



firehunter

discover the industry's
hottest Internet
service solution

sizzling e-commerce capabilities

steaming SLA features

red-hot network performance



igniting red-hot e-business performance



Agilent Technologies
Innovating the HP Way



ignite red-hot e-business performance

Whether you're an Internet, enterprise or application service provider or a business relying on e-commerce, being competitive starts with staying on top of your service. Your competitiveness depends upon your ability to deliver unmatched service quality.

Your customers vote with the click of a mouse. If you're too slow they move on—to a competitor who is just seconds away. How long does it take to get e-mail, access a Web page, search for a product, fill a shopping cart, place an order? Could your customers get there at all? Did it take too long to complete the transaction? Click.

When a few seconds can make or break your business, you need to be absolutely sure about the service you are providing. Every minute of every day. But how?

It all begins with better information. Real-time end-to-end monitoring of your Internet infrastructure performance. A continuous view of the customer experience. Minute-by-minute business results. Proactive warnings of problems. Automated reports that prove the quality of your service.

This is the kind of information you get from Firehunter, the industry's hottest Internet service assurance solution. Firehunter and its sizzling new e-commerce and network performance management capabilities give you the tools you need to stay on top of your Internet services—and stay ahead of your competitors.

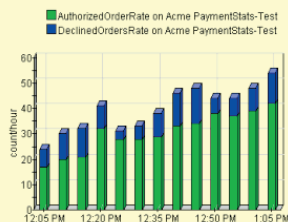
Feel the heat? That's Firehunter igniting red-hot e-business performance.

Firehunter/e-Commerce Business Performance Reports

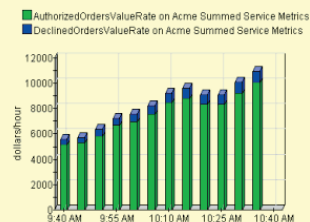
Sample Payment Services Report

Firehunter gives a real-time view into key payment metrics such as the rate and value of authorized and declined payments.

Payment Metrics at a typical E-Commerce site



In this chart you can see the number of authorized versus declined payments per hour.

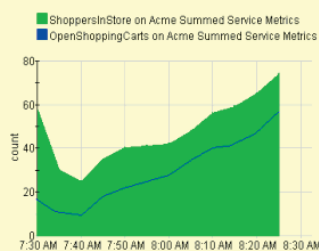


Here is the total dollar value of authorized versus declined payments per hour.

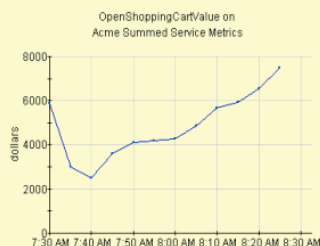
Sample Shopping Activities Report

With Firehunter, you'll always know how many shoppers are in the store, how many are actively shopping, and how much they're spending.

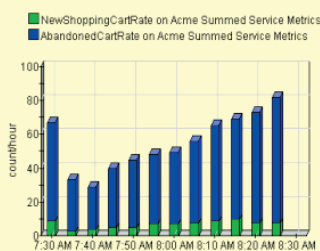
Shopping Activities at a typical E-Commerce site



In this chart you can see the number of shoppers in the store, and how many of them have an open shopping cart containing one or more items.



Here is the total dollar value of items in the open shopping carts.

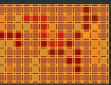


This chart indicates the rate at which new shopping carts are being opened, and the rate at which shopping carts are abandoned without completing a sale.

e-Commerce Business Results

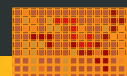
Firehunter/e-Commerce delivers vital information for running Web businesses—such as dollars-per-hour, the number of open and discarded shopping carts, and infrastructure performance during peak business periods.

blaze new trails with f i r e h u n t e r



The Service Assurance Solution that has it All

Firehunter blazes new trails in its ability to proactively measure, monitor and report on the performance and availability of customers' business-critical Internet services. This comprehensive Internet service assurance solution manages the delivered quality of E-mail, News, Web, DNS, RADIUS, FTP and LDAP services, plus such value-added services as network performance management, Web-hosting and e-commerce.





