

Bridgit® 4.6

Installation and system administrator's guide



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Contents

Chapter 1: Introducing Bridgit software	1
Software components Global Server Network (GSN) option SMART Scheduler SMART Scheduler Outlook add-in	3 3
Chapter 2: Installing Bridgit software	5
Preparing for installation	6
Bridgit server requirements Installing Bridgit server software	
Chapter 3: Configuring the server software	25
Setting passwords	25
Changing Bridgit server setup options	29
Setting meeting options	30
Chapter 4: Managing a Global Server Network (GSN)	35
About the Global Server Network (GSN)	35
Bridgit servers in a GSN	36
Bridgit clients in a GSN	40
Chapter 5: Administering the server software	43
About SMART Bridgit Administration Tools	43
Viewing status information	44
Managing servers and meetings	47
Controlling Bridgit software services	
Customizing the Bridgit server's web page	
Downloading the Bridgit client	49
Chapter 6: Using SMART Scheduler	51
Introduction	51
Installing SMART Scheduler server software	51
Configuring SMART Scheduler server	53
Upgrading SMART Scheduler server	54
Installing the SMART Scheduler Outlook add-in	
Installing the SMART Scheduler Outlook add-in from a command line	56
Removing the SMART Scheduler Outlook add-in	58

CONTENTS

Chapter 7: Bandwidth and scalability	
Bandwidth requirements	60
Examples of bandwidth requirements	60
Scaling Bridgit	61
Appendix A: Troubleshooting	63
Using the Bridgit troubleshooting tool	64
Monitoring a meeting's performance – presenter	69
Monitoring a meeting's performance – participant	70
Minimizing network latency	71
Troubleshooting Bridgit server connections	73
Troubleshooting administration tool connections	78
Troubleshooting SMART Scheduler	80
Index	83

Chapter 1 Introducing Bridgit software

Software components	. 2
Bridgit server software (Windows only)	. 2
SMART Bridgit Administration Tools	2
Bridgit client software	. 2
Features and highlights	. 2
Bridgit software and SMART Meeting Pro software	. 3
Bridgit software and SMART Notebook software	. 3
Global Server Network (GSN) option	. 3
SMART Scheduler	. 3
SMART Scheduler Outlook add-in	. 3

Bridgit® conferencing software is a cost effective client/server application that lets you easily schedule meetings to connect, share and collaborate between SMART Board® interactive whiteboards, interactive displays and local and remote participants anytime, anywhere. Bridgit software supports private local and wide area network (LAN and WAN) installations as well as public deployment scenarios that use a fully qualified domain name via the Internet.

For detailed information about using the Bridgit client software, refer to its online Help.

Software components

Once you install and configure Bridgit server software, computers that meet the minimum requirements can connect to your server, download the Bridgit client software and create or join meetings.

Bridgit server software (Windows only)

Bridgitserver software passes data between clients and authenticates client connections using optionally implemented passwords.

SMART Bridgit Administration Tools

Bridgit server software includes an administration tools application. You can use SMART Bridgit Administration Tools to configure servers and view their statuses, manage your Bridgit software licenses, as well as to change passwords, sharing settings and remote control settings. You can also use the administration tools to set up a message of the day and to configure chat and video settings.

When you install Bridgit server software, a shortcut to SMART Bridgit Administration Tools appears on the server's desktop.



Bridgit client software

Bridgit client software transmits meeting data to and from the Bridgit server and displays it to the meeting participants.

Features and highlights

- Share multiple displays with local and remote participants
- Share applications running on your SMART Board interactive whiteboard or computer desktop with meeting participants
- Host live demos, presentations, training events, webinars and ad hoc collaborative sessions
- Share and work on meeting notes simultaneously with remote participants
- Help colleagues and customers navigate Internet and intranet sites
- Request permission to remotely control a meeting participant's computer
- View off-site meeting participants using webcams
- Speak with, and listen to, meeting participants using Voice over Internet Protocol (VoIP) technology

Bridgit software and SMART Meeting Pro software

Bridgit software is integrated with SMART Meeting Pro™ software and SMART Product Drivers to provide screen sharing and simultaneous viewing of multiple shared displays, VoIP and webcam functionality. Bridgit works best with SMART Meeting Pro 3.1 and SMART Meeting Pro Premium version 2.3. For detailed information on this functionality, refer to SMART Meeting Pro documentation.

Bridgit software and SMART Notebook software

Bridgit software is integrated with SMART Notebook[™] collaborative learning software and SMART Product Drivers to provide instant conferencing capabilities. Bridgit works best with SMART Notebook software 10.8 and 11 and SMART Product Drivers 10.8 and 11. For detailed information on this functionality, refer to SMART Notebook software documentation.

Global Server Network (GSN) option

The Bridgit Global Server Network (GSN) is a network of Bridgit servers at different geographical locations. The GSN optimizes bandwidth and reduces latency by detecting the fastest server in each GSN and then automatically connecting the client to that server, regardless of the server they initially connected to.

