Qualys, Inc.
2017 Annual Report

Qualys, Inc.
2018 Proxy Statement

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QUALYS, INC.
919 East Hillsdale Boulevard, 4th Floor
Foster City, California 94404

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

To Be Held at 11:00 a.m. Pacific Daylight Time on Monday, June 18, 2018

TO THE HOLDERS OF COMMON STOCK
OF QUALYS, INC.:

The Annual Meeting of Stockholders of Qualys, Inc., a Delaware corporation, will be held on **Monday, June 18, 2018, at 11:00 a.m. Pacific Daylight Time**, at Qualys's corporate headquarters, 919 East Hillsdale Boulevard, 4th Floor, Foster City, California 94404, for the following purposes as more fully described in the accompanying proxy statement:

1. To elect two Class III directors to serve until the 2021 annual meeting of stockholders or until their successors are duly elected and qualified;
2. To ratify the appointment of Grant Thornton LLP as our independent registered public accounting firm for our fiscal year ending December 31, 2018;
3. To approve, on an advisory and non-binding basis, the compensation of our named executive officers as described in this proxy statement; and
4. To transact such other business as may properly come before the meeting or any adjournments or postponements thereof.

The board of directors of Qualys, Inc. has fixed the close of business on April 19, 2018 as the record date for the meeting. Only stockholders of record of our common stock on April 19, 2018 are entitled to notice of and to vote at the meeting. Further information regarding voting rights and the matters to be voted upon is presented in our proxy statement.

On or about April 27, 2018, we expect to mail to our stockholders a Notice of Internet Availability of Proxy Materials (the "Notice") containing instructions on how to access our proxy statement for our annual meeting and our annual report to stockholders. The Notice provides instructions on how to vote online or by telephone and includes instructions on how to receive a paper copy of proxy materials by mail. This proxy statement and our 2017 annual report can be accessed directly at the following Internet address: http://www.proxyvote.com. All you have to do is enter the control number located on your proxy card.

YOUR VOTE IS IMPORTANT. Whether or not you plan to attend the Annual Meeting of Stockholders, we urge you to submit your vote via the Internet, telephone or mail.

We appreciate your continued support of Qualys, Inc. and look forward to either greeting you personally at the meeting or receiving your proxy.

By order of the Board of Directors,

/s/ Philippe F. Courtot

Philippe F. Courtot
Chairman, President and Chief Executive Officer
Foster City, California
April 27, 2018

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QUALYS, INC.

919 East Hillsdale Boulevard, 4th Floor
Foster City, California 94404

PROXY STATEMENT
FOR 2018 ANNUAL MEETING OF STOCKHOLDERS

to be held on Monday, June 18, 2018 at 11:00 a.m. Pacific Daylight Time

This proxy statement and the enclosed form of proxy are furnished in connection with the solicitation of proxies by our board of directors for use at the annual meeting of stockholders (the "Annual Meeting") to be held on June 18, 2018, and any postponements, adjournments or continuations thereof. The Annual Meeting will be held at Qualys's corporate headquarters, 919 East Hillsdale Boulevard, 4th Floor, Foster City, California 94404, on June 18, 2018 at 11:00 a.m. Pacific Daylight Time. On or about April 27, 2018, we expect to mail to our stockholders a Notice of Internet Availability of Proxy Materials containing instructions on how to access our proxy statement for our Annual Meeting and our annual report to stockholders.

The information provided in the "question and answer" format below is for your convenience only and is merely a summary of the information contained in this proxy statement. You should read this entire proxy statement carefully.

What matters am I voting on?

You will be voting on:

- the election of two Class III directors to hold office until the 2021 annual meeting of stockholders or until their successors are duly elected and qualified;
- a proposal to ratify the appointment of Grant Thornton LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2018;
- a proposal to approve, on an advisory and non-binding basis, the compensation of our named executive officers as described in this proxy statement; and
- any other business that may properly come before the meeting.

How does the board of directors recommend I vote on these proposals?

The board of directors recommends a vote:

- FOR the nominees for election as Class III directors;
- FOR the ratification of the appointment of Grant Thornton LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2018; and
- FOR the compensation of our named executive officers as described in this proxy statement.

Who is entitled to vote?

Holders of our common stock as of the close of business on April 19, 2018, the record date, may vote at the Annual Meeting. As of the record date, we had 38,978,887 shares of common stock outstanding. In deciding all matters at the Annual Meeting, each stockholder will be entitled to one vote for each share of common stock held on the record date. We do not have cumulative voting rights for the election of directors.

Registered Stockholders. If your shares are registered directly in your name with our transfer agent, you are considered the stockholder of record with respect to those shares, and the Notice was provided to you directly by us. As the stockholder of record, you have the right to grant your voting proxy directly to the individuals listed on the proxy card or to vote in person at the Annual Meeting.

Street Name Stockholders. If your shares are held in a stock brokerage account or by a bank or other nominee, you are considered the beneficial owner of shares held in street name, and the Notice was forwarded to you by your broker or nominee, who is considered the stockholder of record with respect to those shares. As the beneficial owner, you have the right to direct your broker or nominee how to vote your shares. Beneficial owners are also invited to attend the Annual Meeting. However, because a beneficial owner is not the stockholder of record, you may not vote your shares in person at the Annual Meeting unless you follow your broker's procedures for obtaining a legal proxy. If you request a printed copy of the proxy materials by mail, your broker or nominee will provide a voting instruction card for you to use.

How do I vote?

There are four ways to vote:

- by Internet at http://www.proxyvote.com, 24 hours a day, seven days a week, until 11:59 p.m. Eastern time on June 17, 2018 (have your proxy card in hand when you visit the website);
- by toll-free telephone at 1-800-690-6903, until 11:59 p.m. Eastern time on June 17, 2018 (have your proxy card in hand when you call);
- by completing and mailing your proxy card (if you received printed proxy materials); or
- by written ballot at the Annual Meeting.

Can I change my vote?

Yes. You can change your vote or revoke your proxy any time before the Annual Meeting by:

- entering a new vote by Internet or by telephone;
- returning a later-dated proxy card;
- notifying the Corporate Secretary of Qualys, Inc., in writing, at the address listed on the front page; or
- completing a written ballot at the Annual Meeting.

What is the effect of giving a proxy?

Proxies are solicited by and on behalf of our board of directors. The persons named in the proxy have been designated as proxies by our board of directors. When proxies are properly dated, executed and returned, the shares represented by such proxies will be voted at the Annual Meeting in accordance with the instruction of the stockholder. If no specific instructions are given, however, the shares will be voted in accordance with the recommendations of our board of directors as described above. If any matters not described in the proxy statement are properly presented at the Annual Meeting, the proxy holders will use their own judgment to determine how to vote your shares. If the Annual Meeting is adjourned, the proxy holders can vote your shares on the new meeting date as well, unless you have properly revoked your proxy instructions, as described above.

Why did I receive a notice regarding the availability of proxy materials on the Internet instead of a full set of proxy materials?

In accordance with the rules of the Securities and Exchange Commission ("SEC"), we have elected to furnish our proxy materials, including this proxy statement and our annual report to stockholders, primarily via the Internet. On or about April 27, 2018, we expect to mail to our stockholders a Notice of Internet Availability of Proxy Materials (the "Notice") that contains instructions on how to access our proxy materials on the Internet, how to vote at the meeting, and how to request printed copies of the proxy materials and annual report. Stockholders may request to receive all future proxy materials in printed form by mail or electronically by e-mail by following the instructions contained in the Notice. We encourage stockholders to take advantage of the availability of the proxy materials on the Internet to help reduce the environmental impact of our annual meetings.

What is a quorum?

A quorum is the minimum number of shares required to be present at the annual meeting for the meeting to be properly held under our bylaws and Delaware law. The presence, in person or by proxy, of a majority of all issued and outstanding shares of common stock entitled to vote at the meeting will constitute a quorum at the meeting. A proxy submitted by a stockholder may indicate that all or a portion of the shares represented by the proxy are not being voted ("stockholder withholding") with respect to a particular matter. Similarly, a broker may not be permitted to vote stock ("broker non-vote") held in street name on a particular matter in the absence of instructions from the beneficial owner of the stock. See "How may my brokerage firm or other intermediary vote my shares if I fail to provide timely directions?" The shares subject to a proxy that are not being voted on a particular matter because of either stockholder withholding or broker non-vote will count for purposes of determining the presence of a quorum. Abstentions are also counted in the determination of a quorum.

How many votes are needed for approval of each matter?

- *Proposal No. 1:* The election of directors requires a plurality of the votes cast at the meeting, meaning that the individuals who receive the largest number of votes cast "for" their election are elected as directors. As a result, any shares not voted "for" a particular nominee (whether as a result of "withhold" votes or broker non-votes) will not be counted in such nominee's favor and will have no effect on the outcome of the election. You may vote "for" or "withhold" on each of the nominees for election as a director.
- *Proposal No. 2:* The ratification of the appointment of Grant Thornton LLP must receive the affirmative vote of a majority of the shares present in person or by proxy at the meeting and entitled to vote thereon to be approved. You may vote "for," "against" or "abstain" on this proposal. Abstentions represent shares present and entitled to vote and thus, will have the same effect as votes "against" this proposal.
- *Proposal No. 3:* The approval, on an advisory and non-binding basis, of the compensation of our named executive officers as described in this proxy statement must receive the affirmative vote of a majority of the shares present in person or by proxy at the meeting and entitled to vote thereon to be approved. You may vote "for," "against" or "abstain" on this proposal. Abstentions represent shares present and entitled to vote and thus, will have the same effect as votes "against" this proposal. Broker non-votes will have no effect on the outcome of this proposal because they represent shares that are not entitled to vote on the matter.

How are proxies solicited for the Annual Meeting?

The board of directors is soliciting proxies for use at the Annual Meeting. All expenses associated with this solicitation will be borne by us. We will reimburse brokers or other nominees for reasonable expenses that they incur in sending these proxy materials to you if a broker or other nominee holds your shares.

How may my brokerage firm or other intermediary vote my shares if I fail to provide timely directions?

Brokerage firms and other intermediaries holding shares of common stock in street name for customers are generally required to vote such shares in the manner directed by their customers. In the absence of timely directions, your broker will have discretion to vote your shares on our sole "routine" matter—the proposal to ratify the appointment of Grant Thornton LLP. Your broker will not have discretion to vote on the election of directors or the proposal to approve executive compensation, absent direction from you.

Is my vote confidential?

Proxy instructions, ballots, and voting tabulations that identify individual stockholders are handled in a manner that protects your voting privacy. Your vote will not be disclosed either within Qualys, Inc. or to third parties, except as necessary to meet applicable legal requirements, to allow for the tabulation of votes and certification of the vote, or to facilitate a successful proxy solicitation.

Where can I find the voting results of the Annual Meeting?

We will announce preliminary voting results at the Annual Meeting. We will also disclose voting results on a Current Report on Form 8-K that we will file with the SEC within four business days after the Annual Meeting. If final voting results are not available to us in time to file a Current Report on Form 8-K, we will file a Current Report on Form 8-K to publish preliminary results and will provide the final results in an amendment to the Form 8-K as soon as they become available.

I share an address with another stockholder, and we received only one paper copy of the proxy materials. How may I obtain an additional copy of the proxy materials?

We have adopted a procedure called "householding," which the SEC has approved. Under this procedure, we deliver a single copy of the Notice and, if applicable, the proxy materials to multiple stockholders who share the same address unless we received contrary instructions from one or more of the stockholders. This procedure reduces our printing costs, mailing costs, and fees. Stockholders who participate in householding will continue to be able to access and receive separate proxy cards. Upon written or oral request, we will deliver promptly a separate copy of the Notice and, if applicable, the proxy materials to any stockholder at a shared address to which we delivered a single copy of any of these documents. To receive a separate copy, or, if you are receiving multiple copies, to request that Qualys only send a single copy, of the Notice and, if applicable, the proxy materials, stockholders may contact us as follows:

Qualys, Inc.
Attention: Investor Relations
919 East Hillsdale Boulevard, 4th Floor
Foster City, California 94404
(650) 801-6100

Stockholders who hold shares in street name may contact their brokerage firm, bank, broker-dealer or other similar organization to request information about householding.

What is the deadline to propose actions for consideration at next year's annual meeting of stockholders or to nominate individuals to serve as directors?

Stockholder Proposals

Stockholders may present proper proposals for inclusion in our proxy statement and for consideration at the next annual meeting of stockholders by submitting their proposals in writing to our Corporate Secretary in a timely manner. For a stockholder proposal to be considered for inclusion in our proxy statement for our 2019 annual meeting of stockholders, our Corporate Secretary must receive the written proposal at our principal executive offices not later than December 28, 2018. In addition, stockholder proposals must comply with the requirements of Rule 14a-8 regarding the inclusion of stockholder proposals in company-sponsored proxy materials. Proposals should be addressed to:

Qualys, Inc.
Attention: Corporate Secretary
919 East Hillsdale Boulevard, 4th Floor
Foster City, California 94404
(650) 801-6100

Our bylaws also establish an advance notice procedure for stockholders who wish to present a proposal before an annual meeting of stockholders but do not intend for the proposal to be included in our proxy statement. Our bylaws provide that the only business that may be conducted at an annual meeting is business that is (i) specified in our proxy materials with respect to such meeting, (ii) otherwise properly brought before the meeting by or at the direction of our board of directors, or (iii) properly brought before the meeting by a stockholder of record entitled to vote at the annual meeting who has delivered timely written notice to our Corporate Secretary, which notice must contain the information specified in our bylaws. To be timely for our 2019 annual meeting of stockholders, our Corporate Secretary must receive the written notice at our principal executive offices:

- not earlier than February 11, 2019; and
- not later than the close of business on March 13, 2019.

In the event that we hold our 2019 annual meeting of stockholders more than 30 days before or more than 60 days after the one-year anniversary date of the 2018 annual meeting, then notice of a stockholder proposal that is not intended to be included in our proxy statement must be received no earlier than the close of business on the 120th day before such annual meeting and no later than the close of business on the later of the following two dates:

- the 90th day prior to such annual meeting; or
- the 10th day following the day on which public announcement of the date of such meeting is first made.

If a stockholder who has notified us of his or her intention to present a proposal at an annual meeting does not appear to present his or her proposal at such meeting, we are not required to present the proposal for a vote at such meeting.

Nomination of Director Candidates

You may propose director candidates for consideration by our nominating and governance committee. Any such recommendations should include the nominee's name and qualifications for membership on our board of directors and should be directed to the Corporate Secretary of Qualys, Inc. at the address set forth above. For additional information regarding stockholder recommendations for director candidates, see "Board of Directors and Corporate Governance—Stockholder Recommendations for Nominations to the Board of Directors."

In addition, our bylaws permit stockholders to nominate directors for election at an annual meeting of stockholders. To nominate a director, the stockholder must provide the information required by our bylaws. In addition, the stockholder must give timely notice to our Corporate Secretary in accordance with our bylaws, which, in general, require that the notice be received by our Corporate Secretary within the time period described above under "Stockholder Proposals" for stockholder proposals that are not intended to be included in our proxy statement.

Availability of Bylaws

A copy of our bylaws is available on our website at http://investor.qualys.com. You may also contact our Corporate Secretary at our principal executive offices for a copy of the relevant bylaw provisions regarding the requirements for making stockholder proposals and nominating director candidates.

PROPOSAL NO. 1
ELECTION OF DIRECTORS

Our business affairs are managed under the direction of our board of directors, which is currently composed of seven members. Six of our directors are "independent" under the Nasdaq Stock Market listing standards. Our board of directors is divided into three staggered classes of directors. At each annual meeting of stockholders, a class of directors will be elected for a three-year term to succeed the same class whose term is then expiring.

Each director's term continues until the election and qualification of his successor, or his earlier death, resignation, or removal. Any increase or decrease in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. This classification of our board of directors may have the effect of delaying or preventing changes in control of our company.

The following table sets forth the names and certain other information for each of the nominees for election as a director and for each of the continuing members of the board of directors.

	Class	Age	Position	Director Since	Current Term Expires	Expiration of Term For Which Nominated
Nominees						
Philippe F. Courtot	III	73	Chairman, President and Chief Executive Officer	2000	2018	2021
Jeffrey P. Hank (1)	III	58	Director	2010	2018	2021
Continuing Directors						
Sandra E. Bergeron (1) (2)	I	59	Director	2006	2019	—
Todd P. Headley (1)	I	55	Director	2016	2019	—
Kristi M. Rogers (3)	I	48	Director	2013	2019	—
Donald R. Dixon (2)	II	70	Director	2000	2020	—
General Peter Pace (1) (3)	II	72	Director	2009	2020	—

(1) Member of the audit committee
(2) Member of the compensation committee
(3) Member of the nominating and governance committee

Nominees for Director

Philippe F. Courtot has served as our Chairman and Chief Executive Officer since March 2001, and has been a director since January 2000. He also served as our President from March 2011 to November 2013, and from May 2014 to present. From April 1999 to February 2000, Mr. Courtot served as Chairman and Chief Executive Officer of Signio Inc., a secure payments solution provider, until its acquisition by VeriSign, Inc. Mr. Courtot holds a Master of Science degree from the University of Paris.

We believe that Mr. Courtot possesses specific attributes that qualify him to serve as a member of our board of directors, including his experience as our President and Chief Executive Officer and his background in the technology industry, as well as his perspective as one of our significant stockholders.

Jeffrey P. Hank has served as a director of our company since January 2010. From June 2005 to July 2012, Mr. Hank was the Vice President, Chief Accounting Officer and Corporate Controller of

Intuit, Inc., and Mr. Hank served as the Vice President of Finance and Chief Accounting Officer of Intuit from July 2012 until September 2013. From June 2002 until September 2003, Mr. Hank was an audit partner at KPMG LLP. From September 1994 until June 2002, Mr. Hank was an audit partner at Arthur Andersen LLP. Mr. Hank holds a Bachelor of Science degree in Business Administration from the University of California at Berkeley.

We believe that Mr. Hank possesses specific attributes that qualify him to serve as a member of our board of directors, including his experience as an executive at a technology company and his background in the accounting industry.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" EACH OF THE NOMINEES NAMED ABOVE.

BOARD OF DIRECTORS AND CORPORATE GOVERNANCE

Continuing Directors

Sandra E. Bergeron has served as a director of our company since June 2006. From 2004 until 2012, Ms. Bergeron was a venture partner at Trident Capital, Inc., a venture capital firm. Ms. Bergeron currently serves on the board of directors of Sophos Group Plc and F5 Networks. Ms. Bergeron previously served on the board of directors of ArcSight, Inc. until it was acquired by Hewlett-Packard Company in September 2010, and also served on the board of directors of TriCipher, Inc. from 2004 until 2010. Ms. Bergeron holds a Bachelor of Business Administration degree from Georgia State University and a Master of Business Administration degree from Xavier University.

We believe that Ms. Bergeron possesses specific attributes that qualify her to serve as a member of our board of directors, including her experience as a director of technology companies and her background in the venture capital industry.

Todd P. Headley has served as a director of our company since February 2016. From 2003 until 2013, Mr. Headley served as the Chief Financial Officer of Sourcefire, Inc., until it was acquired by Cisco Systems, Inc. Prior to Sourcefire, Mr. Headley held key financial management positions in four venture-backed technology start-ups: Riverbed Technologies, Roadshow, BioNetrix and POMS. Mr. Headley currently serves as an advisor and board member to three privately held security companies. Mr. Headley began his career as a public accountant with Arthur Andersen LLP in Washington, D.C. Mr. Headley holds a Bachelor of Science degree in Accounting from Virginia Polytechnic Institute & State University (Virginia Tech).

We believe that Mr. Headley possesses specific attributes that qualify him to serve as a member of our board of directors, including his experience as an executive at technology companies and his background in the technology industry.

Kristi M. Rogers has served as a director of our company since August 2013. Ms. Rogers is currently co-founder and Managing Partner for Principal to Principal. Ms. Rogers was a co-owner and member of the board of Aspen Healthcare Services (now Aspen Medical International). Ms. Rogers ended the relationship and resigned from the Board in December 2016. From March 2014 to June 2015, Ms. Rogers served as Managing Director and Chief Executive Officer of Aspen Healthcare Services, LLC. From 2012 to 2014, Ms. Rogers served on the board of directors of Aspen Medical USA. Ms. Rogers served as a Managing Director of Government Affairs and Public Policy of Manatt, Phelps & Phillips LLP from February 2013 until February 2014. From August 2006 to January 2013, Ms. Rogers served in various positions, including Executive Vice President, President, Chief Executive Officer and Vice Chairman of the Board, at Aegis Defense Services LLC, a provider of security and support services to the U.S. government. Ms. Rogers has also served on the board of directors of several private companies. Ms. Rogers holds a Bachelor of Science degree in Political Science from Michigan State University.

We believe that Ms. Rogers possesses specific attributes that qualify her to serve as a member of our board of directors, including her executive experience and her expertise in the public service sector.

Donald R. Dixon has served as a director of our company since 2000. Since 1993, Mr. Dixon has been a co-founder and managing director of Trident Capital, a venture capital fund, and since 2015, Mr. Dixon has been a co-founder and managing director of Trident Capital Cybersecurity, a venture capital fund focused on cybersecurity. From 2008 to 2014, Mr. Dixon served on the board of directors of XRS Corporation, and since 2014 Mr. Dixon has served on the board of directors of Top Image

Systems, Ltd. Mr. Dixon also currently serves on the boards of directors of several private companies. Mr. Dixon holds a Bachelor of Science degree from Princeton University and a Master of Business Administration degree from the Stanford Graduate School of Business.

We believe that Mr. Dixon possesses specific attributes that qualify him to serve as a member of our board of directors, including his experience as a director of technology companies and his background in the venture capital industry.

General Peter Pace has served as a director of our company since May 2009. From June 1967 until October 2007, Gen. Pace served in the United States Marine Corps, including as Chairman of the Joint Chiefs of Staff. Since October 2007, Gen. Pace has been a principal at Pace Ventures LLC. From February 2010 until its acquisition by Court Square Capital Partners and J. Eric Pike in December 2014, Gen. Pace served on the board of directors of Pike Electric Corporation. Since January 2011, Gen. Pace has served on the board of directors of AAR Corp. From November 2012 to February 2014, Gen. Pace served on the board of directors of LaserLock Technologies, Inc. From December 2012 until its acquisition by Oracle in June 2016, Gen. Pace served on the board of directors of Textura Corp. From January 2003 to January 2011, Gen. Pace served on the board of directors of Steve Myers and Associates Inc., and from June 2010 to June 2013, Gen. Pace served on the board of directors of Wi2Wi Inc. Gen. Pace also currently serves on the boards of directors of several private companies and previously served on the President's Intelligence Advisory Board and Secretary of Defense's Defense Policy Board. Gen. Pace holds a Bachelor of Science degree from the U.S. Naval Academy and a Master of Science degree in Business Administration from The George Washington University.

We believe that Gen. Pace possesses specific attributes that qualify him to serve as a member of our board of directors, including his experience as a director of technology and defense companies and his leadership experience.

Director Independence

Our board of directors has reviewed the independence of each director. Based on information provided by each director concerning his or her background, employment and affiliations, our board of directors has determined that each of Ms. Bergeron, Mr. Dixon, Mr. Hank, Mr. Headley, Gen. Pace and Ms. Rogers do not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is "independent" as that term is defined under the applicable rules and regulations of the SEC and the listing requirements and rules of the Nasdaq Stock Market. In making these determinations, our board of directors considered the current and prior relationships that each non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock held by each non-employee director.

With respect to Mr. Dixon and Gen. Pace, our board of directors specifically considered that Mr. Dixon is the father of Peter Dixon, the Chief Executive Officer and Founder of Second Front Systems, Inc., that Gen. Pace serves on the board of directors of Second Front Systems, Inc., and the terms and value of the Representative Agreement we have with Second Front Systems, Inc. Our board of directors has concluded that our relationship with Second Front Systems, Inc. is not a material relationship that would impede the exercise of independent judgment by Mr. Dixon or Gen. Pace.

Leadership Structure

Mr. Courtot currently serves as both Chairman of our board of directors and President and Chief Executive Officer. Our board of directors believes that the current board leadership structure, coupled with a strong emphasis on board independence, provide effective independent oversight of

management while allowing the board of directors and management to benefit from Mr. Courtot's leadership and years of experience as an executive in the technology industry. Serving on our board of directors since 2000 and as Chief Executive Officer since 2001, Mr. Courtot is best positioned to identify strategic priorities, lead critical discussion and execute our strategy and business plans.

Mr. Courtot possesses detailed in-depth knowledge of the issues, opportunities, and challenges facing us. Independent directors and management sometimes have different perspectives and roles in strategy development. Our independent directors bring experience, oversight and expertise from outside of our company, while the Chief Executive Officer brings company specific experience and expertise. The board of directors believes that Mr. Courtot's combined role enables strong leadership, creates clear accountability, and enhances our ability to communicate our message and strategy clearly and consistently to stockholders.

Lead Independent Director

Our board of directors has appointed Mr. Dixon to serve as our lead independent director. As lead independent director, Mr. Dixon presides over periodic meetings of our independent directors, serves as a liaison between our Chairman and the independent directors and performs such additional duties as our board of directors may otherwise determine and delegate.

Board Meetings and Committees

During the year ended December 31, 2017, our board of directors held 4 meetings (including regularly scheduled and special meetings), our audit committee held 8 meetings, our compensation committee held 5 meetings, and our nominating and governance committee held 2 meetings. Each director attended at least 75% of the total number of meetings of the board of directors and the committees of which he or she was a member during 2017, except for Mr. Schmidt who was hospitalized and passed away in March 2017.

Although we do not have a formal policy regarding attendance by members of our board of directors at annual meetings of stockholders, we encourage, but do not require, directors to attend. Mr. Courtot, Ms. Bergeron, Mr. Hank, Mr. Headley and Ms. Rogers attended the 2017 annual meeting of stockholders.

Our board of directors has an audit committee, a compensation committee, and a nominating and governance committee, each of which has the composition and responsibilities described below. Members serve on these committees until their resignation or until otherwise determined by our board of directors.

Audit Committee

Our audit committee consists of Ms. Bergeron, Mr. Hank, Mr. Headley and Gen. Pace, with Mr. Hank serving as Chairman. The composition of our audit committee meets the requirements for independence under current Nasdaq Stock Market listing standards and SEC rules. Each member of our audit committee meets the financial literacy requirements of the Nasdaq Stock Market listing standards. In addition, our board of directors has determined that Mr. Hank and Mr. Headley are audit committee financial experts within the meaning of the rules and regulations of the SEC. Among other responsibilities, our audit committee:

- selects and hires a qualified firm to serve as the independent registered public accounting firm to audit our financial statements;
- helps to ensure the independence and performance of the independent registered public accounting firm;

- discusses the scope and results of the audit with the independent registered public accounting firm, and reviews, with management and the independent accountants, our interim and year-end operating results;
- oversees procedures for employees to submit concerns anonymously about questionable accounting or audit matters;
- reviews our policies on risk assessment and risk management;
- reviews related party transactions;
- obtains and reviews a report by the independent registered public accounting firm at least annually, that describes our internal quality-control procedures, any material issues with such procedures, and any steps taken to deal with such issues; and
- approves (or, as permitted, pre-approves) all audit and all permissible non-audit services, other than de minimis non-audit services, to be performed by the independent registered public accounting firm.

Our audit committee operates under a written charter that was adopted by our board of directors and satisfies the applicable rules of the SEC and the listing standards Nasdaq Stock Market. A copy of the audit committee charter is available on our website at http://investor.qualys.com.

Compensation Committee

Our compensation committee consists of Ms. Bergeron and Mr. Dixon, with Mr. Dixon serving as Chairman. The composition of our compensation committee meets the requirements for independence under current Nasdaq Stock Market listing standards and SEC rules. Each member of our compensation committee is also a non-employee director, as defined pursuant to Rule 16b-3 promulgated under the Exchange Act, and an outside director, as defined pursuant to Section 162(m) of the Internal Revenue Code of 1986. The purpose of our compensation committee is to discharge the responsibilities of our board of directors relating to the compensation of our executive officers. Among other responsibilities, our compensation committee:

- reviews, approves and determines, or makes recommendations to our board of directors regarding, the compensation of our executive officers;
- administers our stock and equity incentive plans;
- reviews and approves and makes recommendations to our board of directors regarding incentive compensation and equity plans; and
- establishes and reviews general policies relating to compensation and benefits of our employees.

Our compensation committee operates under a written charter that was adopted by our board of directors and satisfies the applicable rules of the SEC and the listing standards of the Nasdaq Stock Market. A copy of the compensation committee charter is available on our website at http://investor.qualys.com.

Nominating and Governance Committee

Our nominating and governance committee consists of Gen. Pace and Ms. Rogers, with Gen. Pace serving as Chairman. The composition of our nominating and governance committee meets the requirements for independence under current Nasdaq Stock Market listing standards and SEC rules. Among other responsibilities, our nominating and governance committee:

- identifies, evaluates and selects, or makes recommendations to our board of directors regarding, nominees for election to our board of directors and its committees;
- evaluates the performance of our board of directors and of individual directors;
- considers and makes recommendations to our board of directors regarding the composition of our board of directors and its committees;
- reviews developments in corporate governance practices;
- evaluates the adequacy of our corporate governance practices and reporting; and
- reviews and makes recommendations to our board of directors regarding corporate governance guidelines and matters.

Our nominating and governance committee operates under a written charter that was adopted by our board of directors and satisfies the applicable rules of the SEC and the listing standards Nasdaq Stock Market. A copy of the nominating and governance committee charter is available on our website at http://investor.qualys.com.

Considerations in Evaluating Director Nominees

The nominating and governance committee uses a variety of methods for identifying and evaluating director nominees. In its evaluation of director candidates, the nominating and governance committee will consider the current size and composition of the board of directors and the needs of the board of directors and the respective committees of the board of directors. Some of the qualifications that the nominating and governance committee considers include, without limitation, issues of character, integrity, judgment, diversity of experience, independence, area of expertise, corporate experience, length of service, potential conflicts of interest and other commitments. Nominees must also have the ability to offer advice and guidance to our Chief Executive Officer based on past experience in positions with a high degree of responsibility and be leaders in the companies or institutions with which they are affiliated. Director candidates must have sufficient time available in the judgment of the nominating and governance committee to perform all board of director and committee responsibilities. Members of the board of directors are expected to prepare for, attend, and participate in all board of director and applicable committee meetings. Other than the foregoing, there are no stated minimum criteria for director nominees, although the nominating and governance committee may also consider such other factors as it may deem, from time to time, are in our and our stockholders' best interests. The nominating and governance committee will also seek appropriate input from the Chief Executive Officer from time to time in assessing the needs of the board of directors for relevant background, experience, diversity and skills of its members.

Although the board of directors does not maintain a specific policy with respect to board diversity, the board of directors believes that the board should be a diverse body, and the nominating and governance committee considers a broad range of backgrounds and experiences. In making determinations regarding nominations of directors, the nominating and governance committee may take into account the benefits of diverse viewpoints. The nominating and governance committee also considers these and other factors as it oversees the annual board of director and committee evaluations.

Stockholder Recommendations for Nominations to the Board of Directors

The nominating and governance committee will consider candidates for director recommended by stockholders so long as such recommendations comply with the certificate of incorporation and bylaws of our company and applicable laws, rules and regulations, including those promulgated by the SEC. The committee will evaluate such recommendations in accordance with its charter, our bylaws and the regular nominee criteria described above. This process is designed to ensure that the board of directors includes members with diverse backgrounds, skills and experience, including appropriate financial and other expertise relevant to our business. Eligible stockholders wishing to recommend a candidate for nomination should contact our General Counsel in writing. Such recommendations must include information about the candidate, a statement of support by the recommending stockholder, evidence of the recommending stockholder's ownership of our stock and a signed letter from the candidate confirming willingness to serve on our board of directors. The committee has discretion to decide which individuals to recommend for nomination as directors.

A stockholder of record can nominate a candidate directly for election to the board of directors by complying with the procedures in Section 2.4(ii) of our bylaws. Any eligible stockholder who wishes to submit a nomination should review the requirements in the bylaws on nominations by stockholders. Any nomination should be sent in writing to Qualys, Inc., Attention: Corporate Secretary, 919 East Hillsdale Boulevard, 4th Floor, Foster City, California 94404. Notice must be received by us no earlier than February 11, 2019, and no later than March 13, 2019. The notice must state the information required by Section 2.4(ii)(b) of our bylaws and otherwise must comply with applicable federal and state law.

Stockholder Communications with the Board of Directors

Stockholders wishing to communicate with the board of directors or with an individual member of the board of directors may do so by writing to the board of directors or to the particular member of the board of directors, and mailing the correspondence to: Qualys, Inc., Attention: General Counsel, 919 East Hillsdale Boulevard, 4th Floor, Foster City, California 94404. All such stockholder communications will be forwarded to the appropriate member or members of the board of directors, or if none is specified, to the Chairman of the board of directors.

Corporate Governance Guidelines and Codes of Business Conduct and Ethics

Our board of directors has adopted Corporate Governance Guidelines. These guidelines address, among other items, the responsibilities of our directors, the structure and composition of our board of directors and corporate governance policies and standards applicable to us in general. In addition, our board of directors has adopted a Code of Business Conduct and Ethics that applies to all of our employees, officers and directors, including our Chief Executive Officer, Chief Financial Officer, and other executive and senior financial officers. The full text of our Corporate Governance Guidelines and Code of Business Conduct and Ethics is posted on the Corporate Governance portion of our website at http://investor.qualys.com. We will post amendments to our Code of Business Conduct and Ethics or waivers of our Code of Business Conduct and Ethics for directors and executive officers on the same website.

Risk Management

Risk is inherent with every business, and we face a number of risks, including strategic, financial, business and operational, legal and compliance, and reputational. We have designed and implemented processes to manage risk in our operations. Management is responsible for the day-to-day management of risks the company faces, while our board of directors, as a whole and assisted by its

committees, has responsibility for the oversight of risk management. In its risk oversight role, our board of directors has the responsibility to satisfy itself that the risk management processes designed and implemented by management are appropriate and functioning as designed.

Our board of directors believes that open communication between management and the board of directors is essential for effective risk management and oversight. Our board of directors meets with our Chief Executive Officer and other members of the senior management team at quarterly board meetings, where, among other topics, they discuss strategy and risks facing the company.

While our board of directors is ultimately responsible for risk oversight, our board committees assist the board of directors in fulfilling its oversight responsibilities in certain areas of risk. The audit committee assists our board of directors in fulfilling its oversight responsibilities with respect to risk management in the areas of internal control over financial reporting and disclosure controls and procedures, and legal and regulatory compliance. The audit committee discusses with management and the independent auditor guidelines and policies with respect to risk assessment and risk management. The audit committee also reviews management's assessment of the key risks facing us, including the key controls it relies on to mitigate those risks. The audit committee also monitors certain key risks at each of its regularly scheduled meetings, such as risk associated with internal control over financial reporting and liquidity risk. The nominating and governance committee assists our board of directors in fulfilling its oversight responsibilities with respect to the management of risk associated with board organization, membership and structure, and corporate governance. Our compensation committee assesses risks created by the incentives inherent in our compensation programs, policies and practices. Finally, the full board of directors reviews strategic and operational risk in the context of reports from the management team, receives reports on all significant committee activities at each regular meeting, and evaluates the risks inherent in significant transactions.

Non-Employee Director Compensation

The following table provides information regarding compensation paid by us to our non-employee directors during 2017. Directors who are also our employees receive no additional compensation for their service as a director. During 2017, one director, Mr. Courtot, our Chairman and Chief Executive Officer, was an employee. Mr. Courtot's compensation is discussed under the heading "Executive Compensation." We reimburse our directors for expenses associated with attending meetings of our board of directors and meetings of committees of our board.

2017 Director Compensation Table

Name	Fees Earned or Paid in Cash	Stock Awards (1)(2)	Total
Sandra E. Bergeron	$43,000	$210,739(3)	$253,739
Donald R. Dixon	61,000	210,739(3)	271,739
Jeffrey P. Hank	50,000	210,739(3)	260,739
Todd P. Headley	38,000	210,739(3)	248,739
General Peter Pace	44,625	210,739(3)	255,364
Kristi M. Rogers	34,000	210,739(3)	244,739
Howard A. Schmidt (4)	6,250	—	6,250

(1) The dollar amounts reported in this column represent the grant date fair value of restricted stock unit awards granted in 2017. These amounts have been calculated in accordance with Financial

Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, Topic 718. The fair value of each restricted stock unit award is measured based on the closing price of our common stock on the date of grant. Pursuant to SEC rules, the amounts shown exclude the impact of estimated forfeitures related to service-based vesting conditions. For a discussion of valuation assumptions, see the stock-based compensation note to our audited financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2017 filed with the SEC on February 23, 2018.

(2) As of December 31, 2017, the aggregate number of shares of our common stock underlying unvested stock awards and outstanding option awards held by each of our non-employee directors was:

Name	Aggregate Number of Shares Underlying Unvested Stock Awards	Aggregate Number of Shares Underlying Outstanding Option Awards
Sandra E. Bergeron	4,982	36,000
Donald R. Dixon	4,982	36,000
Jeffrey P. Hank	4,982	81,000
Todd P. Headley	14,410	—
General Peter Pace	4,982	58,500
Kristi M. Rogers	4,982	45,000
Howard A. Schmidt	—	—

(3) On June 5, 2017, each of Ms. Bergeron, Mr. Dixon, Mr. Hank, Mr. Headley, Gen. Pace and Ms. Rogers was granted a restricted stock unit award covering 4,982 shares of our common stock, which vests on the earlier of (i) June 5, 2018 or (ii) the day before our 2018 annual meeting of stockholders, subject to the applicable director's continued service to us.

(4) Represents compensation for service through March 2, 2017.

Non-Employee Director Compensation Program

During 2017, our non-employee director compensation program consisted of equity and cash, as described below.

Equity Compensation

Upon joining our board of directors, each newly elected non-employee director will be granted an award of restricted stock units with a "value" of $420,000 (the "Initial Award"), with vesting to occur in three equal annual installments on each of the first three anniversaries of the first day of the month following the month that the director joins the board, subject to continued service as a director through each vesting date.

On the date of each annual meeting of stockholders, each non-employee director who has served on our board of directors for at least six months prior to such date will be granted an award of restricted stock units with an intended "value" (based on the average of the closing prices of our common stock for the 30 trading days ending one week before the applicable grant date) of $200,000 (the "Annual Award"), which may be different from the award's actual grant date fair value. Each of these awards vests on the earlier of the first anniversary of its grant date or the day before the next annual meeting of stockholders.

Notwithstanding the vesting schedules described above, the vesting of each Initial Award and each Annual Award will accelerate in full upon a "change in control" of the Company (as defined in our 2012 Equity Incentive Plan).

Cash Compensation

As of the beginning of 2017, our non-employee director compensation program provided that each year, each non-employee director would receive a cash retainer of $30,000 for serving on our board of directors (the "Annual Retainer"). In addition to the Annual Retainer, the lead independent director would be entitled to an additional cash retainer of $15,000.

The chairpersons and members of our board's three standing committees would be entitled to the following cash retainers each year:

Board Committee	Chairperson Retainer*	Member Retainer
Audit Committee	$15,000	$7,500
Compensation Committee	10,000	5,000
Nominating and Governance Committee	6,000	3,000

* No director who serves as chairperson of a committee is entitled to a member retainer for the same committee.

In February 2017, our compensation committee reviewed our non-employee director compensation program. Based on its review of the peer group compensation data provided by Compensia and other relevant factors, our compensation committee determined that we were providing cash compensation below current competitive market levels and approved (i) an increase to the additional cash retainer for serving as the lead independent director to $19,000 and the additional cash retainers for chairpersons and members of our board's three standing committees to the amounts set forth below, and (ii) payments to our non-employee directors such that the total amount of cash compensation they would receive for 2017 would be equal to the amounts they would have otherwise received had our updated director compensation program been in effect as of the beginning of 2017:

Board Committee	Chairperson Retainer*	Member Retainer
Audit Committee	$20,000	$8,000
Compensation Committee	12,000	5,000
Nominating and Governance Committee	7,500	4,000

* No director who serves as chairperson of a committee is entitled to a member retainer for the same committee.

All retainers in cash will be paid in four equal installments on a quarterly basis at the end of the applicable quarter, provided that the individual served as a non-employee director in the applicable capacity during the full quarter, with the amount pro-rated for any director who did not serve in the applicable capacity the full quarter (on either the board of directors and/or the relevant board committee).

PROPOSAL NO. 2
RATIFICATION OF APPOINTMENT OF
INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The audit committee of the board of directors has appointed Grant Thornton LLP (“Grant Thornton”), independent registered public accountants, to audit our financial statements for the year ending December 31, 2018. During the year ended December 31, 2017, Grant Thornton served as our independent registered public accounting firm.

Notwithstanding its selection and even if our stockholders ratify the selection, our audit committee, in its discretion, may appoint another independent registered public accounting firm at any time during the year if the audit committee believes that such a change would be in the best interests of Qualys, Inc. and its stockholders. At the Annual Meeting, the stockholders are being asked to ratify the appointment of Grant Thornton as our independent registered public accounting firm for the year ending December 31, 2018. Our audit committee is submitting the selection of Grant Thornton to our stockholders because we value our stockholders views on our independent registered public accounting firm and as a matter of good corporate governance. Representatives of Grant Thornton will be present at the Annual Meeting, and they will have an opportunity to make statements and will be available to respond to appropriate questions from stockholders.

If the stockholders do not ratify the appointment of Grant Thornton, the board of directors may reconsider the appointment.

Fees Paid to the Independent Registered Public Accounting Firm

The following table presents fees for professional audit services and other services rendered to our company by Grant Thornton for the years ended December 31, 2016 and 2017.

	2016	2017
Audit Fees (1)	$1,124,640	$1,265,344
Audit-Related Fees (2)	91,438	214,785
	$1,216,078	$1,480,129

(1) Audit fees consist of fees for professional services provided in connection with the audit of our annual consolidated financial statements and internal control over financial reporting, review of our quarterly consolidated financial statements and audit services provided in connection with other statutory and regulatory filings.
(2) Audit-Related fees consist of fees for professional services provided in connection with the issuance of our Service Organization Control Report (SOC1), which provides assurance to our customers that we have adequate controls and safeguards over the processing of their data.

Auditor Independence

In 2017, there were no other professional services provided by Grant Thornton that would have required the audit committee to consider their compatibility with maintaining the independence of Grant Thornton.

Audit Committee Policy on Pre-Approval of Audit and Permissible Non-Audit Services of Independent Registered Public Accounting Firm

Consistent with requirements of the SEC and the Public Company Oversight Board, or PCAOB, regarding auditor independence, our audit committee is responsible for the appointment, compensation and oversight of the work of our independent registered public accounting firm. In recognition of this responsibility, our audit committee has established a policy for the pre-approval of all audit and permissible non-audit services provided by the independent registered public accounting firm. These services may include audit services, audit-related services, tax services and other services.

Before engagement of the independent registered public accounting firm for the next year's audit, the independent registered public accounting firm submits a detailed description of services expected to be rendered during that year for each of the following categories of services to the audit committee for approval:

- *Audit services*. Audit services include work performed for the audit of our financial statements and internal control over financial reporting, the review of financial statements included in our quarterly reports, as well as work that is normally provided by the independent registered public accounting firm in connection with statutory and regulatory filings.
- *Audit-Related services*. Audit-Related services are for assurance and related services that are reasonably related to the performance of the audit or review of our financial statements and are not covered above under "audit services."
- *Tax services*. Tax services include all services performed by the independent registered public accounting firm's tax personnel for tax compliance, tax advice and tax planning.
- *Other services*. Other services are those services not described in the other categories.

