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

United States Securities and Exchange Commission
Washington, D.C. 20549

Form S-8
Registration Statement
Under
The Securities Act of 1933

Delaware
(State or other jurisdiction of incorporation or organization)

47-5580846
(I.R.S. Employer Identification Number)

Tenable Holdings, Inc.
7021 Columbia Gateway Drive, Suite 500
Columbia, Maryland 21046
(410) 872-0555

Tenable Holdings, Inc. 2018 Equity Incentive Plan
Tenable Holdings, Inc. 2018 Employee Stock Purchase Plan
(Full titles of the plans)

Amit Yoran
President and Chief Executive Officer
Tenable Holdings, Inc.
7021 Columbia Gateway Drive, Suite 500
Columbia, Maryland 21046
(410) 872-0555

(Name and address of agent for service) (Telephone number, including area code, of agent for service)

Copies to:
Eric C. Jensen
Brian F. Leaf
Madison A. Jones
Cooley LLP
11951 Freedom Drive
Reston, Virginia 20190

Stephen A. Riddick
Tenable Holdings, Inc.
7021 Columbia Gateway Drive, Suite 500
Columbia, Maryland 21046

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.

Large accelerated filer ☐ Accelerated filer ☐
Non-accelerated filer ☑
Emerging growth company ☑ Smaller reporting 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. ☑
### CALCULATION OF REGISTRATION FEE

<table>
<thead>
<tr>
<th>Title of Securities to be Registered</th>
<th>Amount to be Registered(1)</th>
<th>Proposed Maximum Offering Price per Share</th>
<th>Proposed Maximum Aggregate Offering Price</th>
<th>Amount of Registration Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Stock, par value $0.01 per share</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Equity Incentive Plan</td>
<td>4,656,320(2)</td>
<td>$31.24(4)</td>
<td>$145,463,436.80</td>
<td>$17,630.17</td>
</tr>
<tr>
<td>– 2018 Employee Stock Purchase Plan</td>
<td>1,396,896(3)</td>
<td>$26.55(5)</td>
<td>$37,087,588.80</td>
<td>$4,495.02</td>
</tr>
<tr>
<td>Total</td>
<td>6,053,216</td>
<td></td>
<td>$182,551,025.60</td>
<td>$22,125.19</td>
</tr>
</tbody>
</table>

1. Pursuant to Rule 416(a) promulgated under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional shares of Registrant’s common stock that become issuable under the plans set forth herein by reason of any stock dividend, stock split, recapitalization, or other similar transaction effected that results in an increase to the number of outstanding shares of Registrant’s common stock.

2. Represents an automatic annual increase equal to 5% of the total number of shares of the Registrant’s capital stock outstanding on December 31 of the preceding calendar year to the aggregate number of shares of the Registrant’s common stock reserved for issuance under, and which annual increase is provided by, the Registrant’s 2018 Equity Incentive Plan (as amended, the "2018 Plan").

3. Represents an automatic increase equal to 1.5% of the total number of shares of the Registrant’s capital stock outstanding on December 31 of the preceding calendar year to the aggregate number of shares of the Registrant’s common stock reserved for issuance under, and which annual increase is provided by, the Registrant’s 2018 Employee Stock Purchase Plan (the "2018 ESPP").

4. Estimated in accordance with Rule 457(c) and (h) solely for purposes of calculating the registration fee on the basis of $31.24, the average of the high and low prices of the Registrant’s common stock as reported on the Nasdaq Global Select Market on February 27, 2019.

5. Estimated in accordance with Rule 457(c) and (h) solely for the purpose of calculating the registration fee on the basis of $26.55, the average of the high and low prices of the Registrant’s common stock as reported on the Nasdaq Global Select Market on February 27, 2019, multiplied by 85%, which is the percentage of the price per share applicable to purchases under the 2018 ESPP.
Pursuant to General Instruction E of Form S-8, Tenable Holdings, Inc. (the "Registrant") is filing this Registration Statement with the Securities and Exchange Commission (the "Commission") to register (1) 4,656,320 additional shares of its common stock under the 2018 Plan, pursuant to the provisions of the 2018 Plan providing for an automatic increase in the number of shares common stock reserved and available for issuance under the 2018 Plan on January 1, 2019 and (2) 1,396,896 additional shares of its common stock under the 2018 ESPP, pursuant to the provisions of 2018 ESPP providing for an automatic increase in the number of shares of common stock reserved and available for issuance under the 2018 ESPP on January 1, 2019. In accordance with the instructional note to Part I of Form S-8 as promulgated by the Commission, the information specified by Part I of the Form S-8 has been omitted from this Registration Statement.

