



QUALYS™

## ON DEMAND VULNERABILITY MANAGEMENT

### Security Demands Drive Shift to Vulnerability Management

*“Enterprises that implement a vulnerability management process will experience 90 percent fewer successful attacks than those that make an equal investment only in intrusion detection systems.”<sup>(1)</sup>*

**Gartner, Inc.**



## On Demand Business: Global Opportunities, Increased Risks

Technology has transformed the way we all do business. With on-demand technology, today's companies enjoy huge opportunities for improving productivity and reaping the benefits of data sharing with customers, suppliers and business partners. As a business enabler and operational necessity, open systems are flexible, responsive and global. Without proper management, however, this same technology brings associated security risks.

The key challenge is data security—safeguarding the company's information assets. Data such as strategic plans, customer information and R&D results are both crucial to operational success and lucrative targets for attackers. Even generic security threats such as worms and viruses can interrupt business continuity and significantly lower profitability.

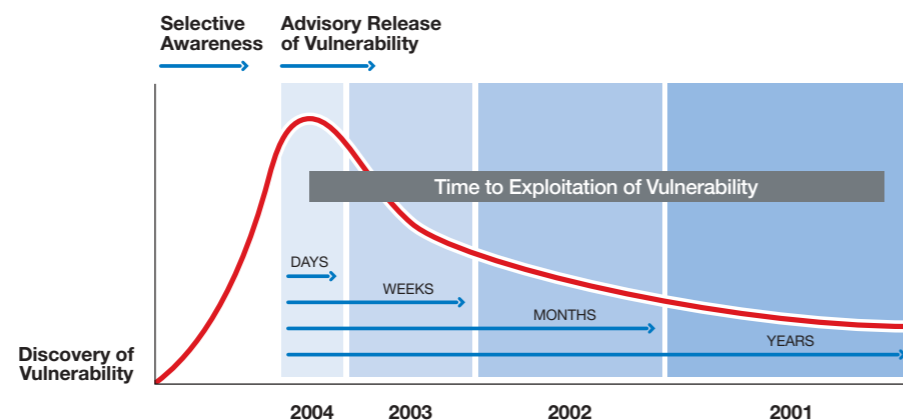
### Network Security – A Critical Business Success Factor

The most recent CSI/FBI survey discovered that the average financial loss from security violations was \$380,000. Losses for theft of proprietary information averaged \$2.7 million per company. Civil liabilities for violations of consumer privacy and security regulations can be much higher. Loss of customer confidence is incalculable. Because of its financial impact, network security has become a critical success factor for businesses and can make or break organizations of any size.

Dozens of new vulnerabilities are found daily in operating systems, applications and critical network assets. Left undetected or improperly corrected, these vulnerabilities provide an open door for 99% of all network attacks. Despite firewalls, virus detection software and intrusion detectors, today's attacks bypass these layers of protection and directly target network weaknesses. By exploiting these known issues, worms, hackers and thieves cause billions of dollars in damage each year.

To compound these risks, sophisticated worms are appearing faster with nearly instant propagation. As a result, security teams have an ever shrinking time frame to identify and fix issues before they can be compromised by an attack.

### Compression of The Discovery/Attack Life Cycle



*"Enterprises that practice sound vulnerability management, rather than only intrusion detection, will experience fewer cyberattacks and suffer less damage from them."*

M. Nicolett and J. Pescatore  
Gartner, Inc.

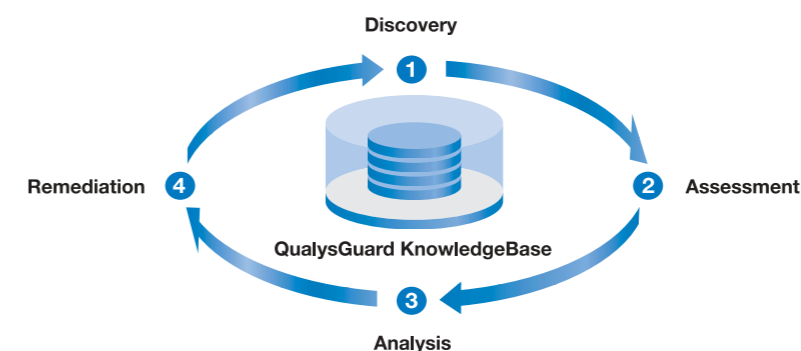
*"The window between vulnerability discovery and time to exploitation is narrowing rapidly. Today's networking environment requires continuous auditing with real-time vulnerability and patch updates."*

Howard A. Schmidt, Former  
Security Advisor to the White  
House, CISO of eBay

## Addressing On Demand Security Requirements

IT departments can reduce threats and prevent intrusions with frequent assessments of their rapidly changing network infrastructure, quickly locating critical asset risks, accurately identifying security issues, and implementing corrective actions. Sounds simple, yet implementation is difficult, even impossible with typical software tools that generate volumes of unmanageable data with questionable integrity.

