User's Guide

LinQ

Software

SMART
Technologies Inc.

Contents

LinQ Software and SMART Board Software

Using LinQ™ software, you can breeze into your next meeting and link your laptop to a SMART interactive product without connecting cables or configuring hardware. After you establish the connection, use LinQ software to show your laptop's video output on the interactive screen.

After this minimal setup, you can begin your presentation from your seat or the interactive product. Because you navigate through your own computer, you can find files and run a presentation without having to familiarize yourself with a different computer. And because you can take advantage of the interactive tools of the SMART Board™ interactive whiteboard or Sympodium™ interactive lectern, you can deliver a dynamic, interactive presentation.

IMPORTANT	In this guide, the computer that's connected to your SMART interactive product is called the *resident computer*. This computer must be connected to the interactive product and to the network, and it must be running SMART Board software version 9.0 or later.
	Your laptop refers to a laptop or a computer running LinQ software and connected to the same network as the resident computer.

To establish a communication link with the interactive product, you must:

- install and run LinQ software on your laptop computer
- be connected to the same network as the resident computer
- run the Mobile Device Manager on the resident computer

SMART Board Icon

You don't need to install SMART Board software on your laptop. However, if you do have it installed on your laptop, you can open your SMART Notebook™ file, write notes on it at the interactive screen, and then save the file on your laptop, all without leaving the interactive product.

Getting Started

Mobile Device Manager Icon

On the resident computer, make sure that the Mobile Device Manager is active. You'll know it's active if you can see the Mobile Device Manager icon in the system tray on the interactive screen. If this icon isn't in the system tray, follow the directions in *To start the Mobile Device Manager* on page 2 to open it. Up to five laptops (or other computers) can connect to the resident computer, but only one can show its video output at a time.

TIP	You can configure the Mobile Device Manager on the resident computer to start every time you start your operating system. This option always makes the interactive product available for connections from other computers through LinQ software (see step 3 in *To start the Mobile Device Manager* on page 2).

LinQ Icon

On your laptop, install and open LinQ software (see *Installing LinQ Software* on page 3). You must also make sure that your laptop is connected to the same network as the resident computer. You can use a wireless connection or a network cable.

After your laptop is connected to the network, establish a communication link with the resident computer from LinQ software's *Connect* dialog box (see *Connecting Your Laptop to the Interactive Product* on page 7).

When you're ready to display the laptop's video output on the SMART interactive screen, press the **Share Desktop** button (see *Showing Your Desktop on the Resident Computer* on page 8).

Your laptop's video output travels across the network and appears on the connected interactive screen. At the interactive screen, you can access the tools available in SMART Board software. For more details, see *Interacting with Your File* on page 9.

To start the Mobile Device Manager

1. Open the *SMART Board Control Panel* and select **Mobile and Wireless Device Settings**.

   The *Mobile and Wireless Device Settings* dialog box opens.

2. Select the **Start the Mobile Device Manager** check box.

3. If you want the Mobile Device Manager to start every time the resident computer's operating system starts, leave the check mark in the **Start Mobile Device Manager when Windows starts** check box.

   If you just want to use the Mobile Device Manager for this session, clear this check box.

4. Type a name for the SMART interactive product in the **SMART Product Name** box.

   This name identifies this interactive product for other users who will link to it over the network. For example, the name could be that of the meeting room.

5. If you want *any* connected laptop to *automatically* share its video output on the interactive screen, clear the **Prompt before sharing desktop** check box. (See *Using the Mobile Device Manager on the Interactive Screen* on page 5 for more details on controlling what's displayed on the interactive screen.)

   If you'd rather control which desktop displays on the interactive screen, leave the check mark in the **Prompt before sharing desktop** check box. When this option is selected, you'll see a message on the interactive screen asking if you want to display a particular laptop's video output. When you press the **Yes** button, the laptop's video output appears on the interactive screen.

6. Press **OK** to close the *Mobile and Wireless Device Settings* dialog box.

7. Close the **SMART Board Control Panel**.

   The **Mobile Device Manager** icon appears in the system tray.

Mobile Device Manager Icon

Network and Laptop Computer Requirements

For best results, your network should support IP multicasting data transmission. However, if your network doesn't support this transmission method, you can still connect by using an IP address instead of the SMART product name.

TIP To find the IP address of the resident computer, look at the *Mobile Device Manager* window on the resident computer. The IP address appears below the SMART product name.

