

Software Product Description

**PRODUCT NAME: POLYCENTER™ System Census, Version 1.2 SPD 50.72.01
for PC LANs**

DESCRIPTION

POLYCENTER System Census for PC LANs automatically collects hardware and software configuration data from MS-DOS®, Microsoft Windows®, OS/2® PCs and Macintosh® systems in the native Novell® NetWare® and Digital PATHWORKS for DOS® environments. Novell NetWare administrators can initiate a manual audit of the hardware and software resources of the file server. A Windows-based graphical user interface then allows users to load this data, along with the data that can be collected from non-networked (standalone) PCs using a “walk-around” disk, into an inventory database at the Local Area Network (LAN) level, and generate queries and reports for the PC LAN Administrator.

This product also provides an optional interface to the POLYCENTER System Census for OpenVMS VAX and ULTRIX RISC, allowing data from multiple PC LANs, along with the data from OpenVMS VAX and ULTRIX RISC systems, to be consolidated from enterprise-wide systems into an SQL database on an OpenVMS VAX or an ULTRIX RISC system. Refer to the Software Product Description (SPD 39.19.xx) for more details on POLYCENTER System Census for OpenVMS VAX and ULTRIX RISC.

POLYCENTER System Census for PC LANs:

- Provides accurate hardware and software inventory data for individual PCs.
- Tracks changes to existing hardware and software resources.
- Provides server login dates and times for users at each PC. This data can be examined to produce a complete history of logins for a single user or group of users. The name of the most frequent user of a PC is output as the Primary User and the next most frequent user is output as the Secondary User.
- Maintains a current list of the administrators allowed to access the PC LAN data and the passwords, access levels, and default queries. This prevents unauthorized access and provides ease-of-use.
- Provides a custom report generator that allows the design of reports on any combination of LANauditor hardware and software data. The report generator gives users control of the fonts, page layout, headers and footers, and data grouping. Print preview allows users to see how the report will look on paper.

- Allows full import and export of LANauditor machine data and software dictionaries.
- Provides tracking of software license information such as license type, limits, serial number, licensee, and comments. This information can be entered manually or imported.

With POLYCENTER System Census for PC LANs, data collection and database updates are done automatically over the network. The data collection is done when the user logs into a server, or during power-on. At login, the data collection module, called the Auditor Module, is downloaded from the server and executed at the PC, generating a configuration data file on the server. When more than one PC logs in, the configuration data file is extended to contain the newly collected data. The file server audit is done manually from a PC workstation logged into the file server. File server configuration data is appended to the same configuration data file. The data in this configuration data file can be loaded into the local PC LAN database using the Inventory Update function invoked by a Windows based graphical user interface. A number of remote configuration file collection points can be defined so that a single LANauditor database can contain data collected from several servers.

POLYCENTER System Census for PC LANs makes the PC data collection effectively transparent to the end users being audited. Hardware audits complete in one to three seconds during login. The more time-consuming software audits, typically taking about 30 seconds per 100 megabytes of hard disk space on the PC being audited, can be conveniently scheduled. It requires minimal resources on the local PC because it executes quickly and terminates after gathering data. The DOS Auditor Module does not use any Terminate and Stay Resident (TSR) programs on the audited PCs, and, therefore, does not tie up valuable Random Access Memory (RAM).

The following list summarizes the data items collected automatically by POLYCENTER System Census for PC LANs:

- Date and time of last audit
- Central processing unit (CPU) type and speed
- Math coprocessor type (FPU)
- System RAM
- Hard drive types and capacities
- Display type
- Operating system version

The following additional data items are collected from DOS and OS/2 machines:

- BIOS module signature and manufacturer
- Extended RAM
- Lotus®-Intel™-Microsoft® expanded memory manager (EMM)
- Number of disk drives (including hard drive partitions and type)
- Floppy drive capacities

- Serial input/output (I/O) port addresses
- Printer I/O port addresses
- All installed cards for MCA and EISA bus machines
- Configuration files such as AUTOEXEC.BAT and CONFIG.SYS.
- Environmental variables
- Device drivers
- BIOS extensions
- Loaded TSR list

In addition, the following types of data are collected from networked PCs:

- Network hardware description
- Primary/secondary user
- Network address
- Network operating system version
- Shell configuration
- PC shell version
- Protocol version
- Network connection list

It also collects the following information on each server or PC-resident software-resource (networked or standalone):

- Directory tree
- Product name
- Product version
- Publisher name
- Resident PC name and network address

Information that cannot be obtained from auditing the PC (for example, serial numbers, office location) is entered manually. The following are examples of manually entered data:

- Administrative data: user name, machine ID, building, department, project, and room number
- PC information: serial number, asset tag, and description for the CPU, monitor, keyboard, printers, serial devices, and other locally connected peripherals

- Machine history notes
- Software license data
- User-defined hardware and software fields

All collected data can be viewed by the LAN Administrators using the Windows based graphical user interface. Using the optional Enterprise Integration Module, data from multiple PC LANs can be consolidated into an SQL database at the enterprise level and viewed using a Motif® based graphical user interface provided by the POLYCENTER System Census GUI for OpenVMS VAX or ULTRIX RISC (see SPD 39.19.xx).