Qualys meets the security requirements of business by supplying on demand, continuous network security audits and vulnerability management. Called QualysGuard, it is delivered as an independent, third-party service. QualysGuard resolves traditional barriers and transcends the limitations of software tools and provides an end-to-end process for vulnerability management.



### 1 Discovery: Network Understanding and Control

*The Discovery phase provides an understanding of the constantly changing network topology and identifies which critical assets may be at risk and warrant assessment.*

### 2 Assessment: Detect Network Weaknesses

*Accurately and comprehensively testing the network for any potential weakness that could be exploited is the foundation of vulnerability assessment.*

### 3 Analysis: Reviewing and Interpreting Audit Results

*Security professionals and corporate executives alike need instant access to reliable reports that can provide unbiased answers concerning the security of the network and actions required to effectively reduce risks.*

### 4 Remediation: Prioritizing and Managing Corrective Actions

*The final stage of the vulnerability management process involves prioritizing what assets are most valuable and remediating the vulnerabilities that pose the greatest risk to your network via links to verified fixes.*

QualysGuard automates the vulnerability management process, saving time, money, and providing the comprehensive network security testing required for today's on-demand businesses.

*"We use QualysGuard to audit business-critical assets to protect our brand and our shareholders against potential financial loss. As an on demand service, QualysGuard Enterprise allows us to align our information security with our core business strategies."*

Dan Klinger, Manager of  
Information Security  
Hershey Foods

*"When we considered the performance, accuracy, ease of use, and deployability of QualysGuard, it yielded a very cost-effective solution for our network."*

Peter Albert, Director of Operations  
iPass Inc.

*"The increasing frequency of cyber attacks requires us to perform more frequent, more reliable security audits in order to stay ahead of vulnerabilities and ensure that our network is protected. Qualys allows us to conduct daily security audits while significantly reducing our costs."*

Robert Noakes, Security Specialist  
California State Lottery

## Architecture Enables Security On Demand

Qualys has architected its service from the ground up to automate network security auditing and vulnerability management. Qualys' on demand technology gives companies an automated system to audit network security from any Internet browser. Since the Qualys solution is delivered over the Web, customers can run network security audits anytime, without the cost or manpower requirements associated with software-based solutions. This unique architecture is the first of its kind.

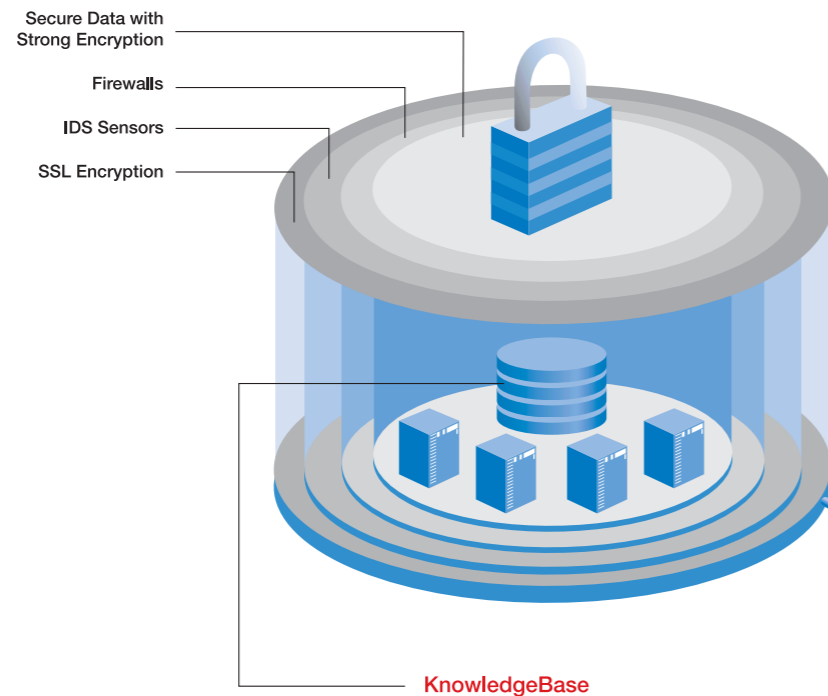
Qualys' architecture enables security on demand. The architecture consists of:

