

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

AMENDMENT NO. 1 TO

FORM S-3

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

NETWORK-1 SECURITY SOLUTIONS, INC.

(Exact Name of Registrant as Specified in its Charter)

DELAWARE

11-3027591

(State or other jurisdiction
of incorporation)

(I.R.S. employer
identification number)

1601 TRAPELO ROAD, RESERVOIR PLACE
WALTHAM, MASSACHUSETTS 02451
(781) 522-3400

(Address, including zip code, and telephone number, including area code,
of Registrant's principal executive offices)

MURRAY P. FISH
PRESIDENT AND CHIEF FINANCIAL OFFICER
NETWORK-1 SECURITY SOLUTIONS, INC.
1601 TRAPELO ROAD, RESERVOIR PLACE
WALTHAM, MASSACHUSETTS 02451
(781) 522-3400

(Address, including zip code, and telephone number, including area code,
of agent for service)

COPIES TO:
SAM SCHWARTZ, ESQ.
OLSHAN GRUNDMAN FROME ROSENZWEIG & WOLOSKY LLP
505 PARK AVENUE
NEW YORK, NEW YORK 10022
(212) 753-7200

APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO PUBLIC: As soon as
practicable after the Registration Statement becomes effective.

If the only securities being registered on this form are being offered
pursuant to dividend or interest reinvestment plans, please 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 1993, other than securities offered only in connection with dividend or
interest reinvestment plans, check the following box:

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 registration statement for the same offering: _____

If the delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box:

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 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(A), MAY DETERMINE.

The information in this prospectus is not complete and may be changed. We 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 is not seeking an offer to buy these securities in any state where the offer or sale is not permitted.

FEBRUARY 12, 2002

PROSPECTUS

NETWORK-1 SECURITY SOLUTIONS, INC.

14,209,610 SHARES OF COMMON STOCK

- o The shares of common stock offered by this prospectus are being sold by the selling stockholders.
- o We will not receive any proceeds from the sale of these shares. We will receive proceeds from the exercise of warrants and those proceeds will be used for our general corporate purposes.
- o Our common stock is traded on the Nasdaq Stock Market's SmallCap Market under the symbol "NSSI".
- o On February 11, 2002, the average of the bid and ask prices for our common stock was \$1.94.

THE SECURITIES OFFERED IN THIS PROSPECTUS INVOLVE A HIGH DEGREE OF RISK. YOU SHOULD CAREFULLY CONSIDER THE FACTORS DESCRIBED UNDER THE HEADING "RISK FACTORS" BEGINNING ON PAGE 4 OF THIS PROSPECTUS.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ADEQUACY OR ACCURACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

February 12, 2002

TABLE OF CONTENTS

PAGE

SUMMARY.....1

RISK FACTORS.....	4
We Have A History Of Losses And If We Do Not Achieve Profitability, We May Not Be Able To Continue Our Business In The Future.....	4
We Could Be Required To Cut Back Or Stop Operations If We Are Unable To Raise Or Obtain Needed Funding.....	4
We Have Not Achieved Substantial Revenue From Software Sales.....	5
Our Revenues Depend On Sales Of Our CYBERWALLPLUS Products And We Are Uncertain Whether There Will Be Broad Market Acceptance Of These Products.....	5
We Need to Hire a Chief Executive Officer And We Need To Attract And Retain Highly Qualified Technical, Sales, Marketing, Development And Management Personnel.....	5
Control by Barry Rubenstein, Wheatley Affiliates and FalconStor Software, Inc.	5
We Require The Consent Of The Holders Of Series E Preferred Stock For Certain Corporate Action.....	6
World Instability - Terrorism.....	6
Our Inability To Enter Into Strategic Relationships With Indirect Channel Partners Could Have A Material Adverse Effect On Us.....	6
The Sale Of Our Professional Services Business Has Had An Adverse Effect On Cash Flow And Revenues.....	6
We May Not Be Able To Successfully Compete In The Network Security Market.....	6
We May Not Be Able To Adequately Protect Our Proprietary Technology, Which Could Result In Lower Revenues And/Or Profits.....	7
We Can Be Exposed To Numerous Potential Liability Claims For Damages And, If Our Insurance Doesn't Adequately Cover Losses, This Could Have A Material Adverse Effect On Us.....	7
Possible Delisting Of Our Securities From Nasdaq; Risks Relating To Low-Priced Stocks.....	8
Favorable License And Distribution Agreement Received by FalconStor Software, Inc.	8
Our Operating Results May Fluctuate Quarterly And If They Were Below The Expectations Of Investors And Analysts, The Price Of Our Stock Would Likely Be Adversely Effected.....	8
The Significant Number Of Options, Warrants And Convertible Securities May Adversely Affect The Market Price Of Our Common Stock.....	9
We Have A Significant Amount Of Authorized But Unissued Preferred Stock, Which May Affect The Likelihood Of A Change Of Control In Our Company.....	9
WHERE YOU CAN FIND MORE INFORMATION.....	9
INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE.....	10
NOTE REGARDING FORWARD-LOOKING STATEMENTS.....	10
USE OF PROCEEDS.....	11
SELLING STOCKHOLDERS.....	12

PLAN OF DISTRIBUTION.....21

LEGAL MATTERS.....23

EXPERTS.....23

DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR
SECURITIES ACT LIABILITIES.....23

SUMMARY

THE COMPANY

We develop, market, license and support a family of network security software products designed to provide comprehensive security to computer networks, including Internet-based systems, internal networks and computing resources. Our CYBERWALLPLUS(TM) family of security software products combines the benefits of firewall and intrusion detection technology with central management features to provide an enterprise-class layer of security protection directly on servers, desktops, wireless and mobile computers.

CYBERWALLPLUS's distributed intrusion prevention technology provides a layer of defense immediately between host machines and the network, complementing network-based security solutions. This bi-directional layer of defense contains mechanisms to protect the network from the host machine, as well as protecting the host machine from the network, regardless of whether the source of attack is inside or outside the organization. CYBERWALLPLUS continues to protect mobile computers even when they connect to networks outside the organization's control.

CYBERWALLPLUS represents the latest generation of our security products which integrates a powerful range of security techniques to actively detect and block intrusions. This technology provides the fine-grained access control, bi-directional protection and stateful packet inspection typically found in high-end perimeter firewalls, combined with powerful intrusion detection and prevention capabilities. CYBERWALLPLUS's policy management enables detailed security policies to be formulated, distributed, and monitored, maximizing IT security resources.

Every day, more and more companies are turning to the Internet as a way to obtain a competitive edge and broaden their markets. The Internet revolution is helping companies reduce costs, increase responsiveness and provide empowerment through immediate knowledge. However, by tying together disparate company networks, and inviting customers, partners and suppliers onto their networks, companies have found that what were once closed and secure enterprise networks are now becoming open networks accessible to authorized and, in many instances, unauthorized users.

Within these new open networks, traditional perimeters and network boundaries have disappeared. We do not believe traditional perimeter security devices such as firewalls can effectively secure all of a network's resources. The CYBERWALLPLUS family of products is designed to address this problem by securing the host computer which has the dual result of protecting its data as well as protecting other network resources from attacks originating from that computer. We believe this will allow organizations to leverage the promise of electronic business, while ensuring the safety of their strategic assets.

Key elements of our strategy are to:

- o Secure an organization's most important servers. This includes database servers for confidential or sensitive data and application servers critical to business operations by replacing or complimenting perimeter firewalls with our server based firewalls and intrusion

prevention software;

- o Secure an organization's most vulnerable client computers. This includes workstations as well as mobile laptop computers which are particularly vulnerable to threats when outside the corporate network and represent an ever increasing percentage of the user community;
- o Emphasize internal network security as an important element of an effective multi-layer defense strategy; and
- o Implement a sales plan that utilizes a multi-channel distribution strategy, including selling direct to end user customers and establishing and maintaining indirect third-party resale relationships with OEMs, systems integrators and VARs in the United States and internationally.

We were incorporated under the laws of the State of Delaware in July 1990. Our executive offices are located at 1601 Trapelo Road, Reservoir Place, Waltham, Massachusetts 02451 and our telephone number at that address is (781) 522-3400. Our web site can be found at <http://www.network-1.com>.

RECENT DEVELOPMENTS

OCTOBER 2001 PRIVATE FINANCING

On October 2, 2001, we completed a private offering of \$6,765,000 of preferred stock and warrants to a group of investors. In such financing we issued 3,191,037 shares of our Series E Preferred Stock at \$2.12 per share and warrants to purchase 6,882,074 shares of our common stock at an exercise price of \$1.27 per share, subject to certain adjustments. Each share of our Series E Preferred Stock is convertible into two shares of our common stock, subject to certain adjustments. The lead investors in such financing were Wheatley Partners, II, L.P., one of our principal stockholders, and related parties, and FalconStor Software, Inc. (Nasdaq: FALC), a storage networking infrastructure software company. FalconStor Software, Inc., as the largest investor in the private offering, received an additional five-year warrant to purchase 500,000 shares of our common stock at an exercise price of \$1.27 per share.

The resale by the selling stockholders of the shares of our common stock underlying the Series E Preferred Stock and the accompanying warrants has been registered under the Securities Act of 1933, as amended, and such shares of common stock may be freely sold.

2

The following is a summary of material terms of the Series E Preferred Stock and the warrants issued in the financing:

SERIES E PREFERRED STOCK

Holders of shares of our Series E Preferred Stock may convert each such share into two shares of our common stock at any time, subject to adjustment in the event of our merger or consolidation, reclassification of our securities or a stock split, subdivision or combination of our securities. The Series E Preferred Stock is entitled to vote on all matters which stockholders are entitled to vote together with the holders of our common stock. Each share of Series E Preferred Stock is entitled to the number of votes equal to the number of shares of our common stock into which such shares may be converted.

Holders of our Series E Preferred Stock shall receive dividends and other distributions, when, as and if declared by our Board of Directors out of funds legally available therefor. Holders of our Series E Preferred Stock shall be entitled to equivalent dividends and distributions as those paid on shares of our common stock. The holders of our Series E Preferred Stock will be entitled to a liquidation preference of \$2.12 plus any declared but unpaid dividends before any payments are made to holders of our common stock in the event of our liquidation, dissolution or winding up.