OPERATION

The POLYCENTER System Census for PC LANs includes three functionally distinct components:

- The Auditor Modules, which perform hardware and software audits on MS-DOS, Windows, OS/2 and Windows for Workgroups PCs, file servers, and Macintosh systems.
- The Database Module, which has Windows and DOS based graphical user interfaces, and uses the output of the Auditor Module to produce formatted reports of PC resources.
- The optional Enterprise Integration Module, which allows consolidation of data from the PC LANs into an enterprise database on an OpenVMS VAX or an ULTRIX RISC system using the POLYCENTER System Census Consolidator for OpenVMS VAX or ULTRIX RISC (see SPD 39.19.xx).

The audit scheduling feature allows the user to schedule audits for the appropriate frequency (every login, once each day, once each week, etc.). The information collected by hardware and software audits is typically stored on the server hard disk in a file named AUDITOR.DAT. PCs that are not networked, such as laptops, may be audited manually by running the Auditor Module from the "walk-around" Auditor disk.

Before network resource information is usable, it must be compiled, arranged, and sorted. This work is performed by the Database Module. Many companies have multiple servers on each network, and may have multiple networks running different network operating systems. A separate Auditor Module installed on each of the servers can be gathering information about those users. The database normally resides on a shared disk that all PC clients can write to (presumably a server disk). The Network Administrator will need to combine and analyze this data using a Windows or DOS based Database module. The DOS and Windows based Database modules are functionally equivalent and can be run interchangeably or concurrently by different users. Both modules take files generated by the Auditor Module and load the database.

Once the database is loaded, the LAN Administrator can query them using either predefined queries or new user-defined queries to extract and present the information in a customized report. For example, a sample query may extract data containing only those records where total extended RAM is greater than zero. The results are then sorted by total extended RAM. The custom report generator in the Windows Database Module can be used to produce reports with full control over data layout, fonts, headers, and footers.

The Database Module provides a number of features to support data import and export. The Windows Clipboard can be used for Copy and Paste exporting of selected records from the Detailed or Summary Reports. The current view can be exported in ASCII, dBASE II, dBASE III, and DIF formats. Data can also be exported as an AUDITOR.DAT file to allow moving information between LANauditor databases. Configuration data can also be imported from ASCII, dBASE II, dBASE III and DIF files. The Software Dictionary, that defines what software packages that LANauditor recognizes, can be imported and exported so that the list of recognized software packages can be kept up to date.

Information gathered across local area networks and bridges can be summarized using queries to provide an organization-wide view of the network. These data collection and database analysis procedures are transparent to the user at the individual PCs.

To control access to database information, users can assign one of three different access levels. This provides a way to customize the program for different administrators. Each administrator is assigned an administrator name, password, access level, and (optional) default query. The default query is performed each time the administrator starts the program. For example, one administrator may be most interested in seeing a PC summary, another administrator may be interested in all of the 386 and 486 PCs, and a third administrator may be most interested in the login information.

ENTERPRISE DATA CONSOLIDATION

An Enterprise Integration Module is provided with the POLYCENTER System Census for PC LANs. This module allows the POLYCENTER System Census Consolidator from an OpenVMS VAX or an ULTRIX RISC system to consolidate this PC LAN data periodically into an SQL database at the enterprise level.

The following are applicable during the enterprise-wide data consolidation:

- The integration module must be installed on a PC running Windows 3.1 in the Novell NetWare or Digital PATHWORKS for DOS environments. Therefore, at least one PC in the PC LAN must be running this module as a Windows 3.1 application. The rest of the client PCs could, however, be MS-DOS, OS/2, or Windows PCs.
- Extended LAN collection is supported, whereby data from multiple PC LANs or PCs logging into multiple servers can be consolidated and viewed by a single Windows based GUI provided by the POLYCENTER System Census for PC LANs.

For Macintosh systems, OS/2 systems, and file servers, not all of the data collected by LANauditor is exported to the enterprise SQL database. The following LANauditor configuration information is not exported. See the POLYCENTER System Census for PC LANs User's Guide, Appendix B for definitions of these fields.

- Machine Detail - System Information for DOS and OS/2 Machines, Pointing Device
- Machine Detail - Macintosh Hardware, Machine Information, all but:
 - Machine Type
 - Processor

- FPU
- Machine Detail - Macintosh Memory for Macintosh Machines, all but:
 - Physical RAM Size
- Installed Device Drivers
- Resident Applications
- Macintosh System Information
- Macintosh Extensions
- Macintosh Control Panel and Desk Accessories
- Macintosh Monitors and Fonts
- Physical Drives for DOS and OS/2
- File Server General Information, all but:
 - File Server Name
 - NOS Version
 - OS Version
 - CPU Type
 - Total Memory
 - Administrative Data
- File Server NetWare Information
- File Server LAN Manager Information
- File Server VINES® Information
- Server Logical Volume Information
- File Server Printers and Communications Devices
- File Server Services
- Captured Files
- Machine History
- User-Defined Software Fields
- Software Licensing
- Exception Record

