

Faronics Insight

COMPREHENSIVE Lab Control

User Guide









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Preface

This user guide explains how to install Faronics Insight, as well as the Student and Teacher's Assistant on the Apple iPad, iPhone, and iPod. This user guide also explains how to use Faronics Insight and its features.

Topics

Important Information
Installing Faronics Insight
Technical Support



Important Information

This section contains important information about your Faronics product.

About Faronics

Faronics delivers market-leading solutions that help manage, simplify, and secure complex IT environments. Our products ensure 100% machine availability, and have dramatically impacted the day-to-day lives of thousands of information technology professionals. Fueled by a market-centric focus, Faronics' technology innovations benefit educational institutions, healthcare facilities, libraries, government organizations, and corporations.

Product Documentation

The following documents form the Faronics Insight documentation set:

• Faronics Insight User Guide — This document guides you how to use the product.



Supported Environments

Faronics Insight supports any combination of computers running the following operating systems:

Windows XP-32, Windows Vista-32/64, Windows 7-32/64, Windows 8.1-32/64, Windows 10-32/64, Windows 2003, 2008 and 2012 Terminal Server, NComputing devices, Mac OS 10.7 or greater, and iPads, iPods and iPhones (iOS7 or greater), Android 4.0 or greater, Chromebook (Chrome 33 and greater).

Note: The Insight classroom setup cannot have only iOS or Android devices. The Insight Teacher must be installed on a regular computer (Laptop, Desktop, or Netbook).

Support for NComputing devices is dependant on the device model and version of the vSpace software installed.

Faronics Insight is supported on Linux students running Ubuntu-32/64 version 11 and 12 with the default desktop. Web limiting is only supported with the Firefox browser. Please see the section *Installing Faronics Insight on Linux on page 42* for a list of supported features. Full parity with existing Student software is planned for future releases.

Listed below are the minimum requirements necessary to run Faronics Insight on both teacher and student computers.

Processor

PCs:166 MHz Intel® Pentium® processor or faster

Macs: 64-bit Intel-based Mac

RAM

- 128 MB for Windows XP
- 256 MB for Windows Vista
- 1 GB for Windows 7
- 1 GB for Windows 8.1
- 1 GB for Windows 10
- 512 MB for Mac OS X
- 512 MB for Ubuntu 11 or 12

Protocol stack

All computers running Faronics Insight must be configured with TCP/IP running static or dynamic IP addresses. 802.11 wireless is supported, however enterprise class access points are recommended.

Please note the features not supported in a thin client environment:

- Mute sound
- Send "Ctrl-Alt-Del"
- USB limiting
- View Key Stroke History
- Print limiting
- · Power on, Reboot, Shutdown, Logoff



Technical Support

Every effort has been made to design this software for ease of use and to be problem free. If problems are encountered, contact Technical Support.

Web: http://support.faronics.com

Contact Information

Web: www.faronics.com

Email: sales@faronics.com

Address:

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Installing Faronics Insight

This chapter describes how to install Faronics Insight.

Topics

Planning the Installation

Faronics Insight Network Configuration

Installing Faronics Insight on Windows

Scripting or Mass Deploying Faronics Insight via MSI

Installing Insight in a Thin Client Environment

Installing Faronics Insight on NComputing Devices

Installing Faronics Insight in Secure Mode

Installing Faronics Insight in Secure Mode

Uninstalling Faronics Insight from a Windows Computer

Installing Faronics Insight on a Mac

Uninstalling Faronics Insight on a Mac

Installing Faronics Insight on iOS devices

Installing Insight on Android devices

Installing Insight Chromebook Student

Installing Faronics Insight on Linux

Remotely Updating Faronics Insight

Remotely Updating Faronics Insight

Configuring Faronics Insight Preferences

Faronics Insight Security Monitoring

Faronics Insight in a NAL environment

Wake-On-LAN Support

802.11 Wireless Support

Additional Faronics Insight Utilities



Planning the Installation

Before installing Faronics Insight, review the following requirements and ensure your network and computers are running smoothly. Doing so will prevent problems during installation.

In most cases, the Insight software running on a computer is referred to as the Teacher or Student (uppercase), as opposed to the users-the actual teachers and students (lowercase) or their general devices.

Consider these issues before beginning installation:

Determine Insight architecture for your environment

There is a new, optional method to install Faronics Insight called the Insight Connection Server. The Insight Connection Server is based on a client-server architecture, where the traditional Insight install is based on a peer-to-peer architecture. The Insight Connection Server will reduce the need for configuration changes to routers and wireless access points to support wired/wireless environments and VLANs.

The existing peer-to-peer architecture will still exist and in many instances may still be the preferred method to install Insight.

Faronics will also support a hybrid environment of both peer-to-peer and client-server architectures.

Before installing, you will need to think about which architecture will be best for your organization. Here are some things to think about when making your decision.

Peer-to-Peer

Pros

- Simple, quick install to teachers and students, no server is required
- Uses less network traffic
- No configuration changes if your labs are all the same subnet
- Perfect for single classroom or small schools
- Scalable for large districts as long as you can make networking changes to allow Multicast or
- Directed Broadcast
- Redundancy is built into the architecture, there is no single point of failure (server)

Cons

- · Traffic does not cross subnets without router, wireless access point modification
- If your wired and wireless networks are not connected, you must make configuration changes to allow broadcast/multicast packets to traverse both networks



Client-Server (Connection Server)

Pros

- No configuration changes to routers or access points required because the Connection Server communicates on TCP port 8080
- Can optionally be enabled to support Distance Teaching
- Best suited for large schools or districts with complicated networks
- Not all features and operating systems are currently supported

Cons

- A server is required for every 500 to 4000 students
- The server is a single point of failure

Not all features and operating systems are currently supported (see "Configuring Insight with Connection Server")

Choose between a normal classroom / laptop cart environment or the 1:1 environment

For a normal classroom / laptop cart environment, follow the normal installation instructions later in this manual.

If you are running Faronics Insight in a "1:1" environment, where each student has their own computing device, decide whether or not you want the students to have the ability to change their channel to the Teacher channel or if you want teachers to create a list and automatically bring the Students into class.

We recommend automatically bringing the students into class.

Here's how it works:

- 1. Setup all student computers with a default "home" channel which is not used by any teachers.
- 2. Setup each teacher on their own unique channel. Using their class room number works well.
- 3. Install the student computers with the default option not to change channels.
- 4. Create a Class List manually or dynamically. These lists can be created based on either their login id, active directory name or computer name.
- 5. In the Teacher console, select the students for the current class or load the appropriate Class List. This will 'pull' students from their home channel temporarily to the channel the teacher is on.
- 6. Dismiss the class. When the current class list is dismissed, all students in the current class will be assigned back to their home channel. Forgetting to actively dismiss the class is not a problem however, as another teacher will be able to pull students to their channel when loading their own class list.

Choose a unique teacher channel for each classroom (normal classroom setup)

Faronics Insight is designed to work with as many as 16,000 different classrooms on the same network. It uses Teacher channels to broadcast the contents of a teacher's computer to student computers on the same channel. To simplify installation, each classroom should have its own unique channel.



Think of a Teacher channel as a TV channel: All TVs tuned to a certain channel receive the same program. In the same way, all Students configured to a certain Teacher channel receive the screen broadcasts from the Teacher configured to that same channel. If only one Faronics Insight classroom is on your network, you can choose any number from 1 to 16,000. If you have multiple Faronics Insight classrooms, each requires its own unique Teacher channel number.

For each classroom, decide which computer will be the Teacher computer

Generally, you want to set up one Teacher computer per classroom. The teacher will use this computer to control all student computers in the same classroom. During installation, you'll have to specify whether the computer is a "Teacher" or a "Student" computer, by selecting the appropriate .msi file.

You may setup more than one teacher computer per classroom, but the first Teacher to perform any "limiting" actions takes preference over subsequent Teachers that try to perform the same "limiting" action in most cases. If the first Teacher goes offline for any reason, the subsequent Teacher's limiting actions take over, so it is a good idea to ensure the settings are the same. If no Teacher is present on the current channel the Students will revert to their home channel in about 20-30 seconds.

Configure a valid TCP/IP protocol stack for all student and teacher computers.

If the computers are using DHCP, the DHCP must be working properly. It is best if the teacher and student computers are all on the same IP subnet. Faronics Insight will work with static IP addresses, but they are not required.

If teacher and student computers are not on the same IP subnet, use Multicast or an IP Directed Broadcast and verify that the switches support those features. More information on choosing the transport and discovery method is available in the "Installing Faronics Insight in a VLAN" section.

Use good networking hardware and software

If your classroom already experiences network errors, Faronics Insight will not perform correctly. If you are experiencing problems logging onto computers or copying files over the network, resolve these issues before installing Faronics Insight.

Use an enterprise class access point

If you plan on using Faronics Insight over a wireless network, it is important to use an enterprise class access point. Generally, personal home network wireless access points that cost less than \$100 are not robust enough to handle many connections. We recommend an access point in the \$200-\$300 range that usually will reliably handle 40-60 Student connections.

Determine whether or not you want students to access the Faronics Insight icon

If you do not want students to access the Faronics Insight icon, run the Student installation, select *Advanced Options* and select *Stealth Mode*.



Determine whether you want to run Faronics Insight using one of the Security Modes

Faronics Insight provides two security modes for installation. It can be installed with one or both security modes selected. Running Faronics Insight in Password-Secure Mode requires a teacher to type in a password in order to see students on a particular channel. If this mode is selected for the Teacher install, the same mode must be selected for the Student installs. For installation instructions, refer to the section *Installing Faronics Insight in Secure Mode* later in this manual.

Running Faronics Insight in Active Directory Secure Mode requires a teacher to be a member of the Domain User Group, *Insight Teachers* to see students on a particular channel. For installation instructions, refer to the section *Installing Faronics Insight in Secure Mode* later in this manual.

Determine if it is necessary to install on Terminal Services, or NComputing environments

Faronics Insight will run in a thin client environment, fat client environment or a mixed environment. For instructions on how to install the thin client support, refer to the section, *Installing Insight in a Thin Client Environment* later in this manual.

Determine if you will be installing the software on the Mac

The Faronics Insight Student and Teacher applications will run on the Mac. For instructions on how to install Faronics Insight on a Mac, refer to the section, *Installing Faronics Insight on a Mac* later in this manual.

Determine if you will be installing the software on Linux

The Faronics Insight Student will run on Ubuntu 10 or 11., though with a limited feature set. For instructions on how to install Faronics Insight students on Linux refer to the section, *Installing Faronics Insight on Linux* later in this manual.

Determine if you will be including iOS devices in the classroom

Faronics Insight provides free software to include Apple devices such as the iPad, iPhone or iPod into the classroom. For instructions on how to include these devices, refer to the section, *Installing Faronics Insight on iOS devices* later in this manual.



Faronics Insight Network Configuration

By default, Faronics Insight assumes that all Students will be on the same IP-subnet as the Teacher. However, it is possible to configure Faronics Insight to function properly even when the Teacher resides on a different subnet (or even a separate segment) from the Student.

IP-Subnets and VLANs

If the Teacher is on a different IP-Subnet from the student computers, the default "IP Broadcast" UDP packets used by Faronics Insight will not be received by the Student, and that machine will not be displayed in the Student List. Instead, you must configure the Teacher software to use either IP-Multicast or IP-Directed Broadcast packets.

IP-Multicast supports the ability to have one device (a Teacher) send a message to a set of recipients (Students) with special multicast addresses rather than a single device. IP-Directed Broadcasts are special addresses which (when properly formed) will traverse your network as a single directed UDP packet until the destination subnet is reached. Upon reaching the destination subnet, the router will then convert the packet into a standard UDP-Broadcast packet.

For either transport method to work, it is important to first verify that your network routers have support for that feature enabled. For IP-Directed Broadcast to work, your routers must also be configured to forward IP-Directed Broadcast packets (sometimes routers refer to these as UDP Directed Broadcasts) and the address of these packets must be properly formed. You should contact your network administrator or refer to your hardware manufacturer's documentation for further information on your network device features and configuration.

Insight Port Usage

Insight's main port number is 796 (or ox31C hex). All non-status broadcast and multicast packets are sent to this port (796). The source port for these packets is dynamic (sometimes referred to as ephemeral), meaning is it decided by TCP/IP at run time and cannot be specified. Generally it is in the range of 49152–65535. All Insight PC's must allow data traffic on port 796 to be received and should not attempt to curtail the transmitting of data on ephemeral sockets.

When a Insight Teacher is performing an action on a specific Student (i.e. Control, Thumbnail acquisition, Chat, etc.) the session oriented TCP packets are used. If the Student is a Fat Client machine, then the destination port will also be 796. Again, the source port is dynamic.

Thin Clients are a special case. All UDP non-status broadcast and multicast packets are still sent to port 796, but if the Student is a Thin Client Student, all TCP packets are sent to a dynamic port. The port for each Student is therefore unique. In this case, it is possible for a Teacher to send a TCP packet from a dynamic port to a dynamic port. However, in the Terminal Server environment, most TCP/IP traffic takes place within the same computer and is little more than inter-process communication.

There is one additional UDP Status packet which is used to monitor Insight activity on the network. This traffic originates on port 1053 and is always sent to port 1053. It is either a broadcast or a multicast packet. Insight will function without Status Packets, but functionality is reduced (especially for a 1:1 environment where the enrollment data packets are used to detect when a Student prematurely leaves a class.)



All Multicast packets are in the address range of 239.0.208.0 to 239.0.208.255. If IP-Multicast is the transport method chosen, then the router must be configured to forward data in this address range. If IP-Directed Broadcast is chosen, then it also must allow all traffic on port 796 (0x031C) and port 1053 (0x41D) (either source or destination) to freely move between the subnets.

Faronics Insight provides a tool to assist you in determining the proper address to use in the IP Directed configuration. It is called DirBCastAddr.exe, and it's available in the install package. After unzipping the package, the tool can be found in the Utilities sub-folder inside the Windows folder. Click on the file and then enter the IP address of any student machine on the target subnet, along with the subnet mask for that subnet. After both addresses have been entered, click on the "Calculate" button.

Configuring Faronics Insight for use with IP-Multicast or IP-Directed Broadcast

After configuring your network devices as described, configure the Faronics Insight software to use that transport method.

- 1. Select Administer | Preferences from the console menu on the Teacher computer.
- 2. On the Network tab, choose either IP-Multicast or IP-Directed Broadcast in the Data Transmission section.
- 3. If IP-Directed Broadcast is the preferred method, enter the IP address determined to be the correct one as shown by the DirBCastAddr.exe utility. If a specific Teacher machine must communicate with Student machines in more than one subnet, add the addresses for the subsequent subnets.

Each Teacher installation should be configured with only the subnets where Students with whom they interact with reside. So different Teacher machines can and will have different subnet addresses listed in the Network configuration dialog in those environments with more than three subnets. In the rare case that more than three subnets are needed for a specific Teacher installation, please contact Technical Support for further assistance.

You can validate your implementation by launching the Teacher console, which should now automatically discover the Student machines on the other subnets. If UDP data is traversing the network properly, the teacher will be able to broadcast his or her screen or blank student screens. If the teacher can also view thumbnails of the students in the Student List or remotely view student screens, then TCP data is also traversing the network properly. As Insight is a peer-to-peer application, both UDP and TCP traffic are required to be able to traverse the subnet for it to function fully.