Firehunter has it all:

- Core service management features and plug-in applications enable you to differentiate your service quality with improved monitoring, reporting and real-time service-level agreement (SLA) management.
- Customer-focused management views and reports help ensure consistently good customer experience and profitable Internet business operations.
- Enhanced SLA management features make it easy to measure, compute and report on the value of SLA compliance.
- New e-commerce management capabilities provide a continuous view of the customer experience linked to real-time measurements of infrastructure performance and minute-by-minute business results.
- Expanded network-service monitoring capabilities enable service providers to measure and manage the performance of entire networks—from customer sites through network backbones to customers or applications—utilizing Cisco Service Assurance Agent (SA Agent) technology, embedded in their routers.

End-to-End Service Monitoring

Firehunter's software agents take measurements across multi-vendor environments (POPs, networks, servers and applications) to capture the exact performance status of your services, including how a problematic area may impact other points within the delivery chain. Firehunter approaches service quality from the customer's point of view.

Availability and performance are monitored and managed from the top-down with active measurements that simulate the actual use patterns of a customer. Measurements are aggregated through the Firehunter service model to provide a composite view of service health. This capability allows you to measure and manage QoS at every point within the service delivery chain.

Extremely Scalable—and Future-Proof

Firehunter was designed for the challenges of companies whose businesses revolve around or depend upon the Internet. It is an ideal service assurance solution for Internet service providers (ISPs), application service providers (ASPs), enterprise service providers (ESPs) and dot-coms.

Excellent scalability makes Firehunter an ideal solution for even the largest service providers and e-businesses. It can be scaled up to meet the challenges faced by organizations that run hundreds of Internet servers and handle on-time service delivery to users with mission-critical requirements.

Written entirely in Java™, Firehunter supports popular server environments—including Sun Solaris®, Windows NT®, HP-UX and Red Hat Linux platforms—and integrates with existing management systems, such as HP OpenView, HP WebQoS, Tivoli and BMC.

With features such as these, Firehunter gives you a future-proof solution—one that is easily customized to accommodate new services and customers for your growing business.



take a closer look at
the industry's hottest
service assurance
solution



A Rich, Graphical Model of Your Environment

From initial installation, Firehunter is quickly and easily tailored to your environment. It automatically discovers the elements of your Internet services and builds a graphical model of your service environment.

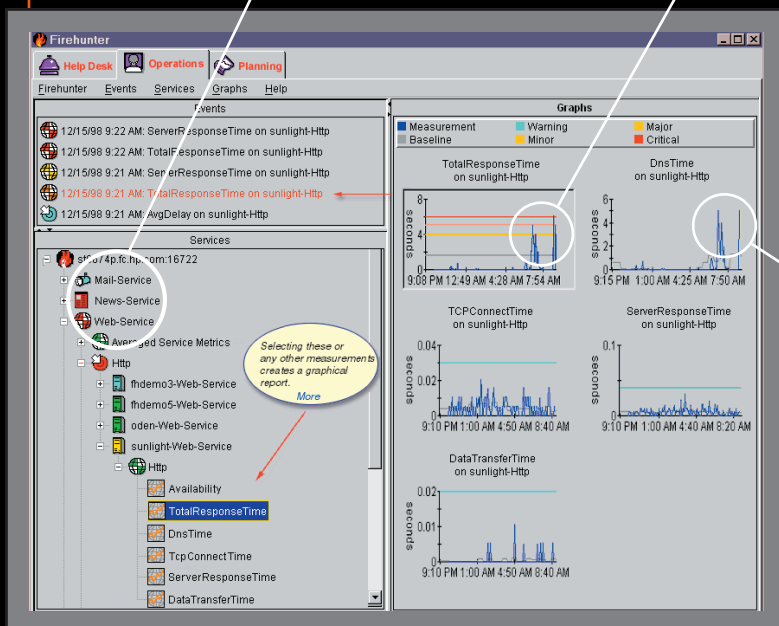
Firehunter uses a unique service model to integrate Internet components into a tree structure that allows you to easily visualize and manage your entire service environment. The service model provides a dynamic, graphical view of the service delivery chain, with visual correlation of status and events across services, elements, customers and SLAs.

Firehunter associates each element of your Internet services with the key tests and measurements needed to verify service availability and performance. It gathers pertinent data from individual applications, servers, network links and networking equipment within your environment to assess end-to-end service performance.