- Login Record

HARDWARE REQUIREMENTS

Auditor Module

- Intel 8086, 8088, 80186, 80286, 80386, 80486, and compatibles
- Motorola MC68000, MC68020, MC68030, MC68040
- 256 Kilobytes (KB) or more available RAM

Database Module

- Intel 80286, 80386, 80486, and compatibles
- 8 Megabytes (MB) of additional hard disk space
- 4 Megabytes (MB) of RAM
- Mouse is highly recommended

Enterprise Integration Module

- Intel 80386, 80486, and compatibles running Windows 3.1
- 5 Megabytes (MB) of additional hard disk space
- 2 Megabytes (MB) of RAM

SOFTWARE REQUIREMENTS

Auditor Module

- MS-DOS or PC-DOS version 3.0 or higher, Macintosh System 6.0.5 or higher, Macintosh System 7, OS/2 version 1.31 or higher.

Database Module

- Windows version 3.0 or higher for the Windows Database Module, and MS-DOS version 3.0 or higher for DOS Database Module

Enterprise Integration Module

- Windows version 3.1 to run the Enterprise Integration Module
- See the section "OPTIONAL SOFTWARE" for the software products required to run this module, thus allowing POLYCENTER System Census for OpenVMS VAX or ULTRIX RISC (SPD 39.19.xx) to consolidate PC LAN data on to an OpenVMS VAX or ULTRIX RISC Consolidator.

OPTIONAL SOFTWARE

The following software products are required to run the Enterprise Integration Module, thus allowing POLYCENTER System Census for OpenVMS VAX or ULTRIX RISC (SPD 39.19.xx) to consolidate PC LAN data on to an OpenVMS VAX or ULTRIX RISC Consolidator:

- POLYCENTER System Census for OpenVMS VAX or ULTRIX RISC (SPD 39.19.xx) Consolidator version 1.1 or higher.
- TCP/IP FTP® or Novell LAN WorkPlace® or NetWare for NFS if this is a Novell NetWare environment.
- DECnet FAL or TCP/IP FTP Server if this is a PATHWORKS for DOS environment. If PATHWORKS for DOS uses DECnet for PC client communications, DECnet FAL on a Windows 3.1 PC can be used. If PATHWORKS for DOS uses TCP/IP for client communications, an FTP Server on the file server has to be made available for use.

ORDERING INFORMATION

Shrink-wrap Packages:

- | | |
|-------------|--|
| QB-22XAA-SA | POLY SC PC LANs basic package includes 1 MS-Windows GUI, 1 PC Consolidator, the ability to collect from 50 PC agents, media, documentation, and license agreement. This basic kit is required for use with the 100, 200, or 400 license upgrade kits to collect data from more than 50 PCs. A maximum of 3,000 agents per single PC consolidator is recommended. |
| QB-23FAA-SA | POLY SC PC UPG 100 PKG provides the ability to collect from an additional 100 PC agents.
Prerequisite: QB-22XAA-SA |
| QB-23GAA-SA | POLY SC PC UPG 200 PKG provides the ability to collect from an additional 200 PC agents.
Prerequisite: QB-22XAA-SA |
| QB-23HAA-SA | POLY SC PC UPG 400 PKG provides the ability to collect from an additional 400 PC agents.
Prerequisite: QB-22XAA-SA |

Software Documentation: QA-22XA*-GZ

Software Product Services: QT-22XA*-, QT-23FA*-, QT-23GA*-, QT-23HA*-

Optional PC Starter Packages for managing PCs through OpenVMS VAX or ULTRIX RISC systems where the PCs are connected to a single PATHWORKS or Novell server:

- QB-271AA-AA POLY SC VAX/PC STARTER KIT provides everything to manage 5 systems and 50 PCs where the PCs are connected to a single PATHWORKS or Novell server, including:
1 QA-ML4AA-H5 OpenVMS VAX SERVER/GUI/AGENT KIT media and documentation
5 QL-ML1A9-AA OpenVMS VAX AGENT/CLIENT SW License
1 QL-ML4A9-AA OpenVMS VAX UNLIMITED CONSOLIDATOR License
2 QL-ML7AA-2B OpenVMS VAX PERSONAL GUI License
1 QB-22XAA-SA POLY SC PC LANs
- QB-288AA-AA POLY SC RISC/PC STARTER KIT provides everything to manage 5 systems and 50 PCs where the PCs are connected to a single PATHWORKS or Novell server, including:
1 QA-ML6AA-H5 ULTRIX RISC SERVER/GUI/AGENT KIT media and documentation
5 QL-ML3A9-AA ULTRIX RISC AGENT/CLIENT SW License
1 QL-ML6A9-AA ULTRIX RISC UNLIMITED CONSOLIDATOR License
2 QL-ML9AC-2B ULTRIX RISC PERSONAL GUI License
1 QB-22XAA-SA POLY SC PC LANs

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