FALCONSTOR SOFTWARE INC Form POS AM March 28, 2017

As filed with the Securities and Exchange Commission on March 28, 2017

Registration No. 333-192171

United States

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Post-Effective Amendment No. 1

to

FORM S-3 on FORM S-1

REGISTRATION STATEMENT

Under

The Securities Act of 1933

FALCONSTOR SOFTWARE, INC.

(Exact name of registrant as specified in its charter)

Delaware 77-0216135

(State or other jurisdiction of incorporation or organization) (I.R.S. Employer Identification No.)

2 Huntington Quadrangle 11747

Suite 2S01 (Zip Code)

Melville, New York

(Address of principal executive offices)
Gary Quinn
President and Chief Executive Officer
FalconStor Software, Inc.
2 Huntington Quadrangle
Suite 2S01
Melville, New York 11747
(Name and address of agent for service)
631-777-5188
(Telephone number, including area code, of agent for service)
With a copy to:
Steve Wolosky, Esq.
Olshan Frome Wolosky LLP
1325 Avenue of the Americas
New York, New York 10019
(212) 451-2300
Approximate date of commencement of proposed sale to the public : From time to time after the effective date of this registration statement, as determined by market conditions.
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If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, check the following box:

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, please check the following box:

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If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering."

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

*Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, 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 (check one):

Large accelerated filer " Accelerated filer " Non-accelerated filer " Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of Each Class of	Amount to be	Proposed Maximum	Proposed Maximum	Amount of
		Offering Price Per		Registration
Securities to be Registered Registered (1)		Share(2)	Aggregate Offering Price(2)	Fee(2)
Common Stock	13,172,276(1)	\$1.48	\$19,494,968.48	\$2,510.96

- (1) In accordance with Rule 416 under the Securities Act of 1933, also includes an indeterminable number of shares that may become issuable by reason of stock splits, stock dividends, and similar transactions.

 Estimated solely for the purpose of calculating the registration fee pursuant to Rules 457(c) of the Securities Act of 1933 based on the average of the high and low sales price of the common stock, as reported on the Nasdag Global.
- (2) 1933 based on the average of the high and low sales price of the common stock, as reported on the Nasdaq Global Market on November 1, 2013. The registration fee was previously paid in full with the filing by the registrant of its Form S-3 registration statement (File No. 333-192171) on November 7, 2013.

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to Section 8(a) of the Securities Act of 1933, may determine.

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EXPLANATORY NOTE

On November 7, 2013, we filed a Form S-3 registration statement (File No. 333-192171), which was declared effective by the Securities Exchange Commission on December 2, 2013 (the "Registration Statement"). We are not currently eligible to use Form S-3 in connection with the current offering and, consequently, this Post-Effective Amendment No. 1 to Form S-3 on Form S-1 is being filed to convert the Registration Statement into a registration statement on Form S-1. All applicable filing fees were paid at the time of the original filing of the Registration Statement.

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The information in this prospectus is not complete and may be changed. The selling stockholders may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion, Dated March 28, 2017

PROSPECTUS

13,172,276 SHARES FALCONSTOR SOFTWARE, INC. Common Stock (\$0.001 par value)

This prospectus relates to the resale of up to 13,172,276 shares of FalconStor Software, Inc. ("FalconStor," the "Company," "we," "our" or "us") common stock by the selling stockholders listed in this prospectus or their permitted transferees. The shares of common stock being offered by the selling stockholders are those issuable to the selling stockholders upon conversion of convertible preferred stock and as payment-in-kind in satisfaction of certain dividend requirements with respect to such preferred stock. The convertible preferred stock was originally issued in a private placement of 900,000 shares of Series A redeemable convertible preferred stock to Hale Capital Partners, LP completed in September 2013. Hale Capital Partners, LP subsequently assigned and transferred all of its shares of Series A redeemable convertible preferred stock to HCP-FVA, LLC. For more information about the rights and preferences of the convertible preferred stock please see the section of this prospectus titled "Description of Capital Stock – Series A Convertible Preferred Stock."

All of the shares offered hereby are being sold by the selling stockholders named in this prospectus, and we will not receive any proceeds from sales of these securities. We will bear the costs and fees of the registration of the shares, and the selling stockholders will bear all commissions and discounts, if any, attributable to the sales of the shares.

The prices at which the selling stockholders or their permitted transferees may dispose of their FalconStor shares or interests therein will be determined by the selling stockholders at the time of sale and may be at the prevailing market price for the shares, at prices related to such market price, at varying prices determined at the time of sale, or otherwise as described under the section of this prospectus under "Plan of Distribution" beginning on page 24. Information regarding the selling stockholders and the times and manner in which they may offer and sell the shares or interests therein under this prospectus is provided under "Selling Stockholders" and "Plan of Distribution" in this prospectus. The selling stockholders may resell the common stock to or through underwriters, broker-dealers or agents, who may receive compensation in the form of discounts, concessions or commissions.

Our common stock is listed on the Nasdaq Capital Market, or Nasdaq, under the symbol "FALC." On March 27, 2017, the last reported sale price of our common stock on Nasdaq was \$0.34.

FalconStor's headquarters is located at 2 Huntington Quadrangle, Suite 2S01, Melville, NY 11747. Our telephone number is (631) 777-5188.

Investing in our shares involves risk. You should carefully consider the risk factors for our shares, which are listed on page 5 of this prospectus. See "Risk Factors."

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NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS DETERMINED WHETHER THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. THEY HAVE NOT MADE, NOR WILL THEY MAKE, ANY DETERMINATION AS TO WHETHER ANYONE SHOULD BUY THESE SECURITIES. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is, 2017	The date of this	prospectus is	, 2017
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This prospectus is part of a registration statement on Form S-1 that we filed with the Securities and Exchange Commission, or the SEC, using a "shelf" registration or continuous offering process. Under this shelf process, selling stockholders may from time to time sell the shares of common stock described in this prospectus in one or more offerings.

All references to "Company," "we," "our" or "us" refer solely to FalconStor Software, Inc. and not to the persons who manage us or sit on our Board of Directors or are our stockholders. Reference to "selling stockholders" refers to those stockholders listed herein under "Selling Stockholders" beginning on page 23 of this prospectus, who may sell shares from time to time as described in this prospectus. All trade names used in this prospectus are either our registered trademarks or trademarks of their respective holders.

No person has been authorized to give any information or to make any representations other than those contained in this prospectus in connection with the offering made hereby, and if given or made, such information or representations must not be relied upon as having been authorized by FalconStor, any selling stockholder or by any other person. Neither the delivery of this prospectus nor any sale made hereunder shall, under any circumstances, create any implication that information herein is correct as of any time subsequent to the date hereof. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any security other than the securities covered by this prospectus, nor does it constitute an offer to or solicitation of any person in any jurisdiction in which such offer or

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solicitation may not lawfully be made.

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PROSPECTUS SUMMARY

This summary highlights selected information contained elsewhere or incorporated by reference in this prospectus. This summary may not contain all the information that you should consider before determining whether to invest in our securities. You should read the entire prospectus carefully, including the information included in the "Risk Factors" section, as well as our consolidated financial statements, notes to the consolidated financial statements and the other information incorporated by reference into this prospectus, as well as the exhibits to the registration statement of which this prospectus is a part, before making an investment decision.

The Company

The Company is a leading Software-Defined Storage ("SDS") company offering a converged data services software platform that is hardware agnostic which was founded in 2000. As a global company, our vision is to deliver enterprise class, software-defined, intelligent data services combined with predictive analytics across any primary or secondary storage hardware; in the cloud or on premise. The Company's mission is to help IT organizations realize more economic value out of existing environments and any future storage investments while reducing complexity, maximizing flexibility and improving operational efficiency. Our award-winning solutions are available and supported worldwide by OEMs as well as leading service providers, system integrators, resellers and FalconStor.

FalconStor was incorporated in Delaware as Network Peripherals, Inc., in 1994. Pursuant to a merger with FalconStor Inc., in 2001, the former business of Network Peripherals, Inc., was discontinued, and the newly re-named FalconStor Software, Inc., continued the storage software business started in 2000 by FalconStor, Inc.

FalconStor's headquarters are located at 2 Huntington Quadrangle, Suite 2S01, Melville, NY 11747. The Company also maintains offices throughout Europe and Asia Pacific. Our telephone number is (631) 777-5188.

	ering

Securities

Covered 13,172,276 shares of common stock, par value \$0.001 per share.

Hereby

Use of We are not selling any securities under this prospectus and will not receive any of the proceeds from the

Proceeds sale of these securities by the selling stockholders.

NASDAO

Risk Factors

MKT Symbol FALC.

Investing in our securities involves risks. Before making an investment decision, you should carefully

consider the specific risks set forth under the caption "Risk Factors" beginning on page 5 of this

prospectus. You should also refer to the other information in this prospectus, including our financial

statements and the related notes incorporated by reference in this prospectus.

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RISK FACTORS

We are affected by risks specific to us as well as factors that affect all businesses operating in a global market. The significant factors known to us that could materially adversely affect our business, financial condition, or operating results are set forth below.

There is substantial doubt about our ability to continue as a going concern.

We have incurred significant operating losses in the previous eight years and negative cash flow from operations in five of the previous eight years. We currently have a working capital deficiency of \$10.5 million, which is inclusive of current deferred revenue of \$15.2 million, and a stockholders' deficit of \$21.7 million. During the year ended December 31, 2016, we incurred a net loss of \$11.0 million and negative cash flow from operations of \$9.4 million. Our total cash balance at December 31, 2016 is \$3.4 million, a decrease of \$10.0 million as compared to December 31, 2015. In addition to these financial metrics, as of December 31, 2016, we were not in compliance with the financial covenants of the Series A redeemable convertible preferred stock, which are mutually agreed to annually, for two consecutive quarters. This breach provides the Series A redeemable convertible preferred stockholders with the right to require us to redeem any of the Series A redeemable convertible preferred stock at the greater of 100% of the stated value plus accrued and unpaid dividends or the product of the number of shares of common stock underlying the Series A redeemable convertible preferred stock and the closing price of our common stock as of December 31, 2016. To date, the holders of the Series A redeemable convertible preferred stock have neither exercised nor waived this right and accordingly this right may be exercised at any time. In addition, the holders of the Series A redeemable convertible preferred stock have the right to request a redemption of the Series A redeemable convertible preferred stock on or after August 5, 2017. If the holders request that the Series A redeemable convertible preferred stock be redeemed, we may not have sufficient liquidity to undertake the redemption. If we do not redeem the Series A redeemable convertible preferred stock, the holders of the Series A redeemable convertible preferred stock can pursue other remedies, including the right to appoint a majority of the members of our board of directors. Our reduced cash balance and history of losses both in and of itself, and in combination with the redemption rights of the holders of the Series A redeemable convertible preferred stock, raise substantial doubt about our ability to continue as a going concern within one year after March 10, 2017. Accordingly, the financial statements as of December 31, 2016, included in our Annual Report on Form 10-K were prepared under the assumption that we will continue as a going concern for the next twelve months.

