

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

FORM 10-Q/A
(Amendment No. 1)

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended June 30, 2012

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: 000-54785

INTEGRITY APPLICATIONS, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

98-0668934

(I.R.S. Employer Identification No.)

102 Ha'Avoda Street
P.O. Box 432
Ashkelon, Israel

(Address of principal executive offices)

L3 78100

(Zip Code)

972 (8) 675-7878

(Registrant's telephone number, including area code)

N/A

(Former name, former address and former fiscal year, if changed since last report)

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 (§232.405 of this chapter) 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 whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company)

Accelerated filer

Smaller reporting company

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 September 7, 2012, 5,295,543 shares of the Company's common stock, par value \$0.001 per share, were outstanding.

Explanatory Paragraph

This Amendment No. 1 on Form 10-Q/A of Integrity Applications, Inc. (the “Company”) amends the Company’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, as filed by the Company with the Securities and Exchange Commission on August 14, 2012 (the “Original Filing”), and is being filed solely to furnish Exhibit 101 to the Original Filing in accordance with Rule 405 of Regulation S-T. Exhibit 101 provides the financial statements and related notes from the Form 10-Q formatted in XBRL (eXtensible Business Reporting Language). As permitted by Rule 405(a)(2)(ii) of Regulation S-T, Exhibit 101 is permitted to be furnished by amendment within 30 days of the filing date of the Original Filing.

This Amendment No. 1 on Form 10-Q/A does not reflect events that may have occurred subsequent to the date of the Original Filing and does not modify or update in any way disclosures made in the Original Filing.

Pursuant to Rule 406T of Regulation S-T, the interactive files on Exhibit 101 hereto are deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, are deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and otherwise are not subject to liability under those sections.

PART II - OTHER INFORMATION

Item 6. Exhibits.

Exhibit No. Description

3.1	Certificate of Incorporation of Integrity Applications, Inc. (1)
3.2	Certificate of Amendment to Certificate of Incorporation of Integrity Applications, Inc. (1)
3.3	Bylaws of Integrity Applications, Inc. (1)
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (2)
31.2	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (2)
32.1	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (2)
32.2	Certification of Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (2)
101.INS	XBRL Instance Document (3)
101.SCH	XBRL Schema Document (3)
101.CAL	XBRL Calculation Linkbase Document (3)
101.LAB	XBRL Label Linkbase Document (3)
101.PRE	XBRL Presentation Linkbase Document (3)
101.DEF	XBRL Definition Linkbase Document (3)

- (1) Previously filed as an exhibit to the Company's Registration Statement on Form S-1, as filed with the SEC on August 22, 2011.
- (2) Previously filed as an exhibit to the Original Filing, as filed with the SEC on August 14, 2012.
- (3) Filed herewith pursuant to Rule 405(a)(2)(ii) of Regulation S-T.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: September 12, 2012

INTEGRITY APPLICATIONS, INC.

By: /s/ Avner Gal
Name: Avner Gal
Title Chairman of the Board and Chief
Executive
Officer

By: /s/ Jacob Bar-Shalom
Name: Jacob Bar-Shalom
Title Chief Financial Officer
(Principal Accounting Officer)

EXHIBIT INDEX

Exhibit No. Description

3.1	Certificate of Incorporation of Integrity Applications, Inc. (1)
3.2	Certificate of Amendment to Certificate of Incorporation of Integrity Applications, Inc. (1)
3.3	Bylaws of Integrity Applications, Inc. (1)
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (2)
31.2	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (2)
32.1	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (2)
32.2	Certification of Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (2)
101.INS	XBRL Instance Document (3)
101.SCH	XBRL Schema Document (3)
101.CAL	XBRL Calculation Linkbase Document (3)
101.LAB	XBRL Label Linkbase Document (3)
101.PRE	XBRL Presentation Linkbase Document (3)
101.DEF	XBRL Definition Linkbase Document (3)

- (1) Previously filed as an exhibit to the Company's Registration Statement on Form S-1, as filed with the SEC on August 22, 2011.
- (2) Previously filed as an exhibit to the Original Filing, as filed with the SEC on August 14, 2012.
- (3) Filed herewith pursuant to Rule 405(a)(2)(ii) of Regulation S-T.