehyperlinks=1&embedallfonts=1
```

Some URL parameters require Boolean arguments. For such parameters, valid values include `1` or `0`, `true` or `false`, `y` or `n`, and `yes` or `no`.

➡ You can also send requests to QuarkXPress Server using the HTTP GET and POST protocols and using XML with XSLT. For more information about these approaches, see the QuarkXPress Server *Web Integration Guide*.

## Understanding QuarkXPress Server namespaces

QuarkXPress Server namespaces differentiate among types of requests that are otherwise identical. For example, consider the following three URLs:

```
http://QXPServer:8080/project1.qxp
```

```
http://QXPServer:8080/pdf/project1.qxp
```

```
http://QXPServer:8080/postscript/project1.qxp
```

These requests are identical, except each uses a different namespace (in italic). (The first request does not specify a namespace, but this simply means the project is to be rendered using the server's default render type.)

Namespaces can be used to determine the format in which a rendered project is returned, as indicated above, but they can also be used to direct a request to XTensions software that performs other functions. For example, if you use Modifier XTensions software's `xml` namespace, Modifier XTensions software can return an XML representation of the project.

### Looking up a namespace

The QuarkXPress Server *Web Integration Guide* lists the namespaces for every QuarkXPress Server function. There is no single list of namespaces because some functions do not require a particular namespace or are available in multiple namespaces. To determine which namespace you want to use:

1 Open the QuarkXPress Server *Web Integration Guide*.

2 Choose **Complete API List** from the **QuarkXPress Server Functions** menu at the top of the page.

3 Click the link for the render type you want or the function you want to use. (The link might be a dynamic publishing process, a renderer, or a request handler.) The page corresponding to that render type or function displays.

4 Locate the **Namespace** row. If the render type or function has an associated namespace, that namespace is listed here.

➡ Third-party XTensions can add their own namespaces. For information about a third-party namespace, see the documentation for the XTensions module that adds that namespace.

## Understanding QuarkXPress Server parameters

Parameters let you control the details of how a request is executed. For example, you can use the `page` parameter to create a request that returns only the third page of a project:

`http://QXPServer:8080/jpeg/project1.qxp?page=3`

You can include multiple parameters in the same request; simply separate them with an ampersand (&). For example, here's a new version of the above URL that returns page three at a scale of 50%:

`http://QXPServer:8080/jpeg/project1.qxp?page=3&scale=.5`

### Looking up a parameter

The QuarkXPress Server *Web Integration Guide* lists the parameters that are available for every QuarkXPress Server function. To determine which parameters you can use with a request:

1 Open the QuarkXPress Server *Web Integration Guide*.

2 Choose **Complete API List** from the **QuarkXPress Server Functions** menu at the top of the page.

3 Click the link for the render type you want or the function you want to use. (The link might be a dynamic publishing process, a renderer, or a request handler.) The page corresponding to that render type or function displays.

4 Locate the **Parameters** row. This row lists all available parameters, and includes a description and a list of valid values for each parameter.

## QuarkXPress Server Web Integration Guide overview

The topics below provide an overview of the contents of the QuarkXPress Server *Web Integration Guide*.

### Render types

QuarkXPress Server render types let you render content in a variety of formats, including EPS, JPEG, PNG, PDF, PostScript, PPML, QuarkXPress, QuarkCopyDesk, and SWF (Flash). You can also return documents in two different "raw" formats. Developers can implement additional rendering formats through server XTensions software.

For more information, see the QuarkXPress Server *Web Integration Guide*.

### General parameters

General parameters are parameters that are applicable to most render types. These parameters allow you to render an individual box, component, layout, page, or spread. You can also render a particular selection of layers, pages, and spreads. In addition, you can control whether the pasteboard is included and how the output should be scaled.

For more information, see the QuarkXPress Server *Web Integration Guide*.

### Specialized parameters

Specialized parameters are parameters that serve special purposes. Some of these parameters work by asking the server to read the contents of XML files.

For more information, see the QuarkXPress Server *Web Integration Guide*.

### Server control parameters

Server control parameters let you perform a variety of server administration tasks, including adding and deleting files from the document pool, retrieving information about files, and flushing caches.

For more information, see the QuarkXPress Server *Web Integration Guide*.

### Document providers

Document providers allow QuarkXPress to render the following types of documents:

- `copydesk`: Allows QuarkXPress Server to render article files created by QuarkCopyDesk.

- `qcddoc`: Allows QuarkXPress Server to render projects created by QuarkXPress.

For more information, see the QuarkXPress Server *Web Integration Guide*.

## Preference administration parameters

The `/getprefs` handler lets clients remotely retrieve an XML representation of the current QuarkXPress Server preferences, as described below.

The `/setprefs` handler lets clients remotely control QuarkXPress Server preferences. For example,
`http://<servername>:<port>/setprefs?AddConnectionFilter=action=allow;`
`ipaddr=206.195.80.80;mask=255.255.255.1;pos=0` permits connection filters and specifies the IP address and the subnet mask of the connection.

| Attribute | Type | Description |
|---|---|---|
| `PortNumber` | integer | Specifies a port number from 1024 to 65,535 (Mac OS) or 1 to 65,535 (Windows). |
| `MaxListens` | integer | Specifies the maximum number of listens from 1 to 32. |
| `MaxConnections` | integer | Specifies the maximum number of connections from 1 to 16. |
| `CacheSize` | integer | Specifies the memory cache size from 1MB to 1024MB. |
| `DocumentRootFolder` | string | Specifies the document root directory. |
| `AllowAddFile` | Boolean | Allows the addition of files to the document root directory. |

| Attribute | Type | Description |
|---|---|---|
| LoggingEnabled | Boolean | Controls whether transactions and errors are logged. |
| LogFolder | string | Specifies the path to the log folder, which contains the error and transaction log files. |
| LogErrors | Boolean | Specifies whether to log error conditions. |
| LogTransactions | Boolean | Specifies whether to log all successful transactions. |
| LogTiming | Boolean | Specifies whether to include timing information (such as processing time and opening time) in the transaction log. |
| LogEvents | Boolean | Specifies whether to log server events that are not related to error conditions. |
| ForceServedDocumentsClosed | Boolean | Causes QuarkXPress Server to close projects that are loaded into cache from the document pool after rendering them. |
| AllowMemoryCaching | Boolean | Specifies whether to store disk-based projects in a memory-resident cache. |
| DefaultDoc | string | Specifies the default HTML file to be returned when the server is accessed through HTTP. |
| ErrorDoc | string | Specifies the HTML file to be retrieved when an error occurs on the server. |
| NoAccessDoc | string | Specifies the HTML file to be returned when access is denied to a server function or project file. |
| DefaultRenderType | string | Sets the default. Valid values include PNG, PDF, EPS, PSCR, QXPD, RAW, RLER, JPEG, and PPML. |
| EnableFileSystemDocPool | Boolean | Controls whether you can specify a folder as the document pool. The default value is YES. |
| VerboseStatusMonitoring | Boolean | Specifies whether to allow verbose status monitoring. |
| LogDocProblems | Boolean | Specifies whether to log any project problems. |
| LogBadSXTDialogs | Boolean | Specifies whether to log server XTensions software dialog boxes that do not conform to QuarkXPress Server expectations. |
| EnableHTTPInterface | Boolean | Turns the built-in HTTP server on or off. |
| ConnectionTimeout | integer | Specifies the amount of time (in seconds) before a connection times out. Valid values are from 1 to 32,767. |
| UseConnectionFilters | Boolean | Specifies whether to allow the addition and modification of IP addresses. |
| DefaultBufferSize | integer | Specifies the size (in KB) of the HTTP buffer. Enter a value from 16 to 256. |
| RequireAdmin Verification | Boolean | Specifies whether to require a user name and password. |
| VerificationUsername | string | Lets you supply a user name. Minimum length is 4 characters; maximum length is 32 characters. |

| Attribute | Type | Description |
|---|---|---|
| VerificationPassword | string | Lets you supply a password. Minimum length is 4 characters; maximum length is 32 characters. |
| ConfirmPassword | string | Confirms a password. Minimum length is 4 characters; maximum length is 32 characters. |
| GenerateHierarchy | Boolean | On an OnAddfile request, specifies whether to create a new file hierarchy as files are added to the document pool. |
| AddConnectionFilter | Boolean (allow/deny) | Specifies whether to allow the addition of connection filters. |
| ipaddr | string | Specifies an IP address for use with connection filters. Use the following format: 123.456.789.123. |
| mask | string | Specifies a subnet mask for use with connection filters. Use the following format: 123.456.789.123. |
| pos | integer | Specifies the position at which to add a connection filter. |
| RemConnectionFilter | integer | Removes a filter at a given index. |
| DisableQxdReturn | boolean | Controls whether a project can be rendered as a QuarkXPress project. |
| ContentLoadingTimeout | integer | Controls the amount of time (in seconds) the server waits for a server XTensions module or other document provider to load content asynchronously before timing out the transaction. |

# Modifying layouts with XML

The `xml` namespace deconstructs a project according to the Modifier DTD. The `construct` namespace lets the server turn an XML representation of a QuarkXPress project back into an actual project. With these namespaces, you can deconstruct a project into an XML representation, change the XML in accordance with the Modifier DTD, and then have the server generate an updated version of the QuarkXPress project. You can even create new QuarkXPress projects from scratch using XML.

In addition, you can use the `construct` namespace to:

- Create a page based on master page
- Create a project from XML, using a Job Jackets™ file as the basis for the project
- Modify text font and style, including OpenType® styles
- Apply style sheets and local formatting to text
- Create and populate tables
- Import pictures into picture boxes and specify picture attributes

The DTD used for XML construction and deconstruction is completely Unicode®-compliant, making it ideal for use in international publishing. Furthermore, the use of this DTD ensures that the schema of XML output created by Constructor does not change when server preferences change. This DTD is provided in the QuarkXPress Server application folder and fully documented in the QuarkXPress Server *Web Integration Guide*.

➡ Deconstructor XTensions software and the `deconstruct` namespace are no longer supported.

# QuarkXPress Server XTensions software

Just as XTensions software provides additional functionality to QuarkXPress, XTensions software enables QuarkXPress Server to do things it can't do by default. The XTensions modules included with QuarkXPress Server allow clients to render projects as PDF files, apply QuarkVista picture effects to pictures, dynamically update pictures in picture boxes and text in text boxes (as well as boxes themselves), import data on the fly, manipulate layers in projects, and more.

## CopyDeskArticle XTensions software

CopyDeskArticle XTensions software allows QuarkXPress Server to do the following things:

- Render QuarkCopyDesk articles
- Export QuarkCopyDesk articles from a QuarkXPress project
- Add a QuarkCopyDesk article to an existing QuarkXPress project
- Create and delete components in a QuarkCopyDesk article within a QuarkXPress project

### Rendering articles

To render QuarkCopyDesk articles, use the `copydesk` namespace, as follows:

`http://[server]:[port]/[render type]/copydesk/[articlename]`

For example, to render "Article.qcd" as a PDF file, you could use a URL like the following:

`http://QXPServer.8080/pdf/copydesk/Article.qcd`

### Exporting articles

To export an article from a QuarkXPress project, use the `QCDDOC` namespace, as follows:

`http://[server]:[port]/qcddoc/[project name]?article=[article name or ID]`

For example, to export the article named "Article1" from the project named "Project1.qxp," you could use a URL like the following:

```
http://QXPServer.8080/qcddoc/Project1.qxp?article=Article1
```

➡️ You cannot export an article from a QuarkXPress project unless the article has been created and named in QuarkXPress using CopyDeskArticleXT XTensions software.

To export an article in a particular format, use the `format` parameter.

- To export a standard article, use `format=fullfeatured`.

- To export an article in lightweight mode, use `format=lightweight`.This format can be useful in situations where file size is an issue. The lightweight file format includes only those items that a QuarkCopyDesk user is supposed to work on.

For example:

```
http://QXPServer.8080/qcddoc/Project1.qxp?article=Article1?format=lightweight
```

➡️ You cannot export page pictures in lightweight mode.

### Adding articles to projects

You can use Modifier XTensions software to create a QuarkCopyDesk article within an existing QuarkXPress project. For example, to add an article named "New Article" to the project named "Project1.qxp," you could use XML like the following:

```xml
<PROJECT PROJECTNAME="Project1.qxp" XMLVERSION="8.0">
 <LAYOUT POINTSPERINCH="72">
  <ID NAME="Layout 1" UID="1"/>
  <ARTICLE OPERATION="CREATE" DOCFORMAT="FULLFEATURED">
   <ID NAME="New Article" UID="4"/>
   <RGBCOLOR BLUE="98" GREEN="254" RED="0"/>
   <COMPONENT BOXNAME="Box1" BOXUID="1" COMPONENTCLASS="CT_TEXT"
    NAME="Component 1" UID="1"/>
  </ARTICLE>
 </LAYOUT>
</PROJECT>
```

For more information, see the QuarkXPress Server *Web Integration Guide*.

### Creating and deleting components

You can use Modifier XTensions software to create and delete components in QuarkCopyDesk articles. For example, to add a component named "New Component" to the article named "Article 1" in the project named "Project1.qxp," you could use XML like the following:

```xml
<PROJECT JOBJACKET="Project1 Job Jacket" JOBTICKET="Default Job Ticket
1:Project1"
 PROJECTNAME="Project1.qxp" XMLVERSION="8.0">
 <LAYOUT POINTSPERINCH="72">
  <ID NAME="Layout 1" UID="1"/>
  <ARTICLE DOCFORMAT="FULLFEATURED">
   <ID NAME="Article 1" UID="1"/>
   <COMPONENT OPERATION="CREATE" BOXUID="9" COMPONENTCLASS="CT_TEXT"
    NAME="New Component"/>
  </ARTICLE>
```

```
 </LAYOUT>
</PROJECT>
```

To delete the component named "New Component" from the article named "Article1.qcd," you could use XML like the following:

```
<PROJECT JOBJACKET="Project1 Job Jacket" JOBTICKET="Default Job Ticket
1:Project1"
 PROJECTNAME="Project1.qxp" XMLVERSION="8.0">
 <LAYOUT POINTSPERINCH="72">
  <ID NAME="Layout 1" UID="1"/>
  <ARTICLE DOCFORMAT="FULLFEATURED">
   <ID NAME="Article 1" UID="1"/>
   <COMPONENT OPERATION="DELETE" NAME="New Component"/>
  </ARTICLE>
 </LAYOUT>
</PROJECT>
```

For more information, see the QuarkXPress Server *Web Integration Guide*.

### PDF Filter XTensions software

PDF Filter XTensions software allows QuarkXPress Server to render a QuarkXPress project as a PDF file.

➡ PDF Filter XTensions software adds a **PDF** pane to the **Preferences** dialog box **(QuarkXPress Server > Preferences)**. For more information, see "*Server preferences*."

➡ To take advantage of more detailed preferences, create a PDF output style and use that output style when rendering projects as PDF files. For more information, see "*Output styles*."

To render QuarkXPress projects as PDF files when PDF is not the QuarkXPress Server default render type, use the PDF namespace, as follows:

`http://[server]:[port]/pdf/[projectname]`

➡ For information about the parameters for exporting in this format, see the QuarkXPress Server *Web Integration Guide*.

### PPML Export XTensions software

PPML Export XTensions software allows QuarkXPress Server to export a QuarkXPress project in PPML format. This module can be used in conjunction with the XML Import XTensions module to produce customized versions of a layout for different customers.

To render QuarkXPress projects in PPML format when PPML is not the QuarkXPress Server default render type, use the PPML namespace, as follows:

`http://server:port/ppml/projectname?path=[path of output directory on server]`

➡ For information about the parameters for exporting in this format, see the QuarkXPress Server *Web Integration Guide*.

## Modifier XTensions software

Modifier XTensions software lets clients perform all of the following tasks using XML:

- Modify the properties of pictures in a QuarkXPress project

- Modify the text in text boxes within a QuarkXPress project

- Modify the properties of text boxes and picture boxes in a QuarkXPress project

- Create and delete picture boxes and text boxes in a QuarkXPress project

- Import text or text strings into text boxes within a QuarkXPress project

- Import pictures into picture boxes within a QuarkXPress project

- Save modified QuarkXPress projects in any supported format to any location on the network (and also in the QuarkXPress Server document pool)

- Create and delete pages

- Create and delete layers

- Move items within layers

- Create and delete tables

- Modify tables and their contents

- Create QuarkCopyDesk articles and components

- Create lines, anchored boxes, and Bézier boxes

- Create lists

- Group and ungroup boxes

- Divide layouts into sections

To use Modifier XTensions software, a client creates an XML file indicating the actions to be taken and sends that XML file to the QuarkXPress Server application, where Modifier XTensions software reads the XML and makes the requested changes. Clients can use a single XML file or string to manipulate multiple documents and boxes.

For more specific information about Modifier XTensions software, and for the Modifier DTD, see the QuarkXPress Server *Web Integration Guide*.

➡ Modifier XTensions software supports both GET and POST functionality.

➡ Modifier XTensions software supports XML containing code that uses Unicode UTF-8 and UTF-16 encodings. Use the `encoding` attribute of the XML declaration to specify an encoding, as you would with any other XML file.

➡ Modifier XTensions software adds a **Modifier** pane to the **Preferences** dialog box (**QuarkXPress Server > Preferences**). For more information, see "*Server preferences*."

### Using Modifier XTensions software

To use Modifier XTensions software:

1 Create a QuarkXPress project. Note the IDs or names of any text and picture boxes you want to manipulate.

2 Upload the project to the QuarkXPress Server document pool.

3 Create XML that describes the changes you want, as described in "*Creating XML for Modifier XTensions software*."

4 Send the XML to the server in one of the following ways:

• Put the XML in a file on the server and then use a URL to point to the file, as follows:

```
http://server:port/namespace/path/projectname?modify=file:absolute
path to XML file on server
```

• Put the XML in the URL, as follows:

```
http://server:port/namespace/path/projectname?modify=XML string
```

➡ Clients can also send XML in the form of a POST request.

### Creating XML for Modifier XTensions software

All XML used with Modifier XTensions software uses the Modifier DTD. This DTD is documented in full in the QuarkXPress Server *Web Integration Guide*.

In general, the structure for addressing items in a particular layout is as follows:

```
<PROJECT>
 <LAYOUT>
  <ID NAME="[name of layout]">
  <[Item being addressed]>
   <[Parameters of item]>
  </[Item being addressed]>
 </LAYOUT>
</PROJECT>
```

For more information, see the QuarkXPress Server *Web Integration Guide*.

### QuarkVista XTensions software

A QuarkVista *preset file* is a file that contains a list of one or more QuarkVista picture effects and instructions for applying those effects. You can use QuarkVista XTensions software to apply and remove preset files containing QuarkVista effects to pictures in picture boxes before rendering a project.

➡ QuarkVista effects work only with projects that were last saved in QuarkXPress 6.0 or later.

### Creating preset files

To create a preset file, open a project in a copy of QuarkXPress that is running QuarkVista XTensions software, select a picture box that contains a picture, apply effects to the picture, and then click the **Save Preset** button on the **Picture Effects** palette. The effects you apply are saved in a preset (.vpf) file at the location you indicate. (By default, preset files are stored in the location specified in the **Picture Effects** pane of the **Preferences** dialog box.)

To use preset files in QuarkXPress Server, copy them to the folder indicated by the **Picture Effects Presets** field in the **Picture Effects** pane of the **QuarkXPress Server Preferences** dialog box (**QuarkXPress Server** menu).

### Using QuarkVista XTensions software

To indicate which preset file should be applied, use the `applyvistaeffect` parameter. To indicate which picture box the preset file should be applied to, use the `vistabox` parameter. The URL syntax is as follows:

`http://[server]:[port]/[namespace]/[path]/[projectname]?applyvistaeffect=[preset file name]&vistabox=[picture box name]`

For example, consider the following URL:

`http://QXPServer:8080/abc.qxp?applyvistaeffect=color.vpf&vistabox=pb2`

In this example, `color.vpf` is the name of the preset file containing the QuarkVista effects, and `pb2` is the name of the box to which the preset file is applied.

You can apply the same preset file to multiple pictures using a single URL. For example, consider the following URL:

`http://QXPServer:8080/abc.qxp?applyvistaeffect=color.vpf&vistabox=p1,p2,p3`

Here, the `color.vpf` preset is applied to the picture boxes named `p1`, `p2`, and `p3`.

➡ If the picture in the target box is not compatible with the QuarkVista effects in the preset file, an alert displays in the Web browser. If **Log Errors** is enabled (**QuarkXPress Server > Server Configurations > Logging** tab), an entry is made in the QuarkXPress Server error log file.

➡ If the specified preset file that contains the QuarkVista effects is not in the preset location, an alert displays in the Web browser. If **Log Errors** is enabled (**QuarkXPress Server > Server Configurations > Logging** tab), an entry is made in the QuarkXPress Server error log file.

➡ If you specify multiple picture boxes in a URL, and the picture in one of those boxes is not compatible with the QuarkVista effects in the preset file, the effects are applied to the remaining files.

### Removing QuarkVista effects

Clients can remove all QuarkVista effects applied to images using the `deletevistaeffect` parameter. Consider the following example:

`http://QXPServer:8080/abc.qxp?deletevistaeffect=pb2`

This URL removes any QuarkVista effects applied to the picture in the picture box named `pb2`.

Clients can remove a QuarkVista effect applied to multiple images from a single URL. Consider the following example:

`http://QXPServer:8080/abc.qxp?deletevistaeffect=p1,p2,p3`

This URL removes any QuarkVista effects applied to pictures in the picture boxes named `p1`, `p2`, and `p3`.

➡ If you apply and remove QuarkVista effects in the same URL, the `deletevistaeffect` parameter takes precedence.

➡ If you open a project that uses QuarkVista effects, but QuarkVista XTensions software is not enabled, the QuarkVista effects are ignored. If **Log Errors** is enabled (**QuarkXPress Server > Server Configurations > Logging** tab), an entry is made in the QuarkXPress Server error log file.

## QuarkXPress Server Layer XTensions software

You can use QuarkXPress Server Layer XTensions software to control the visibility of specific layers in a rendered QuarkXPress project. You can also add layers, delete layers, edit layer attributes, and control whether layers are rendered.

➡ When you use the `getdocinfo` namespace, QuarkXPress Server returns information about items on all of the layers in the QuarkXPress project, including layers that are not visible.

➡ QuarkXPress Server Layers XTensions software adds a **Layers** pane to the **Preferences** dialog box **(QuarkXPress Server > Preferences)**. For more information, see "*Server preferences*."

Clients can use the `layer` parameter to specify a layer (even a hidden layer) to be rendered. For example, the URL `http://QXPServer:8080/doc.qxp?layer=layer1` renders only the layer named "layer1" in the project named "doc.qxp."

Clients can specify more than one layer in a single URL. For example, the URL `http://QXPServer:8080/doc.qxp?layer=layer1,layer2` renders the layers named "layer1" and "layer2."

➡ For information about the parameters for this feature, see the QuarkXPress Server *Web Integration Guide*.

➡ If **Suppress Output** is selected for a layer, QuarkXPress Server does not render that layer when producing PDF, EPS, or PostScript files.

## InteractiveDesignerSXT Server XTensions software

InteractiveDesignerSXT XTensions software allows QuarkXPress Server to render both Print and Interactive layouts in QuarkXPress projects as SWF (Flash) files. If you render a Print layout as an SWF file, you can use the right and left arrow keys to navigate between pages in the SWF file.

➡ InteractiveDesignerXT XTensions software adds **SWF** and **Presentation** panes to the **Preferences** dialog box **(QuarkXPress Server > Preferences)**. For more information, see "*Server preferences*."

To render an Interactive layout in a QuarkXPress project as a SWF file when SWF is not the QuarkXPress Server default render type, use the `SWF` namespace, as follows:

`http://[server]:[port]/swf/[projectname]?layout="[layoutname]"`

➡ For information about the parameters for exporting in this format, see the QuarkXPress Server *Web Integration Guide*.

# Telegraph XTensions software

Unlike the other XTensions software described in this guide, Telegraph XTensions software works with QuarkXPress, rather than with QuarkXPress Server. You can use Telegraph XTensions software to create QuarkXPress projects that can serve as templates in QuarkXPress Server. Using Telegraph XTensions software, you can assign unique names to individual items, define server caching parameters, and upload the template directly to a QuarkXPress Server computer.

➡ These topics explain how to use Telegraph XTensions software. It is assumed that you are already familiar with the functionality and user interface of QuarkXPress.

## Setting Telegraph preferences

Telegraph XTensions software adds the **QuarkXPress Server** pane to the QuarkXPress **Preferences** dialog box (**QuarkXPress/Edit** menu). You can use this pane to configure settings for QuarkXPress Server templates, specify where to store your projects on the server, and control how projects are cached.
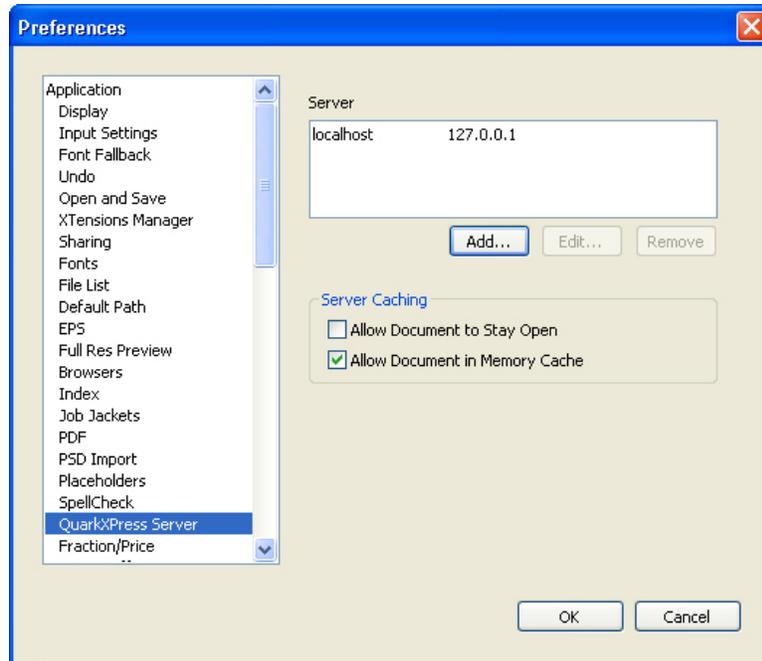
**QuarkXPress Server** pane of **Preferences** dialog box (**QuarkXPress/Edit** menu)

For information on adding a server, see "*Adding a server*."

To edit the properties of a server in the **Server** list, select the server name and then click **Edit**.

To remove a server from the **Server Setup** list, select the server and then click **Remove**.

To allow projects checked in from this copy of QuarkXPress to remain open on the server after it has been served, check **Allow Document to Stay Open**.

To load projects checked in from this copy of QuarkXPress into the server memory cache, check **Allow Document in Memory Cache**.

### Adding a server

The **Server Setup** area of the **QuarkXPress Server** pane lists servers that are potential repositories for QuarkXPress projects. You can add, edit, and remove servers in this list.

To add a server to the **Server Setup** list:

1  Click **Add**. The **Add Server** dialog box displays.
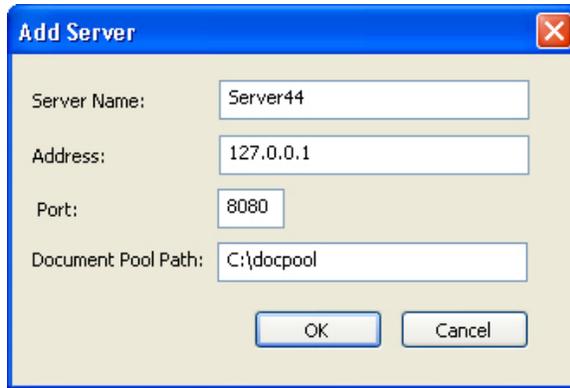
**Add Server** dialog box

2 Enter an identifying name for the server in the **Server Name** field.

3 Enter the server's address in the **Address** field. You can enter either an IP address or the name of the server.

4 Enter the server's port number in the **Port** field. The default port number is 8080. Valid values are from 1 to 65535.

5 In the **Document Pool Path** field, enter the path to the document pool directory on the server, or to a subdirectory within the document pool. If you leave this field blank, the path defaults to the document pool directory path specified in the **QuarkXPress Server Document Root** field (**QuarkXPress Server > Server Configuration > Server** tab).

➡ If you enter a folder path that does not exist, QuarkXPress Server can create the folders in the path when you upload the template to a QuarkXPress Server. To create folders when you upload, check **Generate Hierarchy On Document Upload** in the **Server** tab of the QuarkXPress Server **Server Configuration** dialog box **(QuarkXPress Server > Server Configuration)** before you upload the template to the server.

6 Click **OK**.

### Using Telegraph XTensions software

Once you have configured preferences for Telegraph QuarkXTensions software, you can begin creating QuarkXPress Server templates. After you complete a template, Telegraph XTensions software can upload the file to a QuarkXPress Server computer.

#### Identifying QuarkXPress items and groups

The **Box Identifiers** palette lets you associate names with items and groups. To display this palette, choose Window > Box Identifiers.
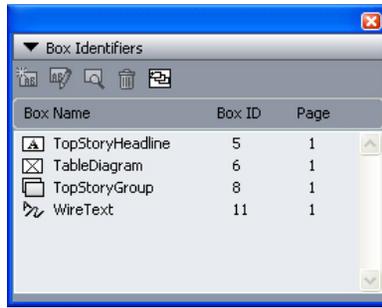
**Box Identifiers** palette

To edit the name of an item or group, select its name in the **Box Modifiers** palette and then click **Edit Box Name** ✏️.

To scroll to the location of a named item or group, double-click the target item or group's name in the **Box Modifiers** palette. Alternatively, you can select the name and click **Go To** 🔍.

To delete an item's or group's name (without deleting the item or group itself), select the name in the **Box Modifiers** palette and then click **Delete** 🗑️.

To make sure that all named boxes display in the **Box Identifiers** palette, click **Populate Named Boxes** 🔲.

Each QuarkXPress item also has an identification number that you can use when you want to render individual project items in QuarkXPress Server. The number displays in the **Box ID** field in the upper right corner of the palette.

➡️ In a chain of text boxes, all boxes use the same **Box Name**. However, each box has a unique **Box ID** number.

**Naming items and groups**

To specify a name for an item or group:

1 Using the Item tool, select the target item or group.