Our ability to continue as a going concern, including in the event of a redemption request by the holders of the Series A redeemable convertible preferred stock, depends on our ability to execute our business plan, increase revenue and billings and reduce expenditures. During 2016, we continued to focus on aligning our expense structure with revenue expectations which included tighter expense controls and overall operational efficiencies which better align our current business plan on a run-rate basis. These efficiencies include among other items, stream-lined personnel related costs and global overhead costs and efficiencies realized on our redesigned go-to-market coverage models. We have reduced our worldwide headcount to 166 employees as of December 31, 2016, compared with 226 employees as of December 31, 2015. However, the decline in revenue over the last twelve months combined with the separation costs related to the headcount reductions have reduced the impact of these reductions in operating expenses, thereby not achieving the expected reduction of quarterly cash burn rate.

There is no assurance that we will be successful in generating sufficient revenue or continuing to reduce operating costs. In addition, to the extent that we continue to incur losses, we may need to seek additional financing and there can be no assurance that we will be able to obtain financing or that such financing will be on favorable terms. Any such financing could be dilutive to our shareholders. Failure to generate sufficient revenue, billings, control or reduce

expenditures and/or the inability to obtain financing will result in an inability of us to continue as a going concern.

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We defaulted under a covenant in the Stock Purchase Agreement covering our Series A redeemable convertible preferred stock.

As of December 31, 2016, we were not in compliance with the financial covenants related to our Series A redeemable convertible preferred stock because we did not reach the agreed upon targets for two consecutive quarters. Under the agreement, this default would allow the Series A redeemable convertible preferred stockholders to require us to redeem any of the Series A redeemable convertible preferred stock for the greater of 100% of the stated value plus accrued and unpaid dividends or the product of the number of shares of common stock underlying the Series A redeemable convertible preferred stock and the closing price as of December 31, 2016. As a result, the holders of the Series A redeemable convertible preferred stock have the right to demand redemption of any of the outstanding Series A redeemable convertible preferred stock they hold. To date, the holders of the Series A redeemable convertible preferred stock have neither exercised nor waived this right and accordingly this right may be exercised at any time. If we do not have the funds necessary to redeem the Series A redeemable convertible preferred stock, the dividends accruing on any outstanding Series A redeemable convertible preferred stock will increase to prime plus 10% (from prime plus 5%). For each six months that the Series A redeemable convertible preferred stock remains unredeemed, the dividend rate increases by 1%, subject to a maximum dividend rate of 19%. Paying these increased dividends could further decrease the amount of capital we have available to run and to invest in our business. In addition, our failure to redeem the Series A redeemable convertible preferred stock would be considered a "Breach Event" under the agreements with the holders of the Series A redeemable convertible preferred stock. If a Breach Event were to occur, then, under the agreements with the holders of our Series A redeemable convertible preferred stock, our Board of Directors would automatically be increased, with the holders of the Series A redeemable convertible preferred stock having the right to appoint the new directors, so that the holders of the Series A redeemable convertible preferred stock would have appointed a majority of the Board of Directors. This would give the holders of the Series A redeemable convertible preferred stock control of the Company. There can be no assurance that we will be able to redeem the Series A redeemable convertible preferred stock should the holders of our Series A redeemable convertible preferred stock request such redemption.

The holders of the Series A redeemable convertible preferred stock have the right to require redemption of the Series A redeemable convertible preferred stock after August 5, 2017. If we are not able to redeem the Series A redeemable convertible preferred stock following a redemption request, the dividends on the Series A redeemable convertible preferred stock will increase. These increased dividends could further reduce the amount of capital available for use in our business. In addition, if we are not able to redeem the Series A redeemable convertible preferred stock then the holders of the Series A redeemable convertible preferred stock will be entitled to appoint a majority of our Board of Directors, which will give the holders of the Series A redeemable convertible preferred stock control of the Company. There can be no assurance that we will be able to redeem the Series A redeemable convertible preferred stock after August 5, 2017.

After August 5, 2017, the holders of the Series A redeemable convertible preferred stock have the right to demand redemption of any of the outstanding Series A redeemable convertible preferred stock that they still hold. If we do not have the funds necessary to redeem the Series A redeemable convertible preferred stock, the dividends accruing on any outstanding Series A redeemable convertible preferred stock will increase to prime plus 10% (from prime plus 5%). For each six months that the Series A redeemable convertible preferred stock remains unredeemed, the dividend rate increases by 1%, subject to a maximum dividend rate of 19%. Paying these increased dividends could further decrease the amount of capital we have available to run and to invest in our business. In addition, our failure to redeem the Series A redeemable convertible preferred stock would be considered a "Breach Event" under the

agreements with the holders of the Series A redeemable convertible preferred stock. If a Breach Event were to occur, then, under the agreements with the holders of our Series A redeemable convertible preferred stock, our Board of Directors would automatically be increased, with the holders of the Series A redeemable convertible preferred stock having the right to appoint the new directors, so that the holders of the Series A redeemable convertible preferred stock would have appointed a majority of the Board of Directors. This would give the holders of the Series A redeemable convertible preferred stock control of the Company. There can be no assurance that we will be able to redeem the Series A redeemable convertible preferred stock after August 5, 2017 should the holders of our Series A redeemable convertible preferred stock request such redemption.

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We have had a history of losses since 2009. There is no guarantee that we will be able to return to, or to maintain, profitability.

We have had a history of losses since 2009. We have taken steps to try to reduce or to eliminate the chance of future losses - such as reducing headcount and other expenses and trying to replace lost OEM sales with sales of FalconStor-branded products - but there is no guarantee that we will be able to return to or to maintain profitability. In addition, our future profitability could be negatively impacted by the decrease of bookings to \$30.0 million for the year ended December 31, 2016 as compared with \$38.9 million for the year ended December 31, 2015. As of December 31, 2016, we had approximately \$3.4 million in cash and cash equivalents. If losses recur, we will deplete our available cash and we may not be able to continue to fund effective sales and marketing or research and development activities on which we are dependent. In addition, to the extent that we continue to incur losses, we may need to seek additional financing and there can be no assurance that we will be able to obtain financing or that such financing will be on favorable terms. Furthermore, to the extent that we issue equity securities in a financing it could be dilutive to our stockholders.

We have received delisting notices from NASDAQ and if our stock price continues to trade below \$1.00 per share or the market value of our common stock continues to be below \$35 million, our common stock will be delisted from NASDAQ.

The NASDAQ Capital Market requires that our common stock maintain a bid price of at least \$1.00 per share. As of November 22, 2016, the closing price of our common stock had been below \$1.00 for 30 consecutive trading days and the Company received written notification from the NASDAQ Stock Market LLC indicating that the Company is not in compliance with NASDAQ Listing Rule 5550(a)(2), as the Company's closing bid price for its common stock was below the \$1.00 per share requirement for the previous 30 consecutive business days. Compliance can be achieved by meeting the applicable standard for a minimum of 10 consecutive trading days during the 180 day compliance period ending May 22, 2017, of which there can be no assurance. In addition, because we have a stockholder deficit, the NASDAQ Capital Market requires the market value of our common stock to be at least \$35 million. As of December 6, 2016, the market value of our common stock had been below \$35 million for 30 consecutive trading days and the Company received written notification from the NASDAQ Stock Market LLC indicating that the Company is not in compliance with NASDAQ Listing Rule 5550(b)(2), as the Company's market value of listed securities was below \$35 million for the previous 30 consecutive business days. Compliance can be achieved by meeting the applicable standard for a minimum of 10 consecutive trading days during the 180 compliance period ending June 5, 2017, of which there can be no assurance. If our common stock is delisted from the NASDAQ Capital Market, the liquidity of our common stock could be materially impacted and it may be more difficult to make transactions in our common stock.

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We recently released our new FreeStor platform and our latest version of CDP/NSS. Our future business, financial and operating results are substantially dependent on the market acceptance of both of these products.

On May 6, 2015 we released our new FreeStor platform, with subsequent enhancements delivered in April and October of 2016 and on November 30, 2016, we released the latest version of our CDP/NSS product, CDP/NSS 9.0. We have spent considerable resources, both financially and in our research and development efforts, developing CDP/NSS 9.0 and FreeStor. In addition, while bookings for FreeStor during the year ended December 31, 2016 exceeded the bookings for this product for the year ended December 31, 2015, the bookings associated with our FreeStor platform failed to make up for declines in our traditional product lines. We currently do not have any other products in our pipeline with the same expectations or which we believe have the same potential for market acceptance as CDP/NSS 9.0 and FreeStor. If (i) either CDP/NSS 9.0 or FreeStor do not gain market acceptance, (ii) sales of either CDP/NSS 9.0 or FreeStor are significantly below our expectations, or (iii) the ongoing future feature/functionality sets of both products are delayed, our results may suffer and it could have a material adverse effect on our business, financial condition and operating results.

We have a significant number of outstanding preferred stock and options, the conversion and exercise of which would dilute the then-existing stockholders' percentage ownership of our common stock, and a smaller number of restricted shares of stock, the vesting of which will also dilute the then-existing stockholders' percentage ownership of our common stock.

As of December 31, 2016, we had outstanding options to purchase 3,491,490 shares of our common stock, we had an aggregate of 2,136,800 outstanding unvested restricted shares and outstanding Series A redeemable convertible preferred stock convertible into 8,781,516 shares of our common stock. If all of the outstanding options were exercised, the proceeds to the Company would average \$3.18 per share. In addition, over the next several years a significant number of shares of common stock are potentially issuable as dividends with respect to the Series A redeemable convertible preferred stock (including 435,438 share of common stock reserved for issuance related to the accrued dividend as of December 31, 2016.). We also had 2,159,170 shares of our common stock reserved for issuance under our stock plans with respect to options (or restricted stock or restricted stock units) that have not been granted. In addition, if, on July 1st of any calendar year in which our 2016 Incentive Stock Plan, (the "2016 Plan"), is in effect, the number of shares of stock to which options, restricted shares and restricted stock units may be granted is less than five percent (5%) of the number of outstanding shares of stock, then the number of shares of stock available for issuance under the 2016 Plan shall be increased so that the number equals five percent (5%) of the shares of common stock outstanding. In no event shall the number of shares of common stock subject to the 2016 Plan in the aggregate exceed twenty million shares, subject to adjustment as provided in the 2016 Plan.

The exercise of all of the outstanding options and/or the vesting of all outstanding restricted shares, the conversion of our outstanding Series A redeemable convertible preferred stock into common stock, the payment of dividends on our Series A redeemable convertible preferred stock through the issuance of common stock and/or the grant and exercise of additional options and/or the grant and vesting of restricted stock and restricted stock units would dilute the then-existing stockholders' percentage ownership of common stock, and any sales in the public market of the common stock issuable upon such exercise could adversely affect prevailing market prices for the common stock. Moreover, the terms upon which we would be able to obtain additional equity capital could be adversely affected because the holders of such securities can be expected to exercise or convert them at a time when we would, in all likelihood, be able to obtain any needed capital on terms more favorable than those provided by such securities.

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We have undertaken a restructuring and other cost reduction initiatives to reduce our expenses and to better align our expenses with our business. There can be no assurance that we have made enough reductions or the right reductions.

Since the third quarter of 2013 we have taken several actions to reduce expenses significantly in an attempt to help return the Company to profitability. Among the actions we took were: A reduction in personnel of approximately 60%; closing offices in geographic locations where our expenses have continued to outpace our revenue; and reducing other expenditures. To date, the reduction in expenses has not been sufficient to return the Company to profitability. There can be no guarantee that the reductions we have made are the right reductions for our business going forward. There is a risk that the restructuring, cost cutting initiatives and reduction in personnel will make it more difficult to grow the business and service our customers.