- Web User Interface for anytime, anywhere access
- Secure Operations Centers to redundantly store encrypted customer data
- KnowledgeBase of vulnerability signatures, updated daily with new audits, patches, and fixes
- Internet Remote Scanners to conduct network perimeter audits
- QualysGuard Scanner Appliances to conduct internal network audits

*QualysGuard's architecture enables accurate vulnerability scanning, data integrity, and ease of use while delivering the lowest total cost of ownership.*

### QualysGuard Secure Operations Centers (SOCs)

Process vulnerability data with n-tiered high availability architecture with load balanced servers, secure databases and encrypted storage.



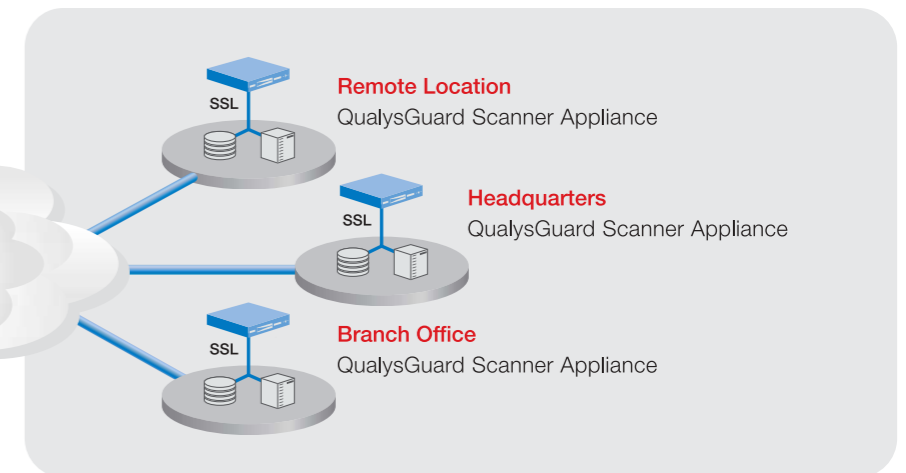
#### KnowledgeBase

Intelligence for QualysGuard services. The industry's largest and most accurate database of vulnerability signatures containing nearly 4000 unique, non-intrusive signatures. Automated updates ensure that QualysGuard users test for the latest network security threats.

### Customer's Network

#### Web User Interface QualysGuard Log In

Browser used to launch scans, read reports, access fix information and track vulnerability tickets from any location at any time.



#### QualysGuard Scanner Appliances

Appliance versions of Internet scanners enable internal network auditing. Snap-in and scan, no user maintenance required. Fully automated with the latest vulnerability signatures. Employs secure communications with SSL encryption.

#### Internet Remote Scanners

For fast, efficient external (perimeter) scanning. Enabled on Qualys servers in Qualys Secure Operations Centers. Inference-based scanning engine for highly accurate vulnerability detection and minimization of false-positives.

## The QualysGuard Advantage

*“Ensuring maximum protection against the latest security threats of the day is a growing concern within our organization. The Qualys on demand technology allows us to audit our security status at any moment and manage network vulnerabilities on a centralized, enterprise-wide level with a fraction of the resources and cost.”*

Mark Iovinelli, Enterprise Design and Implementation Team Manager  
**RR Donnelley**

*“QualysGuard enables us to perform security audits as often as necessary, sort vulnerabilities immediately as they are added to the QualysGuard database, and work proactively to remediate them. This helps us secure all of our network entry points, enforce ICI security policies and assists us in meeting federal requirements.”*

Paul Simmonds, Director of Global Information Security  
**Imperial Chemical Industries**

