Part One:
Using LAN Support Center

Notes

Chapter 1 Introduction to LAN Support Center

Welcome to LAN Support Center, McAfee's Windows-based problem management system.

LSC is a member of McAfee's family of network administration and management tools, a group of network applications that help you manage your LAN more effectively.

The Purpose of LSC

LAN Support Center (LSC) tracks support activities by allowing you to create, maintain and retrieve tickets electronically. Easily accessible windows display vital information regarding the caller's equipment, software and call history. To help solve problems rapidly and identify recurring problem areas, the LSC database gives you instant access to information regarding help desk activity.

LSC also provides management with automated tools to supervise support operations more efficiently. Call histories, support procedure documents and scripts can all be accessed easily to help staff rapidly identify and diagnose problems. Data in every help desk session can be consolidated to analyze staff performance and response times. Help desk issues and their solutions can also be analyzed to identify recurring problem areas which may need configuration adjustments or user training programs.

LSC is a sophisticated yet easy-to-use ticketing system based on a powerful database technology. Each organization can customize the LSC database field labels, the ticket list information display and the information to be included in reports. This ability to customize LSC results in more streamlined workflow.

LSC is a fully compatible Microsoft Windows 3.1 system. Familiar Windows techniques execute commands, scroll and select list information, and open, close and move between multiple windows. Entering, editing, cutting and pasting functions are also consistent with Windows, minimizing required training time.

The reports included with LSC provide management with valuable information regarding staff response time, frequency of problem occurrence, and customer support requests. These reports can be customized to satisfy the requirements of each organization. LSC also includes Crystal Reports, a powerful and easy-to-use custom report writer.

Help Desks

The Problem

The help desk is emerging as a central, corporate organization designed to solve end-user computer hardware and software problems quickly. With the increasing reliance on computers in today's workplace, the effectiveness of the help desk staff has direct impact on workstation user productivity and organization profitability. Automated problem management systems, such as McAfee's LAN Support Center, can have a dramatic impact on how rapidly user problems are resolved and can help managers record and understand data on how the help desk is functioning.

Today's help desk organization faces numerous challenges. As incoming call volumes increase, the time required to log problems manually (i.e., write down messages, problem descriptions and user configurations) negatively effects productivity. It is critical that calls are neither lost nor follow-up activities misplaced and forgotten. Thus arises the need to analyze help desk operations in order to develop programs which minimize user downtime.

Like all other corporate organizations, help desks are asked to do more with less staff. Valuable senior technical staff must be utilized wisely, and junior staff must develop their support skills independently. Within the growing computer user population, perhaps the most critical demand of help desks is to resolve problems faster than ever before.

The McAfee Solution

LAN Support Center is a powerful problem management system that tracks support activities by creating a ticket for every support call. LSC lets you record all necessary details in easy-to-use screens that are fully customized to your organization and individual support staff preferences. By replacing manual procedures with sophisticated information management functions that track a ticket until it is resolved, LSC dramatically improves help desk operations. Support staff spend less time with paperwork and more time on actually solving problems.

The Cost

The justification for automating help desk operations consists of two important elements. First is the direct time saved by the help desk staff in the performance of daily activities. Second are the intangible costs to corporate users and help desk departments that are incurred when users cannot be supported as rapidly as possible. Both cost saving elements are discussed below.

Time Cost Savings

Help Desk Practices,[1] a survey published by the Help Desk Institute about its membership, confirms the broad range of sizes of help desk organizations and user communities. A profile of a five person help desk organization is as follows:

Number of Employees: 5

Average annual salary and benefits (all help desk departmental employees): $35,000

Average hourly wage: $17.00

Average number of users supported: 2,500

Average number of calls/month: 2,000

Cost/month (assuming 5 days/week of operation): $35,000/12 x 5 employees: $14,583/month

Average percentage calls resolved by the help desk: 71%

Average number of calls resolved by the help desk: 1,420

Cost/call/month: $14,583/1,420 calls: $10.20/call

LSC can increase the productivity of existing staff by over 20% in comparison with manual systems. These productivity increases are the direct result of eliminating many of the labor-intensive activities connected with receiving and following through on a support problem. LSC eliminates the time required to manually record details about the caller and the problem. LSC electronically displays configuration and call history information and can help staff members retrieve existing solutions. By capturing help desk information electronically, problem data can be analyzed to identify potential networking improvements that could eliminate future help desk calls.

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[1]Help Desk Institute, *Help Desk Practices, A Survey of Help Desk Institute*

Members, (

Colorado Springs, CO: Help Desk Institute, 1993).

The model below characterizes the hard cost savings that exist for automated help desks with a 20% productivity increase at current calling rates. At 20%, the cost per call savings can justify an additional employee. More importantly, productivity time savings can be the vital resource for those help desks grappling with increasing demands to support new technologies and manage changes to existing hardware and software installations.