We continue to have turnover in our senior management.

On September 15, 2016, our Executive Vice President, Chief Financial Officer and Treasurer resigned from all his positions in the Company. Daniel Murale was appointed as Vice President and Interim Chief Financial Officer effective September 15, 2016. Mr. Murale served as the Company's Director of Finance from June 2013 until his appointment as Vice President and Interim Chief Financial Officer.

In addition to our Executive Vice President, Chief Financial Officer and Treasurer's resignations, in the past few years we have had turnover in other senior positions. We have filled these positions with highly qualified individuals with extensive storage and software company experience. However, there can be no guarantee that the new senior management will be able to get up to speed and successfully manage the Company. In addition, with the exception of Gary Quinn, we have no employment agreements with any of our senior management and there can be no assurance that we will be able to retain any or all of the members of the senior management team.

We are dependent on a significant customer.

For the years ended December 31, 2016 and 2015, we had one customer, Hitachi Data Systems, which accounted for 11% and 10% of our total revenue, respectively. The loss of this customer, or a significant reduction in revenue from this customer, could have a material adverse effect on our results of operations. In addition, for the year ended December 31, 2015 we had one customer, Violin Memory, Inc., which accounted for 23% of our total revenue. This revenue related to our joint development agreement with Violin Memory, Inc., which was a one-time agreement.

A significant portion of our receivables is concentrated with three customers.

As of December 31, 2016, Datang Telecom International Technology Co., Ltd, Hitachi Data Systems and Huawei Technologies Co., Ltd, accounted for 15%, 14% and 12% of our gross accounts receivable balance, respectively. We currently have no reason to expect that these customers will fail to pay the amounts invoiced, nor do we have any history of non-payment with these customers, but the concentration of these receivables means that any failure by these customers to pay us all or a significant portion of these receivables would have a material impact on us.

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Due to the uncertain and shifting development of the data protection and network storage software markets and our reliance on our partners, we may have difficulty accurately predicting revenue for future periods and appropriately budgeting for expenses.

The rapidly evolving nature of the data protection and network storage software markets in which we sell our products, the degrees of effort and success of our partners' sales and marketing efforts, and other factors that are beyond our control, reduce our ability to accurately forecast our quarterly and annual revenue. However, we must use our forecasted revenue to establish our expense budget. Most of our expenses are fixed in the short term or incurred in advance of anticipated revenue. As a result, we may not be able to decrease our expenses in a timely manner to offset any shortfall in revenue.

If we are unable to develop and manufacture new products that achieve acceptance in the data protection and the network storage software markets, our operating results may suffer.

The data protection and the network storage software markets continue to evolve and as a result there is continuing demand for new products. Accordingly, we may need to develop and manufacture new products that address additional data protection or network storage software market segments and emerging technologies to remain competitive in the data storage software industry. We are uncertain whether we will successfully qualify new data protection or network storage software products with our customers by meeting customer performance and quality specifications. Any failure to address additional market segments could harm our business, financial condition and operating results.

Our products must conform to industry standards in order to be accepted by customers in our markets.

Our current products are only one part of a storage system. All components of these systems must comply with the same industry standards in order to operate together efficiently. We depend on companies that provide other components of these systems to conform to industry standards. Some industry standards may not be widely adopted or implemented uniformly, and competing standards may emerge that may be preferred by OEM customers or end users. If other providers of components do not support the same industry standards as we do, or if competing standards emerge, our products may not achieve market acceptance, which would adversely affect our business.

Our products handle mission-critical data for our end-customers and are highly technical in nature. If our products have defects, failures occur or end-customer data is lost or corrupted, our reputation and business could be harmed.

Our products are highly technical and complex and are involved in storing and replicating mission-critical data for our end-customers. Our products may contain undetected defects and failures when they are first introduced or as new versions are released. We have in the past and may in the future discover software errors in new versions of our existing products, new products or product enhancements after their release or introduction, which could result in lost revenue. Despite testing by us and by current and potential end-customers, errors might not be found in new releases or products until after commencement of commercial shipments, resulting in loss of or delay in market acceptance.

Our products may have security vulnerabilities and be subject to intentional attacks by viruses that seek to take advantage of these bugs, errors or other weaknesses. If defects or failures occur in our products, a number of negative effects in our business could result, including:

· lost revenue or lost end-customers;

· increased costs, including warranty expense and costs associated with end-customer support;

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delays, cancellations, reductions or rescheduling of orders or shipments;

product returns or discounts;
diversion of management resources;
legal claims for breach of contract, product liability, tort or breach of warranty; and damage to our reputation and brand.

Because our end-customers use our products to manage and protect their data, we could face claims resulting from any loss or corruption of our end-customers' data due to a product defect. While our sales contracts contain provisions relating to warranty disclaimers and liability limitations, these provisions might not be upheld. Defending a lawsuit, regardless of its merit, is costly and may divert management's attention from our business and could result in public perception that our products are not effective, even if the occurrence is unrelated to the use of our products. In addition, our business liability insurance coverage might not be adequate to cover such claims. If any data is lost or corrupted in connection with the use or support of our products, our reputation could be harmed and market acceptance of our products could suffer.

Issues with the hardware on which our software products are installed could increase our support costs and result in lower sales of our products.

We deliver some of our products, both through our resellers and directly to end-users, installed on third party hardware. If the hardware does not function properly, our support costs will go up. We will have to arrange or pay for the repair or replacement of the broken hardware and we may have to increase the size of our support operations. Hardware reliability issues could also cause resellers and end-users to refuse to make purchases from us, even if our software products function properly.

We rely on our resellers and our OEM partners for most of our sales.

These resellers and OEM partners have limited resources and sales forces and sell many different products, both in the data protection and the network storage software markets and in other markets. The resellers and OEM partners may choose to focus their sales efforts on other products in the data protection and the network storage software markets or other markets. The OEM partners might also choose not to continue to develop or to market products which include our products. This would likely result in lower revenue to us and would impede our ability to grow our business.

The failure of our resellers to sell our products effectively could have a material adverse effect on our revenue and results of operations.

We rely significantly on our value-added resellers, direct market resellers, systems integrators and corporate resellers, which we collectively refer to as resellers, for the marketing and distribution of our software products and our services. However, our agreements with resellers are generally not exclusive, are generally renewable annually and in many cases may be terminated by either party without cause. Many of our resellers carry products that are competitive with ours. These resellers may give a higher priority to other products, including those of our competitors, or may not

continue to carry our products at all. If a number of resellers were to discontinue or reduce the sales of our products, or were to promote our competitors' products in lieu of ours, it would have a material adverse effect on our future revenue. Events or occurrences of this nature could seriously harm our sales and results of operations. In addition, we expect that a significant portion of our sales growth will depend upon our ability to identify and attract new reseller partners. The use of resellers is an integral part of our distribution network. We believe that our competitors also use reseller arrangements. Our competitors may be more successful in attracting reseller partners and could enter into exclusive relationships with resellers that make it difficult to expand our reseller network. Any failure on our part to expand our network of resellers could impair our ability to grow revenue in the future.

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Our growth depends in part on the success of our strategic relationships with third parties.

Our future growth will depend on our ability to enter into successful strategic relationships with third parties. For example, our strategic relationships with DSI, Fujitsu, Hitachi Data Systems, Huawei and X-IO are intended to for the Flash/SSD market targeting customers wanting to integrate new Flash/SSD technology into existing IT environments and OEMs needing to enhance their software stack in order to offer data movement and protection services on their platform. In addition, we work with global distributors to streamline and grow our sales channel. These relationships may not result in additional customers or enable us to generate significant revenue. These relationships are typically non-exclusive and do not prohibit the other party from working with our competitors or from offering competing services. If we are unsuccessful in establishing or maintaining our relationships with these third parties, our ability to compete in the marketplace or to grow our revenue could be impaired and our operating results could suffer.

We rely on channel partners to sell our solutions, and disruptions to, or our failure to develop and manage our channel partners would harm our business.

Our future success is partially dependent upon establishing and maintaining successful relationships with the right channel partners. A majority of our revenue is generated by sales through our channel partners, and we expect channel sales to continue to make up the majority of our total revenue in the future. Accordingly, our revenue is largely dependent on the effective sales and lead generation activities of these channel partners.

Recruiting and retaining qualified channel partners and training them in our technology and product offerings requires significant time and resources. In order to develop and expand our distribution channel, we must continue to scale and improve our processes and procedures that support our channel, including investment in systems and training. Those processes and procedures may become increasingly complex and difficult to manage as we grow our organization. We have no minimum purchase commitments from any of our channel partners, and our contracts with these channel partners do not prohibit them from offering products or services that compete with ours. Our competitors may provide incentives to existing and potential channel partners to favor their products or to prevent or reduce sales of our solutions. Our channel partners may choose not to offer our solutions exclusively or at all. Establishing relationships with channel partners who have a history of selling our competitors' products may also prove to be difficult. In addition, some of our channel partners are also competitors. Our failure to establish and maintain successful relationships with channel partners would harm our business and operating results.

We face intense competition in our market, especially from larger, well-established companies, and we may lack sufficient financial or other resources to maintain or improve our competitive position.

A number of very large corporations have historically dominated the data management market. We consider our primary competitors to be companies that provide enterprise storage products, including Dell Inc., Hitachi Data Systems, Hewlett-Packard Company ("HPE"), IBM, CommVault, DataCore and Nexenta. We also compete to a lesser extent with a number of other private companies and certain well-established companies. Some of our competitors have made acquisitions of businesses that allow them to offer more directly competitive and comprehensive solutions than they had previously offered. In addition, the emergence of cloud computing and software-defined-storage may impact both short-term and long-term growth patterns in the markets in which we compete. We expect to encounter new competitors domestically and internationally as other companies enter our market or if we enter new markets.

Many of our existing competitors have, and some of our potential competitors could have, substantial competitive advantages such as:

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potential for broader market acceptance of their storage architectures and solutions;
greater name recognition and longer operating histories;
larger sales and marketing and customer support budgets and resources;
broader distribution and established relationships with distribution partners and end-customers;
the ability to bundle storage products with other technology products and services, or offer a broader range of storage solutions to better fit certain customers' needs;

lower labor and development costs;
larger and more mature intellectual property portfolios;
substantially greater financial, technical and other resources; and
greater resources to make acquisitions.

Our ability to sell our products is highly dependent on the quality of our services offerings, and our failure to offer high quality support and professional services would have a material adverse affect on our sales of our products and results of operations.

Our services include the assessment and design of solutions to meet our customers' data protection and storage management requirements and the efficient installation and deployment of our products based on specified business objectives. Further, once our products are deployed, our customers depend on us to resolve issues relating to our products. A high level of service is critical for the successful marketing and sale of our software. If our partners or we do not effectively install or deploy our applications, or succeed in helping our customers quickly resolve post-deployment issues, it would adversely affect our ability to sell software products to existing customers and could harm our reputation with potential customers. As a result, our failure to maintain high quality support and professional services would have a material adverse effect on our sales of our products and results of operations.

Failure to achieve anticipated growth could harm our business and operating results.