Configuring Faronics Insight for use with Connection Server

Insight has a new optional feature called the Insight Connection Server that can be installed separately to connect Insight Teachers and Insight Students. The Insight Connection Server is based on a client-server architecture, where the traditional Insight install is based on a peer-to-peer architecture. The Insight Connection Server will reduce the need for configuration changes to routers and wireless access points to support wired/wireless environments and VLANs.

Insight will also support a hybrid environment of both peer-to-peer and client-server architectures.

Insight Connection Server System Requirements:

To support 500 users

- Dedicated machine or virtual machine that is always up and running
- 64-bit Windows running XP or newer (Windows Server Operating system recommended).



- Static IP Address
- 4GB RAM
- 100MB ethernet network adapter
- Requires port 8080 (communication) and 8085 (Status) to be open
- Optional: Insight AD Secure mode is supported

To support 4000 users

- Dedicated machine or virtual machine that is always up and running
- 64-bit Windows Server
- Static IP Address
- 16GB RAM
- 1GB ethernet network adapter connected to a gigabit port on a switch
- Requires port 8080 (communication) and 8085 (Status) to be open
- Optional: Insight AD Secure mode is supported

Insight Connection Server Setup:

- 1. In My Computer, go to the Faronics product download location and double-click *ICS.msi* in the *Installers**<language>*\ folder.
- 2. Click Next.
- 3. Read the license agreement that appears, then click *I Accept*, then *Next*.
- 4. Click Install.
- 5. Click *Finish* to complete the installation.
- 6. Once the installation finishes a new Insight Connection Server Status shortcut was added to the start menu. Run the Insight Connection Server Status shortcut to view the server state.

Connecting Insight Teacher Console to Insight Connection Server:

Same Subnet as Connection Server

- 1. Follow "To install Insight on a teacher computer" to complete the Insight Teacher Console installation.
- 2. If the Insight Teacher Console is on the same subnet as the Connection Server no further configuration is required. The Insight Teacher will discover the Connection Server.

Different Subnet from Connection Server

If the Insight Teacher Console is on different subnet from the Connection Server additional setup is required.

- 1. Once the installation is complete open the Insight Teacher Console and from the administer drop down menu to *select preferences*.
- 2. In the Preferences dialog select Network tab.
- 3. Change the Data Transmission to IP Directed Broadcast.



- 4. *Insert* the IP address of the Insight Connection Server in Subnet 1.
- 5. The Insight Teacher Console is now configured to only communicate with the Connection Server.
- 6. Communicating with Connection Server and Broadcast on a different Subnet (Hybrid Model)
- 7. If the teacher needs to communicate with both broadcast Insight students and the Insight Connection Server one additional step is required.
- 8. In the Data Transmission tab under IP Directed Broadcast, Insert the broadcast range of 255.255.255.255 to the Subnet 2

Configuring Insight Students for Insight Connection Server and Distance Teaching:

- 1. Follow "To install Insight on a student computer" to complete the Insight student installation
- 2. A new dialog is available during the install if you select advanced settings: Insight Connection Server and Distance Teaching
- 3. Check the box "Connect Student to Connection Server".
- 4. Enter the Connection Server Address.
- 5. Once the installation finishes the student will communicate using the Insight Connection Server and webRelay if configured for Distance Teaching.

Features not currently supported by Insight Connection Server:

Video

Student operating systems not currently supported by Insight Connection Server:

Ubuntu Linux

Configuring Faronics for use with Distance Teaching

Faronics is proud to be the first classroom management vendor to provide Distance Teaching over the Internet. With Distance Teaching classroom management is no longer bound to the internal school network. Teachers will now have the same award-winning Insight features to help students miles away! Distance Teaching combines the best aspects of Insight with the webRelay technology of webNetwork to offer a complete end-to-end solution.

Insight Distance Teaching leverages webNetwork's unique two-tier security architecture to provide secure, end-to-end access to the Insight Connection Server for students over the Internet.

- 1. Students configured for Distance Teaching connect to the webNetwork webRelay using HTTP.
- 2. The webNetwork webRelay transmits the information to the Insight Connection Server using TCP.
- 3. The Insight Connection Server passes the information to the Insight Teacher Console.
- 4. The Insight Teacher Console leverages the same model to communicate back with the Distance Teaching Student.

Distance Teaching Students can be located anywhere in the world as long as Internet connectivity is possible with the webNetwork webRelay. The Insight Teacher Consoles are required to be inside the schools internal network to communicate directly with the Insight Connection Server.



Insight Distance Teaching requires the additional purchase of the webNetwork Unified Cloud Platform to securely communicate over the Internet.



Installing Faronics Insight on Windows

Faronics Insight has two installation programs for Windows.

- · teacher.msi
- student.msi

To install Faronics Insight you must run the appropriate.msi file on either the teacher or student computer. The install creates a C:\Program Files\Faronics folder on each computer and stores all files locally.

Once the installation is complete, the Student or Teacher program will automatically start each time the computer is started. The teacher computer will display the Faronics Insight icon in the system tray at the bottom right corner of the computer screen. To begin using Faronics Insight, right-click the icon to open the shortcut menu or left click to open the Faronics Insight console.

On student computers, a Faronics Insight Student icon will appear in the system tray at the bottom right corner of the computer screen. If you place your mouse cursor over the icon, it will tell you the Teacher channel and the IP address of the student computer.

To install Faronics Insight on a teacher computer

- 1. In My Computer, go to the Faronics Insight product download location and double-click *teacher.msi* in the Windows folder.
- 2. Click Next.
- 3. Read the license agreement that appears, then click *I Accept*, then *Next*.
- 4. Type in a Teacher channel number (1 to 16,000), then click *Next*. Remember to choose a unique number for each classroom.
- 5. If necessary, set any Advanced Options. Check the box "Check to configure advanced options." Most of these options only apply to the Teacher when it becomes a Student computer.
- 6. Select a Security Mode option if desired. Selecting either mode is not required, and is not recommended unless you have read the section *Installing Faronics Insight in Secure Mode* later in this guide. Checking the box to *Enable a security mode* allows you to then select one or both security modes. If *Password Secure Mode* is selected, then both Teacher and Student installs require that password to subscribe to a channel. If *Active Directory Secure Mode* is selected, then the teacher must belong to an Active Directory group called Insight Teachers that must be created by your IT staff.
- 7. Click Install.
- 8. Click *Finish* to complete the installation.
- 9. If a Teacher was previously installed on that device, then a reboot will be required in order to update the existing files.

By default, Teachers are installed without the ability to change their channel. If you wish to allow teachers to have the ability to change the channel, or to view multiple channels, you must copy and run the EnableChannelSelect.exe utility located in the Utilities subfolder in the Windows folder from the product download to the Teacher machine.



To install Faronics Insight on a student computer

- 1. In My Computer, go to the Faronics Insight product download location and double-click *student.msi* in the Windows folder.
- 2. Click Next.
- 3. Read the license agreement that appears, then click *I Accept*, then *Next*.
- 4. Type in the Teacher channel number (1 to 16,000) that will manage that Student, or in 1:1 environments enter the Home Channel number determined for that student device. Remember to choose a unique number for each classroom. Click *Next*.
- 5. If you'd like to set any Advanced Options, Check the box "Check to configure advanced options".
- 6. Set any advanced options.
- 7. Click Install.

The Advanced Options include the following choices which are covered in more detail in the *Scripting or Mass Deploying Faronics Insight via MSI* section below.

- Stealth mode-prevent the system tray icon from appearing on the student's machine
- · Change channel-allow the student to change the channel on demand
- · No keyboard monitoring-Turns off keyboard monitoring on the student's machine
- No Internet monitoring-Turns off Internet history monitoring on the student's machine
- Allow Task Manager/Activity monitoring-Restricts the use of Task Manager/Activity monitoring on the student's machine



Scripting or Mass Deploying Faronics Insight via MSI

If you want to run *teacher.msi* or *student.msi* from a script or desktop management tool, there are command-line options to install Faronics Insight. Run *msiexec.exe* and each value should be set to a non-null value such as 1 to enable that feature. *Msiexe.exe* command-line parameters are found by running *msiexec.exe*. *Msiexec.exe* is a Microsoft program.

CHANNEL="X"

Installs Faronics Insight with the Teacher Channel X. "X" must be an integer number from 1 to 16000. If you use channel 16001, the Teacher Console will not be able to control the student.

• ADVANCED_OPTIONS

Required to set any of the following advanced options.

STEALTH_MODE

An advanced option, that when set to a non-null value, prevents the Faronics Insight icon from being shown on the Student computer.

STUDENT_CHANGE_CHANNEL_MODE

An advanced option, that when set to a non-null value, allows the student to change Teacher channels.

NO_KEYBOARD_MONITORING_MODE

An advanced option, that when set to a non-null value, ensures that student keystrokes will not be captured on the Student computer.

NO INTERNET MONITORING MODE

An advanced option, that when set to a non-null value, ensures that Internet history will not be captured on the Student computer.

AD_SECURE_MODE

When set to a non-null value, requires the Teacher or Student to enter Active Directory Security Mode. Only Teachers that are a member of the Domain User Group "Insight Teachers" will be able to manage those Students.

SECURE_MODE

When set to a non-null value, the Password Secure version of the product is installed that requires a password be entered on the teacher console to connect to Student computers, which must also be installed in this mode.

PASSWORD

A password is required when turning on secure mode.

· PASSWORD CONFIRM

Confirmation of the password is required when turning on Password Secure mode.

• TASK_MANAGER_LIMIT

An advanced option, that when set to a non-null value, allows the Teacher to decide to limit or not limit Task Manager and Activity Monitor.

ENABLECHANNELSELECT

When set to a non-null value, allows the Teacher to change channels to view one or more classrooms.

• ICS=IP Address of Connection Server

Will setup the student to communicate with the Insight Connection Server

• RELAY=IP Address of webNetwork webRelay Server

Will setup the student to communicate with the webNetwork webRelay so the student can participate over the Internet in Insight Distance Teaching.



ONLY_INSTALL_UPGRADE (Student.msi only)

When set to 1 deploying the student.msi to an existing student will upgrade, rather than uninstall.

ENABLENETWORKTAMPERCONTROL=1

Install option for Students to turn on the Network tampering Detection feature.

- SSID_WHITELIST_NETWORKS="net1;net2;net3;etc..."
- ENABLE_SSID_WHITELIST=0

Will turn this feature off, to turn it on use it in conjunction with ENABLENETWORKTAMPERCONTROL.

For example:

ADVANCED_OPTIONS=1

ENABLENETWORKTAMPERCONTROL=1

ENABLE_SSID_WHITELIST=1

SSID_WHITELIST_NETWORKS="net1;net2;net 3;etc.."

For example, if you want to silently install a Password Secure mode Teacher that can change channels but starts on channel 3, with a password of "test", your script should look like this:

Msiexec.exe /i "<path to teacher.msi>\teacher.msi" /qn ADVANCED_OPTIONS=1 SECURE_MODE=1 PASSWORD=test

PASSWORD_CONFIRM=test CHANNEL=3 ENABLECHANNELSELECT=1 LCS=192.168.2.3 RELAY=10.1.1.2



Installing Insight in a Thin Client Environment

Faronics Insight supports a Terminal Server or NComputing environment. Faronics Insight allows thin client computers to be used as student and/or teacher computers. You can mix-and-match thin and traditional client computers ("fat clients") in the classroom.

Terminal Server Installation

Terminal Server Installation is a two step process. Initially, the *TerminalServer.msi* installation program needs to be run on the Terminal Server. This will copy all needed files to the Terminal Server but will not configure any Terminal Server client computer as either a Teacher or Student.

If the Terminal Server is in "Execute" mode, the "After Installation" dialog will appear. Since Faronics Insight has been designed to install onto a Terminal Server, it is not necessary to complete this dialog. You can press the "Cancel" button on this dialog at any time.

Once you have completed this first step and the Faronics Insight files have been copied to the Terminal Server, Faronics Insight must be properly configured to run on each desired thin client computer. You may do this in one of three ways:

Manual Student or Teacher Configuration

Login to a thin client terminal with Administrator rights and run the *SetupTSClient.exe* configuration utility. Repeat this for each thin client device in the classroom.

Scripted Student or Teacher Configuration

You can script the *SetupTSClient.exe* utility. The following command line options are recognized:

#X	Configures the Teacher channel, where "X" is the desired channel number
StUdEnT	Configures that thin client device to run the Faronics Insight Student software at login
TeAcHeR	Configures that thin client device to run the Faronics Insight Teacher software at login
PaSsWoRd	Allows a Security Password to be specified
UNINSTALL	Configures so that the thin client device will no longer load the Faronics Insight software
QUIET	Performs a silent configuration (this must be the last option specified)

LskTSDat.ini file

The previous "Manual Configuration" edits a Faronics Insight configuration file (C:\Program Files\Faronics\LskTSDat.ini.) If you do not wish to run *SetupTSClient.exe* on each thin client, you can edit the *LskTSDat.ini* file directly with any text editor such as Notepad.

There is an entry in that file for each thin client which will be running either the Faronics Insight Student or Teacher software. The format of the .ini file is as follows:

[Faronics TSClient List]

THINCLIENToo1001=Teacher, Channel=1, Name=Teacher1

THINCLIENT 001002=Student, Channel=1, Name= THINCLIENT001002

THINCLIENT 001003=Student, Channel=1, Name= THINCLIENT 001003



THINCLIENT 001004=Student, Channel=1, Name= THINCLIENT 001004

DEFAULT=Student, Channel=1, Name=Default

The first part of each line (THINCLIENT001001 in this example) is the "Client Name" of that thin client. Each thin client device has a unique Client Name set by the manufacturer or during hardware configuration. You can find that name by logging into the device and entering the "SET" command from a command prompt. Many IT departments will have a list of Client Names for each thin client device.

The Client Name "DEFAULT" can be used as a default setting. If a Thin Client does not find itself in the *LskTSDat.ini* file, it will assume the configuration of the DEFAULT entry (if that entry exists.)

NOTE: Some Thin Client devices require configuration to set a unique Client Name for the device. Faronics Insight requires all Thin Client devices to have a unique Client Name. Please check your Thin Client device's documentation to make sure each device has a unique Client Name.

Following the Client Name is the type of Faronics Insight software to run on that thin client device (either Student or Teacher.) The next parameter defines which Faronics Insight Channel to use for that thin client. Generally, all thin client devices in the same classroom will have the same Channel number.

The last parameter defines the Faronics Insight Display Name. The Student will appear in the Teacher Console with both the login name and this name. By default, we use the Client Name, but that can be changed if a more meaningful name is desired.

Multiple Terminal Servers

If you are load balancing (i.e. multiple Terminal Servers serving the same classroom) you must install Faronics Insight software on all Terminal Servers and then replicate the completed *LskTSDat.ini* file to all Terminal Servers. If there are many Terminal Servers load balanced together, it is possible to configure Faronics Insight to share a common *LskTSDat.ini* file.

There are two options to install Insight on multiple Terminal Servers that are load balanced:

- 1) Specify which server each system connects to and use the standard installation.
- 2) There is also a way to share a ini file for multiple servers. This requires a change in the registry.

