

**Introducing...**

# HotDocs<sup>®</sup> 2008 Server Edition

In today's increasingly virtual world, many organizations are looking for ways to give their employees and business partners easy access to vital business information and resources—from any location. For example, an organization may need a centralized method for gathering new customer information from its sales force. Another company might want to advertise new jobs on its Web site and collect applicant information via the Internet. HotDocs 2008 Server Edition gives your organization the ability to do this and much more.

This document is designed to give you an overview of HotDocs 2008 Server and what it can do for your organization. It contains an overview of the product, as well as descriptions of the product architecture and system requirements.

Overview: HotDocs Server Edition .....	1
HotDocs Server Architecture.....	3
Part 1: Back-End Service.....	3
Part 2: Host Application .....	5
Part 3: Browser-based Interview.....	6
Part 4: HotDocs Professional Edition.....	7
System Requirements.....	8

**For customer inquiries, contact:**

HotDocs Sales  
705 East Technology Avenue  
Orem, UT 84097  
(800) 500-3627 / (801) 354-8000  
<http://www.hotdocs.com>

TOTAL PRACTICE SOLUTIONS

Client Development   Research Solutions   Practice Management   Litigation Services

© 2007 Matthew Bender & Company, Inc., a member of the LexisNexis Group. All rights reserved.



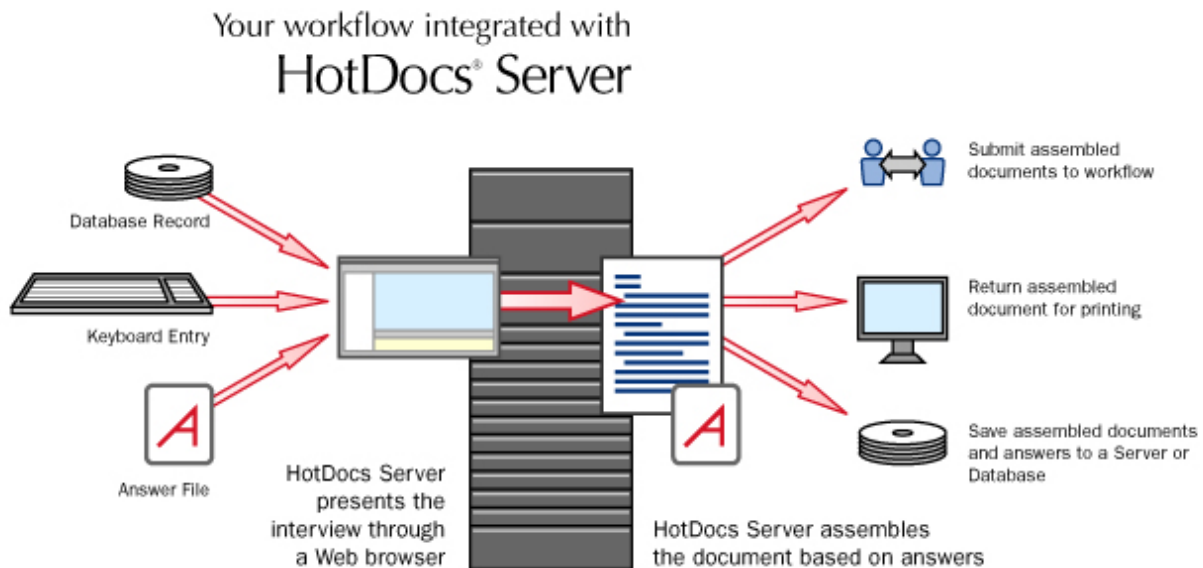
LexisNexis<sup>®</sup>

# Overview: HotDocs Server Edition

HotDocs Server Edition is the server-based version of HotDocs that uses a standard Web browser (Microsoft Internet Explorer) to display HotDocs interviews, or answer-gathering sessions. Generally speaking, when a user goes to your Web site and selects a document for assembly, a request is made from the user's browser to the HotDocs Server engine, which is running on the server. HotDocs Server then sends an interview file back to the user's browser, where it appears as a Web page. Once the required information has been entered, the user clicks a link that posts the answers (in XML format) back to HotDocs Server, where they are merged into assembled documents.