Firehunter Service Model (Visual Correlation)

Overall Service Status

Critical Events



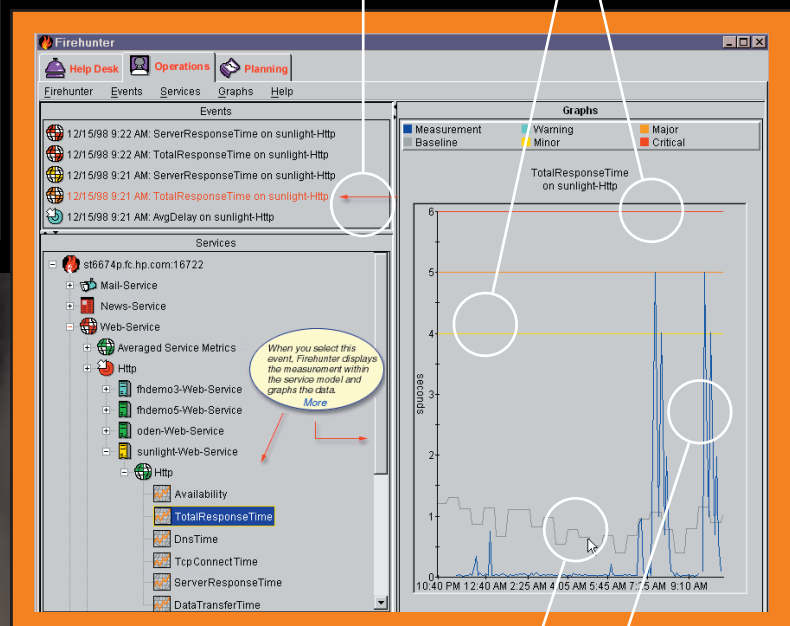
Hot Displays Firehunter's display visually correlates the status of services, components and infrastructure. This information allows the user to quickly navigate to the source of a problem, even in the most complex environments. A service model display is shown in the lower left pane. Performance measurements for selected components are shown in real-time graphs in the right-side pane of the display.

Root Cause

Firehunter Service Model (Baseline & Thresholds)

Alerts

Thresholds



Baseline

Measurement

Problem Analysis with Firehunter Firehunter's baseline and variable threshold methodologies help you identify potential issues as they arise. When you cross thresholds, Firehunter generates alerts so you can work proactively to ward off service problems.

Managing a Wide Range of Services

Firehunter includes service models for managing Web, E-mail, News, DNS, RADIUS, FTP, LDAP, Web hosting, e-commerce and network performance management services. (See the Firehunter Technical Data Sheet for a complete list of supported tests.)

The product is fully customizable, allowing addition of virtually any new service model that you require, as well as custom views and reports. You can add measurements, thresholds, baselines and status propagation rules. You can configure thresholds, test frequency, measurement views, service reports and SLA reports.

Drag-and-drop capabilities in the administration console provide a simple process for turning measurements and tests on and off. Firehunter also enables easy addition of customer nodes that allow providers to group tests and measurements for a selected customer and to provide reports specific to the customer.

Active Measurements, Real-Time Reports

Firehunter uses active measurements—simulating actual customer use—to monitor service response time as seen by the user and passive monitoring to confirm infrastructure availability and performance. Using these measurements, Firehunter creates real-time performance graphs, visually communicating service quality and performance to your customers and internal management. Graphs can be generated at the customer, service and component levels, and can include baselines and alerting thresholds. A database is maintained to produce historical reports.

Firehunter’s customer-focused monitoring and reporting capabilities enable proactive management of service performance on a per-customer basis. Graphical management views are easily segmented by customer, allowing service monitoring and reporting to be tailored to individual needs.

As Firehunter gathers new measurements, it compares the data against calculated performance baselines and thresholds, generating specific events and user-defined actions. It even allows you to set alarms to warn of potential SLA violations before they occur. You can know automatically what is typical and atypical for any time of the day.

Rapid Fault Detection, Isolation and Resolution

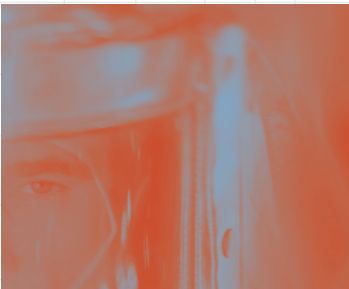
In the event of a service anomaly, Firehunter generates customizable actions—such as pager alerts, e-mail notifications or scripts—to warn operators of potential problems. Thresholds can be configured for specific needs of the environment, customer or other business drivers. Actions are used to link the system with supporting tools, such as trouble ticketing, load balancing, and network and system management systems.