	Help Desks with No Automation	Expected Savings with LSC (20% savings)
# of Calls	1,420	1,420
Calls/year:	17,040	17,040
Cost/call:	$10.20	$8.16
Costs/year:	$173,808	$139,046
Savings/year:		**$ 34,762**

Hidden Cost Savings

LSC's most important benefit is its ability to free up staff time. This increases the number of end users served and makes time available to gain expertise in emerging technologies. According to the Help Desk Institute, its members reported that the issues impacting help desk operations include calls related to new technology support, new customers and changes and upgrades to existing systems. LSC gives your staff the time it needs to keep apace with your growing user community and to stay on top of rapid technological change.

By making your staff more effective, LSC reduces one of your corporation's most critical hidden costs−lost worker productivity. LSC provides support staff with the tools to resolve calls rapidly and share information to maximize technical expertise. This "found time" can be used for any number of activities, including the following:

❑ application training to reduce the need for support calls
❑ cross training to expand your users' knowledge base
❑ keeping up with industry technology changes
❑ planning for network expansions

LSC automates ticket creation, problem management and the reporting requirements of an active help desk. LSC simplifies help desk operations by eliminating the paperwork that slows down your response to support calls. LSC's database maintains support information on-line and lets you quickly view your caller's support history and search for similar problems, to diagnose support problems rapidly. To meet the individual needs of your organization, you can customize many aspects of LSC: field labels, ticket listings and the type of information stored and included on reports.

With McAfee's LAN Support Center, you can perform the following functions:

❑ Track support activities by creating a ticket for every support call, stored in a powerful ticket database.

❑ Build, edit, display and select from lists of customized information needed to create or manage a ticket.

❑ Give staff and managers a snapshot of current support activities, all active tickets and the status of any support problems.

❑ Maintain user and equipment profiles on-line to rapidly display a caller's configuration.

❑ Assign up to four priority levels so urgent problems get quicker attention and resolution.

❑ Route calls to other or more qualified support technicians to get the most productivity out of junior, senior and specialized technicians.

❑ Automate record-keeping and reporting by electronically capturing the entire history of the help desk session−including all ticket information, actions taken and follow-up activities.

❑ Sort, display and save any user-defined, cross section "view" of the ticket database, to facilitate a particular job function.

❑ Filter sections of the ticket database for display or reporting, eliminating extraneous information.

❑ Display multiple windows of ticketing or departmental information simultaneously, and let users rapidly move between windows to create and process a ticket quickly and accurately.

❑ Display solutions to recurring or past problems to quickly resolve similar situations.

❑ Provide powerful query, sorting and reporting features to generate daily and periodic performance reports.

❑ Produce a variety of standard reports detailing support productivity and help desk operations.

❑ Utilize Crystal Reports, a powerful, flexible and easy-to-use report generator to produce LSC information in an unlimited number of formats.

❑ Store custom report formats for future use.

❑ Archive and restore inactive tickets whenever necessary to utilize disk space efficiently.

❑ Support file importing and exporting to share data between LSC and other applications.

❑ Display on-line help information.

❑ Protect against unauthorized access through log-in password security.

LAN Support Center integrates with the following applications:

❑ Novell Btrieve Record Manager - LSC uses the fast and highly sophisticated database system for database management.

❑ Microsoft Windows 3.1 - LSC supports the familiar user interface to minimize training time and maximize ease of use.

❑ Other McAfee network management applications as follows:

-   LSC links to LAN Inventory for a comprehensive and accurate description of a user's hardware configuration.

-   LSC connects to SiteMeter to identify user software version and revision levels. Support staff can also determine whether a user is "locked out" of a metered application due to licensing limits.

-   LSC accesses NetRemote to run the user's workstation remotely, without leaving the help desk.

The LAN Support Center software consists of one executable file and several supporting components. As an introduction to the entire product, this section briefly describes each LSC component. A complete list of LSC files is provided in Appendix C.

The LSC components are:

❑ LAN Support Center Console (LSC.EXE)
❑ LAN Support Center Database Lists
❑ Reporting Module
❑ Import/Export Utility

LSC Console

LSC.EXE is the LSC console and administrative program which provides access to most LSC functions. This main module is a Windows-based program and is intended to be used by the support administrator and the support staff members.

The administrative functions available from the LSC console include:

❑ Setting up staff members and defining access rights
❑ Customizing the LSC database labels
❑ Maintaining the database lists
❑ Archiving and restoring tickets

The support staff functions available from the LSC console include:

❑ Generating tickets to track events
❑ Maintaining ticket information and related activities
❑ Modifying ticket views to speed support response time
❑ Customizing and generating reports

LSC Database Lists

LSC is an integrated database system which tracks and manages all information regarding ticket data. Novell's Btrieve is used as the database record manager. LSC's major databases are:

❑ **Current Ticket Database** - the group of tickets to which new tickets are added. There is only one current database at any time.

❑ **Historical Ticket Database(s)** - a group of tickets that have been removed from the current database. These archived tickets can be loaded into LSC for reference purposes; however, changes to the historical database tickets should not be made. There can be any number of historical databases.