We agreed that so long as the holders of the outstanding shares of Series E Preferred Stock own at least 10% of our outstanding voting stock, we will not take certain actions without the consent of Wheatley Partners, II, L.P., the designee of the holders of Series E Preferred Stock and one of our

principal stockholders. Such actions requiring the consent of Wheatley Partners, II, L.P. includes, among others, (i) issuing securities other than securities to be issued under our stock option plan, (ii) incurring debt in excess of \$250,000, (iii) entering into a merger, acquisition or sale of substantially all of our assets and (iv) taking any action to amend our Certificate of Incorporation or By-laws that could in any way adversely affect the rights of the holders of the Series E Preferred Stock.

WARRANTS

At any time until October 2, 2003 (except for the additional five (5) year warrant to purchase 500,000 shares of our common stock issued to FalconStor Software, Inc.), the holder of a warrant is entitled to purchase the number of shares of our common stock listed in such warrant, at a price of \$1.27 per share. The exercise price and the number of shares received upon exercise may also be adjusted in the event of a stock split, dividend, recapitalization, reorganization, merger, consolidation or sale of our assets, or the issuance by us of shares of our common stock at a price less than the then adjusted exercise price.

FALCONSTOR TECHNOLOGY LICENSE AGREEMENT

Simultaneously with the closing of the October 2001 Financing, we entered into a ten (10) year Technology License Agreement, pursuant to which FalconStor Software, Inc. shall have the right to distribute our product offerings in its indirect and OEM channels. As part of the Technology License Agreement, FalconStor paid us a non-refundable advance of \$500,000 against future royalty payments. For accounting purposes, revenue resulting from this agreement will be subject to existing guidance on revenue recognition.

RISK FACTORS

THE SHARES OFFERED HEREBY ARE SPECULATIVE AND INVOLVE A HIGH DEGREE OF RISK. EACH PROSPECTIVE INVESTOR SHOULD CAREFULLY CONSIDER THE FOLLOWING RISK FACTORS BEFORE MAKING AN INVESTMENT DECISION.

WE HAVE A HISTORY OF LOSSES AND IF WE DO NOT ACHIEVE PROFITABILITY, WE MAY NOT BE ABLE TO CONTINUE OUR BUSINESS IN THE FUTURE.

We have incurred substantial operating losses since our inception, which has resulted in an accumulated deficit of \$30,538,000 as of September 30, 2001. For the years ended December 31, 2000 and 1999, and the nine (9) months ended September 30, 2001, we incurred net losses of \$4,789,000, \$6,946,000 (excludes \$1,500,000 of an imputed preferred stock dividend) and \$4,056,000, respectively. Since September 30, 2001, we have continued to incur substantial operating losses. We have financed our operations primarily through the sales of equity and debt securities as well as the sale of our professional services business in February 2000. Our expense levels are high and our revenues are difficult to predict. We anticipate incurring additional losses until we increase our client base and revenues. We may never achieve or sustain significant revenues or profitability. If we are unable to achieve increased revenues, we will continue to have losses and may not be able to continue our operations.

WE COULD BE REQUIRED TO CUT BACK OR STOP OPERATIONS IF WE ARE UNABLE TO RAISE OR OBTAIN NEEDED FUNDING.

We anticipate, based on our currently proposed plans and assumptions (including the timetable of, costs and expenses associated with, and success of, our marketing efforts), that our current cash position and projected revenues from operations, will more likely than not be sufficient to satisfy our operations and capital requirements for up to twelve (12) months. There can be no assurance, however, that such funds will not be expended prior thereto due to unanticipated changes in economic conditions or other unforeseen circumstances. In the event our plans change, or our assumptions change or prove to be inaccurate (due to unanticipated expenses, difficulties, delays or otherwise),

or the projected revenues otherwise prove to be insufficient to fund our working capital requirements, we could be required to seek additional financing sooner than currently anticipated. We have no current arrangements with respect to any additional financing. Consequently, there can be no assurance that any additional financing will be available to us when needed, on commercially reasonable terms or at all. Any inability to obtain additional financing when needed would have a material adverse effect on our operations, requiring us to curtail and possibly cease operations.

4

WE HAVE NOT ACHIEVED SUBSTANTIAL REVENUE FROM SOFTWARE SALES.

We have had only limited sales of our products. Our total revenues for software licenses for the years ended December 31, 2000 and 1999 and the nine months ended September 30, 2001 were \$978,000, \$260,000 and \$720,000, respectively.

OUR REVENUES DEPEND ON SALES OF OUR CYBERWALLPLUS PRODUCTS AND WE ARE UNCERTAIN WHETHER THERE WILL BE BROAD MARKET ACCEPTANCE OF THESE PRODUCTS.

Our revenue growth for the foreseeable future is dependent upon increased sales of our CYBERWALLPLUS family of software products. Since the introduction of our CYBERWALLPLUS suite of products in January 1999 through September 30, 2001, license revenue from our CYBERWALLPLUS products was only \$1,887,000. Our future financial performance will depend upon the successful introduction and customer acceptance of our CYBERWALLPLUS products as well as the development of new and enhanced versions of this product. Revenue from products such as CYBERWALLPLUS depend on a number of factors, including the influence of market competition, technological changes in the network security market, our ability to design, develop and introduce enhancements on a timely basis and our ability to successfully establish and maintain distribution channels. If we fail to achieve broad market acceptance of our CYBERWALLPLUS products, it would have a material adverse effect on our business, operating results and financial condition.

WE NEED TO HIRE A CHIEF EXECUTIVE OFFICER AND WE NEED TO ATTRACT AND RETAIN HIGHLY QUALIFIED TECHNICAL, SALES, MARKETING, DEVELOPMENT AND MANAGEMENT PERSONNEL.

In June 2001, Avi Fogel resigned as our Chief Executive Officer, President and a Director. Murray Fish, our Chief Financial Officer, is serving as acting President. We are conducting a search for a new Chief Executive Officer. The market for hiring qualified Chief Executive Officer's in the network security field is highly competitive. If we are unable to hire and retain a qualified Chief Executive Officer, our business, operating results and financial condition could be materially adversely affected.

Our success will also depend on our ability to attract, train and retain highly qualified technical, sales, marketing, development and management personnel. There is considerable and often intense competition for the services of such personnel. We may not be able either to retain our existing personnel or acquire additional qualified personnel as and when needed. If we are unable to hire and retain such personnel, our business, operating results and financial condition could be materially adversely affected.

CONTROL BY BARRY RUBENSTEIN, WHEATLEY AFFILIATES AND FALCONSTOR SOFTWARE, INC.

Barry Rubenstein, Wheatley Partners II, L.P. and other affiliated and related entities and parties (the "Wheatley Parties") currently own 32.2% of our outstanding voting stock (exclusive of any securities owned by FalconStor Software, Inc.). In addition, FalconStor Software, Inc. currently owns 16% of our outstanding voting stock. Barry Rubenstein owns 15.5% of the outstanding voting securities of FalconStor and other Wheatley affiliates own an additional 6.1% of the outstanding voting securities of FalconStor Software, Inc. Accordingly, Barry Rubenstein and the Wheatley Parties together with FalconStor currently own 48.3% of our outstanding voting securities (and beneficially own options and warrants to purchase an additional 28.4% of our outstanding voting securities) and as a result of their aggregate holdings would have the ability to control the outcome of all matters submitted to a vote of our stockholders including the election of directors, amendments to our Certificate of

Incorporation and approval of mergers and a sale of substantially all of our assets. Such consolidation of voting power could also have the effect of delaying, deterring or preventing a change in control of our company that might be beneficial to other stockholders.

5

WE REQUIRE THE CONSENT OF THE HOLDERS OF SERIES E PREFERRED STOCK FOR CERTAIN CORPORATE ACTION.

In connection with our private offering of \$6,765,000 of Series E Preferred Stock and warrants completed in October 2001, we agreed that so long as the holders of the outstanding shares of Series E Preferred Stock own at least 10% of our outstanding voting stock, we will not take certain actions without the consent of Wheatley Partners II, L.P., the designee of the holders of Series E Preferred Stock and one of our principal stockholders. Such actions requiring the consent of Wheatley Partners II, L.P. include, among others, (i) issuing securities other than securities to be issued under our stock option plan, (ii) incurring debt in excess of \$250,000, (iii) entering into a merger, acquisition or sale of substantially all of our assets and (iv) taking any action to amend our Certificate of Incorporation or By-laws that could in any way adversely affect the rights of the holders of the Series E Preferred Stock. Accordingly, the Series E Holders may not consent to certain actions that we may consider to be in our best interest and the best interest of the holders of Common Stock. For more information regarding the rights and preferences of the Series E Preferred Stock, see our Current Report on Form 8-K filed with the SEC on October 12, 2001.

WORLD INSTABILITY - TERRORISM.

The recent terrorist attacks in the United States and the declaration of war by the United States against terrorism has created significant instability and uncertainty in the world which may continue to have a material adverse effect on world financial markets, including financial markets in the United States. In addition, such adverse political events may have an adverse impact on economic conditions in the United States. Unfavorable economic conditions in the United States may have an adverse effect on our financial operations including, but not limited to, our ability to expand the market for our products, obtain necessary financing, enter into strategic relationships and effectively compete in the network security market.

OUR INABILITY TO ENTER INTO STRATEGIC RELATIONSHIPS WITH INDIRECT CHANNEL PARTNERS COULD HAVE A MATERIAL ADVERSE EFFECT ON US.

As part of our sales and marketing efforts, we are seeking to develop strategic relationships with indirect channel partners, such as original equipment manufacturers and resellers. We have limited financial, personnel and other resources to undertake extensive marketing activities ourselves. Therefore, our prospects will depend on our ability to develop and maintain strategic marketing relationships with indirect channel partners and their ability to market and distribute our products. If we are unable to enter into and maintain such arrangements or if such arrangements do not result in the successful commercialization of our products, then this could have a material adverse effect on our business, operating results and financial condition.

THE SALE OF OUR PROFESSIONAL SERVICES BUSINESS HAS HAD AN ADVERSE EFFECT ON CASH FLOW AND REVENUES.

In February 2000, we sold our professional services business to Exodus Communications Inc. for \$3.815 million in cash. As part of the transaction with Exodus, we agreed not to offer any professional or consulting services for two (2) years following the closing until February 2002. The professional services business accounted for 77% and 62% of our total revenues during the fiscal years ended December 31, 1999 and 1998, respectively. Accordingly, cash flow from operations has been and may continue to be materially adversely effected from the sale of our professional services business until, if ever, we generate sufficient revenue from the licensing of our software products.

WE MAY NOT BE ABLE TO SUCCESSFULLY COMPETE IN THE NETWORK SECURITY MARKET.