Achieving our anticipated growth will depend on a number of factors, some of which include:

retention of key management, marketing and technical personnel;
our ability to increase our customer base and to increase the sales of our products; and

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competitive conditions in the network storage infrastructure software market. We cannot assure you that the anticipated growth will be achieved. The failure to achieve anticipated growth could harm our business, financial condition and operating results.

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. In general, worldwide economic conditions remain unstable, and these conditions make it difficult for our current and prospective customers and us to forecast and plan future business activities accurately, and they could cause our customers or prospective customers to reevaluate their decision to purchase our products or services. Weak global economic conditions, or a reduction in IT spending even if economic conditions improve, could adversely impact our business and operating results in a number of ways, including longer sales cycles, lower prices for our products, reduced bookings and lower or no growth.

Our future quarterly results may fluctuate significantly, which could cause our stock price to decline.

Our previous results are not necessarily indicative of our future performance and our future quarterly results may fluctuate significantly. Our future performance will depend on many factors, including:

fluctuations in the economy;

• the timing of securing software license contracts and the delivery of software and related revenue recognition;

the seasonality of information technology, including network storage products and spending;

the average unit selling price of our products;

existing or new competitors introducing better products at competitive prices before we do;

·our ability to manage successfully the complex and difficult process of qualifying our products with our customers;

new products or enhancements from us or our competitors;

our ability to release new and innovative products;

import or export restrictions on our proprietary technology; and

personnel changes.

Many of our expenses are relatively fixed and difficult to reduce or modify. As a result, the fixed nature of our expenses will magnify any adverse effect of a decrease in revenue on our operating results.

The ability to predict our future effective tax rates could impact our ability to accurately forecast future earnings.

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We are subject to income taxes in both the United States and the various foreign jurisdictions in which we operate. Judgment is required in determining our provision for income taxes and there are many transactions and calculations where the tax determination may be uncertain. Our future effective tax rates could be affected by (i) changes in our earnings or losses; (ii) changes in the valuation of our deferred tax assets; (iii) changes in tax laws; and (iv) other factors. Our ability to correctly predict our future effective tax rates based upon these possible changes could significantly impact our forecasted earnings.

Our stock price may be volatile.

The market price of our common stock has been volatile in the past and may be volatile in the future. For example, during the twelve months ended December 31, 2016, the closing market price of our common stock as quoted on the NASDAQ Capital Market fluctuated between \$0.45 and \$1.89. The market price of our common stock may be significantly affected by the following factors:

delisting from the NASDAQ Capital Market;

actual or anticipated fluctuations in our operating results, including changes in the timing of when we recognize revenue;

failure to meet financial estimates;

changes in market valuations of other technology companies, particularly those in the network storage software market;

the announcement of any strategic alternatives;

announcements by us or our competitors of significant technical innovations, acquisitions, strategic partnerships, strategic alternatives, joint ventures or capital commitments;

loss of one or more key customers;

the issuance of additional shares of the Series A redeemable convertible preferred stock or common stock pursuant to dividend rights; and

departures of key personnel.

The stock market has experienced extreme volatility that often has been unrelated to the performance of particular companies. These market fluctuations may cause our stock price to fall regardless of our performance.

The likelihood of a change of control in our company could be impacted by the fact that we have a significant amount of authorized but unissued preferred stock, outstanding Series A redeemable convertible preferred stock, a staggered Board of Directors and change of control agreements as well as certain provisions under Delaware law.

Our Board of Directors has the authority, without further action by our common stockholders, to issue up to an additional 1,100,000 shares of preferred stock on such terms and with such rights, preferences and designations, including, without limitation restricting dividends on our common stock, dilution of the voting power of our common stock and impairing the liquidation rights of the holders of our common stock, as the Board may determine without any vote of our common stockholders. Issuance of such preferred stock, depending upon the rights, preferences and designations thereof may have the effect of delaying, deterring or preventing a change in control. Moreover, our outstanding Series A redeemable convertible preferred stock provides the holders with certain rights in the event of a merger with a third party and if we are unable to redeem the Series A redeemable convertible preferred stock elect to exercise their rights to

require the Company to redeem the Series A redeemable convertible preferred stock due to the failure of the Company to comply with the financial covenants covering the Series A redeemable convertible preferred stock. In addition, certain "anti-takeover" provisions of the Delaware General Corporation Law, among other things, may restrict the ability of our stockholders to authorize a merger, business combination or change of control. Further, we have a staggered Board of Directors and have entered into change of control agreements through either employment agreements or our 2005 Key Executive Severance Protection Plan or our Key Employee Change in Control Severance Agreement with certain executives. As a result, our stockholders may lose opportunities to dispose of their shares at favorable prices generally available in takeover attempts or that may be available under a merger proposal and the market price of our common stock and the voting and other rights of our stockholders may also be affected.

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Our business could be materially affected as a result of a natural disaster, terrorist acts, or other catastrophic events.

While our headquarters facilities contain redundant power supplies and generators, our domestic and foreign operations, and the operations of our industry partners, remain susceptible to fire, floods, power loss, power shortages, telecommunications failures, break-ins and similar events. Terrorist actions domestically or abroad could lead to business disruptions or to cancellations of customer orders or a general decrease in corporate spending on information technology, or could have direct impact on our marketing, administrative or financial functions and our financial condition could suffer. We continually look for alternatives to help mitigate any supply chain disruptions due to natural disasters, terrorist acts or other catastrophic events. However, our failure to mitigate these supply chain disruptions could impact our ability to procure and deliver products to our customers, which could adversely impact our overall financial condition.

We are dependent on a variety of IT and telecommunications systems, and any failure of these systems could adversely impact our business and operating results.

We depend on IT and telecommunications systems for our operations. These systems support a variety of functions including order processing, shipping, shipment tracking, billing, support center and internal information exchange.

Failures or significant downtime of our IT or telecommunications systems could prevent us from taking customer orders, shipping products, billing customers, handling support calls, or communication among our offices. The Internet and individual websites have experienced a number of disruptions and slowdowns, some of which were caused by organized attacks. In addition, some websites have experienced security breakdowns. If we were to experience a security breakdown, disruption or breach that compromised sensitive information, it could harm our relationship with our customers. Our support centers are dependent upon telephone and data services provided by third party telecommunications service vendors and our IT and telecommunications system. Any significant increase in our IT and telecommunications costs or temporary or permanent loss of our IT or telecommunications systems could harm our relationships with our customers. The occurrence of any of these events could have an adverse effect on our operations and financial results.

United States Government export restrictions could impede our ability to sell our software to certain end users.

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Certain of our products include the ability for the end user to encrypt data. The United States, through the Bureau of Industry Security, places restrictions on the export of certain encryption technology. These restrictions may include: the requirement to have a license to export the technology; the requirement to have software licenses approved before export is allowed; and outright bans on the licensing of certain encryption technology to particular end users or to all end users in a particular country. Certain of our products are subject to various levels of export restrictions. These export restrictions could negatively impact our business.

The international nature of our business could have an adverse affect on our operating results.

We sell our products worldwide. Accordingly, our operating results could be materially adversely affected by various factors including regulatory, political, or economic conditions in a specific country or region, trade protection measures and other regulatory requirements, and acts of terrorism and international conflicts.

Additional risks inherent in our international business activities generally include, among others, longer accounts receivable payment cycles, difficulties in managing international operations, decreased flexibility in matching workforce needs as compared with the U.S., and potentially adverse tax consequences. Such factors could materially adversely affect our future international sales and, consequently, our operating results.

Foreign currency fluctuations may impact our revenue.

Our licenses and services in Japan are sold in Yen. Many of our licenses and services in Australia, Canada, and in Europe are sold in Australian dollars, Canadian dollars and European Monetary Units ("Euros"), respectively. Changes in economic or political conditions globally and in any of the countries in which we operate could result in exchange rate movements, new currency or exchange controls or other restrictions being imposed on our operations.

Fluctuations in the value of the U.S. dollar may adversely affect our results of operations. Because our consolidated financial results are reported in U.S. dollars, translation of sales or earnings generated in other currencies into U.S. dollars can result in a significant increase or decrease in the reported amount of those sales or earnings. Significant changes in the value of these foreign currencies relative to the U.S. dollar could have a material adverse effect on our financial condition or results of operations. For example, the Euro has weakened against the U.S. dollar by 4% from December 31, 2015 to December 31, 2016.

Fluctuations in currencies relative to currencies in which our earnings are generated make it more difficult to perform period-to-period comparisons of our reported results of operations. For purposes of accounting, the assets and liabilities of our foreign operations, where the local currency is the functional currency, are translated using period-end exchange rates, and the revenue, expenses and cash flows of our foreign operations are translated using average exchange rates during each period.

In addition to currency translation risks, we incur currency transaction risk whenever we enter into either a purchase or a sales transaction using a currency other than the local currency of the transacting entity. Given the volatility of exchange rates, we cannot be assured we will be able to effectively manage our currency transaction and/or translation risks. Volatility in currency exchange rates may have a material effect on our financial condition or results of operations. Currency exchange rate fluctuations have not, in the past, resulted in a material impact on earnings.

However, we may experience at times in the future an impact on earnings as a result of foreign currency exchange rate fluctuations.

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Because we conduct operations in China, risks associated with economic, political and social events in China could negatively affect our business and operating results.

China is a significant market for our products. We have an OEM agreement with Huawei which has historically provided us with significant revenue. As of December 31, 2016 we have 14 employees in China. Our operations in China are subject to a number of risks relating to China's economic and political systems, including:

- government controlled foreign exchange rate and limitations on the convertibility of the Chinese Renminbi; extensive government regulation;
 - · changing governmental policies relating to tax benefits available to foreign-owned businesses;
 - the telecommunications infrastructure;
 - · relatively uncertain legal system; and
 - uncertainties related to continued economic and social reform.

Any significant interruption in our China operations, whether resulting from any of the above uncertainties, natural disasters or otherwise, could result in delays or disruptions in our revenue and our research development operations, either of which could cause our business and operating results to suffer.

If we are unable to protect our intellectual property, our business will suffer.

Our success is dependent upon our proprietary technology. We have 27 patents issued, and numerous pending patent applications, numerous trademarks registered and multiple pending trademark applications related to our products. We cannot predict whether we will receive patents for our pending or future patent applications, and any patents that we own or that are issued to us may be invalidated, circumvented or challenged. In addition, the laws of certain countries in which we sell and manufacture our products, including various countries in Asia, may not protect our products and intellectual property rights to the same extent as the laws of the United States.

We also rely on trade secret, copyright and trademark laws, as well as the confidentiality and other restrictions contained in our respective sales contracts and confidentiality agreements to protect our proprietary rights. These legal protections afford only limited protection and if we are unable to protect our intellectual property our business and operating results may suffer.

Our efforts to protect our intellectual property may cause us to become involved in costly and lengthy litigation, which could seriously harm our business.

In recent years, there has been significant litigation in the United States involving patents, trademarks and other intellectual property rights.