Your laptop computer must meet these requirements to run LinQ software:

- Microsoft® Windows NT® 4.0 (SP 6) or Windows 98, 2000 or XP operating system

- a Pentium® 200 or equivalent

- at least 5 MB free hard disk space

- a color depth setting of 256 colors or more

- a TCP/IP network connection at 5 Mbps speed (10 Mbps is recommended)

If you connect through a wireless network connection, make sure you're using the strongest access point available. Some wireless systems attempt to reconnect to the last access point that you used. Although a connection to that point may be possible, it may not provide the strongest signal. The display quality will be better if you have a strong data connection to the network.

Installing LinQ Software

NOTE: If the resident computer is running SMART Board 9.0 software or later, the Mobile Device Manager is already installed. If it's not already running, start the Mobile Device Manager on the resident computer. For details on how to do this, see *To start the Mobile Device Manager* on page 2. If laptop users are having trouble connecting, see *Firewall Considerations* on page 12.

You can install LinQ software on your laptop from the SMART Board software CD or by downloading LinQ software from www.smarttech.com/support/software/linq.asp.

To install LinQ software, you must have administrator privileges for your operating system. If you're a network administrator, you can customize the installation to silently install the software on computers that are connected to the network. See *Customizing the Installation and Firewall Considerations* on page 11 for more information.

To install LinQ software on your laptop computer

1. Insert the SMART Board Software CD into the laptop's CD drive and click the **Install LinQ Software** link.

   OR

   Download the software from www.smarttech.com/support/software/linq.asp and start the setup program.

2. Follow the on-screen instructions.

3. To get full integration with the interactive product, you can also install SMART Board software on your laptop computer. With the SMART Board Software CD still in the CD drive of the laptop computer, select the **Install SMART Board Software** link and follow the on-screen instructions.

Using LinQ Software and the Mobile Device Manager

At the resident computer, you can control what is displayed on the SMART interactive product. You can allow any connected laptop to display its video output on the interactive screen, or you can have control at the interactive screen. Use the Mobile Device Manager window to see who's connected to the resident computer and to select a laptop for display on the interactive screen. You can also force a laptop to stop sharing on the interactive screen. For details on these procedures, see *Using the Mobile Device Manager on the Interactive Screen* below.

After you've installed LinQ software on your laptop, you're ready to connect to the resident computer and then share your desktop. After you do this, you can show any file that's accessible by your laptop on the SMART interactive product. During your presentation, you can use the interactive features of the SMART product. For example, with your file displayed on the large screen of a SMART Board interactive whiteboard, use the pen tray pens to write over it, and then use the interactive tools of SMART Board software to highlight key points during your presentation.

For more information on using these interactive features, read the *SMART Board Software User's Guide* or the SMART Board Help Center, which you can access from the Start Center.

Sharing the Laptop File and Presenting at the SMART Board Interactive Whiteboard

You can navigate through your file on your laptop from either the interactive screen or your laptop.

Using the Mobile Device Manager on the Interactive Screen

Up to five computers can connect to the resident computer, but only one can display its video output on the interactive screen at a time. To display a laptop's video output, open the *Mobile Device Manager* window and double-click that laptop's name.

At the interactive screen, you can control the display of any laptop by selecting the **Prompt before sharing desktop** check box on the *Mobile and Wireless Device Settings* dialog box. You can do this when you start the Mobile Device Manager (see page 2) or at any time you'd like (page 6).

If you want to display the video output of a different laptop, the first laptop must stop sharing its video output. This happens automatically when a second laptop begins sharing, or you can press **Menu > Stop Sharing <Name>** (where <Name> is the laptop's name) on the *Mobile Device Manager* window.

If the name given to the interactive product (the resident computer) is no longer appropriate, you can change it (see page 6).

To allow automatic display on the interactive screen (default setting)

1. Click the **Mobile Device Manager** icon in the system tray.

2. Select **Application Settings**.

   The *Mobile and Wireless Device Settings* dialog box and the *SMART Board Control Panel* window open.

3. Clear the **Prompt before sharing desktop** check box.

4. Close the *Mobile and Wireless Device Settings* dialog box.

5. Close the **SMART Board Control Panel**.

To restrict automatic display on the interactive screen

1. Click the **Mobile Device Manager** icon.

2. Select **Application Settings**.

   The *Mobile and Wireless Device Settings* dialog box and the *SMART Board Control Panel* window open.

