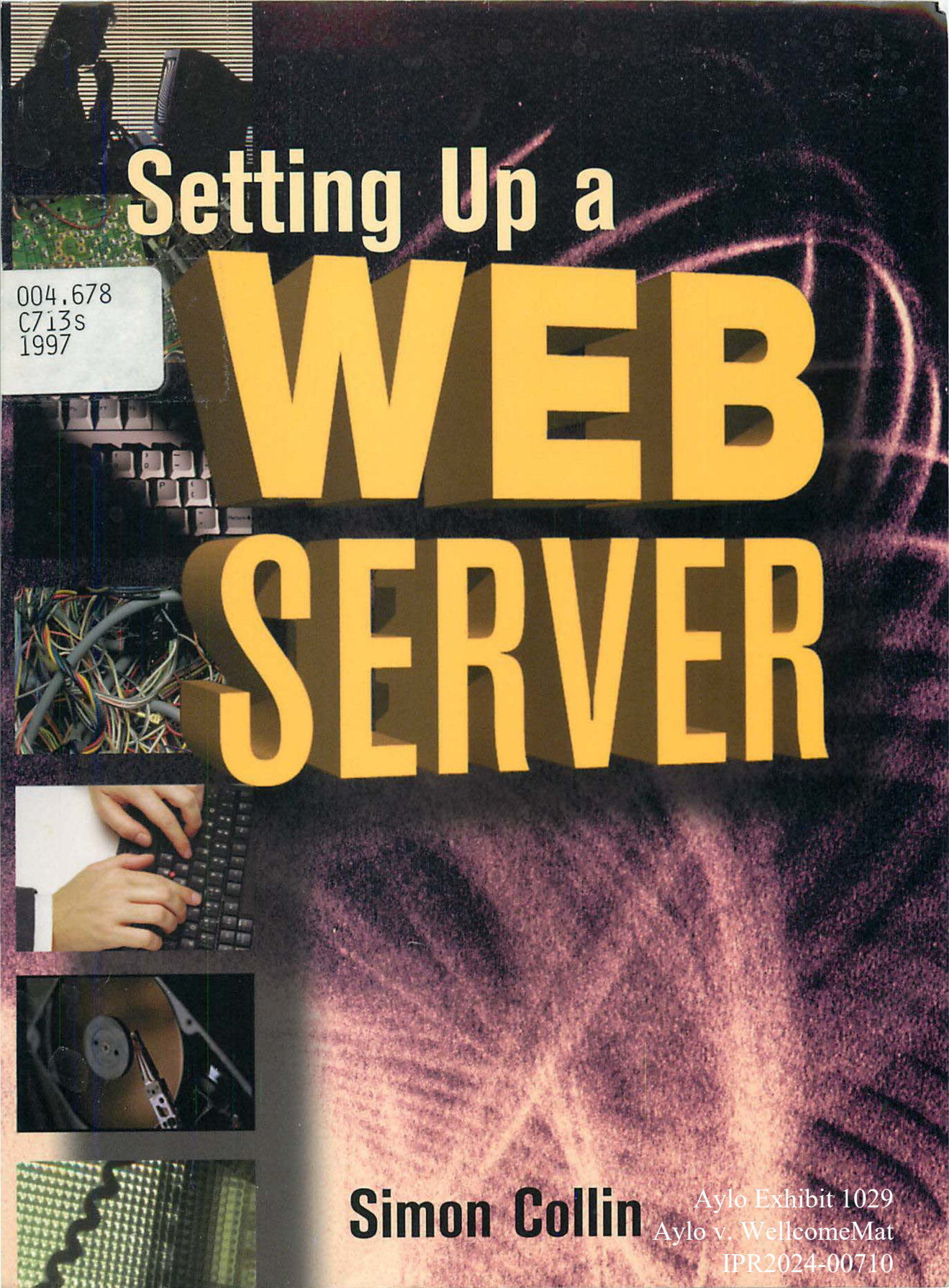




Setting Up a

WEB SERVER

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Simon Collin

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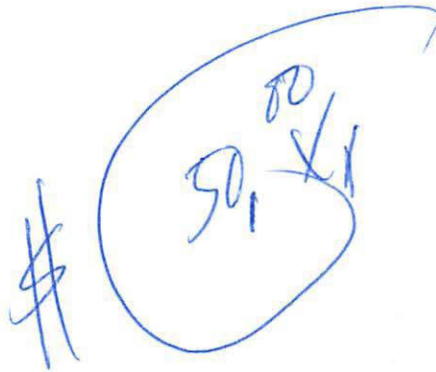
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Simon Collin