We were already subject to one action, which alleged that our technology infringed on patents held by a third party. While we settled this litigation, the fees and expenses of the litigation as well as the litigation settlement were expensive and the litigation diverted management's time and attention. Any additional litigation, regardless of its outcome, would likely be time consuming and expensive to resolve and would divert management's time and attention and might subject us to significant liability for damages or invalidate our intellectual property rights. Any potential intellectual property litigation against us could force us to take specific actions (any of which could have a material

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adverse effect on our business), including:

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- cease selling our products that use the challenged intellectual property;
- obtain from the owner of the infringed intellectual property right a license to sell or use the relevant technology or trademark, which license may not be available on reasonable terms, or at all; or
- ·redesign those products that use infringing intellectual property or cease to use an infringing product or trademark. Developments limiting the availability of Open Source software could impact our ability to deliver products and could subject us to costly litigation.

Many of our products are designed to include software or other intellectual property licensed from third parties, including "Open Source" software. At least one intellectual property rights holder has alleged that it holds the rights to software traditionally viewed as Open Source. In addition, United States courts have not interpreted the terms of many open source licenses, and there is a risk that such licenses could be construed in a manner that could impose unanticipated conditions or restrictions on our ability to commercialize our appliances. We could be required to seek licenses from third parties in order to continue offering our software, to re-engineer our software, to discontinue the sale of our software in the event re-engineering cannot be accomplished on a timely basis or to litigate any disputes relating to our use of open source software, any of which could harm our business. There can be no assurance that the necessary licenses would be available on acceptable terms, if at all. The inability to obtain certain licenses or other rights or to obtain such licenses or rights on favorable terms, or the need to engage in litigation regarding these matters, could have a material adverse effect on our business, operating results, and financial condition. Moreover, the inclusion in our products of software or other intellectual property licensed from third parties on a nonexclusive basis could limit our ability to protect our proprietary rights in our products.

The loss of any of our key personnel could harm our business.

Our success depends upon the continued contributions of our key employees, many of whom would be extremely difficult to replace. We do not have key person life insurance on any of our personnel. Worldwide competition for skilled employees in the network storage software industry is extremely intense. In particular, our success is dependent on our executive management team, including Gary Quinn, our President and Chief Executive Officer, whose employment agreement expires in July 2017. If we are unable to retain existing employees or hire and integrate new employees, our business, financial condition and operating results could suffer.

If actual results or events differ materially from our estimates and assumptions, our reported financial condition and results of operations for future periods could be materially affected.

The preparation of consolidated financial statements and related disclosure in accordance with generally accepted accounting principles requires management to establish policies that contain estimates and assumptions that affect the amounts reported in the consolidated financial statements and the accompanying notes. Note 1 to the Consolidated Financial Statements in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 describes the significant accounting policies and estimates essential to preparing our financial statements. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosures. We base our estimates on historical experience and assumptions that we believe to be reasonable under the circumstances. Actual future results may differ materially from these estimates. We evaluate, on an ongoing basis, our estimates and assumptions.

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Our agreements with the holders of the Series A redeemable convertible preferred stock contain covenants that could limit our ability to obtain financing using our equity. In addition, if we engage in future financings, we may have to use the proceeds to redeem the preferred stock held by such holders. This could cause us to have difficulty in obtaining capital necessary to run our business.

Our agreements with the holders of the Series A redeemable convertible preferred stock give such holders veto power over certain future financings, and give such holders certain rights to participate in any subsequent financing, whether through debt or equity (subject to certain exclusions). These participation rights could discourage a potential investor or a potential lender from making financing available to us on favorable terms. Because of these covenants, if we determine that we are in need of additional capital, we might not be able to obtain it. In addition, our agreements with the holders of the Series A redeemable convertible preferred stock provide that if, at the time of certain future debt or equity financings, the proceeds of which exceed \$5 million, the holders of the Series A redeemable convertible preferred stock still have outstanding Series A redeemable convertible preferred stock, then we must offer to repurchase their Series A redeemable convertible preferred stock. The holders of the Series A redeemable convertible preferred stock have the right to accept the offer or to retain their Series A redeemable convertible preferred stock elect to have their Series A redeemable convertible preferred stock elect to have their Series A redeemable convertible preferred stock repurchased, then the capital raised in excess of \$5 million will go to repurchase the holders' Series A redeemable convertible preferred stock, instead of being able to be used for our business.

Our agreements with the holders of the Series A redeemable convertible preferred stock prevent us from undertaking certain transactions or incurring certain indebtedness without such holders' consent or unless the Series A redeemable convertible preferred stock held by such holders is repurchased. This could hurt our ability to sell underperforming assets or lines of business or to obtain financing.

Our agreements with the holders of the Series A redeemable convertible preferred stock prevent us from undertaking certain transactions or incurring certain debt without such holders' consent or unless the Series A redeemable convertible preferred stock held by such holders' is repurchased. These transactions include, but are not limited to:

- · A merger with, or the sale of substantially all of the Company's assets or capital stock, to a third party;
 - · Assumption of indebtedness in excess of 80% of the Company's accounts receivable; and
- · The sale, license or other disposition of 10% or more of the tangible assets or capital stock of the Company. This could limit our ability to sell off underperforming assets or business lines. It could also prevent us from obtaining financing we may need to run or to grow our business.

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The holders of the Series A redeemable convertible preferred stock are entitled to dividends on the Series A redeemable convertible preferred stock they hold. Depending on whether these dividends are paid in cash or stock, the payment of these dividends will either decrease cash that is available to us to invest in our business or dilute the holdings of all other stockholders.

Our agreements with the holders of the Series A redeemable convertible preferred stock provide that such holders will receive quarterly dividends on the Series A redeemable convertible preferred stock at prime rate plus 5%, subject to a maximum dividend rate of 10%. If we do not have at least \$1.0 million in positive cash flow for any calendar quarter after giving effect to the payment of such dividends, then we can, at our election, pay such dividends in whole or in part in cash, provided that cash flow from operations is not negative, and the remainder can be accrued or paid in common stock to the extent certain equity conditions are satisfied. We also have the ability to accrue and roll over dividends. During 2016, the Company issued 624,009 shares of the Company's common stock as payment for the fourth quarter 2015 and the first three quarters of 2016 dividends. As of December 31, 2016, due to the lack of sufficient surplus to pay dividends as required by the Delaware General Business Corporation Law, the Company was not permitted to pay the fourth quarter dividend in cash or common stock and accrued its fourth quarter 2016 dividend. Accordingly, under Item 1A. of Form S-3, the Company was not S-3 eligible when it filed its Annual Report on Form 10-K. As a result, the Company will not be eligible to utilize the shelf registration statement on Form S-3 that was declared effective by the SEC in 2016. This inability to use Form S-3 for future capital raises could impact our ability to efficiently and expeditiously raise financing. As of December 31, 2016, the Company's liability for dividends to the holders of the Series A redeemable convertible preferred stock totaled \$0.2 million. The payment of future dividends in cash will reduce the cash that we have available to invest in our business. There can be no assurance that we will have enough cash to pay future dividends in cash. If any future dividends are paid in common stock, this will dilute the holdings of all other stockholders.

Unknown Factors

Additional risks and uncertainties of which we are unaware or which currently we deem immaterial also may become important factors that affect us.

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FORWARD-LOOKING STATEMENTS

This prospectus and certain documents incorporated by reference in this prospectus contain forward-looking statements. In some cases, you can identify forward-looking statements by terms such as "may," "intend," "might," "will," "should," "could," "would," "expect," "believe," "estimate," "predict," "potential," or the negative of these terms, and similar expressions. These statements reflect our current views with respect to future events. These statements involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performances or achievements expressed or implied by the forward-looking statements, many of which are discussed in greater detail under the heading "Risk Factors" in this prospectus.

USE OF PROCEEDS

All proceeds from the disposition of the common stock covered by this prospectus will go to the selling stockholders. We will not receive any proceeds from the disposition of the common stock by the selling stockholders. See "Plan of Distribution."

The selling stockholders will pay any underwriting discounts and commissions and expenses incurred by the selling stockholders for brokerage, accounting, tax or legal services or any other expenses incurred by the selling stockholders in disposing of the shares. We will bear the costs, fees and expenses incurred to effect the registration of the shares covered by this prospectus, including all registration and filing fees, Nasdaq listing fees and fees and expenses of counsel (including one counsel for the selling stockholders relating to the preparation of the Registration Statement) and our independent registered public accounting firm.

MARKET FOR OUR COMMON STOCK

Our common stock is currently traded on the NASDAQ Capital Market and prior to August 19, 2016 traded on the NASDAQ Global Market under the symbol "FALC". The following table sets for the high and low sales prices of our common stock as reported on the NASDAQ Global Market or the NASDAQ Capital Market for the periods indicated.

	Price Range High Low	
Year ending December 31, 2017	8	
First Quarter (through March 27, 2017)	\$0.72	\$0.27
Year ended December 31, 2016		
First Quarter	\$1.89	\$1.21
Second Quarter	\$1.40	\$1.06
Third Quarter	\$1.17	\$0.91
Fourth Quarter	\$1.03	\$0.45
Year ended December 31, 2015		
First Quarter	\$1.65	\$1.32
Second Quarter	\$1.61	\$1.37
Third Quarter	\$2.20	\$1.39
Fourth Quarter	\$2.07	\$1.80

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As of March 27, 2017, the last sale price of our common stock on the NASDAQ Capital Market was \$0.34 per share and we had approximately 337 stockholders of record.

SELLING STOCKHOLDERS

The shares of common stock being offered by the selling stockholders are those issuable to the selling stockholders upon conversion of the Series A redeemable convertible preferred stock and in payment of certain dividends payable with respect to such Series A redeemable convertible preferred stock. For additional information regarding the issuance of the Series A redeemable convertible preferred stock, see "Description of Capital Stock – Series A Convertible Preferred Stock" below. We are registering the shares of common stock to permit the selling stockholders to offer such shares for resale from time to time.

The table below lists the selling stockholders and other information regarding the beneficial ownership of the shares of common stock by each of the selling stockholders. The second column lists the number of shares of common stock beneficially owned by each selling stockholder, based on its ownership of the Series A redeemable convertible preferred stock, as of March 27, 2017. The third column lists the shares of common stock being offered by this prospectus by the selling stockholders.

In accordance with the terms of that certain Preferred Stock Purchase Agreement, this prospectus generally covers the resale of the maximum number of shares of common stock potentially issuable to the selling stockholders, including the sum of (i) the number of shares of common stock issuable upon conversion of the Series A redeemable convertible preferred stock as of the trading day immediately preceding the date the registration statement is initially filed with the SEC and (ii) the number of shares of common stock issuable as dividends with respect to the Series A redeemable convertible preferred stock as of the trading day immediately preceding the date the registration statement is initially filed with the SEC. Because the conversion price of the convertible preferred stock may be adjusted and amount of shares issuable as payment-in-kind for dividends may vary, the number of common shares that will actually be issued may be more or less than the number of shares being offered by this prospectus. The fourth column assumes the sale of all of the shares offered by the selling stockholders pursuant to this prospectus.

The selling stockholders may sell all, some or none of their shares in this offering. See "Plan of Distribution."