2 In the **Box Identifiers** palette, click **New Box Name** 🔲. The **New Box Name** dialog box displays.
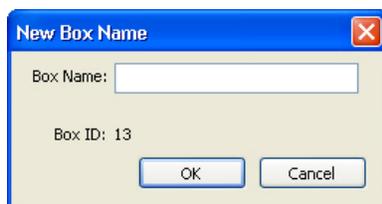


**New Box Name** dialog box

3 Enter a name for the item or group in the **Box Name** field.

4 Click **OK**. The name of the item or group displays on the **Box Identifiers** palette, next to the item's item ID and page number.

➡ In addition to items on layout pages, you can also name items on master pages. Items on layout pages that are based on items on master pages have a default name of *"<Item name on master page><New box UID>"*

### Uploading templates

Telegraph QuarkXTensions software can upload a project to the QuarkXPress Server computer in one simple step. You can also upload any required pictures and fonts, if you choose to collect the fonts and pictures during the upload. To upload the active project:

1 Choose **Utilities > Upload Template**. The **Upload Template** dialog box displays.

➡ If you have edited the project since you last saved it, QuarkXPress prompts you to save the project.
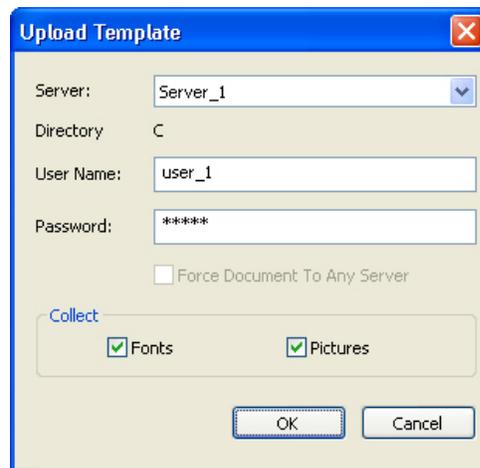


**Upload Template** dialog box

2 Choose a server from the **Server** drop-down menu. This drop-down menu includes the servers listed in the **QuarkXPress Server** pane of the **Preferences** dialog box (**QuarkXPress/Edit** menu).

3 If you specified a directory path for the server, that path automatically displays in the **Directory Path** field. If you did not specify a directory path in the preferences, this field remains blank. This path defaults to the document pool directory specified in QuarkXPress Server.

4 If you are uploading to QuarkXPress Server, and you have configured that server to require authentication, enter a valid user name and password in the User **Name** and **Password** fields. (If the QuarkXPress Server application does not require authentication, leave these fields empty.)

➡ To specify authentication information for a QuarkXPress Server application, display the **HTTP** tab of the **QuarkXPress Server Preferences** dialog box, check the **Realm Verif. for Admin. Requests** box and enter a user name and password.

5 To collect and upload fonts used by the project, check **Fonts**.

6 To collect and upload pictures used by the project, check **Pictures**. This will upload high- or low-resolution pictures that are linked to or embedded in the project.

➡ If picture files are missing or have been modified since they were imported into the project, an alert displays. For more information about missing or modified picture files, see "*Uploading missing or modified pictures*."

7 Click **OK**.

➡ If you check **Fonts**, an alert reminds you of possible restrictions regarding copying font software. Click **OK** to continue uploading the project with the fonts, click **Do Not Collect Fonts** to upload the project without the fonts, or click **Cancel** to stop the upload.

The **Upload Status** window displays a progress bar that displays the status of the upload. When the upload is complete, a message notifies you whether the project uploaded successfully.

### Uploading missing or modified pictures

If the picture files linked to the project are missing or have been modified since they were imported into the project, an alert displays at upload. Choose from among the following options:

• To continue the upload with low-resolution versions of the pictures, click **OK**.

• To stop the upload, click **Cancel**.

• To locate missing pictures or update modified pictures, click **List Pictures**.

If you click **List Pictures**, the **Missing/Modified Pictures** dialog box displays:

• To view a picture in the project, select the picture's name in the list and click **Show**.

• To locate a missing picture file, select it and click **Update**. The **Find** dialog box displays. Locate and choose the appropriate file, and then click **Open**.

• To update a modified picture file, click **Update**. Every instance of the modified picture in the project is updated.

• When **OK** displays in the **Status** column for each picture, click **Collect**. If the status of any picture is still **Missing** or **Modified** when you click **Collect**, that picture file will not be uploaded, but a low-resolution preview will remain in the project.

• To stop the upload and return to the project window, click **Cancel**.

# QuarkXPress Server Monitor

QuarkXPress Server Monitor is no longer included with QuarkXPress Server. All QuarkXPress Server Monitor functionality is available in QuarkXPress Server Manager. For more information, see "*QuarkXPress Server Manager*."

# QuarkXPress Server Manager

QuarkXPress Server Manager is a server application that efficiently routes rendering requests in an environment that uses one or more QuarkXPress Server applications. QuarkXPress Server Manager uses load-balancing methods to determine which server in the QuarkXPress Server pool can best process a document request, and uses caching to improve speed and efficiency. QuarkXPress Server Manager also provides failsafe capability by reliably resubmitting failed requests, either to the same QuarkXPress Server instance or to a different one (depending on the error message returned by the server instance).

QuarkXPress Server does not require QuarkXPress Server Manager, but a QuarkXPress Server Manager server can coordinate multiple QuarkXPress Server applications so that they work together with maximum speed, reliability, and availability.

QuarkXPress Server Manager also provides a Web services interface that allows developers to use QuarkXPress Server features without having to use the HTTP interface.

To configure a QuarkXPress Server Manager server application, you must use the QuarkXPress Server Manager client application. The topics below explain how the QuarkXPress Server Manager client application works and provide examples for using it.

## Understanding QuarkXPress Server Manager

Before you begin, take time to review the topics below so that you understand how this chapter is structured and how you can get the most out of it.

### Load balancing

Load balancing ensures that each rendering request is sent to a server that is likely to be able to handle it quickly. QuarkXPress Server Manager lets you use choose from three load-balancing settings:

- **Random**: Each rendering request is sent to a random server.

- **Round robin**: Requests are sent to servers in a set order. For example, if you have three QuarkXPress Server instances and QuarkXPress Server Manager receives ten rendering requests, the requests are distributed as follows:

| Request | QuarkXPress Server instance used |
|---------|----------------------------------|
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 1 |
| 5 | 2 |
| 6 | 3 |
| 7 | 1 |

- **Dynamic**: The QuarkXPress Server Manager server considers file size and throughput requirements for each request. For example, assume the following series of requests is sent to QuarkXPress Server Manager in an environment that uses two QuarkXPress Server instances:

| Request | Size |
|---------|------|
| 1 | 8MB |
| 2 | 1MB |
| 3 | 2MB |

The first request is assigned to server #1, and the second request is assigned to server #2. When the third request arrives, QuarkXPress Server Manager checks the loads that the two servers are already handling and assigns the task to the server with the smallest load — in this case, server #2.

If a request fails because a server stops responding or because of a "File Not Found" error, QuarkXPress Server Manager does not resubmit that request to that server.

The **Dynamic** setting is typically the most efficient setting for environments with more than one QuarkXPress Server instance.

For information about choosing a load-balancing setting, see "*Controlling load balancing*" Developers can implement their own load-balancing systems; for more information, see the QuarkXPress Server *Web Integration Guide*.

### Request timeout interval

QuarkXPress Server Manager attempts to send each request to a QuarkXPress Server instance that can promptly handle that request. However, in some situations a QuarkXPress Server

instance might be unable to process a request in a reasonable amount of time (for example, if the server is working on a large rendering job, or if the server computer has stopped functioning). If you specify a certain period of time as the request timeout interval, QuarkXPress Server Manager will wait for the response until that period of time elapses, and then send the request to a different QuarkXPress Server instance. This ensures that a request does not get "lost" if its assigned QuarkXPress Server instance does not become available promptly.

For information about setting a request timeout interval, see "*Using other global settings*."

➡ If a client request fails despite being sent to multiple QuarkXPress Server instances, QuarkXPress Server sends the end user a customizable error message or exception so that the end user can appropriately handle the failure. A QuarkXPress Server Manager server can also automatically send e-mail to an administrator in the event of a problem; for more information, see "*Generating automatic e-mail messages*."

### Determining QuarkXPress Server instance availability

QuarkXPress Server Manager uses two methods to determine the availability of a QuarkXPress Server instance: *ping* and *ping document.*

#### *Ping*

QuarkXPress Server Manager periodically sends a ping request to all of its QuarkXPress Server instances to determine whether they are available. Ping requests use the following format:

`http://[Server]:[Port]/getprocessid`

#### *Ping document*

QuarkXPress Server Manager periodically sends a render request to all of its QuarkXPress Server instances to determine whether they can render a document. Ping document requests use the following format:

`http://[Server]:[Port]/[PingDocumentName.qxp]`

You can specify the document to be used for this render request. To avoid long ping document rendering times, use a simple document.

You can specify the interval between pings and ping documents in the **Other Settings** pane in the **Global Settings** pane of the **QuarkXPress Server Manager** window (see "*Using other global settings*").

### Logging

QuarkXPress Server Manager logs all interactions with QuarkXPress Server instances. QuarkXPress Server Manager log files contain the following information:

• Render requests

• QuarkXPress Server responses

- Information about events (such as alerts) that occur during the render-request process

- Details about requests that were sent to a different QuarkXPress Server instance after the first assigned QuarkXPress Server instance was unable to process the request

Within the logs, each QuarkXPress Server instance is identified by its IP address and port number.

You can export log files in XML (Extensible Markup Language) or comma-separated values (CSV) format. For more information, see "*Exporting log files*"