To use a remote .ini file, you will need to add the following key to the registry of each Terminal Server in the server cluster:

HKEY_LOCAL_MACHINE\SOFTWARE\Insight\RemoteIniPath

It needs to be of type REG_SZ and should be the path of the shared ini file. The name of the ini file will still be set to LskTSDat.ini, but you can now specify a remote location for that file. This follows the normal "Windows" way of naming the Remote Ini Path.

Here are some examples:

"\\?\UNC\xpprosp3-3\Data

This will specify a remote share "Data" on computer "xpprosp3-3"

C:\Program Files\Insight

This specifies a local file.

Upgrading Insight on Terminal Server

The TerminalServices.msi installs the updated files for both Teacher and Student, so once that install has completed, both Teacher and Student are updated.



If you have already successfully run the SetupTSClient.exe at some point in the past, you do not need to run it again. SetupTSClient.exe doesn't actually install any files, it only configures entries in the LskTSDat.ini file on the Terminal Server, so that when a remote session starts up, Insight will know whether to launch the Teacher or the Student and set it to the correct channel. If your Teachers and Students are already configured correctly in the LskTSDat.ini then you do not need to run SetupTSClient.exe again, just run TerminalServices.msi and both Teacherand Student will be updated.



Installing Faronics Insight on NComputing Devices

NComputing provides a number of small access devices that connect, either directly or via Ethernet, to a centralized server that hosts each virtual desktop. These devices include the L, U, and X-series computers. Support for NComputing devices is very dependent on the generation of hardware and the version of vSpace software installed. As this support is somewhat dynamic, please check the NComputing matrix on the FAQ page at http://support.faronics.com for the latest news on what combination of hardware model, operating system, and vSpace software is supported with this version of Faronics Insight.

L and M-Series

The L and M-Series platforms allow multiple users to share a single host computer. The client hardware is attached to the host via a standard Ethernet infrastructure. Because of the similarity of the L and M-Series architecture to a standard terminal server, you should first copy the Insight files to the L or M-Series host computer with the TerminalServer.msi package.

X-Series

The X-Series platform allows a single computer to be shared with up to eleven users. Up to 2 X-Series PCI cards are installed in the Host computer. After the software has been installed on all clients of the host, the host should be rebooted and all users should login again. Installation is similar to Terminal Server installation (detailed above.) You must first copy the Faronics Insight files to the Host computer with the *TerminalServer.msi* package and then configure the client computers with the *SetupTSClient.exe* utility.



Installing Faronics Insight in Secure Mode

Faronics Insight has the ability to install additional levels of security if desired. Two modes are available, Password Secure and Active Directory Secure, and one or both may be selected. If the option is not properly installed, however, a Teacher will not be able to communicate on the desired channel and Student access will be unavailable.

Password Secure Mode

This mode requires teachers to type in a password when the console is launched to see students on a particular channel. This feature adds an extra level of security to prevent unauthorized consoles from being used as teachers.

Installation Steps:

- 1. After double clicking on either the *teacher.msi* or *student.msi* file, continue through the install as previously described. To install the password protected version, Check the box to *Enable a security mode*.
- 2. Select Password Secure Mode.
- 3. Type in a password and re-enter it to confirm.
- 4. Repeat these steps for both Teacher or Student installations.

The password is required on the Teacher install so that if a teacher computer uses the "Become a Student" feature, it can still be secure.

When a teacher launches the console or changes channels, they will be prompted for a password to view the students on that particular channel or group of channels.

To install the password protected version on the Teacher or Student using a script or Active Directory, refer to the section above, *Scripting or Mass Deploying Faronics Insight via MSI*.

In order to use .adm templates with the secure version of Insight, you must login to the customer portal and generate a key that will go in the password section of the .adm files.

In the event that only a Teacher or a Student, but not both, was installed with Password Secure mode, the Student will not be accessible by the Teacher. This will be indicated by a Security Locked Out icon on the Student thumbnail. You can verify if this is the case by checking the version number on the Students. If you hover with your mouse over the icon in the Student system tray, it will show a version number something like:

v7.6.0.53Ls, v7.6.0.53Sd or v7.6.0.53Sds

The lowercase letters are the security identifiers, where \mathbf{s} signifies Password Secure Mode and \mathbf{d} signifies an Active Directory Secure Mode installation. The uppercase L and S are not actually security identifiers, rather they refer to the type of Insight install chosen. L is for the Light version and \mathbf{S} indicates a Subscription license. The system is designed to lock out any devices that don't match security models. The Students will need to be reinstalled with the correct security mode option(s) in order to correct the security lock out issue.

Note: If the teacher's password is compromised, it will be necessary to re-install both Teacher and Student computers with a new password.



Active Directory Secure Mode

Faronics Insight has the ability to leverage Windows Active Directory to ensure that only authorized teachers can control students. This mode adds an extra level of security to prevent unauthorized consoles from being used. This mode will only function in an Active Directory Domain environment and on Windows XP or newer systems.

To fully configure this mode, you must have Domain Rights to create and populate a domain User Group.

Installation Steps:

- 1. After double clicking on either the *teacher.msi* or *student.msi* file, continue through the install as previously described. To install the password protected version, Check the box to *Enable a security mode*.
- 2. Select Active Directory Secure Mode.
- 3. Repeat these steps for both Teacher or Student computers (the iOS device must be on the same subnet as the Teacher console).

To install the Active Directory Secure mode on the Teacher or Student using a script or Active Directory, refer to the section, *Scripting or Mass Deploying Faronics Insight via MSI*.

When in this mode, a teacher must be a member of the Domain User Group "Insight Teachers". If the teacher is not a member of that group, then Active Directory Secure students will not interact with that teacher.

Creation of the "Insight Teachers" Domain User Group is done using the appropriate Windows Server 2003 or 2008 Active Directory tools. Once the group has been created, those same tools can be used to populate the group with the appropriate teachers.

While Password Secure Mode requires that both Students and Teachers are installed with this option, Active Directory Mode is a bit different. If the Student has Active Directory Secure Mode enabled, then it will be Security Locked Out to any Teacher who was not installed with the Active Directory Secure Mode enabled (or is not a member of the "Insight Teachers" group). The restriction does not go the other way. An Active Directory Secured Teacher (who is also a a member of the "Insight Teachers" group) will be able to control Students who do not have AD Secure Mode Enabled, without any restrictions.

Note: Active Directory Secure Mode is not available yet for Mac Teachers or Linux or Mac Students.



Uninstalling Faronics Insight from a Windows Computer

To prevent the unauthorized removal of Faronics Insight software, the installation has been designed to be tamper resistant. Rather than using the customary Add or Remove Programs mechanism in Windows, Faronics Insight requires the presence of the original install package to uninstall the software.

The .msi install package acts like a toggle switch. To uninstall Faronics Insight from a Windows computer, simply double-click the same file you used to first install the product, to run the installation program again. This will remove the software. If you were to select and run the file again, the software would be re-installed.

If the download package is no longer available, you should be able to download it again from your customer account in the Customer Portal. If you are not able to access your account, please contact Technical Support and they will provide you a copy of the .msi file. It will be necessary to know the exact version of the software installed. This can be found in the Student List view of the Teacher console, or locally by hovering with your mouse over the Faronics Insight icon in the system tray. The version will be something similar to 7.6.0.48 for this release.

If your Students were installed in Stealth mode, the Insight icon will not be displayed in the system tray. To determine if a Student is installed in that case, you should just see it listed in the Teacher console. If for some reason it is not listed, but installed, there are two ways to check. If you can access the Task Manager on the student (typically you can do this using Ctrl-Alt-Del), there will be an entry under Processes called student.exe and then you will know that Insight is installed.

If you are unable to access the Task Manager, there is Utility available in the folder Support called Student Diagnostics. If you run this program on a Student computer, the first available test is called "Test Local Installation". This test will tell you if Insight is installed and running as well as the channel number, version and other pertinent data. Please contact Technical Support for assistance in using this tool.

- If you are on a teacher computer, run teacher.msi. If you are on a student computer, run student.msi.
- 2. You will be prompted to remove the software, click Next.
- 3. Click Remove.
- 4. Click Finish.

To silently uninstall Faronics Insight using a script, run Msiexec.exe with the following parameters:

Msiexec.exe /x "<path to teacher.msi>\teacher.msi" /qn Msiexec.exe /x "<path to student.msi>\student.msi" /qn



Installing Faronics Insight on a Mac

Faronics Insight has the ability to both monitor and manage students on Mac computers as a Teacher as well as support for Students running on this platform. The installation process on Insight Student and Insight Teacher is similar to a Windows installation, but there are slight differences.

Note: Insight utilities for Mac are located in the *Utilities* folder within the *insight_teacher.dmg*.

Manual Installation

After downloading the Faronics Insight installation file from the Customer Portal, unzip the file.

To install the software on a teacher computer follow these instructions:

- 1. Copy *insight_teacher.dmg* from the Mac folder to the Mac Teacher computer.
- 2. Double click on insight_teacher.dmg.
- 3. Double click on insight_teacher.pkg.
- 4. Follow the installation wizard to the Software License Agreement. After reading the terms of the license, select *Continue* and *Agree*.
- 5. Enter a teacher channel number (1 to 16,000). Choose a unique number for each classroom.
- 6. If desired, check the box to configure *Advanced Options*. These options are the same as previously described in the *Scripting or Mass Deploying Faronics Insight via MSI* section. Again these options relate to the case when a Teacher becomes a Student.
- 7. Click *Continue*. The installation location cannot be changed. Faronics Insight must be installed on the system drive.
- 8. Click *Install*. The installer will ask for the administrator credentials on that computer. Type in the username and password and click *OK*.
- 9. After the installation is successful, click Close.

By default, Teachers are installed without the ability to change their channel. If you wish to allow Teachers to have the ability to change the channel, or to view multiple channels, you must run the EnableChannelSelect utility located in the Utilities folder in the <code>insight_teacher.dmg</code>.

To install the software on a student computer follow these instructions:

- 1. Copy *insight student.dmg* to the Mac student computer.
- 2. Double click on *insight_student.dmg*.
- 3. Double click on insight_student.pkg.
- 4. Follow the installation wizard to the Software License Agreement. After reading the terms of the license, select *Continue* and *Agree*.
- 5. Check the boxes to configure the student as desired. For an list and explanation of the options available, please review the section *Scripting or Mass Deploying Faronics Insight via MSI*.



- 6. Click *Continue*. The installation location cannot be changed. Faronics Insight must be installed on the system drive.
- 7. Click *Install*. The installer will ask for the administrator credentials on that computer. Type in the username and password and click *OK*.
- 8. After the installation is successful, click Close.

Note: The Mac student install will not work properly when installed from a user account with File Vault turned on. This is an Apple bug that displays "Insert the <username> disk".

Mac Student on OS X 10.9 (Mavericks)

Enabling Keystroke Monitoring and Keyboard Blocking

Due to security changes in OS X 10.9 (Mavericks), the Insight Mac Student can no longer block the keyboard or monitor keystrokes by default. This functionality can be enabled in Mavericks by approving the Insight Student as an Accessibility application in the System Preferences:

- 1. After installing the Insight Mac Student (version 7.7.4 or later), open System Preferences from the Apple menu.
- 2. Click the Security & Privacy icon.
- 3. Select the Privacy tab.
- 4. Select Accessibility from the list on the left side of the Privacy pane.
- 5. Click the lock icon in the lower left corner of the window and enter an admin account and password when prompted.
- 6. Select the checkbox next to "Insight" in the list of Accessibility applications. A logout is necessary before the approval will take effect.

Automated Installation

The *insight_teacher.pkg* and the *insight_student.pkg* can be customized and installed through a desktop management application.

To customize this package complete the following steps:

- 1. Double click on <code>insight_teacher.dmg</code> or <code>insight_student.dmg</code>.
- 2. Double click on "Create a custom package".
- 3. Follow the installation wizard and select the appropriate options.
- 4. Name and save the package.

This will create a custom package that can be installed with the selected settings.

Note: Mac OS X 10.4 Tiger does not support the APIs to allow Blank Screen to function nor will it support Show Teacher at login.



Uninstalling Faronics Insight on a Mac

To prevent the unauthorized removal of Faronics Insight software, the installation has been designed to be tamper resistant. To accomplish this, Faronics Insight requires the presence of the original install package to uninstall the software, which acts like a toggle switch. Simply select the file to run the same installation program again that you used to install the product. This will remove the software. If you were to select and run it again, the software would be re-installed.

It will be necessary to know the exact version of the software installed. This can be found in the About menu item of the software. The version will be something similar to 7.6.0.53.

- 1. If you are on a teacher computer, run <code>insight_teacher.dmg</code>.
- 2. If you are on a student computer, run Insight_student.dmg.
- 3. Click on Uninstall.
- 4. Click Yes, Uninstall.
- 5. Type in an administrative username and password.
- 6. Click OK.



Installing Faronics Insight on iOS devices

Faronics Insight provides free Student and Teacher Assistant for the Apple iPad, iPhone, or iPod. The capabilities described below will only work with an existing Faronics Insight v7.5 or greater environment.

Installation

The Student install is a simple download from Apple's iTunes App Store. The Teacher's Assistant install is a two step process.

- 1. From the device, download and install the Insight Teacher's Assistant from the App Store.
- 2. Pair the Teacher's Assistant with a Insight Teacher's console running on either a Windows or Mac computer.

Pairing the Teacher's Assistant with a Teacher Console

Pairing the Teacher's Assistant with a Teacher Console is a critical step for the following reasons:

- The Teacher's Assistant will not discover Students unless it is first paired with a Teacher console.
- The settings to restrict students Internet access or limit application usage are read from the Teacher's Console.

To Pair the iOS Teacher's Assistant to a Teacher Console

- 1. Launch the Insight Teacher console on a Windows or Mac computer.
- 2. From the Administer menu, select Manage Teacher's Assistants. A window will be launched from which the iOS device will be authorized.
- 3. Connect the iOS device to the organization's wireless network.
- 4. Launch the Teacher's Assistant by clicking on the Teacher icon on the iOS device.
- 5. The iOS device will discover and list the available Teacher machines on the network. Select the appropriate Teacher machine from the list.
- 6. A passcode will be generated and displayed on the iOS device.
- 7. In the Manage Teacher's Assistants dialog on the PC or Mac, the iOS device will appear in the window. Select the device and click Authorize.
- 8. Type in the Passcode that was generated on the iOS device and click OK.

Once the Teacher's Assistant has been paired with the Teacher's Console, the pairing will automatically occur whenever the Assistant is launched. To stop pairing the iOS device to a Teacher, select the iOS device in the Manage Teacher's Assistants menu and click *Remove*.

With the pairing complete, the Teacher's Assistant will discover all of the Student computers on the Teacher's channel and download the appropriate feature settings. At this point the Teacher's Assistant will be able to perform the features even if the Teacher's Console is closed. However, if the Teacher's Assistant app is closed, you must start the Teacher's Console on the Mac or PC before re-starting the Teacher's Assistant app.