## Example

The following shows the assembly process:



The benefit of creating a Web application using HotDocs Server is that users do not need HotDocs installed on their computers, since the interview is presented in a Web browser and document assembly happens on the server. For example, a human resources department may integrate its forms into its intranet site using HotDocs Server. Employees may go to the intranet site, select which form to fill out, provide the required information, and then submit the form to the appropriate human resources representative—all from within a Web browser. Depending on project requirements, employees may also print copies of assembled documents, save copies of assembled documents to their hard drives, or simply store assembled documents on the server. Additionally, users can save their answer files on the server, as well as upload answer files from their desktops to the server.

HotDocs Server may also be used for non-interactive assembly. For example, a call can be made to a database and a document can be generated from information within the database. In this case, users do not have to answer any interview questions. Likewise, HotDocs Server interviews may be used to gather information to store in a database without assembling any documents at all.

### **HotDocs Server vs. Desktop HotDocs**

HotDocs Server differs from "desktop" HotDocs (including Player, Standard, and Professional editions) in several ways. First of all, HotDocs Server does not require that users install any special software on their computers; interviews are presented in Microsoft Internet Explorer and document assembly occurs on the server.

Another difference between HotDocs Server and desktop HotDocs is the user interface. The desktop editions include user interfaces for creating and managing templates, assembling documents, managing answer files, and more. The HotDocs Server user interface, at least from the end user's perspective, is limited to displaying interviews in the Web browser. All other interaction with the user is accomplished by a custom host application, which you must build and maintain.

Desktop HotDocs does play an important role in a complete HotDocs Server implementation, however. Specifically, HotDocs Professional Edition is the software used to create templates for use with HotDocs Server, and each HotDocs Server license includes a limited number of licenses for HotDocs Professional.

# HotDocs Server Architecture

---

A typical implementation of HotDocs Server requires a number of parts that work together to meet the needs of your organization. Each part plays a unique role in creating a well-functioning implementation. Collectively, the following four parts are known as the HotDocs Server architecture:

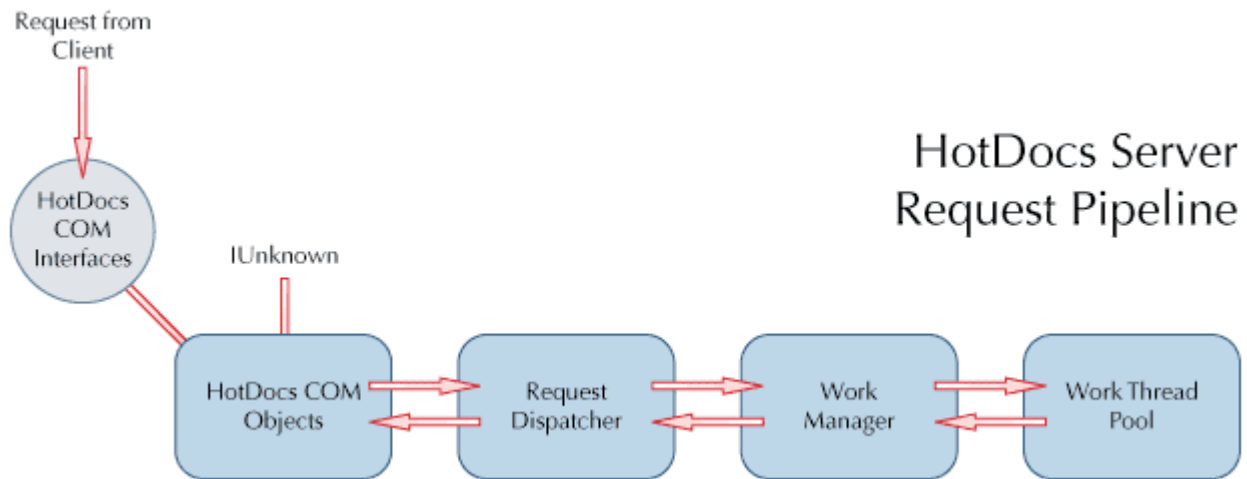
- Back-end Service
- Host Application
- Browser-based Interview
- HotDocs Professional Edition

## Part 1: Back-End Service

The first part of the HotDocs Server architecture is the back-end service, which is the software that runs on the server and performs various tasks, such as assembling documents, producing HTML interviews, and handling answer files. It consists of all the HotDocs Server .DLL and .EXE files located on the server. The main application is **HotdocsServer.exe**, which runs as an operating system service.

