15 Glossary

This chapter defines many of the terms commonly heard when talking about the Web. In each definition, the first occurrence of a term that also has a definition in the glossary is marked with a dagger (†).

absolute URL

A URL† that contains a scheme† (for example, *http*) and a server† address (for example, *www.softquad.com*.)

accessibility

HTML documents are said to be *accessible* if they have been optimized for use by:

1. People with physical disabilities.
2. Users with a variety of hardware and software configurations.

For example, in an accessible document all images should be accompanied by alternate text; this text can be interpreted by a document reader with a voice synthesizer, and displayed instead of the images by a text-only browser.

Accessible applications are those that provide alternate modes of operation for users with disabilities. HoTMetaL PRO provides the Visual Dynamic Keyboard† for this purpose.

ActiveX

ActiveX™ controls are programs that can be referred to in various types of documents and applications under Microsoft Windows, including HTML documents. These programs perform some action in the browser window. OLE is the mechanism under Windows by which ActiveX controls can communicate with a browser. Not all browsers support this feature. See also *Java.*

adaptive (assistive) technology

The use of hardware and software to assist people who have difficulty accessing information systems using conventional methods. Examples of adaptive technology are screen readers† and magnifiers† for users with visual disabilities, and alternative keyboards (such as HoTMetaL PRO's Visual Dynamic Keyboard†) and switches for people with little or no hand movement.

anchor

See *link*.

applet

See *Java*.

attribute

A value that is associated with an element† but is not part of the *content* of the element. Many formatting properties are represented by attributes: for example, background color, table width, and alignment; the URL† part of an link† is an attribute. HoTMetaL PRO has many specialized dialogs for editing these properties; you can also view and edit any attribute directly using the Attribute Inspector.

broken link

A link to a file that does not exist or is not at the location indicated by the URL.

browser

A program that communicates with Web servers,† used for retrieving and displaying documents from the World Wide Web.† Most browsers use a graphical interface to provide access to text, images, audio, and video. Compare this with *editor*.† Some well-known browsers are Lynx,† Microsoft Internet Explorer,† Mosaic,† and Netscape Navigator.†

cascading style sheet (CSS)

A style sheet that can be attached to an HTML document. A cascading style sheet consists of one or more rules. Rules can associate an element, an element in a particular context, certain attributes, or a group of elements with settings for font size, indentation, margins, and many other formatting properties. A rule can also specify that part of the document is to be hidden by the browser.

A style sheet can 'import' another style sheet. These style sheets are said to be 'cascading' because multiple style sheets can be applied to the same document, but there are cascading rules that specify which style sheet's rules apply to a particular element. See the CSS standard at *http://www.w3.org/* and the chapter *Styles* (page 77) for more information.

CERN

The European Laboratory for Particle Physics near Geneva, Switzerland, where the World Wide Web† was 'invented'. For more information, see *http://www.cern.ch/*

CGI

An acronym for Common Gateway Interface. This is a feature of Web servers† that allows HTML clients† such as browsers to communicate over the web with scripts installed on the server. HTML forms† are often processed by such scripts. 'CGI scripts' can be written in any programming language that will run on the server; Perl is a common choice.

class; CLASS attribute

HTML 4.0 supports the CLASS attribute for many HTML elements. In general, a set of elements can be given the same CLASS attribute value to mark them for special processing. A set of elements (possibly including different types of elements) that have the same CLASS value is referred to as a 'class'. Style properties can be applied to members of a class using cascading style sheets.†

clickable image map

See *image map*.

client

In networking, any program that communicates with a server. An example of a client is a browser,† which communicates with a Web server.†

client-side image map — See *image map*.

decor — In HoTMetaL PRO's Site Maker† wizard, a set of graphical objects—buttons, lines, bullets—that have a similar visual theme, and which you can choose to give your site a consistent visual appearance.

design time control — An ActiveX† control that assists a document creator in designing various objects that can be inserted in an HTML document.