### Highly Accurate

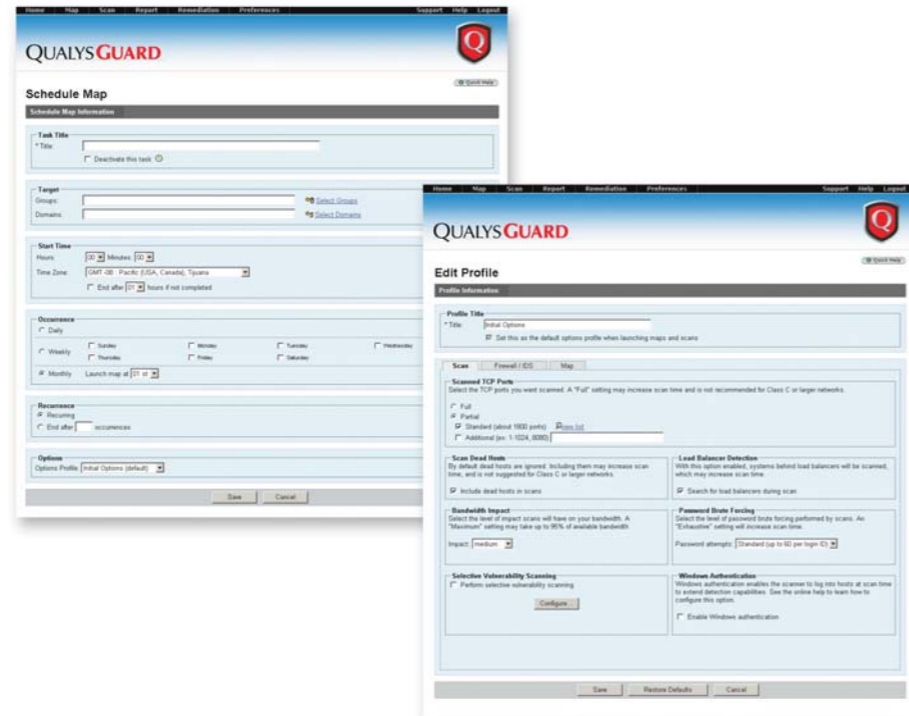
Accuracy of the scanner is a primary requirement in choosing a network security auditing solution. Components of accuracy involve the depth and quality of the audits in combination with a vendor’s ability to eliminate false-positives.

QualysGuard leads the industry in scanning accuracy, delivering:

- 99.997% overall accuracy (.003% false-positive rate)\*— certified by independent auditors and based on over 1 million customer-performed scans each quarter
- Nearly 4000 unique vulnerability signatures— 2x nearest competitor
- Fingerprints over 500 unique applications, operating systems and protocols— 3x nearest competitor
- New audits added daily and available in real-time to customers
- Disciplined audits only check applicable systems— no unnecessary scans
- Non-intrusive audits

### Easy to Use / Robust Management Console

The QualysGuard Web User Interface was designed by business users and security experts. This makes using QualysGuard intuitive, yet sophisticated enough to both answer high-level business security questions and provide asset-level data for detailed needs of administrators.



\*Average reported false-positives across Qualys customer base, per survey of over one million scans.

### Instantly Deployable

QualysGuard requires no software, existing hardware or software infrastructure, or specific technical expertise. Implementing QualysGuard is simple, fast, and immediately effective. Whether you scan the network perimeter or test the entire infrastructure of remote offices, QualysGuard can be up and running in minutes, and be used instantly from any location via a Web browser.



QualysGuard Scanner Appliances can be added effortlessly to securely audit internal networks.

### Trusted, Third Party Results

Because QualysGuard is Web-based, Qualys maintains the operational integrity, KnowledgeBase, and security architecture of the complete network auditing and vulnerability management system. Unlike user-owned and operated software tools, QualysGuard security audit data is tamper-resistant and satisfies regulatory requirements of mandates such as Gramm-Leach-Bliley, Sarbanes-Oxley, SB1386, and HIPAA.

### QualysGuard Benefits vs. Software Solutions

| BENEFITS    | QUALYSGUARD   | SOFTWARE SOLUTIONS                              |
|-------------|---|---|
| Deployment  | Immediate, automated                                | Manual, time-consuming                          |
| Scalability | Increase scale with no additional overhead          | Raises management cost                          |
| Quality     | Fewer bugs, fast response on issues and new threats | Many bugs, slow to fix, manual threat updates   |
| Reporting   | Centralized, dynamic, customized                    | Static, hard to customize, not centralized      |
| Security    | Encrypted storage, transit encryption               | No encrypted storage                            |
| Management  | Automated process, no system management             | Maintain hardware, software, database, security |
| TCO         | Lowest TCO, proven ROI                              | Higher TCO                                      |