As an operating system service, HotDocs Server starts when the server is started and runs in its own process space. This means that HotDocs Server is always available, even when no users are logged on to the system. Also, because HotDocs Server runs in its own thread instead of a thread assigned to it by some other process, security for the thread is not dictated by the client process.

The service nature of HotDocs Server also gives it control over areas of execution, such as the threading and scheduling of requests and work. To control these requests, HotDocs Server maintains a thread pool as part of a larger request pipeline. Requests made by client applications through the COM interfaces are routed through the following four stages of the request pipeline:



- **Stage 1: HotDocs COM objects.** When a request comes into the request pipeline, it is first sent to the appropriate HotDocs Server COM object. The COM object handles initial testing for validity of state and parameters, and then sets up the request objects that live for the life span of the request. The request is then sent to the request dispatcher.
- **Stage 2: Request Dispatcher.** The request dispatcher performs additional state error checking, and then analyzes the request to determine if it requires time scheduled by the work manager, or if it is a trivial call that can be handled immediately. For example, most of the FileCollection object methods and some of the VariableCollection object methods are initially thread safe and do not take much CPU time. These can be handled by the request dispatcher on the same thread on which the request came in. Other work requests that require more time or state changes are handed off to the work manager, the third stage of the request pipeline.
- **Stage 3: Work Manager.** The work manager performs additional error, state, and parameter checking, and then puts the request into the work queue. Objects in this queue are then handled by the final stage of the request pipeline: the work thread pool.
- **Stage 4: Work Thread Pool.** The work thread pool picks a work object off the work queue and does the work required to satisfy the request.

## Part 2: Host Application


The second part of the HotDocs Server architecture is the host application, which utilizes HotDocs Server features or services to accomplish some goal of your organization. You could compare the host application to an automobile, and HotDocs Server to the automobile's engine. Although the engine is powerful by itself, the automobile is what controls it and enables it to perform.

Each host application is unique and is usually written by someone in your organization or a consultant hired by your organization. Although host applications are frequently written as Web applications in ASP pages, they can be almost any type of application on any platform (Java, CGI, etc.). Through the COM Application, COM Utility, .NET Application, and Web Service interfaces, HotDocs Server provides the following services you can incorporate into your own host application:

Service	Description
Answer Collection	HotDocs Server can provide a browser-based interview (HTML form) that collects the information needed to assemble a document based on a HotDocs template. The browser-based interview follows the same rules that a desktop interview follows, and these rules are imposed on the interview by the template author. When the interview is completed, the answers are sent as an XML document to the location specified by the host application.
Answer Manipulation	HotDocs Server provides tools to allow the host application to manipulate answer sets. This allows the host application to learn about answers, insert new answers, remove answers from answer sets, and so forth.
Document Assembly	HotDocs Server can take a set of answers and a template as input and produce either an assembled word processor document or graphical form document. You can assemble text (.RTF, .WPT) or form (.HFT, .HPT) templates. (HotDocs® PDF Advantage, Server Edition is required to assemble PDF-based (.HPT) templates.)
Application Management	The COM and .NET Application interfaces provide tools for managing user sessions. For example, these interfaces allow you to manage the list of templates a user has selected for assembly (the "assembly queue") during the current session, and which documents have already been assembled.