The network security market is characterized by intense competition

and rapidly changing business conditions, customer requirements and technologies. The principal competitive factors affecting the market for network security products include security effectiveness, scope of product offerings, name recognition, product features, distribution channels, price, ease of use and customer service and support. Most of our current and potential competitors have longer operating histories, greater name recognition, larger installed customer bases and possess substantially greater financial, technical and marketing and other competitive resources than us. As a result, our competitors may be able to adapt more quickly to new or emerging technologies

6

and changes in customer requirements or to devote greater resources to the promotion and sale of their products than we may. In addition, certain of our competitors may determine for strategic reasons to consolidate, to substantially lower the price of their network security products or to bundle their products with other products, such as hardware or other enterprise software products. Our current and potential competitors may develop products that may be more effective than our current or future products or that render our products obsolete or less marketable. Increased competition for network security products may result in price reductions and reduced gross margins and may adversely affect our ability to gain market share, any of which would adversely affect the Company's business, operating results and financial condition.

WE MAY NOT BE ABLE TO ADEQUATELY PROTECT OUR PROPRIETARY TECHNOLOGY, WHICH COULD RESULT IN LOWER REVENUES AND/OR PROFITS.

We do not hold any patents and rely on copyright and trade secret laws, non-disclosure agreements and contractual provisions to protect our proprietary technology. These methods afford only limited protection. Despite the precautions we take, unauthorized parties may attempt to copy or otherwise obtain and use our proprietary technologies, ideas, know-how and other proprietary information without authorization or may independently develop technologies similar or superior to our technologies. Policing unauthorized use of our products may be difficult and costly. Also, the laws of some foreign countries do not protect our proprietary rights as much as the laws of the United States. We are unable to predict whether our means of protecting our proprietary rights will be adequate.

We believe that our technologies have been developed independent of others. Nevertheless, third parties may assert infringement claims against us and our technologies may be determined to infringe on the intellectual property rights of others. We could become liable for damages, be required to modify our technologies or obtain a license if our technologies are determined to infringe upon the intellectual property rights of others. We may not be able to modify our technologies or obtain a license in a timely manner, if required, or have the financial or other resources necessary to defend an infringement action. We would be materially adversely effected if we fail to do any of the foregoing.

WE CAN BE EXPOSED TO NUMEROUS POTENTIAL LIABILITY CLAIMS FOR DAMAGES AND, IF OUR INSURANCE DOESN'T ADEQUATELY COVER LOSSES, THIS COULD HAVE A MATERIAL ADVERSE EFFECT ON US.

Since our products are used to prevent unauthorized access to and attacks on critical enterprise information, we may be exposed to potential liability claims for damage caused as a result of an actual or alleged failure of an installed product. We cannot assure you that the provisions in our standard license agreements designed to limit our exposure will be enforceable. Our personnel often gain access to confidential and proprietary client information. Any unauthorized use or disclosure of such information could result in a claim for substantial damages. We can give no assurances that our insurance policies will be sufficient to cover potential claims or that adequate levels of coverage will be available in the future at a reasonable cost.

7

POSSIBLE DELISTING OF OUR SECURITIES FROM NASDAQ; RISKS RELATING TO LOW-PRICED STOCKS.

Our common stock is listed on The Nasdaq Stock Market's SmallCap Market under the symbol "NSSI." In order for our common stock to continue to be listed on Nasdaq, however, we must comply with certain maintenance standards. In the event of a delisting, an investor could find it more difficult to dispose of

or to obtain accurate quotations as to the market value of our common stock.

In addition, if our common stock were to become delisted from trading on Nasdaq and the trading price of our common stock were to then be below \$5.00 per share, our common stock could be considered a penny stock. SEC regulations generally define a penny stock to be an equity security that is not listed on Nasdaq or a national securities exchange and that has a market value of less than \$5.00 per share, subject to certain exceptions. The SEC regulations would require broker-dealers to deliver to a purchaser of our common stock a disclosure schedule explaining the penny stock market and the risks associated with it. Various sales practice requirements are also imposed on broker-dealers who sell penny stocks to persons other than established customers and accredited investors (generally institutions). Broker-dealers must also provide the customer with current bid and offer quotations for the penny stock, the compensation of the broker-dealer and monthly account statements disclosing recent price information for the penny stock held in the customer's account. If our common stock is no longer traded on Nasdaq and becomes subject to the regulations applicable to penny stocks, investors may find it more difficult to obtain timely and accurate quotes and execute trades in our common stock.

FAVORABLE LICENSE AND DISTRIBUTION AGREEMENT RECEIVED BY FALCONSTOR SOFTWARE, INC.

On October 2, 2001, we entered into a License and Distribution Agreement with FalconStor Software, Inc. pursuant to which FalconStor Software, Inc. has the right to distribute, on a non-exclusive basis, our product offerings in its indirect and OEM channels. Simultaneously and conditioned upon entering into the License and Distribution Agreement, FalconStor Software, Inc. invested \$2,300,000 in our private offering of \$6,765,000 of preferred stock and warrants. FalconStor Software, Inc. currently owns 16% of our outstanding voting stock (27.6% assuming the exercise of currently exercisable warrants to purchase 2,169,870 shares of common stock). FalconStor Software, Inc., as the largest investor in the private offering, was able to negotiate terms (and may receive additional benefits in the future) with respect to the License and Distribution Agreement which would likely have not been available to other licensees and distributors who were not simultaneously making a significant investment in our securities.

OUR OPERATING RESULTS MAY FLUCTUATE QUARTERLY AND IF THEY WERE BELOW THE EXPECTATIONS OF INVESTORS AND ANALYSTS, THE PRICE OF OUR STOCK WOULD LIKELY BE ADVERSELY EFFECTED.

We anticipate significant quarterly fluctuations in our operations in the future, since our results are dependent on the volume and timing of orders, which are difficult to predict. Customers' purchasing patterns and budgeting cycles, as well as the introduction of new products, may also cause our operating results to fluctuate. Therefore, comparing quarterly operating results may not be meaningful and should not be relied on. Also, our operating results may be below analysts' and investors' expectations in some future quarters, which would likely have a material adverse effect on the price of our common stock.

8

THE SIGNIFICANT NUMBER OF OPTIONS, WARRANTS AND CONVERTIBLE SECURITIES MAY ADVERSELY AFFECT THE MARKET PRICE OF OUR COMMON STOCK.

As of the date of this prospectus, there are outstanding (i) options and warrants to purchase an aggregate of 11,599,990 shares of our common stock at exercise prices ranging from \$.70 to \$10.125 (ii) 3,422,091 shares of convertible preferred stock which are convertible at any time into 6,773,551 shares of our common stock and (iii) 1,813,176 additional shares of our common stock which may be issued in the future under our stock option plan. To the extent that outstanding options and warrants are exercised or converted, your percentage ownership will be diluted and any sales in the public market of the common stock underlying such options, warrants or convertible debt may adversely affect prevailing market prices for our common stock.

WE HAVE A SIGNIFICANT AMOUNT OF AUTHORIZED BUT UNISSUED PREFERRED STOCK, WHICH MAY AFFECT THE LIKELIHOOD OF A CHANGE OF CONTROL IN OUR COMPANY.

As of the date of this prospectus, our Board of Directors has the authority, without further action by the stockholders, to issue 10,000,000 shares of preferred stock (of which only 231,054 shares of Series D Preferred Stock are outstanding and 3,191,037 shares of Series E Preferred Stock are outstanding) on such terms and with such rights, preferences and designations as the Board may determine. Such terms may include restricting dividends on our common stock, dilution of the voting power of our common stock or impairing the liquidation rights of the holders of our common stock. Issuance of such preferred stock, depending on the rights, preferences and designations thereof, may have the effect of delaying, deterring or preventing a change in control. In addition, certain "anti-takeover" provisions in Delaware law may restrict the ability of our stockholders to authorize a merger, business combination or change of control.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC's Public Reference Room at 450 Fifth Street, N.W., Washington, D.C. 20549. The SEC has prescribed rates for copying. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Our SEC filings are also available to you on the SEC's Internet site at <http://www.sec.gov>.

This prospectus is part of a Registration Statement on Form S-3 filed by us with the SEC under the Securities Act and therefore omits certain information in the Registration Statement. We have also filed exhibits with the Registration Statement that are not included in this prospectus, and you should refer to the applicable exhibit for a complete description of any statement referring to any document. You can inspect a copy of the Registration Statement and its exhibits, without charge, at the SEC's Public Reference Room, and can copy such material upon paying the SEC's prescribed rates.

9

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference the information we file with them, which means that we can disclose important information to you by referring you to those documents. The information we incorporate by reference is considered to be part of this prospectus, and information that we file later with the SEC will automatically update and supersede the information in this prospectus. Accordingly, we incorporate by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934:

1. our Annual Report on Form 10-KSB/A for the year ended December 31, 2000 (filed April 30, 2001);
2. our Quarterly Report on Form 10-QSB for the quarter ended March 31, 2001 (filed May 21, 2001);
3. our Quarterly Report on Form 10-QSB for the quarter ended June 30, 2001 (filed August 20, 2001);
4. Our Quarterly Report on Form 10-QSB for the quarter ended September 30, 2001 (filed November 19, 2001)
5. Our Current Report on Form 8-K (filed June 15, 2001);
6. Our Current Report on Form 8-K (filed October 12, 2001); and
7. The description of our common stock incorporated by reference in our Registration Statement on Form 8-A (filed October 9, 1998), as amended on November 3, 1998.

We will provide at no cost to each person to whom this prospectus is delivered, upon written or oral request, a copy of any of these filings, excluding the exhibits to such filings that we have not specifically incorporated by reference in such filings. You should direct such requests to us at 1601 Trapelo Road, Reservoir Place, Waltham, Massachusetts 02451, Attention: Murray Fish, President and Chief Financial Officer, telephone number (781) 522-3400.

You should rely only on the information and representations provided in this prospectus or on the information incorporated by reference in this prospectus. Neither we, nor the selling stockholders have authorized anyone to provide you with different information. Neither we nor the selling stockholders are making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus is accurate as of any date other than the date on the front of this document unless otherwise specifically stated.

NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains certain forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. Forward-looking statements are statements that include information based upon beliefs of our management, as well as assumptions made by and information available to our management. Statements containing terms such as

10

"believes," "expects," "anticipates," "intends" or similar words are intended to identify forward-looking statements.