The audit committee pre-approves particular services or categories of services on a case-by-case basis. During the year, circumstances may arise when it may become necessary to engage the independent registered public accounting firm for additional services not contemplated in the original pre-approval. In those instances, the services must be pre-approved by the audit committee before the independent registered public accounting firm is engaged. Pre-approval fee levels or budgeted amounts for all services to be provided by the independent registered public accounting firm are established annually by the audit committee. Any proposed services exceeding these levels or amounts require specific pre-approval by the audit committee.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE RATIFICATION OF THE APPOINTMENT OF GRANT THORNTON LLP.

PROPOSAL NO. 3
ADVISORY APPROVAL OF EXECUTIVE COMPENSATION

Section 14A of the Exchange Act enables stockholders to approve, on an advisory and non-binding basis, the compensation of our named executive officers as disclosed pursuant to Regulation 14A of the Exchange Act. This proposal, commonly known as a "Say-on-Pay" proposal, gives our stockholders the opportunity to express their views on our named executive officers' compensation as a whole. This vote is not intended to address any specific item of compensation or any specific named executive officer, but rather the overall compensation of all of our named executive officers and the philosophy, policies and practices described in this proxy statement.

The Say-on-Pay vote is advisory, and therefore is not binding on us, our compensation committee or our board of directors. The Say-on-Pay vote will, however, provide information to us regarding stockholder sentiment about our executive compensation philosophy, policies and practices, which our compensation committee will be able to consider when determining executive compensation for the remainder of the current fiscal year and beyond. Our board of directors and our compensation committee value the opinions of our stockholders and to the extent there is any significant vote against the compensation of our named executive officers as disclosed in this proxy statement, we will endeavor to communicate with stockholders to better understand the concerns that influenced the vote, consider our stockholders' concerns and our compensation committee will evaluate whether any actions are necessary to address those concerns.

We believe that the information provided in the "Executive Compensation" section of this proxy statement, and in particular the information discussed in "Executive Compensation—Compensation Discussion and Analysis—Philosophy and Objectives" beginning on page 24 below, demonstrates that our executive compensation program was designed appropriately and is working to ensure our executive officers' interests are aligned with our stockholders' interests to support long-term value creation. Accordingly, we ask our stockholders to vote "FOR" the following resolution at the Annual Meeting:

"RESOLVED, that the stockholders approve, on an advisory basis, the compensation paid to the named executive officers, as disclosed in the proxy statement for the Annual Meeting pursuant to the compensation disclosure rules of the SEC, including the compensation discussion and analysis, compensation tables and narrative discussion, and other related disclosure."

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE APPROVAL, ON AN ADVISORY BASIS, OF THE NAMED EXECUTIVE OFFICER COMPENSATION AS DESCRIBED IN THIS PROXY STATEMENT.

REPORT OF THE AUDIT COMMITTEE

The audit committee is a committee of the board of directors comprised solely of independent directors as required by the listing standards of the Nasdaq Stock Market and rules of the SEC. The audit committee operates under a written charter approved by the board of directors, which is available on our website at http://investor.qualys.com. The composition of the audit committee, the attributes of its members and the responsibilities of the audit committee, as reflected in its charter, are intended to be in accordance with applicable requirements for corporate audit committees. The audit committee reviews and assesses the adequacy of its charter and the audit committee's performance on an annual basis.

With respect to the financial reporting process of Qualys, Inc. (the "Company"), the management of the Company is responsible for (1) establishing and maintaining internal controls and (2) preparing the Company's consolidated financial statements. Grant Thornton LLP ("Grant Thornton") is responsible for auditing these financial statements. It is the responsibility of the audit committee to oversee these activities. It is not the responsibility of the audit committee to prepare or certify our financial statements or guarantee the audits or reports of Grant Thornton. These are the fundamental responsibilities of management and Grant Thornton. In the performance of its oversight function, the audit committee has:

- reviewed and discussed the audited financial statements with management and Grant Thornton;
- discussed with Grant Thornton the matters required to be discussed by the statement on Auditing Standard No. 1301, Communications with Audit Committees, as adopted by the Public Company Accounting Oversight Board; and
- received the written disclosures and the letter from Grant Thornton required by applicable requirements of the Public Company Accounting Oversight Board regarding the independent accountant's communications with the audit committee concerning independence, and has discussed with Grant Thornton its independence.

Based on the audit committee's review and discussions with management and Grant Thornton, the audit committee recommended to the board of directors that the audited financial statements be included in the annual report on Form 10-K for the year ended December 31, 2017 for filing with the Securities and Exchange Commission.

Respectfully submitted by the members of the audit committee of the board of directors:

Jeffrey P. Hank (Chair)
Sandra E. Bergeron
Todd P. Headley
General Peter Pace

EXECUTIVE OFFICERS

The following table identifies certain information about our executive officers as of April 27, 2018. Officers are elected by the board of directors to hold office until their successors are elected and qualified.

Name	Age	Position
Philippe F. Courtot	73	Chairman, President and Chief Executive Officer
Melissa B. Fisher	45	Chief Financial Officer
Amer S. Deeba	51	Chief Commercial Officer
Bruce K. Posey	66	Vice President, General Counsel and Corporate Secretary
Sumedh S. Thakar	42	Chief Product Officer

Philippe F. Courtot is also a director of our company. Please see the section titled “Board of Directors and Corporate Governance” for his biography.

Melissa B. Fisher has served as our Chief Financial Officer since April 2016. Ms. Fisher joined us from Zynga Inc., a developer of social games, where she served as the Vice President of Financial Planning and Analysis, Investor Relations and Treasury from April 2015 to April 2016. Ms. Fisher previously served as Vice President of Corporate Development, Investor Relations and Treasury of Digital River, Inc., a global provider of enterprise e-commerce SaaS solutions, from July 2013 to March 2015. From September 2009 to March 2012, Ms. Fisher served as Managing Director at Foros. Ms. Fisher spent the earlier parts of her career at Banc of America Securities and Goldman, Sachs & Co. Ms. Fisher currently serves as a director of Model N, Inc., and previously served as a director of Digital Generation, Inc. and Image Sensing Systems, Inc. Ms. Fisher holds a Bachelor of Arts degree in Government from Harvard University and a Masters of Business Administration degree from the Harvard Graduate School of Business Administration.

Amer S. Deeba has served as our Chief Commercial Officer since May 2016, and served as our Vice President of Corporate Development and Strategic Alliances from August 2014 to May 2016, and as our Chief Marketing Officer from January 2007 to August 2014. Mr. Deeba joined us in 2001 and has held various other positions with us since that time, including Vice President, Product Marketing and Vice President, Strategic Alliances. From April 1999 until February 2000, Mr. Deeba served as Director of Product Management at Signio until its acquisition by VeriSign, and from February 2000 until June 2001 he held various positions at VeriSign, including General Manager of the Payment Division. Mr. Deeba holds a Bachelor of Engineering degree from the American University of Beirut and a Master of Science degree from Santa Clara University.

Bruce K. Posey has served as our Vice President and General Counsel since May 2012, and has been our Corporate Secretary since June 2012. From December 2011 to May 2012, Mr. Posey served as Senior Vice President, General Counsel and Corporate Secretary of IntelePeer, Inc. From January 2009 to December 2011, Mr. Posey served as Senior Vice President, General Counsel and Corporate Secretary at Openwave Systems, Inc. From July 2002 to January 2009, Mr. Posey served as Senior Vice President, General Counsel and Corporate Secretary at iPass. Mr. Posey holds a Bachelor of Science degree from the University of Oregon and a Juris Doctor degree from the University of Michigan Law School.

Sumedh S. Thakar has served as our Chief Product Officer since June 2014. Before that, beginning in December 2010, Mr. Thakar served as our Vice President, Engineering. Mr. Thakar joined us in February 2003 and has held various positions with us since that time, including Principal Engineer, Engineering Manager and Director of Engineering. Mr. Thakar holds a Bachelor of Science degree from the University of Pune, India.

EXECUTIVE COMPENSATION

Compensation Discussion and Analysis

This Compensation Discussion and Analysis provides an overview of the material components of our executive compensation program for:

- Philippe F. Courtot, our Chairman, President and Chief Executive Officer;
- Melissa B. Fisher, our Chief Financial Officer;
- Amer S. Deeba, our Chief Commercial Officer;
- Bruce K. Posey, our Vice President, General Counsel and Corporate Secretary; and
- Sumedh S. Thakar, our Chief Product Officer.

These executive officers are collectively referred to in this Compensation Discussion and Analysis and the accompanying compensation tables as the "named executive officers."

Overview

Business Highlights

We are a pioneer and leading provider of cloud-based security and compliance solutions that enable organizations to identify security risks to their IT infrastructures, help protect their IT systems and applications from ever-evolving cyber-attacks and achieve compliance with internal policies and external regulations. Our cloud solutions address the growing security and compliance complexities and risks that are amplified by the dissolving boundaries between internal and external IT infrastructures and web environments, the rapid adoption of cloud computing and the proliferation of geographically dispersed IT assets.

IT infrastructures are more complex and globally-distributed today than ever before, as organizations of all sizes increasingly rely upon a myriad of interconnected information systems and related IT assets, such as servers, databases, web applications, routers, switches, desktops, laptops, other physical and virtual infrastructure, and numerous external networks and cloud services. The predominant approach to IT security has been to implement multiple disparate security products that can be costly and difficult to deploy, integrate and manage and may not adequately protect organizations. As a result, we believe there is a large and growing opportunity for comprehensive cloud-based security and compliance solutions.

We intend to leverage our innovation and extensive expertise to strengthen our leadership position as a trusted provider of cloud-based security and compliance solutions. In 2017, we continued our outstanding financial performance, including achieving the following significant financial results:

- The price of our common stock increased by 88% to $59.35 per share on December 29, 2017, as compared to $31.65 per share on December 30, 2016;
- Revenues increased by 17% to $230.8 million, as compared to $197.9 million in 2016 (which, when normalized for the impact of FX (foreign exchange) and the MSSP (Managed Security Service Provider) contract, represents an increase in revenues of 19%);
- Net income increased by 110% to $40.4 million, as compared to $19.2 million in 2016; and
- Adjusted EBITDA (a non-GAAP financial measure) increased by 25% to $84.9 million, as compared to $68.0 million in 2016.

The reconciliation of net income to Adjusted EBITDA is set forth in the section entitled "*Management's Discussion and Analysis of Financial Condition and Results of Operations*" in our Annual Report on Form 10-K filed with the SEC on February 23, 2018.

Good Governance Practices

We maintain good corporate governance standards in our executive compensation policies and practices. The following policies and practices were in effect during our fiscal year ended December 31, 2017:

- Our compensation committee is made up solely of independent directors and makes all executive compensation decisions.
- Our potential change in control payments and benefits are reasonable in amount.
- We do not offer tax gross-ups to any of our named executive officers.

Effect of Most Recent Stockholder Advisory Vote on Executive Compensation

Our compensation committee considers the results of the annual stockholder advisory vote on the compensation of our Named Executive Officers and stockholder feedback on our executive compensation program as part of its annual executive compensation review. At our 2017 annual meeting of stockholders, over 96% of the votes cast approved the compensation program for our named executive officers as described in our 2017 annual proxy statement. Based on this strong stockholder support, our compensation committee determined not to make any significant changes to our existing executive compensation program and policies. The change to our equity award structure for the equity awards granted to our named executive officers in 2017 (whereby we granted the equity awards entirely in restricted stock units) was not related to the feedback on the stockholder advisory vote. Our compensation committee will continue to consider the results of the annual advisory vote on executive compensation and stockholder feedback as data points in designing our executive compensation program.

Philosophy and Objectives

Our compensation philosophy is to provide programs that attract and retain the best available personnel for positions of substantial responsibility, provide incentives for such persons to perform to the best of their abilities, and to promote the success of our business. The following table identifies the main elements of our executive compensation program and the reason we chose to provide each:

Element of Compensation	Basis for Providing Element
Base Salary	To provide compensation to our named executive officers for services based on their experience and past performance
Non-Equity Incentive Plan Compensation	To motivate and reward our named executive officers for focusing on individual and company objectives that drive increased stockholder value
Equity Compensation	To align our named executive officers' interests with the long-term interests of our stockholders and to promote the retention of our named executive officers
Non-Cash and Non-Equity Benefits	To provide for the safety and wellness of our named executive officers
Change in Control and Severance Payments and Benefits	To promote the retention of our named executive officers

Compensation-Setting Process

Role of the Compensation Committee

Our compensation committee operates under a written charter adopted by the committee and approved by our board of directors. The charter is available on our website. Each member of our compensation committee qualifies as (i) an "independent director" under the Nasdaq Stock Market requirements, (ii) a "non-employee director" under Rule 16b-3 of the Exchange Act of 1934, and (iii) an "outside director" under Section 162(m) of the Internal Revenue Code, or the Code.

Our compensation committee oversees our overall compensation philosophy, compensation plans, and benefits programs. Our compensation committee is responsible for reviewing, approving, and administering our annual and long-term incentive compensation plans and our employee benefit plans and for administering our equity incentive plans.

To this end, our compensation committee establishes the performance objectives and certifies the performance achievement under our annual and long-term incentive compensation plans, and our compensation committee approves the grant of equity awards under our equity incentive plans. Our compensation committee also reviews on a periodic basis the operations of our executive compensation program to determine whether they are properly coordinated and achieving their intended purposes. If our compensation committee determines that any aspect of our executive compensation program yields payments and benefits that are not reasonably related to executive and corporate performance, the committee may take steps to modify such program.

Our compensation committee has the authority to engage independent outside consultants and obtain input from our management team, other employees, and external advisers. In 2017, our compensation committee engaged Compensia, Inc., or Compensia, a third party compensation consultant, to assist us with respect to the compensation of our executive officers, including our named executive officers.

Role of Compensation Consultant

Compensia provided data on the compensation provided to executives in our compensation peer group and the market in general. The compensation peer group is selected on the basis of relevant industry, size and comparability of the business. This data was considered by our compensation committee in setting executive compensation in 2017. This process involved Compensia analyzing, reviewing and making recommendations to our compensation committee regarding (i) the compensation peer group and (ii) various elements of our executive compensation program based on a comparison of the base salary, target total cash compensation (i.e., base salary plus non-equity incentive plan compensation), annual long-term incentive values, and target total direct compensation (i.e., target total cash compensation plus equity awards) we provide to our named executive officers against that provided by our compensation peer group to similarly situated executives. In 2017, Compensia did not provide any services to us or receive any payments from us, except in its capacity as a consultant to our compensation committee. Based on the consideration of the various factors as set forth in the rules of the SEC and the Nasdaq Stock Market, our compensation committee believes that its relationship with Compensia and the work of Compensia on behalf of the committee has not raised any conflict of interest.

Role of Management

During 2017, Ms. Fisher, Mr. Posey, and Rima Tuoma-Bruno, our Chief Human Resources Officer, typically attended our compensation committee's meetings. Our compensation committee may invite to its meetings any other person that it deems appropriate. No named executive officer attends the portions of a meeting during which decisions regarding his or her compensation are made.

Peer Companies

With the assistance of Compensia, our compensation committee approved a list of public company peer companies for the committee to use in conducting a competitive market analysis of executive officer compensation. Our compensation peer group consisted of publicly traded companies in the software, internet software & services, and technology hardware & equipment sectors that generally had revenues greater than $100 million, experienced strong year-over-year growth in revenues and had a market capitalization greater than $400 million. The following is a list of the public companies that our compensation committee approved as our "compensation peer group" in March 2017:

Compensation Peer Group		
Barracuda Networks, Inc.	Gigamon Inc.	Rapid7, Inc.
Benefitfocus, Inc.	Imperva Inc.	SecureWorks Corp.
Callidus Software Inc.	LogMeIn, Inc.	Splunk Inc.
Ellie Mae, Inc.	Palo Alto Networks	SPS Commerce, Inc.
FireEye Inc.	Proofpoint, Inc.	Varonis Systems, Inc.

Our compensation committee believed it was appropriate to include these companies in our compensation peer group because the companies were similar in size, operated within the same or similar industries as us and compete with us for executives. According to the market data provided by Compensia in March 2017, the companies in our compensation peer group had revenues for the four previous quarters between $100 million and $1.6 billion (which was approximately 0.5 to 8.1 times our revenues during the comparable period) and market capitalization as of March 17, 2017 of between $600 million and $13 billion (which was approximately 0.5 to 10.3 times our market capitalization on that date).

With the assistance of Compensia, our compensation committee updated the compensation peer group in September 2017 to reflect changes in our financial characteristics. At that time, our compensation committee screened the compensation peer group for companies that generally had revenues greater than $100 million, experienced strong year-over-year growth in revenues, had a market capitalization greater than $500 million and had high market capitalization to revenue multiples. The following is a list of the public companies that our compensation committee approved as our "compensation peer group in September 2017:

Barracuda Networks, Inc.	Imperva Inc.	Q2 Holdings, Inc.
Callidus Software Inc.	LogMeIn, Inc.	Rapid7, Inc.
Ellie Mae, Inc.	MINDBODY	SecureWorks Corp.
FireEye Inc.	MuleSoft, Inc.	Splunk Inc.
Five9, Inc.	Palo Alto Networks	SPS Commerce, Inc.
Gigamon Inc.	Proofpoint, Inc.	Varonis Systems, Inc.

According to the market data provided by Compensia in October 2017, the companies in our updated compensation peer group had revenues for the four previous quarters between $160 million and $1.8 billion (which was approximately 0.8 to 8.5 times our revenues during the comparable period) and market capitalization as of September 29, 2017 of between $700 million and $13 billion (which was approximately 0.4 to 7.0 times our market capitalization on that date).

Use of Peer Data

Our compensation committee uses the compensation peer group and market data provided by Compensia (including custom cuts of survey data from Radford) to obtain a general understanding of compensation practices within our compensation peer group and the market in general. In setting the various elements of compensation for the named executive officers, our compensation committee reviewed base salary, target total cash compensation (i.e., base salary plus non-equity incentive plan compensation), annual long-term incentive values, and target total direct compensation (i.e., target total cash compensation plus equity incentives). We believe that considering these measures was important because it allows us to provide compensation that, as a complete package, is appropriate for each named executive officer.

Executive Compensation Program Components

The following sections describe each component of our executive compensation program, provide the rationale for each component, and explain how the compensation amounts and awards were determined for 2017.

Base Salary

Base salary is the primary fixed component of our named executive officers' compensation. We use base salary to compensate our named executive officers for services rendered during the fiscal year and to ensure that we remain competitive in attracting and retaining executive talent. A named executive officer's base salary at hire is determined through arm's length negotiation. Our compensation committee typically reviews and considers adjustments to our named executive officers' base salaries on an annual basis. When doing so, our compensation committee takes into account factors such as the named executive officer's experience, skills, knowledge, responsibilities, and performance and the prevailing market conditions.

In April 2017, our compensation committee reviewed our executive compensation program, including base salary for our named executive officers. The committee evaluated the peer group compensation data provided by Compensia and other relevant factors, and determined, based on its judgment, that no adjustments to the base salaries of our named executive officers should be made. Each named executive officer's base salary during 2017 is listed in the table below.

Named Executive Officer	Base Salary for 2017
Philippe F. Courtot	$375,000
Melissa B. Fisher	$325,000
Amer S. Deeba	$300,000
Bruce K. Posey	$275,000
Sumedh S. Thakar	$325,000

The total base salaries paid to our named executive officers during 2017 are set forth in the section entitled "*2017 Summary Compensation Table*" below.

Non-Equity Incentive Plan Compensation

To motivate and reward our named executive officers for our achievement of our annual financial and operational objectives and our long-term strategic and growth goals, we provide cash incentive compensation to our named executive officers based on the achievement of one or more corporate performance objectives. The objectives change from year to year as we grow and market conditions evolve and different priorities are established, but our compensation committee selects challenging goals that are achievable only by strong performance.

Our named executive officers participated in our 2017 Corporate Bonus Plan, which provides them with an opportunity to receive formula-based incentive amounts on a quarterly basis. Our compensation committee decided this was the most appropriate measure of time to determine achievement of short-term goals. Our named executive officers' target bonus opportunities under the 2017 Corporate Bonus Plan are expressed as percentages of their base salaries as of the last day of the applicable quarter. For 2017, these percentages remained unchanged from 2016, and the performance measures used to determine bonuses continued to be based on (i) growth in our bookings for the applicable quarter over the same quarter of the prior year, (ii) growth in revenue from the same quarter in 2016 and (iii) non-GAAP earnings per diluted share, with all three measures weighted equally.

For purposes of the bookings growth measure, bookings were calculated as the sum of subscribed revenues for all new, renewal and upsell subscriptions contracted by customers and channel partners in each quarter. The subscribed revenues were based on the amount of subscription contracted if the term is one year or less, and were capped at one year's worth of subscribed revenues if the subscription term exceeds one year. The bookings growth measure is an internal measure and is a non-GAAP financial measure.

For purposes of the revenue growth measure, revenue was determined in accordance with GAAP and set forth in our quarterly and annual financial statements. For purposes of the non-GAAP earnings per diluted share measure, such earnings were calculated as GAAP net income less stock-based compensation expense and non-recurring charges under the 2017 Corporate Bonus Plan, divided by weighted average shares (diluted) for the applicable quarter. Our compensation committee selected these measures as the corporate performance measures that best supported our annual operating plan and enhanced long-term value creation.

For 2017, each named executive officer's target bonus opportunity (expressed as a percentage of his or her base salary in the applicable quarter) remained unchanged from 2016 and is listed in the table below.

Named Executive Officer	Target Bonus for 2017
Philippe F. Courtot	100%
Melissa B. Fisher	50%
Amer S. Deeba	50%
Bruce K. Posey	50%
Sumedh S. Thakar	50%

The target award amounts for our named executive officers in each quarter of 2017 were as follows:

2017 Corporate Bonus Plan Target Awards

Named Executive Officer	Q1	Q2	Q3	Q4	TOTAL
Philippe F. Courtot	$93,750	$93,750	$93,750	$93,750	$375,000
Melissa B. Fisher	40,625	40,625	40,625	40,625	162,500
Amer Deeba	37,500	37,500	37,500	37,500	150,000
Bruce K. Posey	34,375	34,375	34,375	34,375	137,500
Sumedh S. Thakar	40,625	40,625	40,625	40,625	162,500

A named executive officer's bonus payment was to be paid at a percentage of his or her target incentive amount based on the weighted average of the payout percentages for each applicable measure. To be eligible for a quarterly bonus payment under our 2017 Corporate Bonus Plan, an individual must be employed as of the last day of the quarter.

For each of the three measures of a named executive officer's target bonus opportunity, the payout percentage was capped at 100%. Our compensation committee believed that achieving the top end of the targets would be sufficiently challenging and incentivize top end performance.

	Q1			Q2			Q3			Q4		
	Target	Actual	Payout	Target	Actual	Payout	Target	Actual	Payout	Target	Actual	Payout
Bookings Growth	19.9%	*	94.0%	18.3%	*	100.0%	21.7%	*	100.0%	25.6%	*	89.3%
Rev Growth	15.1%	14.9%	90.0%	15.8%	14.1%	56.8%	16.4%	16.7%	100.0%	20.1%	20.5%	100.0%
Non-GAAP EPS	$0.20	$0.20	100.0%	$0.22	$0.26	100.0%	$0.25	$0.31	100.0%	$0.28	$0.32	100.0%
Weighted Payout			94.7%			85.6%			100.0%			96.4%

* With respect to actual bookings growth rate, as noted above, this is an internal measure that we do not disclose for several reasons, including our belief that disclosure would result in competitive harm. If the results were disclosed, we believe the information would provide competitors with insights into our operations and sales compensations programs that would be harmful to us. Our compensation committee believed that corporate bonus plan structure was appropriate because it was designed to drive sales and profitability.

The aggregate actual amounts awarded for 2017 to our named executive officers were as follows, based on the achievement against the applicable performance measures discussed above:

2017 Corporate Bonus Plan—Actual Award Amount

Named Executive Officer	Actual Award Amount
Philippe F. Courtot	$353,137
Melissa B. Fisher	153,026
Amer Deeba	141,255
Bruce K. Posey	129,484
Sumedh S. Thakar	153,026

Equity Compensation

We use equity awards to incentivize and reward strong long-term corporate performance and align the interests of our named executive officers with those of our stockholders.

The size of equity awards granted to our named executive officers in connection with their hire is determined through arm's-length negotiation. We consider factors such as the named executive officer's prospective role and responsibilities, the cash compensation the named executive officer is expected to receive, the potential incentive and retention value of the award, and the prevailing market conditions.

We also will periodically grant equity awards to our named executive officers to recognize corporate and individual performance, in connection with a promotion, or to provide additional incentive to continue providing services to us. When determining the size of these equity awards, we generally do not apply a fixed formula. Instead, we aim to maximize long-term stockholder value by granting an amount of equity that properly rewards the named executive officer for his or her contribution to the growth in such value, and we therefore take into consideration factors such as the named executive officer's performance, contributions, responsibilities, and experience; the equity held by the named executive officer (including the economic value of his or her unvested equity awards and the ability of this equity to satisfy our retention objectives); a compensation analysis performed by our human resources department and/or Compensia; compensation peer group and market data provided by Compensia; the equity award recommendations of management; and internal equity considerations.

In 2017, our compensation committee determined that the 2017 equity awards to be granted to our named executive officers should be in the form of restricted stock units because they have a lesser dilutive effect than stock options and provide our named executive officers with a floor of certain value delivered (as a restricted stock unit would never be "out of the money").

In April 2017, our compensation committee reviewed relevant compensation peer group and market data provided by Compensia. In the course of that review, our compensation committee and our board of directors determined that the value of the equity awards granted to Messrs. Courtot, Deeba, and Thakar in the prior three years were not competitive with the value of the equity awards provided by companies in our compensation peer group to their similarly situated executives. Therefore, our compensation committee recommended that our board of directors grant "catch-up" restricted stock unit awards to Messrs. Courtot, Deeba, and Thakar. Each of these "catch-up" restricted stock unit awards were structured to vest quarterly in equal installments over the one-year period after the award's vesting commencement date.

Additionally, our compensation committee recommended that our board of directors grant refresh restricted stock unit awards to our named executive officers with each of the refresh restricted stock unit awards structured to vest quarterly in equal installments over a four-year period after the award's vesting commencement date.

The vesting of all equity awards would be subject to the applicable named executive officer's continued service with us as of each vesting date. In addition, the vesting of these awards would accelerate upon the occurrence of certain specified events, as described in the section entitled "*Potential Payments upon Termination or Change in Control*" contained in this proxy statement. In April 2017, the independent members of our board of directors approved these equity award grants.

The number of shares of our common stock covered by each of these equity awards and the intended value at the time of grant is listed in the table below.

Named Executive Officer	Catch-Up Restricted Stock Units	Intended Value of Catch-Up Restricted Stock Units	Refresh Restricted Stock Units	Intended Value of Refresh Restricted Stock Units
Philippe F. Courtot	190,778	$6,879,422	178,287	$6,429,000
Melissa B. Fisher	—	—	68,858	2,483,000
Amer S. Deeba	2,271	81,872	19,244	693,904
Bruce K. Posey	—	—	11,827	426,463
Sumedh S. Thakar	13,916	501,793	75,458	2,721,000

In October 2017, at the request of management, our compensation committee met to evaluate annual compensation for fiscal 2018. The request to change the timing of the annual review and granting of awards was so that the equity awards could be factored into Wall Street guidance regarding our common stock. Our compensation committee reviewed relevant compensation peer group and market data provided by Compensia and recommended that our board of directors grant additional restricted stock unit awards to our named executive officers. The size of these refresh awards were reduced to reflect the fact that portions of the equity awards granted to our named executive officers in April 2017 scheduled to vest during the one-year period after the vesting commencement date still remained unvested. Each of these awards was structured to vest quarterly in equal installments over a four-year period after the award's vesting commencement date, in each case subject to the applicable named executive officer's continued service with us as of each vesting date. In addition, the vesting of these awards would accelerate upon the occurrence of certain specified events, as described in the section entitled "*Potential Payments upon Termination or Change in Control*" contained in this proxy statement. In October 2017, the independent members of our board of directors approved these equity award grants.

The number of shares of our common stock covered by each of these equity awards and the intended value at the time of grant is listed in the table below.

Named Executive Officer	October Restricted Stock Units	Intended Value of October Restricted Stock Units
Philippe F. Courtot	149,232	$7,722,750
Melissa B. Fisher	35,897	1,857,625
Amer S. Deeba	8,556	442,750
Bruce K. Posey	14,153	732,375
Sumedh S. Thakar	74,295	3,844,750

Intended value was translated into a number of shares by dividing the dollar amount by the average of the closing prices of our common stock for the 30 trading days ending one week before the date of grant.

The equity awards granted to our named executive officers during 2017 are set forth in the sections entitled "*2017 Summary Compensation Table*" and "*Grants of Plan-Based Awards in 2017 Table*" below.

Non-Cash and Non-Equity Benefits

Our named executive officers participate in the same retirement plan as other U.S.-based full-time employees. We maintain a tax-qualified retirement plan that provides eligible employees with an opportunity to save for retirement on a tax advantaged basis. All participants' interests in their deferrals are 100% vested when contributed. We match 50% on the dollar up to the first 6% contributed with no vesting period, for our employees, including our named executive officers. Pre-tax contributions are allocated to each participant's individual account and are then invested in selected investment alternatives according to the participants' directions. The 401(k) plan is intended to qualify under Sections 401(a) and 501(a) of the Code. As a tax-qualified retirement plan, contributions to the 401(k) plan and earnings on those contributions are not taxable to the employees until distributed from the 401(k) plan, and all contributions are deductible by us when made.

In addition, our named executive officers are entitled to participate in the same employee benefit plans, and on the same terms and conditions, as our other U.S.-based, full-time employees. These benefits include health, dental and vision insurance; medical and dependent care flexible spending accounts; short- and long-term disability insurance; life insurance; and accidental death and dismemberment insurance. We believe these benefits are generally consistent with those offered by companies with which we compete for employees.

Perquisites and Other Personal Benefits

Currently, we generally do not provide perquisites or other personal benefits to our named executive officers. In the future, we may provide perquisites or other personal benefits in limited circumstances, such as where we believe it is appropriate to assist an individual named executive officer in the performance of his or her duties, to make our named executive officers more efficient and effective, and for recruitment, motivation, or retention purposes. All future practices with respect to perquisites or other personal benefits will be approved and subject to periodic review by our compensation committee.

Change in Control and Severance Benefits

Ms. Fisher's employment offer letter provides for certain protections in the event of termination of her employment under specified circumstances. In addition, certain equity awards granted to our named executive officers provide for acceleration of vesting upon termination of their employment under specified circumstances or upon certain transactions that involve a change in control of the Company. We believe that these agreements maximize stockholder value by minimizing any potential distractions caused by the possibility of an involuntary termination or a potential change in control, which allows our named executive officers to maintain their focus and dedication to their responsibilities. We believe that these arrangements also provide further retention value by encouraging our named executive officers to continue providing services to us.

For a summary of the material terms and conditions of these severance and change in control arrangements, see the section entitled "*Potential Payments upon Termination or Change in Control*" contained in this proxy statement.

Other Compensation Policies

We have implemented an insider trading policy that prohibits our named executive officers from trading in derivative securities (including hedging) with respect to our common stock, pledging company securities as collateral, or holding company securities in a margin account. We have not implemented policies that set minimum stock ownership requirements for our named executive officers or allow us to recover from them any cash or equity-based incentive compensation where the payment

of such compensation was predicated upon the achievement of financial results that were subsequently the subject of a financial restatement.

Tax and Accounting Considerations

Deductibility of Executive Compensation

Section 162(m) of the Code generally limits the amount we may deduct for federal income tax purposes for compensation paid to our Chief Executive Officer and certain of our other executive officers in any taxable year to $1 million per person.

While our compensation committee is mindful of the benefit of being able to fully deduct the compensation paid to our executives, our compensation committee believes that we should retain the flexibility to compensate our executive officers in a manner that can best promote our business objectives. Therefore, our compensation committee intends to continue to compensate our executives in a manner consistent with the best interests of our company and our stockholders, even if such compensation is not fully deductible.

"Parachute Payments" and Deferred Compensation

Under Sections 280G and 4999 of the Code, certain service providers may be subject to an excise tax if they receive payments or benefits in connection with a change in control that exceeds certain prescribed limits, and we, or a successor, may forfeit a deduction on the amounts subject to this excise tax. Section 409A of the Code imposes significant additional taxes on a service provider in the event the service provider receives "deferred compensation" that does not meet the requirements of Section 409A of the Code.

In 2017, we did not provide any of our named executive officers with a "gross-up" or other reimbursement payment for any excise tax liability that he or she might owe as a result of the application of Sections 280G or 4999 or for any additional tax that he or she might owe as a result of the application of Section 409A. We have not agreed and are not otherwise obligated to provide any named executive officer with such a "gross-up" or other reimbursement.

Accounting Considerations

Accounting guidance on stock compensation requires us to measure the compensation expense for all share-based payment awards made to employees (including our named executive officers) and directors based on the grant date "fair value" of these awards. This calculation is performed for accounting purposes and reported in the tables below, even though our named executive officers and directors may never realize any value from their equity awards. This authoritative accounting guidance also requires us to recognize the compensation cost of share-based payment awards in our income statements over the period that the named executive officer or director is required to provide services to us in exchange for the vesting of the equity award.

Risk Considerations

Our compensation committee assesses risks created by the incentives inherent in our compensation policies. We have designed our executive compensation program so that our named executive officers focus on both short-term and long-term financial and operational performance. In addition, our compensation committee has engaged Compensia to independently review our executive compensation program, and our compensation committee conducts an annual review of our executive compensation program to ensure that it continues to reward our named executive officers for creating short-term and long-term stockholder value without encouraging our named executive officers to take

excessive risks. Based on the results of these reviews, we do not believe that our executive compensation program creates risks that are reasonably likely to have a material adverse effect on us.

Compensation Committee Report

The following Report of the Compensation Committee shall not be deemed to be "soliciting material" and should not be deemed "filed" and shall not be deemed to be incorporated by reference in future filings with the SEC, except to the extent that the Company specifically incorporates it by reference into a document filed under the Securities Act or the Exchange Act.

The compensation committee has reviewed and discussed with management the Compensation Discussion and Analysis provided above. Based on its review and discussions, the compensation committee recommended to the board of directors that the Compensation Discussion and Analysis be included in this proxy statement and the Company's Annual Report on Form 10-K for the year ended December 31, 2017, filed with the SEC on February 23, 2018.

Respectfully submitted by the members of the compensation committee of the board of directors:

Donald R. Dixon (Chair)
Sandra E. Bergeron

Compensation Committee Interlocks and Insider Participation

Neither Donald R. Dixon nor Sandra E. Bergeron, who are the members of our compensation committee, is or has been an officer or employee of our company. None of our executive officers currently serves, or in the past year has served, as a member of the compensation committee or director (or other board committee performing equivalent functions or, in the absence of any such committee, the entire board of directors) of any entity that has one or more executive officers serving on our compensation committee or our board of directors.

2017 Summary Compensation Table

The following table provides information regarding the compensation of our named executive officers for 2017.

Name and Principal Position	Year	Salary ($)	Option Awards ($)(1)	Stock Awards ($) (1)	Non-Equity Incentive Plan Compensation ($)(2)	All Other Compensation ($)(3)	Total ($)
Philippe F. Courtot	2017	375,000	—	22,021,699	353,137	—	22,749,836
Chairman, President	2016	366,859	5,269,550	—	214,064	—	5,850,473
and Chief Executive Officer	2015	350,000	—	—	111,563	—	461,563
Melissa B. Fisher (4)	2017	325,000	—	4,532,329	153,026	7,618	5,017,973
Chief Financial Officer	2016	219,167	715,721	810,431	76,971	—	1,822,290
Amer S. Deeba	2017	300,000	—	1,276,222	141,255	10,422	1,727,899
Chief Commercial Officer	2016	283,718	477,421	506,523	87,500	5,170	1,360,332
	2015	250,000	—	—	63,750	—	313,750
Bruce K. Posey	2017	275,000	—	1,198,605	129,484	5,051	1,608,140
Vice President, General Counsel and Corporate	2016	266,859	382,569	405,228	80,729	2,038	1,137,423
Secretary	2015	250,000	825,925	—	63,750	—	1,139,675
Sumedh S. Thakar	2017	325,000	—	7,339,879	153,026	9,000	7,826,905
Chief Product Officer	2016	308,718	1,433,318	1,519,542	94,896	4,944	3,361,418
	2015	260,417	825,925	—	66,875	—	1,153,217

(1) Restricted stock unit awards and option awards are shown at their aggregate grant date fair value as determined in accordance with FASB, ASC Topic 718. The fair value of each option grant is estimated based on the fair market value on the date of grant using the Black-Scholes-Merton option pricing model. The fair value of each restricted stock unit award is measured based on the closing price of our common stock on the date of grant. Pursuant to SEC rules, the amounts shown exclude the impact of estimated forfeitures related to service-based vesting conditions. For a discussion of valuation assumptions, see the stock-based compensation note to our audited financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2017, filed with the SEC on February 23, 2018.
(2) Non-equity incentive plan payments for 2017 were paid under our 2017 Corporate Bonus Plan as described in the narrative above.
(3) Reflects 401(k) matching contributions by Qualys.
(4) Ms. Fisher joined Qualys on April 28, 2016.

Grants of Plan-Based Awards in 2017 Table

The following table shows information regarding cash incentive and equity awards granted to our named executive officers during 2017.

			Estimated Future Payouts Under Non-Equity Incentive Plan Awards		Equity Grants			
Name	Grant Date	Plan Name (1)	Threshold ($)	Target ($)	All Other Stock Awards: Number of Shares of Stock or Units	All Other Option Awards: Number of Securities Underlying Options	Exercise or Base Price of Option Awards ($/Share)	Grant Date Fair Value of Stock and Option Awards ($) (2)
Philippe F. Courtot	1/1/2017	Bonus Plan	$ 31,250	375,000	—	—	—	—
	4/28/2017	2012 Plan	—	—	369,065(3)	—	—	14,172,096
	10/27/2017	2012 Plan	—	—	149,232	—	—	7,849,603
Melissa B. Fisher	1/1/2017	Bonus Plan	$ 13,542	162,500	—	—	—	—
	4/28/2017	2012 Plan	—	—	68,858	—	—	2,644,147
	10/27/2017	2012 Plan	—	—	35,897	—	—	1,888,182
Amer S. Deeba	1/1/2017	Bonus Plan	$ 12,500	150,000	—	—	—	—
	4/28/2017	2012 Plan	—	—	21,515(3)	—	—	826,176
	10/27/2017	2012 Plan	—	—	8,556	—	—	450,046
Bruce K. Posey	1/1/2017	Bonus Plan	$ 11,458	137,500	—	—	—	—
	4/28/2017	2012 Plan	—	—	11,827	—	—	454,157
	10/27/2017	2012 Plan	—	—	14,153	—	—	744,448
Sumedh S. Thakar	1/1/2017	Bonus Plan	$13,542	162,500	—	—	—	—
	4/28/2017	2012 Plan	—	—	89,374(3)	—	—	3,431,962
	10/27/2017	2012 Plan	—	—	74,295	—	—	3,907,917

(1) Awards granted under the “Bonus Plan” represent awards granted under our 2017 Corporate Bonus Plan. Awards granted under the “2012 Plan” represent awards granted under our 2012 Equity Incentive Plan.
(2) Amounts reported in this column represent the grant date fair value of RSU awards, calculated in accordance with FASB ASC Topic 718.
(3) Includes two restricted stock unit awards with the same grant date.

Outstanding Equity Awards at 2017 Year-End Table

The following tables present, for each of our named executive officers, information regarding outstanding stock options and other equity awards held as of December 31, 2017.

	Option Awards (1)					
Named Executive Officer	Grant Date	Vesting Commencement Date	Option Awards— Number of Securities Underlying Unexercised Options (#) Exercisable	Option Awards— Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Awards— Option Exercise Price ($)	Option Awards— Option Expiration Date
Philippe F. Courtot	4/28/2016	4/28/2016	208,333(2)	291,667	$25.56	4/28/2026
	2/6/2014	1/25/2015	398,000(3)	—	26.86	2/5/2024
	12/3/2009	1/25/2011	231,927(4)	—	3.80	12/2/2019
Melissa B. Fisher	4/28/2016	4/28/2016	28,296(5)	39,615	25.56	4/28/2026
Amer S. Deeba	4/28/2016	4/28/2016	18,875(2)	26,425	25.56	4/28/2026
	10/30/2014	10/30/2014	50,000(3)	—	30.58	10/29/2024
	2/6/2014	11/6/2014	40,000(3)	—	26.86	2/5/2024
	4/30/2012	11/5/2012	40,000(3)	—	8.40	11/5/2022
	11/5/2010	11/5/2010	50,000(4)	—	4.10	11/4/2020
	7/30/2009	6/30/2010	31,000(4)	—	2.80	7/29/2019
Bruce K. Posey	4/28/2016	4/28/2016	15,125(2)	21,175	25.56	4/28/2026
	7/30/2015	5/21/2016	39,583(6)	10,417	37.28	7/29/2025
	6/6/2012	5/21/2012	91,000(3)	—	8.90	6/5/2022
Sumedh S. Thakar	4/28/2016	4/28/2016	56,666(2)	79,334	25.56	4/28/2026
	7/30/2015	7/30/2015	50,000(3)	—	37.28	7/29/2025
	10/30/2014	10/30/2014	75,000(3)	—	30.58	10/29/2024
	8/1/2014	6/1/2014	50,000(3)	—	23.51	7/31/2024
	5/2/2014	5/2/2014	50,000(3)	—	19.26	5/1/2024
	10/31/2013	10/31/2013	75,000(3)	—	20.80	10/30/2023
	2/7/2013	2/7/2013	41,011(3)	—	12.68	2/6/2023

(1) Unless otherwise noted in these footnotes, all stock options referenced in this table were granted under the 2012 Plan.

(2) 1/48th of the total number of shares of our common stock subject to this stock option vest monthly starting on the one month anniversary of the vesting commencement date.

(3) Each of these options was fully vested as of December 31, 2017.

(4) Each of these options was awarded under the 2000 Plan and was fully vested as of December 31, 2017.

(5) 1/4th of the total number of shares of our common stock subject to this stock option vest on the one-year anniversary of the vesting commencement date, and 1/48th of the total number of shares subject to this stock option vest monthly thereafter.

(6) 1/24th of the total number of shares of our common stock subject to this stock option vest monthly starting on the one month anniversary of the vesting commencement date.

		Stock Awards (1)	
Named Executive Officer	Grant Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested ($)(7)
Philippe F. Courtot	10/27/2017	149,232(2)	$8,856,919
	4/28/2017	156,002(3)	9,258,719
	4/28/2017	95,389(4)	5,661,337
Melissa B. Fisher	10/27/2017	35,897(2)	2,130,487
	4/28/2017	60,251(3)	3,575,897
	4/28/2016	19,817(5)	1,176,139
Amer S. Deeba	10/27/2017	8,556(2)	507,799
	4/28/2017	16,839(3)	999,395
	4/28/2017	1,136(4)	67,422
	4/28/2016	12,386(6)	735,109
Bruce K. Posey	10/27/2017	14,153(2)	839,981
	4/28/2017	10,349(3)	614,213
	4/28/2016	9,909(6)	588,099
Sumedh S. Thakar	10/27/2017	74,295(2)	4,409,408
	4/28/2017	66,026(3)	3,918,643
	4/28/2017	6,958(4)	412,957
	4/28/2016	37,157(6)	2,205,268

(1) All restricted stock units (RSUs) referenced in this table were granted under the 2012 Plan.
(2) The RSUs will vest quarterly in equal installments over four years beginning on February 1, 2018.
(3) The RSUs will vest quarterly in equal installments over four years beginning on August 1, 2017.
(4) The RSUs will vest quarterly in equal installments over one year beginning on August 1, 2017.
(5) Twenty-five percent (25%) of the RSUs vested on May 1, 2017, and the remaining RSUs will vest quarterly in equal installments through May 1, 2020.
(6) The RSUs will vest quarterly in equal installments over four years beginning on August 1, 2016.
(7) Market value of shares or units of stock that have not vested is computed by multiplying (i) $59.35, the closing price on the Nasdaq Stock Market of our common stock on December 29, 2017, the last business day of 2017, by (ii) the number of shares or units of stock.