Features of Insight Teacher on iOS

With the Teacher Assistant paired to the Teacher's Console the Assistant will be able to perform the following features:

- Discover Student computers
- Display a thumbnail of student screens
- Blank Screens
- Voting
- · Web limiting
- App limiting
- Send Message
- Details View
 - Last used application
 - Last visited website
 - · Battery information
- · Student Question
- Send Tests
- Expanded iOS Teacher Assistant
- Expanded iOS Student

To perform a feature on the student computers you may either select one student, multiple students or all students. To select a student, simply touch their thumbnail. To deselect, touch the thumbnail again. There is an implied all selection if no thumbnails are directly selected.

Once you've selected the pertinent thumbnails, touch the icon for the feature you want to enable. To turn off that feature, touch the feature icon again. If you want to configure a particular feature touch and hold the feature icon and a configuration dialog will appear.

Blank Screens

The blank screens messages are not pulled from the Teacher's Console. However, the messages can be modified and selected from the Teacher's Assistant either from the Settings menu or by touching and holding the message selection box.

Voting

True/False, Multiple Choice or Verbal questions can be sent to the students. Student results are tabulated and shown in real-time to the Teacher's Assistant.

Send Message

Customized messages can be sent to one, multiple or all students. Select the students or use the implied all by selecting no students and touch the Send Message icon. Input a message or select and existing message and touch the Send button.

App Limiting



When the Teacher's Assistant pairs with the Teacher Console, the current app limiting settings are downloaded to the Teacher's Assistant. To limit apps on the selected students, touch the app limiting icon. An app limiting icon will be displayed on the thumbnail. To stop app limiting touch the app limiting icon again.

Web Limiting

When the Teacher's Assistant pairs with the Teacher Console, the current web limiting settings are downloaded to the Teacher's Assistant. To limit the web on the selected students, touch the web limiting icon. A web limiting icon will be displayed on the thumbnail. To stop web limiting, touch the web limiting icon again.

Details View

To view the details about a student such as their battery information, last used application and last visited website, tap a thumbnail twice.

Student Question

Students can raise their hands electronically by clicking on the Insight icon on their computer and typing in a question to the teacher. That question is then displayed on the Teacher's Assistant.

Features of Insight Student on iOS

Insight supports iPads, iPhones, and iPods as students. Insight Student application is a free app available from the iTunes App Store. The functionality is limited to the following:

Voting

Each device acts as a classroom response system where students can respond to the teacher's questions. Students can respond to Yes/No or multiple choice questions.

Battery Monitoring

From the teacher's console you can see the charge remaining on the device's battery.

Thumbnail

From the teacher's console you can see a thumbnail of the device when running the student app. The students can also send and receive messages from the teacher and change their channel when entering a new classroom.

Testing (iPad only)

Full tests can be administered on Insight Student for the iPad.



Installing Insight on Android devices

Insight provides a free Student for Android tablets. Insight supports the Android operating system 2.3.3 and newer. Specific Android validation was performed using the following platforms: Samsung Galaxy tablets, Lenovo tablets, Google Nexus 7 tablet, and the Amazon Kindle Fire tablet.

The capabilities described below will only work with an existing Insight v7.7 or greater environment.

Installation

The Student install is a simple download from Google Play Store (formally Android Market). From within the Android device, login to the Google Play store and then download and install the Insight Student.

Features

The following features are available with the Insight Android Student:

- View Android student thumbnails in the teacher console
- Receive a "Show Teacher" screen broadcast
- Receive a message from the teacher
- · Receive tests administered by a Insight Teacher
- Ask the teacher a question
- Respond to a real-time vote
- Can change classroom channel
- Gather Inventory Information
 - · Current application running
 - Network information
 - · Battery information



Installing Insight Chromebook Student

Insight provides a Student for Chromebooks. Insight supports Chrome 33 and newer.

The Insight Chromebook Student operates within the Insight environment providing many of the same features as the Insight Student for Mac, Windows, Linux, iOS and Android.

The capabilities described below will only work with an existing Insight v7.8 or greater environment and requires the Insight Connection Service.

Requirements and set up

The Insight Connection Service should be installed and set up before continuing with the software installation below. If you have any questions or problems setting up the connection service, contact your Faronics sales or support representative.

Manual Software Installation

(Note: If you are using the Google Admin Console to manage Google Apps for Business or Google Apps for Education, you can skip to the "Google Admin Console" section)

Now you're ready to install the Insight Chromebook Student software.

- 1. Log into your Chromebook.
- 2. Once you are logged in, click on the "apps" icon



3. Then click on the "store" icon.



4. In the Google Web Store, search for "Insight". You should see two applications listed: Insight Student and the Insight Web Helper extension. You want to select the "Insight Student". The Web Helper extension will be discussed below.

If you can't find the application in the store, you can go directly to it by entering the following URL:

- 5. This should take you to the Chrome student installation page.
- 6. On the installation page, click the "+ FREE" button to begin the installation process.
- 7. This will bring up a dialog asking if you want to install "Insight Student". If you agree to the permissions it uses, click the "Add" button to begin the install. It will take a few minutes to download. Once it's complete you should see the apps list showing the Insight student icon.



8. On most installations, the Insight student will start automatically once it's finished installing, if it does not, clicking on the icon in the apps window will start it. Once it's loaded, you should see the Insight icon in your task tray.

Important Note: Screen Sharing is part of the Insight Chromebook student and by default the active browser tab is shared with the Teacher Console. The active browser tab sharing does not require permission on behalf of the end user.

If you want to see the entire Chromebook student screen, this is accomplished by enabling the "Full screen" option. You will be greeted with a message that says "Insight Student would like to share the contents of your screen. Choose what you would like to share." This is a security feature of Chrome and will only be asked once each time the student starts up. Selecting "Share" will allow thumbnails of the Student desktop to be sent to the Teacher. Selecting "Cancel" will disable the desktop sharing feature. If you selected "Share", you will then be shown a small window in the bottom left that says "Insight Student is sharing your screen". Clicking on the "x" in this window will safely dismiss the window without affecting the functionality of the student.

- 9. Insight Web Helper is required for the Web limiting, Web History, Run URL, and Screen Sharing (Active browser tab) features. Installation of the Web Helper extension is similar to the Student.
- 10. Searching the Chrome Web Store for "Insight" should bring up the "Insight Web Helper" extension. If you can't find it, open Chrome to the following URL:

https://chrome.google.com/webstore/detail/insight-web-helper/adepkmleadimefolboaaedghfnnbfpnp?authuser=1

- 11. This will take you to the install page for the Web Helper. Click the "+ FREE" button to being the install.
- 12. When given the "Confirm new extension" dialog, click "Add".
- 13. When the install is complete you should see a window pop up that says "Insight Web Helper has been added to Chrome".
- 14. Congratulations, your Insight Student for Chrome is now installed. You should now proceed with the software configuration.

Software configuration

The Insight Student for Chrome needs to be configured to communicate with a Insight Connection service before it will appear on the Teacher console. To perform this configuration step, you will need to know the IP address or network name and the connection port of the Connection service. Typically the port will be 8080, but if your network admin has configured it differently you will need to know.

- 1. To configure the Student, click the student icon to bring up the menu and click on the "Preferences" option in the menu.
- 2. When the preferences window opens, you will be able to configure the following:
- Device ID This is coded into the app and will be unique for each installation. This cannot be changed.



- Connection service host This is required and must be set to the network address of the connection service.
- Connection service port This is required and must be set to the port that has been configured on the connection service host.
- Screen sharing This allows you to select between Active browser tab and Full screen sharing.
- *Connection service host This is required and must be set to the network address of the connection service.
- *Connection service port This is required and must be set to the port that has been configured on the connection service host.
- 3. Once you have completed the configuration, click the "Save" button to save your changes. (Please keep in mind that if you ever un-install the Student software, all settings will be lost and must be re-entered if you re-install the software later.
- 4. Once your settings have saved, the Student software should begin communicating with the Connection Service. If you have a Teacher Console already configured to use the Connection Service then the Student should appear within a minute or two. If it does not appear within a minute or two, try refreshing the teachers display. (Note: you can refresh the teachers console by pressing <F5>)



Option: Using the Google Admin Console

The Insight Student and the Insight Web Helper extension can be installed automatically for Chromebooks managed by the Google Admin Console for Enterprise or Google Admin Console for Education. The following steps outline the basic procedures for configuring the Admin Console to do this.

- 1. Log into your Google Admin Console using an administrator account.
- From your Dashboard, click on the "Device Management" icon; then click on the "Chrome" link.
- 3. In the Device Settings window, click "User Settings" and make sure the correct organization is selected on the "User Settings" window.
- 4. Scroll down to the "Pre-installed Apps and Extension" section and click on the "Manage pre-installed apps" link.
- 5. When the "Pre-installed Apps and Extensions" window pops up, click on the "Chrome Web Store" button and type "Insight" in the search bar.
- 6. You should see the Insight Student and Insight Web Helper extensions listed. Click the "add" link next to each app you wish to install. It should move to the "Total to pre-install" list.
- 7. When you've selected each app to install, click the "Save" button at the bottom of the window.
- 8. You should now be back at the "User Settings" page. When you're done here, you need to click the "Save changes" to ensure your modifications are saved.

The next time your managed chrome devices are synchronized with the management console, those changes should appear. Typically each device will try to synchronize each time a user logs in however if left alone, the devices can take up to several hours to sync up depending on how you've configured the policy in the Management Console. You can manually force an update on each device by typing "chrome://policy" in the browser navigation pane, and clicking the "reload policies" button.

Note: It can take several minutes for the policy to synchronize, for the applications to download, install and start up.

Additional Software Notes

- Web Limiting and Chrome "Incognito" mode The Web Helper Extension MUST have the "allow in incognito" option checked on the "chrome://extensions" page to limit or prevent the use of "incognito" windows when web limiting is in effect.
- Screen Sharing Due to Chrome security settings, the user will be prompted each time they log in to allow "Insight Student screen sharing". This affects the teacher's ability to see thumbnails on the Insight Teacher console. We have not yet found a way around this.
- Log Out / Lock Unlike most other platforms, Chrome extensions are installed on a per-user basis. This means that if a student logs out of the Chromebook the Student application is unloaded. This means that the device will become unavailable to the Teacher console until a user logs back into the device.



Features

The following features are available with the Insight Chromebook Student:

- Help Individual Students The Student can interact with the Teacher by sending and receiving messages. Students can silently send questions or request help. A small question mark appears on the teacher's console when a Student sends a question.
- View Student Thumbnails Student thumbnails appear on the Teacher Console allowing teachers a quick overview of what the students are working on.
- Show Student Details The details view of Chromebook student will show student name, machine name, last website, last question and Teacher channel.
- Testing The Insight Teacher can send a test to the Chromebook student and collect the test results. Test questions can include True / False, Multiple Choice, short answer and essay questions. Images can also be attached to each test question.
- Show Teacher Screen The Insight Teacher has the ability to share a screen to all or select Students allowing them to follow along.
- Web Browsing Temporarily disable all or selected student access to the web across browser.
 The Teacher controls the sites the Student may browse to or may direct the Student to specific sites.
- Internet History Shows a searchable list of web sites visited by the selected student, which may be saved to a file.
- Blank Screen The Teacher may blank-out all student screens and disable keyboard and mouse.
- Run URL This feature allows a Teacher to run a web site on student computers.
- Class list support Chromebook student will respond to Teacher request to be loaded into a class.



Installing Faronics Insight on Linux

Faronics Insight supports 32 or 64-bit Ubuntu Students v11 or 12. It is currently supported with the default desktop, we only support web limiting with the FireFox browser. Additional support for other Linux distributions, Desktops and browsers is planned for future release, as well as providing parity with Windows and Mac Students.

Installation

To install the software, copy the file student-Ubuntu.run from the Linux folder in the product download location to the Student computer.

- 1. Right-click the file, select the permissions tab, and ensure that the file is set to run as an executable.
- 2. Double click the file to begin the installation.
- 3. Select *Run* to begin the install.
- 4. Enter an administrative password and select *OK* to continue.
- 5. The Insight wizard will launch. Click Next to continue.
- 6. Select *I accept...* and *Next* to continue.
- 7. Select *Finished* to complete the installation.

Alternately, you may also run the install from a Terminal window with the command: /bin/bash student-Ubuntu.run

UPGRADE AND UNINSTALL

To upgrade or uninstall the Student, run the same installation file again by double-clicking it. After presenting your administrative password, you will be presented with a screen asking if you wish to:

- · Uninstall and exit
- Uninstall the current Student before upgrading
- Re-install over the existing Student (recommended)

Make the preferred selection, and the wizard will complete the process.

Features

With this version of the Student installed, a Windows or Mac Teacher can:

- Run Show Teacher (Full Screen)
- Show Student's Screen to Students
- · View Student's Screen
- Remote Control Student's machine



- Blank/unblank Student's screen
- Ask Student to Vote
- Send a Message or Ask a Question
- Limit Web access
- Limit Application usage
- View Internet History
- Change channels
- Remotely update Linux Students

The Student running this version of the software can Ask a Question or respond to a Vote request.

Note: The Student channel can be specified at install time by modifying the /opt/Insight/etc/Insight.conf file. Change the entry "channel=1" to the desired channel. The Teacher can also change the channel after discovering the Student. The Student does not have the ability to change the channel in this release.

Additional information to ensure the Student daemon is properly running, or to start or stop it:

To stop the student as administrator:

"sudo stop student"

To start the student as administrator:

"sudo start student"

To see if the student is currently running:

"status student"

There is a diagnostics script included in the install that will validate the installation and report if any of the student processes are not running. To use it run:

"/opt/student/scripts/student_diagnostics.sh"



Remotely Updating Faronics Insight

After the initial installation of Insight Students and the discovery of those computers in the Teacher console, Student machines may be updated or re-configured with different settings through the Remote Update feature.

Update Insight on Selected Students

Insight strives to quickly address any defect or issue found and reported by our customers through frequent maintenance releases. In addition, significant new functionality is added in product releases like this one. Once a version of Insight Student is installed on a device, from that point on it is possible to deploy new versions from one central "administrative" view or from an individual Teacher console view.

You may select an individual Student from the List, or multiselect a group of Students to update from the currently installed version to the latest release. To accomplish this, simply copy the specific Student installation files from their download location to the location where the Teacher is installed.

Note: If you are using Deep Freeze or similar "lock-down" software on the Student computers, you will have to disable or "thaw" it during this update procedure to allow the new software to be installed onto the student computers.

Student Installation Files

From the download location, copy the appropriate student files and place them in the location where the Teacher console was installed. The specific Student files are:

For Windows Students deployed from a Windows Teacher: student.msi

For Windows Students deployed from a Mac Teacher: pcupdate.zip

For Mac Students deployed from a Windows Teacher: mupdate.zip

For Mac Students deployed from a Mac Teacher: Insight student.dmg

For Ubuntu Students deployed from either Teacher: student-Ubuntu.run

Updating Faronics Insight on Windows Students

- Begin by installing the latest build of Faronics Insight onto the Teacher computer (see the "Updating the Faronics Insight Teacher" section or "Installing Faronics Insight on Windows.")
- 2. If updating from a Windows Teacher, copy the *student.msi* file from the Windows folder in the download location to the Faronics Insight install folder on the Teacher's computer (the default folder is C:\Program Files\Faronics on Windows.)

If updating from a Mac teacher, copy the *pcupdate.zip* file from the Mac directory in the download location to the Insight install folder on the Teacher's computer (the default folder is Applications\Faronics on a Mac.)