Our management, based upon assumptions they consider reasonable, has compiled these forward-looking statements. Such statements reflect our current views with respect to future events. These statements involve known and unknown risks and uncertainties that may cause our actual results in future periods to differ materially from what is currently anticipated. We make cautionary statements in certain sections of this prospectus, including under "Risk Factors." You should read these cautionary statements as being applicable to all related forward-looking statements wherever they appear in this prospectus, the materials referred to in this prospectus or the materials incorporated by reference into this prospectus.

You are cautioned that no forward-looking statement is a guarantee of future performance and you should not place undue reliance on any forward-looking statement. Such statements speak only as of the date of this prospectus and we are not undertaking any obligation to publicly release any revisions to these forward-looking statements to reflect events or circumstances after the date of this prospectus or to reflect the occurrence of unanticipated events.

USE OF PROCEEDS

We will not receive any proceeds from the sale of the shares of our common stock by the selling stockholders. All proceeds from the sale of such shares will be for the accounts of the selling stockholders. We will receive approximately \$10,709,606 in proceeds, equal to the exercise price of the warrants, if the holders of the warrants referenced in this prospectus exercise such securities into shares of our common stock. Any proceeds that we may receive upon exercise of the warrants will be used for working capital purposes.

11

SELLING STOCKHOLDERS

The following table sets forth information, as of January 1, 2002, with respect to the voting stock (common stock and convertible preferred stock) beneficially owned by each selling stockholder. The selling stockholders are not obligated to sell any of the shares offered by this prospectus. The number of shares sold by each selling stockholder may depend on a number of factors, such as the market price of our common stock.

We are registering 14,209,610 shares of our common stock for resale by the selling stockholders in accordance with registration rights previously granted to them. We agreed to file a registration statement under the Securities Act with the SEC, of which this prospectus is a part, with respect to the resale of:

- o an aggregate of 6,382,074 shares that we may issue upon conversion of the Series E Preferred Stock issued in October 2001;

- o an aggregate of 6,882,074 shares that we may issue upon the exercise of warrants issued in connection with the Series E Preferred Stock offering completed in October 2001;
- o an aggregate of 550,000 shares that we may issue upon the exercise of warrants issued to CMH Capital Management Corp. in June 2001 and October 2001;
- o an aggregate of 135,462 shares that we may issue upon exercise of warrants issued to Sage Alliance, Inc. in April 2001, July 2001 and October 2001;
- o an aggregate of 200,000 shares that we may issue upon exercise of warrants issued to BusinessDevelopment.com, LLC in November 2000; and
- o an aggregate of 60,000 shares that we may issue upon exercise of warrants issued to Lipman Capital Group, Inc. in October 2000, January 2001 and February 2001.

The number of shares shown in the following table as being offered by the selling stockholders do not include such presently indeterminate number of additional shares of our common stock that may be issuable as a result of stock splits, stock dividends and similar transactions. Pursuant to Rule 416 under the Securities Act, however, such shares are included in the Registration Statement of which this prospectus is a part.

The selling stockholders may sell any or all of their shares listed below from time to time. Accordingly, we cannot estimate how many shares the selling stockholders will own upon consummation of any such sales. Also, the selling stockholders may have sold, transferred or otherwise disposed of all or a portion of their shares since the date on which the information was provided in transactions exempt from the registration requirements of the Securities Act.

None of the selling stockholders has had a material relationship with us within the past three years other than as a result of the ownership of our securities except: (i) CMH Management Corp., owned by Corey Horowitz, our Chairman of the Board of Directors, renders consulting services to us (as disclosed in our 10-QSB for the quarter ended June 30, 2001 and Exhibit 10.4 to the Registration Statement of which this Prospectus forms a part), (ii) FalconStor Software, Inc. entered into a License and Distribution Agreement with us on October 2, 2001 (as disclosed in Exhibit 10.21 in our Current Report on Form 8-K filed with the Securities and Exchange Commission on October 12, 2001), (iii) EarlyBirdCapital, Inc., of which David Nussbaum is an affiliate, renders financial advisory and investment banking services to us (as disclosed in Exhibit 10.3 of the Registration Statement of which this Prospectus forms a part), (iv) Sage Alliance Inc. rendered consulting services to us (as disclosed in our 10-QSB for the quarter ended June 30, 2001), (v) Lipman Capital Group, Inc. rendered public relations services to us (as disclosed in our 10-QSB for the quarter ended March 31, 2001) and (vi) Business Development.com, Inc. rendered consulting services to us (as disclosed in our 10-KSB for the year ended December 31, 2000).

12

<TABLE><CAPTION>

NAME	NUMBER OF SHARES		PERCENTAGE OF	
	NUMBER OF SHARES	NUMBER OF SHARES	NUMBER OF SHARES	OUTSTANDING COMMON
	BENEFICIALLY OWNED	BEING OFFERED	BENEFICIALLY OWNED	STOCK AFTER
	PRIOR TO OFFERING(1)		AFTER OFFERING(1)(2)	OFFERING(1)
<S>	<C>	<C>	<C>	<C>
Barry Rubenstein	5,523,257(3)	188,676	2,221,385	15.8%
FalconStor Software, Inc.	4,339,740(4)	4,839,740	0	0
Irwin Lieber	2,882,382(5)	660,376	1,467,294	10.7%
Barry Fingerhut	2,792,978(6)	660,376	1,377,890	10.1%
Jonathan Lieber	2,179,198(7)	47,168	1,235,810	9.1%
Seth Lieber	2,001,195(8)	47,168	1,199,315	8.8%

Wheatley Partners II, L.P.	1,572,015(9)	377,356	1,194,659	8.8%
Corey Horowitz	1,339,749(10)	550,000	648,241	4.6%
Woodland Venture Fund	1,305,072(11)	849,056	456,016	3.3%
Seneca Ventures	946,347(12)	660,376	285,971	2.1%
Philip Bloom	613,204(13)	613,204	0	0
Eli Oxenhorn	566,769(14)	471,696	95,073	*
Woodland Partners	529,547(15)	377,356	152,191	1.1%
Brookwood Partners, L.P.	471,696(16)	471,696	0	0
Wheatley Partners, L.P.	347,168(17)	347,168	0	0
David Thalheim	206,991(18)	141,508	65,483	*
Anthony Trobiano	195,676(19)	188,676	7,000	*
Casilli Revocable Trust	188,676(20)	188,676	0	0
Applegreen Partners	179,555(21)	141,508	38,047	*
Jack Erlanger	176,635(22)	94,336	82,299	*
Donna Slavitt	143,036(23)	141,508	1,528	*
Sage Alliances, Inc.	135,462(24)	135,462	0	0
David Nussbaum	133,984(25)	47,168	86,816	*
Gerald Josephson	133,691(26)	94,336	39,355	*

13

<TABLE><CAPTION>

NAME	NUMBER OF SHARES BENEFICIALLY OWNED PRIOR TO OFFERING(1)		PERCENTAGE OF NUMBER OF SHARES BEING OFFERED		OUTSTANDING COMMON STOCK AFTER OFFERING(1)
	<C>	<C>	<C>	<C>	
<S>					
Jeffrey Rubinstein	133,854(27)	94,336	39,518		*
Larry Altman	125,875(28)	47,168	78,707		*
Richard Rosenstock	112,651(29)	47,168	65,483		*
Lipman Capital Group, Inc.	94,800(30)	60,000	34,800		*
Tami Trobiano	96,336(31)	94,336	2,000		*
Owen Associates, L.P.	94,936(32)	94,336	600		*
Charles Ferrara	94,336(33)	94,336	0	0	
Edward Fiegeles	94,336(33)	94,336	0	0	
Gordon Freeman	94,336(33)	94,336	0	0	
Ardith Mederrick	94,336(33)	94,336	0	0	
James Scibelli	94,336(33)	94,336	0	0	
Robert Graifman	79,311(34)	47,168	32,143		*
Patrick McBrien	63,990(35)	47,168	16,822		*

Scott Zelnick	63,990(35)	47,168	16,822	*
Abbey Oxenhorn	62,734(36)	47,168	15,566	*
Seth Oxenhorn	62,734(36)	47,168	15,566	*
Sam Schwartz	57,296(37)	47,168	10,128	*
Steven Wolosky	56,600(38)	56,600	0	0
Seymour Cohen	47,168(39)	47,168	0	0
Andrew Fingerhut	47,168(39)	47,168	0	0
Robert Gladstone	47,168(39)	47,168	0	0
Jennifer Olsen	47,168(39)	47,168	0	0
Harvey Pollak	47,168(39)	47,168	0	0
Maureen Wilson	47,168(39)	47,168	0	0

14

<TABLE><CAPTION>

NAME	NUMBER OF SHARES		PERCENTAGE OF	
	BENEFICIALLY OWNED PRIOR TO OFFERING(1)	NUMBER OF SHARES BEING OFFERED	NUMBER OF SHARES BENEFICIALLY OWNED AFTER OFFERING(1)(2)	OUTSTANDING COMMON STOCK AFTER OFFERING(1)
<S>	<C>	<C>	<C>	<C>
Amy Katz	37,732(40)	37,732	0	0
John Slavitt	37,732(40)	37,732	0	0
Wheatley Foreign Partners, L.P.	30,188(41)	30,188	0	0
Cheryl Blair	18,864(42)	18,864	0	0
Gestion Cajed Inc.	18,864(42)	18,864	0	0
Business Development.com, LLC	12,000(43)	200,000	0	0

* Less than 1%

- Unless otherwise indicated, we believe that all persons named in the above table have sole voting and investment power with respect to all shares of voting stock beneficially owned by them. A person is deemed to be the beneficial owner of securities that can be acquired by such person within 60 days from the date hereof upon the exercise of options, warrants or convertible securities. Each beneficial owner's percentage ownership is determined by assuming that options, warrants and convertible securities held by such person (but not those held by any other person except for outstanding shares of preferred stock) and which are exercisable or convertible within 60 days have been exercised and converted. Assumes a base of 13,554,925 shares of voting stock including (i) 6,781,374 shares of outstanding common stock, (ii) 6,382,074 shares of common stock issuable upon conversion of 3,191,037 shares of outstanding Series E Preferred Stock and (iii) 391,477 shares of common stock issuable upon conversion of 231,054 shares of outstanding Series D Preferred Stock.
- Beneficial ownership of shares held by the selling stockholder after this offering will depend on the number of securities sold by the selling stockholder in this offering.
- Includes (i) 1,194,659 shares of common stock, 188,678 shares of common stock issuable upon conversion of Series E Preferred Stock and 188,678 shares of common stock subject to currently exercisable warrants held by Wheatley Partners II, L.P., (ii) 173,584 shares of common stock

issuable upon conversion of Series E Preferred Stock and 173,584 shares of common stock subject to currently exercisable warrants held by Wheatley Partners, L.P., (iii) 15,094 shares of common stock issuable upon conversion of Series E Preferred Stock and 15,094 shares of common stock subject to currently exercisable warrants held by Wheatley Foreign Partners, L.P., (iv) 31,040 shares of common stock held by Mr. Rubenstein, (v) 47,500 shares of common stock subject to currently exercisable stock options held by Mr. Rubenstein, (vi) 151,628 and 133,780 shares of common stock held by