Option Exercises and Stock Vested in 2017 Table

The following table sets forth the number of shares of common stock acquired during 2017 by our named executive officers upon the exercise of stock options and the vesting of restricted stock unit awards and the value realized upon such exercise or vesting.

	Option Awards		Stock Awards	
Name	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise ($)(1)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting ($)(2)
Philippe F. Courtot	935,762	$30,178,325	47,695	$2,658,996
	20	635	47,694	1,998,379
	471,308	14,657,679	11,143	621,222
	20,000	1,069,000	11,142	466,850
	20,000	1,071,000		
	20,000	1,071,000		
	20,000	1,056,000		
	20,000	1,070,000		
	20,000	1,053,000		
	20,000	1,062,000		
	20,000	1,085,000		
	20,000	1,084,000		
	20,000	1,076,000		
	20,000	1,085,000		
	20,000	1,097,000		
	20,000	1,113,000		
	20,000	1,147,000		
	20,000	1,135,000		
	20,000	1,162,000		
	20,000	1,113,000		
	10,000	569,500		
Melissa B. Fisher			1,982	110,497
			1,981	83,004
			7,927	308,360
			4,304	239,948
			4,303	180,296
Amer S. Deeba	2,000	60,500	1,239	69,074
	2,000	66,800	1,238	51,872
	2,000	64,400	1,239	48,197
	2,000	68,800	1,238	44,816
	2,000	72,200	568	31,666
	2,000	80,100	567	23,757
	2,000	74,000	1,203	67,067
	2,000	84,400	1,202	50,364
	2,000	90,900		
	2,000	99,300		
	2,000	105,900		
	2,000	111,900		

Name	Option Awards		Stock Awards	
	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise ($)(1)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting ($)(2)
Bruce K. Posey	8,093	209,609	991	55,248
	9,000	336,150	991	41,523
			991	38,550
			991	35,874
			739	41,199
			739	30,964
Sumedh S. Thakar	1,600	43,440	3,715	207,111
	1,600	46,560	3,716	155,700
	289	8,251	3,716	144,552
	1,600	41,680	3,715	134,483
	1,800	51,300	3,479	193,954
	16,585	540,671	3,479	145,770
	1,800	58,860	4,716	262,917
	1,800	58,590	4,716	197,600
	1,800	58,140		
	1,011	38,266		
	989	33,201		
	10,000	384,200		
	2,000	77,740		
	2,000	80,940		
	15,000	646,050		
	2,000	87,540		
	2,000	92,640		
	11,904	605,318		

(1) The value realized upon exercise was determined by multiplying (i) the number of shares of our common stock acquired on exercise by (ii) the difference between the closing price per share on the Nasdaq Stock Market of our common stock on the day of exercise and the exercise price per share.
(2) The value realized upon vesting was determined by multiplying (i) the number of shares of our common stock acquired on vesting by (ii) the closing price per share on the Nasdaq Stock Market of our common stock on the day of vesting.

Pension Benefits & Nonqualified Deferred Compensation

We do not provide a pension plan for our employees, and no named executive officers participated in a nonqualified deferred compensation plan during 2017.

CEO Pay Ratio

Under SEC rules, we are required to provide the following information regarding the relationship between the annual total compensation of Mr. Courtot, our Chairman, President and Chief Executive Officer, and the median annual total compensation of our employees (other than Mr. Courtot) for fiscal 2017:

- The median of the annual total compensation of all employees (other than Mr. Courtot) of the Company (including our consolidated subsidiaries) was $39,047.

- Mr. Courtot's annual total compensation, as reported in the 2017 Summary Compensation Table included in this proxy statement, which was $22,749,836.
- Based on the above, for 2017, the ratio of Mr. Courtot's annual total compensation to the median of the annual total compensation of all employees other than Mr. Courtot was 582.6 to 1.

This pay ratio is a reasonable estimate calculated in a manner consistent with Item 402(u) of Regulation S-K. We determined the median of the annual total compensation of our employees as of December 31, 2017, at which time we (including our consolidated subsidiaries) had 869 full-time, part-time and temporary employees, 382 of whom are U.S. employees, and 487 (or approximately 56% of our total employee population) of whom are located outside of the United States (5 in Australia, 4 in Brazil, 2 in Canada, 1 in Colombia, 1 in the Czech Republic, 34 in France, 8 in Germany, 1 in Hong Kong, 379 in India, 3 in Italy, 3 in Japan, 2 in Mexico, 8 in the Netherlands, 1 in the Philippines, 1 in Russia, 2 in Singapore, 1 in South Africa, 1 in Spain, 1 in Switzerland, 2 in the United Arab Emirates, and 27 in the United Kingdom). In accordance with the permitted methodology for determining the "median employee", we excluded all non-U.S. employees (other than those located in France, Germany, India, and the United Kingdom) from our calculations. We then compared the base salaries and bonuses paid to our U.S. and Indian employees in 2017 to determine the median employee Once we identified our median employee, we estimated such employee's annual total compensation as though such median employee was reported in the Summary Compensation Table in accordance with the requirements of Item 402(c)(2)(x) of Regulation S-K, yielding the median annual total compensation disclosed above. With respect to the annual total compensation of Mr. Courtot, we used the amount reported in the "Total" column in the 2017 Summary Compensation Table included in this proxy statement.

Mr. Courtot's annual total compensation for fiscal 2017 did not reflect the annual total compensation he would receive in a typical year because of the "catch-up" restricted stock unit award he received in April 2017 and the refresh restricted stock unit award he received in October 2017 due to the change in timing for review of management compensation. Accordingly, in order to present a more representative comparison of Mr. Courtot's annual total compensation to the median annual total compensation of our employees (other than Mr. Courtot), we have also calculated the pay ratio based on his adjusted annual total compensation for fiscal 2017 (excluding his April 2017 "catch-up" restricted stock unit award and his October 2017 refresh award), as follows:

- Mr. Courtot's adjusted annual total compensation for fiscal 2017 was $7,574,358, which represents his annual total compensation of $22,749,836 reported in the 2017 Summary Compensation Table minus (i) the $7,325,875 grant date fair value of the "catch-up" restricted stock unit award he received in April 2017 and (ii) the $7,849,603 grant date fair value of the refresh award he received in October 2017.
- Based on that figure, for 2017, the ratio of Mr. Courtot's adjusted annual total compensation to the median of the annual total compensation of all employees other than Mr. Courtot was 194 to 1.

Potential Payments upon Termination or Change in Control

Philippe F. Courtot

Mr. Courtot was granted a stock option on April 28, 2016, covering 500,000 shares of our common stock, with a vesting commencement date of April 28, 2016, and an exercise price per share of $25.56. This option, which was granted pursuant to our 2012 Plan and an individual stock option agreement thereunder, is scheduled to vest as to 1/48th of the total shares on each monthly anniversary of the vesting commencement date, subject to Mr. Courtot's continued service through each such date.

Following a “change of control” of the Company (as defined in the stock option grant notice), Mr. Courtot receives 100% vesting acceleration of the option, subject to his continued service through such transaction.

Mr. Courtot was granted (i) on April 28, 2017, an award of 190,778 restricted stock units with a vesting commencement date of May 1, 2017, (ii) on April 28, 2017, an award of 178,287 restricted stock units with a vesting commencement date of May 1, 2017, and (iii) on October 27, 2017, an award of 149,232 restricted stock units with a vesting commencement date of November 1, 2017. These awards, which were each granted pursuant to our 2012 Plan and an individual restricted stock unit agreement thereunder, are scheduled to vest in equal quarterly installments over one year following the vesting commencement date with respect to grant (i), and in equal quarterly installments over four years following the applicable vesting commencement date with respect to grants (ii) and (iii), subject to Mr. Courtot’s continued service through each such date. Following a “change of control” of the Company (as defined in the respective restricted stock unit agreement), Mr. Courtot receives 100% vesting acceleration of the award, subject to his continued service through such transaction.

Melissa B. Fisher

Ms. Fisher was granted (i) on April 28, 2016, a stock option covering 67,911 shares of our common stock, with a vesting commencement date of April 28, 2016 and an exercise price per share of $25.56, (ii) on April 28, 2016, an award of 31,707 restricted stock units with a vesting commencement date of May 1, 2016, (iii) on April 28, 2017, an award of 68,858 restricted stock units with a vesting commencement date of May 1, 2017, and (iv) on October 27, 2017, an award of 35,897 restricted stock units with a vesting commencement date of November 1, 2017. These awards, which were each granted pursuant to our 2012 Plan and an individual stock option or restricted stock unit agreement thereunder, are scheduled to vest as to 25% of the shares subject to the option on the one-year anniversary of the vesting commencement date and as to 1/48th of the shares subject to the option in each month during the three years after the one-year anniversary of the vesting commencement date with respect to grant (i), as to 25% of the restricted stock units on the one-year anniversary of the vesting commencement date and as to 1/16th of the restricted stock units in each quarter during the three years after the one-year anniversary of the vesting commencement date with respect to grant (ii), and in equal quarterly installments over four years following the applicable vesting commencement date with respect to grants (iii) and (iv), subject to Ms. Fisher’s continued service through each such date.

If, within 12 months following a “change in control” of the Company (as defined in the 2012 Plan), Ms. Fisher’s employment is terminated by Qualys other than for “cause” (as defined in her option agreement for grant (i) and her restricted stock unit agreement for grant (ii)), death, or disability or she resigns for “good reason” (as defined in her option agreement and the respective restricted stock unit agreements), then, in each case, 100% of the then-unvested shares subject to her option and her awards of restricted stock units shall accelerate, pursuant to her offer letter agreement dated April 15, 2016 and the respective restricted stock unit agreements). In addition, pursuant to Ms. Fisher’s offer letter agreement, if her employment is terminated by Qualys without cause, she will be entitled to severance equal to 6 months of her base salary and COBRA continuation coverage, subject to her entering into a severance agreement with and a general release of claims in favor of Qualys.

Amer S. Deeba

Mr. Deeba was granted a stock option on April 28, 2016 covering 45,300 shares of our common stock, with a vesting commencement date of April 28, 2016, and an exercise price per share of $25.56. This option, which was granted pursuant to our 2012 Plan and an individual stock option agreement thereunder, is scheduled to vest as to 1/48th of the total shares on each monthly anniversary of the

option’s vesting commencement date, subject to Mr. Deeba’s continued service through each such date. If, within 12 months following a “change in control” of the Company (as defined in the 2012 Plan), Mr. Deeba’s employment is terminated without “cause” (as defined in his stock option grant notice) or Mr. Deeba resigns for “good reason” (as defined in his stock option grant notice), then, in each case, subject to the execution of a release of claims, he receives vesting acceleration of 50% of the then-unvested shares subject to the option.

Mr. Deeba was granted (i) on April 28, 2016, an award of 19,817 restricted stock units with a vesting commencement date of May 1, 2016, (ii) on April 28, 2017, an award of 19,244 restricted stock units with a vesting commencement date of May 1, 2017, (iii) on April 28, 2017, an award of 2,271 restricted stock units with a vesting commencement date of May 1, 2017, and (iv) on October 27, 2017, an award of 8,556 restricted stock units with a vesting commencement date of November 1, 2017. These awards, which were each granted pursuant to our 2012 Plan and an individual restricted stock unit agreement thereunder, are scheduled to vest in equal quarterly installments over four years following the applicable vesting commencement date with respect to grants (i), (ii) and (iv), and in equal quarterly installments over one year following the vesting commencement date with respect to grant (iii), subject to Mr. Deeba’s continued service through each such date. If, within 12 months following a “change in control” of the Company (as defined in the 2012 Plan), Mr. Deeba’s employment is terminated without “cause” (as defined in the respective restricted stock unit agreement) or Mr. Deeba resigns for “good reason” (as defined in the respective restricted stock unit agreement), then, in each case, subject to the execution of a release of claims, he receives vesting acceleration of 50% of the then-unvested portion of each award.

Bruce K. Posey

Mr. Posey was granted stock options on (i) July 30, 2015, covering 50,000 shares of our common stock, with a vesting commencement date of May 21, 2016, and an exercise price per share of $37.28 and (ii) April 28, 2016, covering 36,300 shares, with a vesting commencement date of April 28, 2016, and an exercise price per share of $25.56. These options, which were each granted pursuant to our 2012 Plan and an individual stock option agreement thereunder, are scheduled to vest as to 1/24th of the total shares on each monthly anniversary of the vesting commencement date for grant (i), and as to 1/48th of the total shares on each monthly anniversary of the vesting commencement date for grant (ii), subject to Mr. Posey’s continued service through each such date. Upon a “change in control” of the Company (as defined in the 2012 Plan), Mr. Posey will receive 75% vesting acceleration of the then-unvested shares subject to the options, subject to his continued service through such transaction.

Mr. Posey was granted (i) on April 28, 2016, an award of 15,854 restricted stock units with a vesting commencement date of May 1, 2016, (ii) on April 28, 2017, an award of 11,827 restricted stock units with a vesting commencement date of May 1, 2017, and (iii) on October 27, 2017, an award of 14,153 restricted stock units, with a vesting commencement date of November 1, 2017. These awards, which were each granted pursuant to our 2012 Plan and an individual restricted stock unit agreement thereunder, are scheduled to vest in equal quarterly installments over four years following the applicable vesting commencement date, subject Mr. Posey’s continued service through each such date. Upon a “change in control” of the Company (as defined in the 2012 Plan), Mr. Posey will receive 75% vesting acceleration of the then-unvested portion of the awards granted on April 28, 2016 and April 28, 2017, subject to his continued service through such transaction. If, within 12 months following a “change in control” of the Company (as defined in the 2012 Plan), Mr. Posey’s employment is terminated without “cause” (as defined in his applicable agreement) or Mr. Posey resigns for “good reason” (as defined in his applicable agreement), then, in each case, subject to the execution of a release of claims, he receives vesting acceleration of 50% of the then-unvested portion of the award granted on October 27, 2017.

Sumedh S. Thakar

Mr. Thakar was granted a stock option on April 28, 2016, covering 136,000 shares of our common stock, with a vesting commencement date of April 28, 2016, and an exercise price per share of $25.56. This option, which was granted pursuant to our 2012 Plan and an individual stock option agreement thereunder, is scheduled to vest as to 1/48th of the total shares on each monthly anniversary of the vesting commencement date, subject to Mr. Thakar's continued service through each such date. If, within 12 months following a "change in control" of the Company (as defined in the 2012 Plan), Mr. Thakar's employment is terminated without "cause" (as defined in his stock option grant notice) or Mr. Thakar resigns for "good reason" (as defined in stock option grant notice), then, in each case, subject to the execution of a release of claims, he receives vesting acceleration of 50% of the then-unvested shares subject to the option.

Mr. Thakar was granted (i) on April 28, 2016, an award of 59,450 restricted stock units with a vesting commencement date of May 1, 2016, (ii) on April 28, 2017, an award of 75,458 restricted stock units with a vesting commencement date of May 1, 2017, (iii) on April 28, 2017, an award of 13,916 restricted stock units with a vesting commencement date of May 1, 2017, and (iv) on October 27, 2017, an award of 74,295 restricted stock units with a vesting commencement date of November 1, 2017. These awards, which were each granted pursuant to our 2012 Plan and an individual restricted stock unit agreement thereunder, are scheduled to vest in equal quarterly installments over four years following the applicable vesting commencement date with respect to grants (i), (ii) and (iv), and in equal quarterly installments over one year following the vesting commencement date with respect to grant (iii), subject to Mr. Thakar's continued service through each such date. If, within 12 months following a "change in control" of the Company (as defined in the 2012 Plan), Mr. Thakar's employment is terminated without "cause" (as defined in the respective restricted stock unit agreement) or Mr. Thakar resigns for "good reason" (as defined in the respective restricted stock unit agreement), then, in each case, subject to the execution of a release of claims, he receives vesting acceleration of 50% of the then-unvested portion of each award.

Estimated Payments upon Termination or Change in Control

The following table provides an estimate of the payments and benefits that would be provided in the circumstances described above for each of the named executive officers, assuming the triggering event took place on December 29, 2017 (the last business day of 2017) and based on the $59.35 closing price per share of our common stock on the Nasdaq Stock Market on that date. A number of factors may affect the nature and amount of any potential payments or benefits, and as a result, the payments and benefits actually paid (if any) may be different. For example, a triggering event may occur on a date other than December 29, 2017, the price per share of our common stock on the date of the triggering event may be higher or lower than $59.35 or the assumptions relied upon in the estimate of potential payments and benefits below may not reflect the actual circumstances of the triggering event. Accordingly, there is no guarantee that a triggering event would produce the same or similar results as those estimated below.

			Upon a Qualifying Termination of Employment	
Named Executive Officer	**Type of Benefit**	**Upon Change of Control ($)(1)**	**Not in Connection With a Change of Control ($)**	**In Connection With a Change of Control ($)(1)**
Philippe F. Courtot	Vesting Acceleration	$33,632,403	—	—
	Total Termination Benefits:	**$33,632,403**	**—**	**—**
Melissa B. Fisher	Vesting Acceleration	—	$ —	$8,221,114
	Base Salary Severance	—	162,500	162,500
	COBRA Coverage	—	4,678	4,678
	Total Termination Benefits:	**—**	**$167,178**	**$8,388,292**
Amer S. Deeba	Vesting Acceleration	—	—	$1,601,266
	Total Termination Benefits:	**—**	**—**	**$1,601,266**
Bruce K. Posey	Vesting Acceleration	$ 1,610,675	—	$ 419,961
	Total Termination Benefits:	**$ 1,610,675**	**—**	**$ 419,961**
Sumedh S. Thakar	Vesting Acceleration	—	—	$6,813,427
	Total Termination Benefits:	**—**	**—**	**$6,813,427**

(1) The amounts listed represent the vesting acceleration benefits described above in the section entitled "*Potential Payments upon Termination or Change in Control*" as of December 29, 2017. For restricted stock units, the value of such vesting acceleration is computed by multiplying (i) the number of shares of our common stock subject to the restricted stock units that are being accelerated by (ii) the closing sales price per share of our common stock on December 29, 2017 ($59.35). For options, the value of such vesting acceleration is computed by multiplying (i) the number of shares of our common stock subject to the option that are being accelerated by (ii) the difference between the closing sales price per share of our common stock on December 29, 2017 ($59.35) and the option's exercise price per share.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information with respect to the beneficial ownership of our common stock at April 19, 2018 for:

- each of our named executive officers;
- each of our directors;
- all of our current directors and executive officers as a group; and
- each person or group, who beneficially owned more than 5% of our common stock.

We have determined beneficial ownership in accordance with the rules of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Except as indicated by the footnotes below, we believe, based on information furnished to us, that the persons and entities named in the table below have sole voting and sole investment power with respect to all shares of common stock that they beneficially owned, subject to applicable community property laws.

Applicable percentage ownership is based on 38,978,887 shares of common stock outstanding at April 19, 2018. In computing the number of shares of common stock beneficially owned by a person and the percentage ownership of such person, we deemed to be outstanding all shares of common stock subject to options held by the person that are currently exercisable or exercisable within 60 days of April 19, 2018. However, we did not deem such shares outstanding for the purpose of computing the percentage ownership of any other person.

Unless otherwise indicated, the address of each beneficial owner listed in the table below is c/o Qualys, Inc., 919 East Hillsdale Boulevard, 4th Floor, Foster City, California 94404.

Name of Beneficial Owner	Number of Shares Beneficially Owned	Percentage Beneficially Owned
Named Executive Officers:		
Philippe F. Courtot (1)	6,204,983	15.5%
Amer S. Deeba (2)	258,106	*
Melissa B. Fisher (3)	62,194	*
Bruce K. Posey (4)	138,721	*
Sumedh S. Thakar (5)	434,995	1.1%
Non-Employee Directors:		
Sandra E. Bergeron (6)	69,655	*
Donald R. Dixon (7)	223,945	*
Jeffrey P. Hank (8)	89,655	*
Todd P. Headley (9)	9,696	*
Gen. Peter Pace (10)	93,655	*
Kristi M. Rogers (11)	46,155	*
All directors and current executive officers as a group (11 persons) (12)	7,631,760	18.6%
5% Stockholders:		
BlackRock, Inc. (13)	3,985,117	10.2%
Neuberger Berman Group LLC (14)	2,817,770	7.2%
The Vanguard Group (15)	2,308,622	5.9%

* Represents beneficial ownership of less than 1%.

(1) Consists of (i) 5,146,475 shares of common stock held by Mr. Courtot, (ii) 68,165 shares of common stock subject to restricted stock units that vest within 60 days of April 19, 2018, (iii) 890,343 shares of common stock subject to options exercisable within 60 days of April 19, 2018, and (iv) 100,000 shares of common stock held by Freya Anne Eduarte as custodian under the Uniform Gifts to Minors Act for Mr. Courtot's minor child.

(2) Consists of (i) 27,968 shares of common stock held by Mr. Deeba, (ii) 3,545 shares of common stock subject to restricted stock units that vest within 60 days of April 19, 2018, and (iii) 226,593 shares of common stock subject to options exercisable within 60 days of April 19, 2018.

(3) Consists of (i) 18,295 shares of common stock held by Ms. Fisher, (ii) 8,529 shares of common stock subject to restricted stock units that vest within 60 days of April 19, 2018, and (ii) 35,370 shares of common stock subject to options exercisable within 60 days of April 19, 2018.

(4) Consists of (i) 1,200 shares of common stock held by Mr. Posey, (ii) 2,615 shares of common stock subject to restricted stock units that vest within 60 days of April 19, 2018, and (iii) 134,906 shares of common stock subject to options exercisable within 60 days of April 19, 2018.

(5) Consists of (i) 14,597 shares of common stock held by Mr. Thakar, (ii) 16,554 shares of common stock subject to restricted stock units that vest within 60 days of April 19, 2018, and (iii) 403,844 shares of common stock subject to options exercisable within 60 days of April 19, 2018.

(6) Consists of (i) 28,673 shares of common stock held by Ms. Bergeron, (ii) 4,982 shares of common stock subject to restricted stock units that vest within 60 days of April 19, 2018, and (iii) 36,000 shares of common stock subject to options exercisable within 60 days of April 19, 2018.

(7) Consists of (i) 99,782 shares of common stock held by Mr. Dixon, (ii) 82,538 shares of common stock held by the Donald & Elizabeth Dixon Family Limited Partnership, for which Mr. Dixon and his spouse serve as general partners, (iii) 643 shares of common stock held by the Dixon Family Trust U/A Dated 6/18/88, for which Mr. Dixon serves as trustee, (iv) 4,982 shares of common stock subject to restricted stock units that vest within 60 days of April 19, 2018, and (v) 36,000 shares of common stock subject to options exercisable within 60 days of April 19, 2018.

(8) Consists of (i) 3,673 shares of common stock held by Mr. Hank, (ii) 4,982 shares of common stock subject to restricted stock units that vest within 60 days of April 19, 2018, and (iii) 81,000 shares of common stock subject to options exercisable within 60 days of April 19, 2018.

(9) Consists of (i) 4,714 shares of common stock held by Mr. Headley and (ii) 4,982 shares of common stock subject to restricted stock units that vest within 60 days of April 19, 2018.

(10) Consists of (i) 30,173 shares of common stock held by Gen. Pace, (ii) 4,982 shares of common stock subject to restricted stock units that vest within 60 days of April 19, 2018, and (iii) 58,500 shares of common stock subject to options exercisable within 60 days of April 19, 2018.

(11) Consists of (i) 6,173 shares of common stock held by Ms. Rogers, (ii) 4,982 shares of common stock subject to restricted stock units that vest within 60 days of April 19, 2018, and (iii) 35,000 shares of common stock subject to options exercisable within 60 days of April 19, 2018.

(12) Includes (i) 129,300 shares of common stock subject to restricted stock units that vest within 60 days of April 19, 2018, and (ii) 1,937,556 shares of common stock subject to options exercisable within 60 days of April 19, 2018.

(13) According to a Schedule 13G/A filed on January 19, 2018, BlackRock, Inc. beneficially owns 3,985,117 shares of our common stock. The principal address of BlackRock, Inc. is 55 East 52nd Street, New York, NY 10055.

(14) According to a Schedule 13G filed on February 15, 2018, Neuberger Berman Group LLC beneficially owns 2,817,770 shares of our common stock. The principal address of Neuberger Berman Group LLC is 1290 Avenue of the Americas, New York, NY 10104.

(15) According to a Schedule 13G filed on February 9, 2018, The Vanguard Group beneficially owns 2,308,622 shares of our common stock. The principal address of The Vanguard Group is 100 Vanguard Blvd., Malvern, PA 19355.

RELATED PERSON TRANSACTIONS

We describe below transactions and series of similar transactions, since the beginning of last year, to which we were a party or will be a party, in which:

- the amounts involved exceeded or will exceed $120,000; and
- any of our directors, executive officers, or beneficial holders of more than 5% of any class of our capital stock had or will have a direct or indirect material interest.

Other than as described below, there has not been, nor is there any currently proposed, transactions or series of similar transactions to which we have been or will be a party.

Employment Arrangements and Indemnification Agreements

In addition to the offer letter agreements discussed in the section titled "Executive Compensation—Executive Employment Arrangements," we have entered into offer letter agreements with the following individuals.

Certain Family Relationships

Nicolas Courtot, son of Philippe F. Courtot, our Chairman, President and Chief Executive Officer, was employed by us during 2017 as a Creative Director. During 2017, Nicolas Courtot earned total compensation of $192,934, consisting of base salary and bonus compensation. In addition, Nicolas Courtot participated in our employee benefit plans and arrangements which are generally made available to other employees at his level, including employee equity incentive and benefit plans, including health, vacation, Section 401(k) retirement savings plans and insurance plans. The compensation of Nicolas Courtot was established in accordance with our employment and compensation practices applicable to employees with equivalent qualifications, experience and responsibilities. In addition, a member of Philippe F. Courtot's household is employed by us as a Web and Media Designer and, in 2017, such member of Mr. Courtot's household received less than $120,000 in total compensation.

The agreements and transactions described under this section were reviewed and approved or ratified by the audit committee of our board of directors in accordance with our related party transaction policy described below.

Policies and Procedures for Related Party Transactions

The audit committee of our board of directors has the primary responsibility for reviewing and approving or ratifying transactions with related parties.

We have a formal written policy providing that our executive officers, directors, nominees for election as directors, beneficial owners of more than 5% of any class of our common stock, any member of the immediate family of any of the foregoing persons, and any firm, corporation, or other entity in which any of the foregoing persons is employed, is a general partner or principal or in a similar position, or in which such person has a 5% or greater beneficial ownership interest, are/is not permitted to enter into a related party transaction with us without the consent of our audit committee. In approving or rejecting any such proposal, our audit committee is to consider the relevant facts and circumstances available and deemed relevant to our audit committee, including, whether the transaction is on terms no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances, and the extent of the related party's interest in the transaction.

OTHER MATTERS

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934, as amended, requires that our executive officers and directors, and persons who own more than 10% of our common stock, file reports of ownership and changes of ownership with the SEC. Such directors, executive officers and 10% stockholders are required by SEC regulation to furnish us with copies of all Section 16(a) forms they file.

SEC regulations require us to identify in this proxy statement anyone who filed a required report late during the most recent year. Based on our review of forms we received, or written representations from reporting persons stating that they were not required to file these forms, we believe that during 2017, all Section 16(a) filing requirements were satisfied on a timely basis, except as follows:

- On August 3, 2017, Mr. Deeba filed a late Form 4 to report 542 shares withheld to pay taxes upon the vesting of restricted stock units on February 1, 2017, and 458 shares withheld to pay taxes upon the vesting of restricted stock units on May 1, 2017;
- On August 3, 2017, Mr. Posey filed a late Form 4 to report 434 shares withheld to pay taxes upon the vesting of restricted stock units on February 1, 2017, and 373 shares withheld to pay taxes upon the vesting of restricted stock units on May 1, 2017; and
- On August 3, 2017, Mr. Thakar filed a late Form 4 to report 1,472 shares withheld to pay taxes upon the vesting of restricted stock units on February 1, 2017, and 1,397 shares withheld to pay taxes upon the vesting of restricted stock units on May 1, 2017.

2017 Annual Report and SEC Filings

Our financial statements for the year ended December 31, 2017 are included in our annual report on Form 10-K, which we will make available to stockholders at the same time as this proxy statement. Our annual report and this proxy statement are posted on our website at www.qualys.com and are available from the SEC at its website at www.sec.gov. You may also obtain a copy of our annual report without charge by sending a written request to Investor Relations, Qualys, Inc., 919 East Hillsdale Boulevard, 4th Floor, Foster City, California 94404.

* * *

The board of directors does not know of any other matters to be presented at the Annual Meeting. If any additional matters are properly presented at the Annual Meeting, the persons named in the enclosed proxy card will have discretion to vote shares they represent in accordance with their own judgment on such matters.

It is important that your shares be represented at the Annual Meeting, regardless of the number of shares that you hold. You are, therefore, urged to vote by telephone or by using the Internet as instructed on the enclosed proxy card or execute and return, at your earliest convenience, the enclosed proxy card in the envelope that has also been provided.

THE BOARD OF DIRECTORS

Foster City, California
April 27, 2018

Qualys, Inc.

2017 Annual Report

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

☒ **Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**
For the Annual Period Ended December 31, 2017

or

☐ **Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**
For the transition period from to

Commission file number 001-35662

QUALYS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**77-0534145**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification Number)**

919 E. Hillsdale Boulevard, 4th Floor, Foster City, California 94404
(Address of principal executive offices, including zip code)

(650) 801-6100
(Registrant's telephone number, including area code)

Securities registered pursuant to section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common stock, $0.001 par value per share	NASDAQ Stock Market

Securities registered pursuant to section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K(§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☒ Accelerated filer ☐ Non-accelerated filer (Do not check if a smaller reporting company) ☐ Smaller reporting company ☐

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of June 30, 2017, the aggregate market value of voting shares of common stock held by non-affiliates of the registrant was $1,293 million based on the last reported sale price of the registrant's common stock on June 30, 2017. Shares of common stock held by each executive officer and director and by each person who owns 10% or more of the outstanding common stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

The number of shares of the Registrant's common stock outstanding as of January 31, 2018 was 38,628,442 shares.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement for its 2018 Annual Meeting of Stockholders are incorporated by reference in Part III of this Annual Report on Form 10-K where indicated. Such proxy statement will be filed with the Securities and Exchange Commission within 120 days of the registrant's fiscal year ended December 31, 2017.

Qualys, Inc.

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PART I

Forward-Looking Statements

In addition to historical information, this Annual Report on Form 10-K contains "forward-looking" statements within the meaning of the federal securities laws, which statements involve substantial risks and uncertainties. Forward-looking statements generally relate to future events or our future financial or operating performance. In some cases, it is possible to identify forward-looking statements because they contain words such as "anticipates," "believes," "contemplates," "continue," "could," "estimates," "expects," "future," "intends," "likely," "may," "plans," "potential," "predicts," "projects," "seek," "should," "target," or "will," or the negative of these words or other similar terms or expressions that concern our expectations, strategy, plans or intentions. Forward-looking statements contained in this Annual Report on 10-K include, but are not limited to, statements about:

- *our financial performance, including our revenues, costs, expenditures, growth rates, operating expenses and ability to generate positive cash flow to fund our operations and sustain profitability;*
- *anticipated technology trends, such as the use of cloud solutions;*
- *our ability to adapt to changing market conditions;*
- *economic and financial conditions, including volatility in foreign exchange rates;*
- *our ability to diversify our sources of revenues, including selling additional solutions to our existing customers and our ability to pursue new customers;*
- *the effects of increased competition in our market;*
- *our ability to innovate, enhance our cloud solutions and platform and introduce new solutions;*
- *our ability to effectively manage our growth;*
- *our anticipated investments in sales and marketing, our infrastructure, new solutions, research and development, and acquisitions;*
- *maintaining and expanding our relationships with channel partners;*
- *our ability to maintain, protect and enhance our brand and intellectual property;*
- *costs associated with defending intellectual property infringement and other claims;*
- *our ability to attract and retain qualified employees and key personnel, including sales and marketing personnel;*
- *our ability to successfully enter new markets and manage our international expansion;*
- *our expectations, assumptions and conclusions related to our provision for income taxes, our deferred tax assets and our effective tax rate; and*
- *other factors discussed in this Annual Report on Form 10-K in the sections titled "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business."*

We have based the forward-looking statements contained in this Annual Report on Form 10-K primarily on our current expectations and projections about future events and trends that we believe may affect our business, financial condition, results of operations and prospects. The results, events and circumstances reflected in these forward-looking statements are subject to risks, uncertainties, assumptions, and other factors including those described in Part I, Item 1A (Risk Factors) of this Annual Report. Moreover, we operate in a very competitive and rapidly changing environment. New risks and uncertainties emerge from time to time, and it is not possible for us to predict all risks and

uncertainties that could have an impact on the forward-looking statements used herein. We cannot provide assurance that the results, events, and circumstances reflected in the forward-looking statements will be achieved or occur, and actual results, events or circumstances could differ materially from those described in the forward-looking statements.

You should not rely on forward-looking statements as predictions of future events. Except as required by law, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements, and we undertake no obligation to update any forward-looking statements to reflect events or circumstances after the date of such statements.

Qualys, the Qualys logo and QualysGuard, and other trademarks and service marks of Qualys appearing in this Annual Report on Form 10-K are the property of Qualys. This Annual Report on Form 10-K also contains trademarks and trade names of other businesses that are the property of their respective holders. We have omitted the ® and ™ designations, as applicable, for the trademarks used in this Annual Report on Form 10-K.

Item 1. Business

Overview

We are a pioneer and leading provider of a cloud-based platform delivering security and compliance solutions that enable organizations to identify security risks to their information technology (IT) infrastructures, help protect their IT systems and applications from ever-evolving cyber-attacks and achieve compliance with internal policies and external regulations. Our cloud solutions address the growing security and compliance complexities and risks that are amplified by the dissolving boundaries between internal and external IT infrastructures and web environments, the rapid adoption of cloud computing and the proliferation of geographically dispersed IT assets. Our integrated suite of security and compliance solutions delivered on our Qualys cloud platform enables our customers to identify their IT assets, collect and analyze large amounts of IT security data, discover and prioritize vulnerabilities, recommend remediation actions and verify the implementation of such actions. Organizations use our integrated suite of solutions delivered on our Qualys cloud platform to cost-effectively obtain a unified view of their security and compliance posture across globally-distributed IT infrastructures as our solution offers a single platform for information security, application security, endpoint, developer security and cloud teams.

IT infrastructures are more complex and globally-distributed today than ever before, as organizations of all sizes increasingly rely upon a myriad of interconnected information systems and related IT assets, such as servers, databases, web applications, routers, switches, desktops, laptops, other physical and virtual infrastructure, and numerous external networks and cloud services. In this environment, new and evolving digital technologies intended to improve organizations' operations can also increase vulnerability to cyber-attacks, which can expose sensitive data, damage IT and physical infrastructures, and result in serious financial or reputational consequences. In addition, the rapidly increasing amount of data and devices in IT environments makes it more difficult to identify and remediate vulnerabilities in a timely manner. The predominant approach to IT security has been to implement multiple disparate security products that can be costly and difficult to deploy, integrate and manage and may not adequately protect organizations. As a result, we believe there is a large and growing opportunity for comprehensive cloud-based security and compliance solutions delivered in a single platform.

We designed our Qualys cloud platform to transform the way organizations secure and protect their IT infrastructures and applications. Our cloud platform offers an integrated suite of solutions that automates the lifecycle of asset discovery, security assessments, and compliance management for an organization's IT infrastructure and assets, whether such infrastructure and assets reside inside the

organization, on their network perimeter, on endpoints or in the cloud. Since inception, our solutions have been designed to be delivered through the cloud and to be easily and rapidly deployed on a global scale, enabling faster implementation and lower total cost of ownership than traditional on-premises enterprise software products. Our customers, ranging from some of the largest global organizations to small businesses, are served from our globally-distributed cloud platform, enabling us to rapidly deliver new solutions, enhancements and security updates.

We believe that our cloud platform provides our customers with unique advantages, including:

- *No hardware to buy or manage.* There is no infrastructure or software to buy and maintain thus reducing our customers' operating costs; all services are accessible in the cloud via web interface. Qualys operates and maintains the platform.
- *Real-time visibility in one place, anytime and anywhere*. Our customers can conveniently see their security and compliance posture across their global IT asset inventory in one browser window, without plugins or a virtual private network (VPN), whenever and wherever Internet access is available.
- *Easy global scanning.* Our customers can easily perform scans on geographically distributed and segmented networks at the perimeter, behind the firewall, on dynamic cloud environments and on endpoints.
- *Seamless scaling.* Our cloud platform is a scalable, comprehensive, and end-to-end solution for the IT security needs of our customers. Our customers can seamlessly add new coverage, users and services after they have deployed our platform.
- *Up to date resources*. Qualys has one of the largest knowledge bases of vulnerability signatures in the industry. All security updates are made in real-time.
- *Data stored securely*. Data is securely stored and processed in a multi-tiered architecture of load-balanced servers. Our encrypted databases are physically and logically secured.

We were founded and incorporated in December 1999 with a vision of transforming the way organizations secure and protect their IT infrastructure and applications and initially launched our first cloud solution, Vulnerability Management (VM), in 2000. As VM gained acceptance, we introduced new solutions to help customers manage increasing IT security and compliance requirements. Today, the suite of solutions offered on our cloud platform, which we refer to as the Qualys Cloud Apps, includes: Asset Inventory (AI), CMDB Sync (SYN), VM, Continuous Monitoring (CM), Cloud Agent Platform (CAP), Threat Protection (TP), Security Configuration Assessment (SCA), Indication of Compromise (IOC), Policy Compliance (PC), PCI Compliance (PCI), Security Assessment Questionnaire (SAQ), File Integrity Monitoring (FIM), Web Application Scanning (WAS) and Web Application Firewall (WAF).

We provide our solutions through a software-as-a-service model, primarily with renewable annual subscriptions. These subscriptions require customers to pay a fee in order to access our cloud solutions. We invoice our customers for the entire subscription amount at the start of the subscription term, and the invoiced amounts are treated as deferred revenues and are recognized ratably over the term of each subscription. We continue to experience significant revenue growth from existing customers as they renew and purchase additional subscriptions.

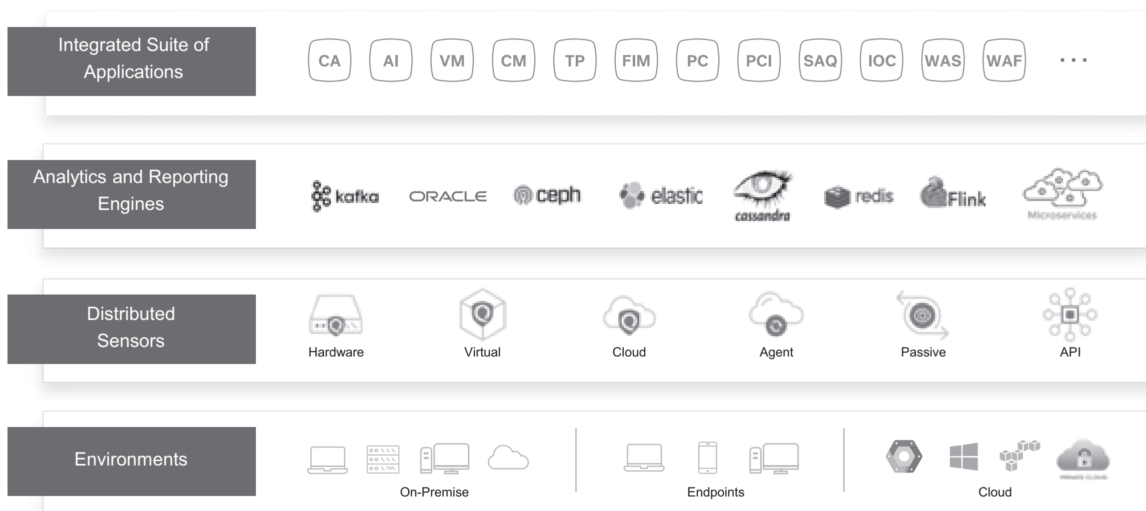
Our Qualys cloud platform is currently used by over 10,300 customers in more than 130 countries, including a majority of each of the Forbes Global 100 and Fortune 100. Our revenues increased from $164.3 million in 2015 to $197.9 million in 2016, and reached $230.8 million in 2017. Our VM solutions (including VM, AI, SYN, CM, TP, Cloud Agent for VM, allocated scanner revenue and Qualys Private Cloud Platform) have provided a substantial majority of our revenues to date, representing 75%, 76% and 77% of total revenues in 2017, 2016 and 2015, respectively. We generated net income of

$40.4 million in 2017, $19.2 million in 2016 and $15.9 million in 2015. Total assets as of December 31, 2017 and 2016 were $537.5 million and $407.0 million, respectively.

Our Platform

Our cloud platform consists of a suite of asset management, IT security, compliance monitoring, and web application security solutions, which we refer to as the Qualys Cloud Apps, that leverages our shared and extensible core services and our highly scalable multi-tenant cloud infrastructure. We also provide open application program interfaces, or APIs, and other developer tools that allow third parties to embed our technology into their solutions and build applications on our cloud platform.

Our cloud platform utilizes sensors, including physical, virtual and cloud scanners, and cloud agents that provide our customers with continuous visibility enabling customers to respond to threats immediately. It automatically gathers and analyzes security and compliance data in a scalable, state-of-the-art backend. The technology underlying our cloud infrastructure enables us to ingest, process, analyze and store a high volume of sensor data coming from our agents, scanners and passive analyzers, and correlate information at very high speeds in a distributed manner for millions of devices.



Our cloud platform is delivered to our customers via our shared platform offering from our global data centers, or via our private platform offering Qualys Private Cloud Platform (PCP) for customers or partners that want the platform to reside within the customer's data center. The PCP is a standalone version of our multi-layer, multi-tenant services architecture and is a fully integrated turnkey solution, making it more scalable, cost effective and faster to deploy within a customer's data center. Solutions delivered through our PCP are typically on the same subscription basis as solutions delivered through our shared platform. Our PCP utilizes hardware and software owned by us and physically located on the customer's premises. The customer is not permitted to take possession of the software or access the software code. Our PCP provides our subscription-based platform services to the customer using a virtual version of our software. This virtualized PCP allows us to extend our security and compliance solutions without the complexity and cost associated with deploying traditional enterprise software. Additionally, in 2016, we introduced the Private Cloud Platform Appliance (PCPA), an on-premises security and compliance solution packaged in a form-factor for medium-sized companies.

Qualys Core Services

Our core services enable integrated workflows, management and real-time analysis and reporting across all of our IT security and compliance solutions for our customers inside their organizations, on the perimeter, on endpoints or in the cloud.

Our core services constitute dynamic and customizable dashboards and centrally managed, self-updating integrated Cloud Apps, through what we call a “single-pane-of-glass” user interface. Our interactive, dynamic dashboards and cloud platform allow our customers to aggregate and correlate all of their IT, security and compliance data in one place, drill down into details, and generate reports customized for different audiences. Our cloud platform’s powerful elasticsearch clusters enable customers to instantly find detailed data on any asset.