- 3. In the Faronics Insight console, select the computers that you would like to update.
- 4. Click Administer and then the Update Faronics Insight on Selected Students menu option.



5. Provide the credentials for the Students selected. The entire group of Students must be accessible with the same Administrative credentials.

This will take a few seconds for every student selected. When it is done, you may need to press the *View*, then *Refresh* (*F*₅) menu item to see the newly installed version on the student computers.

When deploying students through *Update Faronics Insight on Selected Students* menu, the settings that are pushed out to the student are the same as the *Advanced Options* set during the Teacher install.

Note: This method will only work if there already exists a v6.5 or newer Student running on the computer. This method cannot be used to upgrade a v6.2 student to v7.6 student. Upgrading from v6.2 to v7.6 requires a reinstall of the software on the local device.

Note: If you are upgrading *Insight Students on Windows* from a *Mac Teacher Console*, both the *pcupdate.zip* from the Mac *Install* folder and *student.msi* must be in the /Applications/Faronics/Insight folder on the Mac for the Windows Student upgrade to succeed.

Updating Faronics Insight on Macs

- 1. Begin by reinstalling the latest build of Faronics Insight onto the Teacher computer (See "Updating Faronics Insight" section above.)
- 2. Copy *mupdate.zip* from the Mac directory to the Faronics Insight Install folder on the Teacher's computer (the default folder is C:\Program Files\Faronics on Windows or "/Applications\Faronics" on a Mac).
- 3. In the Faronics Insight console, select the computers that you would like to update.
- 4. Click Administer and then the Update Faronics Insight on Selected Students menu option.
- 5. Provide the credentials for the Students selected. The entire group of Students must be accessible with the same Administrative credentials.

This will take a few seconds for every student selected. When it is done, you may need to press the *View*, then *Refresh* menu item to see the newly installed version on the student computers.

Mac Students are logged out after this process and will need to be logged in again after completion.

When deploying students through *Update Faronics Insight on Selected Students* menu, the settings that are pushed out to the student are the same as the *Advanced Options* set during the Teacher install.

Updating Faronics Insight on Ubuntu

- 1. Begin by reinstalling the latest build of Faronics Insight onto the Teacher computer (See "Updating Faronics Insight" section above.)
- 2. Copy *student-Ubuntu.run* from the Linux directory to the Faronics Insight Install folder on the Teacher's computer (the default folder is C:\Program Files\Faronics on Windows or "/Applications\Faronics" on a Mac).
- 3. In the Faronics Insight console, select the computers that you would like to update.
- 4. Click Administer and then the Update Faronics Insight on Selected Students menu option.
- 5. Provide the credentials for the Students selected. The entire group of Students must be accessible with the same Administrative credentials.

This will take a few seconds for every student selected. When it is done, you may need to press the *View*, then *Refresh* menu item to see the newly installed version on the student computers.



When deploying students through *Update Faronics Insight on Selected Students* menu, the settings that are pushed out to the student are the same as the *Advanced Options* set during the Teacher install.

If you are using Deep Freeze or some similar "lock-down" software on the student computers, you will have to disable it during this update procedure to allow the new software to be installed onto the student computers.

Note: You may select a mixed platform of installed students to update as long as each of the necessary update files are present and the credentials to access the machine are the same for each device in the group. Good IT practice would suggest doing a subset of machines at a time.

This is also an ideal way to update student computers from the 30-day demo version to the latest retail version.



Running Faronics Insight in Kiosk Mode

In Faronics Insight you can run the Teacher Console on Windows in Kiosk Mode. This mode configures the Faronics Insight console so it cannot be minimized or terminated.

To run the Faronics Insight console in Kiosk mode follow these instructions:

- 1. On the Teacher computer, the Faronics Insight teacher.msi file.
- 2. Open regedit.exe.
- 3. Browse to $HKEY_LOCAL_MACHINE \backslash SOFTWARE \backslash Microsoft \backslash Windows \backslash Current Version \backslash Run.$
- 4. Add *KiOsK* to the Faronics Insight Teacher Key C:\Program Files\Faronics\Teacher.exe KiOsK 5. Click *OK*.

The next time the system is rebooted, the Faronics Insight Teacher Console will run in Kiosk Mode.



Configuring Faronics Insight Preferences

Faronics Insight is easy to configure. All preferences are controlled by one dialog with seven tabs. Most preferences are controlled by making a change to these settings on the Teacher computer.

The available configuration tabs are:

- Teacher
- Student
- Web Limiting
- Application Limiting
- Keystroke Alerts
- Drive Limiting
- Network

Teacher Preferences

The Teacher tab lets you configure the following preferences:

Show Teacher Screen

Full Screen

The Teacher's screen will be shown on the Student's screens. The Students will not be able to control their mice and keyboards during Show Teacher.

Windowed

The Teacher's broadcasted screen will appear in a window on the Students' screens. This way the students can "follow along" with the teacher and use their computers during the teacher's broadcast session.

Color Reduction

Limits the number of colors and suppresses the background image used by the Teacher during Screen Broadcast, Remote Control and Show Student. This both improves performance and lowers network bandwidth requirement.

Show Dual Monitors

Allows the Teacher to show dual monitors and return thumbnails of students using dual monitors.

Blank Screens Message

This option allows teachers to specify the text to display on the student's screens when they are blanked. Enter the text message into the drop down list and select *Apply*. The last 10 messages are saved so they can be quickly selected when blanking screens. These messages can be seen from the Blank Screen button on the console toolbar. You may view, select or delete message from that button.

Use an image when blanking screens allows the teacher to select an image to be displayed in the background rather than the default blue background.



Notifications

Show system tray notification when teacher minimizes - This option allows teachers to show or hide the Insight icon in the system tray when the console is minimized.

Show unload notification when dismissing classes - This option will prompt teachers to unload on-demand students at dimissal of a class list.

Automatically check for Insight updates - If enabled the Insight Teacher console will check for updates at load time.

Warn before disruptive actions (Screen Blanking, Limiting, Show Screen, Clear **Desktop)** - This option will prompt with a warning dialog prior to preforming one of these actions listed above.

Sounds

If checked, the Faronics Insight sound effect will be played when showing the Teacher's screen to Students.

Student Preferences

The Student tab lets you configure the following preferences:

Remote Control

Disable Student Keyboard and Mouse

This option allows the teacher to "lock-out" the student's inputs while the teacher is Remotely Controlling a student computer.

Student Thumbnails

Show Current Application Icon On Thumbnails

When in the thumbnail view, this option will show an icon in the upper left hand corner that represents the current application that the student is running.

Show Last Visited Website Icon On Thumbnails

When in the thumbnail view, this option will show an icon in the upper right hand corner that represents the website that the student last visited.

Show Student Name (from Directory) when available

Shows the student directory name below the thumbnail if it is available.

Note: Both the student name and the machine name are automatically shown on medium to large thumbnails. You may choose either single option to be shown on small thumbnails.

Task Manager / Activity Monitor

Disables Task Manager or Activity Monitor on Student computers.



Faronics Insight Folder on Student

This option lets you specify the path of the folder on student computers. This can be on the local hard drive or on a network drive.

Display notification on student when web is accessed

This option will turn on or off the notice that is displayed on the Student when they try to access the Internet if Web Limiting is turned on.

Web Limiting

The Web Limiting tab lets you configure the following preferences for Limiting the Web.

Block All

This option blocks all web browsing, instant messaging and e-mail programs.

Allowed Web Sites

This option allows you to type in a list of websites that are allowed when Limit Web is turned on. The list of web sites do not need to include the http:// or the www. prefix. One site is entered at a time, followed by a return (enter). The lists of websites can be saved and loaded by using the Load and Save buttons. The files are saved as .lsu files. A sample list might look like this:

www.cnn.com

nationalgeographic.com

*.microsoft.com

Block the following Web Sites

This option allows you to type in a list of websites that are blocked when Limit Web is turned on. The list of web sites do not need to include the http:// or the www. prefix. One site is entered at a time, followed by a return (enter). The lists of websites can be saved and loaded by using the Load and Save buttons. The files are saved as lsu files to a location of your choice.

Note: In both the Allowed and Blocked Websites sections you may use the "" and "?" wildcards to specify websites. Web limiting on Windows will occur with 32-bit Internet Explorer(6.x-9), Firefox (3.x or 4.x) and Chrome. Web limiting on the Mac is supported on Safari and Firefox(3.x or 4.x). If Web Limiting is turned on, 64-bit Internet Explorer will simply be blocked from launching on Windows and Chrome will be blocked on Mac.

Restrict Private and IP Address Browsing

Prohibits students from using the InPrivate Browsing feature in 32-bit Internet Explorer(only) and browsing to websites using their dotted decimal (IP Address) Internet addresses.

Application Limiting

The Application Limiting tab lets you configure the following preferences:



Allowed Applications

This option allows you to specify a list of applications that are allowed when Limit Apps is turned on. The entries should include the appropriate file extension if one exists. Similar to Limit Web, enter the applications one at a time, with a carriage return (enter) after each entry. The lists of applications can be saved and loaded by using the Load and Save buttons. The files are saved as .lsa files.

Applications can be typed in directly, added by clicking on the add button and selecting an active application on the Teacher's computer, or by adding an application from the Student's computer by clicking on View Student's Running Programs in the Monitor menu.

The application display name is typically an .exe file in Windows, though the Application Limiting software actually uses the internal name of the file. While the default display name and the internal name are usually identical, they can also be very different, so check the properties of the executable to determine its internal name if problems occur limiting that application. On Mac, enter the display name of the file as it appears in Finder.

Block Applications

This option allows you to specify a list of applications that are blocked when Limit Apps is turned on

The lists of applications can be saved and loaded by using the Load and Save buttons. The files are saved as .lsa files.

Applications can be typed in directly, added by clicking on the add button and selecting an active application on the Teacher's computer or by adding an application from the Student's computer by clicking on View Student's Running Programs in the Monitor menu.

Note: On both Windows and Mac there are some applications that can not restricted, as their usage is fundamental to the working system. And example of this would be File Explorer in Windows and Finder in Mac.

Keystroke Alerts

The Keystroke Alerts tab allows you to specify a list of banned words. If a student types a banned word, the teacher will be notified with a yellow caution icon on the student's thumbnail. Use your mouse to hover over the thumbnail, and it will display the word that was typed by the student.

Drive Limiting

The Drive Limiting tab allows you to configure the types of drives that will be blocked when you click the Limit Drives button. Faronics Insight can block USB drives and CD/DVD drives on most students. This is not supported however on Thin clients, Linux or LabQuest students.

Network

The Network tab lets you configure the following preferences:

Data Transmission

IP-Broadcast — This default option uses broadcast packets when the teacher needs to contact all student computers. This option assumes that student are on the same subnet as the teacher.



Note that broadcast packets do not cross subnets or other segments. If you need to cross a subnet we recommend either IP-Multicast or IP-Directed Broadcast.

IP-Multicast — Transports Faronics Insight data to students via TCP/IP-Multicast. Multicast allows networking hardware to keep Faronics Insight traffic local to Faronics Insight computers. If your network hardware supports this option, it's highly recommended.

IP-Directed Broadcast — If the teacher is on a different IP-Subnet from some or all of the students, and Multicast is not possible, this option can be used. To calculate the proper address, use the DirBCastAddr.exe utility in the Utilities folder on the Faronics Insight product download.

Note: Some additional configuration of the Routers/Switches may be needed to enable Multicast and/or Directed Broadcasts on your network. Consult your hardware guide for your switches/routers to be sure. For more information regarding these options, refer to the section "Installing Faronics Insight in a VLAN."

Multiple Network Adapters

Specify Network Interface Card — Some computers actually have more than one Network Interface card (NIC) and/or multiple IP addresses (i.e. a router). Many times these may be virtual or wireless network adapters.

Faronics Insight will always use the "first" NIC that responds, but that is not always the desired NIC or network. You can use this checkbox to specify which NIC you prefer to use.

If your Teacher computer has multiple real or virtual network adapters, specify the adapter that Faronics Insight should use from the drop down box.

Teacher Channel

• Channel Number — This feature is normally disabled so that Teachers cannot change the channel number assigned to them. If you prefer to allow a teacher to change channels, or view multiple channels, this feature must be enabled after the install, on each Teacher machine where the ability is desired. There is a utility called <code>EnableChannelSelect.exe</code> that is available in the Utilities directory in the product download. Copy the utility to the Teacher machine and double-click it to run to enable this feature.

Listed below are the command-line parameters for *EnableChannelSelect.exe*:

EnableChannelSelect.exe TRUE

EnableChannelSelect.exe FALSE

*Note: *EnableChannelSelect.exe* will also make it so that teachers or administrators can change student channels remotely. To access this feature, select one or more Students and Click on *Administer*, then *Change Student Channel*...

- Administrator Channel Channel "o" (zero) is the administrator channel and has the ability to monitor all assigned channels and see all Student machines that have been installed.
- Use Multiple Channels This feature allows the teacher to "group" any of the 16,000 channels. Each channel must be separated by a comma. For example: 1,3,4 will configure the teacher console to be able to monitor all students on channels 1, 3 and 4 at the same time.



Changing Channels

If you ever need to change the channels of student computers there are several ways to accomplish this task.

- Uninstall and re-install the product, selecting a new channel in the install dialog.
- On Windows, run *EnableChannelSelect.exe*, which is located in the *Utilities* directory.
- Change the channel from the Faronics Insight console. If *EnableChannelSelect.exe* has been run, it is possible to change the Student channels remotely from the console.
 - 1. Select the Students whose channel is to be changed.
 - 2. Click Administer then Change Student Channel...
 - 3. Enter the new channel.
 - 4. Click OK.
- Set the channel with student.adm using Active Directory.

Note: Faronics Insight works well with imaging tools such as Ghost. The key consideration when using an imaging tool is how to change the channel for all of the computers in a particular classroom. For large organizations, the recommended method is to use Active Directory or *EnableChannelSelect.exe* through a login script. Smaller organizations may find it easier simply to change the channel through the Teacher console.

Updating the Faronics Insight Teacher

To update Faronics Insight with a new product version, simply run the new Teacher installation files. It will automatically update the Faronics Insight files to the new version without the need to uninstall the old version before installing the new version. If the old version is previous to v6.0, uninstalling is not required, but is recommended.

Updating the Faronics Insight Student

Improvements to the Faronics Insight software are released as needed. If you ever wish to update the Student computers to the latest build of Faronics Insight, there is an automated way to do this. It is no longer necessary to re-install the software manually on all Student computers. See the section *Remotely Updating Faronics Insight* earlier in this guide for more information.



Faronics Insight Security Monitoring

With a tool as powerful as Faronics Insight, there's always a possibility for misuse. A student may be tempted to find an unauthorized copy and load the Teacher software to disrupt a class.

There are three ways to deal with possible misuse.

- Set school policies around appropriate behavior, monitor and enforce the policy.
- 2. Install Faronics Insight in Active Directory Secure Mode which requires teachers to belong to a domain group called "Insight Teachers" in order to manage student computers. (Recommended method)
- 3. Install Faronics Insight in Password Secure Mode, which requires a password on both the Teacher and Student machines before access is allowed.

Security Monitor

Security Monitor is also available in the Utilities folder from the Faronics Insight download folder. This application runs on any PC and will capture a log of Faronics Insight activity, including the installation or uninstall of the Faronics Insight program.