### Caching

To increase speed and efficiency, QuarkXPress Server Manager caches information in memory. If the response to a render request, URL request, or file request is included in the QuarkXPress Server Manager memory cache, QuarkXPress Server Manager returns the response from the disk cache instead of sending the request to a QuarkXPress Server instance. For more information, see "*Managing the cache*"

➡ Requests that contain a binary parameter and multipart responses are not cached, regardless of whether global caching or command-specific caching is enabled.

➡ When the QuarkXPress Server Manager server application receives response data from a QuarkXPress Server instance, QuarkXPress Server Manager can return that response directly or write it as a file and return the file's URL. The second approach maximizes efficiency for SOAP-based clients, because SOAP transfers binary data very slowly. Cached response files have names that begin with "TMP_", and they are removed when they reach the age specified in the cache settings (see "*Managing the cache*"). QuarkXPress Server Manager uses the cache file this way regardless of whether caching is turned on or off; however, you can override this behavior by setting the `responseasurl` parameter to `false` for every request.

### Web services

QuarkXPress Server Manager provides a Web services interface that makes it easy for developers to create applications that use QuarkXPress Server. This Web services interface provides the same functionality that is available through the QuarkXPress Server HTTP interface. For more information about the Web services interface, see the QuarkXPress Server *Web Integration Guide*.

## Working with QuarkXPress Server Manager

The general process for using QuarkXPress Server Manager is as follows:

1 Install QuarkXPress Server Manager software.

2 Launch one or more QuarkXPress Server instances on your network.

**3** Launch the QuarkXPress Server Manager Console application (see *Starting the Manager server application*").

**4** From the QuarkXPress Server Manager Console application, start the Server Manager server application (see *Starting the Manager server application*").

**5** Launch the QuarkXPress Server Manager client application (see *Starting the Manager client application*").

**6** Using the QuarkXPress Server Manager client application, connect to a QuarkXPress Server Manager server (see "*Starting QuarkXPress Server Manager*").

**7** Use the **Manage QuarkXPress Server** pane of the **QuarkXPress Server Manager** window to add QuarkXPress Server instances and specify information about those servers (see "*Configuring QuarkXPress Server instances*").

**8** Configure logging options, caching options, a load-balancing method, proxy server settings, automatic e-mail settings, and various other settings in the **Global Settings** pane of the **QuarkXPress Server Manager** window (see "*Controlling load balancing*," "*Using a proxy server*," "*Generating automatic e-mail messages*," and "*Using other global settings*").

**9** As necessary, export and delete logs using the **Manage Logs** pane of the **QuarkXPress Server Manager** window (see "*Managing logs*").

**10** As necessary, delete cache items and clear the QuarkXPress Server Manager server cache using the **Manage Cache** pane of the **QuarkXPress Server Manager** window (see "*Managing the cache*").

### Starting QuarkXPress Server Manager

You can use one copy of the QuarkXPress Server Manager client application to administer multiple copies of the QuarkXPress Server Manager server application (but only one at a time). Each QuarkXPress Server Manager server can handle multiple QuarkXPress Server instances.
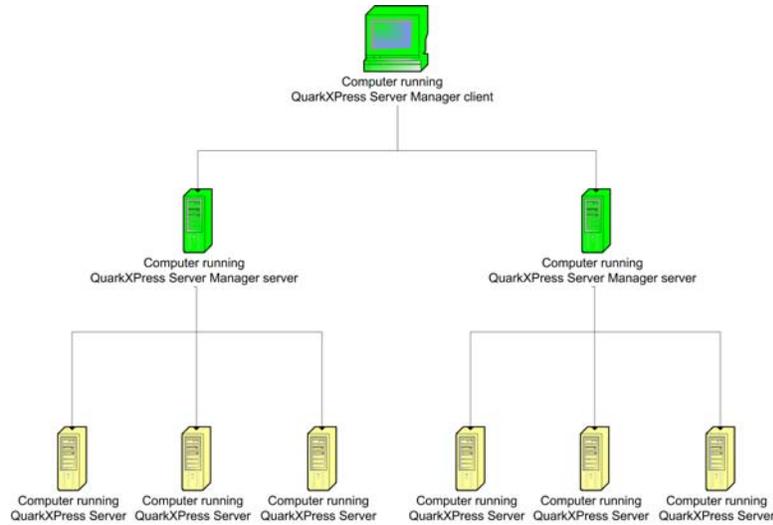
QuarkXPress Server Manager diagram

### Starting the Manager server application

To launch the QuarkXPress Server Manager server application:

- *Mac OS:* Open the `QuarkXPress Server Manager/Server` folder inside the applications folder and double-click "tomcat_start.command."

- *Windows:* Choose **Start > Programs > QuarkXPress Server Manager > Start QuarkXPress Server Manager**.

  You can access API documentation in HTML format by navigating to `http://[server]:[port]`, where `[server]` identifies the computer on which QuarkXPress Server Manager is running.

### Starting the Manager client application

To launch the QuarkXPress Server Manager client application:

- Mac OS: Double-click the "Client Administrator" icon.

- Windows: Choose **Start > Programs > QuarkXPress Server Manager > Client Administrator**.

  When you launch the QuarkXPress Server Manager client application, the **Log On** dialog box displays.

**Log On** dialog box

To log on to a particular QuarkXPress Server Manager server:

**1**  Do one of the following things:

  • Choose the server name or IP address from the **Server Name/IP Address** drop-down menu.

  • Choose **Add Server** from the **Server Name/IP Address** drop-down menu, and then enter the server's DNS name or IP address, followed by the server's port number, in the fields below the drop-down menu.

**2**  Click **OK**. The **QuarkXPress Server Manager** window displays.

### Request handler binding

When you add a QuarkXPress Server instance to QuarkXPress Server Manager, you can choose to bind that server instance to particular rendering type or request type. When QuarkXPress Server Manager receives a matching request, it will send the request to only those server instances that are bound to that rendering type or request type. If multiple server instances are bound to a particular rendering type or request type, QuarkXPress Server Manager balances the load of such requests between the server instances.

An instance of QuarkXPress Server Manager that is not bound to any specific type of request is called a *generic server*. If a request is not bound to a particular server instance, QuarkXPress Server Manager sends that request to a generic server. If more than one generic server is available, QuarkXPress Server Manager balances the load of such requests between them.

You can bind a server to more than one rendering type or request type.

### Configuring QuarkXPress Server instances

The **Manage QuarkXPress Server** pane of the **QuarkXPress Server Manager** window lists the QuarkXPress Server instances the QuarkXPress Server Manager server is handling. You can use this pane to add QuarkXPress Server instances, edit the description of existing QuarkXPress Server instances, and delete QuarkXPress Server instances.
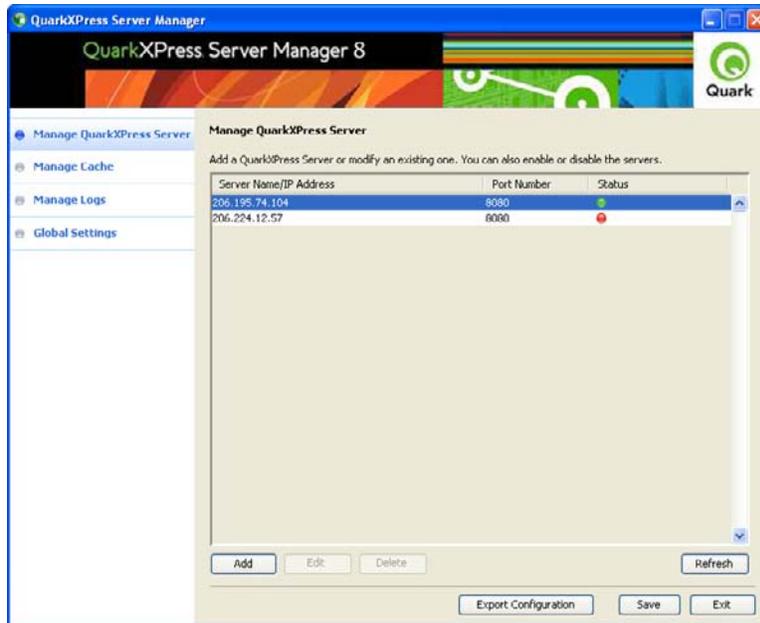
**Manage QuarkXPress Server** pane

### *Adding and enabling a QuarkXPress Server instance*

When you add and enable a QuarkXPress Server instance in the **Manage QuarkXPress Server** pane of the **QuarkXPress Server Manager** window, the QuarkXPress Server Manager server begins routing rendering requests to that QuarkXPress Server instance.

➡ If you add and enable a QuarkXPress Server instance in this pane, be sure that clients are no longer sending rendering requests directly to that QuarkXPress Server instance; otherwise, the server will be handling both direct requests and routed requests, and the server might become overly busy. Note also that requests sent directy to such a QuarkXPress Server instance do not benefit from QuarkXPress Server Manager features such as load balancing, caching, and logging.

To add and enable a QuarkXPress Server instance:

1 Display the **Manage QuarkXPress Server** pane of the **QuarkXPress Server  Manager** window.

2 Click **Add**. The **Add QuarkXPress Server** dialog box displays.
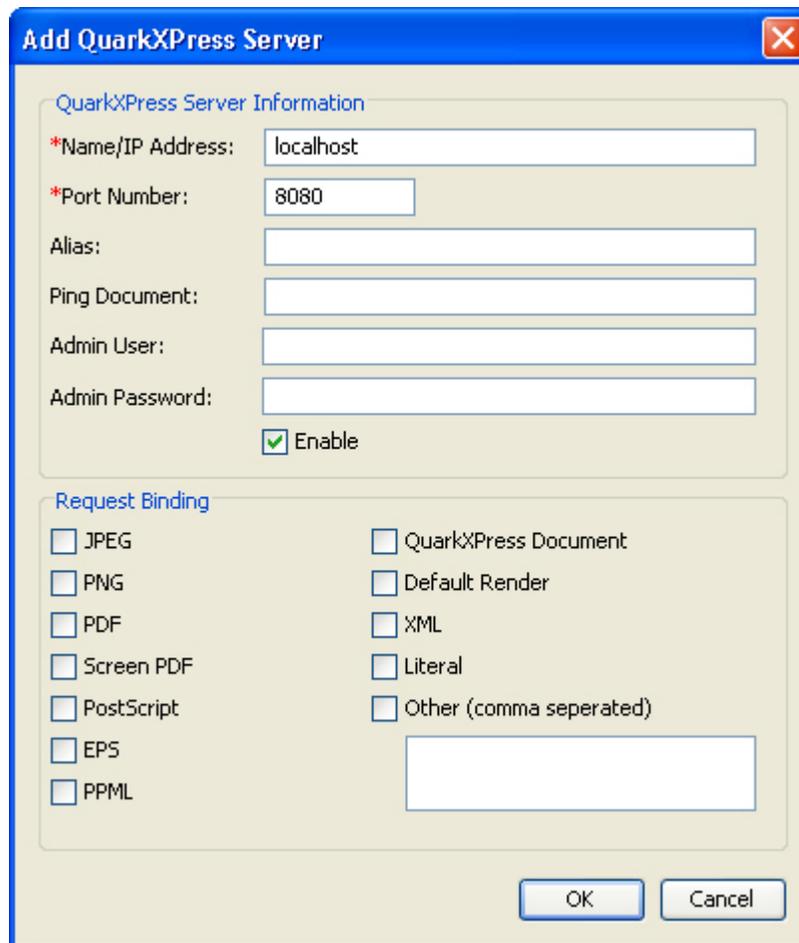
**Add QuarkXPress Server** dialog box

3 Enter the QuarkXPress Server instance's DNS name or IP address in the **Name/IP Address** field.

4 Enter the QuarkXPress Server instance's port number in the **Port Number** field.

5 To specify an alternate name for the server, enter a value in the **Alias** field. The **Alias** value displays in the **Manage QuarkXPress Server** pane of the **QuarkXPress Server Manager** window.

6 If you choose to use a particular ping document for this server (see "*Ping document*"), make sure the project file is in the QuarkXPress Server instance's document pool and then enter the project's file name in the **Ping Document** field. The ping document is used only if the global **Ping Type** is set to **Ping Document** (see "*Using other global settings*"). Note that if you do not set a ping document here, and no global ping document is set (see "*Using other global settings*"), an error message might display to indicate that the server is registered but inactive.

7 Enter the QuarkXPress Server instance user name and password in the **Admin User** and **Admin Password** fields.

8   To restrict this server to one or more particular types of rendering, check the appropriate boxes in the **Request Binding** area. To add additional render types (for example, render types provided by QuarkXPress Server XTensions software), check **Other** and enter the appropriate namespaces in the corresponding field as a comma-separated list. For more information, see "*Request handler binding*."

9   To specify that QuarkXPress Server Manager should begin sending rendering requests to this QuarkXPress Server instance, check **Enable**.

10  Click **OK**.

### Editing a QuarkXPress Server instance

To edit the description of a QuarkXPress Server instance, display the **Manage QuarkXPress Server** pane of the **QuarkXPress Server Manager** window, select the server in the list, and then click **Edit**. The options in the **Edit QuarkXPress Server** dialog box are the same as the options in the **Add QuarkXPress Server** dialog box (see "*Adding and enabling a QuarkXPress Server instance*").

### Enabling and disabling routing to QuarkXPress Server instances

The **Status** column in the **Manage QuarkXPress Server** pane of the **QuarkXPress Server Manager** window shows the status of each QuarkXPress Server instance. A green icon indicates that the server successfully replied to the last ping or ping document request, a red icon indicates that the server is not responding, and a gray icon indicates that the server is inactive.

➡  The status list is not updated automatically. To update the list with the current status of all servers, click **Refresh**.

To enable routing to a QuarkXPress Server instance, do one of the following things:

- Control+click/right-click the server name to display a context menu and then choose **Enable**.

- Select the server, click **Edit** to display the **Edit QuarkXPress Server** dialog box, check **Enable**, and then click **OK**.

To disable routing to a QuarkXPress Server instance, do one of the following things:

- Control+click/right-click the server name to display a context menu and then choose **Disable**.

- Select the server, click **Edit** to display the **Edit QuarkXPress Server** dialog box, uncheck **Enable**, and then click **OK**.

**Manage QuarkXPress Server** pane

### Displaying information about a QuarkXPress Server instance

To display information about a QuarkXPress Server instance, double-click the server's name in the **Manage QuarkXPress Server** pane of the **QuarkXPress Server Manager** window. The **QuarkXPress Server Details** dialog box displays.

