

# Proposal for Upgrading SSH Client Software

## Project Description

This project seeks to replace the current free SSH client software on general over 700 University lab and Computer Science lab computers with a paid client which has up-to-date security capabilities.

A site license for the Tectia SSH client for the entire university covering up to 2,500 clients and 2,500 servers would cost \$30,000. There is an annual fee of \$7,500 after the first year. If we do not purchase the continuing support, we can still distribute the software within the university, but we will not have access to updates or technical support.

## Current Usage

Currently, all FSU lab computers have SSH 3.2.9 - Secure Shell Protocol, which is the last version of this client that was free for educational use. It was released in 2003 and has since ceased to be distributed. Computer Science students must use an SSH client to access the department servers, which serve as uniform development and testing environments for student-written scripts and programs.

## Impact of the Project

This semester alone, there are 561 students enrolled in Introduction to Programming, 239 students enrolled in Object-Oriented Programming, and 261 students in Introduction to Unix, all of which have at least four assignments requiring connecting to the department servers. There are also other, smaller classes which require the use of an SSH client.

It is possible that other departments teach classes that require students to use SSH clients, who would also benefit from an improved option.

## Justification

In the thirteen years SSH 3.2.9 was released in 2003, several vulnerabilities have been discovered with the encryption algorithms available in that version. Because many students use FSU lab computers to do assignments that use our department servers, our servers have had to continue to accept these vulnerable encryption algorithms. With more current client software on the general lab computers, we could update the server-side software to only accept the more secure algorithms, thus better protecting student and faculty data.

There are some free newer clients, but we have found that students have great difficulty learning how to use them. This semester alone we had more than 200 students either visiting the Systems office, calling the Systems office, or submitting help tickets due to confusion using the various free clients available. This client is designed by the inventors of SSH, thus they have the most experience designing this software for practical easy use.

### **Ongoing Support**

While there are benefits to purchasing continuing support annually (\$7,500 per year) in the form of updates and technical support, the initial site license purchase alone will update our current clients to reflect fourteen years of advances in encryption without necessitating a difficult-to-use interface.

### **Description of Project Team**

We propose to distribute the SSH client throughout the general University labs through Classroom Support. Within the department, we would distribute the client through Systems Group.

### **Supporting Documents**

1. Price quote from ssh.com
2. Student Technology Fee Budget Template for 2017 Project Funding Proposal



SSH Communications Security, Inc.  
 460 Totten Pond Road, Suite 460  
 Waltham, MA 02451  
 tel. + 1 781 247 2100  
 fax + 1 781 890 2960

US Federal Tax ID: 77-0485931

Quote Information

Created Date 12/9/2016  
 Expiration Date 12/31/2016  
 Quote Number 00005180

Tectia Contact Information

Prepared By	Mike Nastasia	Contact Name	Yu Wang
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Address Information

Bill To Name	Florida State University	Ship To Name	Florida State University
Bill To	Florida United States		

Special Terms

Special Terms • Send Purchase Orders to orderprocessing-us@ssh.com or fax to 781-890-2960. Include "bill to" information and the name and email address of "Ship-to" contact. For new customers purchasing a support agreement also include the Support Site, and Customer Download Center contact names and email address. For credit card orders please call Kevin Murphy 781.247.2123 Kevin.Murphy@ssh.com

This quote is for a University licensing agreement with a Host Cap of 2500 SSH Clients or SSH Servers or a combination. It is a customer size. Approval for customer size is valid if order is placed in 2016.

Overview of Licensing plan

- Includes any combination of SSH Tectia Server or SSH Tectia Client licenses
- Includes 1st year SSH Standard Support Services.
- Required a current support agreement be in place in order to continue to use the licensing (renewal prices are agreed in advance)

These documents with no changes need to be in place before agreement is valid.:

- 1) APPENDIX 1 "PRICES"
- 2) APPENDIX 2 "SCOPE OF SUPPORT SERVICES" SSH STANDARD SUPPORT SERVICE
- 3) SSH UNIVERSITY SITE LICENSE AND SERVICE AGREEMENT



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#### Quote Line Items

Line Item Number	Product	Product Code	Sales Price	Quantity	Total Price	Line Item Description
00014079	Tectia SSH Client	27010-D1300	USD 7,500.00	1.00	USD 7,500.00	University Licensing Program - Custom size 2500 Host Cap
00014080	Tectia SSH Client Standard Support	27030-S1127	USD 7,500.00	1.00	USD 7,500.00	University Licensing Program - Custom size 2500 Host Cap
00014081	Tectia SSH Server	25510-D1100	USD 7,500.00	1.00	USD 7,500.00	University Licensing Program - Custom size 2500 Host Cap
00014082	Tectia SSH Server Standard Support	25530-S1125	USD 7,500.00	1.00	USD 7,500.00	University Licensing Program - Custom size 2500 Host Cap