With this utility, many schools have quickly been able to pinpoint students who are abusing the "appropriate use policy" of their classroom.

Teachers can also access the Security Monitoring data by clicking *View* then *Status Window*. As soon as teachers perform actions you will see the security messages.

Students downloading and installing a demo version of Faronics Insight caused the largest security problem with the previous versions. Starting with *Faronics Insight v6.1*, the demo version cannot interact with the released version.



Faronics Insight in a NAL environment

NAL (NetWare Application Launcher) is part of the Novell ZEN Works package. NAL can be used to control the student desktop, giving students access to only administrator-approved applications. In the most restrictive mode (and perhaps most useful mode for schools), ONLY the applications specified can be run.

To install Faronics Insight in a NAL environment, push out both the Teacher and Student programs using the supplied Windows .msi files.

Note for Teacher computers:

If the teacher's computer is also locked-down by NAL, the teacher will not have a System Tray and will not be able to click the Faronics Insight Teacher Icon to control Faronics Insight. Instead, the hot-key sequence "<Ctrl><Alt><L>" can be used to bring up the Faronics Insight Teacher's menu.



Wake-On-LAN Support

Wake-On-LAN (WOL) technology can be used to remotely "power-on" student computers. However, Student computers must be configured to enable WOL. The steps needed to do this vary with every computer model. Generally, the computer needs special hardware to support this and there is a BIOS switch which needs to be enabled. It is best to consult with your computer supplier to determine the actual steps needed.

In the utilities folder of the Faronics Insight product download, there is a utility, *WakeUp.exe*, which can test compliance of WOL.

This utility will send a WOL "Wake Up" signal to a specified target computer. To use this utility, you will need two computers: the target computer and a console computer. Both will need to belong to the same IP subnet. You will have to determine the Physical MAC Address of the target computer.

If this computer is a Win9x computer, you can use the Window's *winipcfg.exe* utility. Otherwise, you can run the IPCONFIG /ALL command from a command prompt.

Once you have the Physical MAC address of the target computer, shut down that computer and from a command prompt on the other (console) computer you can run the *WakeUp.exe* utility. This will send the WOL Wake Up packet to the target computer.

If WOL is properly configured on the target computer, it will then power-on. If not, you will have to check with the hardware manufacturer to see what additional steps need to be taken. If WOL is not properly configured on a student computer, the Faronics Insight teacher computer will NOT be able to perform a WOL Wake-Up on that computer.

Note: Apple's version of Wake-On-LAN will only wake a Mac from sleep, not power-on a Mac that is off.



802.11 Wireless Support

Faronics Insight includes a wireless protocol that is automatically selected when the Teacher computer senses that it is communicating over a wireless network. This protocol significantly increases the performance of Faronics Insight on wireless networks.

Special Hardware Requirements

- Please make sure that all computers are using the latest NIC (Network Interface Connector)
 drivers available from the NIC vendor. The "world of wireless" is similar to the LAN
 environment of a decade ago. Wireless network drivers are being updated and improved
 frequently.
- 2. Enterprise Class Access points are recommended. There are two basic types of Access Points: Residential and Enterprise. The easiest way to differentiate is with the price.
- A "Residential" Access Point will generally sell for around \$100. They work fine in a home environment where several computers will be sharing an Internet link and perhaps a printer.
- The "Enterprise" Access Point is designed to truly support 50 or more clients at the same time. They generally sell for around \$300. Unless you really have less than five student computers, you want an "Industrial" class Access Point. This will benefit not only Faronics Insight, but general student computing as well.
- 3. Turn off Power Save on the student computer's NICs. In our testing we've found that Faronics Insight performance is improved as well as the battery life of the computer.

Installation

It is assumed that all wireless computers are associated to the same Access Point. Other than this, there are no other special installation concerns. Simply run the installation programs on the teacher and student computers, as specified earlier in this installation guide.

Performance

The speed of the Teacher's screen broadcasts to student computers will NOT be as good over a wireless network when compared to the performance over a wired network. There is no way to overcome this.

A wired network can send broadcast and multicast data at 100Mbits per second. An 802.11 wireless network generally sends broadcast and multicast data at 1MBit per second (a mere 1% of the wired speed).

In addition to the drastic bandwidth reduction of wireless networks, the Access Point architecture of 802.11 will quite often add significant propagation delays to broadcast and multicast data. This is due to the Power Save architecture of the 802.11 world.

However, the Faronics Insight Show Teacher feature will still work reasonably well. Even complex Teacher screens should appear on Student screens within three seconds. Simple Teacher screen changes should appear almost immediately.



Wireless Performance Tweaks

If you optionally wish to improve performance, you can attempt to configure your Access Point (AP). Since this differs from vender to vender, we can only give general guidelines. You'll have to consult your Access Point's manual to see how to actually make the change on your particular Access Point.

- 1. Drop the Beacon Interval as low as possible. Generally, this can go down to 50ms.
- 2. Set the DTIM to ZERO. This allows broadcast and multicast packets to be sent after EVERY beacon packet.
- 3. Increase the Broadcast or Multicast speed. Not all AP's allow this to be set.



Additional Faronics Insight Utilities

SecurityMonitor.exe

If you suspect a student has a rogue copy of Faronics Insight, you can quickly identify that student with the new Faronics Insight Security Monitor. The Faronics Insight Security Monitor will capture all traffic and optionally save the data out to a log file. Click the Options button, select the logging tab and type in a filename.

Clicking on the options button also allows you to filter by Teacher and by message. This new filter capability allows you to sift through all of the messages to just find the inappropriate use. If you find a rogue Teacher console is in use, you can show Real-time Alerts by selecting that computer. At that point, all traffic from that computer is flagged with a warning sign.

EnableChannelSelect.exe

By default, a teacher cannot alter the settings in the Teacher Channel area of the Network tab of the Teacher Preferences dialog. This information is set during installation and generally does not need to be set. However, if a teacher does need to change these settings, running this utility on the teacher's machine will then allow that teacher to update his or her local channel, groups, and remote student channels. This utility must be run with local Administrator privileges. If you have need to revoke these rights, you can run this utility with the "FALSE" command-line option.

DisableAudio.exe

By default, a teacher can use the audio capabilites of Insight. If you do not want a teacher to be able to use the audio settings you can run this utility (DisableAudio.exe TRUE) on the teacher's machine and it will make it so the speak\audio section will be grayed out and disabled.

You can set it back to the default by running DisableAudio.exe FALSE.

DisableDataTransmission.exe

By default, a teacher can alter the settings in the Data Transmission area of the Network tab of the Teacher Preferences dialog. If you do not want a teacher to change the Data Transmission settings you can run this utility on the teacher's machine and it will make it so the Data Transmission section will be grayed out and disabled.

You can set it back to the default by running DisableDataTransmission.exe FALSE.

DirBCastAddr.exe

When configuring the Teacher preferences, the Network tab allows for up to 3 different "IP-Directed Broadcast" addresses. These are special addresses which (when properly formed) will traverse your network as a single directed UDP packet until the destination subnet is reached. Upon reaching the destination subnet, the router will then convert the packet into a standard UDP-Broadcast packet.



For this to function, the routers must be configured to forward IP-Directed Broadcast packets (sometimes routers refer to these as "UDP Directed Broadcasts") and the address of these packets must be properly formed. This utility will help with the later. You must enter the IP address of any student machine on the target subnet along with the subnet mask for that subnet. After both addresses have been entered, click on the "Calculate" button. Copy the resulting address into one of the three Subnet entries in the Data Transmission area of the Network tab of the Teacher Preferences dialog.LSeriesLocation.exe

EnableChannelSelect.exe

The Teacher Channel is generally set during installation. The Faronics Insight software can always be re-installed to update the local Teacher Channel on a student or teacher machine. This utility can also be used to update that local Teacher Channel. It must be run with local Administrator rights. On a Teacher machine, it can also be used to group channels together. It is a console application. All parameters are passed on the command-line. The new Teacher channel must be a number between 0 and 16000. (Note that channel 0 has no real use for a Student machine.) If the machine is a Teacher machine, you can specify a group of channels by enclosing the comma separated channels within brackets. (i.e. {1,4,63})

SetDataTrans.exe

This will alter the base data transmission type on a Teacher machine between IP-Broadcast, IP-Multicast, and IP-Directed Broadcast. As a console application, the parameters are passed on the command line. They are "Broadcast", "Multicast", or "Directed:w.x.y.z,w1.x1.y1.z1,...". For IP-Directed Broadcasts, you can specify up to 4 dotted-decimal IP-Directed Broadcast addresses. You can use the DirBCastAddr.exe utility to properly form these addresses.

StudentDiagnostics.exe

This is a diagnostic utility used by Faronics Insight Technical Support personnel. It is generally used to detect network connectivity issues involving firewalls and routers.

StudPopUp.exe

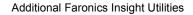
If the student or teacher computer does not have a system tray (it is possible to remove the system tray with Group Policies or with Novell's NetWare Application Launcher) there will be no way to access the local Insight menu. Running this app will bring up the local Faronics Insight menu.

SwitchToTeacher.exe

While the Teacher console has an option to switch functionality to that of a Student, there is no easy way for a Student machine to switch to the functionality of a Teacher machine. This utility will provide that option. For this to function, you must first install the Teacher software on that student machine and then over-install the Student software. Running this utility will stop the local Student application and launch the Teacher application.

WakeUp.exe

The Faronics Insight Teacher console can issue a Wake-On-Lan packet to wake up specified student computers. For this to work, the student computers must be configured in their BIOS to all for a remote wakeup. Unfortunately, all computer manufacturers seem to set these BIOS settings in a different way. This utility is used to verify that a particular machine has been setup





properly. It will take the MAC address of the target computer as a command-line option. For example, if the MAC address of a target student machine were 00-22-64-AD-9C-AC, you could use WakeUp.exe to "wake-up" that machine with the following command line: WakeUp.exe 00-22-64-AD-9C-AC [Enter].





Using Insight

This chapter describes how to use Faronics Insight in your classroom.

Topics

Getting Started
How Faronics Insight Works
Using the Teacher computer
About the Student computers
User Interface Tips
Insight New Feature Overview
Insight Feature Overview
Using the Test Builder on a different machine
Faronics Insight Security Monitoring
Faronics Insight Configuration Preferences



Getting Started

The Insight product download includes the setup files needed to install Faronics Insight. In most cases, the Faronics Insight software running on a computer is referred to as the Teacher or Student (uppercase), as opposed to the users-the actual teachers and students (lowercase) or their general devices.



How Faronics Insight Works

Faronics Insight works by enabling a teacher to see all student computers within a computer-based classroom.

It uses teacher "channels" to ensure that all the computers in that classroom are visible; much like a TV channel enables different TVs to see the same program. Faronics Insight has 16,000 teacher channels from which to choose, which means that you can have as many as 16,000 different classrooms using Faronics Insight at any given time.

The best way to set up Faronics Insight in a lab, classroom or wireless laptop cart is for each classroom or room to have its own teacher channel. This setup enables all of the computers in the same classroom to interact with each other and the teacher to manage the entire room.

If Faronics Insight is going to be used in a 1:1 environment, where every student has a notebook there are two options:

- 1. The recommended option is for teachers to create a Class List and then automatically bring those students into class.
- 2. Another option is to have the students join the teacher's channel. In this mode, the teacher can monitor students as they join and/or leave the class. The teacher can also compare the current list of students in the class against a previously saved class list.

Most schools choose the first option because it allows them to start the class more quickly than the second option. If you decide to use Class Lists, there are three ways to implement this.

Implementing Class Lists

For each of the three Class List methods, determine your channel assignment first.

- 1. Setup all student computers with a default "home" channel which is not used by any teachers. For instance, in a middle school you could assign the 7th graders to channel 7, 8th graders to channel 8, and 9th graders to channel 9. Alternately you could assign a single channel to the entire student body.
- 2. Setup each teacher on their own unique channel. Using the teacher's class room number works well for many schools.
- 3. Install the student computers with the default option not to change channels.
- 4. Create a Class List by one of the three methods below. These lists can be created based on either the student Login Name, their Machine Name, or in Windows you can choose to use their Active Directory (AD) Name.
- 5. In the Teacher console, load the appropriate Class List. This will "pull" students from their home channel temporarily to the channel the teacher is on.
- 6. Dismiss the class. When the current class is dismissed, all students in that group will be assigned back to their home channel. Forgetting to actively dismiss the class is not a problem however, as another teacher will be able to pull students to their channel when loading their own Class List.

Create a Class List manually

- 1. From the Administer menu select One to One and then Manage Class Lists.
- 2. Determine how you would like to select students and choose the appropriate radio button. You may choose to find students by one of the following methods:



- · Student Login Name
- · Student Machine Name
- Student Name (from Active Directory in Windows environments)
- 3. Click the *Browse for Students* button.
- 4. Check off the appropriate students for this class and select *Add*.
- 5. If desired, Browse to associate a previously created Profile with this class.
- 6. Save the class by entering a name. Class Lists are saved with a .lsc extension.

The class may now be loaded on demand. This will cause the current Student List in the console to be replaced by the students in the saved file.

Create a Class List from a static file

- 1. Create a .csv file that lists the students by either:
 - Student Login Name
 - · Student Machine Name
 - Student Name (from Active Directory)

An example of what this file might look like for Login Names:

Studento1

Studento2

Studento3...

From the Administer menu select One to One and then Manage Class Lists.

- 2. Select Import Students...
- 3. Select the .csv file that was previously created.
- 4. If desired, *Browse* to associate a previously created Profile with this class.
- 5. Save the class by entering a name. Class Lists are saved with a .lsc extension.

The class may now be loaded on demand. This will cause the current Student List to be replaced by the students in the saved file. You can later Dismiss Current Class from the same menu location.

Create a Dynamic Class List from your Student Information System (SIS)

Because of the number of different student information systems that exist, Faronics Insight has chosen to take a more generic approach to our integration with these tools. Generally these systems provide a mechanism to export data like the Student Name for example, and to schedule that data export on an ongoing basis.

To prepare for implementing Dynamic Class Lists, you will need to create two files by exporting the required data from your SIS software. The first one is the Teacher file. It should contain only three columns of data, separated by commas. Your tool should have an export option to save as .csv, but if not, a plain text file is also acceptable.



The data needs to be listed in specific order by row: Teacher name, Class ID, Class Name with these items separated by commas. The Teacher name can be either their Network Login Name, their Machine Name, or in Windows environments with Active Directory, their Student Name. The Class ID number can be any numeric identifier, it just needs to be unique for each class.

The second file you need is a Student file. The Student file needs to include only two columns of data separated by commas: ClassID and Student Name. The Student Name can again be their Login Name, their Machine Name, or in Windows environments with Active Directory, their Student Name.

Each of the two files must be named as follows (case sensitive):

"ClassesByTeacherLoginName.csv", "StudentsForClassByLoginName.csv",

"ClassesByTeacherMachineName.csv", "StudentsForClassByMachineName.csv",

"ClassesByTeacherADName.csv" or "StudentsForClassByADName.csv" depending on the method you chose to export the data for the Teacher or Student name.

Once you have exported this data to the files and named them appropriately, copy them to any network location that your Teacher machines can access. Most SIS tools allow you to schedule this kind of data export, but if not it would be easy to setup a cron job to export and copy this data to the file share as often as you like.