Digital Offers — A Digital Offer (DO), embedded in an HTML page, will:

- name and describe the product, including a unique ID, price and tax information
- specify shipping details, costs and taxes
- specify URLs (for an online product), subscription terms (where appropriate), and payment terms.

Digital Offers are created (by OM-Transact utilities) as the Web page is served. The input for the creation of a DO is a pre-Digital Offer (a PDO).

DNS — Domain Name System. This is the way in which the network turns a host or Internet domain (for example, *softquad.com*) into an Internet IP address† for use with TCP/IP.† Internet applications use both domain names and IP addresses to connect to other computers on the Internet.

editor — A program, such as HoTMetaL PRO, used to create, or change the content of, HTML† documents. Compare this with *browser*.

element — Elements are the structural building blocks of HTML† documents. Blocks of text in HTML documents are contained in elements according to their function in the document: for example, headings, lists, paragraphs, and links† are all surrounded by specific elements.

extranet

1. An intranet† that is linked to the intranet(s) of one or more other organizations.
2. An intranet that provides limited access from the outside world.

firewall — In networking, a firewall is a computer that prevents intruders from accessing all the computers on a network if they manage to break into one computer someplace. The firewall usually sits between your inside network and the outside Internet.

form — A group of graphical controls in an HTML† document: text boxes, radio buttons, drop-down lists, check boxes, etc. A user browsing the document can enter information in a form and use the browser to submit it to an e-mail address or a program on a Web server.† See also CGI.

frame — A sub-window of a browser window; each frame can display a different document.

FTP — The File Transfer Protocol; one of the schemes† that can be specified in a URL.† This has traditionally been one of the most important of the network services. You can use this standard communications protocol to pick up a copy of a file from a remote computer, provided that you can connect to that computer (with TCP/IP,† for example).

GIF — A common graphics format used in HTML† documents. This format is owned by CompuServe. See also JPEG and PNG.

gopher — A line-mode Internet protocol that predates the Web. Web browsers can normally communicate with gopher servers.

home page — The top-level document of a site associated with a person, company, organization, or subject, usually containing introductory information and links to other relevant pages.†

hot image; hot spot; hot text — Hot text is text in a hypertext† document (such as an HTML† document) that is a link to some other file; a hot image is an image that is a link to some other file; a hot spot is hot text, or a region in an image map.†

HTML — The HyperText Markup Language. This is the usual format for documents that are 'published' on the Web. HTML is an application of SGML.†

HTML Source editing

HoTMetaL PRO provides an editing window in which you can edit the HTML source ('code') of the document directly, as a text file. This window provides visual cues to identify the various components of the HTML source. HoTMetaL PRO also provides WYSIWYG† and Tags On† (structural) editing windows.

HTTP, http

The HyperText Transfer Protocol. This protocol is used to transfer HTML documents over the network, between a Web server† and an HTML browser, while you wait. The HTTP protocol is implemented by Web servers.

hypertext

Text that contains links to other documents or specific locations in documents. HTML documents are examples of hypertext.

ICADD

The International Committee for Accessible Document Design. Techniques created by ICADD and documented in ISO 12083 specify how to automatically transform SGML† files (including HTML† files) into input to a Braille, large print, or synthesized voice system. All HTML documents created by HoTMetaL PRO are ICADD-ready and can readily be converted to these formats using ICADD techniques. See also *accessibility.*

ID (identifier)

The ID attribute† was added to most HTML elements in HTML 3.0. It is used for constructing cascading style sheets:† an ID attribute uniquely identifies a single instance of an element so that a style rule can be constructed for that element in a cascading style sheet.† An ID must start with a letter, followed by letters and digits; it is not case-sensitive.