15

Woodland Venture Fund and Seneca Ventures, respectively, (vii) 424,528, 330,188, 235,848, 188,678 and 94,338 shares of common stock issuable upon conversion of Series E Preferred Stock held by Woodland Venture Fund, Seneca Ventures, Brookwood Partners, L.P., Woodland Partners and Barry Rubenstein, respectively, (viii) 611,366, 423,605, 282,095, 235,848, 145,335 and 1,333 shares of common stock subject to currently exercisable warrants held by Woodland Venture Fund, Seneca Ventures, Woodland Partners, Brookwood Partners, L.P., Barry Rubenstein and Marilyn Rubenstein, respectively, and (ix) 117,550, 58,774, 58,774, 839 and 839 shares of common stock issuable upon conversion of Series D Preferred Stock held by Woodland Venture Fund, Seneca Ventures, Woodland Partners, Barry Rubenstein and Marilyn Rubenstein, respectively. Does not include options to purchase 11,875 shares of common stock which are not currently exercisable. Barry Rubenstein is a general partner of Wheatley Partners II, L.P. and a member of the general partner of each of Wheatley Partners, L.P. and Wheatley Foreign Partners, L.P. Barry Rubenstein and Woodland Services Corp. are the general partners of Woodland Venture Fund and Seneca Ventures. Barry Rubenstein is the general partner of Brookwood Partners, L.P. Barry Rubenstein is the President and sole director of Woodland Services Corp. Marilyn Rubenstein is the wife of Barry Rubenstein. Mr. Rubenstein disclaims beneficial ownership of the shares of common stock held by Wheatley Partners II, L.P., Wheatley Partners, L.P. and Wheatley Foreign Partners, L.P., except to the extent of his equity interest therein.

- (4) Includes (i) 2,169,870 shares of common stock issuable upon conversion of Series E Preferred Stock and (ii) 2,169,870 shares of common stock subject to currently exercisable warrants. Does not include 500,000 shares of common stock subject to warrants which are not currently exercisable (but which are being registered for sale). For so long as the holders of the outstanding shares of Series E Preferred Stock own at least 10% of our voting stock, FalconStor Software, Inc. agrees to vote all of its outstanding voting stock (Series E Preferred Stock and common stock issuable upon exercise of warrants received in our October, 2001 private offering) in the same manner as the holders of the majority of the Series E Preferred Stock excluding the Series E Preferred Stock owned by FalconStor Software, Inc.
- (5) Includes (i) 1,194,659 shares of common stock, 188,678 shares of common stock issuable upon conversion of Series E Preferred Stock and 188,678 shares of common stock subject to currently exercisable warrants held by Wheatley Partners II, L.P., (ii) 173,584 shares of common stock issuable upon conversion of Series E Preferred Stock and 173,584 shares of common stock subject to currently exercisable warrants held by Wheatley Partners, L.P., (iii) 15,094 shares of common stock issuable upon conversion of Series E Preferred Stock and 15,094 shares of common stock subject to currently exercisable warrants held by Wheatley Foreign Partners, L.P., (iv) 23,280 shares of common stock owned by Mr. Lieber, (v) 47,500 shares of common stock subject to currently exercisable stock options owned by Mr. Lieber, (vi) 330,188 shares of common stock issuable upon conversion of Series E Preferred Stock owned by Mr. Lieber, (vii) 58,774 shares of common stock issuable upon conversion of Series D Preferred Stock owned by Mr. Lieber, and (viii) 473,269 shares of common stock subject to currently exercisable warrants owned by Mr. Lieber. Does not include options to purchase 11,875 shares of common stock owned by Mr. Lieber which are not currently exercisable. Mr. Lieber disclaims beneficial ownership of the shares of common stock held by Wheatley Partners II, L.P., Wheatley Partners, L.P. and Wheatley Foreign Partners, L.P., except to the extent of his equity interest therein.

- (6) Includes (i) 1,194,659 shares of common stock, 188,678 shares of common stock issuable upon conversion of Series E Preferred Stock and 188,678 shares of common stock subject to currently exercisable warrants held by Wheatley Partners II, L.P., (ii) 173,584 shares of common stock issuable upon conversion of Series E Preferred Stock and 173,584 shares of common stock subject to currently exercisable warrants held by Wheatley Partners, L.P., (iii) 15,094 shares of common stock issuable upon conversion of Series E Preferred Stock and 15,094 shares of common stock subject to currently exercisable warrants held by Wheatley Foreign Partners, L.P., (iv) 31,040 shares of common stock owned by Mr. Fingerhut, (v) 330,188 shares of common stock issuable upon conversion of Series E Preferred Stock owned by Mr. Fingerhut, (vi) 58,774 shares of common stock issuable upon conversion of Series D Preferred Stock owned by Mr. Fingerhut, and (vii) 423,605 shares of common stock subject to currently exercisable warrants owned by Mr. Fingerhut. Mr. Fingerhut disclaims beneficial ownership of the shares of common stock held by Wheatley Partners II, L.P., Wheatley Partners, L.P. and Wheatley Foreign Partners, L.P., except to the extent of his equity interest therein.
- (7) Includes (i) 1,194,659 shares of common stock, 188,678 shares of common stock issuable upon conversion of Series E Preferred Stock and 188,678 shares of common stock subject to currently exercisable warrants held by Wheatley Partners II, L.P., (ii) 173,584 shares of common stock issuable upon conversion of Series E Preferred Stock and 173,584 shares of common stock subject to currently exercisable warrants held by Wheatley Partners, L.P., (iii) 15,094 shares of common stock issuable upon conversion of Series E Preferred Stock and 15,094 shares of common stock subject to currently exercisable warrants held by Wheatley Foreign Partners, L.P., (iv) 70,754 shares of common stock issuable upon conversion of Series E Preferred Stock and 70,754 shares of Common Stock subject to currently exercisable warrants held by Applegreen Partners, (v) 3,104 shares of common stock owned by Mr. Lieber, (vi) 23,584 shares of common stock issuable upon conversion of Series E Preferred Stock and 23,584 shares of common stock subject to currently exercisable warrants owned by Mr. Lieber, and (vii) 14,693 shares of common stock issuable upon conversion of Series D Preferred Stock and 23,354 shares of common stock subject to currently exercisable warrants owned by Applegreen Partners. Jonathan Lieber is a partner of Applegreen Partners. Mr. Lieber disclaims beneficial ownership of the shares of common stock held by Wheatley Partners II, L.P., Wheatley Partners, L.P., Wheatley Foreign Partners, L.P. and Applegreen Partners, except to the extent of his equity interest therein.
- (8) Includes (i) 1,194,659 shares of common stock, 188,678 shares of common stock issuable upon conversion of Series E Preferred Stock and 188,678 shares of common stock subject to currently exercisable warrants held by Wheatley Partners II, L.P., (ii) 173,584 shares of common stock issuable upon conversion of Series E Preferred Stock and 173,584 shares of common stock subject to currently exercisable warrants held by Wheatley Partners, L.P., (iii) 15,094 shares of common stock issuable upon conversion of Series E Preferred Stock and 15,094 shares of common stock subject to currently exercisable warrants held by Wheatley Foreign Partners, L.P., (iv) 4,656 shares of common stock owned by Seth Lieber, and (v) 23,584 shares of common stock issuable upon conversion of Series E Preferred

Stock and 23,584 shares of common stock subject to currently exercisable warrants owned by Seth Lieber. Mr. Lieber disclaims beneficial ownership of the shares of common stock held by Wheatley Partners II, L.P., Wheatley Partners, L.P. and Wheatley Foreign Partners, L.P., except to the extent of his equity interest therein.

- (9) Includes (i) 1,194,659 shares of common stock, (ii) 188,678 shares of common stock issuable upon conversion of Series E Preferred Stock and (iii) 188,678 shares of common stock subject to currently exercisable warrants. Does not include (i) 316,448, 23,280, 31,040, 4,656 and 3,104 shares of common stock beneficially owned by Barry Rubenstein, Irwin

Lieber, Barry Fingerhut, Seth Lieber and Jonathan Lieber, respectively, each of whom is a general partner of Wheatley Partners II, L.P., and (ii) an aggregate of 7,140,407 shares of common stock subject to currently exercisable warrants, options, Series D Preferred Stock and Series E Preferred Stock beneficially owned by Barry Rubenstein (3,634,794 shares), Irwin Lieber (1,287,087 shares), Barry Fingerhut (1,189,923 shares), Jonathan Lieber (604,079 shares) and Seth Lieber (424,524 shares).

- (10) Includes (i) 486,303 shares of common stock held by Mr. Horowitz, (ii) 42,500 shares of common stock subject to currently exercisable stock options held by Mr. Horowitz, (iii) 155,463 shares of common stock held by CMH Capital Management Corp., (iv) 424,936 shares of common stock subject to currently exercisable warrants held by CMH, (v) 85,220 shares of common stock subject to currently exercisable warrants held by Mr. Horowitz, (vi) 70,754 shares of common stock issuable upon conversion of Series E Preferred Stock, 70,754 shares of common stock subject to currently exercisable warrants and 1,528 shares of common stock, all owned by Donna Slavitt, the wife of Mr. Horowitz and (vii) 2,291 shares of common stock held by Horowitz Partners, a general partnership of which Mr. Horowitz is a partner. Does not include warrants and options to purchase 260,625 shares of common stock which are not currently exercisable (but which 250,000 shares are being registered for sale).
- (11) Includes (i) 151,628 shares of common stock, (ii) 424,528 shares of common stock issuable upon conversion of Series E Preferred Stock, (iii) 117,550 shares of common stock issuable upon conversion of Series D Preferred Stock and (iv) 611,366 shares of common stock subject to currently exercisable warrants.
- (12) Includes (i) 133,780 shares of common stock, (ii) 330,188 shares of common stock issuable upon conversion of Series E Preferred Stock, (iii) 58,774 shares of common stock issuable upon conversion of Series D Preferred Stock and (iv) 423,605 shares of common stock subject to currently exercisable warrants.
- (13) Includes (i) 306,602 shares of common stock subject to currently exercisable warrants and (ii) 306,602 shares of common stock issuable upon conversion of Series E Preferred Stock.
- (14) Includes (i) 330,921 shares of common stock subject to currently exercisable warrants and (ii) 235,848 shares of common stock issuable upon conversion of Series E Preferred Stock.