To use these files with Faronics Insight, after installing the Teacher then launch the console. The steps to load the lists are the same on Windows and Mac with one exception. The Load Dynamic Class List menu item must be enabled in the Windows console with a utility provided in the Windows folder in the install download image. Simply copy the file ADClassListShimCSV.exe to the location of the Teacher install (typically C:\Program Files\Faronics) and its presence in the folder will enable this menu item.

- 1. From the Administer menu, navigate to One to One and select Load Dynamic Class Lists.
- 2. Browse to the location where you saved the Teacher and Student .csv files.
- 3. Select the class and students you wish to load.

You can later Dismiss Current Class from the same menu location.

The console will always check these files for changes so new students coming in or teachers changing classes will be handled automatically.



Using the Teacher computer

The use model for Insight is quite similar to previous versions. On the teacher computer, you will see a small Faronics Insight icon in the system tray. The system tray is located in the bottom right corner of your computer screen. You will use this menu to control the key features of Faronics Insight. On a Mac, the Faronics Insight menu can be accessed on the dock icon.

More advanced features are available when you access the Faronics Insight Teacher console. The console can be accessed by "left clicking" on the Faronics Insight system tray icon or dock icon or launching it from the Start menu.

In the console the key features are available as icons on the toolbar. All of the features can be accessed through the menus. It is also possible to right mouse click on computer thumbnails to access the key features.

When selecting computer thumbnails, we recommend using *ctrl-a* to select all computers or hold down the *ctrl key* and click with your mouse to select a group of computers. On the Mac use *command-a* to select all computers. In the thumbnail view you can select multiple computers by just selecting them with the mouse.

When using the toolbar buttons, a single click enables that feature and presses the button. Another click will disable that feature, just like a toggle switch.

It is possible to have multiple Teacher consoles monitor the same classroom. However, only the first Teacher's action on a computer will take effect and only that Teacher console can stop the action. For example, if a teacher blanks the student's screens, another teacher cannot unblank the student's screens.



About the Student computers

Faronics Insight is set up to run in the background on student computers. Students will automatically be discovered by the teacher on their channel, provided that the network is functioning properly and the appropriate selections have been made in the Network tab for Multicast or IP-Directed Broadcast configuration.

Faronics Insight Student Icon

A Faronics Insight icon appears in the system tray at the bottom right corner of the computer screen in Windows. On the Mac it appears as a small icon at the top of the screen. If you place your cursor over the icon, it will tell you which teacher channel the computer is on.

If a student single clicks on this icon they can request help from the teacher. The student can type a question and a small question mark is displayed in the teacher console indicating that student has a question. The question mark goes away when the teacher chats with the student or uses the menu item *Clear Student Question*.

If a student right clicks on this icon, it will bring up the student file folder where the Send/Collect files feature sends files.

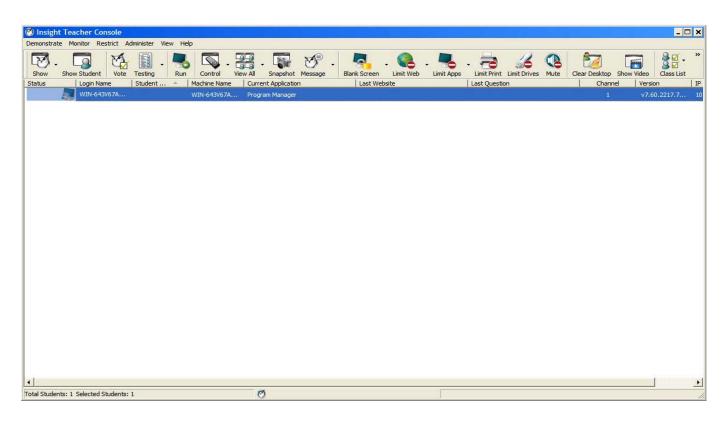
NOTE: If you selected the option to allow students to change their channel during the installation of the Faronics Insight Student application, the students will have a menu option to select a channel they wish to join.



User Interface Tips

Faronics Insight was designed to be simple and easy-to-use. Most of the features are accessible from the Faronics Insight system tray menu or dock icon. The more advanced features are available in the Faronics Insight Teacher console.

All of the features are grouped under one of five menu items: Demonstrate, Monitor, Restrict, Administer, and View.



Faronics Insight Toolbar Buttons

To use a feature in Faronics Insight, select the individual student or students and press the Faronics Insight Toolbar button that corresponds to the feature that you want to use. At that point the button will depress and change to a lighter color. To stop using that feature, click the button again.

Some of the Faronics Insight Toolbar Buttons have a little arrow to the right of the button. Click on the button to access additional options for that feature.

Buttons can be added, removed or moved by click on *View* then *Configure Toolbar* on a PC or *Customize Toolbar* on a Mac.

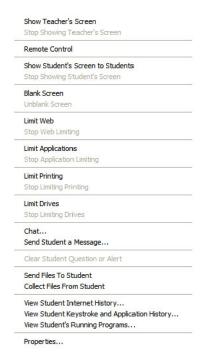
Activating Web and Application Limiting

Web and Application limiting must be configured before they can be activated. You may configure these features in the preferences menu and then turn them on through the menus or the toolbar buttons.



Right-mouse click

In the Faronics Insight Teacher console you can access advanced features by right-mouse clicking on a student computer in either the Details or Thumbnail view.



Multiple Select

It is possible to select one, several or all students.

To select multiple students, use the standard Windows *ctrl* click method. You can also select the entire list with the *ctrl-a* key sequence. On the Mac use *command-a* to select all computers.

In the details view, the line will turn blue when selected. In the thumbnail view, the thumbnail will have a thick red line surrounding it. It is not necessary to use the Windows *ctrl* click in the thumbnail view. In the thumbnail view you can select multiple thumbnails by clicking on another thumbnail.

Once you have selected the desired students, you can right-click on the selected students and get an advanced options menu, click on the toolbar button or console menu.

Unselect Students

To unselect students, click on a blank area of the console.

Implicit ALL Selection

If no students are selected, there is an implied all selection when activating key features like Blank Screens or Show Teacher. For example, if no students are selected you can click the blank screens toolbar button and all of the student screens will be blanked.

Refresh Screen

Pressing F5 on a PC or *command-r* on a Mac or the menu item *View -> Refresh* will refresh the console by initiating a re-discovery of student computers on the channel.



Sorting

By default, the detail view is sorted alphabetically by the *Login Name* column. If you click on the any of the other column headings, the list will sort on the selected column.

Faronics Insight System Tray Menu or Dock Icon Menu

A right mouse click on the Faronics Insight icon in the system tray or dock icon will bring up a menu that contains the features that most teachers use every day.

A left mouse click on the system tray icon will stop the action that you are doing to the students and bring up the Faronics Insight Teacher console.

Hotkey for the Faronics Insight Menu

Some Teacher PCs do NOT have a visible task bar. Since it would not be possible to click on the non-visible icon, you can bring up the Faronics Insight Teacher's menu with a *ctrl+alt+l*. (The "l" stands for Faronics Insight)

Selected Only

In thumbnail view you can just watch a few machines by selecting those machines and pressing the *Selected Only* menu beneath the arrow on the *View All* button.

Classroom Layout

Classroom Layout allows you to arrange the thumbnails in the shape of the classroom. A classroom layout is automatically saved for each size of thumbnails. To switch to a classroom layout view, click the arrow to the right of the *View All* button and select *Classroom Layout*.

Snap to Grid makes it easier to align thumbnails when in Classroom Layout view. Lock Layout, makes sure the layout stays the same once you've set it.

Note: Classroom Layout is not an available feature in the WMS teacher.

Show Tooltips

Show Tooltips will either Show or Disable tooltips in the thumbnail view.

Magnify Thumbnails

The magnify menu on the *View All* button turns on or off the ability to hover over a thumbnail and have it expand temporarily to a larger size.



Insight New Feature Overview

Insight includes many new features but was designed to remain simple and easy-to-use. Here's a list of new features included in this release, which are available in the Windows, Mac and WMS teacher.

Insight Connection Server

The Faronics Insight Connection Server is a new, optional method to run Faronics Insight, based on a client-server architecture. The traditional Insight install is based on a peer-to-peer architecture. The Faronics Insight Connection Server will reduce the need for configuration changes to routers and wireless access points to support wired/wireless environments and VLANs.

The existing peer-to-peer architecture will still exist and in many instances may still be the preferred method to install Insight.

Faronics Insight will also support a hybrid environment of both peer-to-peer and client-server architectures.

Distance Teaching

Faronics Insight is proud to be the first classroom management vendor to provide Distance Teaching over the Internet. Classroom management is no longer bound to the internal school network. Teachers will now have the same award-winning Insight features to help students miles away!

Expanded iOS Teacher Assistant

New features in the iOS Teacher Assistant App include Remote Control Student and Remote Control Teacher. Remote Control Student allows a Teacher to be mobile in the classroom while still having access to remotely use the mouse and keyboard on a selected student. Remote Control Teacher will provide a remote control session with the teacher's machine that is paired to the iOS Teachers Assistant App. Remote Control Teacher allows all the features inside the Insight Teacher Console to be leveraged remotely and any other application running on the teacher machine to be utilized remotely by the teacher or teacher assistant.

Expanded iOS Student

The iOS Student now includes the ability to receive a "Show Teacher" and "Show Student" Screen broadcast. A new iOS Insight web browser is included in the student to provide thumbnail views as students interact with the web. In addition, the iOS web browser can be configured to limit web access and view website history.

* Due to iOS memory limitations the maximum screen size that can be displayed in "Show Teacher" is 3000 pixels wide.

New Android Features

Faronics Insight now supports Students devices running Android version 2.3, 3.0, 3.1, 3.2, and 4.0 on smartphones and tablets. Insight Android features are able to perform the following functions:

· View Android student thumbnails in the teacher console



- Receive a "Show Teacher" screen broadcast
- Receive a message from the teacher
- Receive tests administered by a Insight Teacher
- Ask the teacher a question
- Respond to a real-time vote
- Can change classroom channel
- Gather inventory information
 - Current application running
 - Network information
 - Battery information

Tech Console Deep Freeze Support

Network Administrators can now use Tech Console v7.7 to centrally manage Deep Freeze settings on supported computers.

Faronics provides a tool for Windows XP, Vista, Windows 7 and Mac 10.4, 10.5, 10.6 and 10.7 systems called Deep Freeze. Deep Freeze gives Network Administrators enhanced options for configuring shared computers, such as desired state protection. Once Deep Freeze is installed and enabled, Network Administrators can modify the Deep Freeze state. Tech Console provides the ability to view which of two settings are in force, and allows Network Administrators to remotely change the setting.

*Faronics Deep Freeze software and licenses are not included. Deep Freeze licenses can be purchased from Faronics. For more information visit www.faronics.com/deepfreeze.

Improved Software Install with Tech Console

Distributing software packages remotely to user machines has been improved by threading. Now multiple installations can begin at the same time.

Group Chat

Allows multiple students to chat in a group with the teacher.

Speak

Speak to class - allows the Teacher console audio to be broadcast to the students in the class.

Let Student Speak To Class - allows the student selected audio to be broadcast to the students in the class.

Talk with Student - Turns on the microphone of the Teacher and broadcasts the audio to the selected student.

Listen to Student - Turns on the microphone of the selected student and broadcasts the audio to the teacher's console.

Note: Listening to audio on a Mac student will only work on OSX v10.5 and above



Assessment Mode

Administration of online assessments specifically in K-12 education, largely driven by the adoption of the Common Core State Standards Initiative (CCSSI) in the United States, creates an opportunity for states and school districts to further their overall digital learning strategies. The new feature for Insight, Assessment Mode, allows an Administrator or Teacher to put Students into a secure, locked mode in order to take an assessment exam.

When applied, the Students enter Assessment Mode. During this mode the Teacher can't interact with a Student and is restricted to monitor or communicate with an Assessment Mode Student.

Insight Assessment Mode will address PARCC testing requirements with regard to being able to lock down the device during the test. It will block students from leaving the test as well as block incoming messages, and prevent going to unauthorized Web sites or applications.

The Teacher or Administrator of the exam may choose from the available options to lock down the student machine during the assessment. These options include limiting Web, applications, print, USB/CDROM/DVD drives and be saved and loaded for future use. Assessment Mode activity is logged for subsequent reference.

Note: Assessment Mode is only fully supported by ICS connected Windows and Mac Student machines (i.e. - they are capable of being limited by all Assessment Mode limit settings.) Student installs should not be configured to allow the student to change channels if use of Assessment Mode is planned.



Insight Feature Overview

Insight includes the following features that were available in previous versions:

Show Teacher's Screen Full Screen or Windowed

Shows the teacher's screen to all students on the same Teacher channel.

Select between a "full screen" and a "windowed" show mode. In Full Screen mode, the teacher's screen will take over the entire student's screen and lock-out the student's mouse and keyboard.

In Windowed mode, the teacher's screen will appear in a window on the student's machine. The students can then resize the window and work by following along with the teacher.

When you show your computer screen to student computers, a sound is transmitted from your speakers. This sound lets students know that a Faronics Insight session is about to begin. To change this sound, replace c:\program files\insight\start.wav and stop.wav with your own sounds. On a Mac, these files are located in "/Applications/Faronics Insight/Teacher.app/Contents/Resources".

If you Show Teacher to a machine that is not logged in, it will always be in Full Screen mode.

View Thumbnail Mode (Monitoring)

View up to 3000 crisp high color student thumbnails at the same time. Every student's screen will appear as a "thumbnail" in the Faronics Insight Teacher console. There are 4 sizes of thumbnails that can be sized automatically to the best fit. You can choose to only view selected students by clicking on the *View All* button then checking the *View Selected* option.

Classroom Layout

Thumbnails can now be arranged in the shape of the classroom. Each size thumbnail has its own layout that is automatically saved. Classroom layouts can be saved loaded and locked. This feature is not supported in WMS teacher.

Magnify Thumbnails

When you hover over a thumbnail, the thumbnail size will quickly increase. If you do not like this feature, it can be turned off by clicking on the *View All* button then removing the check from the *Magnify* option.

Active Application/Website Icon

In the upper right hand corners of the thumbnail you have the option of seeing an icon of the active application and website.

Load/Save Profile

Available under the *View* menu, *Profiles* save key teacher settings so they can quickly be loaded at a later time. The following settings are saved in a profile:

- Class lists
- Thumbnail layouts
- · Web Limiting URLs and button state



- Application Limiting programs and button state
- Limit Task Manager/Activity Monitor on Student
- Limit Dotted Decimal Browsing
- · Limit Print button state
- Limit USB button state
- Mute button state
- Blank screens messages

Remote Control

Take remote control of a selected student or students. This means, you can remotely use the mouse and keyboard on the selected student's computer. With Faronics Insight, you can even remote control a computer at the login prompt.

In order to send the *ctrl-alt-del* command to a computer during remote control, you may click on the Control button's chevron menu -> Send *ctrl-alt-del* menu or the *Monitor -> Send ctrl-alt-del* menu item.

During Remote Control we map the Command key on the Mac to the *Alt* key on Windows and the *Option* key to the *Windows* key.