PART II

Item 3 Incorporation of Certain Documents by Reference

The following documents filed by the Registrant with the Commission are incorporated by reference into this Registration Statement:

(a) The contents of the Registrant’s Registration Statement on Form S-8 (File No. 333-226347), filed with the Commission on July 26, 2018;

(b) The Registrant’s Annual Report on Form 10-K for the fiscal year ended December 31, 2018, filed with the Commission on March 1, 2019;

(c) All other reports of the Registrant filed pursuant to Sections 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") since the end of the fiscal year covered by the Registrant’s Annual Report referred to in (1) above (other than Current Reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits furnished on such form that relate to such items);

(d) The description of the Registrant’s common stock, which is contained in a registration statement on Form 8-A filed on July 20, 2018 (File No. 001-38600) under the Exchange Act, including any amendment or report filed for the purpose of updating such description.

(e) All other reports and documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act (other than Current Reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits furnished on such form that relate to such items) on or after the date of this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference herein and to be a part of this Registration Statement from the date of the filing of such reports and documents. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any subsequently filed document that also is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 8 Exhibits
<table>
<thead>
<tr>
<th>Exhibit Number</th>
<th>Description</th>
<th>Schedule Form</th>
<th>File Number</th>
<th>Exhibit</th>
<th>Filing Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Amended and Restated Certificate of Incorporation of the Registrant, as currently in effect</td>
<td>8-K</td>
<td>001-3600</td>
<td>3.1</td>
<td>July 30, 2018</td>
</tr>
<tr>
<td>4.2</td>
<td>Amended and Restated Bylaws of the Registrant, as currently in effect</td>
<td>S-1</td>
<td>333-226002</td>
<td>3.4</td>
<td>June 29, 2018</td>
</tr>
<tr>
<td>4.3</td>
<td>Form of Common Stock Certificate of the Registrant</td>
<td>S-1/A</td>
<td>333-226002</td>
<td>4.1</td>
<td>July 16, 2018</td>
</tr>
<tr>
<td>5.1*</td>
<td>Opinion of Cooley LLP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.1*</td>
<td>Consent of Ernst &amp; Young LLP, independent registered public accounting firm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.2*</td>
<td>Consent of Cooley LLP (included in Exhibit 5.1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.1*</td>
<td>Power of Attorney (included on the signature page of this Form S-8)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>99.1</td>
<td>2018 Equity Incentive Plan and Forms of Stock Option Grant Notice and Agreement and Restricted Stock Unit Grant Notice and Agreement thereunder</td>
<td>S-8</td>
<td>333-226347</td>
<td>10.4</td>
<td>July 26, 2018</td>
</tr>
<tr>
<td>99.2</td>
<td>2018 Employee Stock Purchase Plan</td>
<td>S-8</td>
<td>333-226347</td>
<td>10.5</td>
<td>July 26, 2018</td>
</tr>
</tbody>
</table>

* Filed herewith
SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Columbia, Maryland, on March 1, 2019.

TENABLE HOLDINGS, INC.

By: /s/ Amit Yoran

Amit Yoran
President, Chief Executive Officer and Chairman

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Amit Yoran, Stephen A. Vintz and Stephen A. Riddick, and each of them, as his or her true and lawful attorneys-in-fact and agents, each with the full power of substitution, for him or her and in their name, place or stead, in any and all capacities, to sign any and all amendments to this Registration Statement (including post-effective amendments), and to sign any registration statement for the same offering covered by this Registration Statement that is to be effective upon filing pursuant to Rule 462(b) promulgated under the Securities Act, and all post-effective amendments thereto, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his, her or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

