



DIVISION OF
CORPORATION FINANCE

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

May 4, 2012

Via E-mail

Stephen A. Remondi
Chief Executive Officer
Exa Corporation
55 Network Drive
Burlington, MA 01803

**Re: Exa Corporation
Amendment No. 2 to Registration Statement on Form S-1
Filed April 9, 2012
File No. 333-176019**

Dear Mr. Remondi:

We have reviewed your amended registration statement and response letter, and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. Unless otherwise indicated, references to prior comments refer to those contained in our letter dated November 1, 2011.

General

1. Since you appear to qualify as an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act, please disclose on your prospectus cover page that you are an emerging growth company, and revise your prospectus to:
 - Describe how and when a company may lose emerging growth company status;
 - Briefly describe the various exemptions that are available to you, such as exemptions from Section 404(b) of the Sarbanes-Oxley Act of 2002 and Section 14A(a) and (b) of the Securities Exchange Act of 1934; and
 - State your election under Section 107(b) of the JOBS Act:
 - If you have elected to opt out of the extended transition period for complying with new or revised accounting standards pursuant to Section 107(b), include a statement that the election is irrevocable; or
 - If you have elected to use the extended transition period for complying with new or revised accounting standards under Section 102(b)(1), provide a risk factor explaining that this election allows you to delay the adoption of new or revised accounting standards that have different effective dates for public and private companies until those standards apply to private companies. Please state in your risk factor that, as a result of this election, your financial statements may not be comparable to companies that comply with public

company effective dates. Include a similar statement in your critical accounting policy disclosures.

Prospectus Summary

Risks Associated with Our Business and Ownership of Our Stock, page 4

2. As requested in prior comment 1, please further revise your summary disclosure to state unambiguously that your private equity investors and other insiders will, acting together, have effective control of the company following the offering, as indicated in your revised risk factor on page 23. The revised summary disclosure stating that these insiders “will limit” minority shareholders’ ability to influence corporate matters appears to understate the degree of control of your private equity shareholders in particular may have following the offering, depending on the number of shares offered for sale by them.

Risk Factors

“We have identified material weaknesses in our internal control...” page 22

3. You refer here to risks that may arise in the event that your independent registered public accounting firm is unable to express an opinion that your internal control is effective in the future. We again note that you appear to qualify as an emerging growth company under the JOBS Act, and as such you will be exempt from the auditor attestation requirements for the period specified in the Act. Please consider adding related risk factor disclosure.

Management’s Discussion and Analysis of Financial Condition and Results of Operations

Critical Accounting Policies

Income Taxes, page 42

4. We note that you reversed \$12.8 million of your valuation allowance at January 31, 2012, whereas at January 31, 2011, you maintained a full valuation allowance against your United States deferred tax assets. Please explain in greater detail the positive and negative evidence that you considered to reverse your full valuation allowance at January 31, 2012. For example, we note your table on page F-31 indicates that your domestic operations incurred losses before income taxes in the years ended January 31, 2010 and January 31, 2011. Refer to FASB ASC 740-10-30-16 through 30-25.

Equity-based compensation awards since February 1, 2010, page 45

5. You disclose in this section that on March 6, 2012, your board granted employee options to purchase an aggregate of 21,500 shares of your common stock, but your disclosure on

page II-2 regarding recent sales of unregistered securities reflects that options exercisable into only 19,000 shares were issued on that date. Please revise or advise as appropriate.

Results of Operations

Fiscal year ended January 31, 2012 compared to fiscal year ended January 31, 2011, page 51

6. We note your expanded disclosures in response to prior comments 6 and 9. Your disclosure indicates that your provision for income taxes was significantly impacted by your release of the valuation allowance. Please expand your disclosures to provide additional explanation of this release. We also note that your foreign taxes and rate differential line in your table on page F-32 has significantly changed from your last amendment. To the extent that certain countries have had a more significant impact on your effective tax rate, disclose this information and include a discussion regarding how potential changes in such countries' operations may impact your results of operations. We refer you to Item 303(a)(3)(i) of Regulation S-K and Section III.B of SEC Release 33-8350. Similar concerns apply to your discussion for the fiscal year ended January 31, 2011 compared to fiscal year ended January 31, 2010.

Liquidity and Capital Resources

Net Cash Flows from Operating Activities, page 56

7. Please expand your discussion for fiscal year 2012 to discuss the nature of the increase of your accounts payable and other assets at December 31, 2011. Refer to Section IV.B.1 of SEC Release 33-8350.

Capital Resources, page 57

8. We refer you to your response to prior comment 24 in your response letter dated October 7, 2011. It appears that you have omitted the amount of cash and cash equivalents that are currently held outside of the United States that was previously disclosed. Please disclose this amount. Refer to Item 303(a)(1) of Regulation S-K and Section IV of SEC Release 33-8350.

Executive Compensation

Summary Compensation Table for Fiscal Year 2012, page 83

9. We note that you have revised your summary compensation table to include compensation information for your named executive officers for fiscal year 2012. Please also provide compensation information for fiscal year 2011, given that you previously were required to provide this information in your registration statement. Refer to Instruction 1 to Item 402(c) of Regulation S-K.

Mr. Stephen A. Remondi
Exa Corporation
May 4, 2012
Page 4

Notes to Consolidated Financial Statements

Note 3. Summary of Significant Accounting Policies

Revenue Recognition, page F-13

10. We have reviewed your response to the fourth bullet point of prior comment 13. Your response indicates that the information available for your customers' "actual utilization patterns is anecdotal, and not sufficiently comprehensive or accurate to provide a reliable basis for recognition of license revenue." We note your disclosure on page F-13 that licenses for capacity-based licenses may be software-only or provided in the form of SaaS. Your disclosure further states that these capacity-based licenses offer customers a limited amount of simulation capacity. In light of your inability to track this capacity for revenue recognition purposes, please explain how you are able to monitor the simulation capacity to ensure that simulation capacity does not exceed the terms of the license.

Fair Value of Financial Instruments, page F-19

11. Please revise to add a table that reconciles the changes in financial instruments that were valued according to the Level 3 valuation hierarchy. See FASB ASC 820-10-50-2(c).

You may contact Ryan Rohn, Staff Accountant, at (202) 551-3739 or Stephen Krikorian, Accounting Branch Chief, at (202) 551-3730 if you have questions regarding comments on the financial statements and related matters. Please contact Katherine Wray, Staff Attorney, at (202) 551-3483 or me at (202) 551-3735 with any other questions.

Sincerely,

/s/ Barbara C. Jacobs

Barbara C. Jacobs
Assistant Director

cc: Via E-mail
Edmond Furlong, Chief Financial Officer
Robert W. Sweet, Jr., Foley Hoag LLP