18

- (15) Includes (i) 188,678 shares of common stock issuable upon conversion of Series E Preferred Stock, (ii) 58,774 shares of common stock issuable upon conversion of Series D Preferred Stock and (iii) 282,095 shares of common stock subject to currently exercisable warrants.
- (16) Includes (ii) 235,848 shares of common stock subject to currently exercisable warrants and (ii) 235,848 shares of common stock issuable upon conversion of Series E Preferred Stock.
- (17) Includes (i) 173,584 shares of common stock subject to currently exercisable warrants and (ii) 173,584 shares of common stock issuable upon conversion of Series E Preferred Stock.
- (18) Includes (i) 27,297 shares of common stock, (ii) 108,940 shares of common stock subject to currently exercisable warrants and (iii) 70,754 shares of common stock issuable upon conversion of Series E Preferred Stock.
- (19) Includes (i) 7,000 shares of common stock, (ii) 94,338 shares of common stock subject to currently exercisable warrants and (iii) 94,338 shares of common stock issuable upon conversion of Series E Preferred Stock.
- (20) Includes (i) 94,338 shares of common stock subject to currently exercisable warrants and (ii) 94,338 shares of common stock issuable upon conversion of Series E Preferred Stock.

- (21) Includes (i) 94,108 shares of common stock subject to currently exercisable warrants, (ii) 70,754 shares of common stock issuable upon conversion of Series E Preferred Stock and (iii) 14,693 shares of common stock issuable upon conversion of Series D Preferred Stock.
- (22) Includes (i) 37,444 shares of common stock, (ii) 92,023 shares of common stock subject to currently exercisable warrants and (iii) 47,168 shares of common stock issuable upon conversion of Series E Preferred Stock.
- (23) Includes (i) 1,528 shares of common stock, (ii) 70,754 shares of common stock subject to currently exercisable warrants and (iii) 70,754 shares of common stock issuable upon conversion of Series E Preferred Stock.
- (24) Includes warrants to purchase 135,462 shares of common stock which may, at the direction of Sage, be issued or transferred to employees and consultants of Sage.
- (25) Includes (i) 23,584 shares of common stock subject to currently exercisable warrants, (ii) 23,584 shares of common stock issuable upon conversion of Series E Preferred Stock, (iii) 54,594 shares of common stock owned by Dalewood Associates, L.P. ("Dalewood") and (iv) 32,222 shares of common stock subject to currently exercisable warrants owned by Dalewood. Mr. Nussbaum is the general partner of Dalewood. Mr. Nussbaum disclaims

19

beneficial ownership of the securities held by Dalewood except to the extent of his equity interest therein.

- (26) Includes (i) 3,000 shares of common stock, (ii) 83,523 shares of common stock subject to currently exercisable warrants and (iii) 47,168 shares of common stock issuable upon conversion of Series E Preferred Stock.
- (27) Includes (i) 10,000 shares of common stock, (ii) 76,686 shares of common stock subject to currently exercisable warrants and (iii) 47,168 shares of common stock issuable upon conversion of Series E Preferred Stock.
- (28) Includes (i) 50,000 shares of common stock, (ii) 46,291 shares of common stock subject to currently exercisable warrants, (iii) 23,584 shares of common stock issuable upon conversion of Series E Preferred Stock and (iv) 6,000 shares of common stock owned by Mr. Altman's wife.
- (29) Includes (i) 27,297 shares of common stock, (ii) 61,770 shares of common stock subject to currently exercisable warrants and (iii) 23,584 shares of common stock issuable upon conversion of Series E Preferred Stock.
- (30) Includes (i) 34,800 shares of common stock owned by Jonathan Lipman, the sole stockholder of Lipman Capital Group, Inc., and (ii) 60,000 shares of common stock subject to currently exercisable warrants, of which warrants to purchase up to 18,000 shares of Common Stock may be transferred to a consultant of Lipman Capital Group, Inc..
- (31) Includes 2,000 shares of common stock, (ii) 47,168 shares of common stock subject to currently exercisable warrants and (iii) 47,168 shares of common stock issuable upon conversion of Series E Preferred Stock.
- (32) Includes (i) 47,168 shares of common stock subject to currently exercisable warrants, (ii) 47,168 shares of common stock issuable upon conversion of Series E Preferred Stock and (iii) 600 shares of common stock held by Alan Silverman, a principal of Owen Associates, L.P., in a retirement account.
- (33) Includes (i) 47,168 shares of common stock subject to currently exercisable warrants and (ii) 47,168 shares of common stock issuable upon conversion of Series E Preferred Stock.
- (34) Includes (i) 32,143 shares of common stock, (ii) 23,584 shares of

common stock subject to currently exercisable warrants and (iii) 23,584 shares of common stock issuable upon conversion of Series E Preferred Stock.

- (35) Includes (i) 4,555 shares of common stock, (ii) 35,851 shares of common stock subject to currently exercisable warrants and (iii) 23,584 shares of common stock issuable upon conversion of Series E Preferred Stock.

20

- (36) Includes (i) 4,215 shares of common stock, (ii) 34,935 shares of common stock subject to currently exercisable warrants and (iii) 23,584 shares of common stock issuable upon conversion of Series E Preferred Stock.
- (37) Includes (i) 33,712 shares of common stock subject to currently exercisable warrants and options, and (ii) 23,584 shares of common stock issuable upon conversion of Series E Preferred Stock. Does not include options to purchaser 4,700 shares of common stock which are not currently exercisable.
- (38) Includes (i) 28,300 shares of common stock subject to currently exercisable warrants and (ii) 28,300 shares of common stock issuable upon conversion of Series E Preferred Stock.
- (39) Includes (i) 23,584 shares of common stock subject to currently exercisable warrants and (ii) 23,584 shares of common stock issuable upon conversion of Series E Preferred Stock.
- (40) Includes (i) 18,866 shares of common stock subject to currently exercisable warrants and (ii) 18,866 shares of common stock issuable upon conversion of Series E Preferred Stock.
- (41) Includes (i) 15,094 shares of common stock subject to currently exercisable warrants and (ii) 15,094 shares of common stock issuable upon conversion of Series E Preferred Stock.
- (42) Includes (i) 9,432 shares of common stock subject to currently exercisable warrants and (ii) 9,432 shares of common stock issuable upon conversion of Series E Preferred Stock.
- (43) Includes (i) 12,000 shares of common stock subject to currently exercisable warrants and (ii) Does not include 188,000 shares of common stock subject to warrants which are not currently exercisable (but which are being registered for resale).

PLAN OF DISTRIBUTION

This prospectus relates to the offer and sale by the selling stockholders of an aggregate of 14,209,610 shares of our common stock that we may issue upon the exercise of outstanding warrants and conversion of outstanding shares of Series E Preferred Stock issued by us in a private offering completed in October 2001.

The selling stockholders may sell the shares in transactions in the over-the-counter market, in negotiated transactions, or a combination of such methods of sale. The selling stockholders may sell the shares through public or private transactions at prevailing market prices, at prices related to such prevailing market prices or at privately negotiated prices. The selling stockholders may also sell shares pursuant to Rule 144 of the Securities Act, if applicable.

The selling stockholders may use underwriters or broker-dealers to sell the shares. Such underwriters and broker-dealers may receive compensation in the form of discounts or commissions from the selling stockholders, or they may receive commissions from the purchasers of shares for

21

whom they acted as agents, or both (which compensation as to a particular broker-dealer might be in excess of customary commissions). The selling stockholders and any underwriter or broker-dealer who participates in the

distribution of the shares may be deemed to be "underwriters" within the meaning of the Securities Act, and any commissions received by them and any profit on the resale of the shares purchased by them may be deemed to be underwriting discounts or commissions under the Securities Act.

In addition, the broker-dealers' commissions, discounts or concession may qualify as underwriters' compensation under the Securities Act. We will disclose in a post-effective amendment to the registration statement any broker-dealers the selling stockholders contract with in the selling effort who may appear to be acting as underwriters within the meaning of Section 2(11) of the Securities Act. If any such broker-dealers are acting as underwriters, we will revise the disclosures in the registration statement to include the amount of the shares of our common stock being sold by the broker-dealer and, if the broker-dealer is entitled to sell additional shares, the broker-dealer's relationship and obligations to us and the selling stockholders and any associated expenses which we or the selling stockholders may incur in connection with such sale of our common stock. We will also file any agreement we or the selling stockholders may enter into with such broker-dealer as an exhibit to the registration statement.

Under applicable rules and regulations under the Exchange Act, any person engaged in a distribution of the shares may not simultaneously engage in market-making activities with respect to our common stock for a certain period of time, except under certain limited circumstances. Also, without limiting the foregoing, each selling stockholder and any other person participating in such distribution will be subject to applicable provisions of the Exchange Act and rules and regulations thereunder (including Regulation M), which provisions may limit the timing of purchases and sales of shares of our common stock by such selling stockholder.

At the time a selling stockholder makes an offer to sell shares, to the extent required by the Securities Act, a prospectus will be delivered. If a supplemental prospectus is required, one will be delivered setting forth the number of shares being offered and the terms of the offering, including the names of any underwriters, dealers or agents, the purchase price paid by any underwriter for the shares, and any discounts or commissions.

In order to comply with the securities laws of certain states, if applicable, the shares will be sold in such jurisdictions only through registered or licensed brokers or dealers. In addition, in certain states the shares may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and complied with.

We have agreed to pay substantially all of the expenses incident to the registration, offering and sale of the shares to the public, excluding the commissions or discounts of underwriters, broker-dealers or agents.

LEGAL MATTERS

The validity of the securities offered hereby will be passed upon for us by the law firm of Olshan Grundman Frome Rosenzweig & Wolosky LLP, 505 Park Avenue, New York, New York. Steven Wolosky, a member of such firm, owns 14,150 shares of our Series E Preferred Stock (convertible into 28,300 shares of our common stock) and warrants to purchase 28,300 shares of our common stock as of the date of this prospectus. Sam Schwartz, also a member of such firm, owns 11,792 shares of our Series E Preferred Stock (convertible into 23,584 shares of our common stock) and owns warrants and options to purchase 38,412 shares of our common stock as of the date of this prospectus.