❑ **Qualification Lists** - the categorized lists of information entered into LSC which act as reference aids to facilitate data entry and maintain the integrity of the data files.

Appendix C provides a complete list of the LSC data and executable files.

Reporting Module

LSC is shipped with several pre-defined reports that represent reports often requested by support desk management. These reports provide valuable information regarding ticket activity, staff response time, problem types, and much more.

LSC's pre-defined reports can be customized to reflect individual reporting requirements. By applying filtering criteria (i.e., a "query") to a pre-defined report, the report will only include the data in the LSC database that matches the query constraints. These customized reports can be saved for future use.

LSC also includes the Crystal Reports software, a powerful and easy-to-use report generator. With Crystal Reports, you can create and customize your own reports using data from the LSC database. Powerful calculation and formatting features will help you generate more meaningful performance monitoring and analytical reports.

NOTE:
The Crystal Reports software is installed using the LSC install utility. A Crystal Reports program icon is added to the McAfee Program Manager group.
Procedures for using Crystal Reports are presented in Part Two of this manual.

Import/ Export Utility

The LSC import/export utility is a DOS application which enables the transfer of ticket data into and out of LAN Support Center. Upon installation, the utility (LSCIMEX.EXE) is copied into the LSC program directory.

LAN Support Center ticket and action information can be exported into an ASCII text file for use in another database application. Similarly, data from comma delimited ASCII files can be imported into LSC.

Because LSC 3.0 has a customizable interface, most data fields are not restricted to a particular format. The import/export utility will match the field names in LSC even if they have been changed by the administrator. The only fields that have a specified format are date and time fields. All other fields may be of any type or format.

Procedures for using the import/export utility are discussed in Appendix E.

Environment

The following minimum criteria must be met in order to run LAN Support Center:

- ❏ 386SX CPU
- ❏ 4 MB of RAM
- ❏ Novell Btrieve Record Manager
- ❏ Windows 3.1 in Enhanced Mode

NOTES:

a - LSC can operate on Novell NetWare via IPX/SPX and is compatible with NetWare 4.0 and NMS.

b - LSC will work with Client Based and Server Based Btrieve. Server Based Btrieve (BREQUEST version 6.10) is recommended for increased performance. Refer to Appendix D for more information on using BREQUEST.

This manual is organized in three parts:

❑ Part One: Using LAN Support Center
❑ Part Two: Using Crystal Reports
❑ Part Three: Reference Guide

The individual chapters in each part of the manual are listed in the tables below.

Part One: Using LAN Support Center

CHAPTER	DESCRIPTION
Chapter 1: **Introduction to LAN Support Center**	Provides introductory information about LSC, its requirements and how to receive technical support.
Chapter 2: **Installation & Configuration**	Provides complete installation instructions and troubleshooting information. It also discusses the configuration of Novell's Btrieve record manager.
Chapter 3: **Getting Started**	Discusses the LSC interface and provides a tutorial for the first time LSC user.
Chapter 4: **Ticket Data Display**	Presents an overview of the various windows that display the ticket data maintained by LSC.
Chapter 5: **Setup and Administration**	Describes the procedures for defining the LSC database labels, assigning staff membership and security, managing the qualification lists, archiving/restoring tickets and configuring print parameters.
Chapter 6: **Work Tickets**	Describes the procedures for creating and maintaining work tickets.
Chapter 7: **Viewing Ticket Data**	Discusses the various methods available for viewing ticket information.
Chapter 8: **LSC Reports**	Discusses procedures for generating both pre-defined and custom reports. Illustrates and discusses each report type.

Part Two: Using Crystal Reports

CHAPTER	DESCRIPTION
Chapter 9: **Introduction to Crystal Reports**	Provides a brief overview of Crystal Reports to familiarize you with the Crystal Reports screens, using the mouse, error messages, and the help facility.
Chapter 10: **Using Crystal Reports**	Conceptually leads you through the process of creating a report with Crystal Reports. It suggests a methodology for creating reports starting with nothing more than a one sentence statement of purpose for the report.
Chapter 11: **Practical Crystal Reports**	Contains a variety of report creation topics and additional information on the practical aspects of using Crystal Reports to solve typical reporting problems.

Part Three: Reference Guide

CHAPTER	DESCRIPTION
Appendix A: **Error Messages**	Lists the error messages associated with LSC and provides explanations for each.
Appendix B: **Btrieve Status Codes**	Lists the error messages associated with Novell's Btrieve and provides explanations for each.
Appendix C: **LSC File List**	Lists and defines the files included with LSC.
Appendix D: **Using Brequest**	Provides recommendations on how to setup and use BREQUEST.
Appendix E: **LSC Import/Export Utility**	Provides instructions on using the import/export utility.

This ends the introduction to LAN Support Center. Refer to the next chapter for installation and configuration instructions.

Notes