5
<table>
<thead>
<tr>
<th>Signature</th>
<th>Title</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>/s/ Amit Yoran</td>
<td>President, Chief Executive Officer and Chairman</td>
<td>March 1, 2019</td>
</tr>
<tr>
<td>Amit Yoran</td>
<td>(Principal Executive Officer)</td>
<td></td>
</tr>
<tr>
<td>/s/ Stephen A. Vintz</td>
<td>Chief Financial Officer</td>
<td>March 1, 2019</td>
</tr>
<tr>
<td>Stephen A. Vintz</td>
<td>(Principal Financial Officer and Principal Accounting Officer)</td>
<td></td>
</tr>
<tr>
<td>/s/ Arthur W. Coviello, Jr.</td>
<td>Director</td>
<td>March 1, 2019</td>
</tr>
<tr>
<td>Arthur W. Coviello, Jr.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/s/ Kimberly L. Hammonds</td>
<td>Director</td>
<td>March 1, 2019</td>
</tr>
<tr>
<td>Kimberly L. Hammonds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/s/ John C. Huffard, Jr.</td>
<td>Director</td>
<td>March 1, 2019</td>
</tr>
<tr>
<td>John C. Huffard, Jr.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/s/ Jerry M. Kennelly</td>
<td>Director</td>
<td>March 1, 2019</td>
</tr>
<tr>
<td>Jerry M. Kennelly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/s/ Ping Li</td>
<td>Director</td>
<td>March 1, 2019</td>
</tr>
<tr>
<td>Ping Li</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/s/ A. Brooke Seawell</td>
<td>Director</td>
<td>March 1, 2019</td>
</tr>
<tr>
<td>A. Brooke Seawell</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/s/ Richard M. Wells</td>
<td>Director</td>
<td>March 1, 2019</td>
</tr>
<tr>
<td>Richard M. Wells</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
March 1, 2019

Tenable Holdings, Inc.
7021 Columbia Gateway Drive, Suite 500
Columbia, MD 21046

Re: Registration on Form S-8

Ladies and Gentlemen:

We have acted as counsel to Tenable Holdings, Inc., a Delaware corporation (the “Company”), and you have requested our opinion in connection with the filing of a Registration Statement on Form S-8 (the “Registration Statement”) with the U.S. Securities and Exchange Commission, covering the offering of up to (a) 4,656,320 shares of the Company's common stock, par value $0.01 per share (the “2018 EIP Shares”) issuable pursuant to the Company's 2018 Equity Incentive Plan and (b) 1,396,896 shares of common stock, par value $0.01 per share (together with the 2018 EIP Shares, the “Shares”) issuable pursuant to the Company’s 2018 Employee Stock Purchase Plan (together with the Company’s 2018 Equity Incentive Plan, as amended, the “Plans”).

In connection with this opinion, we have examined and relied upon the Registration Statement and related prospectuses, the Company's Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, as currently in effect, the Plans and the originals or copies certified to our satisfaction of such other records, documents, certificates, memoranda and other instruments as we deem necessary or appropriate to enable us to render the opinion expressed below. We have assumed the genuineness and authenticity of all documents submitted to us as originals and the conformity to originals of all documents submitted to us as copies thereof. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not sought to independently verify such matters.

Our opinion is expressed only with respect to the General Corporation Law of the State of Delaware. We express no opinion to the extent that any other laws are applicable to the subject matter hereof and express no opinion and provide no assurance as to compliance with any federal or state securities law, rule or regulation.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares, when sold and issued in accordance with the Plans, the Registration Statement and related prospectuses, will be validly issued, fully paid, and nonassessable (except as to Shares issued pursuant to certain deferred payment arrangements, which will be fully paid and nonassessable when such deferred payments are made in full).
We consent to the filing of this opinion as an exhibit to the Registration Statement.

Sincerely,

Cooley LLP

By: /s/ Brian F. Leaf

Brian F. Leaf
CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the Tenable Holdings, Inc. 2018 Equity Incentive Plan and the Tenable Holdings, Inc. 2018 Employee Stock Purchase Plan of our report dated March 1, 2019, with respect to the consolidated financial statements of Tenable Holdings, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2018, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP
Tysons, Virginia
March 1, 2019