IETF

The Internet Engineering Task Force, responsible for the technical management of the Internet. The IETF coordinates the development of the HTTP† standard.

image map; image map file

An *image map* is an image that is divided into regions, each of them associated with a URL. Clicking in a region causes the file referred to by the associated URL to be accessed. An image map is also called a *clickable image map*. There are two kinds of image maps: *server-side* (ISMAP) image maps require an external *image map file* that defines the regions in an image map and assigns them to URLs. *Client-side* (USEMAP) image maps accomplish the same thing using special elements in the docu-

ment itself. Client-side image maps are easier for document authors to implement, but are not supported by all browsers.

Information Manager — The control center of HoTMetaL PRO. It allows you to manage HoTMetaL PRO projects, including creating new projects, editing projects, and moving projects to a Web server† (publishing).

interlaced image — An image that is first displayed in the browser at a low resolution, and then in successively higher resolutions, until the whole image has been downloaded. This is sometimes referred to as *progressive display*. GIF,† JPEG,† and PNG† images can be interlaced. Not all browsers support this feature.

Internet Explorer — A popular browser developed by Microsoft Corporation.

intranet — An 'internal net', whose pages are available only on a local server. An organization can use Web technology, such as browsers, servers, and editors to share information among its members or employees, but not make this information accessible to the public over the WWW. See also *extranet*.

IP address — An IP address is the specific address, in numerical form, of a computer on the Internet. Each IP address is unique to that computer, and consists of four numbers separated by periods.

ISP — An Internet Service Provider (ISP) provides access to the Internet for a fee, usually through a dialup connection.

ISMAP — Another name for *image map*.†

ISO — The International Organization for Standardization ('ISO' is not an exact acronym).

ISO 8859-1 character set

This is the character set for 'special' or 'accented' characters that is generally in use for HTML documents. This character set is also called 'ISO Latin 1'. It includes characters required for most western European languages. This character set is one of several in the ISO 8859 standard: others support, for example, Eastern European languages and Cyrillic-based languages such as Russian. HTML now specifies the much broader Unicode standard.

Java

Java is a programming environment that operates in conjunction with certain browsers. It lets you refer to and run programs, called *applets*, from an HTML document. Applets perform some special processing in the browser window, such as drawing a picture or interacting with the user. The Java programming language is a platform-independent object-oriented language, with some similarities to C and C++. See also *ActiveX*.

JavaScript

JavaScript is a programming language that is loosely based on Java.† Instead of being *referred to* in an HTML document, as Java applets are, JavaScript code is usually embedded in the document itself, using the SCRIPT element.

JPEG

An image format that is commonly supported by Web browsers. JPEG is an acronym for Joint Photographic Expert Group. See also GIF, PNG.

layout

1. The visual arrangement of components—text, images, tables, etc.—on a printed or virtual page.
2. In HoTMetaL PRO's Site Maker† wizard, a choice of structure for the pages in the site that you're creating.

line-mode browser

An HTML browser that can be used on a 'dumb terminal' such as a VT100 or a PC with communications software. The most common is Lynx.†

link

An element† in an HTML document that points to a document, or to a specific location in a document, using a URL. When the document is displayed in a browser, clicking on a link causes the browser to display the document and/or location that it points to.

Lynx A common line-mode† HTML browser. Lynx can be used over a slow dial-up line or if you don't have a windowing system.

mailto A scheme† that causes a browser to send a form to a particular e-mail address, or generate a mail-editing window.

markup Special codes in a document that specify how parts of it are to be processed by an application. In a word-processor file, markup specifies how the text is to be formatted; in an HTML document, the markup specifies the text's structural function (heading, title, paragraph, etc.).

marquee A piece of text that scrolls across a browser† document window. Not all browsers support marquees.

meta-information Information *about* a document that is read by a Web or intranet server. It could be indexing information for search purposes, document creation and expiry information, etc. Meta data is contained in META tags in the HEAD element.

MIME The Multipurpose Internet Mail Extensions (RFC 1510): extensions that allow e-mail messages to contain audio, video, and multiple files. It is also the format that Web servers† and browsers use to transfer files. The MIME *content type* of a file tells a browser how to process it. The content type for HTML files is 'text/html'.