EXPERTS

The financial statements incorporated in this prospectus by reference to the Annual Report on Form 10-KSB for the year ended December 31, 2000 have been so incorporated in reliance on the report of Richard A. Eisner & Company, LLP, independent accountants, given on the authority of said firm as experts in accounting and auditing.

DISCLOSURE OF COMMISSION POSITION ON
INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers or persons controlling us, we have 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.

23

NETWORK-1 SECURITY SOLUTIONS, INC.

14,209,610 SHARES
OF
COMMON STOCK

PROSPECTUS

February 12, 2002

PART II.

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The following table sets forth the expenses in connection with the offering described in the Registration Statement, all of which will be borne by the Company.

SEC registration fee.....	\$ 5,766.28
Legal fees and expenses*.....	20,000.00
Accounting fees and expenses*.....	10,000.00
Miscellaneous expenses*.....	750.00

TOTAL.....	\$ 36,516.28
	=====

* Estimated.

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Section 145 of the Delaware General Corporations Law (the "DGCL") contains provisions entitling the Company's directors and officers to indemnification from judgments, fines, amounts paid in settlement, and reasonable expenses (including attorneys' fees) as the result of an action or

proceeding in which they may be involved by reason of having been a director or officer of the Company. In its Certificate of Incorporation, the Company has included a provision that limits, to the fullest extent now or hereafter permitted by the DGCL, the personal liability of its directors to the Company or its stockholders for monetary damages arising from a breach of their fiduciary duties as directors. Under the DGCL as currently in effect, this provision limits a director's liability except where such director (i) breaches his duty of loyalty to the Company or its stockholders, (ii) fails to act in good faith or engages in intentional misconduct or a knowing violation of law, (iii) authorizes payment of an unlawful dividend or stock purchase or redemption as provided in Section 174 of the DGCL, or (iv) obtains an improper personal benefit. This provision does not prevent the Company or its stockholders from seeking equitable remedies, such as injunctive relief or rescission. If equitable remedies are found not to be available to stockholders in any particular case, stockholders may not have any effective remedy against actions taken by directors that constitute negligence or gross negligence.

The Certificate of Incorporation also includes provisions to the effect that (subject to certain exceptions) the Company shall, to the maximum extent permitted from time to time under the law of the State of Delaware, indemnify, and upon request shall advance expenses to, any director or officer to the extent that such indemnification and advancement of expenses is permitted under such law, as it may from time to time be in effect. In addition, the Bylaws require the Company to indemnify, to the full extent permitted by law, any director, officer, employee or agent of the Company for acts which such person reasonably believes are not in violation of the Company's

II-1

corporate purposes as set forth in the Certificate of Incorporation. At present, the DGCL provides that, in order to be entitled to indemnification, an individual must have acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the Company's best interests.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Company pursuant to any charter, provision, by-law, contract, arrangement, statute or otherwise, the Company has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

ITEM 16. EXHIBITS

NO.	DESCRIPTION
-----	-------------

- - - - -

- | | |
|--------|--|
| 3.1 | Certificate of Incorporation, as amended. Previously filed as Exhibit 3.1 to the Company's Registration Statement on Form SB-2 (Registration No. 333-59617), declared effective by the SEC in November 1998 (the "1998 Registration Statement"), and incorporated herein by reference. |
| 3.1.1* | Certificate of Amendment to the Certificate of Incorporation dated November 27, 2001. |
| 3.2 | Certificate of Designations of Series D Preferred Stock. Previously filed as Exhibit 3.1 to the Company's current report on Form 8-K filed January 5, 2000 and incorporated herein by reference. |
| 3.3 | Certificate of Designations of Series E Preferred Stock. Previously filed as Exhibit 3.1 to the Company's current report on Form 8-K filed October 12, 2001 (the "October 2001 Form 8-K") and incorporated herein by reference. |
| 3.4 | By-laws, as amended. Previously filed as Exhibit 3.2 to the 1998 Registration Statement and incorporated herein by reference. |
| 4.1 | Form of Common Stock certificate. Previously filed as Exhibit 4.1 to the 1998 Registration Statement and incorporated herein by reference. |
| 5.1* | Opinion of Olshan Grundman Frome Rosenzweig & Wolosky LLP regarding legality of securities being registered. |

- 10.1 Securities Purchase Agreement, dated as of October 2, 2001, between the Company and the investors listed therein. Previously filed as Exhibit 10.21 to the October 2001 Form 8-K and incorporated herein by reference.
- 10.2 Form of Warrant, dated October 2, 2001, issued by the Company to the holder listed thereon. Previously filed as Exhibit B to Exhibit 10.21 to the October 2001 Form 8-K and incorporated herein by reference.
- 10.3* Financial Advisory and Investment Banking Agreement, dated December 1, 2001 by and between EarlyBirdCapital, Inc. and the Company.
- 10.4* Agreement dated January 29, 2002 between the Company and CMH Capital Management Corp. relating to extension of the consulting agreement.
- 23.1* Consent of Richard A. Eisner & Company, LLP, independent certified public accountants.

II-2

- 24.1 No person has signed this Registration Statement under a power of attorney. A power of attorney relating to the signing of amendments hereto is incorporated in the signature pages hereof.

* Filed with Amendment No. 1 to this Registration Statement

ITEM 17. UNDERTAKINGS

- (1) The undersigned Registrant hereby undertakes that it will:

(a) File, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement to include any additional or changed material information on the plan of distribution.

(b) For determining liability under the Securities Act, treat each post-effective amendment as a new Registration Statement of the securities offered, and the offering of securities at that time to be the initial BONA FIDE offering.

(c) File a post-effective amendment to remove from registration any of the securities that remain unsold at the end of this offering.

(2) 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 Securities Act and is, therefore, unenforceable.

- (3) The undersigned Registrant hereby undertakes that it will:

(a) For determining any liability under the Securities Act, treat the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4), or 497(h) under the Securities Act as part of this Registration Statement as of the time the Commission declared it effective.

(b) For determining any liability under the Securities Act, treat each post-effective amendment that contains a form of prospectus as a new registration statement for the securities offered in the registration statement, and the offering of such securities at that time as the initial BONA FIDE offering of those securities.

II-3

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Waltham, State of Massachusetts.

Dated: February 11, 2002

NETWORK-1 SECURITY SOLUTIONS, INC.

By: /s/ Murray P. Fish

Murray P. Fish, President and
Chief Financial Officer

KNOW ALL MEN BY THESE PRESENTS, that each director and officer whose signature appears below constitutes and appoints Murray P. Fish his true and lawful attorney-in-fact and agent, with full power and substitution and re-substitution, to sign in any and all capacities any and all amendments or post-effective amendments to this Registration Statement on Form S-3 and to file the same with all exhibits thereto and other documents in connection therewith with the Securities and Exchange Commission, granting to such attorney-in-fact and agent, full power and authority to do all such other acts and execute all such other documents as he may deem necessary or desirable in connection with the foregoing, as fully as the undersigned might or could do in person, hereby ratifying and confirming all that such attorney-in-fact and agent 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 dates indicated:

<TABLE><CAPTION>

Signature -----	Title -----	Date -----
<S>	<C>	<C>
/s/ Murray P. Fish ----- Murray P. Fish	President, Chief Financial Officer and Director (principal executive officer and principal financial and accounting officer)	February 11, 2002
* ----- Corey M. Horowitz	Chairman of the Board of Directors	February 11, 2002
* ----- Jonathan Mark	Director	February 11, 2002

* By: /s/ Murray P. Fish

Murray P. Fish
Attorney-in-Fact

</TABLE>

II-4

INDEX TO EXHIBITS

NO. ----	DESCRIPTION -----
3.1	Certificate of Incorporation, as amended. Previously filed as Exhibit 3.1 to the Company's Registration Statement on Form SB-2 (Registration No. 333-59617), declared effective by the SEC in November 1998 (the "1998 Registration Statement"), and incorporated herein by reference.
3.1.1*	Certificate of Amendment to the Certificate of Incorporation dated

November 27, 2001.

- 3.2 Certificate of Designations of Series D Preferred Stock. Previously filed as Exhibit 3.1 to the Company's current report on Form 8-K filed January 5, 2000 and incorporated herein by reference.
- 3.3 Certificate of Designations of Series E Preferred Stock. Previously filed as Exhibit 3.1 to the Company's current report on Form 8-K filed October 12, 2001 (the "October 2001 Form 8-K") and incorporated herein by reference.
- 3.4 By-laws, as amended. Previously filed as Exhibit 3.2 to the 1998 Registration Statement and incorporated herein by reference.
- 4.1 Form of Common Stock certificate. Previously filed as Exhibit 4.1 to the 1998 Registration Statement and incorporated herein by reference.
- 5.1* Opinion of Olshan Grundman Frome Rosenzweig & Wolosky LLP regarding legality of securities being registered.
- 10.1 Securities Purchase Agreement, dated as of October 2, 2001, between the Company and the investors listed therein. Previously filed as Exhibit 10.21 to the October 2001 Form 8-K and incorporated herein by reference.
- 10.2 Form of Warrant, dated October 2, 2001, issued by the Company to the holder listed thereon. Previously filed as Exhibit B to Exhibit 10.21 to the October 2001 Form 8-K and incorporated herein by reference.
- 10.3* Financial Advisory and Investment Banking Agreement, dated December 1, 2001 by and between EarlyBirdCapital, Inc. and the Company.
- 10.4* Agreement dated January 29, 2002 between the Company and CMH Capital Management Corp. relating to extension of the consulting agreement.
- 23.1* Consent of Richard A. Eisner & Company, LLP, independent certified public accountants.
- 24.1 No person has signed this Registration Statement under a power of attorney. A power of attorney relating to the signing of amendments hereto is incorporated in the signature pages hereof.

* Filed with Amendment No. 1 to this Registration Statement

CERTIFICATE OF AMENDMENT TO THE
CERTIFICATE OF INCORPORATION
OF
NETWORK-1 SECURITY SOLUTIONS, INC.

Pursuant to Section 242 of the General
Corporation Law of the State of Delaware

Network-1 Security Solutions, Inc., (the "Corporation"), a Delaware corporation, hereby certifies as follows:

FIRST: The Board of Directors of the Corporation duly adopted a resolution setting forth and declaring advisable the amendment of Article IV Section A of the Amended and Restated Certification of Incorporation of the Corporation so that, as amended, said Section shall read as follows:

ARTICLE IV

A. Classes of Stock

This Corporation is authorized to issue two classes of stock to be designated, respectively, "Common Stock" and "Preferred Stock". The total number of shares which the Corporation is authorized to issue is sixty million (60,000,000) shares. Fifty million (50,000,000) shares shall be Common Stock, \$.01 par value per share (the "Common Stock"), and ten million (10,000,000) shares shall be Preferred Stock, \$.01 par value per share (the "Preferred Stock").

