

A **graphical client** is a piece of Windows or Macintosh software that is part of a larger application that provides the user interface and handles tasks related to data presentation.

IN-LIBRARY PUBLIC WORKSTATIONS

The computer workstations a library provides in-house represent another form of electronic use where measured levels of use may be of interest. These workstations serve many purposes and often have a wider array of information resources available than what is made available to those beyond the library walls.

The characteristics of these public workstations vary depending on the type of library. Public libraries have different needs from academic libraries. But, for all libraries, these workstations represent a major investment of resources and are a critical component of providing access to electronic resources and services to the library's patrons.

The public workstations in the library tend to offer the following functions:

- **Access to the library's online catalog.** Although most ILS systems offer a Web-based OPAC for remote users, a graphical client may be used for computers within the library. Such a client would operate natively on the Windows or Macintosh operating system and may offer some advanced features not as easily accomplished in a Web interface. The trend is growing, however, for libraries to use the Web version of the OPAC on their in-library workstations, providing the same interface for both remote and local users.
- **Access to Web-based electronic resources** such as the electronic databases, journals, and other materials.
- **Access to CD-ROM-based electronic resources.** Not many years ago libraries worked hard to maintain their networks of CD-ROM-based products, which provided the basis for their electronic information products. Although the Web has displaced the vast majority of the CD-ROM products that operate on the local computer's operating system, some continue. Some applications in this category make use of intensive graphics and are not suitable for Web delivery.
- **Productivity software.** This category includes tools such as word processing and spreadsheets.
- **E-mail and instant messaging.** Libraries vary in whether to allow these activities on public workstations. For some, the public workstations are so heavily used that such activities are discouraged.

In the public library setting, the provision of Internet access is a service in itself. Libraries have groups of computers designated for this function, serving those in the community without access to computers in their homes or workplaces. Demand for this service is high in public libraries, and a waiting list or reservations system to schedule access to these computers is not uncommon.

Measuring the use of the in-library public workstations is challenging. But knowing the levels of use on workstations helps the library determine if the numbers of computers provided are adequate and the applications on the computers are being used.

In-library public workstations offer many options for configuration and deployment. Some libraries choose to offer all available options on each system, meaning that a library user can expect to see the same applications

on each system. In others, computers may be dedicated to specific tasks. The library may designate some computers that exclusively access the library's online catalog and others that provide access to all available items. Especially in public libraries, workstations may be designated for Internet access and may need to be subdivided into workstations that filter the Internet and others with open access. Computers in a children's section may have yet another set of applications available.

Knowing the relative use of each type of workstation can help librarians make informed decisions on how to deploy computers within the library. With adequate statistical information on their relative levels of use, the library can make decisions whether enough public workstations exist or if some are underutilized or idle.

Ensuring appropriate work

Protecting workstations from being changed or misused by library users is a major challenge. The library's computers must have a consistent appearance; library users should not be able to add or delete programs, move or change any icons or menu items provided, change the wallpaper graphics, or make other cosmetic alternations. Computer and network security concerns mandate that users not be able to gain access to the computer's operating system in a way that would enable them to break into the library's other network-based systems or other systems external to the library. Since the library provides these workstations, more options for control and measurement can be implemented when measuring the use of resources by remote users.

Software products designed specifically for managing public workstations in libraries and computer labs provide features that control the workstation interface so users cannot accidentally or intentionally make changes. These products typically block direct access to the computer operating system and can even remove specified items from the Web browser or other applications the library may find unsuitable for computers.

These public workstation management systems often include a software component designed to monitor and log the use of the systems. In most cases the monitoring capability may be an optional, added-cost module.

The following products are examples of available software products for recording and reporting on the use of public workstations in the library:

Historian from Fortres Grand Corp. is an application can be installed on a computer to monitor and record its use. It consists of two basic components, the Recorder and Reporter. The Reporter component works behind the scenes, invisible to the user, to track each software application run on the computer and record the Web pages viewed, files accessed, or pages printed. The product can measure the total amount of time each user spends browsing the Web. The library can customize the level of recorded information. The Reporter module is required to view the use data collected by the Recorder. Use information can be displayed at the workstation directly, or library staff can export the data for use with spreadsheets and other applications. Many standard use reports can be produced and custom queries allow you to study selected aspects of use.