Should an outage occur, operators are immediately informed of the specific services and components that are involved. By generating an SLA report, they can quickly see which customers are impacted and how SLAs may be affected. Operators can then drill down to the specific device or application that is causing the problem and initiate corrective action.

In the more difficult case of gradual degradation in service quality, Firehunter provides both service thresholds that give early warning of declining service quality and a historical database of service performance that can be analyzed for trends.

Operators can easily compare performance over the same time period in preceding days and weeks to detect trends. They can then determine the root cause of slow degradation by viewing service component measurements associated with the service problem.

Using Firehunter, service providers manage by exception, quickly analyzing and intelligently responding to any deviations from normal behaviors and efficiently addressing growth rates and other trends.



SLA Management and Reporting

Firehunter provides unique capabilities to automate the SLA administration, management and reporting processes. Tools are provided for capturing SLA requirements from contract documents and configuring the system for automated monitoring and reporting. You can define customer-specific graphical SLA report cards that verify compliance and the QoS delivered across all of their services.

Automated SLA reports can be scheduled for delivery on a regular basis and made available for viewing on a secure Web page with any Web browser. Internal SLA reports can be produced to help you identify and correct potential SLA violations before they happen. Regular reports on delivered QoS and SLA compliance improve customer satisfaction and loyalty.

Firehunter enables real-time management of SLAs. Individual parameters of an SLA such as availability, network latency, and response time are measured and compared to thresholds set in an SLA expression. SLA compliance calculations are performed every 5 minutes to provide a new real-time picture of accumulated SLA compliance. SLA compliance status is shown in the active Firehunter service model and graphs of SLA performance are presented with alerting thresholds that can be set to give a warning if a specific customer's SLA is about to be breached. The service provider can then take preemptive action. Historical reports give valuable summary and trend information about SLA performance.

To view actual Firehunter reports on leading Internet sites and services, visit the Demos and Tours section at: www.firehunter.com

Firehunter SLA Compliance Reporting

SLA Compliance Report

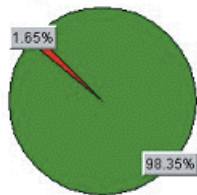
Executive Summary

Period : Feb 26, 2000 12:00:00 AM - Mar 2, 2000 12:59:59 AM

Compliant Calculations	: 239	Total SLA Revenue	: \$57,260.42
Non-Compliant Calculations	: 4	Total SLA Credit	: \$247.50
Undetermined Calculations	: 0	Net SLA Revenue	: \$57,012.92

Overall Compliance Summary

■ Compliant ■ Non-Compliant ■ Undetermined



New E-Commerce Capabilities

Firehunter/e-Commerce builds on the solid foundation of the core features found in the Firehunter product line. When you plug Firehunter/e-Commerce into the core Firehunter product, you gain the benefits of an integrated solution for successfully managing an e-commerce environment.

- **Firehunter SLA reports** Firehunter's SLA compliance reports summarize the quality of service delivered as compared to SLA requirements. Firehunter can also generate contract reports, which provide a management tool to document and track numerous SLAs. These reports are customizable to provide multiple views of services.

Firehunter SLA Contract Reporting

SLA Report Card

SLA	Compliant Calculations	Non-Compliant Calculations	Undetermined Calculations *	SLA Revenue	Credit	Net SLA Revenue
Books_Gold_AmazingStoreFrontSLA	40	0	0	\$8,000.00	\$0.00	\$8,000.00
Music_Gold_HotTunes	38	3	0	\$7,562.50	\$180.00	\$7,382.50
Network_Gold_HotTunes	40	1	0	\$11,343.75	\$67.50	\$11,276.25
Retail_Gold_ComputersRUs	41	0	0	\$12,604.17	\$0.00	\$12,604.17
Transaction_Gold_AmazingBooks	40	0	0	\$8,750.00	\$0.00	\$8,750.00
Web_Gold_AmazingBooks	40	0	0	\$9,000.00	\$0.00	\$9,000.00
TOTAL	239	4	0	\$57,260.42	\$247.50	\$57,012.92

Firehunter/e-Commerce provides a continuous view of the customer experience correlated with real-time data on infrastructure performance and minute-by-minute business results. Firehunter's transaction test capabilities quickly and easily measure availability and customer response times of the most important areas of your e-commerce site, including outside component operations such as catalog look-up and credit verification.

