



DIVISION OF  
CORPORATION FINANCE

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

December 12, 2012

Via Facsimile

Mr. Kevin M. Dotts  
Chief Financial Officer  
Internap Network Services Corporation  
One Ravinia Drive, Suite 1300  
Atlanta, GA 30346

**Re: Internap Network Services Corporation  
Form 10-K for the fiscal year ended December 31, 2011  
Filed February 23, 2012  
Form 10-Q for the quarterly period ended September 30, 2012  
Filed October 25, 2012  
File No. 001-31989**

Dear Mr. Dotts:

We have reviewed your filings 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.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Form 10-K for the fiscal year ended December 31, 2011

General

1. We note that you have included on the facing page of the Form 10-K the file number 000-31989 when the file number currently assigned to you in EDGAR is 001-31989. In addition, we note you have included the file number 000-27265 on your subsequent Forms 10-Q. Please confirm your understanding regarding your current Commission File Number and confirm that you will use the current file number when filing reports on Form 10-K and Form 10-Q in the future. Alternatively, please tell us why you believe it is appropriate to use a file number that is different from the one currently assigned to you.

Item 1. Business, page 1

2. We are unable to locate disclosure responsive to Item 101(e)(4) of Regulation S-K. In future filings, please disclose how members of the public may obtain your securities filings.

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

Results of Operations

Data Center Services, page 27

3. We note your revenue growth in your data center services segment for the year ended December 31, 2011 and subsequent quarterly periods. Your current disclosures should clearly indicate whether this growth is related to existing customers purchasing additional services or growth from new customers. Please tell us what consideration you gave to clarifying revenue growth between existing customers and new customers. We refer you to Item 303(a)(3)(iii) of Regulation S-K and Section III.D of SEC Release No. 33-6835.
4. You state that your company-controlled data centers are more profitable at "certain levels" of utilization than are your partner sites. Please tell us what consideration you gave to expanding your disclosures regarding the correlation between utilization levels of company-controlled data centers and their profitability. Please refer to Item 303(a)(3)(iii) of Regulation S-K.

Notes to Consolidated Financial Statements

Note 3. Acquisition, page F-12

5. We note your acquisition of Voxel Holdings, Inc. on December 30, 2011. Please provide us with your significance tests used to determine whether financial statements of this acquisition are to be provided pursuant to Rule 3-05 of Regulation S-X. In addition, describe the nature of the intangible asset Software for Sale and indicate why you are amortizing this asset if it is held for sale.

Note 15. Commitments, Contingencies, Concentrations of Risk and Litigation

Litigation, page F-24

6. If there is at least a reasonable possibility that a loss exceeding amounts already recognized may have been incurred, in your next periodic filing, please either disclose an estimate (or, if true, state that the estimate is immaterial in lieu of providing quantified

amounts) of the additional loss or range of loss, or state that such an estimate cannot be made. Please refer to FASB ASC 450-20-50. You may provide your disclosures on an aggregated basis. Please include your proposed disclosures in your response.

Form 10-Q for the quarterly period ended September 30, 2012

Condensed Consolidated Statements of Operations and Comprehensive Loss, page 1

7. Please tell us what consideration you gave to breaking out revenue by product and service in your statement of operations pursuant to Rule 5-03 of Regulation S-X. That is, please indicate the amount of product sales.

Condensed Consolidated Balance Sheet, page 2

8. Tell us why the revolving line of credit is presented as a non-current liability in the September 30, 2012 balance sheet; however, this liability is classified as a current liability in the December 31, 2011 balance sheet. Identify the significant terms that support your presentation. We note you disclose in your 2011 Form 10-K that the terms include customary events of default that could result in acceleration of the credit agreement. Cite the literature that supports your presentation.

Unaudited Condensed Notes to Consolidated Financial Statements

Note 3. Property and Equipment, page 6

9. We note that you reassessed the estimated useful lives of certain assets included in your property and equipment during January 2012. Please tell us the nature of your determination that the estimated useful lives were longer than originally anticipated. As part of your response, please tell us how you determined that this was a "reassessment" rather than an error. In addition, tell us what consideration you gave to disclosing the per share effect of this change. We refer you to FASB ASC 250-10-50-4.

Note 6. Fair Value Measurements, page 7

10. Tell us what consideration you gave to including the accrued contingent consideration within the fair value table since this liability is reported at fair value.

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Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Results of Operations

Data Center Services, page 13

11. We note that you cite the increase in revenue is also attributable to Voxel, but you do not quantify this impact. See, for example, page 15 of your Form 10-Q for the quarterly period ended September 30, 2012. Please tell us what consideration you gave to clarifying the impact of the Voxel acquisition on revenue growth. We refer you to Item 303(a)(3)(iii) of Regulation S-K and Section III.D of SEC Release No. 33-6835.

IP Services, page 14

12. We note in your Q3 2012 earnings call dated October 25, 2012, you cite lower, non-recurring IP equipment sales as one of the factors that resulted in a decline in IP Services revenue for the quarterly period ended September 30, 2012. This factor does not appear to be discussed in your discussion of results of operations on pages 14 and 15 of your Form 10-Q. Please advise.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

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You may contact Ryan Rohn, Staff Accountant, at (202) 551-3739 if you have questions regarding comments on the financial statements and related matters. If you have any other questions, please contact Ivan Griswold, Staff Attorney, at (202) 551-3853 or Maryse Mills-Apenteng, Special Counsel, at (202) 551-3457. If you require further assistance, do not hesitate to contact me at (202) 551-3730.

Sincerely,

/s/ Stephen Krikorian

Stephen Krikorian  
Accounting Branch Chief