*“The privacy and security of our patients’ information is a fundamental requirement at Cedars-Sinai. Qualys provides us with a third-party capability to audit our networks for vulnerabilities and provide verified fixes immediately. With an automated process, we have significantly reduced our costs for network security audits.”*

Ray Duncan, Director of Technology and Architecture  
**Cedars-Sinai Medical Center**

*“The ease-of-use, its automated scanning capability, and the overall value combine to make QualysGuard an important tool for us in securely protecting our network and its data.”*

Stephan Mueller, Sr. Security and Business Systems Continuity Manager  
**Fujitsu Siemens Computers**



**Winner. IDG Network Award (Jun/2004)**

*Qualys was selected as the winner of the prestigious "Best Service of the Year for Network Protection" award and also named a finalist for "Most Innovative Use of Technology Product" award.*



**Analyst's Choice Award – eWeek (July/2003)**

*"[QualysGuard] consistently identified the most potential exposures and identified the most serious problems, earning it our eWEEK Labs Analyst's Choice Award."*



**Winner. TechWorld Recommended (Sept/2003)**

*"Qualys scores above and beyond the competition as it uses an attack database which lists many thousands of weaknesses and these are regularly updated whenever a new threat is identified...[Qualys is] a very sophisticated vulnerability scanning service that delivers a huge amount of easily accessible information about the state of your local network."*

## QualysGuard Solution Offerings

### QUALYS<sup>®</sup>GUARD<sup>®</sup> ENTERPRISE

QualysGuard Enterprise automates the process of vulnerability management—from network discovery and assessment to on-demand reporting, remediation tracking and enforcement of security policies. QualysGuard Enterprise eliminates traditionally labor-intensive audit practices, saving time and simplifying large-scale vulnerability management. As a highly scalable enterprise solution, the on demand service supports distributed security auditing, centralized reporting from distributed scans, and many customization options for flexible reporting and scan configuration.

### QUALYS<sup>®</sup>GUARD<sup>®</sup> EXPRESS

QualysGuard Express offers an accurate, automated security audit and vulnerability management service without the substantial cost, resource, or rollout issues associated with software solutions. QualysGuard Express is easy to use and can be deployed instantly. The service is ideal for small to medium sized organizations (or departmental operating units) seeking protection against vulnerabilities, including the latest worms and network security risks.

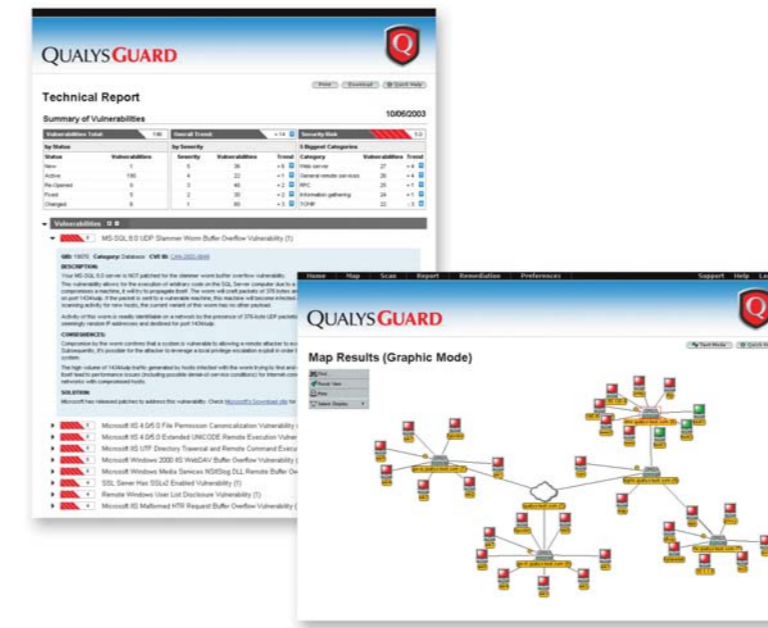


### QUALYS<sup>®</sup>GUARD<sup>®</sup> CONSULTANT

QualysGuard Consultant enables auditors to reduce their time on-site by scoping and performing detailed vulnerability assessments remotely—anytime and anywhere. QualysGuard Consultant allows network security auditors to conduct engagements faster and more efficiently through easy setup and accurate, comprehensive results. Web-based reporting makes audit results immediately available from any location. Customization options enable consultants to easily create client-specific reports, and to configure scans for optimal performance on client networks.