Firehunter/e-Commerce also lets business managers view real-time performance in business terms—approved sales per minute, items sold at any given time of the day, the number of shopping carts used—and filled. It provides the data business managers need to confirm the quality of service received from service providers and to determine the ROI that a site is producing.

In short, Firehunter/e-Commerce provides essential information for the successful operations of an e-storefront or similar web-based interactive applications. Whether you are a service provider or a hosted customer, Firehunter/e-Commerce helps you turn up the burners on your e-business operations. (See inside front cover for more e-Commerce reports.)

Expanded Network-Service Monitoring Capabilities

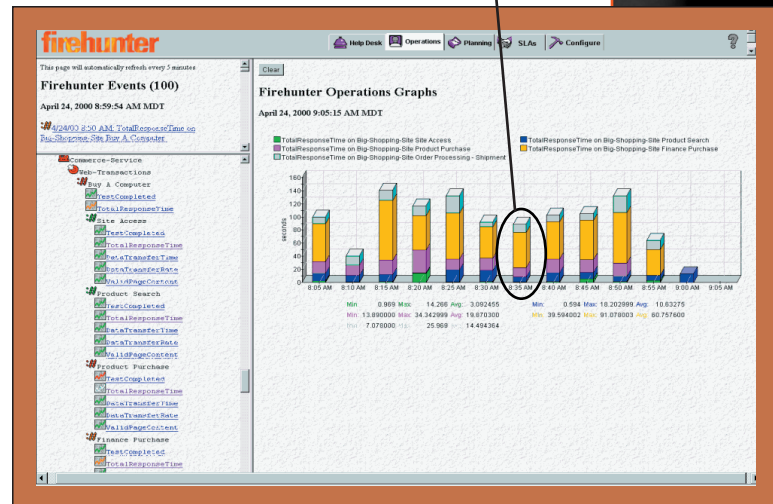
Firehunter's expanded network-service capabilities enable service providers to measure and report on the performance of entire networks, from customer sites through network backbones to customers or applications.

Using Cisco SA Agent technology, Firehunter can take measurements from Cisco routers at customer sites. This allows service providers to monitor their customer's experience without installing additional servers or probes. This enables ISPs to offer—at a premium price—precise, verifiable, customer-specific service-level agreements (SLAs) that will attract the growing number of companies entrusting business-critical services to the Internet.

The new network-service management capabilities simplify network analysis by graphically correlating end-to-end measurements. This enables ISPs to continuously evaluate key performance indicators, verify service levels, identify potential bottlenecks, and generate graphical reports on SLA compliance.

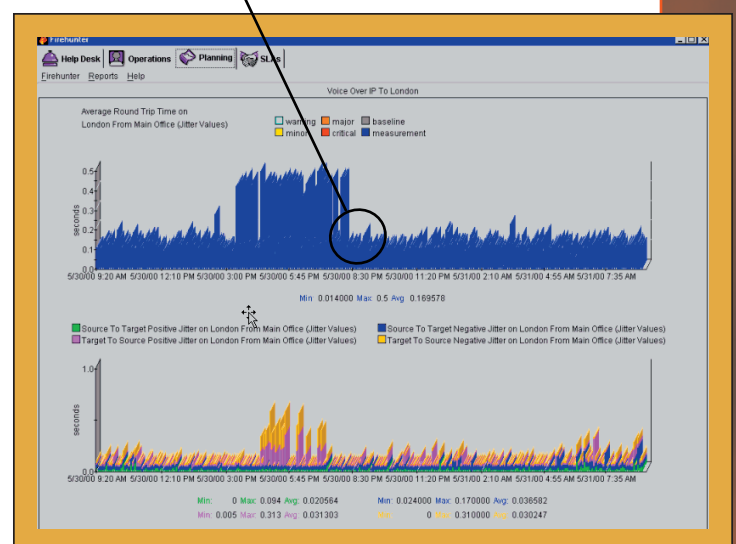
E-Commerce Transaction Monitoring (Customer Experience)

Individual transactions show total response time and time required for each step



- **e-Commerce Customer Experience** Firehunter/e-Commerce monitors and validates customer experience on your business website. Sample user transactions are captured and played against the site to measure in near real-time the performance seen by customers using the site. Transactions are broken down into steps corresponding to key actions taken by the user (e.g. site access, product search, product purchase, etc). The response of each step is measured with baselines and thresholds. The graph of transaction response times provides a real-time view of performance and which steps are causing problems.