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To Francesca and Natasha—thanks

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```

sub return_html {
    print "Content-type: text/html\n\n";
    print "<html>\n <head>\n <title>Results of Search</title>\n
</head>\n";
    print "<body>\n <body bgcolor=#FFFFFF text=#000000>\n
<center>\n <h2>MyCompany's Archive</h2>\n <h3>from
MyCompany </h3></center>\n";
    print "Results on Search String: <B>$term</B><p>\n";
    print "<ul>\n";
    print "\n$string\n";
    print "</ul>\n";
    print "\n";
    print "</ul><br><hr size=7 width=75%><p>\n";
    print "<ul>\n<li><a href=\"$search_url\">Back to Search
Page</a>\n";
    print "<li><a href=\"$title_url\">$title</a>\n";
    print "</ul>\n";
    print "<hr size=7 width=75%>\n";
    print "</body>\n</html>\n";
}

```

Creating applications for Windows servers

If your Web server is running under Microsoft Windows NT, the natural choice for creating server tools and programs is one of the many RAD (rapid application development) tools designed just for Windows, such as Microsoft Visual Basic and Borland Delphi.

Both these programming environments are fast, flexible and easy to use, but the problem lies not with them but with the way the HTTP server can link to them. Under Unix, the CGI gateway provides all the channels to pass information between client and server, but under Windows this does not work. Two systems, similar to CGI, have been developed and each has its own benefits.

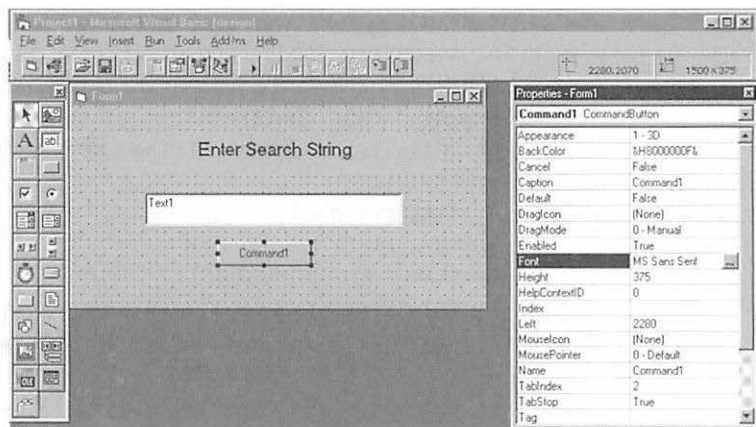
Windows CGI and ISAPI

The CGI interface (discussed at the start of this chapter) allows HTML Web pages to call and pass information to server applications, was designed for a Unix operating system. This system works well for the majority of Web servers that work under Unix, but it does cause problems for the newer generation of Web server software that works under Microsoft Windows NT. The CGI interface is really designed to work with an operating system that supports a command line interface to a command interpreter. Windows NT does have a command interpreter, but this is rarely used so another method of emulating CGI sessions was required. To solve the problem, Windows CGI was developed (by

Bob Denny) that provided CGI processing from a Windows executable application.

Figure 13.2:

If you run a Windows Web server, you can extend the functionality with Visual Basic



The main difference between Windows CGI and CGI for Unix is that Windows CGI passes information between client and server using files rather than using environment variables (which is how CGI on Unix works).

There is an alternative to CGI called ISAPI (Internet Server Applications Programming Interface) that works using dynamic link libraries (DLLs), so there is no need for an executable.

Server applications in MS-Visual Basic

As described above, there are two ways of calling applications and passing information between the server and client: Windows CGI and ISAPI. Either of these systems can be used to allow an HTML Web page to call an application written in Visual Basic—but in my experience, it's far easier to use the Windows CGI tools.

Using ISAPI

The Microsoft IIS Web server arrives with two sample DLLs that can act as the middle layer between a VB application and the ISAPI process. To make the most of this method of linking Visual Basic you will need the Visual C++ compiler to compile the source code of these sample DLLs. Once you have done this you can start to create your VB program.

Using Windows CGI

Windows CGI allows information between client and server using files that are in the Windows INI file format. This is a perfect way of switching information between application and server, since almost every