	Maximum Number of		
Number of Shares of Common Stock	Shares of Common	Number of Shares of	
Owned Prior to	Stock to be Sold	Common Stock	
Offering	Pursuant to this	Owned After Offering	
	Prospectus		
9,632,870 (2)	13,172,276	0	
(Owned Prior to Offering	Number of Shares of Common Stock Owned Prior to Offering Offering Offering Stock to be Sold Pursuant to this Prospectus	

⁽¹⁾ Martin Hale, Jr. ("Mr. Hale") is the Chief Executive Officer of Hale Capital Partners, LP ("Hale Capital") and a member of the Board of Directors of FalconStor since September 2013. Mr. Hale is also the sole owner and Chief Executive Officer of Hale Fund Management, LLC, a Delaware limited liability company ("Fund Management"), the general partner of Hale Capital Management, LP ("Capital Management"), the manager of Hale Capital. Hale Capital is the sole member of HCP-FVA, LLC, a Delaware limited liability company ("HCP-FVA"). Fund Management is

the manager of HCP-FVA. The address and principal office of Mr. Hale, Hale Capital, Fund Management, Capital Management and HCP-FVA is 17 State Street, Suite 3230, New York, New York 10004. Each of Mr. Hale, Fund Management and Capital Management disclaims beneficial ownership of the shares of common stock except to the extent of his or its pecuniary interest.

Consists of 8,781,516 shares of common stock issuable upon the conversion of Series A redeemable convertible preferred stock and 851,354 shares of Common Stock issued as dividend payments to HCP-FVA.

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PLAN OF DISTRIBUTION

We are registering pursuant to this prospectus a total of 13,172,276 shares of common stock on behalf of the selling stockholders. The selling stockholders, which as used herein includes donees, pledgees, transferees or other successors-in-interest selling shares of common stock or interests in shares of common stock received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of common stock or interests in shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

The selling stockholders may use any one or more of the following methods when disposing of shares or interests therein:

ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers; block trades in which the broker-dealer will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;

purchases by a broker-dealer as principal and resale by the broker-dealer for its account;

an exchange distribution in accordance with the rules of the applicable exchange;

privately negotiated transactions;

short sales;

through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise:

broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;

distribution to members, limited partners or stockholders of selling security holders;

a combination of any such methods of sale; and

any other method permitted by applicable law.

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The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act of 1933, as amended the ("Securities Act"), amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer the shares of common stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

In connection with the sale of our common stock or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling stockholders may also sell shares of our common stock short and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The aggregate proceeds to the selling stockholders from the sale of the common stock offered by them will be the purchase price of the common stock less discounts or commissions, if any. Each of the selling stockholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of common stock to be made directly or through agents. We will not receive any of the proceeds from this offering.

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act, provided that they meet the criteria and conform to the requirements of that rule.

The selling stockholders and any underwriters, broker-dealers or agents that participate in the sale of the common stock or interests therein may be "underwriters" within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. Selling stockholders who are "underwriters" within the meaning of Section 2(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act.

To the extent required, the shares of our common stock to be sold, the names of the selling stockholders, the respective purchase prices and public offering prices, the names of any agents, dealers or underwriters and any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

In order to comply with the securities laws of some states, if applicable, the common stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the common stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the selling stockholders that the anti-manipulation rules of Regulation M under the Securities Exchange Act of 1934, as amended, may apply to sales of shares in the market and to the activities of the selling stockholders and their affiliates. In addition, to the extent applicable we will make copies of this prospectus (as it may

be supplemented or amended from time to time) available to the selling stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

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We have agreed to indemnify the selling stockholders against liabilities, including liabilities under the Securities Act and state securities laws, relating to the registration of the shares offered by this prospectus.

We have agreed with the selling stockholders to keep the registration statement of which this prospectus constitutes a part effective until the earlier of (i) the fifth anniversary of the effective date of such registration statement, (ii) such time as all of the shares of common stock covered by the registration statement have been sold publicly or (iii) such time as all of the shares of common stock covered by the registration statement may be sold by the selling stockholders pursuant to Rule 144 without volume limitations and without the requirement that there be adequate current public information with regards to us.

DESCRIPTION OF CAPITAL STOCK

FalconStor is authorized to issue 100,000,000 shares of common stock, par value \$0.001 per share, and 2,000,000 shares of preferred stock, par value \$0.001 per share. As of March 27, 2017, there were approximately 44,154,499 shares of common stock outstanding and 900,000 shares of Series A redeemable convertible preferred stock outstanding.

The following is a summary of the rights and preferences of our capital stock and certain other securities convertible into our capital stock. While we believe that the following description covers the material terms of our capital stock and other securities, the description may not contain all of the information that is important to you and is subject to and qualified in its entirety by our Restated Certificate of Incorporation, Bylaws, and the other agreements and instruments described below. We encourage you to read carefully our Restated Certificate of Incorporation, as amended, Bylaws and the other agreements and instruments described below for a more complete understanding of our capital stock.

Common Stock

FalconStor is authorized to issue 100,000,000 shares of common stock, par value \$0.001 per share. As of March 27, 2017, there were approximately 44,154,499 shares of common stock outstanding.

Each share of common stock entitles its record holder to one vote on all matters to be voted on by the common stockholders of FalconStor. Except as otherwise provided by law, actions by the common stockholders of FalconStor may be approved by a majority vote of the stockholders present at a duly called meeting of the stockholders at which a quorum is present (with the Series A redeemable convertible preferred stock generally voting on an as-converted basis with the common stock); however, an amendment to the Bylaws by the stockholders requires the affirmative vote of the holders of at least sixty-six and two-thirds percent (66-2/3%) of the voting power of all of the then outstanding shares of the capital stock of the Company entitled to vote generally in the election of directors, voting together as a single class, as well as approval by the holders of Series A redeemable convertible preferred stock, as described more fully below. The Board of Directors of the Company may amend the Bylaws with the majority vote of the total number of authorized directors. The Board of Directors of FalconStor is classified and currently consists of five directors divided into three classes, each class with a term of office expiring the third succeeding annual meeting of stockholders after election of such class. At all meetings of stockholders for the election of directors, a plurality of the votes cast is sufficient to elect the directors to be elected at such meeting of stockholders. No provision of FalconStor's Restated Certificate of Incorporation or Bylaws provides for cumulative voting in the case of the election of directors or on any other matter.

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Each holder of common stock of FalconStor is entitled to share pro rata in any dividends paid on the common stock out of assets legally available for that purpose, when, and if declared by the Board of Directors. Upon the liquidation, dissolution or winding up of the Company, the assets of the Company shall be distributed pro rata among the holders of common stock. However, the aforementioned dividend and liquidation rights are limited and qualified by the Series A redeemable convertible preferred stock, which has a preference to any such distribution of the assets or funds. Other than the rights described above, the holders of common stock have no redemption, preemptive, subscription or conversion rights, nor any rights to payment from any sinking or similar fund, and are not subject to any calls or assessments. There are no restraints in the Restated Certificate of Incorporation or Bylaws of FalconStor on the right of holders of shares of common stock to sell or otherwise alienate their shares of stock in FalconStor, and there are no provisions discriminating against any existing or prospective holder of shares of common stock as a result of such security holder owning a substantial amount of securities.

In addition to FalconStor's outstanding common stock, FalconStor has outstanding options to purchase its common stock held by its employees and directors and additional shares available for issuance under several equity compensation plans, as further described in FalconStor's periodic reports filed with the SEC.

Preferred Stock

FalconStor is authorized to issue 2,000,000 shares of preferred stock, par value \$0.001 per share. Our board of directors has the authority, subject to any limitations prescribed by Delaware law, to issue shares of preferred stock in one or more series and to fix and determine the designation, privileges, preferences and rights and the qualifications, limitations and restrictions of those shares, including dividend rights, conversion rights, voting rights, redemption rights, terms of sinking funds, liquidation preferences and the number of shares constituting any series or the designation of the series, without any further vote or action by the stockholders. Any shares of our preferred stock so issued may have priority over our common stock with respect to dividend, liquidation and other rights. Our board of directors may authorize the issuance of preferred stock with voting rights or conversion features that could adversely affect the voting power or other rights of the holders of our common stock. Although the issuance of preferred stock could provide us with flexibility in connection with possible acquisitions and other corporate purposes, under some circumstances, it could have the effect of delaying, deferring or preventing a change of control. We will describe the particular terms of any preferred stock in more detail in the applicable prospectus supplement.

On September 16, 2013, FalconStor issued 900,000 shares designated as Series A redeemable convertible preferred stock. This leaves 1,100,000 shares of authorized but unissued preferred stock. As of March 27, 2017, FalconStor currently has 900,000 shares of Series A redeemable convertible preferred stock outstanding.

Series A Redeemable Convertible Preferred Stock

On September 16, 2013, FalconStor issued to Hale Capital 900,000 shares of Series A redeemable convertible preferred stock, par value \$0.001 per share, at a price of \$10 per share, subject to the terms of the Certificate of Designations, Preferences and Rights of Series A Convertible Preferred Stock (the "Certificate of Designations"). On September 25, 2013, Hale Capital assigned and transferred to its affiliate, HCP-FVA, the 900,000 shares of Series A redeemable convertible preferred stock and all of its rights and obligations under the Preferred Stock Purchase Agreement dated as of September 16, 2013 by and among the Company and Hale Capital.

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Pursuant to the Certificate of Designations, each share of Series A redeemable convertible preferred stock can be converted into shares of FalconStor's common stock, at an initial conversion price equal to \$1.02488 per share, subject to appropriate adjustments for any stock dividend, stock split, stock combination, reclassification or similar transaction, (i) at any time at the option of the holder or (ii) by FalconStor if, following the first anniversary of the issuance of the Series A redeemable convertible preferred stock (subject to extension under certain circumstances), the volume weighted average trading price per share of FalconStor's common stock for sixty (60) consecutive trading days exceeds 250% of the conversion price and continues to exceed 225% of the conversion price through the conversion date, subject at all times to the satisfaction of, and the limitations imposed by, the equity conditions set forth in the Certificate of Designations (including, without limitation, the volume limitations set forth therein).

Pursuant to the Certificate of Designations, the holders of the Series A redeemable convertible preferred stock will also receive quarterly dividends at the prime rate (provided in the Wall Street Journal Eastern Edition) plus 5% (up to a maximum dividend rate of 10%), payable in cash, provided, that if FalconStor does not have at least \$1.0 million in positive cash flow for any calendar quarter after giving effect to the payment of such dividends, FalconStor shall pay such dividends in a combination of cash (to the extent of its positive cash flow in excess of \$1.0 million or, if the Company so elects, such greater amount up to the amount of its positive cash flow) and the remainder can be accrued or paid in common stock to the extent certain equity conditions are satisfied. A holder's right to convert its shares of Series A redeemable convertible preferred stock and receive dividends in the form of common stock is subject to certain limitations including, among other things, that the shares of common stock issuable upon conversion or as dividends will not, prior to receipt of stockholder approval, result in any holder beneficially owning greater than 19.99% of FalconStor's currently outstanding shares of common stock. At the 2014 annual meeting of stockholders held on May 28, 2014, stockholders approved the potential issuance of more than 19.99% of the Company's issued and outstanding common stock upon conversion of the Series A redeemable convertible preferred stock or as payment of dividends or in connection with a change of control of the Company.