Mosaic The first widely-used HTML browser,† developed at the NCSA.†

NCSA The National Center for Supercomputing Applications, located at the University of Illinois at Urbana-Champaign, Illinois. The NCSA is an (indirectly) U.S. government-funded body that exists to try and make powerful computers more accessible to researchers. Mosaic† was originally written at the NCSA.

Netscape Navigator A popular web browser developed by Netscape Communications Corporation.

OLE — See *ActiveX*.

orphan files — Files in a HoTMetaL PRO project that cannot be reached by following links that start in the project's home page. The HoTMetaL PRO Information Manager locates orphan files for you.

page — A single HTML document (which can be longer than one screen).

PNG — Portable Network Graphics; a graphics format supported by some browsers. PNG is a 'lossless' format; some of its advantages are better (24-bit) color support, compression, and anti-aliasing and transparency capabilities.

Pockets — User-defined sets of files that are useful for managing projects. You can create Pockets based on a variety of criteria, such as search results, files with broken links, orphaned files (files without any links to them), etc. Once you have created a Pocket with a certain type of file in it, you can then delete, copy, or rename listed files all together, rather than trying to find each and every file in the project display.

Pre-Digital Offers (PDOs) — See *Digital Offers*.

pretty printing — Saving an HTML file in such a way that it is easily readable by a human; for example, indenting nested lists to reflect their nesting structure.

progressive display — See *interlaced image*.

project — A defined group of files, consisting of linked HTML files, auxiliary HoTMetaL PRO files, and linked files in other formats. Projects are displayed and managed in the Information Manager.

proxy server A proxy server is a computer that is directly connected to the Internet, allowing multiple users on a network to access the Internet. It may also be part of a firewall,† protecting the network from unauthorized access. The proxy server then acts as an agent (or proxy), to make the connection. To you, inside the firewall, it pretends to be the server that you're attempting to connect to; on the outside, it pretends to be the client, and talks to the real server, thus letting you talk to a server outside the firewall (or vice versa). See also *socks*.†

publishing Publishing a HoTMetaL PRO project means moving your documents to an intranet server so that other users can have access to your project. The publishing component of the HoTMetaL PRO Information Manager lets you publish some or all of your files to a local or remote server. Once you have specified the destination server for your documents, the publishing component will automatically log in to the server and deliver the files to the location you specify.

relative URL A URL that is missing some information (such as the scheme† or network location), which a browser is expected to inherit from the URL of the document that contains the relative URL.

scheme The part of a URL that tells an HTML client,† such as a browser, which access method to use to retrieve the file specified in the URL.

screen magnifier Screen magnification software helps people with visual impairments to use computers by enlarging the image on the screen. The magnification program runs simultaneously with the computer's operating system and applications. An area of the screen, selected using the mouse or cursor keys, is enlarged to fill the whole screen or displayed in a magnifying window.

screen reader A software package that enables people to use computers without having to see the monitor. The screen reader uses a sound card or speech synthesizer to speak the text on the screen and the users' keystrokes. Because screen readers produce a stream of spoken text, the user usually receives a top to bottom, line by line account of a page. This means that graphics, even those including words, are missed and columns are often misread.

server — See *Web server*.

SGML — An international standard for describing the markup† of structured documents. The basic idea behind SGML is that information can be made independent of particular hardware and software. This is done by storing all documents as text-only files (with references to documents in other formats, such as graphics, when required), and using markup that describes the *structure* of documents, rather than their physical appearance. SGML is described by the ISO 8879 standard (1986). HTML is an application (a particular instance) of SGML.