SECOND: That a resolution was duly adopted by unanimous written consent of the directors of the Corporation, pursuant to Section 242 of the General Corporation Law of the State of Delaware, setting forth the above-mentioned amendment to the Certificate of Incorporation and declaring said amendment to be advisable. A majority of the stockholders of the Corporation entitled to vote on the proposed amendment approved the matter during its annual meeting on November 27, 2001 in accordance with Section 242 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF AND UNDER PENALTIES OF PERJURY, Network-1 Security Solutions, Inc. has caused this Certificate of Amendment to the Certificate of Incorporation to be signed by its President this 27th day of November, 2001.

NETWORK-1 SECURITY SOLUTIONS, INC.

/s/ Murray P. Fish

Murray P. Fish
President and Chief Financial Officer

EXHIBIT 5.1

[LETTERHEAD OF OLSHAN GRUNDMAN FROME ROSENZWEIG & WOLOSKY LLP]

February 11, 2002

212-451-2306
sss@ogfirlaw.com

Securities and Exchange Commission
450 Fifth Street, N.W.
Judiciary Plaza

Washington, D.C. 20549

Re: Network-1 Security Solutions, Inc.
Commission File No. 333-81344
Registration Statement on Form S-3

Gentlemen:

Reference is made to the Registration Statement on Form S-3 dated February 12, 2002, as amended (the "Registration Statement"), filed with the Securities and Exchange Commission by Network-1 Security Solutions, Inc., a Delaware corporation (the "Company"). The Registration Statement relates to the resale of an aggregate of 14,209,610 shares (the "Shares") of the Company's Common Stock, \$.01 par value (the "Common Stock") of which 6,382,074 Shares are issuable upon conversion of outstanding Series E Preferred Stock of the Company and 7,827,536 Shares issuable upon the exercise of certain outstanding warrants issued by the Company.

We advise you that we have examined original or copies certified or otherwise identified to our satisfaction of the Certificate of Incorporation and By-laws of the Company, minutes of meetings of the Board of Directors and stockholders of the Company, the Registration Statement, and such other documents, instruments and certificates of officers and representatives of the Company and public officials, and we have made such examination of the law as we have

February 7, 2002
Page 1

deemed appropriate as the basis for the opinion hereinafter expressed. In making such examination, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, and the conformity to original documents of documents submitted to us as certified or photostatic copies.

Based upon the foregoing, we are of the opinion that:

The 14,209,610 Shares to be issued upon conversion of 3,191,037 shares of outstanding Series E Preferred Stock and 7,827,536 Shares issuable upon the exercise of certain outstanding warrants have been duly authorized and reserved for and when issued in accordance with the terms of each respective security will be legally paid and non-assessable.

Two members of this firm hold shares of Series E Preferred Stock convertible into an aggregate of 51,884 Shares and warrants and options exercisable into an aggregate of 66,712 Shares.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and we further consent to the reference to this firm under the caption "Legal Matters" in the Registration Statement and the Prospectus forming a part thereof.

Very truly yours,

/s/ OLSHAN GRUNDMAN FROME ROSENZWEIG & WOLOSKY LLP

FINANCIAL ADVISORY AND INVESTMENT BANKING AGREEMENT

This Agreement is made and entered as of December 1, 2001 between EarlyBirdCapital, Inc. ("EBC" or the "Consultant") and Network-1 Security Solutions, Inc. (the "Company").

In consideration of the mutual promises made herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. The Company hereby engages the Consultant to render financial consulting and investment banking advice to the Company upon the terms and conditions set forth herein. The term of this Agreement shall be for 12 months commencing on December 1, 2001. This engagement of Consultant by the Company shall be on a non-exclusive basis and shall not prevent the Company from engaging another party to act in the same or similar capacity.

2. During the term of this Agreement, Consultant shall provide the Company with such regular and customary financial consulting advice as is reasonably requested by the Company. It is understood and acknowledged by the parties that the value of Consultant's advice is not readily quantifiable, and that although Consultant shall be obligated to render the advice contemplated by this Agreement upon the reasonable request of the Company, Consultant shall not be obligated to spend any specific amount of time in so doing. Consultant's duties may include, but will not necessarily be limited to:

- (a) Assisting in the Company's financial public relations;
- (b) Rendering advice with regard to internal operations, including:
 - (i) the formation of corporate goals and their implementation;
 - (ii) the Company's financial structure and its divisions or subsidiaries;
 - (iii) securing, when and if necessary and possible, additional financing through banks and/or insurance companies; and
 - (iv) corporate organization and personnel.
- (c) Rendering advice with regard to any of the following corporate finance matters:
 - (i) changes in the capitalization of the Company;
 - (ii) changes in the Company's corporate structure;
 - (iii) redistribution of shareholdings of the Company's stock;
 - (iv) offerings of securities in public and private transactions;
 - (v) alternative uses of corporate assets;
 - (vi) structure and use of debt; and
 - (vii) sales of stock by insiders pursuant to Rule 144 or otherwise.

In addition to the foregoing, Consultant shall also render such other financial consulting and/or investment banking services (including mergers and acquisitions or financings of the Company) as may from time to time be agreed upon by Consultant and the Company.

Consultant may engage other companies to furnish certain of the consulting services provided for hereunder, subject to consultant's supervision, and remit a portion of its compensation to these companies in exchange for these services, provided, however, that this arrangement shall not increase the total compensation that must be paid by the Company under this Agreement.

1

3. The Company shall pay Consultant the following compensation:

(a) A cash fee of \$200,000, of which \$35,000 shall be payable upon signing this Agreement and the balance of \$165,000 shall be payable as follows: (i) nine monthly installments of \$10,000 on the first day of each calendar month beginning on January 1, 2002 and (ii) three quarterly installments of \$25,000 each, payable on May 31, 2002, August 31, 2002 and November 30, 2002.

(b) In addition to the above, upon the written request of the

Company to Consultant to engage in additional services, the Company shall compensate Consultant in amounts to be mutually agreed upon, in the event that:

- (i) Consultant originates a financing;
- (ii) Consultant acts as an underwriter or placement agent in the sale or distribution of securities by the Company to the public or in a private transaction;
- (iii) Consultant provides a fairness opinion or other valuation analysis; or
- (iv) Consultant introduces to the Company a source for business from which the Company derives revenue.

4. (a) The Company acknowledges that all opinions and advice (written or oral) given by Consultant to the Company in connection with Consultant's engagement are intended solely for the benefit and use of the Company in considering the transaction to which they relate, and the Company agrees that no person or entity other than the Company shall be entitled to make use of or rely upon the advice of Consultant to be given hereunder, and no such opinion or advice shall be used for any manner or for any purpose, nor may the Company make any public references to Consultant, or use the Consultant's name in any annual reports or any other reports or releases of the Company, without Consultant's prior written consent.

(b) The Company acknowledges that Consultant makes no commitment to make a market in the Company's securities, to recommend or advise its clients to purchase the Company's securities, or to prepare research or corporate finance reports.

5. Consultant will hold in confidence any confidential information which the Company provides to Consultant pursuant to this Agreement which is designated by an appropriate stamp or legend as being confidential. Notwithstanding the foregoing, Consultant shall not be required to maintain confidentiality with respect to information (i) which is or becomes part of the public domain not due to the breach of this Agreement by Consultant; (ii) of which it had independent knowledge prior to disclosure; (iii) which comes into the possession of Consultant in the normal and routine course of its own business from and through independent non-confidential sources; or (iv) which is required to be disclosed by Consultant by laws, rules or regulations. If Consultant is requested or required to disclose any confidential information supplied to it by the Company, Consultant shall, unless prohibited by law, promptly notify the Company of such request(s) so that the Company may seek an appropriate protective order.

6. Consultant shall perform its services hereunder as an independent contractor and not as an employee or agent of the Company or any affiliate thereof. Consultant shall have no authority to act for, represent or bind the Company or any affiliate thereof in any manner, except as may be expressly agreed to by the Company in writing from time to time.

7. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof. No provision of this Agreement may be amended, modified or waived, except in a

2

writing signed by both parties. This Agreement shall be binding upon and inure to the benefit of each of the parties and their respective successors, legal representatives and assigns. This Agreement may be executed in counterparts. In the event of any dispute under this Agreement, then and in such event, each party agrees that the same shall be submitted to the American Arbitration Association ("AAA") in the City of New York, for its decision and determination in accordance with its rules and regulations then in effect. Each of the parties agrees that the decision and/or award made by the AAA may be entered as judgment of the Courts or the State of New York, and shall be enforceable as such. This Agreement shall be construed and enforced in accordance with the laws of the State of New York, without giving effect to conflict of laws.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed on the day and year first above written.

By: /s/ David M. Nussbaum

By: /s/ Murray P. Fish

Title: Chairman

Title: President and CFO

EXHIBIT 10.4

January 29, 2002

Corey Horowitz, President
CMH Capital Management Corp.
885 Third Avenue, Suite 2900
New York, NY 10022

Re: Extension of CMH Consulting Agreement

Dear Corey:

This letter will confirm that Network-1 Security Solutions, Inc. and CMH Capital Management Corp. have agreed to an extension of the Consulting Agreement, dated June 29, 2001 (which expired on December 29, 2001) for a period equal to the earlier (i) June 29, 2002 or (ii) three (3) months from the commencement of employment of a new Chief Executive Officer of Network-1.

If the foregoing correctly confirms our understanding, kindly execute this letter agreement as provided below.

Very truly yours,

/s/ Murray P. Fish

Murray P. Fish, President
and Chief Financial Officer

Agreed and Accepted:

CMH Capital Management Corp.

By: /s/ Corey M. Horowitz

Corey M. Horowitz, President

EXHIBIT 23.1

INDEPENDENT AUDITORS' CONSENT

The Board of Directors
Network-1 Security Solutions, Inc.

We consent to the reference to our firm under the caption "Experts" in the Registration Statement on Form S-3 of Network-1 Security Solutions, Inc. and to the incorporation by reference therein of our report dated February 21, 2001 with respect to our audit of the financial statements of Network-1 Security Solutions, Inc. included in its Annual Report on Form 10-KSB for the year ended December 31, 2000 filed with the Securities and Exchange Commission.

Richard A. Eisner & Company, LLP

New York, New York
February 11, 2002