Our core services include:

- *Asset Tagging and Management.* Enables customers to easily identify, categorize and manage large numbers of assets in highly dynamic IT environments and automates the process of inventory management and hierarchical organization of IT assets. Built on top of this core service is the Qualys AI framework, which is a global asset inventory service enabling our customers to search for information on any IT asset, scaling to millions of assets for customers of all sizes, helping IT and security personnel to search IT assets and maintain an up-to-date inventory on a continuous basis.
- *Reporting and Dashboards.* A highly configurable reporting engine that provides customers with reports and dashboards based on their roles and access privileges.
- *Questionnaires and Collaboration.* A configurable workflow engine that enables customers to easily build questionnaires and capture existing business processes and workflows to evaluate controls and gather evidence to validate and document compliance.
- *Remediation and Workflow.* An integrated workflow engine that allows customers to automatically generate helpdesk tickets for remediation and to manage compliance exceptions based on customer-defined policies, enabling subsequent review, commentary, tracking and escalation. This engine automatically distributes remediation tasks to IT administrators upon scan completion, tracks remediation progress and closes open tickets once patches are applied and remediation is verified in subsequent scans.
- *Big Data Correlation and Analytics Engine.* Provides elasticsearch capabilities for indexing, searching and correlating large amounts of security and compliance data with other security incidents and third-party security intelligence data. Embedded workflows enable customers to quickly assess risk and access information for remediation, incident analysis and forensic investigations.
- *Alerts and Notifications.* Creates email notifications to alert customers of new vulnerabilities, malware infections, scan completion, open trouble tickets and system updates.

Qualys Cloud Apps

Many organizations have an array of heterogeneous point tools that do not interoperate well and are difficult and costly to maintain and integrate, making it difficult for Chief Information Officers (CIOs) and Chief Information Security Officers (CISOs) to obtain a single, unified view of their organization’s security and compliance posture. The Qualys cloud platform and its Cloud Apps help organizations escape this tool-fragmentation dilemma by drastically simplifying their security stacks and regaining unimpeded visibility across their IT environment.

The Cloud Apps are self-updating, centrally managed and tightly integrated, and cover a broad range of functionality in areas such as vulnerability management, IT asset management, IT security, web app security and compliance monitoring.

Our suite of Cloud Apps currently includes: AI, SYN, VM, CM, CAP, TP, SCA, IOC, PC, PCI, SAQ, FIM, WAS and WAF.

We believe that our applications are easy to use and provide our customers with a high level of control because our applications are part of one platform, share a common user interface, utilize the same scanners and agents, access the same collected data, and leverage the same user permissions.

Our customers can subscribe to one or more of our security and compliance Apps based on their initial needs and expand their subscriptions over time to new areas within their organization or to additional Qualys solutions. We offer three editions of our Qualys Cloud Apps: Enterprise for large enterprises, Express for medium-sized businesses, and Express Lite for small-sized businesses.

Many of our customers use multiple Cloud Apps to develop a more complete understanding of their respective environment's security and compliance posture. The Qualys cloud platform currently provides the following Cloud Apps to our customers:

Asset Management

Asset Inventory (AI): AI provides a complete, continuously updated inventory of a customer's IT assets everywhere: on premises, in clouds or at mobile endpoints. It lists assets' installed software, existing vulnerabilities and hardware details. A powerful search engine enables ad hoc queries and refines such queries. In addition to Qualys' network scanners, AI leverages our Cloud Agents, which are lightweight, self-updating and run in the background. These Cloud Agents continuously enable the assessment of the compliance and security status of customer assets, including intermittently connected assets, without the need for scan windows or credential management.

CMDB Sync (SYN): This certified application synchronizes AI data with ServiceNow's Configuration Management system. Device changes are immediately transmitted to the Qualys cloud platform and then synchronized with ServiceNow. For customers, this means an end to unidentified and misclassified assets and to data update delays, all of which decrease chances of breaches. SYN provides real-time, comprehensive visibility of IT asset inventories enabling immediate detection of security and compliance risks.

IT Security

Vulnerability Management (VM): VM is an industry leading and award-winning solution that automates network auditing and vulnerability management across an organization, including network discovery and mapping, asset management, vulnerability reporting and remediation tracking. Driven by our comprehensive knowledge base of known vulnerabilities, VM enables cost-effective protection against vulnerabilities without substantial resource deployment.

Continuous Monitoring (CM): Built on top of VM, CM is a next-generation cloud service that can detect network threats and unexpected changes before they turn into breaches. Whenever it spots an anomaly in your network, it immediately sends targeted, informative alerts to the right people for each situation and each machine. CM tracks what happens throughout public perimeters, internal networks, and cloud environments—anywhere in the world.

Threat Protection (TP): Thousands of new vulnerabilities are disclosed annually. With TP, customers can pinpoint their most critical threats and identify what they need to remediate first. TP continuously correlates external threat information against a customer's vulnerabilities and IT asset inventory, so customers know which threats pose the greatest risk to their organization at any given time. As Qualys engineers continuously validate and rate new threats from internal and external sources, TP's live feed displays the latest vulnerability disclosures and maps them to customers' impacted IT assets. Customers can see the assets affected by each threat, and drill down into details.

Security Configuration Assessment (SCA): A VM add-on, SCA expands our VM program with automatic assessment of IT assets' configurations using the latest Center for Internet Security (CIS) Benchmarks for operating systems, databases, applications and network devices. SCA provides intuitive workflows for assessing, monitoring, reporting and remediating security-related configuration issues. SCA's CIS assessments are provided via a web-based user interface and delivered from the Qualys cloud platform, enabling centralized management with minimal deployment overhead. SCA users can automatically create downloadable reports and view dashboards.

Indication of Compromise (IOC): IOC delivers threat hunting, detects suspicious activity, and confirms the presence of known and unknown malware for devices both on and off the network. From its single console, customers can monitor current and historical system activity for all on-premises servers, user endpoints, and cloud instances—even for assets that are currently offline or have been re-imaged by IT. IOC utilizes the Cloud Agent to capture endpoint activity on files, processes, mutant handles, registries, and network connections, and uploads the data to the Qualys cloud platform for storage, processing, and query.

Compliance Monitoring

Policy Compliance (PC): PC performs automated security configuration assessments on IT systems throughout a network, helping to reduce risk and continuously ensure compliance with internal policies and external regulations. PC leverages out-of-the-box library content to fast-track compliance assessments using industry-recommended best practices. PC also provides a centralized, interactive console for specifying baseline standards for different hosts. By automating requirement evaluation against multiple standards for OSes, network devices, databases and server applications, PC enables the quick identification of security issues and works to prevent configuration drift. PC works to prioritize and track remediation and exceptions, while demonstrating a repeatable auditable process for compliance management.

PCI Compliance (PCI): PCI streamlines and automates compliance with PCI DSS (Payment Card Industry Data Security Standard) requirements for protecting the collection, storage, processing and transmission of cardholder data. As an Approved Scanning Vendor, Qualys has been authorized by the PCI Security Standards Council to conduct the required quarterly scans. PCI scans all Internet-facing networks and systems with Six Sigma (99.9996%) accuracy, generates reports and provides detailed patching instructions. An auto-submission feature completes the compliance process once remediation is completed.

Security Assessment Questionnaire (SAQ): SAQ automates and streamlines third-party and internal risk assessment processes, obviating the need to perform such processes manually via email and spreadsheets. SAQ easily designs surveys to assess procedural controls of IT security policies and practices. SAQ automates the launch and monitoring of assessment campaigns, making the process agile, accurate, comprehensive, centralized, scalable and uniform across an organization. SAQ also provides tools for displaying, analyzing and acting on collected data, enabling the assessment of compliance with industry standards, regulations and internal policies of third parties, like vendors and partners, and of employees.

File Integrity Monitoring (FIM): FIM logs and centrally tracks file change events on common enterprise operating systems in organizations of all sizes. FIM provides customers with a simple way to achieve centralized cloud-based visibility of activity resulting from normal patching and administrative tasks, change control exceptions or violations, or malicious activity—then reports on that system activity as part of compliance mandates. FIM collects the critical details needed to quickly identify changes and root out activity that violates policy or is potentially malicious. FIM helps customers to comply with change control policy enforcement and change monitoring requirements.

Web Application Security

Web Application Scanning (WAS): WAS continuously discovers and catalogs web apps in your network—including new and unknown ones — and detects vulnerabilities and misconfigurations. Scaling up to thousands of web apps, it conducts incisive, thorough and precise scans, with few false positives. Its seamless integration with Web Application Firewall (WAF) enables one-click patching of web apps, including mobile apps and Internet of things (IoT) services. With WAS, customers can also insert security into DevOps environments by detecting code security issues early and often in the app development and deployment pipeline. WAS also scans, identifies and removes malware infections from customers' websites using behavioral and static analysis.

Web Application Firewall (WAF): WAF permits the reduction of application security cost and complexity with a unified platform to detect and virtually patch web application vulnerabilities. Simple, scalable and adaptive, WAF enables the quick blocking of attacks, prevents disclosure of sensitive information, and controls when and where customer applications are accessed. WAF and WAS work together seamlessly. Customers scan web apps with WAS, deploy one-click virtual patches for detected vulnerabilities in WAF, and manage it all from a centralized cloud-based portal. WAF can be deployed in minutes, supports Transport Layer Security (TLS) and Secure Sockets Layer (SSL) and does not require special hardware.

Our Growth Strategy

We intend to strengthen our leadership position as a trusted provider of cloud-based security and compliance solutions. The key elements of our growth strategy are:

- ***Continue to innovate and enhance our cloud platform and suite of solutions.*** We intend to continue to make significant investments in research and development to extend our cloud platform's functionality by developing new security solutions and capabilities and further enhancing our existing suite of solutions. From inception through December 31, 2016, we have added the following solutions: VM, PCI, PC, WAS, WAF, CM, CAP, AI, SYN, SAQ and TP. In 2017, we introduced a number of new offerings, including FIM, IOC and SCA.
- ***Expand the use of our suite of solutions by our large and diverse customer base.*** With more than 10,300 customers across many industries and geographies, we believe we have a significant opportunity to sell additional solutions to our customers and expand their use of our suite of solutions. Since typically our customers initially deploy one or two of our solutions in select parts of their IT infrastructures, our existing customers serve as a strong source of new sales as they expand their scope and increase their subscriptions, or choose to adopt additional solutions from our integrated suite of IT security and compliance offerings. In this regard, we continue to expand our sales execution and marketing functions to increase adoption of our newly developed solutions among our existing customers.
- ***Drive new customer growth and broaden our global reach.*** We are pursuing new customers by targeting key accounts and expanding our sales and marketing organization and network of channel partners. We will continue to seek to make significant investments to

encourage organizations to replace their existing security products with our cloud solutions. We intend to expand our relationships with key security consulting organizations, managed security service providers and value added resellers to accelerate the adoption of our cloud platform. We seek to strengthen existing relationships as well as establish new relationships to increase the distribution and market awareness of our cloud platform and target new geographic regions. We also plan to partner with such security providers that can host our Private Cloud offering within their data centers, helping us expand our reach in new markets and new geographies.

- ***Selectively pursue technology acquisitions to bolster our capabilities and leadership position.*** We may explore acquisitions that are complementary to and can expand the functionality of our cloud platform. We may also seek to acquire development teams to supplement our own personnel and acquire technology to increase the breadth of our cloud-based security and compliance solutions. In 2017, we acquired certain assets of Nevis Networks (India) Private Limited (“Nevis”), a company developing network security solutions for detection and awareness of external intrusions to computer networks. This transaction provided us with significant domain expertise in passive scanning technologies and allowed us to accelerate our move into the adjacent market of mitigation and response at endpoints. In 2017, we also acquired the assets of NetWatcher, allowing us to expand our threat protection and management capabilities and add new offerings to managed service providers (MSPs).

Our Customers

We market and sell our solutions to enterprises, government entities and small and medium-sized businesses across a broad range of industries, including education, financial services, government, healthcare, insurance, manufacturing, media, retail, technology and utilities. As of December 31, 2017, we had over 10,300 customers in more than 130 countries, including a majority of each of the Forbes Global 100 and Fortune 100. In each of 2017, 2016 and 2015, no one customer accounted for more than 10% of our revenues. In 2017, 2016 and 2015, 70%, 71% and 70%, respectively, of our revenues were derived from customers in the United States. We sell our solutions to enterprises and government entities primarily through our field sales force and to small and medium-sized businesses through our inside sales force. We generate a significant portion of sales through our channel partners, including managed service providers, value-added resellers and consulting firms in the United States and internationally.

Sales and Marketing

Sales

We market and sell our IT security and compliance solutions to customers directly through our sales teams as well as indirectly through our network of channel partners.

Our global sales force is organized into a field sales team, which focuses on enterprises, generally including organizations with more than 5,000 employees, and an inside sales team, which focuses on small to medium-sized businesses, which generally include organizations with less than 5,000 employees. Both our field and inside sales teams are divided into three geographic regions, including the Americas; Europe, Middle East and Africa; and Asia-Pacific. We also further segment each of our sales teams into groups that focus on adding new customers or managing relationships with existing customers.

Our channel partners maintain relationships with their customers throughout the territories in which they operate and provide their customers with services and third-party solutions to help meet those customers’ evolving security and compliance requirements. As such, these partners offer our IT security and compliance solutions in conjunction with one or more of their own products or services

and act as a conduit through which we can connect with these prospective customers to offer our solutions. Our channel partners include security consulting organizations, managed service providers and resellers, such as Deutsche Telekom AG, Fujitsu, DXC Technology, Insight Technologies, Inc., Optiv Security, Inc., SecureWorks Corp., and Verizon Communications Inc.

For sales involving a channel partner, the channel partner engages with the prospective customer directly and involves our sales team as needed to assist in developing and closing an order. When a channel partner secures a sale, we sell the associated subscription to the channel partner who in turn resells the subscription to the customer, with the channel partner earning a fee based on the total value of the order. Once the order is completed, we provide these customers with direct access to our solutions and other associated back-office applications, enabling us to establish a direct relationship as part of ensuring customer satisfaction with our solutions. At the end of the subscription term, the channel partner engages with the customer to execute a renewal order, with our sales team providing assistance as required. In 2017, 2016 and 2015, 41%, 42% and 39%, respectively, of our revenues were generated by channel partners.

Marketing

Our marketing programs include a variety of online marketing, advertising, conferences, events, public relations activities and web-based seminar campaigns targeted at key decision makers within our prospective customers.

We have a number of marketing initiatives to build awareness and encourage customer adoption of our solutions. We offer free trials and services to allow prospective customers to experience the quality of our solutions, to learn in detail about the features and functionality of our cloud platform, and to quantify the potential benefits of our solutions.

Customer Support

We deliver 24x7x365 day customer technical support from centers located in Foster City, California; Raleigh, North Carolina; and Pune, India. We recruit senior level technical personnel and trained subject matter experts who work closely with engineering and operations personnel to resolve issues quickly. Our security and compliance solutions can be deployed easily and are designed to be implemented and operated without the need for significant professional services. We also offer various training programs as part of our subscriptions to all of our customers. We believe that our customer support helps ensure customer satisfaction and is critical to retaining and expanding our customer base. In addition, we leverage the insights drawn from our customers to further improve the functionality of our security and compliance solutions.

Research and Development and Operations

We devote significant resources to maintain, enhance and add new functionality to our Qualys cloud platform and the integrated suite of solutions that we offer. Our development organization consists of agile engineering teams with substantial security expertise in specific areas of our solutions. In addition to our development teams, we have also built a sophisticated research team focused on identifying threats and developing signatures for vulnerabilities and compliance checks so that we can provide our customers with daily updates and enable them to scan their assets for the latest threats. We conduct our research and development in the United States, France, India, and the United Kingdom, which gives us access to some of the best research and engineering talent in the world. Our focus remains to attract engineering talent as we continue to add new solutions and improve existing ones.

Our development team works closely with our customers and partners to gain valuable insights into their environments and gather feedback for threat research, product development and innovations.

We typically release updates to our solutions, including enhancements and new features multiple times a year, and we measure the quality of our scan results on a frequent basis in an effort to maintain the highest level of scan accuracy.

The modular architecture of our cloud platform enables our engineering teams to simultaneously work on different features, accelerating the delivery of new functionalities to customers. Our research and development team also works collaboratively with our technical support team to ensure customer satisfaction and with our sales team to accelerate the adoption of our solutions.

Research and development expenses were $42.8 million, $36.6 million and $30.4 million for 2017, 2016 and 2015, respectively.

Manufacturing Agreement

Our physical appliances are provided by SYNNEX Corporation, or SYNNEX, pursuant to a manufacturing services agreement dated March 1, 2011. Under this agreement, SYNNEX manufactures, assembles and tests our physical scanner appliances. This agreement has an initial term of one year, which is automatically renewed for additional one-year terms, unless terminated (i) at any time upon the mutual written agreement of us and SYNNEX, (ii) by either party upon 90 days or more written notice, (iii) upon written notice, subject to applicable cure periods, if the other party has materially breached its obligations under the agreement or (iv) by either party upon the other party seeking an order for relief under the bankruptcy laws of the United States or similar laws of any other jurisdiction, a composition with or assignment for the benefit of creditors, or dissolution or liquidation.

Data Center Agreements

Our data center operations are provided by large third-party data center vendors and are located in the United States, Switzerland, the Netherlands and India. Our data center agreements have varying terms through 2020.

Competition

The expanding capabilities of our security and compliance solutions have enabled us to address a growing array of opportunities in the cloud IT security and compliance market. We compete with a large and broad array of established and emerging vulnerability management vendors, compliance vendors and data security vendors in a highly fragmented and competitive environment.

We compete with large and small public companies, such as FireEye, Inc., Imperva, Inc., International Business Machines Corporation, Micro Focus International plc, Rapid7, Inc. and Symantec Corporation, as well as privately held security providers including Barracuda Networks Inc., BeyondTrust Software, Inc., Carbon Black, Inc., CrowdStrike Inc., Tanium Inc., Tenable Network Security, Inc., Tripwire, Inc. and Trustwave Holdings, Inc. We also seek to replace IT security and compliance solutions that organizations have developed internally. As we continue to extend our cloud platform’s functionality by further developing security and compliance solutions, such as web application scanning and firewalls, we expect to face additional competition in these new markets.

We believe that the principal competitive factors affecting the market for cloud-based security and compliance solutions include product functionality, breadth of offerings, flexibility of delivery models, ease of deployment and use, total cost of ownership, scalability and performance, customer support and extensibility of platform. We believe that our suite of solutions generally competes favorably with respect to these factors. However, many of our primary competitors have greater name recognition, longer operating histories, more established customer relationships, larger marketing budgets and significantly greater resources than we do.

Intellectual Property

We rely on a combination of trade secrets, copyrights, patents and trademarks, as well as contractual protections, to establish and protect our intellectual property rights and protect our proprietary technology. As of February 23, 2018, we have eleven issued patents, several pending U.S. patent applications and an exclusive license to four U.S. patents, which was obtained in connection with our acquisition of Nemean in 2010. The inbound license remains in effect until the licensed patents are no longer enforceable, unless the applicable license agreement is first terminated by us or terminated by the licensor for a breach of the agreement or if we undergo certain bankruptcy events. The licenses are currently exclusive and will remain exclusive so long as we make an appropriately-timed written election and pay an annual fixed royalty for ten years thereafter. These exclusive licenses are subject to the licensor's reservation of certain rights in the patents and subject to the U.S. government's reserved rights in the technology. We have a number of registered and unregistered trademarks. We require our employees, consultants and other third parties to enter into confidentiality and proprietary rights agreements and control access to software, documentation and other proprietary information. We view our trade secrets and know-how as a significant component of our intellectual property assets, as we have spent years designing and developing our Qualys cloud platform, which we believe differentiates us from our competitors.

We expect that software and other solutions in our industry may be subject to third-party infringement claims as the number of competitors grows and the functionality of products in different industry segments overlaps. Any of these third parties might make a claim of infringement against us at any time.

Employees

As of December 31, 2017, we had 869 full-time employees, including 384 in research and development, 206 in sales and marketing, 189 in operations and customer support and 90 in general and administrative. As of December 31, 2017, we had 381 employees in the United States and 488 employees internationally. None of our U.S. employees are covered by collective bargaining agreements. Employees in certain European countries have collective bargaining arrangements at the national level. We believe our employee relations are good and we have not experienced any work stoppages.

Available Information

Our principal executive offices are located at 919 E. Hillsdale Blvd., 4th Floor, Foster City, California 94404. The telephone number of our principal executive offices is (650) 801-6100, and our main corporate website is *www.qualys.com*. Information contained on, or that can be accessed through, our website, does not constitute part of this Annual Report on Form 10-K and inclusion of our website address in this Annual Report on Form 10-K is an inactive textual reference only.

We make available our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended, free of charge on our website, *www.qualys.com* as soon as reasonably practicable after they are electronically filed with or furnished to the Securities and Exchange Commission, or SEC. Additionally, copies of materials filed by us with the SEC may be accessed at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549 or at the SEC's website, *www.sec.gov*. For information about the SEC's Public Reference Room, contact 1-800-SEC-0330.

Geographic Information

For a description of our revenue and property and equipment by geographic location, see Note 10 to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Item 1A. Risk Factors

An investment in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below, and all other information contained in this Annual Report on Form 10-K, including our consolidated financial statements and the related notes, before making a decision to invest in our common stock. Our business, operating results, financial condition, or prospects could be materially and adversely affected by any of these risks and uncertainties. In that case, the trading price of our common stock could decline, and you might lose all or part or all of your investment. In addition, the risks and uncertainties discussed below are not the only ones we face. Our business, operating results, financial performance or prospects could also be harmed by risks and uncertainties not currently known to us or that we currently do not believe are material.

Subscriptions to our Vulnerability Management solutions generate most of our revenues, and if we are unable to continue to renew and grow subscriptions for these solutions, our operating results would suffer.

We derived approximately 75%, 76% and 77% of our revenues from subscriptions to our VM solutions for the years ended December 31, 2017, 2016 and 2015, respectively. In 2015 and prior 10-Q and 10-K filings, we had included all revenues from scanners and credits for prepaid services in our VM solutions revenues. In the fourth quarter of 2016, we changed the methodology to allocate revenues from scanners and credits across our products.

We expect to continue to derive a significant majority of our revenues from subscriptions to our VM solutions. As a result, the market demand for our Vulnerability Management solutions is critical to our continued success. Demand for these solutions is affected by a number of factors beyond our control, including continued market acceptance of our solution for existing and new use cases, the timing of development and release of new products or services by our competitors, technological change, and growth or contraction in our market. Our inability to renew or increase subscriptions for this solution or a decline in price of this solution would harm our business and operating results more seriously than if we derived significant revenues from a variety of solutions.

Our quarterly operating results may vary from period to period, which could result in our failure to meet expectations with respect to operating results and cause the trading price of our stock to decline.

Our operating results have historically varied from period to period, and we expect that they will continue to do so as a result of a number of factors, many of which are outside of our control, including:

- the level of demand for our solutions;
- publicity regarding security breaches generally and the level of perceived threats to IT security;
- expenses associated with our existing and new products and services;
- changes in customer renewals of our solutions;
- the extent to which customers subscribe for additional solutions;
- seasonal buying patterns of our customers;
- the level of perceived threats to IT security;
- security breaches, technical difficulties or interruptions with our service;
- changes in the growth rate of the IT security and compliance market;

- the timing and success of new product or service introductions by us or our competitors or any other changes in the competitive landscape of our industry, including consolidation among our competitors;
- the introduction or adoption of new technologies that compete with our solutions;
- decisions by potential customers to purchase IT security and compliance products or services from other vendors;
- the amount and timing of operating costs and capital expenditures related to the operations and expansion of our business;
- the timing of sales commissions relative to the recognition of revenues;
- the announcement or adoption of new regulations and policy mandates or changes to existing regulations and policy mandates;
- failure of our products and services to operate as designed;
- price competition;
- the length of our sales cycle for our products and services;
- insolvency or credit difficulties confronting our customers, affecting their ability to purchase or pay for our solutions;
- timely invoicing or changes in billing terms of customers;
- timing of deals signed within the quarter;
- pace and cost of hiring employees;
- changes in foreign currency exchange rates;
- general economic conditions, both domestically and in the foreign markets in which we sell our solutions;
- future accounting pronouncements or changes in our accounting policies;
- our ability to integrate any products or services that we may acquire in the future into our product suite or migrate existing customers of any companies that we may acquire in the future to our products and services;
- our effective tax rate;
- the timing of expenses related to the development or acquisition of technologies, services or businesses; and
- potential goodwill and intangible asset impairment charges associated with acquired businesses.

Each factor above or discussed elsewhere in this Annual Report on Form 10-K or the cumulative effect of some of these factors may result in fluctuations in our operating results. This variability and unpredictability could result in our failure to meet expectations with respect to operating results, or those of securities analysts or investors, for a particular period. In addition, a significant percentage of our operating expenses are fixed in nature and based on forecasted trends in revenues. Accordingly, in the event of shortfalls in revenues, we are generally unable to mitigate the negative impact on margins in the short term by reducing our operating expenses. If we fail to meet or exceed expectations for our operating results for these or any other reasons, the trading price of our common stock could fall and we could face costly lawsuits, including securities class action suits.

If the market for cloud solutions for IT security and compliance does not evolve as we anticipate, our revenues may not grow and our operating results would be harmed.

Our success depends to a significant extent on the willingness of organizations to increase their use of cloud solutions for their IT security and compliance. However, the market for cloud solutions for IT security and compliance is at an early stage relative to on-premises solutions, and as such, it is difficult to predict important market trends, including the potential growth, if any, of the market for cloud security and compliance solutions. To date, some organizations have been reluctant to use cloud solutions because they have concerns regarding the risks associated with the reliability or security of the technology delivery model associated with these solutions. If other cloud service providers experience security incidents, loss of customer data, disruptions in service delivery or other problems, the market for cloud solutions as a whole, including our solutions, may be negatively impacted. Moreover, many organizations have invested substantial personnel and financial resources to integrate on-premises software into their businesses, and as a result may be reluctant or unwilling to migrate to a cloud solution. Organizations that use on-premises security products, such as network firewalls, security information and event management products or data loss prevention solutions, may also believe that these products sufficiently protect their IT infrastructure and deliver adequate security. Therefore, they may continue spending their IT security budgets on these products and may not adopt our security and compliance solutions in addition to or as a replacement for such products.

If the market for cloud solutions for IT security and compliance does not evolve in the way we anticipate or if customers do not recognize the benefits of our cloud solutions over traditional on-premises enterprise software products, and as a result we are unable to increase sales of subscriptions to our solutions, then our revenues may not grow or may decline, and our operating results would be harmed.

If we do not successfully anticipate market needs and opportunities or are unable to enhance our solutions and develop new solutions that meet those needs and opportunities on a timely or cost-effective basis, we may not be able to compete effectively and our business and financial condition may be harmed.

The IT security and compliance market is characterized by rapid technological advances, customer price sensitivity, short product and service life cycles, intense competition, changes in customer requirements, frequent new product introductions and enhancements and evolving industry standards and regulatory mandates. Any of these factors could create downward pressure on pricing and gross margins, and could adversely affect our renewal rates, as well as our ability to attract new customers. Our future success will depend on our ability to enhance existing solutions, introduce new solutions on a timely and cost-effective basis, meet changing customer needs, extend our core technology into new applications, and anticipate and respond to emerging standards and business models. We must also continually change and improve our solutions in response to changes in operating systems, application software, computer and communications hardware, networking software, data center architectures, programming tools and computer language technology.

We may not be able to anticipate future market needs and opportunities or develop enhancements or new solutions to meet such needs or opportunities in a timely manner or at all. The market for cloud solutions for IT security and compliance is relatively new, and it is uncertain whether our new solutions will gain market acceptance.

Our solution enhancements or new solutions could fail to attain sufficient market acceptance for many reasons, including:

- failure to timely meet market demand for product functionality;
- inability to identify and provide intelligence regarding the attacks or techniques used by cyber-attackers;

- inability to inter-operate effectively with the database technologies, file systems or web applications of our prospective customers;
- defects, errors or failures;
- delays in releasing our enhancements or new solutions;
- negative publicity about their performance or effectiveness;
- introduction or anticipated introduction of products by our competitors;
- poor business conditions, causing customers to delay IT security and compliance purchases;
- easing or changing of external regulations related to IT security and compliance; and
- reluctance of customers to purchase cloud solutions for IT security and compliance.

Furthermore, diversifying our solutions and expanding into new IT security and compliance markets will require significant investment and planning, require that our research and development and sales and marketing organizations develop expertise in these new markets, bring us more directly into competition with security and compliance providers that may be better established or have greater resources than we do, require additional investment of time and resources in the development and training of our channel partners and entail significant risk of failure.

If we fail to anticipate market requirements or fail to develop and introduce solution enhancements or new solutions to satisfy those requirements in a timely manner, such failure could substantially decrease or delay market acceptance and sales of our present and future solutions and cause us to lose existing customers or fail to gain new customers, which would significantly harm our business, financial condition and results of operations.

If we fail to continue to effectively scale and adapt our platform to meet the performance and other requirements of our customers, our operating results and our business would be harmed.

Our future growth depends upon our ability to continue to meet the expanding needs of our customers as their use of our cloud platform grows. As these customers gain more experience with our solutions, the number of users and the number of locations where our solutions are being accessed may expand rapidly in the future. In order to ensure that we meet the performance and other requirements of our customers, we intend to continue to make significant investments to develop and implement new proprietary and third-party technologies at all levels of our cloud platform. These technologies, which include databases, applications and server optimizations, and network and hosting strategies, are often complex, new and unproven. We may not be successful in developing or implementing these technologies. To the extent that we do not effectively scale our platform to maintain performance as our customers expand their use of our platform, our operating results and our business may be harmed.

Our current research and development efforts may not produce successful products or enhancements to our platform that result in significant revenue, cost savings or other benefits in the near future, if at all.

We must continue to dedicate significant financial and other resources to our research and development efforts if we are to maintain our competitive position. However, developing products and enhancements to our platform is expensive and time consuming, and there is no assurance that such activities will result in significant new marketable products or enhancements to our platform, design improvements, cost savings, revenue or other expected benefits. If we spend significant resources on research and development and are unable to generate an adequate return on our investment, our business and results of operations may be materially and adversely affected.

Our platform, website and internal systems may be subject to intentional disruption or other security incidents that could result in liability and adversely impact our reputation and future sales.

We and our service providers could be a target of cyber-attacks or other malfeasance designed to impede the performance of our solutions, penetrate our network security or the security of our cloud platform or our internal systems, misappropriate proprietary information and/or cause interruptions to our services. Our solutions, platforms, and system may also suffer security incidents as a result of non-technical issues, including intentional or inadvertent breaches by our employees or service providers. Because our operations involve providing IT security solutions to our customers, we may be targeted for cyber-attacks and other security incidents. If an actual or perceived breach of our security measures or those of our service providers occurs, it could adversely affect the market perception of our solutions, negatively affecting our reputation, and may expose us to the loss of information, litigation, regulatory actions and possible liability. Any such actual or perceived security breach could also divert the efforts of our technical and management personnel. In addition, any such actual or perceived security breach could impair our ability to operate our business and provide solutions to our customers. If this happens, our reputation could be harmed, our revenues could decline and our business could suffer.

Our business depends substantially on retaining our current customers, and any reduction in our customer renewals or revenues from such customers could harm our future operating results.

We offer our Qualys cloud platform and integrated suite of solutions pursuant to a software-as-a-service model, and our customers purchase subscriptions from us that are generally one year in length. Our customers have no obligation to renew their subscriptions after their subscription period expires, and they may not renew their subscriptions at the same or higher levels or at all. As a result, our ability to grow depends in part on customers renewing their existing subscriptions and purchasing additional subscriptions and solutions. Our customers may choose not to renew their subscriptions to our solutions or purchase additional solutions due to a number of factors, including their satisfaction or dissatisfaction with our solutions, the prices of our solutions, the prices of products or services offered by our competitors, reductions in our customers' spending levels due to the macroeconomic environment or other factors. If our customers do not renew their subscriptions to our solutions, renew on less favorable terms, or do not purchase additional solutions or subscriptions, our revenues may grow more slowly than expected or decline and our results of operations may be harmed.

If we are unable to continue to attract new customers and grow our customer base, our growth could be slower than we expect and our business may be harmed.

We believe that our future growth depends in part upon increasing our customer base. Our ability to achieve significant growth in revenues in the future will depend, in large part, upon continually attracting new customers and obtaining subscription renewals to our solutions from those customers. If we fail to attract new customers our revenues may grow more slowly than expected and our business may be harmed.

If we are unable to sell subscriptions to additional solutions, our future revenue growth may be harmed and our business may suffer.

We will need to increase the revenues that we derive from our current and future solutions other than Vulnerability Management for our business and revenues to grow as we expect. Revenues from our other solutions such as Policy Compliance, PCI Compliance, Security Assessment Questionnaire, Web Application Scanning, and Web Application Firewall have been relatively modest compared to revenues from our Vulnerability Management solutions. Our future success depends in part on our

ability to sell subscriptions to these additional solutions to existing and new customers. This may require more costly sales and marketing efforts and may not result in additional sales. If our efforts to sell subscriptions to additional solutions to existing and new customers are not successful, our business may suffer.

Our sales cycle can be long and unpredictable, and our sales efforts require considerable time and expense. As a result, revenues may vary from period to period, which may cause our operating results to fluctuate and could harm our business.

The timing of sales of subscriptions for our solutions can be difficult to forecast because of the length and unpredictability of our sales cycle, particularly with large transactions. We sell subscriptions to our security and compliance solutions primarily to IT departments that are managing a growing set of user and compliance demands, which has increased the complexity of customer requirements to be met and confirmed during the sales cycle and prolonged our sales cycle. Further, the length of time that potential customers devote to their testing and evaluation, contract negotiation and budgeting processes varies significantly, which has also made our sales cycle long and unpredictable. The length of the sales cycle for our solutions typically ranges from six to twelve months but can be more than eighteen months. In addition, we might devote substantial time and effort to a particular unsuccessful sales effort, and as a result we could lose other sales opportunities or incur expenses that are not offset by an increase in revenues, which could harm our business.

Adverse economic conditions or reduced IT spending may adversely impact our business.

Our business depends on the overall demand for IT and on the economic health of our current and prospective customers. Economic weakness, customer financial difficulties, and constrained spending on IT security may result in decreased revenue and earnings. Such factors could make it difficult to accurately forecast our sales and operating results and could negatively affect our ability to provide accurate forecasts to our contract manufacturers. In addition, continued governmental budgetary challenges in the United States and Europe and geopolitical turmoil in many parts of the world have and may continue to put pressure on global economic conditions and overall spending on IT security. General economic weakness may also lead to longer collection cycles for payments due from our customers, an increase in customer bad debt, restructuring initiatives and associated expenses, and impairment of investments. Furthermore, the continued weakness and uncertainty in worldwide credit markets, including the sovereign debt situation in certain countries in the European Union, may adversely impact our customers' available budgetary spending, which could lead to delays in planned purchases of our solutions.

Uncertainty about future economic conditions also makes it difficult to forecast operating results and to make decisions about future investments. Future or continued economic weakness for us or our customers, failure of our customers and markets to recover from such weakness, customer financial difficulties, and reductions in spending on IT security could have a material adverse effect on demand for our platform and consequently on our business, financial condition and results of operations.

Our security and compliance solutions are delivered from five data centers, and any disruption of service at these facilities would interrupt or delay our ability to deliver our solutions to our customers which could reduce our revenues and harm our operating results.

We currently host substantially all of our solutions from third-party data centers located in the United States, Switzerland, the Netherlands and India. These facilities are vulnerable to damage or interruption from earthquakes, hurricanes, floods, fires, cybersecurity attacks, terrorist attacks, employee negligence, power losses, telecommunications failures and similar events. The facilities also could be subject to break-ins, sabotage, intentional acts of vandalism and other misconduct. The

occurrence of a natural disaster, an act of terrorism or misconduct, a decision to close the facilities without adequate notice or other unanticipated problems could result in interruptions in our services.

Some of our data centers are not currently redundant and we may not be able to rapidly move our customers from one data center to another, which may increase delays in the restoration of our service for our customers if an adverse event occurs. We have added data center facilities to provide additional capacity for our cloud platform and to enable disaster recovery. We continue to build out these facilities; however, these additional facilities may not be operational in the anticipated time-frame and we may incur unplanned expenses.

Additionally, our existing data center facilities providers have no obligations to renew their agreements with us on commercially reasonable terms, or at all. If we are unable to renew our agreements with the facilities providers on commercially reasonable terms or if in the future we add additional data center facility providers, we may experience costs or downtime in connection with the loss of an existing facility or the transfer to, or addition of, new data center facilities.

Any disruptions or other performance problems with our solutions could harm our reputation and business and may damage our customers' businesses. Interruptions in our service delivery might reduce our revenues, cause us to issue credits to customers, subject us to potential liability and cause customers to terminate their subscriptions or not renew their subscriptions.

If we are unable to increase market awareness of our company and our new solutions, our revenues may not continue to grow, or may decline.

We have a limited operating history, particularly in certain markets and solution offerings, and we believe that we need to continue to develop market awareness in the IT security and compliance market. Market awareness of our capabilities and solutions is essential to our continued growth and success in all of our markets, particularly for the large enterprise, service provider and government markets. If our marketing programs are not successful in creating market awareness of our company and our full suite of solutions, our business, financial condition and results of operations may be adversely affected, and we may not be able to achieve our expected growth.

We face competition in our markets, and we may lack sufficient financial or other resources to maintain or improve our competitive position.

We compete with a large range of established and emerging vulnerability management vendors, compliance vendors and data security vendors in a highly fragmented and competitive environment. We face significant competition for each of our solutions from companies with broad product suites and greater name recognition and resources than we have, as well as from small companies focused on specialized security solutions.

We compete with large and small public companies, such as FireEye, Inc., Imperva, Inc., International Business Machines Corporation, Micro Focus International plc, Rapid7, Inc. and Symantec Corporation, as well as privately held security providers including Barracuda Networks Inc., BeyondTrust Software, Inc., Carbon Black, Inc., CrowdStrike Inc., Tanium Inc., Tenable Network Security, Inc., Tripwire, Inc. and Trustwave Holdings, Inc. We also seek to replace IT security and compliance solutions that organizations have developed internally. As we continue to extend our cloud platform's functionality by further developing security and compliance solutions, such as web application scanning and firewalls, we expect to face additional competition in these new markets. Our competitors may also attempt to further expand their presence in the IT security and compliance market and compete more directly against one or more of our solutions.

We believe that the principal competitive factors affecting our markets include product functionality, breadth of offerings, flexibility of delivery models, ease of deployment and use, total cost of ownership, scalability and performance, customer support and extensibility of platform. Many of our existing and potential competitors have competitive advantages, including:

- greater brand name recognition;
- larger sales and marketing budgets and resources;
- broader distribution networks and more established relationships with distributors and customers;
- access to larger customer bases;
- greater customer support resources;
- greater resources to make acquisitions;
- greater resources to develop and introduce products that compete with our solutions;
- greater resources to meet relevant regulatory requirements; and
- substantially greater financial, technical and other resources.

As a result, our competitors may be able to respond more quickly and effectively than we can to new or changing opportunities, technologies, standards or customer requirements. With the introduction of new technologies, the evolution of our service and new market entrants, we expect competition to intensify in the future.

In addition, some of our larger competitors have substantially broader product offerings and can bundle competing products and services with other software offerings. As a result, customers may choose a bundled product offering from our competitors, even if individual products have more limited functionality than our solutions. These competitors may also offer their products at a lower price as part of this larger sale, which could increase pricing pressure on our solutions and cause the average sales price for our solutions to decline. These larger competitors are also often in a better position to withstand any significant reduction in capital spending, and will therefore not be as susceptible to economic downturns.

Furthermore, our current and potential competitors may establish cooperative relationships among themselves or with third parties that may further enhance their resources and product and services offerings in the markets we address. In addition, current or potential competitors may be acquired by third parties with greater available resources. As a result of such relationships and acquisitions, our current or potential competitors might be able to adapt more quickly to new technologies and customer needs, devote greater resources to the promotion or sale of their products and services, initiate or withstand substantial price competition, take advantage of other opportunities more readily or develop and expand their product and service offerings more quickly than we do. For all of these reasons, we may not be able to compete successfully against our current or future competitors.

If our solutions fail to help our customers achieve and maintain compliance with regulations and industry standards, our revenues and operating results could be harmed.

We generate a portion of our revenues from solutions that help organizations achieve and maintain compliance with regulations and industry standards. For example, many of our customers subscribe to our security and compliance solutions to help them comply with the security standards developed and maintained by the Payment Card Industry Security Standards Council, or the PCI Council, which apply to companies that store cardholder data. Industry organizations like the PCI Council may significantly change their security standards with little or no notice, including changes that

could make their standards more or less onerous for businesses. Governments may also adopt new laws or regulations, or make changes to existing laws or regulations, that could impact the demand for or value of our solutions.

If we are unable to adapt our solutions to changing regulatory standards in a timely manner, or if our solutions fail to assist with or expedite our customers' compliance initiatives, our customers may lose confidence in our solutions and could switch to products offered by our competitors. In addition, if regulations and standards related to data security, vulnerability management and other IT security and compliance requirements are relaxed or the penalties for non-compliance are changed in a manner that makes them less onerous, our customers may view government and industry regulatory compliance as less critical to their businesses, and our customers may be less willing to purchase our solutions. In any of these cases, our revenues and operating results could be harmed.

We may not maintain profitability in the future.

We may not be able to sustain or increase our growth or maintain profitability in the future. We plan to continue to invest in our infrastructure, new solutions, research and development and sales and marketing, and as a result, we cannot assure you that we will maintain profitability. We may incur losses in the future for a number of reasons, including without limitation, the other risks and uncertainties described in this Annual Report on Form 10-K. Additionally, we may encounter unforeseen operating expenses, difficulties, complications, delays and other unknown factors that may result in losses in future periods. If our revenue growth does not meet our expectations in future periods, our financial performance may be harmed and we may not again achieve or maintain profitability in the future.

The sales prices of our solutions are subject to competitive pressures and may decrease, which may reduce our gross profits and adversely impact our financial results.

The sales prices for our solutions may decline for a variety of reasons, including competitive pricing pressures, discounts, a change in our mix of solutions and subscriptions, anticipation of the introduction of new solutions or subscriptions, or promotional programs. Competition continues to increase in the market segments in which we participate, and we expect competition to further increase in the future, thereby leading to increased pricing pressures. Larger competitors with more diverse product and service offerings may reduce the price of products or subscriptions that compete with ours or may bundle them with other products and subscriptions. Additionally, although we price our products and subscriptions worldwide in U.S. dollars, Euros, British Pounds and Japanese Yen, currency fluctuations in certain countries and regions may negatively impact actual prices that partners and customers are willing to pay in those countries and regions, or the effective prices we realize in our reporting currency. We cannot assure you that we will be successful in developing and introducing new offerings with enhanced functionality on a timely basis, or that our new product and subscription offerings, if introduced, will enable us to maintain our prices and gross profits at levels that will allow us to maintain positive gross margins and achieve profitability.

If our solutions fail to detect vulnerabilities or incorrectly detect vulnerabilities, our brand and reputation could be harmed, which could have an adverse effect on our business and results of operations.