Firehunter Network Performance Monitoring Latency and Jitter



- **Network Performance Monitoring** Firehunter's network service monitoring capabilities make it possible to measure and report on the performance of entire networks, from customer sites through network backbones to customers or applications. These capabilities employ Cisco SA Agent technology.

Red-Hot reports from Firehunter:

- SLA reports
- Aggregated service health
- Web, E-mail, News, DNS, RADIUS, FTP, LDAP, Web hosting, e-commerce, network performance
 - response time
 - availability
- Service performance
 - response time
 - breakdown by service component
 - hourly, daily, weekly or user-defined basis
- Asset utilization
 - server statistics (CPU and memory usage)
 - load and response times
 - real-time data
 - trend summaries
- Diagnostics reports
 - key service health indicators, correlated in common report
 - problem isolation
- Planning Summary reports
 - performance and utilization
 - track performance, growth trends
 - asset, capacity and service planning

firehunter

DISCOVER

spark growth - and profitability

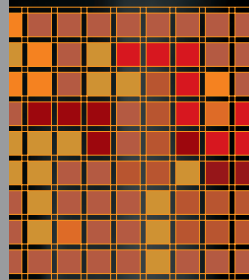
Today's fast-moving Internet market is extremely competitive. To grow your market share and glean profits from new revenues, you have to offer performance and service quality that is unmatched.

Whether you're a service provider, an enterprise or a dot-com, your competitiveness depends upon verified, superior service. When your competitors are just a click away, you can't afford slow-moving Web pages, sluggish e-commerce transactions or sites that are not available.

With Firehunter and its e-commerce, Web hosting and network performance management capabilities, you can be sure that you are delivering the quality of service you need to keep your current customers and attract new ones.

For service providers, Firehunter provides additional competitive advantages. Its end-to-end service management and SLA reporting capabilities make it possible to offer your customers premium services, backed by strong guarantees.

Put it all together and you have a solution that sparks your growth and profitability.



System Requirements

Firehunter Diagnostic Management Server (DMS) is supported on the following hardware and software:

- SunSPARC, Ultra Server or Workstation, including multi-processors with Solaris 2.6, 2.7, 2.8
- Intel-based systems, Microsoft Windows NT Workstation (or Server) 4.0 (SP4 or SP5) and Windows 2000
- HP-UX 11.0 on workstations or servers

Firehunter Measurement Agents are supported on the following platforms:

- Microsoft Windows NT 4.0 (SP4 or SP5) and Windows 2000
- SunSPARC, Solaris 2.5.1, 2.6, 2.7, 2.8
- FreeBSD 3.1, 3.2, 3.3
- Red Hat Linux 6.1, 6.2
- HP-UX 10.20, 11.00

For More Information

Detailed information about Firehunter is available online at www.firehunter.com or through any Firehunter sales office. Firehunter scales to meet the needs of even the largest, global enterprises. To find the configuration that's right for you, check with your Firehunter sales representative.

United States:
Chicago, Illinois
312-474-4010

Rockville, Maryland
(410) 362-7706

Japan:
Tokyo, Japan
(+81 3) 3335 8542

Englewood, Colorado
(303) 662-4373

Europe:
Amstelveen, The Netherlands
(+31 20) 5479824

Asia Pacific:
Blackburn, Australia
(+61 3) 9210 5405

Fort Collins, Colorado
(970) 288-3030

Berkshire, United Kingdom
44 (0) 7004 666666

Mountain View, California
(650) 962-2801

Bad Homburg, Germany
(+49 6172) 499 783

[Acknowledgements:]

Java™ and Solaris® are registered U.S. trademarks of Sun Microsystems, Inc.

Windows NT® is a U.S. registered trademark of Microsoft Corporation.

UNIX® is a registered trademark of the Open Group.

Technical information in this document is subject to change without notice.

Agilent Technologies, Inc.
Printed in the USA. 6/00
5980-1427E



Agilent Technologies
Innovating the HP Way