#### Totals

Subtotal	USD 30,000.00
Total Price	USD 30,000.00
Grand Total	USD 30,000.00

#### Terms and Conditions

##### Tax Information:

Unless otherwise expressly included in this quote, all prices are exclusive of all taxes, fees, tariffs or other duties. Where applicable, it is the responsibility of the purchaser to pay all taxes, fees, tariffs or other duties in regards to this sale to the correct governmental entity. Where SSH Communications Security is required to collect taxes, fees, tariffs or other duties, a separate invoice will be sent to the purchaser and is payable on the same terms as set forth in the payment terms below.

##### Ordering Instructions:

Send purchase order to [orderprocessing-us@ssh.com](mailto:orderprocessing-us@ssh.com) or fax to 781.890.2960. Please include ship to address, technical end-user contact, bill to address and bill to contact on purchase order. Please include a copy of this quote if you are paying by check.

##### Payment Terms:

Net 30 days from the date of invoice. Interest on late payments is 10 % p.a.

##### How to Pay:

Payment can be made by credit card, check or wire transfer. **If paying by credit card**, please call our order processing department at 781.247.2123. **If paying by check**, please make check payable to : SSH Communications Security and mail to File # 74372, P.O. Box 60000, San Francisco, CA 94160. **If paying by wire transfer**, please wire funds to Bank of America, ABA# 121000358. Acct # 08665-09025. Bank of America address: Castro Street Branch. Mountain View, CA 94041.

##### Terms of Delivery:

FOB, SSH's Premises, Waltham, MA.

##### General Conditions:

The Standard Terms and Conditions of SSH Communications Security shall apply, unless the Customer and SSH Communications Security have entered into a specific written agreement.



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SSH's Standard Terms and Conditions of Delivery, Standard Service Terms and Conditions for the Support Services and Standard End-User License Agreements (EULA) can be accessed via <http://www.ssh.com/legal/terms>

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SSH Communications Security Standard Terms and Conditions for Support Services are located at: <http://www.ssh.com/legal>

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All deliveries are by electronic download. Contact SSH if physical media is required.

Software supplied by SSH is subject to export control laws, regulations and restrictions imposed by the European Union and/or United States of America. Re-export of software may need permission from relevant authorities.

## Student Technology Fee Budget Template for 2016-2017 Project Funding Proposal

Project Title: Software upgrade for University and Computer Science classrooms and labs

Organization or College: Arts and Sciences

Department or Unit: Computer Science

Project Period Start Date: 5/1/2017 End Date: 5/30/2017

### I. Senior/Key Personnel

List senior and / or key personnel whose compensation will be funded through project non-recurring funds

First Name	Middle Name	Last Name	Project Role	Requested Salary	Fringe Benefits	Funds Requested
A.						
B.						
C.						
D.						
<b>Total Funds Requested for Senior/Key Personnel</b>						\$ -

### II. Student & Other Personnel

	Requested Salary	Fringe Benefits	FTE	Funds Requested
Graduate Students				
Undergraduate Students				
Other Personnel				
<b>Total Funds Requested for Students &amp; Other Personnel</b>				\$ -
<b>Total Salaries, Wages &amp; Benefits</b>				<u><u>\$ -</u></u>

## Student Technology Fee Budget Template for 2016-2017 Project Funding Proposal

### III. Equipment

List items and dollar amounts for each item, including software, (or multiple items of the same type with a total cost of) over \$2,000 - add lines as needed

Item Description	Funds Requested
A. Tectia SSH Client Software	30,000
B.	
C.	
D.	
<b>Total for items over \$2,000</b>	<b>\$ 30,000.00</b>
<b>Total for Additional items (less that \$2,000 each)</b>	
<b>Total Equipment Costs</b>	<b>\$ 30,000.00</b>
<b>IV. Other Costs</b>	
	Funds Requested
Materials & Supplies	
Consultant Services	
Equipment or Facility Rental/Use Fees	
Additional Project Costs (describe in budget justification)	
<b>Total for Others Costs</b>	<b>\$ -</b>
<b>Total Project Cost</b>	<b>\$ 30,000.00</b>