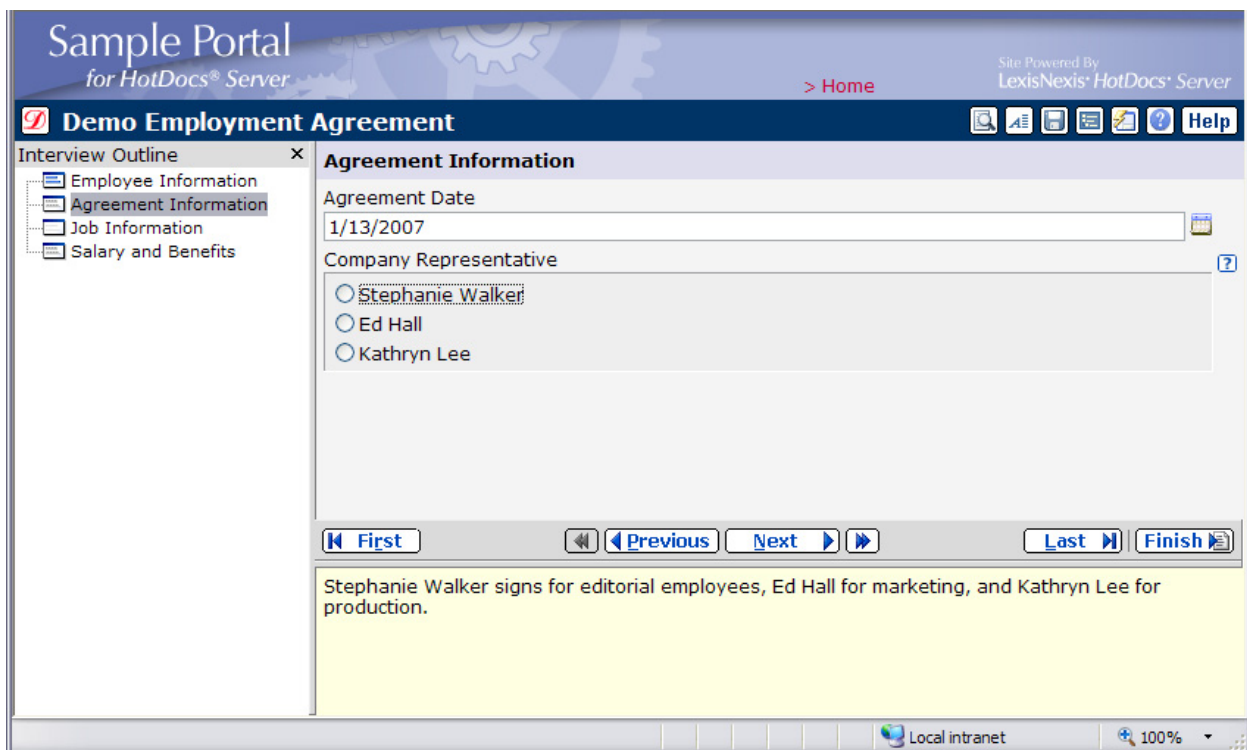
All other services that people frequently associate with desktop HotDocs, such as template, answer file, and document management, must be provided by the host application. This is where HotDocs Server's flexible design is so important: it does not impose any requirements about template, document, or answer management or storage. You can choose how, when, and where these files and data are stored, which makes it easy to fit into your existing workflow infrastructure.

To see a working example of a HotDocs Server host application, you can install *Sample Portal for HotDocs Server*. This basic host application (including all source code) is included on the HotDocs Server CD as a demonstration of one way in which you could write a host application. It demonstrates how to incorporate all of the basic features of HotDocs Server into a host application, although it is not designed to be used as-is in a production environment.

 The HotDocs Server Help file contains reference sections for using the COM, .NET, and Web Services interfaces to build your own host application. If you need assistance developing your own host application, the LexisNexis Practice Management Services team can help. It has experience in developing Web sites and template sets, and integrating existing systems and applications with HotDocs Server. LexisNexis also offers several "out-of-the-box" host applications if you do not wish to build your own. Contact your HotDocs sales representative at (800) 500-3627 for details.

### Part 3: Browser-based Interview

The third part of the HotDocs Server architecture is the browser-based HTML interview. This is where questions are presented to end users and answers are gathered. The following picture shows an example of an HTML interview:



A number of factors affect the appearance of browser-based interviews. First of all, the host application determines the layout of the Web page on which the interview is displayed. HotDocs Server provides methods that can be called to produce an HTML interview, which is then embedded in the host application's Web page. The interview may be displayed on its own Web page, or it may be included on a page with other graphics, links, etc.