3. Select the **Prompt before sharing desktop** check box.

4. Close the *Mobile and Wireless Device Settings* dialog box.

5. Close the **SMART Board Control Panel**.

To change the name of the interactive product

1. Press the **Mobile Device Manager** icon in the resident computer's system tray.

2. Select **Application Settings**.

   The *Mobile and Wireless Device Settings* dialog box and the *SMART Board Control Panel* window open.

3. Type a new name in the **SMART Product Name** box.

4. Press **OK**.

5. Close the **SMART Board Control Panel**.

Connecting Your Laptop to the Interactive Product

To connect your laptop to the interactive product, click the LinQ icon on your desktop.

The *Connect* dialog box opens where you can type your name and select the interactive product that you want to connect to. Then press the **Connect** button.

Type your name here

Select an interactive product that's running the Mobile Device Manager

Press this button to connect
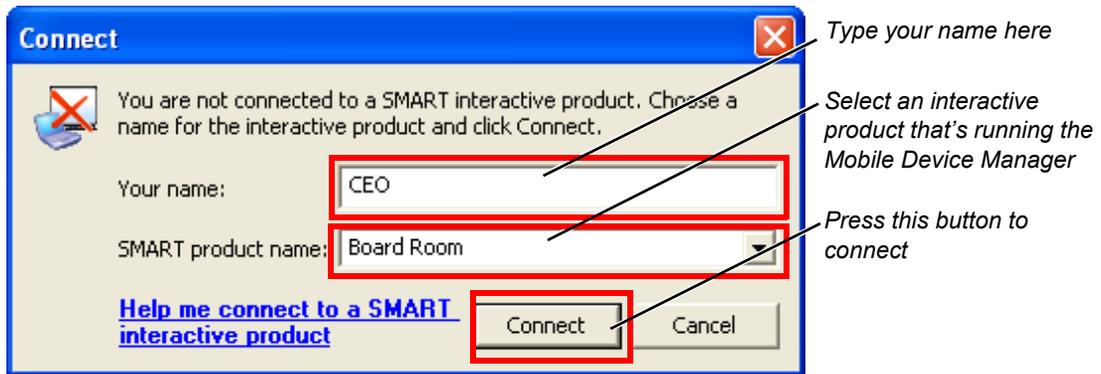
If you can't connect using the name of the SMART product, you'll have to use its IP address. See the tip on page 3 for information on finding the resident computer's IP address.

Changing How Your Name Appears on the Mobile Device Manager

If you've connected to the resident computer but don't like the way your name appears on the Mobile Device Manager's list of connected computers, you can change it.

To change your name

1. In the *LinQ Software* dialog box, press **Menu > Connect**.

   The *Connect* dialog box opens.

2. Type a new name in the **Your Name** box.

3. Press the **Connect** button.

   Your new name appears in the *Mobile Device Manager* window on the interactive product.

Showing Your Desktop on the Resident Computer

When you're ready to display your desktop on the resident computer, click the **LinQ** icon on your desktop and then click the **Share Desktop** button in the *LinQ Software* dialog box.
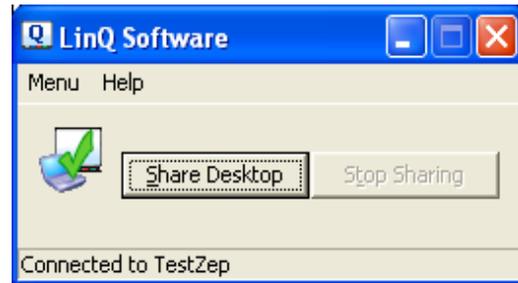
Depending on the setup of Mobile Device Manager software on the resident computer, your desktop appears automatically, or you'll see a dialog box on the interactive screen, where you must press **Yes**. (For details on this setting, see *Using the Mobile Device Manager on the Interactive Screen* on page 5.)

At the interactive product, you can show a desktop by pressing the **Mobile Device Manager** icon in the system tray and selecting it from the list of connected computers.

Your desktop can appear on the interactive product in a window or it can occupy the full screen. With the full screen view, your desktop takes up the entire interactive surface of the SMART product, giving you plenty of room to make notes. Also, you avoid distracting your viewers with images from the resident computer. However, you may find it easier to navigate on the resident computer if the display is in windowed mode.

### To change the size of the displayed laptop

At the laptop, select **Menu > Sharing Options**, and then select either **Show Full Screen** or **Show Windowed**.

At the interactive product, press **Menu > Viewing Options** and select **View Full Screen** or **View Windowed**.