If our solutions fail to detect vulnerabilities in our customers' IT infrastructures, or if our solutions fail to identify and respond to new and increasingly complex methods of attacks, our business and reputation may suffer. There is no guarantee that our solutions will detect all vulnerabilities. Additionally, our security and compliance solutions may falsely detect vulnerabilities or threats that do not actually exist. For example, some of our solutions rely on information on attack sources aggregated from third-party data providers who monitor global malicious activity originating from a variety of

sources, including anonymous proxies, specific IP addresses, botnets and phishing sites. If the information from these data providers is inaccurate, the potential for false indications of security vulnerabilities increases. These false positives, while typical in the industry, may impair the perceived reliability or usability of our solutions and may therefore adversely impact market acceptance of our solutions and could result in negative publicity, loss of customers and sales, increased costs to remedy any incorrect information or problem, or claims by aggrieved parties. Similar issues may be generated by the misuse of our tools to identify and exploit vulnerabilities.

In addition, our solutions do not currently extend to cover mobile devices or personal devices that employees may bring into an organization. As such, our solutions would not identify or address vulnerabilities in mobile devices, such as mobile phones or tablets, or personal devices, and our customers' IT infrastructures may be compromised by attacks that infiltrate their networks through such devices.

An actual or perceived security breach or theft of the sensitive data of one of our customers, regardless of whether the breach is attributable to the failure of our solutions, could adversely affect the market's perception of our security solutions.

Incorrect or improper implementation or use of our solutions could result in customer dissatisfaction and harm our business and reputation.

Our solutions are deployed in a wide variety of IT environments, including large-scale, complex infrastructures. If our customers are unable to implement our solutions successfully, customer perceptions of our platform may be impaired or our reputation and brand may suffer. Our customers have in the past inadvertently misused our solutions, which triggered downtime in their internal infrastructure until the problem was resolved. Any misuse of our solutions could result in customer dissatisfaction, impact the perceived reliability of our solutions, result in negative press coverage, negatively affect our reputation and harm our financial results.

Undetected software errors or flaws in our cloud platform could harm our reputation or decrease market acceptance of our solutions, which would harm our operating results.

Our solutions may contain undetected errors or defects when first introduced or as new versions are released. We have experienced these errors or defects in the past in connection with new solutions and solution upgrades and we expect that these errors or defects will be found from time to time in the future in new or enhanced solutions after commercial release of these solutions. Since our customers use our solutions for security and compliance reasons, any errors, defects, disruptions in service or other performance problems with our solutions may damage our customers' business and could hurt our reputation. If that occurs, we may incur significant costs, the attention of our key personnel could be diverted, our customers may delay or withhold payment to us or elect not to renew, or other significant customer relations problems may arise. We may also be subject to liability claims for damages related to errors or defects in our solutions. A material liability claim or other occurrence that harms our reputation or decreases market acceptance of our solutions may harm our business and operating results.

Our solutions could be used to collect and store personal information of our customers' employees or customers, and therefore privacy and other data handling concerns could result in additional cost and liability to us or inhibit sales of our solutions.

We collect the names and email addresses of our customers in connection with subscriptions to our solutions. Additionally, the data that our solutions collect to help secure and protect the IT infrastructure of our customers may include additional personal or confidential information of our customers' employees and their customers. Personal privacy has become a significant issue in the

United States and in many other countries where we offer our solutions. The regulatory framework for privacy issues worldwide is currently evolving and is likely to remain uncertain for the foreseeable future. Many federal, state and foreign government bodies and agencies have adopted or are considering adopting laws and regulations regarding the collection, use, disclosure and retention of personal information. In the United States, these include, for example, rules and regulations promulgated under the authority of the Federal Trade Commission, the Health Insurance Portability and Accountability Act of 1996, or HIPAA, the Gramm-Leach-Bliley Act, or GLB, and state breach notification laws. Internationally, virtually every jurisdiction in which we operate has established its own data security and privacy legal framework with which we or our customers must comply, including the Data Protection Directive established in the European Union and the Federal Data Protection Act passed in Germany.

These privacy, data protection and information security laws and regulations may result in ever-increasing regulatory and public scrutiny and escalating levels of enforcement and sanctions. Additionally, new laws and regulations relating to privacy and data protection continue to be proposed and enacted. For example, the European Union has adopted a General Data Protection Regulation, or GDPR, to supersede the Data Protection Directive. This regulation, which will take full effect on May 25, 2018, will cause EU data protection requirements to be more stringent and provide for greater penalties. Noncompliance with the GDPR can trigger fines of up to €20 million or 4% of global annual revenues, whichever is higher.

The privacy, data protection, and information security laws and regulations we must comply with also are subject to change. For example, in June 2016, United Kingdom voters approved an exit from the European Union, commonly referred to as “Brexit,” which could also lead to further legislative and regulatory changes. Additionally, an October 2015 ruling of the Court of Justice of the European Union invalidated the U.S.-EU Safe Harbor Framework as a method of compliance with European restrictions regarding the transfer of personal data outside of the European Economic Area, or EEA. U.S. and EU authorities reached a political agreement in February 2016 regarding a new means for legitimizing personal data transfers from the EEA to the U.S., the EU-U.S. Privacy Shield Framework, and we have joined the EU-U.S. Privacy Shield Framework and a related program, the Swiss-U.S. Privacy Shield Framework. The EU-U.S. Privacy Shield is subject to legal challenge, however, and it or the Swiss-U.S. Privacy Shield may be modified or invalidated. We may be unsuccessful in maintaining legitimate means for our transfer and receipt of personal data from the EEA or Switzerland. We may experience reluctance or refusal by current or prospective European customers to use our products, and we may find it necessary or desirable to make further changes to our handling of personal data of European residents.

In addition to laws and regulations, privacy advocacy and industry groups or other private parties may propose new and different privacy standards that either legally or contractually apply to us. Because the interpretation and application of privacy and data protection laws, regulations, standards and contractual obligations are uncertain, it is possible that they may be interpreted and applied in a manner that is, or perceived to be, inconsistent with our data management practices or the features of our solutions. If so, in addition to the possibility of regulatory investigations and enforcement actions, fines, lawsuits and other claims, other forms of injunctive or operations-limiting relief, and damage to our reputations and loss of goodwill, we could be required to fundamentally change our business activities and practices or modify our solutions and may face limitations in our ability to develop new solutions and features, any of which could have an adverse effect on our business. Any inability to adequately address privacy concerns, even if unfounded, or any actual or perceived inability to comply with applicable privacy or data protection laws, regulations and privacy standards, could result in cost and liability to us, damage our reputation, inhibit sales of subscriptions and harm our business.

Furthermore, the costs of compliance with, and other burdens imposed by, the laws, regulations, and privacy standards that are applicable to the businesses of our customers may limit the use and

adoption of, and reduce the overall demand for, our solutions. Privacy concerns, whether valid or not valid, may inhibit market adoption of our solutions particularly in certain industries and foreign countries.

If we are unable to continue the expansion of our sales force, sales of our solutions and the growth of our business would be harmed.

We believe that our growth will depend, to a significant extent, on our success in recruiting and retaining a sufficient number of qualified sales personnel and their ability to obtain new customers, manage our existing customer base and expand the sales of our newer solutions. We plan to continue to expand our sales force and make significant investment in our sales and marketing activities. Our recent hires and planned hires may not become as productive as quickly as we would like, and we may be unable to hire or retain sufficient numbers of qualified individuals in the future in the competitive markets where we do business. Competition for highly skilled personnel is frequently intense, especially in the San Francisco Bay Area, one of the locations in which we have a substantial presence and need for highly skilled personnel and we may not be able to compete for these employees. If we are unable to recruit and retain a sufficient number of productive sales personnel, sales of our solutions and the growth of our business may be harmed. Additionally, if our efforts do not result in increased revenues, our operating results could be negatively impacted due to the upfront operating expenses associated with expanding our sales force.

A significant portion of our customers, channel partners and employees are located outside of the United States, which subjects us to a number of risks associated with conducting international operations and if we are unable to successfully manage these risks, our business and operating results could be harmed.

We market and sell subscriptions to our solutions throughout the world and have personnel in many parts of the world. In addition, we have sales offices and research and development facilities outside the United States and we conduct, and expect to continue to conduct, a significant amount of our business with organizations that are located outside the United States, particularly in Europe and Asia. Therefore, we are subject to risks associated with having international sales and worldwide operations, including:

- foreign currency exchange fluctuations;
- trade and foreign exchange restrictions;
- economic or political instability in foreign markets;
- greater difficulty in enforcing contracts, accounts receivable collection and longer collection periods;
- changes in regulatory requirements;
- tax laws (including U.S. taxes on foreign subsidiaries);
- difficulties and costs of staffing and managing foreign operations;
- the uncertainty and limitation of protection for intellectual property rights in some countries;
- costs of compliance with foreign laws and regulations and the risks and costs of non-compliance with such laws and regulations;
- costs of complying with U.S. laws and regulations for foreign operations, including the Foreign Corrupt Practices Act, import and export control laws, tariffs, trade barriers, economic sanctions and other regulatory or contractual limitations on our ability to sell our solutions in certain foreign markets, and the risks and costs of non-compliance;

- heightened risks of unfair or corrupt business practices in certain geographies and of improper or fraudulent sales arrangements that may impact financial results and result in restatements of, and irregularities in, financial statements;
- the potential for political unrest, acts of terrorism, hostilities or war;
- management communication and integration problems resulting from cultural differences and geographic dispersion; and
- multiple and possibly overlapping tax structures.

Our business, including the sales of subscriptions of our solutions, may be subject to foreign governmental regulations, which vary substantially from country to country and change from time to time. Failure to comply with these regulations could adversely affect our business. Further, in many foreign countries it is common for others to engage in business practices that are prohibited by our internal policies and procedures or U.S. regulations applicable to us. Although we have implemented policies and procedures designed to ensure compliance with these laws and policies, there can be no assurance that all of our employees, contractors, channel partners and agents have complied or will comply with these laws and policies. Violations of laws or key control policies by our employees, contractors, channel partners or agents could result in delays in revenue recognition, financial reporting misstatements, fines, penalties or the prohibition of the importation or exportation of our solutions and could have a material adverse effect on our business and results of operations. If we are unable to successfully manage the challenges of international operations, our business and operating results could be adversely affected.

In addition, as of December 31, 2017, approximately 56% of our employees were located outside of the United States, with a significant number of these employees located in Pune, India. Accordingly, we are exposed to changes in laws governing our employee relationships in various U.S. and foreign jurisdictions, including laws and regulations regarding wage and hour requirements, fair labor standards, employee data privacy, unemployment tax rates, workers' compensation rates, citizenship requirements and payroll and other taxes which may have a direct impact on our operating costs. We may continue to expand our international operations and international sales and marketing activities. Expansion in international markets has required, and will continue to require, significant management attention and resources. We may be unable to scale our infrastructure effectively or as quickly as our competitors in these markets and our revenues may not increase to offset any increased costs and operating expenses, which would cause our results to suffer.

Disruptive technologies could gain wide adoption and supplant our cloud security and compliance solutions, thereby weakening our sales and harming our results of operations.

The introduction of products and services embodying new technologies could render our existing solutions obsolete or less attractive to customers. Our business could be harmed if new security and compliance technologies are widely adopted. We may not be able to successfully anticipate or adapt to changing technology or customer requirements on a timely basis, or at all. If we fail to keep up with technological changes or to convince our customers and potential customers of the value of our solutions even in light of new technologies, our business could be harmed and our revenues may decline.

Our business and operations have experienced significant growth, and if we do not appropriately manage any future growth, or are unable to improve our systems and processes, our operating results may be negatively affected.

We have experienced significant growth over the last several years. From 2015 to 2017, our revenues have grown from $164.3 million to $230.8 million, and our headcount increased from 431 employees at the

beginning of 2015 to 869 employees at December 31, 2017. We rely on information technology systems to help manage critical functions such as order processing, revenue recognition and financial forecasts. To manage any future growth effectively we must continue to improve and expand our IT systems, financial infrastructure, and operating and administrative systems and controls, and continue to manage headcount, capital and processes in an efficient manner. We may not be able to successfully implement improvements to these systems and processes in a timely or efficient manner.

Our failure to improve our systems and processes, or their failure to operate in the intended manner, may result in our inability to manage the growth of our business and to accurately forecast our revenues, expenses and earnings, or to prevent certain losses. In addition, as we continue to grow, our productivity and the quality of our solutions may also be adversely affected if we do not integrate and train our new employees quickly and effectively. Any future growth would add complexity to our organization and require effective coordination across our organization. Failure to manage any future growth effectively could result in increased costs, harm our results of operations and lead to investors losing confidence in our internal systems and processes.

Forecasts of market growth may prove to be inaccurate, and even if the markets in which we compete achieve the forecasted growth, there can be no assurance that our business will grow at similar rates, or at all.

Growth forecasts relating to the expected growth in the market for IT security and compliance and other markets are subject to significant uncertainty and are based on assumptions and estimates which may prove to be inaccurate. Even if these markets experience the forecasted growth, we may not grow our business at similar rates, or at all. Our growth is subject to many factors, including our success in implementing our business strategy, which is subject to many risks and uncertainties. Accordingly, forecasts of market growth should not be taken as indicative of our future growth.

We rely on third-party channel partners to generate a substantial amount of our revenues, and if we fail to expand and manage our distribution channels, our revenues could decline and our growth prospects could suffer.

Our success significantly depends upon establishing and maintaining relationships with a variety of channel partners and we anticipate that we will continue to depend on these partners in order to grow our business. For the years ended December 31, 2017, 2016 and 2015, we derived approximately 41%, 42% and 39%, respectively, of our revenues from sales of subscriptions for our solutions through channel partners, and the percentage of revenues derived from channel partners may increase in future periods. Our agreements with our channel partners are generally non-exclusive and do not prohibit them from working with our competitors or offering competing solutions, and many of our channel partners have more established relationships with our competitors. If our channel partners choose to place greater emphasis on products of their own or those offered by our competitors, do not effectively market and sell our solutions, or fail to meet the needs of our customers, then our ability to grow our business and sell our solutions may be adversely affected. In addition, the loss of one or more of our larger channel partners, who may cease marketing our solutions with limited or no notice, and our possible inability to replace them, could adversely affect our sales. Moreover, our ability to expand our distribution channels depends in part on our ability to educate our channel partners about our solutions, which can be complex. Our failure to recruit additional channel partners, or any reduction or delay in their sales of our solutions or conflicts between channel sales and our direct sales and marketing activities may harm our results of operations. Even if we are successful, these relationships may not result in greater customer usage of our solutions or increased revenues.

In addition, the financial health of our channel partners and our continuing relationships with them are important to our success. Some of these channel partners may be unable to withstand adverse changes in economic conditions, which could result in insolvency and/or the inability of such distributors

to obtain credit to finance purchases of our products and services. In addition, weakness in the end-user market could negatively affect the cash flows of our channel partners who could, in turn, delay paying their obligations to us, which would increase our credit risk exposure. Our business could be harmed if the financial condition of some of these channel partners substantially weakened and we were unable to timely secure replacement channel partners.

Our solutions contain third-party open source software components, and our failure to comply with the terms of the underlying open source software licenses could restrict our ability to sell our solutions.

Our solutions contain software licensed to us by third-parties under so-called “open source” licenses, including the GNU General Public License, or GPL, the GNU Lesser General Public License, or LGPL, the BSD License, the Apache License and others. From time to time, there have been claims against companies that distribute or use open source software in their products and services, asserting that such open source software infringes the claimants’ intellectual property rights. We could be subject to suits by parties claiming that what we believe to be licensed open source software infringes their intellectual property rights. Use and distribution of open source software may entail greater risks than use of third-party commercial software, as open source licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code. In addition, certain open source licenses require that source code for software programs that are subject to the license be made available to the public and that any modifications or derivative works to such open source software continue to be licensed under the same terms. If we combine our proprietary software with open source software in certain ways, we could, in some circumstances, be required to release the source code of our proprietary software to the public. Disclosing the source code of our proprietary software could make it easier for cyber attackers and other third parties to discover vulnerabilities in or to defeat the protections of our solutions, which could result in our solutions failing to provide our customers with the security they expect from our services. This could harm our business and reputation. Disclosing our proprietary source code also could allow our competitors to create similar products with lower development effort and time and ultimately could result in a loss of sales for us. Any of these events could have a material adverse effect on our business, operating results and financial condition.

Although we monitor our use of open source software in an effort both to comply with the terms of the applicable open source licenses and to avoid subjecting our solutions to conditions we do not intend, the terms of many open source licenses have not been interpreted by U.S. courts, and there is a risk that these licenses could be construed in a way that could impose unanticipated conditions or restrictions on our ability to commercialize our solutions. In this event, we could be required to seek licenses from third parties to continue offering our solutions, to make our proprietary code generally available in source code form, to re-engineer our solutions or to discontinue the sale of our solutions if re-engineering could not be accomplished on a timely basis, any of which could adversely affect our business, operating results and financial condition.

We rely on software-as-a-service vendors to operate certain functions of our business and any failure of such vendors to provide services to us could adversely impact our business and operations.

We rely on third-party software-as-a-service vendors to operate certain critical functions of our business, including financial management and human resource management. If these services become unavailable due to extended outages or interruptions or because they are no longer available on commercially reasonable terms or prices, our expenses could increase, our ability to manage our finances could be interrupted and our processes for managing sales of our solutions and supporting our customers could be impaired until equivalent services, if available, are identified, obtained and integrated, all of which could harm our business.

We use third-party software and data that may be difficult to replace or cause errors or failures of our solutions that could lead to lost customers or harm to our reputation and our operating results.

We license third-party software as well as security and compliance data from various third parties to deliver our solutions. In the future, this software or data may not be available to us on commercially reasonable terms, or at all. Any loss of the right to use any of this software or data could result in delays in the provisioning of our solutions until equivalent technology or data is either developed by us, or, if available, is identified, obtained and integrated, which could harm our business. In addition, any errors or defects in or failures of this third-party software or data could result in errors or defects in our solutions or cause our solutions to fail, which could harm our business and be costly to correct. Many of these providers attempt to impose limitations on their liability for such errors, defects or failures, and if enforceable, we may have additional liability to our customers or third-party providers that could harm our reputation and increase our operating costs.

We will need to maintain our relationships with third-party software and data providers, and to obtain software and data from such providers that do not contain any errors or defects. Any failure to do so could adversely impact our ability to deliver effective solutions to our customers and could harm our operating results.

Delays or interruptions in the manufacturing and delivery of our physical scanner appliances by our sole source manufacturer may harm our business.

Upon customer request, we provide physical or virtual scanner appliances on a subscription basis as an additional capability to the customer’s subscription for use during their subscription term. Our physical scanner appliances are built by a single manufacturer. Our reliance on a sole manufacturer involves several risks, including a potential inability to obtain an adequate supply of physical scanner appliances and limited control over pricing, quality and timely deployment of such scanner appliances. In addition, replacing this manufacturer may be difficult and could result in an inability or delay in deploying our solutions to customers that request physical scanner appliances as part of their subscriptions.

Furthermore, our manufacturer’s ability to timely manufacture and ship our physical scanner appliances depends on a variety of factors, such as the availability of hardware components, supply shortages or contractual restrictions. In the event of an interruption from this manufacturer, we may not be able to develop alternate or secondary sources in a timely manner. If we are unable to purchase physical scanner appliances in quantities sufficient to meet our requirements on a timely basis, we may not be able to effectively deploy our solutions to new customers that request physical scanner appliances, which could harm our business.

We are exposed to fluctuations in currency exchange rates, which could negatively affect our financial condition and results of operations.

Our reporting currency is the U.S. dollar and we generate a majority of our revenues in U.S. dollars. However, in 2017, we incurred approximately 19% of our expenses outside of the United States in foreign currencies, primarily Euros, British Pounds, and Indian Rupee, principally with respect to salaries and related personnel expenses associated with our European and Indian operations. Additionally, in 2017, approximately 18% of our revenues were generated in foreign currencies. Accordingly, changes in exchange rates may have a material adverse effect on our business, operating results and financial condition. The exchange rate between the U.S. dollar and foreign currencies has fluctuated substantially in recent years and may continue to fluctuate substantially in the future. We expect that a majority of our revenues will continue to be generated in U.S. dollars for the foreseeable future and that a significant portion of our expenses, including personnel costs, as well as capital and

operating expenditures, will continue to be denominated in Euro, British Pound and Indian Rupee. The results of our operations may be adversely affected by foreign exchange fluctuations.

We use forward foreign exchange contracts to mitigate the effect of changes in foreign exchange rates on certain cash and accounts receivable balances denominated in certain foreign currencies. However, we may not be able to purchase derivative instruments that are adequate to insulate ourselves from foreign currency exchange risks. Additionally, our hedging activities may contribute to increased losses as a result of volatility in foreign currency markets.

Failure to protect our proprietary technology and intellectual property rights could substantially harm our business and operating results.

The success of our business depends in part on our ability to protect and enforce our trade secrets, trademarks, copyrights, patents and other intellectual property rights. We attempt to protect our intellectual property under copyright, trade secret, patent and trademark laws, and through a combination of confidentiality procedures, contractual provisions and other methods, all of which offer only limited protection.

We primarily rely on our unpatented proprietary technology and trade secrets. Despite our efforts to protect our proprietary technology and trade secrets, unauthorized parties may attempt to misappropriate, reverse engineer or otherwise obtain and use them. The contractual provisions that we enter into with employees, consultants, partners, vendors and customers may not prevent unauthorized use or disclosure of our proprietary technology or intellectual property rights and may not provide an adequate remedy in the event of unauthorized use or disclosure of our proprietary technology or intellectual property rights. Moreover, policing unauthorized use of our technologies, solutions and intellectual property is difficult, expensive and time-consuming, particularly in foreign countries where the laws may not be as protective of intellectual property rights as those in the United States and where mechanisms for enforcement of intellectual property rights may be weak. We may be unable to determine the extent of any unauthorized use or infringement of our solutions, technologies or intellectual property rights.

As of February 23, 2018, we have eleven issued patents and several pending U.S. patent applications, and may file additional patent applications in the future. Additionally, we have an exclusive license to four third-party patents. The process of obtaining patent protection is expensive and time-consuming, and we may not be able to prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner, if at all. We may choose not to seek patent protection for certain innovations and may choose not to pursue patent protection in certain jurisdictions.

Furthermore, it is possible that our patent applications may not result in granted patents, that the scope of our issued patents will be limited or not provide the coverage originally sought, that our issued patents will not provide us with any competitive advantages, or that our patents and other intellectual property rights may be challenged by others or invalidated through administrative processes or litigation. In addition, issuance of a patent does not guarantee that we have an absolute right to practice the patented invention. As a result, we may not be able to obtain adequate patent protection or to enforce our issued patents effectively.

From time to time, legal action by us may be necessary to enforce our patents and other intellectual property rights, to protect our trade secrets, to determine the validity and scope of the intellectual property rights of others or to defend against claims of infringement or invalidity. Such litigation could result in substantial costs and diversion of resources and could negatively affect our business, operating results and financial condition. If we are unable to protect our intellectual property rights, we may find ourselves at a competitive disadvantage to others who need not incur the additional expense, time and effort required to create the innovative solutions that have enabled us to be successful to date.

Assertions by third parties of infringement or other violations by us of their intellectual property rights could result in significant costs and harm our business and operating results.

Patent and other intellectual property disputes are common in our industry. Some companies, including some of our competitors, own large numbers of patents, copyrights and trademarks, which they may use to assert claims against us. Third parties may in the future assert claims of infringement, misappropriation or other violations of intellectual property rights against us. They may also assert such claims against our customers or channel partners whom we typically indemnify against claims that our solutions infringe, misappropriate or otherwise violate the intellectual property rights of third parties. As the numbers of products and competitors in our market increase and overlaps occur, claims of infringement, misappropriation and other violations of intellectual property rights may increase. Any claim of infringement, misappropriation or other violation of intellectual property rights by a third party, even those without merit, could cause us to incur substantial costs defending against the claim and could distract our management from our business.

The patent portfolios of our most significant competitors are larger than ours. This disparity may increase the risk that they may sue us for patent infringement and may limit our ability to counterclaim for patent infringement or settle through patent cross-licenses. In addition, future assertions of patent rights by third parties, and any resulting litigation, may involve patent holding companies or other adverse patent owners who have no relevant product revenues and against whom our own patents may therefore provide little or no deterrence or protection. There can be no assurance that we will not be found to infringe or otherwise violate any third-party intellectual property rights or to have done so in the past.

An adverse outcome of a dispute may require us to:

- pay substantial damages, including treble damages, if we are found to have willfully infringed a third party’s patents or copyrights;
- cease making, licensing or using solutions that are alleged to infringe or misappropriate the intellectual property of others;
- expend additional development resources to attempt to redesign our solutions or otherwise develop non-infringing technology, which may not be successful;
- enter into potentially unfavorable royalty or license agreements in order to obtain the right to use necessary technologies or intellectual property rights; and
- indemnify our partners and other third parties.

In addition, royalty or licensing agreements, if required or desirable, may be unavailable on terms acceptable to us, or at all, and may require significant royalty payments and other expenditures. Some licenses may also be non-exclusive, and therefore our competitors may have access to the same technology licensed to us. Any of the foregoing events could seriously harm our business, financial condition and results of operations.

If we are required to collect sales and use or other taxes on the solutions we sell, we may be subject to liability for past sales and our future sales may decrease.

Taxing jurisdictions, including state and local entities, have differing rules and regulations governing sales and use or other taxes, and these rules and regulations are subject to varying interpretations that may change over time. In particular, the applicability of sales taxes to our subscription services in various jurisdictions is unclear. It is possible that we could face sales tax audits and that our liability for these taxes could exceed our estimates as tax authorities could still assert that we are obligated to collect additional amounts as taxes from our customers and remit those taxes to those authorities. We could also be subject to audits with respect to state and international jurisdictions for which we have not accrued tax liabilities. A successful assertion that we should be collecting additional sales or other taxes on our services in jurisdictions where we have not historically done so

and do not accrue for sales taxes could result in substantial tax liabilities for past sales, discourage customers from purchasing our solutions or otherwise harm our business and operating results.

We depend on the continued services and performance of our senior management and other key employees, the loss of any of whom could adversely affect our business, operating results and financial condition.

Our future performance depends on the continued services and continuing contributions of our senior management, particularly Philippe F. Courtot, our Chairman, President and Chief Executive Officer, and other key employees to execute on our business plan and to identify and pursue new opportunities and product innovations. We do not maintain key-man insurance for Mr. Courtot or for any other member of our senior management team. From time to time, there may be changes in our senior management team resulting from the termination or departure of executives. Our senior management and key employees are generally employed on an at-will basis, which means that they could terminate their employment with us at any time. The loss of the services of our senior management, particularly Mr. Courtot, or other key employees for any reason could significantly delay or prevent the achievement of our development and strategic objectives and harm our business, financial condition and results of operations.

If we are unable to hire, retain and motivate qualified personnel, our business may suffer.

Our future success depends, in part, on our ability to continue to attract and retain highly skilled personnel. The loss of the services of any of our key personnel, the inability to attract or retain qualified personnel or delays in hiring required personnel, particularly in engineering and sales, may seriously harm our business, financial condition and results of operations. Any of our employees may terminate their employment at any time. Competition for highly skilled personnel is frequently intense, especially in the San Francisco Bay Area, one of the locations in which we have a substantial presence and need for highly skilled personnel and we may not be able to compete for these employees.

We are required under accounting principles generally accepted in the United States (“U.S. GAAP”) to recognize compensation expense in our operating results for employee stock-based compensation under our equity grant programs, which may negatively impact our operating results and may increase the pressure to limit stock-based compensation that we might otherwise offer to current or potential employees. In addition, to the extent we hire personnel from competitors, we may be subject to allegations that they have been improperly solicited or divulged proprietary or other confidential information.

Changes in laws or regulations related to the Internet may diminish the demand for our solutions and could have a negative impact on our business.

We deliver our solutions through the Internet. Federal, state or foreign government bodies or agencies have in the past adopted, and may in the future adopt, laws or regulations affecting data privacy and the use of the Internet. In addition, government agencies or private organizations may begin to impose taxes, fees or other charges for accessing the Internet or on commerce conducted via the Internet. These laws or charges could limit the viability of Internet-based solutions such as ours and reduce the demand for our solutions.

A portion of our revenues are generated by sales to government entities, which are subject to a number of challenges and risks.

Government entities have historically been particularly concerned about adopting cloud-based solutions for their operations, including security solutions, and increasing sales of subscriptions for our solutions to government entities may be more challenging than selling to commercial organizations.

Selling to government entities can be highly competitive, expensive and time-consuming, often requiring significant upfront time and expense without any assurance that we will win a sale. We have invested in the creation of a cloud offering certified under the Federal Information Security Management Act, or FISMA, for government usage but we cannot be sure that we will continue to sustain or renew this certification, that the government will continue to mandate such certification or that other government agencies or entities will use this cloud offering. Government demand and payment for our solutions may be impacted by public sector budgetary cycles and funding authorizations, with funding reductions or delays adversely affecting public sector demand for our solutions. Government entities may have contractual or other legal rights to terminate contracts with our channel partners for convenience or due to a default, and any such termination may adversely impact our future results of operations. Governments routinely investigate and audit government contractors' administrative processes, and any unfavorable audit could result in the government refusing to continue buying our solutions, a reduction of revenues or fines or civil or criminal liability if the audit uncovers improper or illegal activities. Any such penalties could adversely impact our results of operations in a material way.

Governmental export or import controls could subject us to liability if we violate them or limit our ability to compete in foreign markets.

Our solutions are subject to U.S. export controls, specifically, the Export Administration Regulations and economic sanctions enforced by the Office of Foreign Assets Control. We incorporate encryption technology into certain of our solutions. These encryption solutions and the underlying technology may be exported only with the required export authorizations, including by license, a license exception or other appropriate government authorizations. U.S. export controls may require submission of an encryption registration, product classification and/or annual or semi-annual reports. Governmental regulation of encryption technology and regulation of imports or exports of encryption products, or our failure to obtain required import or export authorization for our solutions, when applicable, could harm our international sales and adversely affect our revenues. Compliance with applicable regulatory requirements regarding the export of our solutions, including with respect to new releases of our solutions, may create delays in the introduction of our solutions in international markets, prevent our customers with international operations from deploying our solutions throughout their globally-distributed systems or, in some cases, prevent the export of our solutions to some countries altogether. In addition, various countries regulate the import of our appliance-based solutions and have enacted laws that could limit our ability to distribute solutions or could limit our customers' ability to implement our solutions in those countries. Any new export or import restrictions, new legislation or shifting approaches in the enforcement or scope of existing regulations, or in the countries, persons or technologies targeted by such regulations, could result in decreased use of our solutions by existing customers with international operations, declining adoption of our solutions by new customers with international operations and decreased revenues. If we fail to comply with export and import regulations, we may be fined or other penalties could be imposed, including a denial of certain export privileges.

Our success in acquiring and integrating other businesses, products or technologies could impact our financial position.

In order to remain competitive, we have in the past and may in the future seek to acquire additional businesses, products, services or technologies. The environment for acquisitions in our industry is very competitive and acquisition candidate purchase prices may exceed what we would prefer to pay. Moreover, achieving the anticipated benefits of future acquisitions will depend in part upon whether we can integrate acquired operations, products and technology in a timely and cost-effective manner, and even if we achieve benefits from acquisitions, such acquisitions may still be viewed negatively by customers, financial markets or investors. The acquisition and integration process is complex, expensive and time-consuming, and may cause an interruption of, or loss of momentum in, product development and sales activities and operations of both companies and we may incur substantial cost and expense, as well as divert the attention of management. We may issue equity

securities which could dilute current stockholders' ownership, incur debt, assume contingent or other liabilities and expend cash in acquisitions, which could negatively impact our financial position, stockholder equity and stock price. We may not find suitable acquisition candidates, and acquisitions we complete may be unsuccessful. If we consummate a transaction, we may be unable to integrate and manage acquired products and businesses effectively or retain key personnel. If we are unable to effectively execute acquisitions, our business, financial condition and operating results could be adversely affected.

Our financial results are based in part on our estimates or judgments relating to our critical accounting policies. These estimates or judgments may prove to be incorrect, which could harm our operating results and result in a decline in our stock price.

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, as provided in the section titled "Part II, Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations," the results of which form the basis for making judgments about the carrying values of assets, liabilities, equity, revenues and expenses that are not readily apparent from other sources. Our operating results may be adversely affected if our assumptions change or if actual circumstances differ from those in our assumptions, which could cause our operating results to fall below the expectations of securities analysts and investors, resulting in a decline in our stock price. Significant assumptions and estimates used in preparing our consolidated financial statements include those related to revenue recognition, accounting for income taxes, stock-based compensation, and fair value measurement.

Changes in financial accounting standards may cause adverse and unexpected revenue fluctuations and impact our reported results of operations.

We prepare our financial statements in accordance with U.S. GAAP. These principles are subject to interpretation by the SEC and various bodies formed to interpret and create appropriate accounting principles. A change in these accounting standards or practices could harm our operating results and could have a significant effect on our reporting of transactions and reported results and may even retroactively affect previously reported transactions. New accounting pronouncements and varying interpretations of accounting pronouncements have occurred and may occur in the future. Changes to existing rules or the questioning of current practices may harm our operating results, or require that we make significant changes to our systems, processes and controls or the way we conduct our business.

We have historically expensed commissions associated with sales of our solutions immediately upon receipt of a subscription order from a customer and generally recognize the revenues associated with such sale over the term of the agreement. Accordingly, our historical operating income in any period may not be indicative of our financial health and future performance. With the adoption of Accounting Standards Update ("ASU") 2014-09, Revenue from Contracts with Customers (Topic 606) effective January 1, 2018, we will commence capitalizing of our commissions but will elect to use the practical expedient in Topic 606 and expense commissions related to contracts with a renewal contract term of one year or less. As a result of the adoption of Topic 606, our future operating results may vary from period to period as our commission expense will not be directly comparable to historical periods.

Through December 2017, we have expensed commissions paid to our sales personnel in the quarter in which the related order is received. In contrast, we have generally recognized the revenues associated with a sale of our solutions ratably over the term of the subscription, which is typically one year. Accordingly, our historical results may have fluctuated based on timing of commission expenses

as compared to revenue recognized. With the adoption of Topic 606, our operating results will also fluctuate and not be comparable to historical periods and continue to fluctuate as we will generally capitalize commissions except for renewal sales that are one year or less. In addition, amortization of expense from previously capitalized contracts is expected to increase over time as our opening capitalized commission asset balance upon adoption of Topic 606 only includes open contracts as of December 31, 2017. Accordingly, we expect our commission expense to grow in future periods after the initial adoption of Topic 606.

We recognize revenues from subscriptions over the term of the relevant service period, and therefore any decreases or increases in bookings are not immediately reflected in our operating results.

We recognize revenues from subscriptions over the term of the relevant service period, which is typically one year. As a result, most of our reported revenues in each quarter are derived from the recognition of deferred revenues relating to subscriptions entered into during previous quarters. Consequently, a shortfall in demand for our solutions in any period may not significantly reduce our revenues for that period, but could negatively affect revenues in future periods. Accordingly, the effect of significant downturns in bookings may not be fully reflected in our results of operations until future periods. We may be unable to adjust our costs and expenses to compensate for such a potential shortfall in revenues. Our subscription model also makes it difficult for us to rapidly increase our revenues through additional bookings in any period, as revenues are recognized ratably over the subscription period.

Changes in our provision for income taxes or adverse outcomes resulting from examination of our income tax returns could adversely affect our operating results. We could be subject to additional taxes.

We are subject to income taxes in the United States and various foreign jurisdictions, and our domestic and international tax liabilities are subject to the allocation of expenses in differing jurisdictions. Our tax rate is affected by changes in the mix of earnings and losses in countries with differing statutory tax rates, certain non-deductible expenses arising from the requirement to expense stock options, excess tax benefits from stock-based compensation, and the valuation of deferred tax assets and liabilities, including our ability to utilize our federal and state net operating losses, which were $54.4 million as of December 31, 2017. As a result of the Tax Cuts and Jobs Act (“the 2017 Tax Act”), which was enacted by the U.S. federal government on December 22, 2017, our federal tax rate will decrease in 2018, resulting in our recording of $10.4 million of additional income tax expense in 2017 due to the re-measurement of certain deferred tax assets and liabilities. Accordingly, our operating results have fluctuated and may not be comparable to historical periods and continue to fluctuate in the future. Increases in our effective tax rate could harm our operating results.

Additionally, significant judgment is required in evaluating our tax positions and our worldwide provision for taxes. During the ordinary course of business, there are many activities and transactions for which the ultimate tax determination is uncertain. In addition, our tax obligations and effective tax rates could be adversely affected by changes in the relevant tax, accounting and other laws, regulations, principles and interpretations, including those relating to income tax nexus, by recognizing tax losses or lower than anticipated earnings in jurisdictions where we have lower statutory rates and higher than anticipated earnings in jurisdictions where we have higher statutory rates, by changes in foreign currency exchange rates, or by changes in the valuation of our deferred tax assets and liabilities. We may be audited in various jurisdictions, and such jurisdictions may assess additional taxes, sales taxes and value-added taxes against us. Although we believe our tax estimates are reasonable, the final determination of any tax audits or litigation could be materially different from our historical tax provisions and accruals, which could have a material adverse effect on our operating results or cash flows in the period or periods for which a determination is made.

Uncertainties in the interpretation and application of the 2017 Tax Cuts and Jobs Act could materially affect our tax obligations and effective tax rate.

The 2017 Tax Act significantly affected U.S. tax law by changing how the U.S. imposes income tax on multinational corporations. Given the timing, scope, and magnitude of the changes enacted by the 2017 Tax Act, along with on-going implementation efforts, guidance, and other developments from U.S. regulatory and standard-setting bodies, the completion of the accounting for certain tax items included in Note 9 to the Consolidated Financial Statements included in Part II, Item 8, that have been reported as provisional may be subject to material change. Any significant changes to our future effective tax rate, including final resolution of provisional amounts relating to effects of the 2017 Tax Act, may result in a material adverse effect on our business, financial condition, results of operations, or cash flows.

Our business is subject to the risks of earthquakes, fire, power outages, floods and other catastrophic events, and to interruption by man-made problems such as terrorism.

A significant natural disaster, such as an earthquake, fire or a flood, or a significant power outage could have a material adverse impact on our business, operating results and financial condition. Our corporate headquarters and a significant portion of our operations are located in the San Francisco Bay Area, a region known for seismic activity. In addition, natural disasters could affect our business partners' ability to perform services for us on a timely basis. In the event we or our business partners are hindered by any of the events discussed above, our ability to provide our solutions to customers could be delayed, resulting in our missing financial targets, such as revenues and net income, for a particular quarter. Further, if a natural disaster occurs in a region from which we derive a significant portion of our revenues, customers in that region may delay or forego subscriptions of our solutions, which may materially and adversely impact our results of operations for a particular period. In addition, acts of terrorism could cause disruptions in our business or the business of our business partners, customers or the economy as a whole. All of the aforementioned risks may be exacerbated if the disaster recovery plans for us and our suppliers prove to be inadequate. To the extent that any of the above results in delays of customer subscriptions or commercialization of our solutions, our business, financial condition and results of operations could be adversely affected.

If we fail to maintain an effective system of internal control over financial reporting, our ability to produce timely and accurate financial statements or comply with applicable regulations could be impaired.

As a public company, we are subject to the reporting requirements of the Securities Exchange Act of 1934, or the Exchange Act, the Sarbanes-Oxley Act, and the rules and regulations of the NASDAQ Stock Market. To comply with the requirements of being a public company, we may need to undertake various actions, such as implementing additional internal controls and procedures and hiring accounting or internal audit staff.

Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with GAAP. Our current controls and any new controls that we develop may become inadequate because of changes in conditions in our business. Any failure to maintain effective controls, or any difficulties encountered in their improvement, could harm our operating results or cause us to fail to meet our reporting obligations. Any failure to maintain effective internal control over financial reporting also could adversely affect the results of periodic management evaluations regarding the effectiveness of our internal control over financial reporting that we are required to include in our periodic reports we file with the SEC under Section 404 of the Sarbanes-Oxley Act. While we were able to assert in this Annual Report on Form 10-K that our internal control over financial reporting was effective as of December 31, 2017, we cannot predict the outcome of our testing in future periods. If

we are unable to assert in any future reporting period that our internal control over financial reporting is effective (or if our independent registered public accounting firm is unable to express an opinion on the effectiveness of our internal controls), investors may lose confidence in our operating results and our stock price could decline. In addition, if we are unable to continue to meet these requirements, we may not be able to remain listed on the NASDAQ Stock Market.

Market volatility may affect our stock price and the value of an investment in our common stock and could subject us to litigation.

The trading price of our common stock has been, and may continue to be, subject to significant fluctuations in response to a number of factors, most of which we cannot predict or control, including:

- announcements of new solutions, services or technologies, commercial relationships, acquisitions or other events by us or our competitors;
- fluctuations in stock market prices and trading volumes of securities of similar companies;
- general market conditions and overall fluctuations in U.S. equity markets;
- variations in our operating results, or the operating results of our competitors;
- changes in our financial guidance or securities analysts' estimates of our financial performance;
- changes in accounting principles;
- sales of large blocks of our common stock, including sales by our executive officers, directors and significant stockholders;
- additions or departures of any of our key personnel;
- announcements related to litigation;
- changing legal or regulatory developments in the United States and other countries; and
- discussion of us or our stock price by the financial press and in online investor communities.

In addition, the stock market in general, and the stocks of technology companies such as ours in particular, have experienced substantial price and volume volatility that is often seemingly unrelated to the operating performance of particular companies. These broad market fluctuations may cause the trading price of our common stock to decline. In the past, securities class action litigation has often been brought against a company after a period of volatility in the trading price of its common stock. We may become involved in this type of litigation in the future. Any securities litigation claims brought against us could result in substantial expenses and the diversion of our management's attention from our business.

Our actual operating results may differ significantly from our guidance.

From time to time, we have released, and may continue to release, guidance in our quarterly earnings conference calls, quarterly earnings releases, or otherwise, regarding our future performance that represents our management's estimates as of the date of release. This guidance, which includes forward-looking statements, has been and will be based on projections prepared by our management. These projections are not prepared with a view toward compliance with published guidelines of the American Institute of Certified Public Accountants, and neither our registered public accountants nor any other independent expert or outside party compiles or examines the projections. Accordingly, no such person expresses any opinion or any other form of assurance with respect to the projections.

Projections are based upon a number of assumptions and estimates that, while presented with numerical specificity, are inherently subject to significant business, economic and competitive

uncertainties and contingencies, many of which are beyond our control and are based upon specific assumptions with respect to future business decisions, some of which will change. We intend to state possible outcomes as high and low ranges which are intended to provide a sensitivity analysis as variables are changed but are not intended to imply that actual results could not fall outside of the suggested ranges. The principal reason that we release guidance is to provide a basis for our management to discuss our business outlook with analysts and investors. We do not accept any responsibility for any projections or reports published by any such third parties.

Guidance is necessarily speculative in nature, and it can be expected that some or all of the assumptions underlying the guidance furnished by us will not materialize or will vary significantly from actual results. Accordingly, our guidance is only an estimate of what management believes is realizable as of the date of release. Actual results may vary from our guidance and the variations may be material. In light of the foregoing, investors are urged not to rely upon our guidance in making an investment decision regarding our common stock.

Any failure to successfully implement our operating strategy or the occurrence of any of the events or circumstances set forth in this “Risk Factors” section in this Annual Report on Form 10-K could result in the actual operating results being different from our guidance, and the differences may be adverse and material.

Concentration of ownership among our existing executive officers, directors and holders of 10% or more of our outstanding common stock may prevent new investors from influencing significant corporate decisions.

As of December 31, 2017, our executive officers, directors and holders of 10% or more of our outstanding common stock beneficially own, in the aggregate, approximately 14% of our outstanding common stock. As a result, such persons, acting together, have significant ability to control our management and affairs and substantially all matters submitted to our stockholders for approval, including the election and removal of directors and approval of any significant transaction. These persons also have significant ability to control our management and business affairs. This concentration of ownership may have the effect of delaying, deferring or preventing a change in control, impeding a merger, consolidation, takeover or other business combination involving us, or discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of our business, even if such a transaction would benefit other stockholders.