Cascading style sheets also affect the interview appearance. HotDocs Server interviews use a set of style sheets that you can customize to make the HTML interview blend in with the host application. For example, if your host application uses one set of colors, you can modify the user style sheet to use the same colors in the interview, thus giving the interview a uniform appearance with the rest of the Web site.

Template developers that create templates for use with HotDocs Server can also greatly influence the appearance of interviews. For example, they can group related variables in dialogs, place variables side-by-side in dialogs, add additional text or prompts to explain questions, or include resource links to help users complete the interview.

## Part 4: HotDocs Professional Edition

The fourth part of the HotDocs Server architecture is HotDocs Professional Edition. This is the desktop software used to create templates for use with HotDocs Server. (Each license for HotDocs 2008 Server Edition includes a limited number of licenses for HotDocs 2008 Professional Edition.)

When creating templates for use with HotDocs Server, you can use most of the same features as you can when creating templates for use with the desktop version of HotDocs. For example, HotDocs Server templates may contain related variables grouped into separate dialogs, dialog scripts that dynamically gray or hide variables, instructions for specifying the order in which dialogs are asked, and many other features. However, some features are either not supported or work differently in HotDocs Server templates. These differences are listed in both the HotDocs and HotDocs Server Helps.

The following HotDocs Professional Edition features are designed specifically for creating HotDocs Server templates:

- **Component File Properties:** Templates may be enabled for use with HotDocs Server at the **Component File Properties** dialog box. Once enabled, templates may be used with either desktop HotDocs or HotDocs Server. Also, when this property is set, HotDocs warns you if you try to use a feature that is not allowed in a HotDocs Server template.
- **Test in Browser:** The **Test in Browser** command (**Template** menu) allows template developers to view an HTML interview for HotDocs Server-enabled templates. Using this feature is a way to ensure that the interview looks and works correctly before uploading the template to the Web server.
- **Publish Templates for Use With HotDocs Server:** The **Publishing Wizard** (**Tools** menu) includes an option for publishing templates for use with HotDocs Server. When this option is selected, HotDocs generates HotDocs Variable Collection (.HVC) and interview definition (.JS) files for HotDocs Server-enabled templates. These are the files HotDocs Server uses to generate browser-based HTML interviews.
- **Upload Templates:** After publishing the templates for use with HotDocs Server, the template files, including the .HVC and .JS files, must be uploaded to the Web server running HotDocs Server. You may do this as part of the publishing process by creating a Web page on the server to handle the uploaded files, or you can use your own uploading process to manually upload the template files after they have been published.

# System Requirements

---

## Hardware

The hardware requirements for your system vary depending upon the type and complexity of the templates assembled. HotDocs Server performance is primarily bound by disk I/O speed, which means you should ensure that the disk system is as fast as possible. Also, additional RAM improves disk I/O speed by allowing the operating system to cache more files in system memory. The basic recommended hardware configuration is as follows:

- 2–4 processors (2 GHz or faster) (Single processor machines can work well for development and lower load production environments.)
- 1024 MB RAM
- SCSI or comparable storage subsystem

## Software

Your system must meet the following software requirements before you can install HotDocs 2008 Server:

- Microsoft Windows 2000 Server or Windows Server 2003
- Microsoft .NET Framework 2.0
- Microsoft Internet Information Services (IIS) 5.0 or greater

In addition to the requirements listed above for the server, end users who assemble documents using HotDocs Server must have certain software installed on their computers to complete browser-based interviews or view assembled documents. The following software is required:

- Microsoft Windows
- Microsoft Internet Explorer 6.0 or later
- Any word processor that can display, edit, or print an assembled text document, including WordPerfect® and Microsoft® Word
- HotDocs® Filler (for assembled HFD and HPD form documents) and/or Adobe® Reader® (for assembled PDF-based form documents)

## Copyright Information

---

Copyright © 2007 Matthew Bender & Company, Inc., a member of the LexisNexis Group.

All rights reserved. No part of this product may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form by any means without the express written permission of Matthew Bender & Company, Inc. ("Matthew Bender")

HotDocs is a registered trademark of Matthew Bender & Company, Inc. LexisNexis and the Knowledge Burst logo are registered trademarks of Reed Elsevier Properties, Inc., used under license. Other product names may be trademarks or registered trademarks of their respective companies.