```
QuarkXPress Server Details                                          ✕

localhost:8090

OS Platform               -
QuarkXPress Server Version -
Status                    - Inactive
Ping Document             - <Not Set>
Request Bindings          - <Not Set>
Admin User                - <Not Set>
Serviced Requests         - 0
Pending Requests          - 0
Pending Request Size      - 0
Last Request Time         - Fri May 22 13:06:10 MDT 2009
Failed Requests           - 4
Failed Ping Requests      - 2

                                                        OK
```
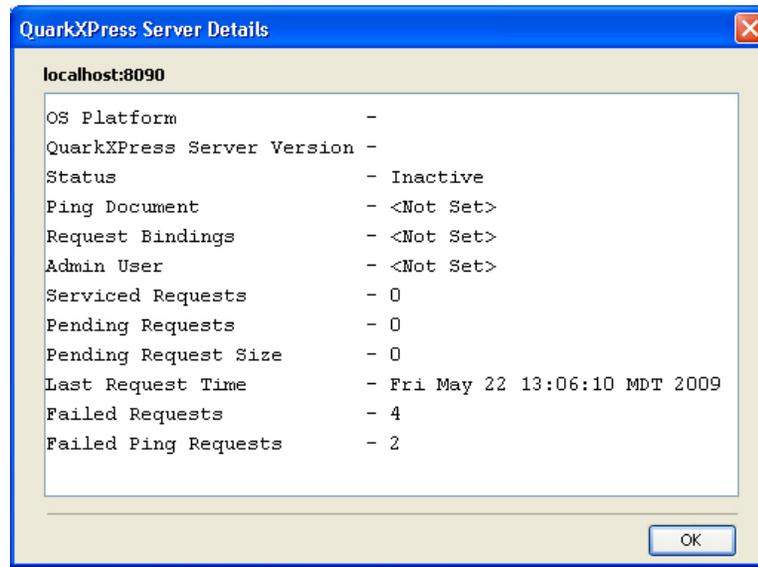
**QuarkXPress Server Details** dialog box

### Deleting a QuarkXPress Server instance

To delete a QuarkXPress Server instance from the list of available servers in the **QuarkXPress Server Manager** window, display the **Manage QuarkXPress Server** pane of the **QuarkXPress Server Manager** window, select the server name or IP address, and then click **Delete**.

➡ Deleting a QuarkXPress Server instance from this dialog box does not shut down the QuarkXPress Server instance, but it does prevent the QuarkXPress Server Manager server from routing rendering requests to the QuarkXPress Server instance.

**Managing the cache**

Each QuarkXPress Server Manager server has an in-memory cache (in which it stores the keys to recently accessed items) and a disk-based cache (in which the items themselves are stored). If a request for a recently used item arrives, and a QuarkXPress Server Manager server has that request in its memory cache, the server can simply return the response from its disk cache instead of having to send the request to a QuarkXPress Server instance.

➡ Requests are stored in the cache only if the cache is turned on. For more information, see "*Configuring cache options*."

➡ The cache stores only the results of requests that do not deliberately bypass the cache.

### Viewing a QuarkXPress Server Manager server cache

To view the list of files in the QuarkXPress Server Manager server's cache, display the **Manage Cache** pane of the **QuarkXPress Server Manager** window. This pane lists the URL of each file in the cache, the file's size, and the date and time of the file's generation. To view a cache file, double-click the file name in the list.
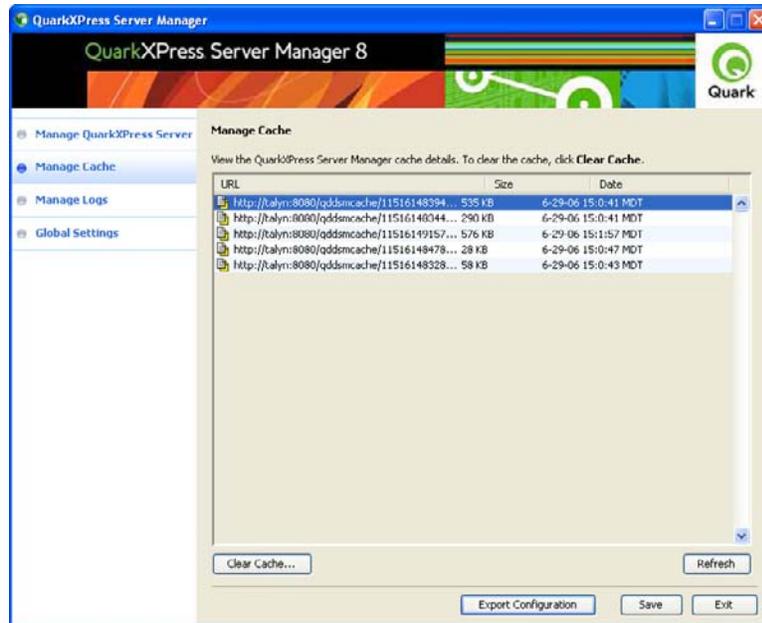


**Manage Cache** pane

### Deleting files from the cache

There is usually no need to manually delete files from a QuarkXPress Server Manager server's cache. When the cache reaches 95% of its capacity, QuarkXPress Server Manager automatically begins deleting the least recently used files in the cache to make room for new files. However, you can also manually clear files from the cache.

To manually delete cache files:

1 If you want to delete specific files, select those files in the list.

2 Click **Clear Cache**. The **Clear Cache** alert displays.

3 If you want to delete specific files, uncheck **Delete all cache files**. If you want to clear all files from the cache, check **Delete all cache files**.

4 Click **OK**.

*Configuring cache options*

To configure cache options, display the **Cache Settings** pane in the **Global Settings** pane of the **QuarkXPress Server Manager** window.

- To set the maximum number of files allowed in the cache, enter a value in the **Cache Count** field. When the number of files in the cache reaches the number you set here, QuarkXPress Server Manager begins deleting the least recently used files to make room in the cache.

- To set the maximum disk cache size, enter a value in the **Cache Disk Size** field. When the disk cache reaches this size, QuarkXPress Server Manager begins deleting the least recently used files to make room in the cache.

- To specify an interval after which the cache should be periodically cleared, enter a value in the **Cache Cleanup Interval** field.

- To specify where cache files for the QuarkXPress Server Manager server should be stored, enter a path in the **Cache Folder** field.

- The **Cache** radio buttons let you control caching for the QuarkXPress Server Manager server. To turn caching on, click **On**. To turn caching off, click **Off**.
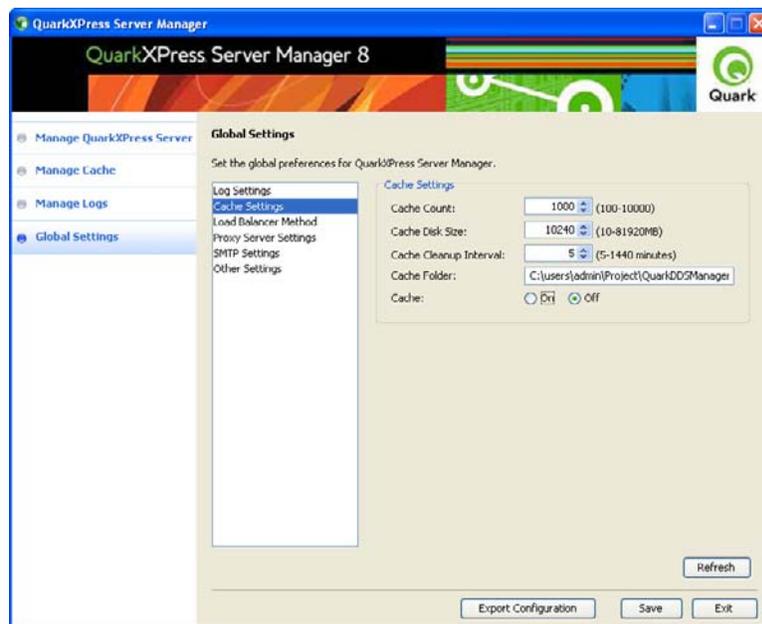


**Cache Settings** pane

**Managing logs**

A QuarkXPress Server Manager server maintains logs of all of the requests it receives, the responses from the QuarkXPress Server instances, information about events (such as alerts) that occur during the render-request process, dates and times, and details about each request that was sent to a different QuarkXPress Server instance after its first assigned QuarkXPress Server instance was unable to process the request.

➡ To control what information is stored in the logs, use the **Log Settings** pane in the **Global Settings** pane of the **QuarkXPress Server Manager** window. For more information, see "*Configuring logging options*."
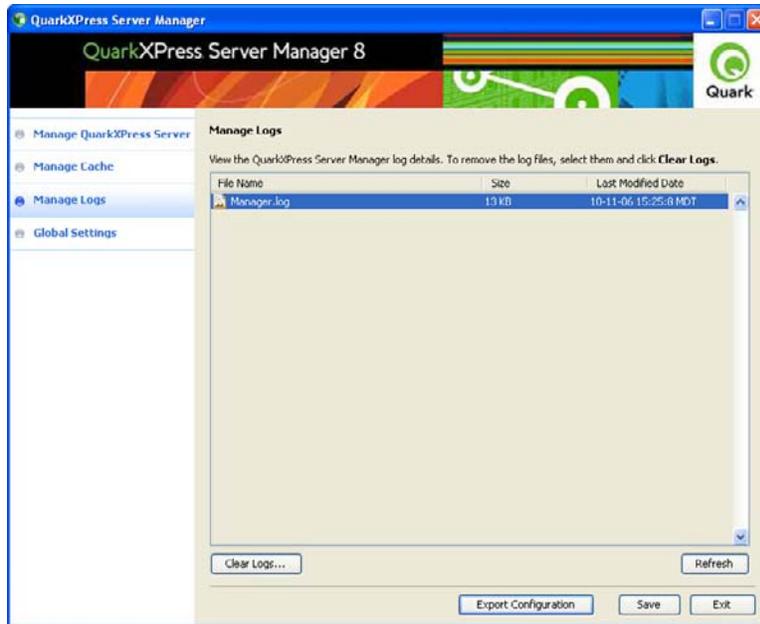


**Manage Logs** pane

### *Exporting log files*

You can export log files to your local file system in XML and CSV format. To export a log file, display the **Manage Logs** pane of the **QuarkXPress Server Manager** window, Control+click/right-click the log file's name and choose **Export as XML** or **Export to CSV format**.

### *Viewing log file details*

To view information about a log file, display the **Manage Logs** pane of the **QuarkXPress Server Manager** window, and then either double-click the log file name or Control-click/right-click the log file name and choose **View Log Details**. The log detail information displays in your system's default Web browser.

### *Deleting log files*

To delete log files:

1 Display the **Manage Logs** pane of the **QuarkXPress Server Manager** window.

2 Select the one or more log file names in the list.

3 Click **Delete**. The **Clear Logs** dialog box displays.

**4** To delete only the selected files, uncheck **Delete all log files** and then click **OK**. To delete all log files, check **Delete all log files** and then click **OK**.

### *Configuring logging options*

To configure logging options, display the **Log Settings** pane in the **Global Settings** pane of the **QuarkXPress Server Manager** window.

To set the maximum log file size, enter a value in the **Max Log File Size** field. When a log file reaches this size, the current log file is closed and a new log file is created.

To specify the maximum number of log files to keep, enter a value in the **Max Rolling Count** field. When the number of log files reaches this limit, QuarkXPress Server Manager deletes the oldest log file each time a new log file is created.

To specify the root name of the log file for the QuarkXPress Server Manager server, enter that name in the **Log File** field. To place the log file in a particular directory, precede the file name with an absolute path. QuarkXPress Server Manager appends numbers to this name to create consecutively named log files.

To control how much information is stored in the log files, check a box in the **Logging Level** area:

- **Debug**: Stores information such as the commands executed and the servers where those commands are executed. Also stores all of the information that is stored when **Information, Warning**, and **Error** are checked.

- **Information**: Stores informational messages such as startup messages and command-retry messages. Also stores all of the information that is stored when **Warning** and **Error** are checked.

- **Warning**: Stores warning messages. Also stores all of the information that is stored when **Error** is checked.

- **Error**: Stores error messages and stack traces for exceptions.

➡ The **Debug** and **Information** settings produce large logs that grow rapidly, so you might want to use these settings for troubleshooting only.
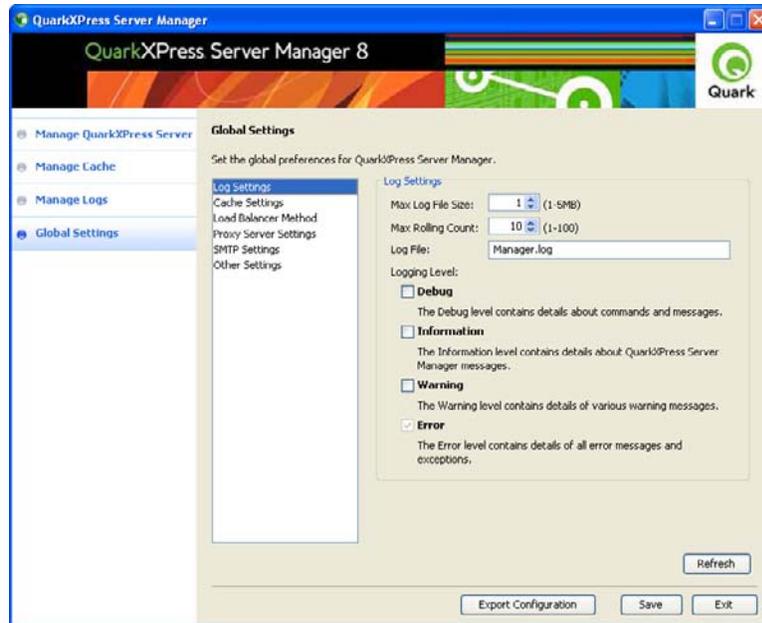
**Log Settings** pane

### Controlling load balancing

Load balancing ensures that each rendering request is sent to a QuarkXPress Server instance that is most likely to be able to handle it quickly. To define a load-balancing setting for the QuarkXPress Server Manager server, display the **Load Balancer Method** pane in the **Global Settings** pane of the **QuarkXPress Server Manager** window and then choose an option from the **Choose Load Balancer** drop-down menu.

QuarkXPress Server Manager lets you use choose from three load-balancing settings:

• **Dynamic**: Sends requests to servers based on file size

• **Random**: Sends each rendering request to a random server

• **Round robin**: Sends requests to servers in a set order

For more information about these load-balancing settings, see "*Load balancing*"
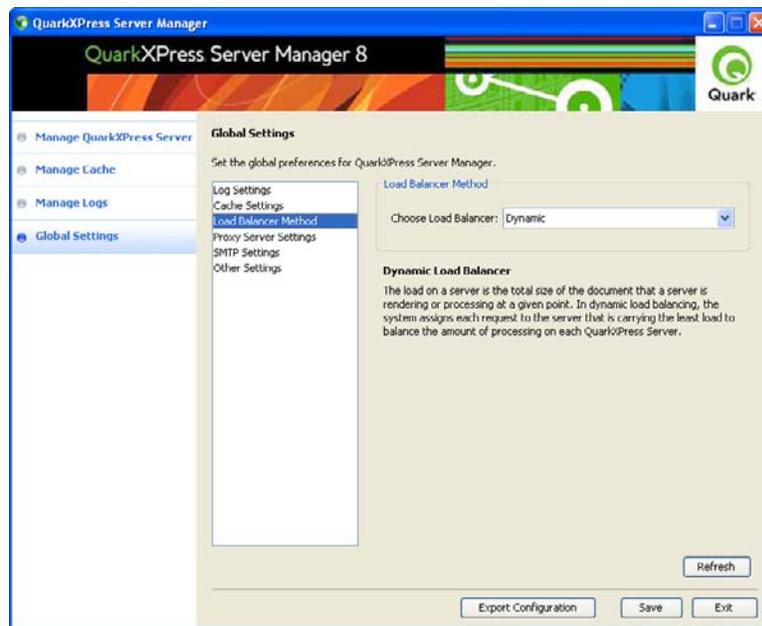
**Load Balancer Method** pane

### Using a proxy server

Some networks route network traffic through a proxy server for reasons of efficiency or security. To use a proxy server for all requests and responses between QuarkXPress Server Manager and QuarkXPress Server:

**1**   Display the **Proxy Server Settings** pane in the **Global Settings** pane of the **QuarkXPress Server Manager** window.

**2**   Check **Use a Proxy Server for my LAN**.

**3**   Enter the proxy server's DNS name or IP address in the **Address** field.

**4**   Enter the proxy server's port number in the **Port Number** field.

**5**   Enter the proxy server's user name in the **User Name** field.

**6**   Enter the proxy server's password in the **Password** field.
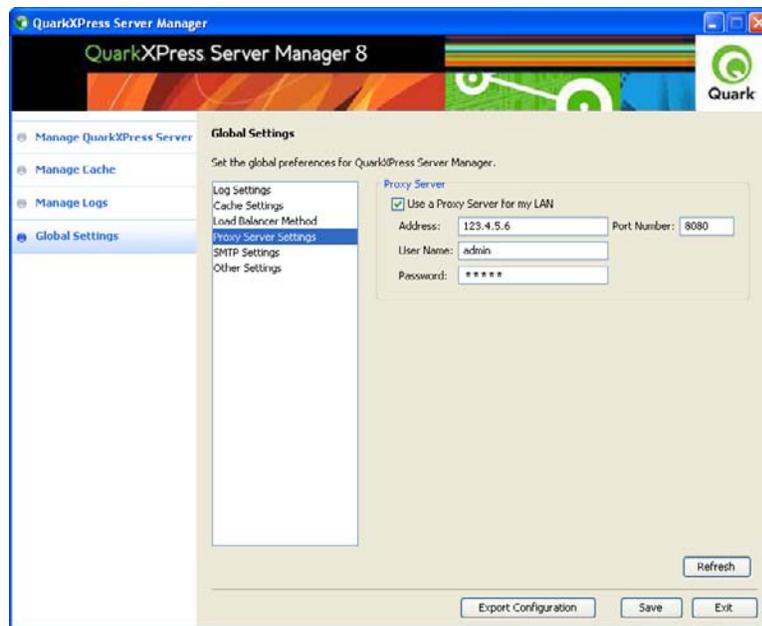
**Proxy Server Settings** pane

### Generating automatic e-mail messages

You can configure a QuarkXPress Server Manager server to automatically generate and send e-mail messages if particular events occur. To configure the QuarkXPress Server Manager server to automatically send e-mail messages:

1 Display the **SMTP Settings** pane in the **Global Settings** pane of the **QuarkXPress Server Manager** window.

2 Enter a valid SMTP server name or IP address in the **SMTP Server** field and then enter the corresponding port number in the **Port Number** field.

3 Enter the e-mail address to which messages should be sent in the **Admin Email ID** field.

4 If this SMTP server requires validation, enter a valid user name in the **UserName** field and a valid password in the **Password** field.
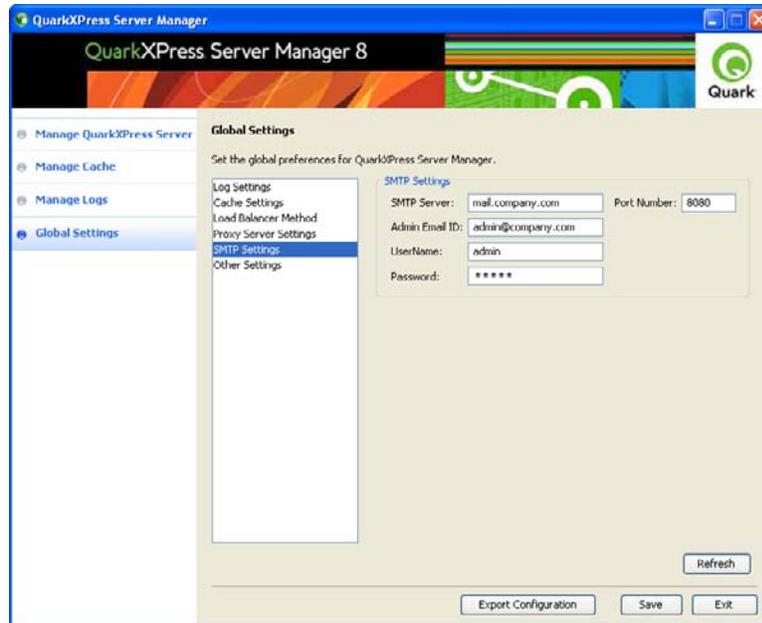
### SMTP Settings pane

Two events can cause QuarkXPress Server Manager to generate an e-mail message:

• If **Inactive Host E-mail Notification** is checked (see "*Using other global settings*"), a message is sent when a QuarkXPress Server instance goes from the active state to the inactive state.

• If you have set up custom error messages (as described in "*Using custom error messages*"), certain QuarkXPress Server errors result in e-mail messages.

### Using other global settings

To configure other global settings, display the **Other Settings** pane in the **Global Settings** pane of the **QuarkXPress Server Manager** window and then use the following controls:

• **Max Retries**: To specify the maximum number of times the QuarkXPress Server Manager server should submit a request to the QuarkXPress Server instances, enter a value in this field. When QuarkXPress Manager has unsucessfully submitted a request this many times, the application returns an error message.

• **Request Timeout**: To specify the maximum number of minutes the QuarkXPress Server Manager server should wait for a response from a QuarkXPress Server instance, enter a value in this field. When this time has elapsed, the QuarkXPress Server Manager server retries the request (unless the **Max Retries** value has been reached).

• **Connection Timeout**: To specify the maximum number of seconds the QuarkXPress Server Manager server should spend attempting to establish a connection with a particular QuarkXPress Server instance, enter a value in this field.

• **Max Connections Per Host**: To specify the maximum number of connections the QuarkXPress Server Manager server should open for a particular QuarkXPress Server instance before it begins queuing requests, enter a value in this field.

- **Max Total Connections**: To specify the maximum number of connections the QuarkXPress Server Manager server should open for all hosts before it begins queuing requests, enter a value in this field.

- **Ping Interval**: To set the amount of time the QuarkXPress Server Manager server should wait between ping attempts (see "*Determining QuarkXPress Server instance availability*"), enter a value in this field.

- **Ping Type**: To indicate whether QuarkXPress Server Manager should use a simple ping or a ping document to test a QuarkXPress Server instance, choose an option from this drop-down menu.

- **Ping Document**: To indicate which QuarkXPress project the QuarkXPress Server Manager server should use for ping document requests, enter the project file name in this field. Make sure a copy of the project file is in each QuarkXPress Server instance's document pool. Note that individual QuarkXPress Server instances can override this this value by providing another document name. Note also that a ping document is used only if **Ping Type** is set to **Ping Document**.

- **Common Document Pool Usage**: Check this box if all managed QuarkXPress Server instances are using the same document pool. If this box is checked, then upload, delete, and saveas requests are sent to one of the available servers. If this box is unchecked, then upload, delete, and saveas requests are sent to all managed servers. Note that you must manually set each server to point at the common document pool.

- **Platform-specific Rendering**: A QuarkXPress Server Manager server can send requests that involve Mac OS project files to a Mac OS-based QuarkXPress Server instance, and send requests that involve Windows project files to a Windows-based QuarkXPress Server instance. Setting up the server in this manner can be desirable if the project files involved use fonts that are available on only one platform or the other. To enable platform-specific rendering for the QuarkXPress Server Manager server, check this box.

- **Inactive Host E-mail Notification**: To automatically generate an e-mail message when a QuarkXPress Server instance becomes inactive, check this box. The e-mail message is sent to the address specified in the **SMTP Settings pane**.
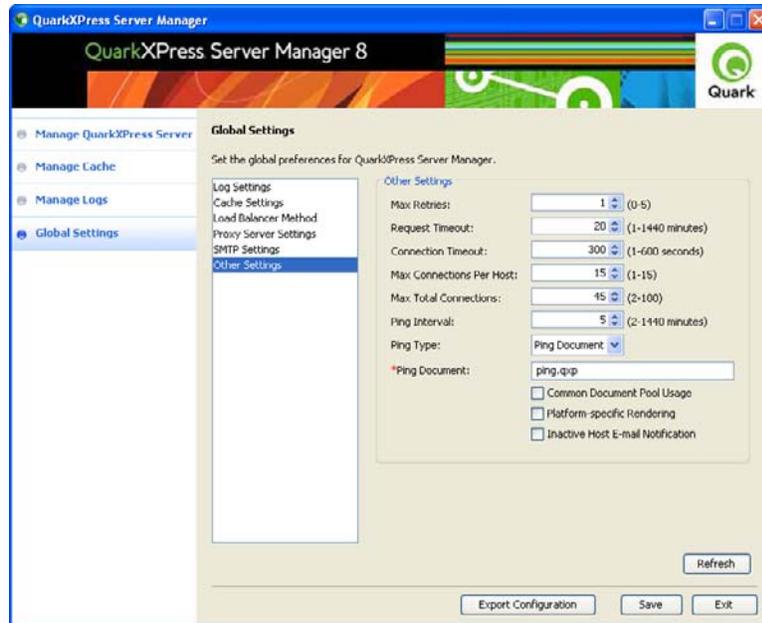
**Other Settings** pane

### Saving a server configuration

Changes that you make to a server configuration in the QuarkXPress Server Manager client are not made to the QuarkXPress Server Manager server until you click **Save** at the bottom of the **QuarkXPress Server Manager** window.

To discard any changes you have made since logging on to the QuarkXPress Server Manager server, click **Refresh**. The configuration of the QuarkXPress Server Manager server remains as it was.

To discard any changes and exit the application, click **Quit**.

➡ Disabling or enabling a QuarkXPress Server instance from the QuarkXPress Server Manager client is not considered a configuration change.

### Exporting a server configuration

To export a description of the current server configuration in XML format, click **Export Configuration** at the bottom of the **QuarkXPress Server Manager** window and then specify a location to save the XML file.

### Using custom error messages

You can control which errors cause the QuarkXPress Server Manager server application to send e-mail messages to the address specified in the **SMTP Settings** pane (see "*Generating automatic e-mail messages*"). You can also define which messages are sent when such errors occur. The first step is to create a custom error code that corresponds to a QuarkXPress Server error code. After you set up this custom error code, you can specify whether that code generates an e-mail message and then create custom error messages.

### Creating a custom error code

To create a custom error code:

1   On the computer where the QuarkXPress Server Manager server application is running, open the following file in a text-editing application:

*[application folder]*\server\apache-tomcat-6.0.18\webapps\quark\ WEB-INF\classes\Manager_Server_ErrorCodeMapping.properties

2   Create a new line containing a QuarkXPress Server specific error code for which you want to generate automatic e-mail messages (with or without a custom text message). Follow the error code with an equals sign, a unique custom error code, and a return.

3   Save and close the file.

➡   This change will not take effect until you quit and restart the QuarkXPress Server Manager server application.

### Flagging an error code to generate an e-mail message

To specify that a custom error code should cause an e-mail message to be generated:

1   Create a unique custom error code for the target QuarkXPress Server error. For more information, see "*Creating a custom error code*").

2   On the computer where the QuarkXPress Server Manager server application is running, open the following file in a text-editing application:

*[application folder]*\server\apache-tomcat-6.0.18\webapps\quark\WEB-INF\ classes\ManagerErrorCodeMailOption.properties

3   Create a new line containing the unique custom error code you defined in step 2. Follow the custom error code with a tab, enter a 1 (to send the message) or a 0 (to suppress the message), and then press Return.

4   Save and close the file.

➡   This change will not take effect until you quit and restart the QuarkXPress Server Manager server application.

### Creating custom error text

To define the text that should be sent in an e-mail message when an error occurs:

1   Create a unique custom error code for the target QuarkXPress Server error (as described in "*Creating a custom error code*").

2   On the computer where the QuarkXPress Server Manager server application is running, open the following file in a text-editing application:

*[application folder]*\server\apache-tomcat-6.0.18\webapps\quark\WEB-INF\
classes\ManagerErrorCodeMessage.properties

3  Create a new line containing the unique custom error code you defined in step 2. Follow
the custom error code with a tab and then enter the custom text to be returned for that
error.

4  Save and close the file.

➡ This change will not take effect until you quit and restart the QuarkXPress Server Manager
server application.

### Sending requests from a browser

Like QuarkXPress Server, QuarkXPress Server Manager lets you send requests from a Web
browser. This capability helps to ensure that you need to make only minimal changes
when you update an application so that it sends requests to a QuarkXPress Server Manager
server instead of a QuarkXPress Server instance.

Assume that a QuarkXPress Server instance expects requests in the following format:

`http://[QXPServer]:[port]/[request]?[request_parameters]`

If this is the case, a QuarkXPress Server Manager server will expect requests in the following
format:

`http://[QXPSManagerServer]:[port]/quark/servlet/qxpsm/[request]?[request_parameters]`

In other words, a QuarkXPress Server Manager server accepts requests in a format that is
similar to the request format used with a QuarkXPress Server instance. That means you
can get the benefits of QuarkXPress Server Manager without having to completely rewrite
your applications.

### *Additional parameters*

In addition to request-specific parameters, QuarkXPress Server Manager accepts the
following request parameters. These parameters can be submitted in the standard
QuarkXPress Server GET format joined by an ampersand (&) with the other parameters in
the body of the request.

• `qxpsm_bypassfileinfo`: When QuarkXPress Server Manager receives a request, it executes
a `fileinfo` request on the document to get the document's size and last-modified date
and time. These values are used for load balancing and for determining whether to serve
the document from the cache. If the value of this parameter is set to true, the `fileinfo`
request is not made, file size is considered to be zero for load-balancing purposes, and the
document in the cache is considered to have changed.

• `qxpsm_context`: Set this value if you need to use it in a custom load balancer.

• `qxpsm_maxtries`: This parameter lets you specify a maximum number of retries for a
specific request. If this parameter is absent or set to 0, the global maximum retries value
is used. To disable maximum retries for a request, use the value –1.