Future sales of shares by existing stockholders could cause our stock price to decline.

The market price of shares of our common stock could decline as a result of substantial sales of our common stock, particularly sales by our directors, executive officers, employees and significant stockholders, a large number of shares of our common stock becoming available for sale, or the perception in the market that holders of a large number of shares intend to sell their shares. As of December 31, 2017, we had approximately 38.6 million shares of our common stock outstanding. Certain holders of shares of common stock have rights, subject to some conditions, to require us to file registration statements covering their shares or to include these shares in registration statements that we may file for ourselves or other stockholders.

In addition, as of December 31, 2017, there were approximately 1.4 million restricted stock units and options to purchase approximately 4.5 million shares of our common stock outstanding. If such options are exercised and restricted stock units are released, these additional shares will become available for sale. As of December 31, 2017, we had an aggregate of 2.2 million shares of our common stock reserved for future issuance under our 2012 Equity Incentive Plan, which can be freely sold in the public market upon issuance. If a large number of these shares are sold in the public market, the sales could reduce the trading price of our common stock.

We cannot guarantee that our recently announced stock repurchase program will be fully consummated or that it will enhance stockholder value, and any stock repurchases we make could affect the price of our common stock.

In February 2018, we announced a $100.0 million stock repurchase program. Although our board of directors authorized this stock repurchase program, we are not obligated to repurchase any specific dollar amount or to acquire any specific number of shares. The stock repurchase program could affect the price of our common stock, increase volatility and diminish our cash reserves. In addition, it may be suspended or terminated at any time, which may result in a decrease in the price of our common stock.

We do not intend to pay dividends on our common stock and therefore any returns will be limited to the value of our stock.

We have never declared or paid any cash dividend on our common stock. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Any return to stockholders will therefore be limited to the value of their stock.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of us, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that may delay or prevent an acquisition of us or a change in our management. These provisions include:

- authorizing “blank check” preferred stock, which could be issued by the board without stockholder approval and may contain voting, liquidation, dividend and other rights superior to our common stock, which would increase the number of outstanding shares and could thwart a takeover attempt;
- a classified board of directors whose members can only be dismissed for cause;
- the prohibition on actions by written consent of our stockholders;
- the limitation on who may call a special meeting of stockholders;
- the establishment of advance notice requirements for nominations for election to our board of directors or for proposing matters that can be acted upon at stockholder meetings; and
- the requirement of at least two-thirds of the outstanding capital stock to amend any of the foregoing second through fifth provisions.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which limits the ability of stockholders owning in excess of 15% of our outstanding voting stock to merge or combine with us. Although we believe these provisions collectively provide for an opportunity to obtain greater value for stockholders by requiring potential acquirers to negotiate with our board of directors, they would apply even if an offer rejected by our board were considered beneficial by some stockholders. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our principal executive offices are located in Foster City, California, where we occupy a 76,922 square-foot facility under a lease expiring on April 30, 2028. We have additional U.S. offices in Bellevue, Washington and Raleigh, North Carolina. We also lease offices in Courbevoie, France; Moscow, Russia; Munich, Germany; Frankfurt, Germany; Nuremberg, Germany; Pune, India; Dubai, United Arab Emirates; Reading, United Kingdom; and Tokyo, Japan. We believe our facilities are adequate for our current needs and for the foreseeable future.

We operate principal data centers at third-party facilities in Santa Clara, California; Ashburn, Virginia; Geneva, Switzerland; Pune, India; and Amsterdam, the Netherlands.

Item 3. Legal Proceedings

From time to time we may become involved in legal proceedings or be subject to claims arising in the ordinary course of our business. We are not presently a party to any legal proceedings that, if determined adversely to us, would individually or taken together have a material adverse effect on our business, operating results, financial condition or cash flows. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

Item 4. Mine Safety Disclosures.

Not Applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Market Information

Our common stock is listed on the NASDAQ Stock Market under the trading symbol "QLYS". The following table sets forth the high and low per share sales prices for our common stock as reported on the NASDAQ Stock Market for the two most recent fiscal years:

	Low	High
Fiscal 2017:		
Fourth quarter	$50.00	$62.35
Third quarter	$39.45	$53.55
Second quarter	$34.80	$44.35
First quarter	$31.80	$38.38
Fiscal 2016:		
Fourth quarter	$30.61	$39.67
Third quarter	$29.69	$38.32
Second quarter	$23.77	$32.65
First quarter	$16.96	$32.48

Holders of Common Equity

As of January 31, 2018, there were approximately 94 holders of record of our common stock. Because many of our shares of common stock are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by these record holders.

Dividend Policy

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain any future earnings to fund business development and growth, and do not expect to pay any dividends in the foreseeable future. Any future determination to declare cash dividends will be made at the discretion of our board of directors, subject to applicable laws, and will depend on a number of factors, including our financial condition, results of operations, capital requirements, contractual restrictions, general business conditions and other factors that our board of directors may deem relevant.

Securities Authorized for Issuance under Equity Compensation Plans

The following table summarizes information about our equity compensation plans as of December 31, 2017. All outstanding awards relate to our common stock.

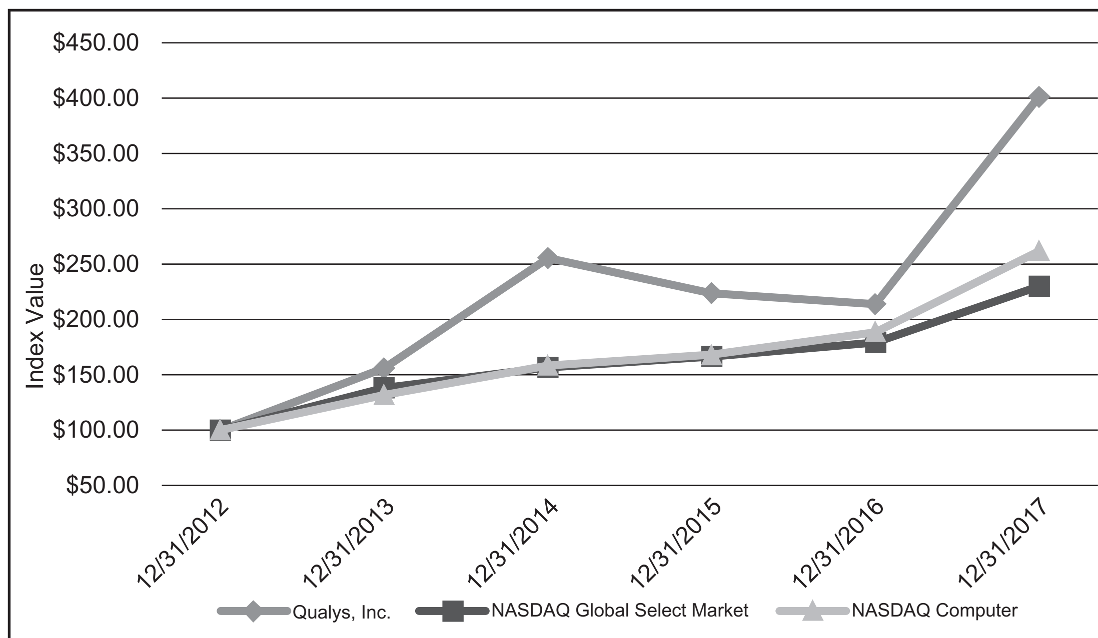
Plan Category	(a) Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	(b) Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	(c) Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
Equity compensation plans approved by security holders[1]	4,495,891	$25.29	2,208,858
Equity compensation plans not approved by security holders	—	$ —	—

(1) Equity compensation plans approved by stockholders include the 2000 Equity Incentive Plan, as amended and the 2012 Equity Incentive Plan. Prior to our IPO, we issued securities under our 2000 Equity Incentive Plan, as amended. Following our IPO, we issued securities under our 2012 Equity Incentive Plan.

Stock Price Performance Graph

The following graph shows a comparison from December 31, 2012 through December 31, 2017 of the cumulative total return for an investment of $100 (and the reinvestment of dividends) in our common stock, the NASDAQ Global Select Market and the NASDAQ Computer. Such returns are based on historical results and are not intended to suggest future performance.

COMPARISON OF CUMULATIVE TOTAL RETURN*
Among Qualys, Inc., NASDAQ-Global Select Market Composite Index, and NASDAQ Computer Index



* $100 invested on 12/31/12 in stock or index, including reinvestment of dividends. Fiscal year ending December 31.

	Dec 31, 2012	Dec 31, 2013	Dec 31, 2014	Dec 31, 2015	Dec 31, 2016	Dec 31, 2017
Qualys, Inc.	$100.00	$156.25	$255.24	$223.73	$214.00	$401.28
NASDAQ Global Select Market	$100.00	$138.00	$156.90	$166.49	$179.13	$230.05
NASDAQ Computer	$100.00	$131.95	$158.17	$168.05	$188.67	$261.81

The information on the above Stock Price Performance Graph shall not be deemed to be “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section or Sections 11 and 12(a)(2) of the Securities Act of 1933, as amended, and shall not be incorporated by reference into any registration statement or other document filed by us with the Securities and Exchange Commission, whether made before or after the date of this Annual Report on Form 10-K, regardless of any general incorporation language in such filing, except as shall be expressly set forth by specific reference in such filing.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

No shares of our common stock were repurchased during the fourth quarter of 2017.

Item 6. Selected Consolidated Financial Data

The following selected consolidated financial data should be read in conjunction with "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements, related notes and other financial information included elsewhere in this Annual Report on Form 10-K. Our historical results are not necessarily indicative of the results that may be expected in the future, and the results for the year ended December 31, 2017 are not necessarily indicative of operating results to be expected for any other period.

	Year Ended December 31,				
	2017	2016	2015	2014	2013
	(in thousands, except per share data)				
Consolidated Statements of Operations Data:					
Revenues	$230,828	$197,925	$164,284	$133,579	$107,962
Income from operations	$ 37,243	$ 30,107	$ 24,806	$ 9,247	$ 2,309
Net income	$ 40,440	$ 19,224	$ 15,865	$ 30,244	$ 1,541
Net income per share attributable to common stockholders: [1]					
Basic	$ 1.08	$ 0.55	$ 0.47	$ 0.92	$ 0.05
Diluted	$ 1.01	$ 0.50	$ 0.42	$ 0.81	$ 0.04

	As of December 31,				
	2017	2016	2015	2014	2013
	(in thousands)				
Consolidated Balance Sheet Data:					
Cash, cash equivalents and short-term investments	$288,414	$243,856	$178,966	$127,218	$ 97,196
Long-term investments	67,224	45,725	43,277	39,448	35,608
Total assets	537,525	407,004	323,514	260,024	192,603
Deferred revenues, current	143,186	114,964	98,025	81,147	67,505
Deferred revenues, noncurrent	17,136	15,528	14,564	10,064	8,889
Total stockholders' equity	343,544	258,413	195,566	151,827	103,117

(1) See Notes 1 and 12 to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for an explanation of the calculation of our basic and diluted income per share attributable to common stockholders.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

You should read the following discussion in conjunction with the section titled "Selected Consolidated Financial Data" and our consolidated financial statements and the related notes included elsewhere in this Annual Report on Form 10-K. In addition to historical information, this discussion contains forward-looking statements that involve risks and uncertainties that could cause our actual results to differ materially from our expectations, as discussed in "Forward-Looking Statements" in Part I of this Annual Report on Form 10-K. Factors that could cause such differences include, but are not limited to, those described in the section titled "Risk Factors" and elsewhere in this Annual Report on Form 10-K.

Overview

We are a pioneer and leading provider of a cloud-based platform delivering security and compliance solutions that enable organizations to identify security risks to their information technology (IT) infrastructures, help protect their IT systems and applications from ever-evolving cyber-attacks and achieve compliance with internal policies and external regulations. Our cloud solutions address the growing security and compliance complexities and risks that are amplified by the dissolving boundaries between internal and external IT infrastructures and web environments, the rapid adoption of cloud computing and the proliferation of geographically dispersed IT assets. Our integrated suite of security and compliance solutions delivered on our Qualys cloud platform enables our customers to identify their IT assets, collect and analyze large amounts of IT security data, discover and prioritize vulnerabilities, recommend remediation actions and verify the implementation of such actions. Organizations use our integrated suite of solutions delivered on our Qualys cloud platform to cost-effectively obtain a unified view of their security and compliance posture across globally-distributed IT infrastructures as our solution offers a single platform for information security, application security, endpoint, developer security and cloud teams.

We were founded and incorporated in December 1999 with a vision of transforming the way organizations secure and protect their IT infrastructure and applications and initially launched our first cloud solution, Vulnerability Management (VM), in 2000. As VM gained acceptance, we introduced new solutions to help customers manage increasing IT security and compliance requirements. Today, the suite of solutions offered on our cloud platform, which we refer to as the Qualys Cloud Apps, includes: Asset Inventory (AI), CMDB Sync (SYN), VM, Continuous Monitoring (CM), Cloud Agent Platform (CAP), Threat Protection (TP), Security Configuration Assessment (SCA), Indication of Compromise (IOC), Policy Compliance (PC), PCI Compliance (PCI), Security Assessment Questionnaire (SAQ), File Integrity Monitoring (FIM), Web Application Scanning (WAS) and Web Application Firewall (WAF). Our VM solutions (including VM, AI, SYN, CM, TP, Cloud Agent for VM, allocated scanner revenue and Qualys Private Cloud Platform) have provided a substantial majority of our revenues to date, representing 75%, 76% and 77% of total revenues in 2017, 2016 and 2015, respectively.

We provide our solutions through a software-as-a-service model, primarily with renewable annual subscriptions. These subscriptions require customers to pay a fee in order to access our cloud solutions. We invoice our customers for the entire subscription amount at the start of the subscription term, and the invoiced amounts are treated as deferred revenues and are recognized ratably over the term of each subscription. We continue to experience significant revenue growth from existing customers as they renew and purchase additional subscriptions. Revenues from customers existing at or prior to December 31, 2016 grew by $21.5 million to $219.4 million during 2017. Subscriptions from new customers added in 2017 contributed $11.4 million to the increase in revenues. We expect revenue growth from existing and new customers to continue.

We market and sell our solutions to enterprises, government entities and small and medium-sized businesses across a broad range of industries, including education, financial services, government, healthcare, insurance, manufacturing, media, retail, technology and utilities. As of December 31, 2017, we had over 10,300 customers in more than 130 countries, including a majority of each of the Forbes Global 100 and Fortune 100. In 2017, 2016 and 2015, approximately 70%, 71% and 70%, respectively, of our revenues were derived from customers in the United States. We sell our solutions to enterprises and government entities primarily through our field sales force and to small and medium-sized businesses through our inside sales force. We generate a significant portion of sales through our channel partners, including managed service providers, value-added resellers and consulting firms in the United States and internationally.

We have had continued revenue growth over the past three years. Our revenues increased from $164.3 million in 2015 to $197.9 million in 2016, and reached $230.8 million in 2017, representing period-over-period increases of $33.6 million and $32.9 million, or 20% and 17%, respectively. We generated net income of $15.9 million in 2015, $19.2 million in 2016, and $40.4 million in 2017.

Key Metric

In addition to measures of financial performance presented in our consolidated financial statements, we monitor the key metric set forth below to help us evaluate growth trends, establish budgets, measure the effectiveness of our sales and marketing efforts and assess operational efficiencies.

	Year Ended December 31,		
	2017	2016	2015
		(in thousands)	
Adjusted EBITDA	$84,933	$67,966	$56,660

Adjusted EBITDA

We monitor Adjusted EBITDA, a non-GAAP financial measure, to analyze our financial results and believe that it is useful to investors, as a supplement to U.S. GAAP measures, in evaluating our ongoing operational performance and enhancing an overall understanding of our past financial performance. We believe that Adjusted EBITDA helps illustrate underlying trends in our business that could otherwise be masked by the effect of the income or expenses that we exclude in Adjusted EBITDA. Furthermore, we use this measure to establish budgets and operational goals for managing our business and evaluating our performance. We also believe that Adjusted EBITDA provides an additional tool for investors to use in comparing our recurring core business operating results over multiple periods with other companies in our industry.

Adjusted EBITDA should not be considered in isolation from, or as a substitute for, financial information prepared in accordance with U.S. GAAP. We calculate Adjusted EBITDA as net income before (1) other (income) expense, net, which includes interest income, interest expense and other income and expense, (2) provision for (benefit from) income taxes, (3) depreciation and amortization of property and equipment, (4) amortization of intangible assets, (5) stock-based compensation, (6) non-recurring expenses and (7) acquisition-related expenses that do not reflect ongoing costs of operating the business.

The following unaudited table presents the reconciliation of net income to Adjusted EBITDA for each of the periods presented.

	Year Ended December 31,		
	2017	2016	2015
	(in thousands)		
Net income	$40,440	$19,224	$15,865
Depreciation and amortization of property and equipment	19,828	16,621	13,974
Amortization of intangible assets	808	373	386
Interest expense	3	26	6
(Benefit from) provision for income taxes	(1,062)	11,205	8,655
EBITDA	60,017	47,449	38,886
Stock-based compensation	26,961	20,149	17,494
Other (income) expense, net	(2,138)	(348)	280
Acquisition-related expense[(1)]	93	—	—
One-time tax related expense[(2)]	—	716	—
Adjusted EBITDA	$84,933	$67,966	$56,660
Percentage of revenues	37%	34%	34%

(1) *Adjusted EBITDA for 2017 excludes approximately $0.1 million of compensation expense from the acquisition of NetWatcher.*

(2) *Adjusted EBITDA for 2016 excludes approximately $0.7 million of a non-recurring expense related to the remittance of payroll taxes from fiscal year 2013 through May 2016. During this same period, we have not excluded any amounts related to other non-recurring items from Adjusted EBITDA because we have considered such amounts to be immaterial.*

Limitations of Adjusted EBITDA

Adjusted EBITDA, a non-GAAP financial measure, has limitations as an analytical tool, and should not be considered in isolation from or as a substitute for the measures presented in accordance with U.S. GAAP. Some of these limitations are:

- Adjusted EBITDA does not reflect certain cash and non-cash charges that are recurring;
- Adjusted EBITDA does not reflect income tax payments that reduce cash available to us;
- Adjusted EBITDA excludes depreciation and amortization of property and equipment and, although these are non-cash charges, the assets being depreciated and amortized may have to be replaced in the future; and
- Other companies, including companies in our industry, may calculate Adjusted EBITDA differently or not at all, which reduces its usefulness as a comparative measure.

Because of these limitations, Adjusted EBITDA should be considered alongside other financial performance measures, including revenues, net income, cash flows from operating activities and our financial results presented in accordance with U.S. GAAP.

Key Components of Results of Operations

Revenues

We derive revenues from the sale of subscriptions to our security and compliance solutions, which are delivered on our cloud platform. Subscriptions to our solutions allow customers to access our cloud-based security and compliance solutions through a unified, web-based interface. Customers generally enter into one year renewable subscriptions. The subscription fee entitles the customer to an unlimited number of scans for a specified number of devices or web applications and, if requested by a customer as part of their subscription, a specified number of physical or virtual scanner appliances. Our physical and virtual scanner appliances are requested by certain customers as part of their subscriptions in order to scan IT infrastructures within their firewalls and do not function without, and are not sold separately from, subscriptions for our solutions. Customers are required to return physical scanner appliances and computer equipment if they do not renew their subscriptions.

We typically invoice our customers for the entire subscription amount at the start of the subscription term. Invoiced amounts are reflected on our consolidated balance sheets as accounts receivable or as cash when collected, and as deferred revenues until earned and recognized ratably over the subscription period. Accordingly, deferred revenues represent the amount billed to customers that has not yet been earned or recognized as revenues, pursuant to subscriptions entered into in current and prior periods.

Cost of Revenues

Cost of revenues consists primarily of personnel expenses, comprised of salaries, benefits, performance-based compensation and stock-based compensation, for employees who operate our data centers and provide support services to our customers. Other expenses include depreciation of data center equipment and physical scanner appliances and computer hardware provided to certain customers as part of their subscriptions, expenses related to the use of third-party data centers, amortization of third-party technology licensing fees, amortization of intangibles related to acquisitions, maintenance support, fees paid to contractors who supplement or support our operations center personnel and overhead allocations. We expect to continue to make capital investments to expand and support our data center operations, which will increase the cost of revenues in absolute dollars.

Operating Expenses

Research and Development

Research and development expenses consist primarily of personnel expenses, comprised of salaries, benefits, performance-based compensation and stock-based compensation, for our research and development teams. Other expenses include third-party contractor fees, amortization of intangibles related to acquisitions and overhead allocations. All research and development costs are expensed as incurred. We expect to continue to devote substantial resources to research and development in an effort to continuously improve our existing solutions as well as develop new solutions and capabilities and expect that research and development expenses will increase in absolute dollars.

Sales and Marketing

Sales and marketing expenses consist primarily of personnel expenses, comprised of salaries, benefits, sales commissions, performance-based compensation and stock-based compensation for our worldwide sales and marketing teams. Other expenses include marketing and promotional events, lead-generation marketing programs, public relations, travel, software licenses and overhead allocations. All costs are expensed as incurred, including sales commissions. Sales commissions are expensed in the quarter in which the related order is received and are paid in the month subsequent to

the end of that quarter, which results in increased expenses prior to the recognition of related revenues. Our new sales personnel are typically not immediately productive, and the resulting increase in sales and marketing expenses we incur when we add new personnel may not result in increased revenues if these new sales personnel fail to become productive. The timing of our hiring of sales personnel, or the participation in new marketing events or programs, and the rate at which these generate incremental revenues, may affect our future operating results. We expect to continue to significantly invest in additional sales personnel worldwide and also in more marketing programs to support new solutions on our platform, which will increase sales and marketing expenses in absolute dollars.

General and Administrative

General and administrative expenses consist primarily of personnel expenses, comprised of salaries, benefits, performance-based compensation and stock-based compensation, for our executive, finance and accounting, legal and human resources teams, as well as professional services, insurance, fees, and software licenses. We expect that general and administrative expenses will increase in absolute dollars, as we continue to add personnel and incur professional services to support our growth and compliance with legal requirements.

Other Income (Expense), Net

Our other income (expense), net consists primarily of interest and investment income from our short-term and long-term investments; foreign exchange gains and losses, the majority of which result from fluctuations between the U.S. dollar and the Euro, British Pound and Indian Rupee; losses on disposal of property and equipment; and impairment of long-lived assets.

Provision for Income Taxes

We are subject to federal, state and foreign income taxes for jurisdictions in which we operate, and we use estimates in determining our provision for these income taxes and deferred tax assets. Earnings from our non-U.S. activities are subject to income taxes in the local countries at rates which were generally lower than U.S. tax rates during 2017 and may also be subject to U.S. income taxes. Our effective rates differ from the U.S. statutory rate primarily due to foreign income subject to different tax rates than the U.S., research and development tax credits, non-deductible stock-based compensation expense, excess tax benefits related to stock-based compensation and other adjustments.

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the tax impact of timing differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carry-forwards. Deferred tax assets and liabilities are measured using statutory tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period when the statutory rate change is enacted into law. During 2017, we recognized an expense of $10.4 million as a result of re-measuring deferred tax assets and liabilities using the reduced U.S. federal tax rate of 21% which decreased from 35% due to the enactment of the 2017 Tax Act.

We assess the likelihood that deferred tax assets will be realized, and we recognize a valuation allowance if it is more likely than not that some portion of the deferred tax assets will not be recognized. This assessment requires judgment as to the likelihood and amounts of future taxable income.

Our benefit from income taxes in 2017 consists of a tax benefit for excess tax benefits related to stock-based compensation and the recognition of our U.S. federal and certain state deferred tax assets including federal research credits. The tax benefit was partially offset by the re-measurement of deferred taxes due to the 2017 Tax Act and income taxes for profits generated in foreign jurisdictions by wholly-owned subsidiaries.

Results of Operations

The following tables set forth selected consolidated statements of operations data for each of the periods presented.

	Year Ended December 31,		
	2017	2016	2015
	(in thousands)		
Consolidated Statements of Operations data:			
Revenues	$230,828	$197,925	$164,284
Cost of revenues[1]	51,580	43,128	34,327
Gross profit	179,248	154,797	129,957
Operating expenses:			
Research and development[1]	42,816	36,591	30,438
Sales and marketing[1]	63,855	58,985	50,397
General and administrative[1]	35,334	29,114	24,316
Total operating expenses	142,005	124,690	105,151
Income from operations	37,243	30,107	24,806
Other income (expense), net	2,135	322	(286)
Income before income taxes	39,378	30,429	24,520
(Benefit from) provision for income taxes	(1,062)	11,205	8,655
Net income	$ 40,440	$ 19,224	$ 15,865

(1) Includes stock-based compensation as follows:

	Year Ended December 31,		
	2017	2016	2015
	(in thousands)		
Cost of revenues	$ 2,159	$ 1,858	$ 1,250
Research and development	5,944	5,678	4,936
Sales and marketing	4,755	4,870	3,867
General and administrative	14,103	7,743	7,441
Total stock-based compensation	$26,961	$20,149	$17,494

The following table sets forth selected consolidated statements of operations data for each of the periods presented as a percentage of revenues.

	Year Ended December 31,		
	2017	2016	2015
Revenues	100%	100%	100%
Cost of revenues	22	22	21
Gross profit	78	78	79
Operating expenses:			
Research and development	19	18	18
Sales and marketing	28	30	31
General and administrative	15	15	15
Total operating expenses	62	63	64
Income from operations	16	15	15
Other income (expense), net	1	0	0
Income before income taxes	17	15	15
(Benefit from) provision for income taxes	(1)	5	5
Net income	18%	10%	10%

Comparison of Years Ended December 31, 2017 and 2016

Revenues

	Year Ended December 31,		Change	
	2017	2016	$	%
	(in thousands, except percentages)			
Revenues	$230,828	$197,925	$32,903	17%

Revenues increased $32.9 million in 2017 compared to 2016. Revenues from customers existing at or prior to December 31, 2016 grew by $21.5 million to $219.4 million during 2017. Subscriptions from new customers added in 2017 contributed $11.4 million to the increase in revenues. Of the total increase of $32.9 million, 22.9 million was from customers in the United States and the remaining $10.0 million was from customers in foreign countries. We expect revenue growth from existing and new customers to continue. The growth in revenues reflects the continued demand for our solutions.

Cost of Revenues

	Year Ended December 31,		Change	
	2017	2016	$	%
	(in thousands, except percentages)			
Cost of revenues	$51,580	$43,128	$8,452	20%
Percentage of revenues	22%	22%		
Gross profit percentage	78%	78%		

Cost of revenues increased $8.5 million in 2017 compared to 2016, primarily due to an increase in personnel expenses of $4.1 million, driven by the increase in the number of employees to support the continued growth of our business; a $2.8 million increase in depreciation expense related to additional

computer hardware and software; a $0.5 million increase in amortization expense related to acquired technology resulting from our business acquisitions; increased data center costs of $0.5 million; and increased consulting services and third-party software license maintenance expense of $0.2 million each as our business continues to grow.

Research and Development Expenses

	Year Ended December 31,		Change	
	2017	2016	$	%
	(in thousands, except percentages)			
Research and development	$42,816	$36,591	$6,225	17%
Percentage of revenues	19%	18%		

Research and development expenses increased $6.2 million in 2017 compared to 2016, primarily due to an increase in personnel expenses of $5.7 million, driven by additional employees hired to support the growth of our business; and increased related facilities costs and expenses of $1.0 million to support our research and development activities. These increases were partially offset by lower consulting services of $0.4 million. We continue to significantly invest in and expand our research and development teams to continuously improve our platform and existing solutions, as well as develop new solutions and capabilities.

Sales and Marketing Expenses

	Year Ended December 31,		Change	
	2017	2016	$	%
	(in thousands, except percentages)			
Sales and marketing	$63,855	$58,985	$4,870	8%
Percentage of revenues	28%	30%		

Sales and marketing expenses increased $4.9 million in 2017 compared to 2016, primarily due to an increase in personnel expenses of $3.8 million, driven by the increase in the number of employees to support the growth of our business; and increased marketing expenses of $1.2 million, including lead generation expense.

General and Administrative Expenses

	Year Ended December 31,		Change	
	2017	2016	$	%
	(in thousands, except percentages)			
General and administrative	$35,334	$29,114	$6,220	21%
Percentage of revenues	15%	15%		

General and administrative expenses increased $6.2 million in 2017 compared to 2016, primarily driven by an increase in personnel expenses of $7.4 million, principally due to higher executive stock-based compensation and the addition of new employees to support the growth of our business. The increase was partially offset by lower legal fees of $1.4 million.

Total Other Income (Expense), Net

	Year Ended December 31,		Change	
	2017	2016	$	%
	(in thousands, except percentages)			
Total other income (expense), net	$2,135	$322	$1,813	563%
Percentage of revenues	1%	0%		

Total other income (expense), net, increased $1.8 million in 2017 compared to 2016, primarily due to an increase in interest income as our cash and investment balances increased year over year.

(Benefit from) Provision for Income Taxes

	Year Ended December 31,		Change	
	2017	2016	$	%
	(in thousands, except percentages)			
(Benefit from) provision for income taxes	$(1,062)	$11,205	$(12,267)	(109)%
Percentage of revenues	(1)%	5%		

We recorded an income tax benefit of $1.1 million in 2017 as compared to an income tax provision of $11.2 million in 2016. This was primarily due to the favorable impact of excess tax benefits from stock-based compensation of $27.1 million due to the adoption of ASU 2016-09 in 2017. This benefit was partially offset by $10.4 million of expense recorded for the re-measuring of deferred tax assets and liabilities due to the decrease in the federal rate from 35% to 21% resulting from the Tax Cuts and Jobs Act, enacted into law on December 22, 2017.

Comparison of Years Ended December 31, 2016 and 2015

Revenues

	Year Ended December 31,		Change	
	2016	2015	$	%
	(in thousands, except percentages)			
Revenues	$197,925	$164,284	$33,641	20%

Revenues increased $33.6 million in 2016 compared to 2015. Revenues from customers existing at or prior to December 31, 2015 grew by $20.4 million to $184.7 million during 2016. Subscriptions from new customers added in 2016 contributed $13.2 million to the increase in revenues. Of the total increase of 33.6 million, $24.4 million was from customers in the United States and the remaining $9.3 million was from customers in foreign countries. The growth in revenues reflects the continued demand for our solutions.

Cost of Revenues

	Year Ended December 31,		Change	
	2016	2015	$	%
	(in thousands, except percentages)			
Cost of revenues	$43,128	$34,327	$8,801	26%
Percentage of revenues	22%	21%		
Gross profit percentage	78%	79%		

Cost of revenues increased $8.8 million in 2016 compared to 2015, primarily due to an increase in personnel expenses of $2.7 million to support the continued growth of our business; a $2.2 million increase in depreciation expenses related to additional computer hardware and software; an increase in third-party software maintenance expense of $2.1 million; increased data center and equipment repair and maintenance of $0.5 million; increased overhead costs of $0.5 million; and increased temporary services of $0.2 million as we continued to grow.

Research and Development Expenses

	Year Ended December 31,		Change	
	2016	2015	$	%
	(in thousands, except percentages)			
Research and development	$36,591	$30,438	$6,153	20%
Percentage of revenues	18%	18%		

Research and development expenses increased $6.2 million in 2016 compared to 2015, primarily due to an increase in personnel expenses of $4.9 million, driven by the increase in the number of employees; increased temporary services of $0.5 million; and increased overhead costs of $0.5 million we continued to grow. We continue to significantly invest in and expand our research and development teams to continuously improve our platform and existing solutions, as well as develop new solutions and capabilities.

Sales and Marketing Expenses

	Year Ended December 31,		Change	
	2016	2015	$	%
	(in thousands, except percentages)			
Sales and marketing	$58,985	$50,397	$8,588	17%
Percentage of revenues	30%	31%		

Sales and marketing expenses increased $8.6 million in 2016 compared to 2015, primarily due to an increase in personnel expenses of $5.2 million. principally due to the increase in the number of employees; increased marketing expenses of $2.1 million, primarily trade show, lead generation and branding expenses; and increased software license and maintenance fees of $0.9 million.

General and Administrative Expenses

	Year Ended December 31,		Change	
	2016	2015	$	%
	(in thousands, except percentages)			
General and administrative	$29,114	$24,316	$4,798	20%
Percentage of revenues	15%	15%		

General and administrative expenses increased $4.8 million in 2016 compared to 2015, primarily driven by increased legal, accounting, consulting and temporary services of $2.8 million; increased personnel expenses of $2.4 million, primarily due to additional employees to support the growth of our business; $0.7 million of a non-recurring expense in 2016 related to the remittance of payroll taxes from fiscal year 2013 through May 2016; and a $0.3 million increase in dues and subscriptions. These increases were partially offset by $0.7 million of lower allocated costs for certain information technology expenses and by lower bad debt expense of $0.7 million.

Total Other Income (Expense), Net

	Year Ended December 31,		Change	
	2016	2015	$	%
	(in thousands, except percentages)			
Total other income (expense), net	$322	$(286)	$608	(213)%
Percentage of revenues	0%	0%		

Total other income (expense), net increased $0.6 million in 2016 compared to 2015, primarily due to an increase in investment and interest income and lower foreign exchange losses.

Provision for Income Taxes

	Year Ended December 31,		Change	
	2016	2015	$	%
	(in thousands, except percentages)			
Provision for income taxes	$11,205	$8,655	$2,550	29%
Percentage of revenues	5%	5%		

The increase in the provision is primarily due to the significant increase in income before tax of $30.4 million in 2016 compared to $24.5 million in 2015.

Liquidity and Capital Resources

At December 31, 2017, our principal source of liquidity was cash, cash equivalents and short-term and long-term investments of $355.6 million, including $7.5 million held outside of the United States by our foreign subsidiaries. We do not anticipate that we will need funds generated from foreign operations to fund our domestic operations. However, if we repatriate these funds, we could be subject to foreign withholding taxes.

We have experienced positive cash flows from operations during the years ended December 31, 2017, 2016 and 2015, respectively. We believe our existing cash, cash equivalents, short-term and long-term investments, and cash from operations will be sufficient to fund our operations for at least the next twelve months. We expect to spend approximately $23.0 to $28.0 million through December 31, 2018 for capital expenditures, primarily related to infrastructure to support the anticipated growth in our business. Our future capital requirements will depend on many factors, including our rate of revenue growth, the expansion of our sales and marketing activities, the timing, type and extent of our spending on research and development efforts, international expansion and investment in data centers. We may also seek to invest in or acquire complementary businesses or technologies.

Cash Flows

The following summary of cash flows for the periods indicated has been derived from our consolidated financial statements included elsewhere in this report:

	Year Ended December 31,		
	2017	2016	2015
	(in thousands)		
Cash provided by operating activities	$ 107,646	$ 68,110	$ 65,960
Cash used in investing activities	(118,195)	(96,490)	(61,348)
Cash provided by financing activities	10,403	23,419	10,582
Net (decrease) increase in cash and cash equivalents	$ (146)	$ (4,961)	$ 15,194

Cash Flows from Operating Activities

In 2017, cash provided by operating activities of $107.6 million was primarily due to $40.4 million of net income, as adjusted by increases in deferred revenues of $29.8 million, attributable to our continued growth in sales; non-cash items including depreciation and amortization expense of $20.6 million and stock-based compensation expense of $27.0 million; and an increase in other noncurrent liabilities of $7.3 million, primarily attributable to deferred rent relating to our office facility. These increases were partially offset by an increase in accounts receivable of $18.0 million due to the timing of customer payments.

In 2016, cash flows from operating activities of $68.1 million resulted primarily from our net income of approximately $19.2 million, as adjusted by increases in deferred revenues of $17.9 million, attributable to our continued growth in sales; accrued liabilities of $9.7 million; non-cash items including depreciation and amortization expense of $17.0 million; and stock-based compensation expense of $20.1 million. These increases were partially offset by the non-cash effect of excess tax benefits from stock based compensation of $8.7 million, an increase in prepaid expenses and other assets of $2.1 million and an increase in accounts receivable of $4.9 million.

In 2015, cash flows from operating activities of $66.0 million resulted primarily from our net income of approximately $15.9 million, as adjusted by an increase in deferred revenues of $21.4 million, attributable to our continued growth; an increase in subscriptions exceeding one year; and non-cash items including depreciation and amortization expense of $14.4 million, stock-based compensation expense of $17.5 million and net utilization of deferred income taxes of $6.6 million. These increases were partially offset by an increase in accounts receivable of $10.2 million.

Cash Flows from Investing Activities

In 2017, cash used in investing activities of $118.2 million was primarily attributable to net purchases of investments of $67.9 million and net cash paid in connection with our acquisitions of Nevis Networks (India) Private Limited (Nevis) and Defensative, LLC (NetWatcher) of $12.5 million. Additionally, $37.8 million of cash was used for capital expenditures, including the buildout of our new headquarters facility, computer hardware and software for our data centers to support our growth and development, and to purchase physical scanner appliances and computer hardware provided to certain customers as part of their subscriptions.

In 2016, cash used in investing activities of $96.5 million was primarily attributable to net purchases of investments of $73.2 million, arising from cash provided from operating activities. Additionally, $23.2 million of cash was used for capital expenditures, including computer hardware and software for our data centers to support our growth and development, and to purchase physical scanner appliances and computer hardware provided to certain customers as part of their subscriptions.

In 2015, cash used in investing activities of $61.3 million was primarily attributable to $20.1 million of cash for capital expenditures, including computer hardware and software for our data centers to support our growth and development, and to purchase physical scanner appliances and computer hardware provided to certain customers as part of their subscriptions. Additionally, there were also net purchases of investments of $41.2 million, arising from cash provided from operating activities.

Cash Flows from Financing Activities

In 2017, cash provided by financing activities of $10.4 million was primarily attributable to $31.3 million of proceeds from the exercise of stock options, offset by employee payroll taxes paid related to net share settlement of equity awards of $20.9 million.

In 2016, cash provided by financing activities of $23.4 million was primarily attributable to $15.2 million of proceeds from the exercise of stock options and $8.7 million of excess tax benefits from stock based compensation.

In 2015, cash provided by financing activities of $10.6 million was primarily attributable to $10.1 million of proceeds from the exercise of stock options.

Contractual Obligations

Our principal commitments consist of obligations under our outstanding leases for office space, third-party data centers and office equipment. The following table summarizes our contractual cash obligations at December 31, 2017 and the effect such obligations are expected to have on our liquidity and cash flows in future periods:

		Payment Due by Period			
Contractual Obligations	**Total**	**Less Than 1 Year**	**1-3 Years**	**3-5 Years**	**More than 5 Years**
		(in thousands)			
Operating lease obligations	$48,896	$6,893	$11,199	$8,804	$22,000

On October 14, 2016, we entered into a lease agreement (included in the table above) for our new headquarters office facility. The lease payments commence on May 1, 2018 and the lease has a ten-year term through April 2028. The total commitment of $38.6 million is payable monthly with escalating rental payments throughout the lease term. We took possession of the facility on May 1, 2017, completed construction of the facility and moved into the facility in November 2017.

In connection with this lease, we have provided the landlord with a $1.2 million standby letter of credit (classified as restricted cash) to secure our obligations through the end of the lease term.

Operating lease obligations represent our obligations to make payments under the lease agreements for our facilities, data centers, and office equipment leases. During the year ended December 31, 2017, we made regular payments on our operating lease obligations of $4.4 million.

Off-Balance Sheet Arrangements

During the periods presented, we did not have, nor do we currently have, any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities.

Recent Accounting Pronouncements

See Note 1 to the consolidated financial statements in Part II, Item 8 of this Annual Report on Form 10-K for a discussion of recent accounting pronouncements.

Critical Accounting Policies and Estimates

Our consolidated financial statements are prepared in accordance with U.S. GAAP. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, expenses and related disclosures. On an ongoing basis, we evaluate our estimates and assumptions. Our actual results may differ from these estimates under different assumptions or conditions.

We believe that of our significant accounting policies, which are described in the notes to our consolidated financial statements, the following accounting policies involve the greatest degree of judgment and complexity and have the greatest potential impact on our consolidated financial statements. A critical accounting policy is one that is material to the presentation of our consolidated financial statements and requires us to make difficult, subjective or complex judgments for uncertain matters that could have a material effect on our financial condition and results of operations. Accordingly, these are the policies we believe are the most critical to aid in fully understanding and evaluating our financial condition and results of operations. For further information on all of our significant accounting policies, see Note 1—The Company and Summary of Significant Accounting Policies in the accompanying notes to the consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K.

Revenue Recognition

We derive revenues from the sale of subscriptions to our security and compliance solutions, which are delivered on our cloud platform. Subscriptions to our solutions allow customers to access our cloud-based security and compliance solutions through a unified, web-based interface. Customers generally enter into one year renewable subscriptions though some customers do enter into subscriptions with longer terms. The subscription fee entitles the customer to an unlimited number of scans for a specified number of devices or web applications and, if requested by a customer as part of their subscription, a specified number of physical or virtual scanner appliances. Our physical and virtual scanner appliances are requested by certain customers as part of their subscriptions in order to scan IT infrastructures within their firewalls and do not function without, and are not sold separately from, subscriptions for our solutions. In some limited cases, we also provide certain computer equipment used to extend our Qualys cloud platform into our customers' private cloud environment. Customers are required to return physical scanner appliances and computer equipment if they do not renew their subscriptions.

Subscriptions for unlimited scans and certain limited scan arrangements with firm expiration dates are recognized ratably over the period in which the services are performed, generally one year. We recognize revenues for certain other limited scan arrangements, where expiration dates can be extended, on an as-used basis. We recognize the subscription of physical scanner appliances and other computer equipment as revenues ratably over the period of the subscription, which is commensurate with the term of the related subscription. Because the customer's access to our cloud solutions are delivered at the same time or within close proximity to the delivery of physical scanner appliances and the terms are commensurate for these services and equipment, we consider these elements as a single unit of accounting recognized ratably over the subscription term. Physical equipment (scanners and private cloud platforms) are accounted for as operating leases and revenue is recognized over the subscription term. Costs of shipping and handling charges associated with physical scanner appliances and other computer equipment are included in cost of revenues.

Deferred revenues consist of revenues billed or received that will be recognized in the future under subscriptions existing at the balance sheet date.

Income Taxes

We are subject to income taxes in the United States as well as other tax jurisdictions in which we conduct business. Earnings from our non-U.S. activities are subject to local income tax and may also be subject to U.S. income tax.

Income tax expense or benefit is recognized for the amount of taxes payable or refundable for the current year, and for deferred tax assets and liabilities for the tax consequences of events that have been recognized in an entity's financial statements or tax returns. We must make significant assumptions,

judgments and estimates to determine our current provision for (benefit from) income taxes, our deferred tax assets and liabilities, and any valuation allowance to be recorded against our deferred tax assets. Our judgments, assumptions and estimates relating to the current provision for (benefit from) income taxes include the geographic mix and amount of income (loss), our interpretation of current tax laws, and possible outcomes of current and future audits conducted by foreign and domestic tax authorities. Our judgments also include anticipating the tax positions we will record in the financial statements before actually preparing and filing the tax returns. Our estimates and assumptions may differ from the actual results as reflected in our income tax returns and we record the required adjustments when they are identified or resolved. Changes in our business, tax laws or our interpretation of tax laws, and developments in current and future tax audits, could significantly impact the amounts provided for income taxes in our results of operations, financial position, or cash flows.

Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to tax benefit carry-forwards and to differences between the financial statement amounts of assets and liabilities and their respective tax basis. We regularly review our deferred tax assets for recoverability and establish a valuation allowance if it is more likely than not that some portion or all of the deferred tax assets will not be realized. To make this assessment, we take into account predictions of the amount and category of taxable income from various sources and all available positive and negative evidence about these possible sources of taxable income. The weight given to the potential effect of negative and positive evidence is commensurate with the extent to which the strength of the evidence can be objectively verified.

Based on the analysis of positive and negative factors noted above, we do not have a valuation allowance against U.S. federal and certain state deferred tax assets. We believe it is more likely than not that our California deferred tax assets will not be realized because the income attributed to California is not expected to be sufficient to recognize these deferred tax assets. Accordingly, we continue to record a valuation allowance as of December 31, 2017 for our California deferred tax assets. If, in the future, we determine that these deferred tax assets are more likely than not to be realized, a release of all or part, of the related valuation allowance could result in an income tax benefit in the period such determination is made.

We recognize an income tax expense or benefit with respect to uncertain tax positions in our financial statements that we judge is more likely than not to be sustained solely on its technical merits in a tax audit, including resolution of any related appeals or litigation processes. To make this judgment, we must interpret complex and sometimes ambiguous tax laws, regulations and administrative practices. If an income tax position meets the more likely than not recognition threshold, then we must measure the amount of the tax benefit to be recognized by determining the largest amount of tax benefit that has a greater than a 50% likelihood of being realized upon effective settlement with a taxing authority that has full knowledge of all of the relevant facts. It is inherently difficult and subjective to estimate such amounts, as this requires us to determine the probability of various possible settlement outcomes. To determine if a tax position is effectively settled after a tax examination has been completed, we must also estimate the likelihood that another taxing authority could review the respective tax position. We must also determine when it is reasonably possible that the amount of unrecognized tax benefits will significantly increase or decrease in the 12 months after each fiscal year-end. These judgments are difficult because a taxing authority may change its behavior as a result of our disclosures in our financial statements. We must reevaluate our income tax positions on a quarterly basis to consider factors such as changes in facts or circumstances, changes in tax law, effectively settled issues under audit, the potential for interest and penalties, and new audit activity. Such a change in recognition or measurement would result in recognition of a tax benefit or an additional charge to the tax provision.

On December 22, 2017, the 2017 Tax Act was enacted into law. The new legislation contains several key tax provisions that impact the Company, including the reduction of the corporate income

tax rate from 35% to 21% effective January 1, 2018 and a variety of other changes, such as a one-time repatriation tax on accumulated foreign earnings (transition tax), acceleration of business asset expensing, and reduction in the amount of executive pay that could qualify as a tax deduction, among others. We have estimated our provision for income taxes in accordance with the 2017 Tax Act and guidance available as of the date of this filing and as a result have recorded $10.4 million as additional income tax expense due to the re-measurement of certain deferred tax assets and liabilities as a result in the reduction of the federal tax rate. No amount related to the one-time transition tax on the mandatory deemed repatriation of foreign earnings was recorded due to cumulative foreign losses of our subsidiaries.

On December 22, 2017, Staff Accounting Bulletin No. 118 (“SAB 118”) was issued to address the application of US GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the 2017 Tax Act. In accordance with SAB 118, we have determined that the $10.4 million of the deferred tax expense recorded in connection with the re-measurement of certain deferred tax assets and liabilities and the zero amount of transition tax on the mandatory deemed repatriation of foreign earnings were provisional amounts and reasonable estimates at December 31, 2017. A comprehensive analysis of the newly introduced provisions for Global Intangible Low Tax Income (“GILTI”), for which additional guidance is expected from the U.S. Internal Revenue Service, is required to finalize the amounts of our deferred tax assets and liabilities, and a detailed analysis of historical foreign earnings and the potential correlative adjustments will be performed to verify the transitional tax does not apply. Subsequent adjustments resulting from the additional work referred to above will be recorded to current tax expense in the quarter of 2018 when the analysis is complete.

As a result of the adoption of ASU 2016-09 on January 1, 2017, the Company recorded a cumulative effect adjustment to increase retained earnings by $7.7 million with a corresponding increase to deferred tax assets for the federal and state net operating losses and federal research credits attributable to excess tax benefits from stock-based compensation which had not been previously recognized. All excess tax benefits and deficiencies in the current and future periods will be recognized as income tax expense in the Company’s Consolidated Statement of Operations in the reporting period in which they occur. This will result in increased volatility in the Company’s effective tax rate. For the year ended December 31, 2017, the Company recognized a benefit of $27.1 million related to excess tax benefits.

Stock-Based Compensation

We recognize the fair value of our employee stock options and restricted stock units over the requisite service period for those awards ultimately expected to vest. The fair value of each option is estimated on date of grant using the Black-Scholes-Merton option pricing model and the fair value of each restricted stock unit is based on the fair value of our stock on the date of grant. Forfeitures are estimated on the date of grant and revised if actual or expected forfeiture activity differs materially from original estimates.

Determining the appropriate fair value model and calculating the fair value of employee stock options requires the use of highly subjective assumptions, including the expected life of the stock option and stock price volatility. The assumptions used in calculating the fair value of employee stock options represent management’s best estimates, but the estimates involve inherent uncertainties and the application of management’s judgment. As a result, if factors change and we use different assumptions, our stock-based compensation expense could be materially different in the future.

We also record compensation representing the fair value of stock options granted to non-employees. Stock-based non-employee compensation is recognized over the vesting periods of the options. The value of options granted to non-employees is periodically re-measured as they vest over a performance period.

Fair Value Measurement

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. For certain of our financial instruments, including cash and certain cash equivalents, accounts receivable, accounts payable, and other current liabilities, the carrying amounts approximate their fair value due to the relatively short maturity of these balances.

We measure and report certain cash equivalents, investments and derivative foreign currency forward contracts at fair value in accordance with the provisions of the authoritative accounting guidance that addresses fair value measurements. This guidance establishes a hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the most observable inputs be used when available. The hierarchy is broken down into three levels based on the reliability of inputs as follows:

Level 1—Valuations based on quoted prices in active markets for identical assets or liabilities.

Level 2—Valuations based on other than quoted prices in active markets for identical assets and liabilities, quoted prices for identical or similar assets or liabilities in inactive markets, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3—Valuations based on inputs that are generally unobservable and typically reflect management's estimates of assumptions that market participants would use in pricing the asset or liability.

Our financial instruments consist of assets measured using Level 1 and 2 inputs. Level 1 assets include a highly liquid money market fund, which is valued using unadjusted quoted prices that are available in an active market for an identical asset. Level 2 assets include fixed-income U.S. government agency securities, commercial paper, corporate bonds, asset-backed securities and derivative financial instruments consisting of foreign currency forward contracts. The securities, bonds and commercial paper are valued using prices from independent pricing services based on quoted prices in active markets for similar instruments or on industry models using data inputs such as interest rates and prices that can be directly observed or corroborated in active markets. The foreign currency forward contracts are valued using observable inputs.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

We have domestic and international operations and we are exposed to market risks in the ordinary course of our business. These risks primarily include interest rate, foreign exchange and inflation risks, as well as risks relating to changes in the general economic conditions in the countries where we conduct business. To reduce certain of these risks, we monitor the financial condition of our large customers and limit credit exposure by collecting subscription fees in advance.

Foreign Currency Risk

Our results of operations and cash flows have been and will continue to be subject to fluctuations because of changes in foreign currency exchange rates, particularly changes in exchange rates between the U.S. dollar and the Euro, British Pound, and Indian Rupee, the currencies of countries where we currently have our most significant international operations. A portion of our invoicing is denominated in the Euro, British Pound and Japanese Yen. Our expenses in international locations are generally denominated in the currencies of the countries in which our operations are located.

Derivative financial instruments are utilized by the Company to reduce foreign currency exchange risks. We use foreign currency forward contracts to partially mitigate the impact of fluctuations in cash and accounts receivable balances denominated in Euros and British Pounds. We do not use these contracts for speculative or trading purposes, nor are they designated as hedges. These contracts typically have a maturity of one month, and we record gains and losses from these instruments in other income (expense), net. The effect of an immediate 10% adverse change in foreign exchange rates would not be material to our financial condition, operating results or cash flows.

Interest Rate Sensitivity

We have $355.6 million in cash, cash equivalents and short-term and long-term investments at December 31, 2017. Cash and cash equivalents include cash held in banks, highly liquid money market funds, U.S. government agency securities, and commercial paper. Investments consist of fixed-income U.S. government agency securities, corporate bonds, asset-backed securities and commercial paper. We determine the appropriate balance sheet classification of our investments at the time of purchase and reevaluate such designation at each balance sheet date. We classify our investments as either short-term or long-term based on each instrument's underlying contractual maturity date.

The primary objectives of our investment activities are the preservation of principal and support of our liquidity requirements. We do not enter into investments for trading or speculative purposes. Our investments are subject to market risk due to changes in interest rates, which may affect the interest income we earn and the fair market value. We do not believe that a 10% increase or decrease in interest rates would have a material impact on our operating results or cash flows.

Item 8. Financial Statements and Supplementary Data

Qualys, Inc.
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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Report of Independent Registered Public Accounting Firm

Board of Directors and Shareholders
Qualys, Inc.

Opinion on the financial statements

We have audited the accompanying consolidated balance sheets of Qualys, Inc. (a Delaware corporation) and subsidiaries (the “Company”) as of December 31, 2017 and 2016, the related consolidated statements of operations, comprehensive income, changes in stockholders’ equity, and cash flows for each of the three years in the period ended December 31, 2017, and the related notes and financial statement schedule listed in the index appearing under Item 15(a)(2) (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (“PCAOB”), the Company’s internal control over financial reporting as of December 31, 2017, based on criteria established in the 2013 *Internal Control-Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”), and our report dated February 23, 2018 expressed unqualified opinion.

Basis for opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ GRANT THORNTON LLP

We have served as the Company’s auditor since 2005.

San Jose, California
February 23, 2018

Report of Independent Registered Public Accounting Firm

Board of Directors and Shareholders
Qualys, Inc.

Opinion on internal control over financial reporting

We have audited the internal control over financial reporting of Qualys, Inc. (a Delaware corporation) and subsidiaries (the "Company") as of December 31, 2017, based on criteria established in the 2013 *Internal Control-Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in the 2013 *Internal Control-Integrated Framework* issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated financial statements of the Company as of and for the year ended December 31, 2017, and our report dated February 23, 2018 expressed an unqualified opinion on those financial statements.

Basis for opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting ("Management's Report"). Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and limitations of internal control over financial reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ GRANT THORNTON LLP

San Jose, California
February 23, 2018

Qualys, Inc.

CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share data)

	December 31, 2017	December 31, 2016
Assets		
Current assets:		
Cash and cash equivalents	$ 86,591	$ 86,737
Short-term investments	201,823	157,119
Accounts receivable, net of allowance of $816 and $702 at December 31, 2017 and 2016, respectively	64,412	47,024
Prepaid expenses and other current assets	16,524	9,808
Total current assets	369,350	300,688
Long-term investments	67,224	45,725
Property and equipment, net	58,557	39,401
Deferred tax assets, net	25,066	16,590
Intangible assets, net	12,401	987
Goodwill	1,549	317
Restricted cash	1,200	1,200
Other noncurrent assets	2,178	2,096
Total assets	$537,525	$407,004
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 1,144	$ 2,051
Accrued liabilities	21,444	13,317
Deferred revenues, current	143,186	114,964
Total current liabilities	165,774	130,332
Deferred revenues, noncurrent	17,136	15,528
Other noncurrent liabilities	11,071	2,731
Total liabilities	193,981	148,591
Commitments and contingencies (Note 6)		
Stockholders' equity:		
Preferred stock: $0.001 par value; 20,000,000 shares authorized, no shares issued and outstanding at December 31, 2017 and 2016	—	—
Common stock, $0.001 par value; 1,000,000,000 shares authorized, 38,598,117 and 35,841,001 shares issued and outstanding at December 31, 2017 and 2016, respectively	39	36
Additional paid-in capital	304,155	266,794
Accumulated other comprehensive loss	(574)	(156)
Retained earnings (deficit)	39,924	(8,261)
Total stockholders' equity	343,544	258,413
Total liabilities and stockholders' equity	$537,525	$407,004

The accompanying notes are an integral part of these Consolidated Financial Statements.

Qualys, Inc.

CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)

	Year Ended December 31,		
	2017	2016	2015
Revenues	$230,828	$197,925	$164,284
Cost of revenues	51,580	43,128	34,327
Gross profit	179,248	154,797	129,957
Operating expenses:			
Research and development	42,816	36,591	30,438
Sales and marketing	63,855	58,985	50,397
General and administrative	35,334	29,114	24,316
Total operating expenses	142,005	124,690	105,151
Income from operations	37,243	30,107	24,806
Other income (expense), net:			
Interest expense	(3)	(26)	(6)
Interest income	2,674	1,320	570
Other expense, net	(536)	(972)	(850)
Total other income (expense), net	2,135	322	(286)
Income before income taxes	39,378	30,429	24,520
(Benefit from) provision for income taxes	(1,062)	11,205	8,655
Net income	$ 40,440	$ 19,224	$ 15,865
Net income per share:			
Basic	$ 1.08	$ 0.55	$ 0.47
Diluted	$ 1.01	$ 0.50	$ 0.42
Weighted average shares used in computing net income per share:			
Basic	37,443	35,247	34,050
Diluted	40,071	38,369	38,184

The accompanying notes are an integral part of these Consolidated Financial Statements.

Qualys, Inc.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in thousands)

	Year Ended December 31,		
	2017	2016	2015
Net income	$40,440	$19,224	$15,865
Available-for-sale investments:			
Change in net unrealized loss on investments, net of tax	(462)	(57)	(202)
Less: reclassification adjustment for net realized gain (loss) included in net income, net of tax	44	112	(19)
Other comprehensive (loss) income, net of tax	(418)	55	(221)
Comprehensive income	$40,022	$19,279	$15,644

The accompanying notes are an integral part of these Consolidated Financial Statements.

Qualys, Inc.

CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year Ended December 31,		
	2017	2016	2015
Cash flows from operating activities:			
Net income	$ 40,440	$ 19,224	$ 15,865
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization expense	20,636	16,994	14,360
Bad debt expense	657	199	851
Loss on disposal of property and equipment	161	55	5
Stock-based compensation	26,961	20,149	17,494
Amortization of premiums and accretion of discounts on investments	1,324	1,000	594
Excess tax benefits from stock-based compensation	—	(8,700)	(487)
Impairment of intangible assets	—	—	255
Deferred income taxes	(10,414)	(440)	6,564
Excess tax benefits included in deferred tax assets	7,696	—	—
Changes in operating assets and liabilities:			
Accounts receivable	(17,966)	(4,898)	(10,183)
Prepaid expenses and other assets	(53)	(2,107)	(1,011)
Restricted cash	—	(1,200)	—
Accounts payable	(454)	(1,220)	(3,293)
Accrued liabilities	1,485	9,696	3,339
Deferred revenues	29,830	17,903	21,378
Other noncurrent liabilities	7,343	1,455	229
Net cash provided by operating activities	107,646	68,110	65,960
Cash flows from investing activities:			
Purchases of investments	(299,891)	(222,953)	(146,707)
Sales and maturities of investments	231,996	149,708	105,509
Purchases of property and equipment	(37,818)	(23,245)	(20,051)
Business acquisitions	(12,482)	—	—
Capitalized software development costs	—	—	(99)
Net cash used in investing activities	(118,195)	(96,490)	(61,348)
Cash flows from financing activities:			
Proceeds from exercise of stock options	31,327	15,157	10,095
Excess tax benefits from stock-based compensation	—	8,700	487
Payments for taxes related to net share settlement of equity awards	(20,924)	(438)	—
Net cash provided by financing activities	10,403	23,419	10,582
Net (decrease) increase in cash and cash equivalents	(146)	(4,961)	15,194
Cash and cash equivalents at beginning of period	86,737	$ 91,698	76,504
Cash and cash equivalents at end of period	$ 86,591	$ 86,737	$ 91,698
Supplemental disclosures of cash flow information			
Cash paid for interest expense	3	27	6
Cash paid for income taxes, net of refunds	1,584	856	995
Non-cash investing and financing activities			
Business acquisitions recorded in Intangible Assets and Accrued liabilities	1,000	—	—
Purchases of property and equipment recorded in accounts payable and accrued liabilities	2,765	1,438	—
Vesting of early exercised common stock options	—	—	19

The accompanying notes are an integral part of these Consolidated Financial Statements.

Qualys, Inc.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands, except share data)

	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Retained earnings (deficit)	Total Stockholders' Equity
	Shares	Amount				
Balances at December 31, 2014	33,594,285	$ 34	$195,133	$ 10	$(43,350)	$151,827
Net income	—	—	—	—	15,865	15,865
Other comprehensive loss, net of tax	—	—	—	(221)	—	(221)
Issuance of common stock upon exercise of stock options	807,846	—	10,095	—	—	10,095
Issuance of common stock upon vesting of restricted stock units	12,500	—	—	—	—	—
Vesting of early exercised common stock options	—	—	19	—	—	19
Excess tax benefits from stock-based compensation	—	—	487	—	—	487
Stock-based compensation	—	—	17,494	—	—	17,494
Balances at December 31, 2015	34,414,631	34	223,228	(211)	(27,485)	195,566
Net income	—	—	—	—	19,224	19,224
Other comprehensive income, net of tax	—	—	—	55	—	55
Issuance of common stock upon exercise of stock options	1,399,157	2	15,155	—	—	15,157
Issuance of common stock upon vesting of restricted stock units	25,213	—	—	—	—	—
Issuance of common stock in exchange for services	2,000	—	26	—	—	26
Excess tax benefits from stock-based compensation	—	—	8,700	—	—	8,700
Taxes related to net share settlement of equity awards	—	—	(438)	—	—	(438)
Stock-based compensation	—	—	20,123	—	—	20,123
Balances at December 31, 2016	35,841,001	36	266,794	(156)	(8,261)	258,413
Cumulative effect of a change in accounting principle related to stock-based compensation	—	—	—	—	7,745	7,745
Net income	—	—	—	—	40,440	40,440
Other comprehensive loss, net of tax	—	—	—	(418)	—	(418)
Issuance of common stock upon exercise of stock options	2,997,095	3	31,324	—	—	31,327
Issuance of common stock upon vesting of restricted stock units	217,111	—	—	—	—	—
Taxes related to net share settlement of equity awards	(457,090)	—	(20,924)	—	—	(20,924)
Stock-based compensation	—	—	26,961	—	—	26,961
Balances at December 31, 2017	38,598,117	$ 39	$304,155	$(574)	$ 39,924	$343,544

The accompanying notes are an integral part of these Consolidated Financial Statements.

NOTE 1. The Company and Summary of Significant Accounting Policies

Description of Business

Qualys, Inc. (the “Company”, “we”, “us”, “our”) was incorporated in the state of Delaware on December 30, 1999. The Company is headquartered in Foster City, California and has majority-owned subsidiaries throughout the world. The Company is a pioneer and leading provider of cloud-based security and compliance solutions that enable organizations to identify security risks to their IT infrastructures, help protect their IT systems and applications from ever-evolving cyber-attacks and achieve compliance with internal policies and external regulations. The Company’s cloud solutions address the growing security and compliance complexities and risks that are amplified by the dissolving boundaries between internal and external IT infrastructures and web environments, the rapid adoption of cloud computing and the proliferation of geographically dispersed IT assets. Organizations can use the Company’s integrated suite of solutions delivered on its Qualys cloud platform to cost-effectively obtain a unified view of their security and compliance posture across globally-distributed IT infrastructures.

Basis of Presentation

The accompanying consolidated financial statements and footnotes have been prepared by the Company in accordance with accounting principles generally accepted in the United States (“U.S. GAAP”) as well as the instructions to Form 10-K and the rules and regulations of the U.S. Securities and Exchange Commission (“SEC”). In the opinion of management, the accompanying consolidated financial statements include all adjustments necessary for the fair presentation of the Company’s consolidated financial position, results of operations and cash flows for the periods presented. The accompanying consolidated financial statements include the accounts of the Company and its majority-owned subsidiaries. All significant intercompany transactions and balances have been eliminated upon consolidation.

Reclassification

The Company reclassified certain information technology expenses across the functions that benefit from their support. In 2016, the Company reclassified $3.0 million out of general and administrative expenses. Of this amount the Company reclassified $0.7 million to cost of revenues, $1.3 million to research and development and $1.0 million to sales and marketing. In 2015, the Company reclassified $2.3 million out of general and administrative expenses. Of this amount the Company reclassified $0.5 million to cost of revenues, $1.0 million to research and development and $0.8 million to sales and marketing.

Use of Estimates

The preparation of the consolidated financial statements in conformity with U.S. GAAP requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of assets and liabilities at the date of the consolidated financial statements and the reported results of operations during the reporting period. The Company’s management regularly assesses these estimates, which primarily affect revenue recognition, the valuation of accounts receivable, goodwill and intangible assets, stock-based compensation and the provision for income taxes. Actual results could differ from those estimates and such differences may be material to the accompanying consolidated financial statements.

Concentration of Credit Risk

The Company invests its cash and cash equivalents with major financial institutions. Cash balances with any one institution at times may be in excess of federally insured limits. Cash equivalents are invested in high-quality investment grade financial instruments and are diversified. The Company has not experienced any losses in such accounts and believes it is not exposed to any significant credit risk.

Credit risk with respect to accounts receivable is dispersed due to the large number of customers. Collateral is not required for accounts receivable. The Company maintains an allowance for potential credit losses based upon the expected collectability of accounts receivable. The Company writes off its receivables once collection efforts are unsuccessful. As of December 31, 2017 and 2016, no customer or channel partner accounted for more than 10% of the Company's revenues and accounts receivable balance.

Cash, Cash Equivalents, Short-Term and Long-Term Investments

Cash and cash equivalents include cash held in banks, highly liquid money market funds, commercial paper, and fixed-income U.S. government agency securities, all with original maturities of three months or less when acquired. The Company's investments consist of fixed-income U.S. government agency securities, corporate bonds, asset-backed securities and commercial paper. Management determines the appropriate classification of the Company's investments at the time of purchase and reevaluates such designation at each balance sheet date.

The Company classifies its investments as either short-term or long-term based on each instrument's underlying contractual maturity date.

Cash equivalents are stated at cost, which approximates fair market value. Short-term and long-term investments are classified as available-for-sale and are carried at fair value. Unrealized gains and losses in fair value are reported in other comprehensive income (loss). When the available-for-sale securities are sold, cost is based on the specific identification method, and the realized gains and losses are included in other income (expense) in the consolidated statements of operations. Short-term and long-term investments are reviewed quarterly for impairment that is deemed to be other-than-temporary. An investment is considered other-than-temporarily impaired when its fair value is below its amortized cost and (1) there is an intent to sell the security, (2) it is "more likely than not" that the security will be sold before recovery of its amortized cost basis or (3) the present value of expected cash flows from the investment is not expected to recover the entire amortized cost basis. Declines in value that are considered to be other-than-temporary and adjustments to amortized cost for the amortization of premiums and the accretion of discounts are recorded in other income (expense). Interest and dividends are recorded in interest income as earned.

Accounts Receivable

Accounts receivable are recorded at the invoiced amount and do not bear interest. The allowance for doubtful accounts represents the Company's best estimate of the amount of probable credit losses and is determined based on a review of existing accounts receivable by aging category to identify significant customers or invoices with collectability issues. For those invoices not specifically reviewed, the reserve is calculated based on the age of the receivable and historical write-offs.

Any change in the assumptions used in analyzing a specific account receivable may result in an additional provision for doubtful accounts being recognized in the period in which the change occurs. When the Company ultimately concludes that a receivable is uncollectible, the balance is written off against the allowance for doubtful accounts. Payments subsequently received on such receivables are credited back to the allowance for doubtful accounts.

Property and Equipment, net

Property and equipment are stated at cost less accumulated depreciation and amortization. Depreciation is computed using the straight-line method over the estimated useful lives of the assets, which range from three to five years. Leasehold improvements are amortized on a straight-line basis over the lesser of the estimated useful life of the asset or the lease term.

The Company purchases physical scanner appliances and other computer equipment that are provided to customers on a subscription basis. This equipment is recorded within property and equipment on the accompanying consolidated balance sheet, and the depreciation is recorded to cost of revenues over an estimated useful life of three years.

Upon retirement or disposal, the cost of assets and the related accumulated depreciation are removed from the accounts and any resulting gain or loss is reflected in the consolidated statements of operations. Repairs and maintenance that do not extend the life of an asset are expensed as incurred and major improvements are capitalized as property and equipment.

Leases

On certain of our operating lease agreements, the Company may receive rent free periods or escalating rent payments over the terms of the leases. The Company recognizes rent expense under these agreements on a straight-line basis over the term of the lease, starting when the Company takes possession of the property from the landlord. The Company records the difference between the recognized rent expense and the amounts payable under the lease as a short-term or long-term deferred rent liability. When the Company receives tenant allowances upon entering into certain leases, the Company records the allowances as an offset to short-term or long-term deferred rent liability and amortizes them using the straight-line method as a reduction to rent expense over the term of the lease.

Impairment of Long-Lived Assets

The Company evaluates its long-lived assets, which consist of property and equipment, and intangible assets subject to amortization, for indicators of possible impairment when events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. Impairment exists if the carrying amounts of such assets exceed the estimates of future undiscounted cash flows expected to be generated by such assets. Should an impairment exist, the impairment loss would be measured based on the excess carrying value of the asset over the asset’s estimated fair value. In each of 2017, 2016 and 2015, the Company had no impairment of long-lived assets.

Goodwill and Intangible Assets

Goodwill represents the excess of the purchase price over the fair value of the net tangible and identifiable intangible assets acquired in a business combination and is not subject to amortization. Goodwill and other intangible assets with indefinite lives are not amortized, but tested for impairment

annually or if certain circumstances indicate a possible impairment may exist. These tests are performed at the reporting unit level. The Company's operations are organized as one reporting unit.

In testing for a potential impairment of goodwill, the Company first performs a qualitative assessment of its reporting unit to determine if it is more likely than not (a more than 50% likelihood) that the fair value of the reporting unit is less than its carrying amount. If the fair value is not considered to be less than the carrying amount, no further evaluation is necessary. The Company performed the annual qualitative assessment for the year ended December 31, 2017 and concluded there was no potential impairment of goodwill.

In testing for a potential impairment of intangible assets with indefinite lives that are not subject to amortization, the Company first performs a qualitative assessment to determine if it is more likely than not (a more than 50% likelihood) that the fair value of the indefinite-lived intangible assets is less than the carrying amount. If the fair value is not considered to be less than the carrying amount, no further evaluation is necessary. The Company performed the annual qualitative assessment in 2017 and concluded that as of December 31, 2017, there was no potential impairment of the indefinite-lived intangible assets.

If the qualitative assessment indicates there is more than a 50% likelihood that the fair value is less than the carrying amount of the reporting unit or the intangible asset, the Company would perform a two-step test. In the first step, the carrying value of the reporting unit or intangible asset is compared to its estimated fair value. If the estimated fair value is less than the carrying value, then potential impairment exists. In the second step, for goodwill, the Company calculates the amount of any impairment by determining the implied fair value of goodwill using a hypothetical purchase price allocation, similar to that which would be applied if it were an acquisition and the purchase price was equivalent to fair value as calculated in the first step. Impairment is equivalent to any excess of goodwill carrying value over its implied fair value. For indefinite-lived intangible assets, the Company performs the currently prescribed quantitative impairment test by comparing the fair value of the indefinite-lived intangible asset with its carrying value. In 2015, the Company determined there was an impairment of certain indefinite-lived intangible assets and recorded a write-off of $0.3 million recorded in other expense, net.

Certain other intangible assets acquired are amortized over their estimated useful lives and tested for impairment if certain circumstances indicate an impairment may exist. The Company's intangible assets are comprised primarily of existing technology, patent license, and non-competition agreements and are amortized over periods ranging from three to fourteen years on a straight-line basis. As of December 31, 2017, the Company has not written down any of these intangible assets as a result of impairment.

Software Development Costs

The Company capitalizes qualifying software costs developed for internal use. These costs include internal costs, such as payroll and benefits of those employees directly associated with the development of the software, and other consulting expenses. Total capitalized development costs and the related accumulated amortization were $0.4 million each at both December 31, 2017 and 2016.

Business Combinations

We apply the provisions of ASC 805, Business Combinations, in accounting for our acquisitions. It requires us to recognize separately from goodwill the assets acquired and the liabilities assumed at

their acquisition date fair values. Goodwill as of the acquisition date is measured as the excess of consideration transferred over the net of the acquisition date fair values of the assets acquired and the liabilities assumed. While we use our best estimates and assumptions to accurately value assets acquired and liabilities assumed at the acquisition date as well as any contingent consideration, where applicable, our estimates are inherently uncertain and subject to refinement. As a result, during the measurement period, which may be up to one year from the acquisition date, we record adjustments to the assets acquired and liabilities assumed with the corresponding offset to goodwill. Upon the conclusion of the measurement period or final determination of the values of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded to our consolidated statements of operations.

Derivative Financial Instruments

Derivative financial instruments are utilized by the Company to reduce foreign currency exchange risks. The Company uses foreign currency forward contracts to mitigate the impact of foreign currency fluctuations of certain non-U.S. dollar denominated asset positions, primarily cash and accounts receivable. These contracts are recorded within prepaid expenses and other current assets in the consolidated balance sheets. Gains and losses resulting from currency exchange rate movements on these forward contracts are recognized in other income (expense) in the accompanying consolidated statements of operations in the period in which the exchange rates change and offset the foreign currency gains and losses on the underlying exposure being hedged. The Company does not enter into derivative financial instruments for trading or speculative purposes.

At December 31, 2017, the Company had two outstanding forward contracts with notional amounts of 7.0 million Euros and 4.8 million British Pounds, respectively, both with the expiry date of January 31, 2018. At December 31, 2016, the Company had two outstanding forward contracts with notional amounts of 7.6 million Euros and 4.6 million British Pounds, which expired on February 2, 2017. These forward contracts were entered into as of December 29, 2017 and December 30, 2016, respectively, and had a fair value of $0 at both December 31, 2017 and 2016. These derivatives did not meet the criteria to be designated as hedges. These instruments were valued using Level 2 inputs.

The following summarizes the gains (losses) recognized from forward contracts and other foreign currency transactions:

	Year Ended December 31,		
	2017	2016	2015
Net (loss) gain from forward contracts	$(1,665)	$ 554	$ 608
Other foreign currency transaction gains (losses)	1,310	(1,324)	(1,052)
Total foreign exchange loss, net	$ (355)	$ (770)	$ (444)

Stock-Based Compensation

The Company recognizes the fair value of its employee stock options and restricted stock units (RSUs) over the requisite service period for those awards ultimately expected to vest. The fair value of each option is estimated on date of grant using the Black-Scholes-Merton option pricing model and the fair value of each restricted stock unit is based on the fair value of the Company's stock on the date of grant. Forfeitures are estimated on the date of grant and revised if actual or expected forfeiture activity differs materially from original estimates.

Option grants to non-employees are accounted for at the fair value of the equity instrument issued, as calculated using the Black-Scholes-Merton option-pricing model and the expense is recognized over the vesting periods of the options. The value of options granted to non-employees is re-measured as they vest over a performance period.

Revenue Recognition

The Company derives revenues from subscriptions that require customers to pay a fee in order to access the Company's cloud solutions. Customers generally enter into one year renewable subscriptions though some customers do enter into subscriptions with longer terms. The subscription fee entitles the customer to an unlimited number of scans for a specified number of networked devices or web applications and, if requested by a customer as part of their subscription, a specified number of physical or virtual scanner appliances. The Company's physical and virtual scanner appliances are requested by certain customers as part of their subscriptions in order to scan IT infrastructures within their firewalls and do not function without, and are not sold separately from, subscriptions for the Company's solutions. In some limited cases, the Company also provides certain computer equipment used to extend its Qualys cloud platform into its customers' private cloud environment. Customers are required to return physical scanner appliances and computer equipment if they do not renew their subscriptions.

The Company recognizes revenues when all of the following conditions are met:

- There is persuasive evidence of an arrangement.
- The service has been provided to the customer.
- The collection of the fees is reasonably assured.
- The amount of fees to be paid by the customer is fixed or determinable.

Subscriptions are recognized ratably over the subscription period. The Company recognizes revenues from subscriptions that include physical scanner appliances and other computer equipment ratably over the period of the subscription. Physical equipment (scanners and private cloud platforms) are accounted for as operating leases and revenue is recognized over the subscription term.

The Company recognizes revenues for certain limited scan arrangements, for which expiration dates can be extended, on an as-used basis.

Deferred revenues consist of revenues billed or received that will be recognized in the future under subscriptions existing at the balance sheet date. The current portion of deferred revenues represents amounts that are expected to be recognized within one year of the balance sheet date.

Costs of shipping and handling charges incurred by the Company associated with physical scanner appliances and other computer equipment are included in cost of revenues.

Sales taxes and other taxes collected from customers to be remitted to government authorities are excluded from revenues.

Advertising Expenses

Advertising costs are expensed as incurred and include costs of advertising, trade show costs and promotional materials. The Company incurred advertising costs of $8.6 million, $7.7 million and $6.1 million for 2017, 2016 and 2015, respectively.

Income Taxes

The Company provides for the effect of income taxes in its consolidated financial statements using the asset and liability method which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the consolidated financial statements. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases, net operating loss carryovers, and tax credit carry forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the period that includes the enactment date. As a result of the 2017 Tax Act the Company re-measured certain deferred tax assets and liabilities as of December 31, 2017 and recorded $10.4 million of deferred tax expense during 2017 as detailed in Note 9, “Income Taxes”.

Income tax expense or benefit is recognized for the amount of taxes payable or refundable for the current year, and for deferred tax assets and liabilities for the tax consequences of events that have been recognized in an entity’s financial statements or tax returns. The Company must make significant assumptions, judgments and estimates to determine its current provision (benefit) for income taxes, its deferred tax assets and liabilities, and any valuation allowance to be recorded against its deferred tax assets. The Company’s judgments, assumptions and estimates relating to the current provision (benefit) for income taxes include the geographic mix and amount of income (loss), its interpretation of current tax laws, and possible outcomes of current and future audits conducted by foreign and domestic tax authorities. The Company’s judgments also include anticipating the tax positions the Company will record in the consolidated financial statements before actually preparing and filing the tax returns. The Company’s estimates and assumptions may differ from the actual results as reflected in its income tax returns and the Company records the required adjustments when they are identified or resolved. Changes in the Company’s business, tax laws or the Company’s interpretation of tax laws, and developments in current and future tax audits, could significantly impact the amounts provided for income taxes in the Company’s results of operations, financial position, or cash flows.

Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to tax benefit carry-forwards and to differences between the financial statement amounts of assets and liabilities and their respective tax basis. The Company regularly reviews its deferred tax assets for recoverability and establishes a valuation allowance if it is more likely than not that some portion or all of the deferred tax assets will not be realized. To make this assessment, the Company takes into account predictions of the amount and category of taxable income from various sources and all available positive and negative evidence about these possible sources of taxable income. The weight given to the potential effect of negative and positive evidence is commensurate with the extent to which the strength of the evidence can be objectively verified.

The Company applies a two-step approach to determining the financial statement recognition and measurement of uncertain tax positions. The Company only recognizes an income tax expense or benefit with respect to uncertain tax positions in its financial statements that the Company judges is more likely than not to be sustained solely on its technical merits in a tax audit, including resolution of any related appeals or litigation processes. To make this judgment, the Company must interpret complex and sometimes ambiguous tax laws, regulations and administrative practices. If an income tax position meets the more likely than not recognition threshold, then the Company must measure the amount of the tax benefit to be recognized by determining the largest amount of tax benefit that has a greater than a 50% likelihood of being realized upon effective settlement with a taxing authority that

has full knowledge of all of the relevant facts. It is inherently difficult and subjective to estimate such amounts, as this requires the Company to determine the probability of various possible settlement outcomes. To determine if a tax position is effectively settled after a tax examination has been completed, the Company must also estimate the likelihood that another taxing authority could review the respective tax position. The Company must also determine when it is reasonably possible that the amount of unrecognized tax benefits will significantly increase or decrease in the 12 months after each fiscal year-end. These judgments are difficult because a taxing authority may change its behavior as a result of the Company's disclosures in its financial statements. The Company must reevaluate its income tax positions on a quarterly basis to consider factors such as changes in facts or circumstances, changes in tax law, effectively settled issues under audit, and new audit activity. Such a change in recognition or measurement would result in recognition of a tax benefit or an additional charge to the tax provision. The Company's policy is to recognize interest and penalties related to unrecognized tax benefits as a component of the provision for income taxes.

Comprehensive Income (Loss)

Other comprehensive income (loss) consists of unrealized gains (losses) on available-for-sale investments, net of tax, which are not included in the Company's net income. Total comprehensive income includes net income and other comprehensive income (loss) and is included in the consolidated statements of comprehensive income.

Foreign Currency Transactions

The Company's operations are conducted in various countries around the world and the financial statements of its foreign subsidiaries are reported in the U.S. dollar as their respective functional currency. Monetary assets and liabilities denominated in foreign currencies have been re-measured into U.S. dollars using the exchange rates in effect at the balance sheet date, and income and expenses are re-measured at average exchange rates during the period. Foreign currency re-measurement gains and losses and foreign currency transaction gains and losses are recognized in other income (expense), net. The Company recorded total foreign currency transaction losses of $0.4 million, $0.8 million and $0.4 million during 2017, 2016 and 2015, respectively.

Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. For certain of the Company's financial instruments, including certain cash equivalents, accounts receivable, accounts payable, and other current liabilities, the carrying amounts approximate their fair value due to the relatively short maturity of these balances.

The Company measures and reports certain cash equivalents, investments and derivative foreign currency forward contracts at fair value in accordance with the provisions of the authoritative accounting guidance that addresses fair value measurements. This guidance establishes a hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the most observable inputs be used when available. The hierarchy is broken down into three levels based on the reliability of inputs as follows:

Level 1—Valuations based on quoted prices in active markets for identical assets or liabilities.

Level 2—Valuations based on other than quoted prices in active markets for identical assets and liabilities, quoted prices for identical or similar assets or liabilities in inactive markets, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3—Valuations based on inputs that are generally unobservable and typically reflect management's estimates of assumptions that market participants would use in pricing the asset or liability.

The Company's financial instruments consist of assets measured using Level 1 and 2 inputs. Level 1 assets include a highly liquid money market fund, which is valued using unadjusted quoted prices that are available in an active market for an identical asset. Level 2 assets include fixed-income U.S. government agency securities, commercial paper, corporate bonds, asset-backed securities and derivative financial instruments consisting of foreign currency forward contracts. The securities, bonds and commercial paper are valued using prices from independent pricing services based on quoted prices in active markets for similar instruments or on industry models using data inputs such as interest rates and prices that can be directly observed or corroborated in active markets. The foreign currency forward contracts are valued using observable inputs, such as quotations on forward foreign exchange points and foreign interest rates. See Note 2 for more information regarding the fair value measurement of the Company's financial instruments.

Net Income Per Share

Basic net income per share is computed by dividing net income by the weighted-average number of common shares outstanding during the period. All participating securities are excluded from basic weighted average common shares outstanding. In computing diluted net income per share, undistributed earnings are reallocated to reflect the potential impact of dilutive securities. Diluted net income per share is computed by dividing net income by the weighted-average number of shares of common stock outstanding during the period, adjusted for the effects of potentially dilutive common shares, which are comprised of outstanding stock options. The dilutive potential common shares are computed using the treasury stock method or the as-if converted method, as applicable. The effects of outstanding stock options are excluded from the computation of diluted net income per common share in periods in which the effect would be antidilutive.

Recently Adopted Accounting Pronouncements

In March 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2016-09, Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting. ASU 2016-09 intended to simplify and improve various aspects related to how employee-share based payment transactions are accounted for and presented in the financial statements, requiring excess tax benefits and deficiencies to be recognized as a component of income tax expense rather than equity. The inclusion of excess tax benefits and deficiencies as a component of income tax expense will increase volatility within our provision for income taxes as the amount of excess tax benefits or deficiencies from stock-based compensation awards depends on our stock price at the date the awards vest. This guidance also requires excess tax benefits to be presented as an operating activity on the statement of cash flows and allows an entity to make an accounting policy election to either estimate expected forfeitures or to account for them as they occur. The Company adopted this ASU in its first quarter of 2017 and elected to apply this adoption prospectively, recording an increase to retained earnings of $7.7 million with a corresponding increase to deferred tax assets for federal and state net operating losses and federal research credits.

Additionally, the income tax consequences in the current year include a tax deduction benefit of $27.1 million and increased current and deferred tax benefits for federal research credits. The Company has prospectively adjusted its consolidated statements of cash flows. The Company has made the accounting policy election to continue to estimate forfeitures expected to occur to determine the amount of stock-based compensation expense to record each period. See Note 9, “Income Taxes”, for additional impact on the Company’s consolidated financial statements.

Recently Issued Accounting Pronouncements Not Yet Adopted

In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers (Topic 606), which amends the existing accounting standards for revenue recognition. ASU 2014-09 is based on principles that govern the recognition of revenue at an amount an entity expects to be entitled when products or services are transferred to customers. Subsequently, the FASB has issued the following standards related to ASU 2014-09: ASU 2016-08, Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations; ASU 2016-10, Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing; ASU 2016-12, Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients and ASU 2016-20, Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers. We must adopt ASU 2016-08, ASU 2016-10, ASU 2016-12 and ASU 2016-20 with ASU 2014-09 (collectively, the “new revenue standards”) on January 1, 2018. The Company has considered the impact of the standards’ requirements and we do not expect that the adoption will have a material impact on the amount or timing of revenue recognized but will impact the Company’s consolidated financial statements with respect to the capitalization and amortization of incremental costs of obtaining a contract, primarily sales commissions. Under the Company’s current accounting policy, sales commissions are expensed as incurred. The new revenue standards require the capitalization of all incremental costs that the Company incurs to obtain a contract with a customer that it would not have incurred if the contract had not been obtained, provided the Company expects to recover the costs. Under the new revenue standards, the Company will amortize these costs over a period of benefit, as estimated by management, which may extend beyond the contract term. The Company will elect to use the practical expedient in Accounting Standards Codification (“ASC”) 340-40- 25-4 and expense commissions related to contract renewals with a renewal contract term of one year or less. The Company will adopt the new revenue standards as of January 1, 2018, using the modified retrospective transition method applied to those contracts which are not completed as of that date. For sales commissions that are capitalized, the Company expects to record an estimated cumulative-effect adjustment to retained earnings of $2.7 million associated with the capitalization of sales commissions related to contracts in progress as of January 1, 2018. In addition, we expect to amortize sales commissions over five years, representing the period which our goods and services are being transferred to our customers.

In January 2016, the FASB issued ASU 2016-01, Financial Instruments—Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities, which will impact certain aspects of recognition, measurement, presentation and disclosure of financial instruments. The ASU will impact the accounting for equity investments, financial liabilities under the fair value option, and the presentation and disclosure requirements for financial instruments. This ASU is effective for public business entities in fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. The adoption of this ASU is not expected to have a material impact on the Company’s consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842), which requires lessees to recognize all leases, including operating leases, on the balance sheet as a lease asset or lease

liability, unless the lease is a short-term lease. ASU 2016-02 also requires additional disclosures regarding leasing arrangements. ASU 2016-02 is effective for us beginning in the first quarter of fiscal 2019 and early adoption is permitted. Pursuant to the leasing criteria, most of our leased space and equipment leases will be required to be accounted for as capitalized assets on the balance sheet with an offsetting financing obligations. In the statement of operations, what was formerly rent expense will be bifurcated into depreciation and interest expense. The Company is currently evaluating the impact and expects the ASU will have a material impact on its consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, Classification of Certain Cash Receipts and Cash Payments (a consensus of the Emerging Issues Task Force), to provide guidance on the presentation of certain cash receipts and cash payments in the statement of cash flows in order to reduce diversity in existing practice. This ASU is effective for public business entities in fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. The adoption of this ASU is not expected to have a material impact on the Company’s consolidated financial statements.