You'll also notice the **Fit to Window** option that's available at both the interactive screen and the laptop. When this option is active, LinQ software adjusts for any resolution differences between your laptop and the interactive screen.
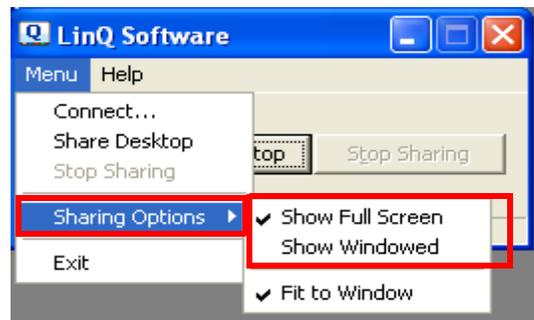
Sharing Options at the Laptop
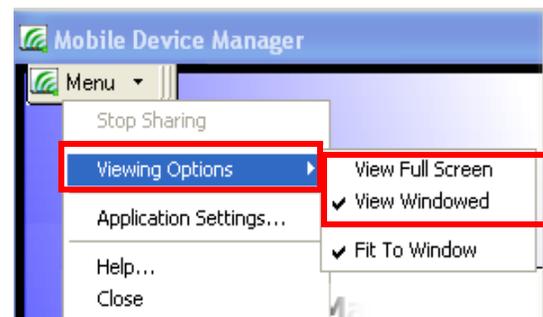
Sharing Options at the Interactive Screen

Interacting with Your File

Although you're working at the interactive screen, your file remains on your laptop. With your file on the interactive screen, you have full mouse and keyboard control over your computer at the interactive screen, so when you touch the interactive screen, you move the pointer on your laptop. You can write notes over any application without installing or running SMART Board software on your laptop.

If you choose to stay in front of your laptop, you can navigate through your file as you normally would. Your audience can easily follow along by watching the interactive screen. If you move the laptop mouse, your audience can see it move on the interactive screen.

If you prefer, go to the interactive screen to navigate through your presentation file. You can access applications on the resident computer, including SMART Board software. To do this, view your laptop in Windowed mode (see *Showing Your Desktop on the Resident Computer* on page 8), and then access the resident computer's applications as you normally would.

If you're presenting using Notebook software on your laptop, any notes that you make at the interactive product become part of your file. If you're using another resident program, you can still capture your annotations by using the screen capture tools of Notebook software, which will capture your annotations in a Notebook file on the resident computer.

NOTE: Notebook software is an application that comes with SMART Board software.

Because your computer is sending information over the network, the transmission may slow down if you display files with detailed graphics, such as high-resolution photographs, Flash animation, or screens with complex backgrounds. Lowering your laptop's resolution and color setting may improve the transmission speed.

IMPORTANT	Although you can send your desktop to the resident computer, the resident computer can't send its desktop to your computer. You must watch the presentation of other desktops on the SMART product, or create a Web or data conference with conferencing software such as Bridgit™ software.

Stopping the Display of Your Desktop

You can stop displaying or sharing your desktop either from your laptop or at the interactive screen.

At your laptop, open the *LinQ Software* dialog box and press the **Stop Sharing** button.

If you're at the interactive screen, you can force a laptop to stop sharing by pressing **Menu > Stop Sharing <Name>** (where <Name> is the laptop's name).
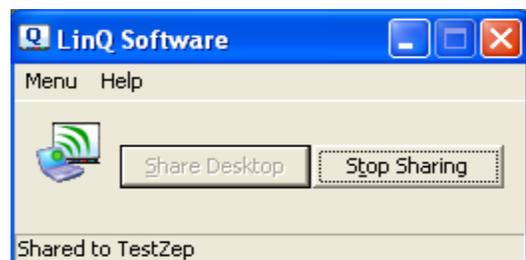
Closing Programs

You can close LinQ software by selecting **Menu > Exit**.

You can close the Mobile Device Manager window by selecting **Menu > Close**. However, closing the Mobile Device Manager doesn't stop the program. You can stop the Mobile Device Manager program by exiting through the SMART Board Control Panel.

To exit the Mobile Device Manager program

1. At the resident computer, press the **Mobile Device Manager** icon in the system tray.

2. Select **Application Settings**.

   The *Mobile and Wireless Device Settings* dialog box and the *SMART Board Control Panel* window open.