### QUALYS<sup>®</sup>GUARD<sup>®</sup> MSP

QualysGuard MSP allows managed security providers (MSPs) to immediately deploy a comprehensive vulnerability assessment service as part of an integrated suite of managed services. QualysGuard is ideally suited to meet the needs of MSPs, enabling central operations to securely scan internal and external networks in real-time, and provide on-demand vulnerability management services as part of a differentiated managed security program.



**Qualys Wins SC Magazine Awards (Apr/2004)**

*The SC Magazine Awards distinguish vendors that are nominated by their readers. Qualys was awarded "Best Security Service" and "Editors Choice Award" from a field of more than 900 nominations.*



**Winner. Computerworld Innovative Technology Awards (Sept/2003)**

*The Computerworld Innovative Technology Awards distinguish vendors that are nominated by their customers for offering leading-edge products or services that provide measurable payback. QualysGuard was selected as the security award winner from a field of 350 nominations.*



**Qualys Wins InfoWorld 100 Award**

*The InfoWorld 100 Awards Honor Companies that Executed Ground-Breaking IT Projects in 2003.*

## Company Expertise

Qualys is the leading provider of vulnerability management and pioneered the on demand delivery model. The Qualys flagship service, QualysGuard, performs more than 1 million scans per quarter on networks owned by thousands of organizations, including some of the world's largest enterprises.

QualysGuard was built from the ground up as the first on demand vulnerability management solution. The solution uniquely provides companies an automated system to audit network security at any time from any Internet browser—proactive assessment and remediation of security risks is therefore accomplished without any infrastructure to deploy and manage. QualysGuard users can immediately identify, prioritize and remediate vulnerabilities before exploitation by worms or attackers. This automated solution enables organizations to reliably detect and eliminate vulnerabilities more frequently and accurately than with traditional software solutions.

Qualys' unique on demand technology ensures immediate and up-to-date knowledge of vulnerabilities, high scalability of scanning, and accuracy and reliability of network audits without straining IT resources. With the increasing sophistication and shortened lifecycle of attacks, automating and auto-provisioning vulnerability management is critical in fighting the threats that define today's security climate.

With its extensive experience identifying and detecting vulnerabilities on real world networks, Qualys has developed the world's largest and most accurate vulnerability signature database, adding dozens of new vulnerability signatures each week. Qualys publishes predictive indices of both internal and external vulnerabilities that are at the greatest risk for compromise. These dynamic Top 10 lists are updated automatically and continuously from a statistically representative sample of thousands of networks, and help security administrators prioritize their remediation efforts by focusing on the most dangerous threats.

As a company, Qualys serves thousands of enterprise customers, including ABN Amro, Hershey Foods, Hewlett-Packard and The Thomson Corporation. Qualys security experts frequently speak at industry events and advise Congress on the development of national policy for digital security. Qualys is headquartered in Redwood Shores, California, with European offices in France, Germany and the U.K., and Asian offices in Japan, Singapore, Australia, Korea and the Republic of China.

To learn more about how Qualys can help your organization immediately reduce network threats, call **1 (800) 745 4355** or visit **[www.qualys.com](http://www.qualys.com)** for a free trial of QualysGuard.

(1) "Security Demands Drive Shift to Vulnerability Management", M. Nicolett and J. Pescatore, 19 November 2003, Gartner, Inc.





**QUALYS™**

**Qualys Corporate Headquarters**

**Qualys, Inc.**

1600 Bridge Parkway  
Redwood Shores, CA 94065  
T: (650) 801 6100  
F: (650) 801 6101

**Worldwide Offices**

**UK – Qualys, Ltd.**

Abbey House 18-24 Stoke Road  
Slough, Berkshire, SL2 5AG  
T: +44 (0) 1753 495570  
F: +44 (0) 1753 495577

**Germany – Qualys GmbH**

München Airport  
Terminalstrasse Mitte 18  
85356 München  
T: +49 (0) 89 97007 146  
F: +49 (0) 89 97007 200

**France – Qualys Technologies**

80 avenue de la Grande Armée  
75017 Paris  
T: +33 (0) 1 44 17 00 60  
F: +33 (0) 1 44 17 00 63

For more information, visit: [www.qualys.com](http://www.qualys.com)