In November 2016, the FASB issued ASU 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash. The update provides guidance on the presentation of restricted cash or restricted cash equivalents in the statement of cash flows. The Company will adopt ASU 2016-18 retrospectively in the first quarter of fiscal 2018. Restricted cash at both December 31, 2017 and 2016 was $1.2 million.

In January 2017, the FASB issued ASU 2017-01, Business Combinations (Topic 805): Clarifying the Definition of a Business, which revises the definition of a business and provides new guidance in evaluating when a set of transferred assets and activities is a business. This ASU is effective for public business entities in fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017 on a prospective basis. The adoption of this ASU is not expected to have a material impact on the Company’s consolidated financial statements.

In January 2017, the FASB issued ASU 2017-04, Simplifying the Test for Goodwill Impairment (Topic 350). This standard eliminates Step 2 from the goodwill impairment test, instead requiring an entity to recognize a goodwill impairment charge for the amount by which the goodwill carrying amount exceeds the reporting unit’s fair value. This ASU is effective for interim and annual goodwill impairment tests in fiscal years beginning after December 15, 2019 with early adoption permitted. This ASU must be applied on a prospective basis. The adoption of this ASU is not expected to have a material impact on the Company’s consolidated financial statements.

NOTE 2. Fair Value of Financial Instruments

The Company's cash and cash equivalents, short-term investments, and long-term investments consist of the following:

	December 31, 2017			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
	(in thousands)			
Cash and cash equivalents:				
Cash	$ 86,500	$—	$ —	$ 86,500
Money market funds	91	—	—	91
Total	86,591	—	—	86,591
Short-term investments:				
Commercial paper	12,623	—	(3)	12,620
Corporate bonds	38,425	1	(64)	38,362
U.S. government agencies	151,058	—	(217)	150,841
Total	202,106	1	(284)	201,823
Long-term investments:				
Asset-backed securities	4,998	—	(12)	4,986
U.S. government agencies	24,269	—	(54)	24,215
Corporate bonds	38,198	—	(175)	38,023
Total	67,465	—	(241)	67,224
Total	$356,162	$ 1	$(525)	$355,638

	December 31, 2016			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
	(in thousands)			
Cash and cash equivalents:				
Cash	$ 72,673	$—	$ —	$ 72,673
Money market funds	473	—	—	473
Commercial paper	13,591	—	—	13,591
Total	86,737	—	—	86,737
Short-term investments:				
Commercial paper	14,782	5	—	14,787
Corporate bonds	13,490	—	(11)	13,479
Asset-backed securities	1,235	—	—	1,235
U.S. government agencies	127,660	—	(42)	127,618
Total	157,167	5	(53)	157,119
Long-term investments:				
Asset-backed securities	5,091	2	—	5,093
U.S. government agencies	29,501	—	(71)	29,430
Corporate bonds	11,243	—	(41)	11,202
Total	45,835	2	(112)	45,725
Total	$289,739	$ 7	$(165)	$289,581

The following table sets forth by level within the fair value hierarchy the fair value of the Company's available-for-sale securities measured on a recurring basis, excluding cash and money market funds:

	December 31, 2017			
	Level 1	Level 2	Level 3	Fair Value
	(in thousands)			
Commercial paper	$—	$ 12,620	$—	$ 12,620
U.S. government agencies	—	175,056	—	175,056
Corporate bonds	—	76,385	—	76,385
Asset-backed securities	—	4,986	—	4,986
Total	$—	$269,047	$—	$269,047

	December 31, 2016			
	Level 1	Level 2	Level 3	Fair Value
	(in thousands)			
Commercial paper	$—	$ 28,378	$—	$ 28,378
U.S. government agencies	—	157,048	—	157,048
Corporate bonds	—	24,681	—	24,681
Asset-backed securities	—	6,328	—	6,328
Total	$—	$216,435	$—	$216,435

The following summarizes the fair value of securities classified as available-for-sale by contractual maturity:

	December 31, 2017			
	Mature within One Year	After One Year through Two Years	Over Two Years	Fair Value
	(in thousands)			
Commercial paper	$ 12,620	$ —	$ —	$ 12,620
U.S. government agencies	150,841	22,033	2,182	175,056
Corporate bonds	38,362	22,717	15,306	76,385
Asset-backed securities	4,702	284	—	4,986
Total	$206,525	$45,034	$17,488	$269,047

At December 31, 2017 and 2016, derivative financial instruments, consisting of foreign currency forward contracts, were valued at $0 as the contracts were entered into on the last day of the respective reporting periods. These instruments were valued using Level 2 inputs.

There were no transfers between Level 1, Level 2 or Level 3 of the fair value hierarchy, as determined at the end of each reporting period.

NOTE 3. Property and Equipment, Net

Property and equipment consists of the following:

	December 31, 2017	December 31, 2016
	(in thousands)	
Computer equipment	$ 77,883	$ 57,295
Computer software	20,447	19,716
Furniture, fixtures and equipment	5,075	3,425
Scanner appliances	14,325	14,776
Leasehold improvements	16,067	3,694
Total property and equipment	133,797	98,906
Less: accumulated depreciation and amortization	(75,240)	(59,505)
Property and equipment, net	$ 58,557	$ 39,401

Physical scanner appliances and other computer equipment that are or will be subject to leases by customers have a net carrying value of $6.8 million and $8.3 million at December 31, 2017 and 2016, respectively, including assets that have not been placed in service of $0.9 million and $1.3 million, respectively. Other fixed assets not placed in service at December 31, 2017 and 2016 were $9.6 million and $3.6 million, respectively. Depreciation and amortization expense relating to property and equipment was $19.9 million, $16.6 million and $13.9 million for 2017, 2016 and 2015, respectively.

On November 20, 2017, the Company moved its headquarters office from Redwood City, California to Foster City, California. Due to the move, the Company incurred a loss of disposal of $0.2 million from abandoning the Redwood City office facilities. The gross amount of abandoned costs was $2.4 million with accumulated depreciation of $2.2 million and a net book value of $0.2 million. The loss was recognized in operating expenses.

NOTE 4. Business Combinations

In 2017, the Company purchased certain assets of Nevis Networks (India) Private Limited (“Nevis”) and Defensative, LLC (NetWatcher). The Nevis acquisition accelerates the Company’s development of network security solutions for detection and awareness of external intrusions to computer networks. The NetWatcher acquisition expands the Company’s threat protection and management capabilities and adds new offerings to managed security service providers. Total purchase consideration related to the Company’s business combinations was $5.8 million in cash for Nevis, and $7.7 million for NetWatcher of which $1.0 million is payable in the future subject to terms and conditions of the purchase agreement. Total cash paid in the business combinations completed during 2017 was $12.5 million. Pro forma financial information for these acquisitions have not been presented because they are not material to our consolidated financial statements, either individually or in aggregate.

In connection with the NetWatcher acquisition, certain founders of NetWatcher will receive future payments with continued employment at their one year and two year anniversaries with the Company. These future payments are being recorded as employee compensation expense ratably over the two-year period.

The Company accounted for the acquisition of certain assets of Nevis and Netwatcher as business combinations. The allocation of the consideration for business combinations completed in year of 2017 is summarized as follows (in thousands):

Acquiree	Purchase Consideration	Net Tangible Assets Acquired/ (liabilities assumed)	Purchased Intangible Assets	Goodwill
Nevis	$ 5,753	$14	$ 5,156	$ 583
NetWatcher	7,729	80	7,000	649
Total	$13,482	$94	$12,156	$1,232

Purchased intangible assets represent the estimated fair value of purchased technology from our acquisitions of Nevis and NetWatcher. The excess of purchase consideration over the fair value of net tangible and identifiable intangible assets acquired was recorded as goodwill. Goodwill generated from these acquisitions was primarily related to the acquired workforce, expected improvements in technology performance and additional product functionality. The fair values assigned to tangible assets acquired and identifiable intangible assets are based on management's estimates and assumptions.

The intangible assets have an estimated useful life of 5 years. Goodwill is deductible for tax purposes over 15 years.

NOTE 5. Goodwill and Intangible Assets, Net

Intangible assets consist primarily of developed technology and patent licenses in business combinations. Acquired intangibles are amortized on a straight-line basis over the respective estimated useful lives of the assets.

The carrying values of intangible assets are as follows (in thousands):

				December 31, 2017	
	Weighted Average Lives	Weighted Remaining Average Lives	Cost	Accumulated Amortization	Net Book Value
Developed technology	5 years	5 years	$14,067	$(2,371)	$11,696
Patent licenses	14 years	7 years	1,388	(723)	665
Total intangibles subject to amortization			$15,455	$(3,094)	12,361
Intangible assets not subject to amortization					40
Total intangible assets, net					$12,401

				December 31, 2016	
	Weighted Average Lives	Weighted Remaining Average Lives	Cost	Accumulated Amortization	Net Book Value
Developed technology	7 years	1 year	$ 1,910	$(1,728)	$ 182
Patent licenses	14 years	8 years	1,388	(623)	765
Total intangibles subject to amortization			$ 3,298	$(2,351)	947
Intangible assets not subject to amortization					40
Total intangible assets, net					$ 987

Intangible assets amortization expense was $0.7 million and $0.4 million for 2017 and 2016, respectively.

As of December 31, 2017, the Company expects amortization expense in future periods to be as follows (in thousands):

2018	$ 2,531
2019	2,531
2020	2,531
2021	2,531
2022	2,071
2023 and thereafter	166
Total expected future amortization expense	$12,361

Goodwill, which is not subject to amortization, totaled $1.5 million and $0.3 million as of December 31, 2017 and 2016, respectively.

NOTE 6. Commitments and Contingencies

Leases

The Company leases certain computer equipment and its corporate office and data center facilities under non-cancelable operating leases for varying periods through 2028.

The following are the minimum annual lease payments due under operating leases at December 31, 2017 (in thousands):

2018	$ 6,893
2019	5,784
2020	5,415
2021	4,663
2022	4,141
2023 and thereafter	22,000
Total minimum lease payments	$48,896

Rent expense was $9.6 million, $7.1 million and $6.6 million for 2017, 2016 and 2015, respectively. Although certain of the operating lease agreements provide for rent free periods or escalating rent payments over the terms of the leases, rent expense under these agreements is recognized on a straight-line basis over the term of the lease, starting when the Company takes possession of the property from the landlord. As of December 31, 2017 and 2016, the Company has accrued $9.5 million and $0.4 million of deferred rent related to these agreements, which is reflected in accrued liabilities and other noncurrent liabilities in the accompanying consolidated balance sheets.

On October 14, 2016, the Company entered into a lease agreement (included in the table above) for its new headquarters office facility. The lease payments commence on May 1, 2018 and the lease has a ten-year term through April 2028. The total commitment of $38.6 million is payable monthly with escalating rental payments throughout the lease term. The Company took possession of the facility on May 1, 2017, completed construction of the facility and moved into the facility in November 2017.

In connection with this lease, the Company has provided the landlord with a $1.2 million standby letter of credit to secure the Company's obligations through the end of the lease term, which was classified as restricted cash in the accompanying consolidated balance sheets.

Indemnifications

The Company from time to time enters into certain types of contracts that contingently require it to indemnify various parties against claims from third parties. These contracts primarily relate to (i) the Company's by-laws, under which it must indemnify directors and executive officers, and may indemnify other officers and employees, for liabilities arising out of their relationship, (ii) contracts under which the Company must indemnify directors and certain officers for liabilities arising out of their relationship, and (iii) contracts under which the Company may be required to indemnify customers or resellers from certain liabilities arising from potential infringement of intellectual property rights, as well as potential damages caused by limited product defects. To date, the Company has not incurred and has not recorded any liability in connection with such indemnifications.

The Company maintains director and officer insurance, which may cover certain liabilities arising from its obligation to indemnify its directors.

Contingencies

From time to time, the Company may have certain contingent liabilities that arise in the ordinary course of its business activities. The Company accrues a liability for such matters when it is probable a loss has been incurred and such loss can be reasonably estimated. As of December 31, 2017 and 2016, the Company has not recorded and is not aware of any material liabilities for contingencies.

NOTE 7. Stockholders' Equity and Stock-based Compensation

Common Stock

The Company had reserved shares of common stock for future issuance as of December 31, 2017 as follows:

Options and RSUs outstanding under equity incentive plans	
2000 Equity Incentive Plan	691,589
2012 Equity Incentive Plan	5,214,890
Shares available for future grants under an equity incentive plan	
2012 Equity Incentive Plan	2,208,858
Total shares reserved for future issuance	8,115,337

Preferred Stock

Effective October 3, 2012, the Company is authorized to issue 20,000,000 shares of undesignated preferred stock with a par value of $0.001 per share. Each series of preferred stock will have such rights and preferences including dividend rights, dividend rate, conversion rights, voting rights, rights and terms of redemption (including sinking fund provisions), redemption price, and liquidation preferences as determined by the Board. As of December 31, 2017 and 2016, there are no issued or outstanding shares of preferred stock.

Stock Options

2012 Equity Incentive Plan

The 2012 Equity Incentive Plan (the 2012 Plan) was adopted and approved in September 2012 and became effective on September 26, 2012. Under the 2012 Plan, the Company is authorized to grant to eligible participant's incentive stock options (ISOs), non-statutory stock options (NSOs), stock appreciation rights (SARs), restricted stock awards (RSAs), restricted stock units (RSUs), performance units and performance shares equivalent to up to 9,861,234 shares of common stock as of December 31, 2017. The number of shares of common stock available for issuance under the 2012 Plan includes an annual increase on January 1 of each year by an amount equal to the least of 3,050,000 shares; 5% of the outstanding shares of stock as of the last day of the immediately preceding fiscal year; or an amount determined by the board of directors. Options may be granted with an exercise price that is at least equal to the fair market value of the Company's stock at the date of grant and are exercisable when vested. Options granted generally vest over a period of up to four years, with a maximum term of ten years. ISOs may only be granted to employees and any subsidiary corporations' employees. All other awards may be granted to employees, directors and consultants and subsidiary corporations' employees and consultants. Options, SARs, RSAs, RSUs, performance units and performance awards may be granted with vesting terms as determined by the board of directors and expire no more than ten years after the date of grant or earlier if employment or service is terminated. As of December 31, 2017, 2,208,858 shares were available for grant under the 2012 Plan.

2000 Equity Incentive Plan

Under the 2000 Equity Incentive Plan (the 2000 Plan), the Company was authorized to grant to eligible participants either ISOs or NSOs. The ISOs were granted at a price per share not less than the fair market value at the date of grant. The NSOs were granted at a price per share not less than 85% of the fair market value at the date of grant. Options granted generally vest over a period of up to four years, with a maximum term of ten years. The 2000 Plan was terminated in connection with the closing of the IPO, and accordingly, no shares are currently available for issuance under the 2000 Plan. The 2000 Plan continues to govern outstanding awards granted thereunder.

Options granted under the 2000 Plan were immediately exercisable, and unvested shares are subject to repurchase by the Company. Upon termination of employment of an option holder, the Company has the right to repurchase at the original purchase price any issued but unvested common shares. The amounts paid for shares purchased under an early exercise of stock options and subject to repurchase by the Company are not reported as a component of stockholders' equity (deficit) until those shares vest. The amounts received in exchange for these shares are recorded as an accrued liability in the accompanying consolidated balance sheets and will be reclassified to common stock and additional paid-in capital as the shares vest.

Stock-based Compensation

Stock-based compensation included in the consolidated statements of operations is as follows:

	Year Ended December 31,		
	2017	2016	2015
		(in thousands)	
Cost of revenues	$ 2,159	$ 1,858	$ 1,250
Research and development	5,944	5,678	4,936
Sales and marketing	4,755	4,870	3,867
General and administrative	14,103	7,743	7,441
Total stock-based employee compensation	$26,961	$20,149	$17,494

Stock-based compensation cost is recognized on a straight-line basis over the service period. Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures materially differ from those estimates.

As of December 31, 2017, the Company had $16.5 million of total unrecognized employee compensation cost related to unvested options that it expects to recognize over a weighted-average period of 2.4 years.

The fair value of each option granted to employees is estimated on the date of grant using the Black-Scholes-Merton option-pricing model based on the following assumptions:

	Year Ended December 31,		
	2017	2016	2015
Expected term (in years)	5.1 to 5.5	5.0 to 5.9	4.9 to 5.9
Volatility	47% to 49%	45% to 49%	45% to 48%
Risk-free interest rate	1.8% to 2.0%	1.1% to 1.3%	1.3% to 1.7%
Dividend yield	—	—	—

The expected term of the options is based on evaluations of historical and expected future employee exercise behavior. The risk-free interest rate is based on the U.S. Treasury rates at the date of grant with maturity dates approximately equal to the expected term at the grant date. Volatility is based on a combination of the historical volatility of the Company and of several public entities that are similar to the Company. The Company bases volatility on this combination because it does not have sufficient historical transactions in its own shares on which to solely base expected volatility. Beginning in the third quarter of 2017, the volatility was estimated using the historical volatility derived from the Company's common stock. The Company has not historically declared any dividends and does not expect to in the future.

Non-Employee Stock-based Compensation

The Company records compensation representing the fair value of stock options granted to non-employees. Stock-based non-employee compensation was $0.9 million, $0.7 million and $0.6 million for 2017, 2016 and 2015, respectively. Non-employee stock-based compensation is recognized over the vesting periods of the options. The value of options granted to non-employees is re-measured as they vest over a performance period.

Stock Option Plan Activity

A summary of the Company's stock option activity is as follows:

	Outstanding Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
				(in thousands)
Balance as of December 31, 2014	7,605,407	$12.93	6.5	$188,743
Granted	1,526,450	$39.50		
Exercised	(807,846)	$12.50		
Canceled	(744,953)	$27.67		
Balance as of December 31, 2015	7,579,058	$16.88	5.9	$131,345
Granted	2,120,633	$26.64		
Exercised	(1,399,157)	$10.83		
Canceled	(772,854)	$31.57		
Balance as of December 31, 2016	7,527,680	$19.25	6.0	$101,717
Granted	408,225	$40.82		
Exercised	(2,997,095)	$11.05		
Canceled	(442,919)	$33.29		
Balance as of December 31, 2017	4,495,891	$25.29	6.6	$153,129
Vested and expected to vest—December 31, 2017	4,242,256	$24.75	6.6	$146,791
Exercisable—December 31, 2017	3,002,205	$21.90	5.8	$112,447

The following table summarizes the outstanding and vested stock options at December 31, 2017:

	Outstanding			Exercisable	
Exercise Price	**Number of Shares**	**Weighted Average Exercise Price Per Share**	**Weighted Average Remaining Contractual Life (Years)**	**Number of Shares**	**Weighted Average Exercise Price Per Share**
$2.60 – $4.40	471,051	$ 3.76	2.1	471,051	$ 3.76
$4.80 – $13.60	458,565	$10.50	4.8	458,565	$10.50
$16.68 – $25.17	605,184	$22.46	6.6	445,629	$21.59
$25.56 – $25.56	969,674	$25.56	8.3	394,095	$25.56
$26.58 – $26.86	478,043	$26.86	6.1	477,613	$26.86
$30.58 – $31.67	456,331	$30.87	7.2	350,657	$30.66
$34.97 – $37.28	559,687	$36.62	7.9	266,436	$36.81
$38.40 – $40.89	369,970	$39.57	7.7	100,054	$40.72
$52.14 – $52.14	57,886	$52.14	6.7	38,105	$52.14
$52.60 – $52.60	69,500	$52.60	9.8	—	$ —
	4,495,891	$25.29	6.6	3,002,205	$21.90

The weighted-average grant date fair value of the Company's stock options granted during 2017, 2016 and 2015 was $18.03, $11.12 and $16.51, respectively. The aggregate grant date fair value of the Company's stock options granted during 2017, 2016 and 2015 was $7.4 million, $23.6 million and $25.2 million, respectively.

The intrinsic value of options exercised was $92.1 million, $25.0 million and $22.7 million during 2017, 2016 and 2015, respectively. Intrinsic value of an option is the difference between the fair value of the Company's common stock at the time of exercise and the exercise price paid.

Restricted Stock

The terms and conditions of RSUs and RSAs, including vesting criteria and timing are set by the board of directors. The cost of RSUs and RSAs is determined using the fair value of the Company's common stock on the date of the grant. Compensation cost is recognized on a straight-line basis over the requisite service period of each grant adjusted for estimated forfeitures.

A summary of the Company's RSUs and RSAs activity is as follows:

	Number of Shares	Weighted-Average Grant Date Fair Value Per Share
Balance as of December 31, 2015	47,500	$37.28
Granted	681,350	$28.52
Vested	(39,998)	$27.49
Cancelled	(101,519)	$31.12
Balance as of December 31, 2016	587,333	$28.85
Granted	1,326,849	$42.69
Vested	(368,367)	$33.52
Cancelled	(135,227)	$32.04
Balance as of December 31, 2017	1,410,588	$40.34
Expected to vest as of December 31, 2017	1,239,124	$39.87

As of December 31, 2017, the Company had $44.6 million of unrecognized compensation cost related to unvested awards that it expects to recognize over a weighted-average period of 2.9 years.

401(k) Plan

The Company's 401(k) Plan (the "401(k) Plan") was established in 2000 to provide retirement and incidental benefits for its employees. As allowed under section 401(k) of the Internal Revenue Code, the 401(k) Plan provides tax-deferred salary deductions for eligible employees. Contributions to the 401(k) Plan are limited to a maximum amount as set periodically by the Internal Revenue Service. During the years ended December 31, 2017 and 2016, the Company made contributions to the 401(k) Plan of $1.1 million and $0.6 million, respectively. During the year ended December 31, 2015, the Company made no contribution to the 401(k) Plan.

NOTE 8. Other Expense, Net

Other expense, net consists of the following:

	Year Ended December 31,		
	2017	2016	2015
	(in thousands)		
Foreign exchange losses	$(355)	$(770)	$(444)
Other expense	(181)	(202)	(406)
Other expense, net	$(536)	$(972)	$(850)

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NOTE 9. Income Taxes

The Company's geographical breakdown of income before income taxes is as follows:

	Year Ended December 31,		
	2017	2016	2015
	(in thousands)		
Domestic	$34,914	$28,982	$22,540
Foreign	4,464	1,447	1,980
Income before income taxes	$39,378	$30,429	$24,520

The provision for (benefit from) income taxes consists of the following:

	Year Ended December 31,		
	2017	2016	2015
	(in thousands)		
Current			
Federal	$ 22	$ 8,334	$ 115
State	23	1,125	1,041
Foreign	1,471	963	693
Total current provision	1,516	10,422	1,849
Deferred			
Federal	(1,650)	611	7,115
State	(996)	126	(247)
Foreign	68	46	(62)
Total deferred (benefit) provision	(2,578)	783	6,806
Total (benefit from) provision for income taxes	$(1,062)	$11,205	$8,655

The reconciliation of the statutory federal income tax rate to the Company's effective tax rate is as follows:

	Year Ended December 31,		
	2017	2016	2015
Federal statutory rate	35.0%	35.0%	35.0%
State taxes	(2.1)	2.1	2.2
Stock-based compensation	(58.1)	2.4	0.5
Foreign source income	(0.2)	0.9	0.6
Change in valuation allowance	2.8	1.3	1.3
Federal rate adjustment (due to 2017 Tax Act)	26.4	—	—
Federal and state research and development credit	(5.3)	(3.6)	(3.9)
Other	(1.2)	(1.3)	(0.4)
(Benefit from) provision for income taxes	(2.7)%	36.8%	35.3%

On December 22, 2017, the Tax Cuts and Jobs Act (the "2017 Tax Act") was enacted into law. The new legislation contains several key tax provisions that impact the Company, including the reduction of the corporate income tax rate from 35% to 21% effective January 1, 2018. The new legislation also includes a variety of other changes, such as a one-time repatriation tax on accumulated foreign earnings (transition tax), acceleration of business asset expensing, and reduction in the amount of executive pay that could qualify as a tax deduction, among others. We have estimated our provision for income taxes in accordance with the 2017 Tax Act and guidance available as of the date of this filing and as a result have recorded $10.4 million as additional income tax expense due to the re-measurement of certain deferred tax assets and liabilities as a result of the reduction of the federal tax rate. No deferred taxes were recorded for the newly introduced provisions for Global Intangible Low Tax Income ("GILTI"), and no amount related to the one-time transition tax on the mandatory deemed repatriation of foreign earnings was recorded due to cumulative foreign losses of our subsidiaries.

On December 22, 2017, Staff Accounting Bulletin No. 118 ("SAB 118") was issued to address the application of US GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the 2017 Tax Act. In accordance with SAB 118, we have determined that the $10.4 million of the deferred tax expense recorded in connection with the re-measurement of certain deferred tax assets and liabilities and the $0 amount of transition tax on the mandatory deemed repatriation of foreign earnings were provisional amounts and reasonable estimates at December 31, 2017. A comprehensive analysis of GILTI, for which additional guidance is expected from the U.S. Internal Revenue Service, is required to finalize the amounts of our deferred tax assets and liabilities and a detailed analysis of historical foreign earnings and the potential correlative adjustments will be performed to verify the transitional tax does not apply. Subsequent adjustments resulting from the additional analysis to be completed will be recorded to current tax expense in the quarter of 2018 when the analysis is complete.

The 2017 Tax Act includes a mandatory one-time tax on accumulated earnings of foreign subsidiaries, and as a result, all previously unremitted earnings are no longer subject to U.S. tax after 2017. Depending on the jurisdiction, distributions of earnings could be subject to withholding taxes at rates applicable to the distributing jurisdiction. As the Company intends to continue to reinvest the earnings of foreign subsidiaries indefinitely, no U.S. income taxes or foreign withholding taxes have been provided on undistributed earnings earned by our foreign subsidiaries. The Company's share of undistributed earnings of foreign subsidiaries that could be subject to foreign withholding taxes was $9.0 million and $5.7 million as of December 31, 2017 and 2016, respectively. Determination of the amount of unrecognized deferred tax liability for temporary differences related to investments in these non-U.S. subsidiaries that are essentially permanent in duration is not practicable.

As a result of the adoption of ASU 2016-09 on January 1, 2017 we recorded a cumulative effect adjustment to increase retained earnings by $7.7 million with a corresponding increase to deferred tax assets for the federal and state net operating losses and federal research credits attributable to excess tax benefits from stock-based compensation which had not been previously recognized. All excess tax benefits and deficiencies in the current and future periods will be recognized as income tax expense in our Consolidated Statement of Operations in the reporting period in which they occur. This will result in increased volatility in our effective tax rate. For the year ended December 31, 2017, we recognized a benefit of $27.1 million related to the excess tax benefits.

Deferred Income Taxes

Deferred income taxes reflect the tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The components of the Company's deferred tax assets and liabilities are as follows:

	December 31,	
	2017	2016
	(in thousands)	
Deferred tax assets		
Net operating loss carryforwards	$ 8,947	$ 1,472
Research and development credit carryforwards	11,493	3,334
Foreign tax credit carryforwards	1,149	—
Accrued liabilities	470	681
Deferred revenues	3,416	5,018
Deferred rent	558	74
Intangible assets	409	409
Stock-based compensation	7,135	12,513
Other	638	1,225
Gross deferred tax assets	34,215	24,726
Valuation allowance	(5,773)	(3,688)
Net deferred tax assets	28,442	21,038
Deferred tax liabilities		
Fixed assets	(3,372)	(4,448)
Intangible assets	(4)	—
Total deferred tax liabilities	(3,376)	(4,448)
Net deferred tax assets	$25,066	$16,590

Realization of deferred tax assets is dependent upon future earnings, if any, and the timing and amount of such assets are uncertain. The Company believes it is more likely than not that its California deferred tax assets will not be realized because the income attributed to California is not expected to be sufficient to recognize these deferred tax assets. Accordingly, the Company continues to record the valuation allowance of $5.8 million as of December 31, 2017 for its California deferred tax assets. During the year ended December 31, 2017, the valuation allowance had increased by $2.1 million to $5.8 million.

At December 31, 2017, the Company had federal and state net operating loss carryforwards of approximately $39.1 million and $15.3 million, respectively, available to reduce federal and state taxable income. Federal net operating losses begin to expire in 2021, and state net operating losses expire from 2029 to 2037. Utilization of the Company's net operating loss carryforwards may be subject to an annual limitation due to the ownership change limitations provided by the Internal Revenue Code and similar state provisions. Such an annual limitation could result in the expiration of the net operating loss carryforwards before utilization. As of December 31, 2017, the Company had $8.7 million of federal and $8.7 million of state research and development credit carryforwards. Federal research and development credits expire in the years 2022 to 2037. State research and development credits do not expire. As of December 31, 2017, the Company had foreign tax credit carryforwards of $1.1 million which expire in the years 2024 to 2027.

The evaluation of an unrecognized tax position is a two-step process. The first step requires the Company to determine whether it is more likely than not that a tax position will be sustained upon

examination based on the technical merits of the position. The second step requires the Company to recognize in the financial statement each tax position that meets the more likely than not criteria, measured at the amount of benefit that has a greater than fifty percent likelihood of being realized.

A reconciliation of the Company's unrecognized tax benefits is as follows:

	Year Ended December 31,		
	2017	2016	2015
	(in thousands)		
Unrecognized tax benefits beginning balance	$4,071	$3,506	$3,330
Gross increase for tax positions of prior years	66	2	20
Gross decrease for tax positions of prior years	—	(15)	(171)
Gross increase for tax positions of current year	1,101	659	418
Lapse of statute of limitations	(126)	(81)	(91)
Total unrecognized tax benefits	$5,112	$4,071	$3,506

The unrecognized tax benefits, if recognized, would impact the income tax provision by $2.8 million, $2.4 million and $2.1 million as of December 31, 2017, 2016 and 2015, respectively.

The Company has elected to include interest and penalties as a component of income tax expense. The amounts were not material for 2017, 2016 and 2015.

The Company files income tax returns in the United States, including various state jurisdictions. The Company's subsidiaries file tax returns in various foreign jurisdictions. The tax years 2012 to 2017 remain open to examination by the major taxing jurisdictions in which the Company is subject to tax, with the exception of France which remains open to examination for the 2013 through 2017 tax years only. As of December 31, 2017, the Company was not under examination by the Internal Revenue Service or any foreign or state tax jurisdiction.

A retroactive and permanent reinstatement of the federal research and development tax credit was signed into law on December 18, 2015 in accordance with the Protecting Americans from Tax Hikes Act of 2015. The Company recorded a 2017 federal research and development credit of $1.3 million, net of reserves, in the fourth quarter of 2017. The California research and development credit estimated for 2017, net of reserves, is $1.3 million.

NOTE 10. Segment Information and Information about Geographic Area

The Company operates in one segment. The Company's chief operating decision maker is the Chairman, President and Chief Executive Officer, who makes operating decisions, assesses performance and allocates resources on a consolidated basis. All of the Company's principal operations and decision-making functions are located in the United States. Revenues by geographic area, based on the location of the customer, are as follows:

	Year Ended December 31,		
	2017	2016	2015
	(in thousands)		
United States	$162,681	$139,743	$115,384
Foreign	68,147	58,182	48,900
Total revenues	$230,828	$197,925	$164,284

Property and equipment, net, by geographic area, are as follows:

	December 31,	
	2017	2016
	(in thousands)	
United States	$50,785	$30,733
Foreign	7,772	8,668
Total property and equipment, net	$58,557	$39,401

NOTE 11. Net Income Per Share

The computations for basic and diluted net income per share are as follows:

	Year Ended December 31,		
	2017	2016	2015
	(in thousands, except per share data)		
Numerator:			
Net income—basic and diluted	$40,440	$19,224	$15,865
Denominator:			
Weighted-average shares used in computing net income per share—basic	37,443	35,247	34,050
Effect of potentially dilutive securities:			
Common stock options	2,262	3,052	4,134
RSUs	366	70	—
Weighted-average shares used in computing net income per share—diluted	40,071	38,369	38,184
Net income per share:			
Basic	$ 1.08	$ 0.55	$ 0.47
Diluted	$ 1.01	$ 0.50	$ 0.42

Potentially dilutive securities not included in the calculation of diluted net income per share because doing so would be antidilutive are as follows:

	Year Ended December 31,		
	2017	2016	2015
	(in thousands)		
Common stock options	742	3,241	1,582
RSUs	71	24	—

NOTE 12. Selected Quarterly Financial Information (Unaudited)

The following table shows a summary of the Company's quarterly financial information for each of the quarters in the two-year period ended December 31, 2017:

	Three Months Ended							
	Mar. 31, 2016	Jun. 30, 2016	Sep. 30, 2016	Dec 31, 2016	Mar. 31, 2017	Jun. 30, 2017	Sep. 30, 2017	Dec. 31, 2017
	(unaudited) (in thousands, except per share data)							
Revenues	$46,248	$48,466	$50,987	$52,224	$53,121	$55,302	$59,490	$62,915
Income from operations	7,597	5,712	7,987	8,811	7,656	9,009	10,849	9,729
Other income (expense), net	168	40	230	(116)	453	360	671	652
Income before income taxes	7,765	5,752	8,217	8,695	8,109	9,369	11,520	10,381
Net income	4,783	3,538	4,996	5,907	21,930	7,202	8,452	2,857
Net income per share:								
Basic	$ 0.14	$ 0.10	$ 0.14	$ 0.17	$ 0.60	$ 0.19	$ 0.22	$ 0.07
Diluted	$ 0.13	$ 0.09	$ 0.13	$ 0.15	$ 0.56	$ 0.18	$ 0.21	$ 0.07

Item 9. Changes In and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2017. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of December 31, 2017, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles, or GAAP. Our internal control over financial reporting includes those policies and procedures that: (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets, (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors, and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2017 based on the criteria established in the 2013 Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission, or COSO. Based on our evaluation under the criteria set forth in the 2013 Internal Control—Integrated Framework issued by the COSO, our management concluded our internal control over financial reporting was effective as of December 31, 2017.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2017 has been audited by Grant Thornton LLP, an independent registered public accounting firm, as stated in its report, which is included in Item 8 of this Annual Report on Form 10-K.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the fourth quarter ended December 31, 2017 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Executive Officers and Directors

Except as set forth below, the information required by this item is incorporated by reference to our Proxy Statement for our 2018 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year ended December 31, 2017.

Codes of Business Conduct and Ethics

Our board of directors has adopted a code of business conduct and ethics that applies to all of our employees, officers and directors, including our Chief Executive Officer, Chief Financial Officer and other executive and senior financial officers. The code of business conduct and ethics is available on our website. We expect that, to the extent required by law, any amendments to the code, or any waivers of its requirements, will be disclosed on our website. We intend to disclose any waiver to the provisions of the code of business conduct and ethics that applies specifically to directors or executive officers by filing such information on a Current Report on Form 8-K with the SEC, to the extent such filing is required by the NASDAQ Stock Market's listing requirements; otherwise, we will disclose such waiver by posting such information on our website.

Item 11. Executive Compensation

The information required by this item is incorporated by reference to our Proxy Statement for our 2018 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year ended December 31, 2017.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Security Ownership of Certain Beneficial Owners and Management

The information required by this item with respect to Item 403 of Regulation S-K regarding security ownership of certain beneficial owners and management is incorporated by reference to our Proxy Statement for our 2018 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year ended December 31, 2017. For the information required by this item with respect to Item 201(d) of Regulation S-K regarding securities authorized for issuance under equity compensation plans, see "Item 5: Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities—Securities Authorized for Issuance under Equity Compensation Plans."

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this item is incorporated by reference to our Proxy Statement for our 2018 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year ended December 31, 2017.

Item 14. Principal Accounting Fees and Services

The information required by this item is incorporated by reference to our Proxy Statement for our 2018 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year ended December 31, 2017.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a)(1) Financial Statements—The financial statements filed as part of this Annual Report on Form 10-K are listed on the Index to Consolidated Financial Statements in Item 8.

(a)(2) Financial Statement Schedules

SCHEDULE II
SUPPLEMENTARY CONSOLIDATED FINANCIAL STATEMENT SCHEDULE
VALUATION AND QUALIFYING ACCOUNTS
(in thousands)

		Additions		
	Balance at Beginning of Year	Charged to Costs and Expenses	Deductions and Other [1]	Balance at End of Year
Allowance for Doubtful Accounts				
Year Ended December 31, 2017	$702	$657	$(543)	$816
Year Ended December 31, 2016	$769	$199	$(266)	$702
Year Ended December 31, 2015	$590	$851	$(672)	$769

(1) Primarily represents write-offs of uncollectible accounts, net of recoveries.

All other schedules have been omitted because they are not required, not applicable, or the required information is otherwise included.

(b) Exhibits

		Incorporated by Reference				
Exhibit Number	Description	Filed Herewith	Form	File No.	Exhibit No.	Filing Date
3.1	Amended and Restated Certificate of Incorporation of Qualys, Inc.		S-1/A	333-182027	3.3	September 12, 2012
3.2	Amended and Restated Bylaws of Qualys, Inc.		S-1/A	333-182027	3.5	September 12, 2012
4.1	Form of common stock certificate.		S-1/A	333-182027	4.1	September 12, 2012
10.1*	2000 Equity Incentive Plan, as amended, and the form of stock option agreement thereunder.		S-1	333-182027	10.1	June 8, 2012
10.2*	2012 Equity Incentive Plan and forms of agreements thereunder.		S-1/A	333-182027	10.2	September 12, 2012

Exhibit Number	Description	Incorporated by Reference Filed Herewith	Form	File No.	Exhibit No.	Filing Date
10.3*	Offer Letter, between Qualys, Inc. and Philippe F. Courtot, dated December 7, 2000.		S-1	333-182027	10.3	June 8, 2012
10.4*	Offer Letter, between Qualys, Inc. and Amer S. Deeba, dated September 4, 2001.		S-1	333-182027	10.4	June 8, 2012
10.5*	Offer Letter, between Qualys, Inc. and Sumedh S. Thakar, dated January 20, 2003.		S-1	333-182027	10.5	June 8, 2012
10.6*	Offer Letter, between Qualys, Inc. and Melissa B. Fisher, dated April 15, 2016.		8-K	001-35662	10.1	May 2, 2016
10.7*	Offer Letter, between Qualys, Inc. and Bruce K. Posey, dated May 8, 2012.		S-1	333-182027	10.9	June 8, 2012
10.8*	Form of director and executive officer indemnification agreement.		S-1/A	333-182027	10.10	August 10, 2012
10.9	Lease Agreement, between Qualys, Inc. and Hudson Metro Center, LLC, dated October 14, 2016.		8-K	001-35662	10.1	October 19, 2016
10.10*	Qualys, Inc. Executive Performance Bonus Plan.		Schedule 14A, Appendix A	001-35662	N/A	April 25, 2016
10.11*†	Qualys, Inc. 2016 Corporate Bonus Plan, as amended.		10-Q	135,662,000	10.3	August 4, 2016
10.12	Master Services Agreement, between Qualys, Inc. and Savvis Communications Corporation, dated June 22, 2010.		S-1/A	333-182027	10.14	September 12, 2012
10.13†	Master Agreement, between Qualys, Inc. and Interoute Communications Limited, dated March 31, 2008.		S-1/A	333-182027	10.15	September 12, 2012

Exhibit Number	Description	Filed Herewith	Incorporated by Reference Form	File No.	Exhibit No.	Filing Date
10.14†	Manufacturing Services Agreement, between Qualys, Inc. and Synnex Corporation, dated March 1, 2011.		S-1/A	333-182027	10.16	September 12, 2012
21.1	List of subsidiaries of Qualys, Inc.	X				
23.1	Consent of Grant Thornton LLP, independent registered public accounting firm.	X				
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of The Sarbanes-Oxley Act of 2002.	X				
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of The Sarbanes-Oxley Act of 2002.	X				
32.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of The Sarbanes-Oxley Act of 2002.	X				
32.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of The Sarbanes-Oxley Act of 2002.	X				

Exhibit Number	Description	Filed Herewith	Incorporated by Reference Form	File No.	Exhibit No.	Filing Date
101.INS	XBRL Instance Document	X				
101.SCH	XBRL Taxonomy Extension Schema Document	X				
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document	X				
101.DEF	XBRL Taxonomy Extension Definition Linkbase	X				
101.LAB	XBRL Taxonomy Extension Labels Linkbase Document	X				
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document	X				

* Indicates a management contract or compensatory plan or arrangement.
† Portions of this exhibit have been omitted due to a determination by the Securities and Exchange Commission that these portions should be granted confidential treatment.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Foster City, State of California on February 23, 2018.

QUALYS, INC.

By: /s/ PHILIPPE F. COURTOT
Philippe F. Courtot
Chairman, President and
Chief Executive Officer
(principal executive officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities indicated:

Signature	Title	Date
/s/ PHILIPPE F. COURTOT Philippe F. Courtot	Chairman, President and Chief Executive Officer (principal executive officer)	February 23, 2018
/s/ MELISSA B. FISHER Melissa B. Fisher	Chief Financial Officer (principal financial and accounting officer)	February 23, 2018
/s/ SANDRA E. BERGERON Sandra E. Bergeron	Director	February 23, 2018
/s/ DONALD R. DIXON Donald R. Dixon	Director	February 23, 2018
/s/ JEFFREY P. HANK Jeffrey P. Hank	Director	February 23, 2018
/s/ TODD P. HEADLEY Todd P. Headley	Director	February 23, 2018
/s/ GENERAL PETER PACE General Peter Pace	Director	February 23, 2018
/s/ KRISTI M. ROGERS Kristi M. Rogers	Director	February 23, 2018

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BOARD OF DIRECTORS

Philippe F. Courtot
Chairman, President and Chief Executive Officer

Sandra E. Bergeron
Board member of Sophos Group Plc and F5 Networks

Donald R. Dixon
Managing Director of Trident Capital

Jeffrey P. Hank
Former Vice President of Finance and Chief Accounting Officer of Intuit, Inc.

Todd P. Headley
Former Chief Financial Officer of Sourcefire, Inc.

General Peter Pace
Principal at Pace Ventures LLC

Kristi M. Rogers
Managing Partner of Principal to Principal

CORPORATE EXECUTIVES

Philippe F. Courtot
Chairman, President and Chief Executive Officer

Melissa B. Fisher
Chief Financial Officer

Amer S. Deeba
Chief Commercial Officer

Bruce K. Posey
Vice President, General Counsel and Corporate Secretary

Sumedh S. Thakar
Chief Product Officer

CORPORATE HEADQUARTERS

Qualys, Inc.
919 E. Hillsdale Blvd.
Foster City, California 94404
T: (650) 801-6100
F: (650) 801-6101
www.qualys.com

COMMON STOCK LISTING

NASDAQ Stock Market
Ticker Symbol: QLYS

ANNUAL MEETING OF STOCKHOLDERS

Monday, June 18, 2018, at 11:00 A.M. local time
Qualys, Inc.
919 E. Hillsdale Blvd.
Foster City, California 94404

REGISTRAR AND TRANSFER AGENT

For questions regarding your account, changes of address or the consolidation of accounts, please contact the Company's transfer agent:

Computershare Trust Company, N.A.
250 Royall Street
Canton, Massachusetts 02021
T: (800) 962-4284
Foreign Stockholders: (781) 575-3120
www.computershare.com/investor

LEGAL COUNSEL

Wilson Sonsini Goodrich & Rosati, P.C.
Palo Alto, California

INDEPENDENT AUDITORS

Grant Thornton LLP
San Francisco, California

INVESTOR RELATIONS

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Investor Relations
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QUALYS®
CONTINUOUS SECURITY