3. Clear the **Start the Mobile Device Manager** check box.

4. Press **OK** to close the *Mobile and Wireless Device Settings* dialog box.

5. Close the **SMART Board Control Panel**.

Customizing the Installation and Firewall Considerations

This section provides network administrators with additional information on custom installation or removal of LinQ software, and information on firewalls in the Windows XP operating system.

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To customize the installation or the removal of LinQ software

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NOTE: You must have administrator privileges for your operating system to perform this advanced procedure. When you install LinQ software with this procedure, you use the .msi file, instead of the .exe file.

Use the INSTALLDIR command line option to install LinQ software to a specified folder.

Or you can silently install or remove LinQ software by using the appropriate command line statements, as described in the following table.

Type of Installation	Description	Command Line Options
Silent Install	Install the software without displaying the user interface. You can use other standard Windows Installer commands, such as: /qb – shows only a progress indicator /qn+ – shows only a dialog box at the end of the installation	msiexec /i "{Path to msi}\LinQ Setup.msi" /q
Silent Uninstall	Uninstall the software without displaying the user interface	msiexec /x "{Path to msi}\LinQ Setup.msi" /q

Firewall Considerations

If the resident computer runs the Windows XP operating system, you may experience difficulties connecting a mobile or wireless device to the interactive screen if the resident computer has an active Internet Connection Firewall. This firewall can obstruct device connection.

When you install LinQ software on your laptop and activate the Mobile Device Manager on the resident computer, the installation program opens the ports described in the table below. If you have an active firewall, you'll see a firewall confirmation message.

Port	Purpose
5450 (TCP)	Main communications port
5451 (UDP)	Board discovery port

You can check if your Windows Internet Connection Firewall is active by following the appropriate procedure below. The procedure to check this setting varies according to the Service Pack (SP) you have installed. Read the procedure that corresponds to your service pack.

However, if your firewall configuration prevents LinQ software from automatically opening the required ports, or if you use a different firewall, you may need to disable your firewall while LinQ software and the Mobile Device Manager are active.

To see if the firewall connection is active (Window XP (SP 1) operating system)

1. From the Windows **Start** menu, select **Control Panel > Network Connections > Local Area Connection** or **Windows Network Connection** (whichever's appropriate).

   The *Local Area Connection Status* dialog box appears.

2. Press the **General** tab and then press the **Properties** button.

   The *Local Area Connection Properties* dialog box appears.

3. Press the **Advanced** tab.

4. Make sure that the check box beside **Protect my computer and network by limiting or preventing access to this computer from the Internet** is not selected.

5. Press **OK** to close the *Local Area Connection Properties* dialog box.

6. Press **Close** to close the *Local Area Connection Status* dialog box.

7. Close the Windows **Control Panel**.

To see if the firewall connection is active (Windows XP (SP 2) operating system)

1. From the Windows **Start** menu, select **Control Panel > Network Connections > Local Area Connection** or **Windows Network Connection** (whichever's appropriate).

   The *Local Area Connection Status* dialog box appears.

2. Press the **General** tab and then press the **Properties** button.

   The *Local Area Connection Properties* dialog box appears.

3. Press the **Advanced** tab.

4. Press the **Settings** button.

   The *Windows Firewall* dialog box opens.

5. Make sure that **Off** is selected.

6. Press **OK** to close the *Windows Firewall* dialog box

7. Press **OK** to close the *Local Area Connection Properties* dialog box.

8. Close the Windows **Control Panel**.

Contacting SMART Technologies

Contacting SMART Technical Support

SMART's Technical Support team welcomes your call. However, you may first want to contact your local reseller if you experience difficulties with your SMART product, as they may be able to solve the problem without delay.

All SMART products include free telephone, fax and e-mail support.

Telephone: 1.866.518.6791 (toll-free in Canada/U.S.) or
+1.403.228.5940 (all other countries)
(Available 7 a.m. – 6 p.m. Mountain time from Monday to Friday)

Fax: +1.403.806.1256

E-Mail: support@smarttech.com

Website: www.smarttech.com/support

When you phone Technical Support, it will be helpful if you can access your computer and the interactive product during the call. The support representative may ask you for the following information:

- the serial number of your interactive product
- the version of the software that's causing the problem and the version of your computer's operating system

General Inquiries

Main Switchboard: 1.888.42.SMART (toll-free in Canada/U.S.) or
+1.403.245.0333 (all other countries)
(Available 7 a.m. – 6 p.m. Mountain time from Monday to Friday)

Fax: +1.403.228.2500

E-Mail: info@smarttech.com

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