Upon certain triggering events, such as bankruptcy, insolvency or a material adverse effect or failure of FalconStor to issue shares of common stock upon conversion of the Series A redeemable convertible preferred stock in accordance with its obligations, the holders may require FalconStor to redeem all or some of the Series A redeemable convertible preferred stock at a price per share equal to the greater of (i) the sum of 100% of the stated value of a share of Series A convertible preferred stock plus accrued and unpaid dividends with respect thereto, and (ii) the product of the number of shares of common stock underlying a share of Series A redeemable convertible preferred stock and the closing price as of the occurrence of the triggering event. On or after August 5, 2017, each holder of Series A redeemable convertible preferred stock can also require FalconStor to redeem its Series A redeemable convertible preferred stock in cash at a per share price equal to 100% of the stated value of a share of Series A redeemable convertible preferred stock plus accrued and unpaid dividends with respect thereto. Upon consummation of a fundamental sale transaction, the Series A redeemable convertible preferred stock shall be redeemed at a per share redemption price equal to the greater of (y) 250% of the per share purchase price of the Series A redeemable convertible preferred stock and (z) the price payable in respect of such share of Series A redeemable convertible preferred stock if such share of Series A redeemable convertible preferred stock had been converted into such number of shares of common stock in accordance with the Certificate of Designations (but without giving effect to any limitations or restrictions contained therein) immediately prior to such fundamental sale transaction. In addition, if FalconStor consummates an equity or debt financing that results in more than \$5.0 million of net proceeds to FalconStor and/or its subsidiaries, the holders of Series A redeemable convertible preferred stock will have the right, but not the obligation, to require FalconStor to use the net proceeds in excess of \$5.0 million to repurchase all or a portion of the Series A redeemable convertible preferred stock at a per share price equal to the greater of (i) the sum of 100% of the stated value of such share of Series A redeemable convertible preferred stock plus accrued and unpaid dividends with respect thereto, and (ii) the number of shares of common stock into which such share of Series A redeemable convertible preferred stock is then convertible multiplied by the greater of (y) the closing price of the common stock on the date of announcement of such financing or (z) the closing price of the common stock on the date of consummation of such financing.

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Each share of the Series A redeemable convertible preferred stock is entitled to a number of votes per share equal to the number of shares of common stock issuable upon conversion of a share of Series A redeemable convertible preferred stock, based on an assumed conversion price of \$1.23 per share. In addition, the holders of a majority of the Series A redeemable convertible preferred stock must approve certain actions, including approving any amendments to FalconStor's Restated Certificate of Incorporation or Bylaws that adversely affects the voting powers, preferences or other rights of the Series A redeemable convertible preferred stock; payment of dividends or distributions; any liquidation, capitalization, reorganization or any other fundamental transaction of FalconStor; issuance of any equity security senior to or on parity with the Series A redeemable convertible preferred stock as to dividend rights, redemption rights, liquidation preference and other rights; issuances of equity below the conversion price; any liens or borrowings other than non-convertible indebtedness from standard commercial lenders which does not exceed 80% of FalconStor's accounts receivable; and the redemption or purchase of any of the capital stock of FalconStor.

In connection with the issuance and sale of the Series A redeemable convertible preferred stock, FalconStor and Hale Capital also agreed that the holders of the Series A redeemable convertible preferred stock have the exclusive right, voting separately as a class, to elect two (2) directors to the Board of Directors, for so long as at least eighty-five percent (85%) of the Series A redeemable convertible preferred stock purchased under the Purchase Agreement remains outstanding, which shall be reduced to one (1) director at such time as less than eighty-five percent (85%) but greater than fifteen percent (15%) of the Series A redeemable convertible preferred stock purchased under the Purchase Agreement remains outstanding. In accordance with the Purchase Agreement, Martin M. Hale, Jr. and Michael P. Kelly were designated for election by the holders of the Series A redeemable convertible preferred stock to, and currently serve as members of, FalconStor's Board of Directors. If we do not redeem the Series A redeemable convertible preferred stock as required by the Certificate of Designations, the holders of the Series A redeemable convertible preferred stock can pursue other remedies, including the right to appoint a majority of the members of our board of directors.

Anti-Takeover Provisions

FalconStor may issue up to an additional 1,100,000 shares of preferred stock on such terms and with such rights, preferences and designations, including, without limitation restricting dividends on its common stock, dilution of the voting power of its common stock and impairing the liquidation rights of the holders of its common stock, as the Board of Directors may determine without any vote of the stockholders. The issuance of such preferred stock, depending upon the rights, preferences and designations thereof may have the effect of delaying, deterring or preventing a change in control of FalconStor.

In addition, as more fully explained in Item 14 below, FalconStor is subject to Section 203 of the Delaware General Corporation Law ("DGCL"), which may restrict the ability of stockholders to authorize a merger, business combination or change of control. Further, the Company has a classified Board of Directors and has entered into change of control agreements through either employment agreements, its 2005 Key Executive Severance Protection Plan with certain executives, Key Employee Change in Control Severance Agreements between the Company and certain employees, or certain incentives provided to certain employees, which may also have the effect of delaying, deterring or preventing a change in control.

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Transfer Agent and Registrar; Market Listing

The transfer agent for FalconStor's common stock is Computershare Shareowners Services LLC. Our common stock is traded on the Nasdaq Capital Market under the symbol "FALC."

LEGAL MATTERS

Certain legal matters in connection with the issuance of the shares of common stock offered hereby have been passed upon for the Company by Olshan Frome Wolosky LLP, 1325 Avenue of the Americas, New York, New York 10019.

EXPERTS

The consolidated financial statements of FalconStor Software, Inc. and its subsidiaries as of December 31, 2016, and the related consolidated statements of operations, stockholders' deficit, comprehensive loss, and cash flows for each of the years in the two-year period ended December 31, 2016, have been incorporated by reference in this prospectus and in the registration statement in reliance upon the report of BDO USA, LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the reporting requirements of the Exchange Act and its rules and regulations. The Exchange Act requires us to file reports, proxy statements and other information with the SEC. Copies of these reports, proxy statements and other information can be read and copied at the SEC Public Reference Room, 100 F Street NE, Washington, D.C. 20549. Information on the operation of the Public Reference Room may be obtained by calling the SEC at 1–800–SEC–0330. The SEC also maintains a website that contains reports, proxy statements and other information regarding issuers that file electronically with the SEC. These materials may be obtained electronically by accessing the SEC's website at http://www.sec.gov.

We make available, free of charge on our website at http://www.falconstor.com, copies of our filings with the SEC, including our annual reports on Form 10–K, quarterly reports on Form 10–Q, proxy statements, and current reports on Form 8–K as well as amendments to those reports filed or furnished pursuant to Section 13 or 15(d) of the Exchange Act, together with Section 16 insider beneficial stock ownership reports, as soon as reasonably practicable after we electronically file these documents with, or furnish them to, the SEC.

INCORPORATION BY REFERENCE OF CERTAIN DOCUMENTS

The SEC allows us to incorporate by reference the information we file with it, which means that we can disclose important information to you by referring you to those documents that are considered part of this prospectus. We incorporate by reference the documents listed below (other than any portion of such filings that are furnished under applicable SEC rules rather than filed under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act). The documents we are incorporating by reference are as follows:

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(1) Our Annual Report on Form 10-K for the year ended December 31, 2016;

Our Proxy Statement on Schedule 14A filed with the SEC on March 24, 2017; and The description of our common stock contained in our registration statement on Form 8-A declared effective by the SEC on June 28, 1994, including any amendments or reports filed for the purpose of updating that description. We also incorporate by reference into this prospectus any additional documents that we may file with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the completion or termination of the offering, but excluding any information deemed furnished and not filed with the SEC. Any statements contained in a previously filed document incorporated by reference into this prospectus shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus, or in a subsequently filed document also incorporated by reference herein, modifies or supersedes that statement.

Any document, and 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 prospectus to the extent that a statement contained herein, or in any other subsequently filed document that also is incorporated or deemed to be incorporated by reference herein, modifies or supersedes such document or statement. Any such document or statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

The documents incorporated by reference in this prospectus may be obtained from us without charge and will be provided to each person, including any beneficial owner, to whom a prospectus is delivered. You may obtain a copy of the documents at no cost by submitting an oral or written request to:

FalconStor Software, Inc. 2 Huntington Quadrangle Suite 2S01 Melville, New York 11747 Attention: Chief Financial Officer (631) 777-5188

Additional information about us is available at our web site located at http://www.falconstor.com/. Information contained in our web site is not a part of this prospectus.

DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling the Company, the Company has been advised that it is the SEC's opinion that such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

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PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution(1)(2)

SEC registration fee \$2,510.96
Transfer agent and registrar fee \$2,100
Printing expenses \$1,000
Accountant fees \$12,500
Counsel fees \$15,000
Miscellaneous \$—

Total \$33,110.96

- (1) All such amounts are estimates, other than the SEC registration fee.
- (2) All fees and expenses incident to the registration of the shares disclosed above are borne by FalconStor, except for underwriting discounts and trading commissions in connection with the selling stockholders' offers and sales of the common stock. Counsel feels include fees incurred in respect of counsel to the selling stockholders in addition to those of counsel to FalconStor.

Item 14. Indemnification of Directors and Officers

As permitted by the DGCL, the Company's Restated Certificate of Incorporation, as amended, limits the personal liability of a director or officer to the Company for monetary damages for breach of fiduciary duty of care as a director. Liability is not eliminated for (i) any breach of the director's duty of loyalty to the Company or its stockholders, (ii) acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) unlawful payment of dividends or stock purchase or redemptions pursuant to Section 174 of the DGCL, or (iv) any transaction from which the director derived an improper personal benefit.

Delaware Law

The Company is subject to Section 203 of the DGCL, which prevents an "interested stockholder" (defined in Section 203, generally, as a person owning 15% or more of a corporation's outstanding voting stock) from engaging in a "business combination" with a publicly-held Delaware corporation for three years following the date such person became an interested stockholder, unless: (i) before such person became an interested stockholder, the board of directors of the corporation approved the transaction in which the interested stockholder became an interested stockholder or approved the business combination; (ii) upon consummation of the transaction that resulted in the interested stockholder's becoming an interested stockholder, the interested stockholder owns at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced (subject to certain exceptions), or (iii) following the transaction in which such person became an interested stockholder, the business combination is approved by the board of directors of the corporation and authorized at a meeting of stockholders by the affirmative vote of the holders of 66% of the outstanding voting stock of the corporation not owned by the interested stockholder. A "business combination" includes mergers, stock or asset sales and other transactions resulting in a financial benefit to the interested stockholder.

The provisions of Section 203 of the DGCL could have the effect of delaying, deferring or preventing a change in the control of the Company.

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FalconStor Software, Inc. maintains a directors and officers insurance and company reimbursement policy. The policy insures directors and officers against unindemnified loss arising from certain wrongful acts in their capacities and reimburses FalconStor Software, Inc. for such loss for which FalconStor Software, Inc. has lawfully indemnified the directors and officers. The policy contains various exclusions, none of which relate to the offering hereunder. FalconStor Software, Inc. also has agreements with its directors and officers providing for the indemnification thereof under certain circumstances.

Item 15. Recent Sales of Unregistered Securities

During the past three years, the following securities were sold by the Company without registration under the Securities Act:

In connection with the right of the holder of the Series A redeemable convertible preferred stock to convert accrued dividends into common stock for the periods ended June 30, 2015 and September 30, 2015, due owing to the holder, the Company issued an aggregate of 227,345 shares of common stock, to the holder. The conversion and the related issuance was in accordance with the terms of the Certificate of Designations, and the Company has no further obligations to the holder with respect to the accrued dividends.