Selecting multiple computers will allow you to remote control multiple computers at the same time. This only works if they look exactly the same.

NOTE: Before using this feature in Windows Vista and above, the following security policy must be enabled:

Local Security Policy > Security Options > Interactive Logon: Do not display last user name.

Limit Student Web Browsing

Temporarily disable all or selected student access to the web across all browsers.*

In the preferences dialog, you may choose between blocking...

- All web activity
- Allowing certain websites
- Blocking certain websites

This feature must be configured in the Preferences dialog and then turned on by clicking the Limit Web button or menu item.

The allow and block lists recognize the wildcards "*" and "?", making it easier to limit certain kinds of websites.

While the Internet is disabled, an icon on both the teacher and the student computer will indicate that the web is disabled.

If a student tries to browse to a website that isn't allowed, they can optionally be shown a website that lists the allowed websites.

Note*: On the Mac, Safari is the only supported browser for allowing certain websites. Block all works across all web browsers.



Limit Student Applications

Temporarily disable all or selected student access to specified software applications. This must be configured in the *Preferences* dialog and then turned on by clicking the *Limit Apps* button or menu. Students cannot get around this feature by simply renaming the application.

Disable Student Printers

Temporarily disable all or selected student printers. Once disabled, the students will not be able to print until you again enable printing.

Drive Limiting

Limit student ability to access USB thumb drives and CD-ROM drives. USB keyboards and mice will NOT be affected. This feature is supported on all Mac operating systems and PCs running Windows 2000 and higher.

Limit Task Manager (PC) or Activity Monitor (Mac)

Check this option if you want to limit the student's ability to run Task Manager or Activity Monitor.

Keystroke & Application Monitoring

Monitor all keystrokes that have been pressed on a computer by any user. This feature will not capture keystrokes at the login prompt or password dialogs. This feature is supported on all Mac operating systems and PCs running Windows 2000 and higher.

Student Voting

Ask Yes/No or multiple choice questions from the Faronics Insight Teacher console. View in real-time how many students have responded and how they responded.

Student Testing

Create up to 100 question tests that can include graphics (.jpg, .png, .gif, .bmp). The test questions can be randomized, sent out to one or more students and tracked in real-time. Teachers can optionally time the test, show results to students and export the results to a .csv file.

Muting

Mute the sound on student computers. This can be done through the *Mute* button or through the *Mute Student Speakers* menu under the *Restrict* menu.

Notebook battery monitoring

Monitors the battery state on a notebook or iPod. If the charge drops below 50%, a yellow warning battery icon is displayed. If the charge drops below 20%, a red critical battery icon is displayed. The percentage remaining and A/C status is also available from the Properties menu.

Secure Mode

Faronics Insight can be configured to require a password to access the console. This password must match the password that was entered during the secure student install.



Blank Screens

Blank-out all student screens on your channel and disable all student keyboards and mice. The message may be customized in the Preferences menu. This feature is useful when you want to lecture without the distraction of students playing with their computers.

Show a Student's Screen

Send a student's screen to all other students. Simply select a student and click the Show Student button. While the button is enabled, the student will have control of their machine and their screen will be shown to the rest of the students in the class.

Anti-tampering controls

Insight attempts to prevent students from mischievously unloading the software or disrupting the classroom.

Send and Collect Files

Send files to student computers and then collect them back. The student must be logged in for this feature to work.

The Mac student will handle C:\ and other windows paths for convenience when sending/collecting files in mixed PC, Mac environment.

Files can be brought back to unique folders, preserving the file names or to a single folder by renaming file names.

Send a message

Send a message to any or all students. This is often an effective way to get a distracted student back on task.

Student Question

Students can click on the Faronics Insight icon and type a question to the teacher. A question mark appears on their machine or thumbnail. In the Details view you can see the student question in the 'Last Question' column. In the Thumbnail view you can see the student question by moving the mouse over the thumbnail image which displays the question in a tooltip.

The question mark can be cleared by the teacher through a chat session or a right click on the thumbnail.

Text Chat

Initiate a text-based chat session with a single student from the teacher's console.

Shutdown, Logoff, Restart

From the teacher's console, shutdown, logoff or restart student machines.

Security status monitoring

The Faronics Insight Security Monitoring tool can be accessed by clicking *View Status Window*. This feature shows all Faronics Insight traffic so that you can identify unauthorized Faronics Insight activity.



You may also run the new *SecurityMonitor.exe*, found in the Utilities folder in the product download, to log all Faronics Insight activities to a file and filter those messages based on type and teacher.

Choose Random Student

This feature allows the teacher to let Faronics Insight randomly select a student. This is a fun way to engage students and encourage participation in the classroom.

Co-browse the Internet

Co-browse allows teacher's to browse the web using the primary tab and have the web browsers on the selected student machines actually browse to the same location as the teacher. Internet Explorer is supported on PCs and Safari is supported on the Mac.

View Student's Running Applications

View all running applications on a student's computer and add those applications to the allowed or blocked lists. Starting in Insight you may also stop a running application immediately from this dialog box.

Draw on screen

This option allows you to draw with a red pen on the screen. Press the left mouse button and move the mouse to draw. To end this mode, close the *Draw on Screen* window by clicking on the X in the upper-right corner of the screen.

Easy to see mouse cursor

In order for the students to better see the teacher's cursor, a large red cursor appears in the student view. These cursors are the same shape as the real cursor, but are 4 times the size and are bright red.

Student Screen Snapshot

Save a student's screen to a standard graphic file. (.jpg or .bmp) The date, time and student login name are displayed in the saved file.

NetWare Support

If the computer is a using the NetWare client software, Insight will use the NetWare login name instead of the Microsoft login name.

Multicast support

One of the benefits of using TCP/IP is the availability of Multicast. Multicast allows networking hardware to keep Faronics Insight traffic local to Faronics Insight computers and cross subnets. Because some network routers or switches don't support Multicast, this option is disabled by default, but can easily be enabled in the *Preferences* menu on the *Network tab*.

Student Power-Off

Log off, restart or power off student computers.



This feature might experience problems on Windows 9x machines. Microsoft states that this will not work on certain hardware. While it has been tested successfully on Compaq, Dell, and IBM computers, it may not be able to properly power down all brands or models of computers running the Windows 98, or ME operating system. (Please see Microsoft Knowledge Base Article Q220706.)

Power on or Wake-On-LAN

If your student computers are configured to take advantage of Wake-On-LAN technology, the Faronics Insight Teacher can "power-on" all student PC's.

Most computers ship with the Wake-On-LAN option turned off in the BIOS, so you must go into the BIOS setup at boot time and turn it on.

Apple's version of Wake-On-LAN will wake a Mac from sleep but will not power-on a Mac that is off.

Channel Grouping

The teacher can control any specific channel or group any number of channels together controlling them simultaneously.

View Only

Allows teachers to supervise a selected student machine. While monitoring, you will see everything the student is doing, but will not be able to control that student's keyboard and mouse.

View All

This will show all computer screens in the classroom as a small, medium, large or extra large thumbnails.

As you move your mouse over a thumbnail image, the student's login name and computer name for that image appear in a tooltip. If the student has a question you will also see that question in the tooltip. If you hover for about a second the thumbnail will optionally get larger. If you right-click a thumbnail view, you will get a menu of options to control that student.

Refresh List

By selecting this option or using the shortcut key, F_5 on the PC or command+r on the Mac, you can refresh the list and see any new students that might have entered the class. This occurs automatically every three minutes.

Run Program

This feature allows you to run an application or a web site on student computers. This can be quite useful for younger students who have trouble navigating to a specific web address or starting a specific application.

Send Message

Send messages to all or selected students. The message will appear in the lower, right-hand corner of the student's PC, or upper right-hand corner on Mac.



Show Internet History

Shows a list of web sites visited by the selected student. This feature works across all browsers on the PC. On the Mac, Show Internet History will only work with Safari.

Become a Student Machine

If you want to turn the Teacher computer into a student computer temporarily, you can do it from the teacher's console. Click on *Administer*, then *Become a Student Machine*. It will remain a student computer until it is rebooted or the current user has logged off.

Remove Selected Students from Class

This feature temporarily disables the Faronics Insight on the selected student machines. The software is re-enabled when a student next logs into that machine, or when you use the *Add Selected Student Back into Class* option on that student machine.

When a student's machine has been disabled, it will still appear in the list, but will have a graphical stop sign on the computer screen. This is just a reminder to the teacher that this student is not controlled by Faronics Insight.

Change Machine Display Name

This option does not alter the computer's actual machine name. However, it will allow an alternative name to be displayed in the Faronics Insight's Machine Name field. If your computers do not have meaningful Machine Names, you can use this option to better name the computers (i.e. "Row 1 Column 5").

Student Question

Students can type in a question for the teacher. That question can be seen by the teacher by hovering the mouse over the thumbnail or looking at the *Last Question* column in the details view.

Update Faronics Insight on Selected Students

This option can be used to quickly install a new version of Faronics Insight on selected student computers. To enable this feature, please refer to the Install Guide.

Change Student Channel from the Console

Changes student channels from the teacher's console. This must be enabled by an administrator with the *EnableChannelSelect.exe* utility.

Properties Page

The properties page is a useful troubleshooting tool if you need to know what teacher is taking an action on a particular student. It also shows the amount of power remaining in the battery and its charging status.



Toolbar Configuration

The toolbar can be customized through the menu *View -> Configure Toolbar*. On the PC, it can also be configured by holding down the "alt" key while dragging the buttons to a new location or removing them by dragging them off the button bar. You can also reset the toolbar back to the default in the *Customize Toolbar* window.

If there are more buttons on the bar than you can see, they can be accessed through the ">>" chevron button on the upper right corner of the toolbar.

Student Name from Active Directory

Faronics Insight normally displays the Windows or Novell login name. However, if the Student Display name is available in Active Directory, that Display name is displayed in the Login Name column.

Teacher Kiosk Mode

The Faronics Insight Teacher console can be run in a way so that it cannot be minimized or closed. To run the Faronics Insight Teacher console in Kiosk Mode refer to the Installation Manual.

Preferences

Preferences configures how Faronics Insight works. See the *Configuration Preferences* section below...

NOTE: The system administrator who set up Faronics Insight on your network most likely optimized these settings during installation. You may want to consult with that person before making any changes to the custom preferences.

Ask Tech Console Technician a Question

In addition to our award winning Faronics Insight, Faronics has created a brand new product called the Tech Console. Designed to help the school's technical staff better support their teaching staff, the Tech Console provides many tools like Inventory and Software distribution, as well as the ability to remotely control devices to address student or teacher computer problems. When installed in the same school, Teachers have the ability to send a question directly to someone in their IT group or technical staff from their Faronics Insight Teacher console when they need immediate assistance.



Using the Test Builder on a different machine

Teachers may want to create tests on a home computer or different computer on the school network.

To create tests on a different computer other than the Faronics Insight Teacher computer follow these steps:

- 1. In My Computer, browse to c:\Program Files\Faronics. On a Mac, browse to Applications\Insight\Testing.
- 2. Windows copy the Testing directory to a thumbdrive, CD or network drive. On a Mac copy Testbuilder.app.
- 3. On Windows paste the Testing directory from the thumbdrive, CD or network drive to any Windows computer. On a Mac paste *Testbuilder.app* to any location.
- 4. On Windows, double click on *Testbuilder.exe* to launch the Faronics Insight Test Builder. On a Mac, double click on *Testbuilder.app*.
- Create a test
- 6. Save a test
- 7. Copy the saved tests (.lst files) back to the c:\Program Files\Faronics\Insight\Testing folder on Windows or the Applications\Insight\Testing folder on a Mac.
- 8. Browse for the newly created test and send it out to the students through the Faronics Insight Teacher console.



Faronics Insight Security Monitoring

With a tool as powerful as Faronics Insight, there's always a possibility for misuse. A student may be tempted to find an unauthorized copy and load the teacher software to disrupt a class.

There are three ways to deal with possible misuse.

- 1. Set school policies around appropriate behavior, monitor and enforce the policy.
- Install Insight in Active Directory Secure Mode which requires teachers to belong to a domain group called "Insight Teachers" in order to manage student computers. (Recommended method)
- 3. Install Insight in Secure mode, which requires a password.

Security Monitor

Security Monitor is also available in the utilities folder on the Faronics Insight download file. This application runs on any PC and will capture a log of Faronics Insight activity, including the installation or un-installation of the Faronics Insight program.

With this utility, many schools have quickly been able to pinpoint students who are abusing the "appropriate use policy" of their classroom.

Teachers can also access the Security Monitoring data by clicking *View* then *Status Window*. As soon as teachers perform actions you will see the security messages.

Students downloading and installing a demo version of Faronics Insight caused the largest security problem with the previous versions. Starting with *Faronics Insight v6.1*, the demo version cannot interact with the released version.



Faronics Insight Configuration Preferences

The Preferences dialog contains settings for both administrators and teachers. Listed below are the settings that a teacher may want to change:

Full Screen or Windowed

- Full screen shows the teacher's screen on the student's screen and disables the keyboard and mouse
- Windowed shows the teacher's screen on the student's screen in a re-sizeable window and does NOT disable the student's keyboard and mouse.

Show Dual Monitors

Turns on dual monitors support on the teacher console and the student.

Blank Screen Message

Allows the teacher to specify a message that will be shown when student screens are blanked.

Sounds

Allows the teacher to turn off the sound that is played when the Show teacher or Show student button is pressed.

Limit Task Manager / Activity Monitor on Student

If checked the Task Manager on PCs and the Activity Monitor on Macs will be disabled. This helps prevent hacking and disrupting Faronics Insight.

Restrict IP Address and Internet Explorer In Private Browsing

Some students were using IP address browsing to get around Faronics Insight's web limiting feature. If this option is selected, students cannot browse the web using IP addresses. (i.e. htp://70.235.50.6)

Faronics Insight will also restrict the In Private browsing feature of Internet Explorer.

Web Limiting

Specifies when Web Limiting is enabled, whether to...

- Block all Web Browsing
- Allow only the following websites
- Block the following websites

List of websites can be saved and loaded. The wildcards "*" and "?" can be used. On Windows students the web can be limited on Windows Internet Explorer, Firefox and Chrome. On Mac students the web can only be limited when students are using Safari.



Application Limiting

Specifies when Application Limiting is enabled, whether to...

- Allow only the following applications
- Block the following applications

Applications can be added to either the allowed or blocked lists by clicking on the add button in the preferences dialog or by Viewing the Student's Running programs. The preferences dialog shows applications running on the Teacher's PC.

The application lists can be saved and loaded.

Show Current Application Icon on Thumbnails

When enabled, this feature shows the current application that is running on the student PC as an icon in the upper left hand corner of the thumbnail.

Show Last Visited Website Icon on Thumbnails

When enabled, this feature shows the website that was last visited by the student as an icon in the upper right hand corner of the thumbnail.

Full Path of the Faronics Insight Folder on Student Machines

Allows the teacher to specify the default location for student files. This can be on the hard drive or a network drive.

Drive Limiting

Specifies the kinds of drives that should be blocked when you click the Limit Drives buttton.

Keystroke Alerts

Create, save and load lists of words that alert the teacher if typed by a student. Each word should be separated by a carriage return.

Note: There are additional options, such as the network tab, that are described in the Installation manual and should only be changed by a system administrator.