- `qxpsm_responseredirect`: If you use servlet methodology to send a request to QuarkXPress Server Manager with `qxpsm_responseasurl=true`, QuarkXPress Server Manager returns a frameset page with one or more frames. If the response is not multipart, the frameset contains a single page with a URL pointing to a response file in the temporary cache. This can be problematic if, for example, you want to use the returned URL as an image link in an HTML page. In such situations, submit the request with both `qxpsm_responseredirect=true` and `qxpsm_responseasurl=true`. If you do this, QuarkXPress Server Manager returns the URL of the rendered file in the temporary cache instead of returning a frameset page. Note, however, that if the request results in a multipart response (such as the response returned by the `boxes` parameter), QuarkXPress Server Manager ignores the `qxpsm_responseredirect=true` parameter and returns the frameset page.

- `qxpsm_timeout`: This parameter lets you specify a timeout (in milliseconds) for a specific request. If this parameter is absent or set to 0, the global timeout value is used. To disable timeout for a request, use the value –1.

- `qxpsm_servername`: By default, the target QuarkXPress Server instance for each request is determined by the QuarkXPress Server Manager server's load-balancing system. To send a request to a specific QuarkXPress Server instance, set this parameter to the name or IP address of that QuarkXPress Server instance. Note that if you use this parameter with an IP address, you must also submit the port number using the qxpsm_serverport parameter.

- `qxpsm_serverport`: If you use the `qxpsm_servername` parameter with an IP address, supply the corresponding port number as this parameter's value.

- `qxpsm_usecache`: If you set this value to false, the request will be rendered regardless of whether it is cached and regardless of whether caching is enabled at the global level.

- `qxpsm_username`: The value of this parameter, if supplied, is used as the "Admin User" value when the request is forwarded to a QuarkXPress Server instance.

- `qxpsm_password`: The value of this parameter, if supplied, is used as the "Admin Password" value when the request is forwarded to a QuarkXPress Server instance.

- `qxpsm_responseasurl`: By default, QuarkXPress Server Manager writes responses as temporary files in the cache folder and returns a URL to the client. This approach prevents the performance degradation that can result from sending binary data using SOAP. However, you might want QuarkXPress Server Manager to return the response directly if you are creating an application that processes that response (simple or multipart) with its own logic. To make QuarkXPress Server Manager send a response to the browser rather than the URL of the temporary files in the cache, set this value to false. (Note that setting this value to false might result in decreased performance.)

# QuarkXPress Server Manager Scripting Environment

A script is a set of commands written in an interpreted language to automate certain application tasks. You can use server-side scripts with QuarkXPress Server Manager. The QuarkXPress Server Manager Scripting Environment application allows you to manage automated scripts that perform actions without requiring another application or user intervention. Script-writers can access almost all QuarkXPress Server Manager services through the QuarkXPress Server Manager Scripting Environment interface.

Scripts can be initiated manually or on a predefined schedule. The QuarkXPress Server Manager installation includes sample scripts, including four comment-only scripts ("vars," "intro," and "funcs") that provide valuable information about writing scripts for QuarkXPress Server Manager. You can also embed scripts in other scripts.

The QuarkXPress Server Manager server supports JavaScript™ and includes the JSLint syntax checker. However, you can write scripts in any language that is supported by Apache® Bean Scripting Framework (BSF), and you can plug any scripting engine into the Bean Scripting Framework.

When writing scripts, you can directly access the following functions: `print`, `readUrl`, `runCommand`, `spawn`, `sync`, `load`, `debug`, `info`, `warn`, `error`, and `exception`.

## Scripting Environment configuration

The QuarkXPress Manager application folder contains a "Client" folder and/or a "Server" folder. The QuarkXPress Server Manager Scripting Environment application is in the "Client" folder. A folder named "scripts" in the "Server" folder contains some sample scripts.

### Working with the Scripting Environment

The QuarkXPress Server Manager Scripting Environment user interface includes commands for creating, editing, and checking the syntax of scripts for QuarkXPress Server Manager. You can also can execute scripts manually or schedule scripts to run at certain times.

You can view saved scripts and individual script information by double-clicking the QuarkXPress Server Manager folder icon at the top of the **Stored Scripts** column.
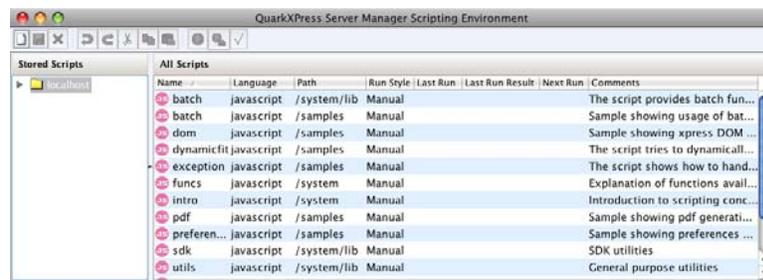


### QuarkXPress Server Manager Scripting Environment window

Double-click a script listed in the **Stored Scripts** column to view it. When a script displays, many of the menu commands are available from the toolbar at the top of the window.
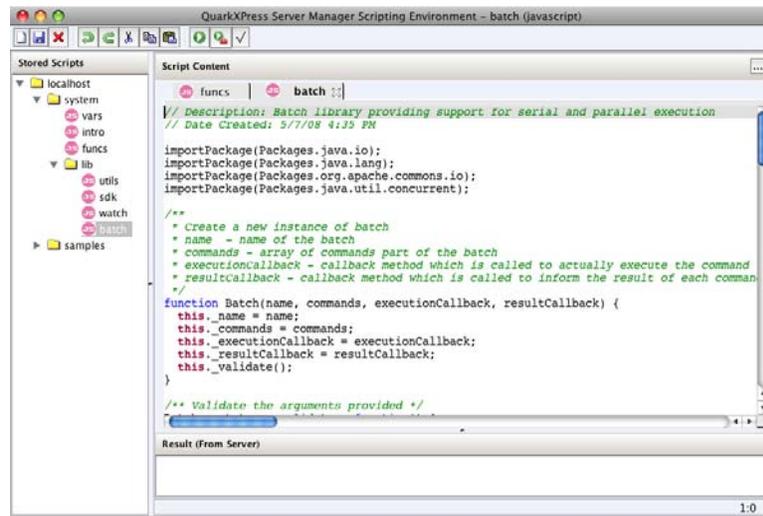


Sample script

### Creating a script

QuarkXPress Server Manager Scripting Environment makes it easy to write and execute scripts for QuarkXPress Server Manager.

➡ Whether your execute a script manually, according to a schedule, or when triggered by an event, the script is executed on the QuarkXPress Server Manager server computer. Consequently, not all of the console output displays in QuarkXPress Server Manager Scripting Environment result window. Only the final result or error returned by the script execution displays in QuarkXPress Server Manager Scripting Environment.

➡ When you call functions, you specify the function name and parameter values.

➡ QuarkXPress Server Manager Scripting Environment includes on-demand syntax checking.

➡ To include an existing script in a new script, use the `load` command. At runtime, QuarkXPress Server Manager copies the target script into the new script. For an example of how this works, see the sample scripts. Note that the syntax checker does not check the syntax of a script that is included using the `load` command.

1 To write a new script, choose **File** > **New** > **javascript**.

A new tab displays in the **QuarkXPress Server Manager Scripting Environment** window, and the script name displays in the **Stored Scripts** list on the left side of the window.

2 Choose **File** > **Save** to retain your work as you write your script.

## Executing a script manually

To execute a script or method manually:

1 Display the script in the **Script Content** column.

2 To execute the script, click **Execute** .

3 To execute a particular method with specific parameters, click **Execute Parameter** . The **Execute Parameters** dialog box displays. Enter a name in the **Method name** field, specify parameters (you can add and delete parameters), and then click **OK**.
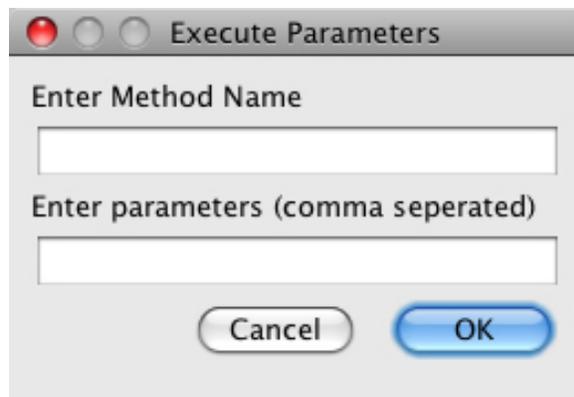
**Execute Parameters** dialog box

### Scheduling a script

You can execute scripts in two ways. You can run a script manually from within QuarkXPress Server Manager Scripting Environment or you can schedule a script to execute at specific intervals. To schedule a script:

1 Display the script in the **Script Content** area of the **QuarkXPress Server Manager Scripting Environment** window.

2 Save the script.

3 Click the **Schedule Script** button ▣. The **Schedule Script** dialog box displays.



**Schedule Script** dialog box

4 Click **Schedule Based** and then enter a start date and time.

• To schedule the script to execute once, click **Once**. The script will execute at the scheduled time.

• To schedule the script to run at regular intervals, click **Recurring every** and then use the corresponding controls to specify how often the script should run. Check **End Time** to specify that the script should stop repeating on a particular date and time. Check **Max Count** to specify that the script should run only a particular number of times.

5 Click **OK**.

# Glossary

**Document pool:** The document pool contains the projects that are available for rendering. By default, the document pool is a collection of discrete files or folders in a specific, identified folder located on the local server or on a connected network drive. When some type of external document provider (such as a content management system or database) is used, projects are not stored in the local document pool.

**Document provider:** The document provider is the source for projects that QuarkXPress Server renders. The most basic document provider is the local document pool. Other document providers can be enabled through the creation of Server XTensions software, which establish a virtual file system. Server XTensions software can register for control of a specified range of the QuarkXPress Server namespace. When a project is requested from this range, server XTensions software retrieves the file from the specified source and hands it to the server. Examples of document providers include content management systems such as a standard database,or a live data feed from an HTTP agent.

**Layout:** A layout is a sequence of same-sized pages in a QuarkXPress project. A project can contain one or more layouts. A layout is functionally equivalent to a QuarkXPress document in QuarkXPress 5 and earlier.

**Project:** A QuarkXPress project is a file created by QuarkXPress. A project can contain one or more layouts.

**Rendering:** Rendering is the process of generating a file in a particular format (such as JPEG, EPS, or PDF) from a QuarkXPress layout.

**Rendering type:** The rendering type is the format in which QuarkXPress Server can render QuarkXPress layouts. Some rendering types, such as JPEG and PNG, can be displayed in a Web browser, while others must be saved to the hard drive.

**Server XTensions Software (SXT):** Server XTensions software is XTensions software written specifically for QuarkXPress Server. For more information, see the QuarkXPress Server XTensions Developer's Kit.

**Subrenderer:** A subrenderer is a process launched by QuarkXPress Server to help process rendering requests. Subrenderers reside on the same server as QuarkXPress Server and share the same memory and preferences. When subrenderers are launched, QuarkXPress Server becomes a load-balancing "master server," passing incoming requests to subrenderers for faster response times.

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