On July 24, 2015, the Company entered into an Independent Marketing Agreement with RFN Prime Marketing Inc., to provide among other items, certain sales and marketing deliverables to the Company in exchange for up to 2.55 million shares of restricted Company common stock which vest based on certain milestone achievements and/or transactions over a twenty-four month period.

On October 29, 2015, the Company issued 253,535 shares of common Stock to a licensor pursuant to the terms of a Software License and Development Agreement. The shares have an aggregate value of \$382,000 based on the 30 day trading day average of the Company's common stock immediately prior to July 29, 2015, the date that the License and Development Agreement was executed.

On March 7, 2016, the Company issued an aggregate of 507,070 shares of common stock pursuant to the terms of a Software License and Development Agreement. The shares have an aggregate value of \$765,000 based on the 30 day trading day average of the Company's common stock immediately prior to July 29, 2015, the date that the Software License and Development Agreement was executed.

In accordance with the terms of the Certificate of Designations, the Company elected to pay the dividend payable to the holders of the Series A redeemable convertible preferred stock for the period ended March 31, 2016 through the issuance of 143,737 shares of common stock.

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On April 1, 2016, the Company issued an aggregate of 591,582 shares of common stock pursuant to the terms of a Software License and Development Agreement. The shares have an aggregate value of \$892,500 based on the 30 day trading day average of the Company's common stock immediately prior to July 29, 2015, the date that the Software License and Development Agreement was executed.

In accordance with the terms of the Certificate of Designations, the Company elected to pay the dividend payable to the holders of the Series A redeemable convertible preferred stock for the period ended June 30, 2016 through the issuance of 186,062 shares of common stock.

In January 2016, in accordance with the terms of the Certificate of Designations, the Company elected to pay the dividend payable to the holders of the Series A redeemable convertible preferred stock for the period ended December 31, 2015 through the issuance to HCP-FVA of 103,200 shares of common stock.

In November 2016, in accordance with the terms of the Certificate of Designations, Preferences and Rights of Series A Convertible Preferred Stock, the Company elected to pay the dividends payable to the holders of the Series A redeemable convertible preferred stock for the period ended September 30, 2016, through the issuance to HCP-FVA of 191,010 shares of our common stock.

The common stock issued in the foregoing transactions was issued in accordance with the exemption provided by Section 4(2) of the Securities Act.

Item 16. Exhibits

- 3.1 Restated Certificate of Incorporation, incorporated herein by reference to Exhibit 3.1 to the Registrant's registration statement on Form S-1 (File no. 33-79350), filed on April 28, 1994.
- 3.2 Amended and Restated By-Laws of FalconStor Software, Inc., incorporated herein by reference to Exhibit 3.2 to the Registrant's annual report on Form 10-K for the year ended December 31, 2010, filed on March 14, 2011.
- 3.3 Certificate of Amendment to the Restated Certificate of Incorporation, incorporated herein by reference to Exhibit 3.3 to the Registrant's annual report on Form 10-K for the year ended December 31, 1998, filed on March 22, 1999.
- 3.4 Certificate of Amendment to the Restated Certificate of Incorporation, incorporated herein by reference to Exhibit 3.4 to the Registrant's annual report on Form 10-K for the year ended December 31, 2001, filed on March 27, 2002.
- 3.5 Certificate of Designations, Preferences and Rights of Series A Convertible Preferred Stock, incorporated herein by reference to Exhibit 4.1 to the Registrant's report on Form 8-K dated September 16, 2013.
- 4.1 2000 Stock Option Plan, as amended May 14, 2004, incorporated herein by reference to Exhibit 4.3 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2004, filed on March 16, 2005. 2007 Outside Directors Equity Compensation Plan, as amended May 8, 2008, incorporated herein by reference to
- 4.2Exhibit 99.2 to the Registrant's quarterly report on Form 10-Q for the quarter ended June 30, 2008, filed on August 11, 2008.
- 4.3 Amended and Restated 2006 Incentive Stock Plan incorporated herein by reference to Exhibit 4.1 to the Registrant's quarterly report on Form 10-Q for the quarter ended March 31, 2007, filed on May 9, 2007.
- 4.4 Form of Restricted Stock Letter Agreement for Executive Officers, incorporated herein by reference to Exhibit 99.1 to the Registrant's quarterly report on Form 10-Q for the period ended March 31, 2008, filed May 9, 2008.

4.5

Form of Restricted Stock Letter Agreement, incorporated herein by reference to Exhibit 4.1 to the Registrant's current report on Form 8-K filed on April 7, 2014.

FalconStor Software Inc., 2013 Outside Directors Equity Compensation Plan, incorporated herein by reference to 4.6the Registrant's Proxy Statement on Schedule 14A for the 2013 Annual meeting of Stockholders, filed on March 29, 2013.

4.7 FalconStor Software, Inc. 2016 Incentive Stock Plan, incorporated by reference to Exhibit A to the Proxy Statement on Schedule 14A dated March 18, 2016.

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- FalconStor Software, Inc. 2016 Outside Directors Equity Compensation Plan, incorporated by reference to Exhibit B to the Proxy Statement on Schedule 14A dated March 18, 2016.
- **5.1 Opinion of Olshan Frome Wolosky LLP as to the legality of the stock covered by this registration statement. Amended and Restated FalconStor Software, Inc., 2005 Key Executive Severance Protection Plan,
- 10.1 incorporated herein by reference to Exhibit 99.2 to Registrant's current report on Form 8-K filed on April 7, 2014.
- FalconStor Software, Inc., Director Compensation Deferral Plan, effective January 1, 2011, incorporated herein by reference to Registrant's annual report on Form 10-K, for the year ended December 31, 2010, filed on March 14, 2011
 - $Agreement\ of\ Lease\ between\ Huntington\ Quadrangle\ 2\ LLC\ and\ FalconStor\ Software\ Inc.,\ dated\ May\ 30,$
- 2013, with a commencement date of March 1, 2014, incorporated herein by reference to Exhibit 99.1 to the Registrant's quarterly report on Form 10-Q for the period ended September 30, 2013 filed on November 7, 2013.
- Employment Agreement dated July 24, 2015 between the Company and Gary Quinn, incorporated herein by reference to Exhibit 10.1 to the Registrant's quarterly report on Form 10-Q dated July 30, 2015.

 Preferred Stock Purchase Agreement dated as of September 16, 2013 between the Company and Hale Capital
- 10.5 Partners, LP, incorporated herein by reference to Exhibit 10.1 to the Registrant's report on Form 8-K dated September 16, 2013.
 - Independent Contractor Agreement dated July 24, 2015 between the Company and RFN Prime Marketing Inc.,
- 10.6 incorporated herein by reference to Exhibit 10.2 to the Registrant's quarterly report on Form 10-Q dated July 30, 2015.
- 10.7 Change in Registrant's Certifying Accountant, Letter of KPMG LLP, incorporated herein by reference to Exhibit 16.1 to the Registrant's report on Form 8-K dated June 16, 2015.
- Separation Agreement and General Release between FalconStor Software, Inc. and Louis Petrucelly, dated August 30, 2016, incorporated by reference to Exhibit 10.1 to the Form 8-K dated August 30, 2016. Key Employee Change in Control Severance Agreement between FalconStor Software, Inc. and Daniel
- 10.9 Murale, dated October 5, 2016, incorporated by reference to Exhibit 10.1 to the Form 8-K dated October 11, 2016.
 - Amendment No. 1 to Independent Contractor Agreement RFN Prime Marketing, Inc., dated August 15, 2016,
- 10.10 incorporated herein by reference to Exhibit 10.3 to the Registrant's quarterly report on Form 10-Q dated November 3, 2016.
 - Subsidiaries of Registrant FalconStor, Inc., FalconStor AC, Inc., FalconStor Software (Korea), Inc.,
- 21.1 incorporated herein by reference to Registrant's annual report on Form 10-K, for the year ended December 31, 2016, filed on March 10, 2017.
- *23.1 Consent of BDO USA, LLP, independent registered public accounting firm.
- **23.2 Consent of Olshan Frome Wolosky LLP (included in exhibit 5.1).
- *24.1 Powers of Attorney, included on the signature page to this Registration Statement.

**	Filed herewith.
**	Previously filed.

Item 17. Undertakings.

A. The undersigned registrant hereby undertakes:

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- To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933; To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or
- (ii) decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
- To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

 That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective
- (2) amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered that remain unsold at the termination of the offering.
 - That, for the purpose of determining liability under the Securities Act to any purchaser, if the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used
- (4) after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.
- B. The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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C. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Town of Melville, State of New York, on the 28th day of March, 2017.

FALCONSTOR SOFTWARE, INC.

(Registrant)

By:/s/ Gary Quinn
Gary Quinn
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints each of Gary Quinn and Daniel Murale his true and lawful attorneys-in-fact and agent, with full power of substitution and resubstitution, for and in his or her name, place and stead, in any and all capacities, to sign any or all amendments to this registration statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent, full power and authority to do and perform each and every act and thing requisite necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his or her substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the date indicated.

Signature	Title	Date
/s/ Gary Quinn Gary Quinn	President, Chief Executive Officer and Director (Principal Executive Officer)	March 28, 2017
/s/ Daniel Murale Daniel Murale	Executive Vice President, Chief Financial Officer, and Treasurer (Principal Financial Officer and Principal Accounting Officer)	March 28, 2017
/s/ Martin M. Hale Jr. Martin M. Hale Jr.	Director	March 28, 2017
/s/ Michael P. Kelly Michael P. Kelly	Director	March 28, 2017
/s/ Barry A. Rudolph	Director	March 28, 2017

Barry A. Rudolph

/s/ William D.

Miller

William D. Miller

Director

March 28, 2017

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EXHIBIT INDEX

- Restated Certificate of Incorporation, incorporated herein by reference to Exhibit 3.1 to the Registrant's registration statement on Form S-1 (File no. 33-79350), filed on April 28, 1994.
- Amended and Restated By-Laws of FalconStor Software, Inc., incorporated herein by reference to Exhibit 3.2 to the Registrant's annual report on Form 10-K for the year ended December 31, 2010, filed on March 14, 2011. Certificate of Amendment to the Restated Certificate of Incorporation, incorporated herein by reference to
- 3.3 Exhibit 3.3 to the Registrant's annual report on Form 10-K for the year ended December 31, 1998, filed on March 22, 1999.
 - Certificate of Amendment to the Restated Certificate of Incorporation, incorporated herein by reference to
- 3.4 Exhibit 3.4 to the Registrant's annual report on Form 10-K for the year ended December 31, 2001, filed on March 27, 2002.
- Certificate of Designations, Preferences and Rights of Series A Convertible Preferred Stock, incorporated herein by reference to Exhibit 4.1 to the Registrant's report on Form 8-K dated September 16, 2013.
- 4.1 2000 Stock Option Plan, as amended May 14, 2004, incorporated herein by reference to Exhibit 4.3 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2004, filed on March 16, 2005. 2007 Outside Directors Equity Compensation Plan, as amended May 8, 2008, incorporated herein by reference
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** Filed herewith.

** Previously filed.