Site Maker — A component of HoTMetaL PRO; a wizard that lets you design a site by supplying some information about you and/or your company, specifying the purpose(s) of the site, and choosing a decor and layout.

socks — A protocol used to connect to servers outside a firewall.† Not all firewalls support socks, in which case a proxy server† is used instead.

style sheet — See *cascading style sheet*.

tags — An element† in an HTML file begins with a *start-tag* (e.g., '<PRE>') and (usually) ends with an *end-tag* (e.g., </PRE>). In HoTMetaL PRO's Tags On† view, tags are represented by tag icons at the beginning and end of an element; you can see the tags directly in the HTML Source† view. See also *markup*.

Tags On editing — HoTMetaL PRO provides an editing window for structural editing. In this window tags are represented by tag icons at the beginning and end of an element. HoTMetaL PRO also has WYSIWYG† and HTML Source† editing windows.

TCP/IP — Transmission Control Protocol/Internet Protocol. This is the low-level protocol used by much of the Internet. It's really two protocols; IP packets are sent over a network that itself uses TCP. Other common variations include SLIP (pronounced 'slip'; Serial Line/Internet Protocol), and PPP (Point to Point Protocol).

transparent image — An image that has had one color (usually the dominant background color) designated as 'transparent', so that when the image is displayed in a browser, the image's background is colored with the browser's background color. The desired effect is an image that does not have a rectangular boundary.

URI — Uniform Resource Identifier. This is a generic name for any of a class of ways of identifying resources on the Internet. Three types of URIs are URCs (Uniform Resource Classification), URLs,† and URNs (Uniform Resource Name). Implementations of URCs and URNs are still in an experimental stage. The basic idea is that a resource (e.g., a document) is identified by a URN, a kind of 'public identifier' in the SGML† sense. The URN is resolved into a URC, which is a collection of information about the resource (it could include, for example, the price of obtaining the resource, and one or more URLs).

URL — Uniform Resource Locator. A URL is the address of a file, written in a format that can be interpreted by a Web server,† which then retrieves the file. A URL can contain a filename, a bookmark to a specific location in the file, a server on which the file resides, and a scheme† that tells how the file is to be retrieved. For most files on Web servers, the scheme *http*† is used.

USEMAP — Another name for a *client-side image map*.

Visual Dynamic Keyboard (VDK) — An on-screen keyboard provided with HoTMetaL PRO that enables users with physical disabilities to use HoTMetaL PRO and other Windows applications. A variety of hardware can be used with the VDK, instead of a conventional keyboard and mouse. See also *accessibility*.

W3C — The World Wide Web Consortium, an industry association for the development of World Wide Web technologies. This organization is sponsored by Massachusetts Institute of Technology (USA), Institut National de Recherche en Informatique et en Automatique (INRIA) (France), and Keio University (Japan). For more information, see *http://www.w3.org/*.

Web, the — An informal name for the World Wide Web.†

Web server — A networked program that responds to requests from local or remote computers for HTML† files. You give the Web server a file name (in the form of a URL†) and it gives you back the file (which can be in any format, text or binary) over the same network connection.

Web View — The Web View (seen on the right side of the HoTMetaL PRO Information Manager window) shows the link structure of your HoTMetaL PRO project as if it were sliding on the surface of a sphere. The Web View starts from a root page: all links go 'outwards' from the home page. The various colors used to display the links give information about the type of link.

World Wide Web — This is a generic term for the collection of Web servers† and browsers† that literally spans the world. Usually abbreviated WWW.

WWW — The World Wide Web.

WYSIWYG editing — What You See Is What You Get. HoTMetaL PRO's WYSIWYG view displays HTML documents as they might appear in a browser. HoTMetaL PRO also provides a Tags On (structural) view and an HTML Source† view.

XML — The eXtensible Markup Language. It is designed to be an easy-to-implement subset of SGML,† for use over the Internet. XML is an initiative of the W3C; for more information, see *http://www.w3c.org/*.

Yuri Rubinsky Insight Foundation (YRIF) — A non-profit organization dedicated to making information more accessible† to people with disabilities. YRIF was founded in memory of Yuri Rubinsky (1952-1996), co-founder and former president of SoftQuad Inc. For more information, see *http://www.yuri.org/*.