The level of monitoring possible with this application may cause significant concerns regarding the privacy of patrons who use the library computers. Although libraries may be interested in general levels of use,

www.fortres.com/products/historian.htm

[www.cybraryn.com/
products/cybraryn.htm](http://www.cybraryn.com/products/cybraryn.htm)www.interface.com

they may not want to record individual details. For library workstations used anonymously, libraries can track more detailed use of individual sessions for the purpose of aggregating the data in subsequent analysis.

Historian is available only for Windows-based systems. The software is priced for educational users at \$39 per computer or \$395 per building.

Computers by Design offers a set of products for the security and management of the public workstations in a library. **CybraryN**, its core product, offers features related to security and authentication. This product includes a reporting module that can produce summaries of how the computers are used. It reports on the use of each application, general patterns of patron use, periods of peak use, and activity levels according to the day of the week. CybraryN also provides reports on Web sites accessed, but doing so requires the use of the company's own CybrarySite Web browser. CybraryN is priced for educational users at \$129.95 for a single user, or a library can purchase a site license for \$2,495.95.

Products such as **Launch Command** from Interface Electronics provide an environment for managing applications on public workstations. Launch Command includes menus, metering, and reporting capabilities. The menu feature provides access to the application available on the workstation in a controlled way, and the metering component controls access based on conditions such as allowed number of simultaneous users. The system includes a module that can be used to produce reports on the applications that have been used on the workstation in any given period.

Printing issues

One of the most vexing aspects of computer workstations in the library is support for printing. The need to stock printers with paper and replace toner or ink cartridges adds significant costs to the provision of this service. Printing also requires a significant level of library staff intervention. Given the costs, printing is often the activity libraries are most interested in monitoring.

Libraries can purchase software products to monitor, control, and charge for pages printed at a workstation. Through the use of these products, a library can not only monitor the way that printing is done, but can turn printing into a revenue-generating activity.

Print management products are complex systems that involve integration with the library's network, printers, computer workstations, and payment systems. The features and relative benefits are not described here, but some major companies and print management products include:

- UnipriNT from Pharos Systems (www.pharos.com/products/uniprint.asp)
- GoPrint from GoPrint Systems (www.goprint.com)
- LPT:One from EnvisionWare, Inc. (www.envisionware.com/lptone/index.htm)
- CybraryPrint from Computers by Design (www.cybraryn.com/products/cybprint.htm)

Summary

Libraries have an interest in understanding how the public workstations provided within the library are used. Unlike access by remote users, the library staff can physically monitor these computers. The level of statistical reporting necessary varies among libraries. For many libraries, little need exists to spend a lot of resources performing detailed tracking and analysis of their use. Library staff can observe general levels of activity, and any adjustments in the numbers or positioning of them can be made accordingly.

Some statistical figures libraries may choose to collect from their public workstations include:

- Total numbers of workstations, broken down by category if applicable
- Number of sessions per workstation per time period. For libraries that do not require user sign-on or authentication, counting sessions isn't likely possible. Determining the boundaries that define the end of one session and the beginning of the next is difficult.
- Sessions per type of user. This figure is applicable only in libraries where users must authenticate before using the workstations.
- Applications accessed and number of sessions per application
- Measurements of activity by time of day, day of week, and so on
- Pages printed by time period and workstation

Most libraries need to gather use statistics on the electronic resources accessed from in-library workstations. For many Web-based resources, this use information can be gathered as part of the same efforts for measuring remote use. Measuring locally installed applications may prove to be more difficult. The library may need to install a third-party monitoring application to gather use statistics. With the trend toward more Web-based applications and fewer locally installed ones, expending significant amounts of effort and resources in monitoring a dwindling set of resources might be unproductive.