For example, if there are five clients in North America and five clients in Europe all connecting to the same meeting, and the GSN consists of one server on each continent, each client automatically connects to the nearest, fastest server. This results in only one high latency overseas connection, instead of five overseas connections. A GSN works just as well for different buildings in the same city, or even different networks in the same building.

SMART Scheduler

SMART Scheduler allows you to create meetings in Microsoft® Outlook® that will automatically start on a specified Bridgit server. SMART Scheduler monitors the Microsoft Exchange server for upcoming Bridgit meetings and starts the meeting on the Bridgit server at the appropriate time.

SMART Scheduler Outlook add-in

To use SMART Scheduler, install the SMART Scheduler Outlook add-in on your client computers. This add-in consists of a toolbar that appears in the standard meeting request window in Microsoft Outlook.

Introducing Bridgit software

You can create a meeting in Outlook that uses Bridgit software by selecting the **This is a SMART Bridgit Meeting** check box in the meeting creation dialog box. Both the meeting creator and the attendees will see a booking in their Outlook calendar that contains a link to the Bridgit meeting.

Chapter 2

Installing Bridgit software

Preparing for installation	6
Bridgit server requirements	7
Software licensing	7
Managing Bridgit software licenses	7
Supported virtualization environment	7
Access requirements	7
Network administration experience	8
Access to servers and infrastructure components on your network	8
Administrator rights	9
Bridgit security	9
Client security	10
Domain names	11
Registered domain name	11
IPv4/IPv6 addresses	11
Bridgit and firewalls	12
Configuring firewalls	12
Configuring proxy servers	13
Bridgit client system requirements	14
Supported Windows operating systems	14
Supported Mac operating system software	14
Without VoIP audio or webcam video	14
With VoIP audio or webcam video	15
Proxy server requirements	15
Webcam requirements	16
Audio requirements	16
SMART Scheduler requirements	17
SMART Scheduler server requirements	17
Microsoft Exchange Server	17
SMART Scheduler Outlook add-in	17
Installing Bridgit server software	18
Introduction	18
Installing the server software	18
Upgrading Bridgit server software	22

Installing Bridgit software

Licensing Bridgit server software	22
Activating using the SMART activation server	22
Activating your license manually	23
Removing server or user licenses	24

This chapter contains information you will need to prepare for installation as well as procedures that will lead you through the installation process of Bridgit software and its options.

Preparing for installation

Bridgit software is scalable, so system requirements vary. The maximum number of users that a server can support is constrained by both the server hardware and the network bandwidth available to that server. The exact number of users supported varies depending on the available bandwidth and the use of Voice over Internet Protocol (VoIP) audio and webcam functionality. Allowing more than the recommended number of simultaneous users may negatively impact performance. To support more users, configure multiple servers to operate as a Global Server Network (GSN).

I NOTES

- To determine the amount of bandwidth you need, see Bandwidth requirements on page 60.
- Your system performs best if you use a high performance server or a dedicated server with no other applications installed.

Bridgit server requirements

Each server must meet the following minimum requirements:

- 3.1 GHz quad-core processor
- 4 GB of RAM
- Windows Server® 2003 R2 or 2008 R2 operating system
- 250 Mbps network interface card (NIC) that supports the TCP/IP

I NOTES

- 1 Gbps NIC is recommended.
- Increased hardware capabilities improve overall meeting performance.
- Optimal number of open microphones with this configuration is 100.
- Optimal number of shared webcams with this configuration is 100.

Software licensing

After the 60-day free evaluation period, users can no longer conduct meetings on the server and must purchase and activate a software license.

Managing Bridgit software licenses

To continue using the software after the evaluation period, you need to purchase a license before the evaluation period expires.

When you purchase a license a Bridgit software license, you're purchasing a server license for up to 500 concurrent users and you receive one product key.

Supported virtualization environment

VMware® vSphere™ Hypervisor 4.1

Access requirements

Before you can successfully install and use a Bridgit server software, you must correctly configure your network environment. Bridgit server software doesn't automatically do this. Therefore, you need access to various components of your network infrastructure before you can configure your network environment appropriately.

Network administration experience

TIMPORTANT

Bridgit server software functions in a complex network environment. Do not attempt to install or configure the Bridgit server software unless you're an experienced network administrator with a full understanding of how your network functions.

Access to servers and infrastructure components on your network

Different network configurations use different types of access.

Network configuration	Type of access
Private local area network (LAN) use	If your Bridgit server will be used only in a private LAN, you need access to the following components of your LAN infrastructure:
	 An administrator login account with installation rights for the server computer you'll install Bridgit server software on.
	 Physical or remote login access, and an administrator login account with configuration rights, for your network's DHCP and DNS servers.
	 You could also need physical or remote login access to, and an administrator login account with configuration rights for, your network's domain server which controls the software firewall configurations for all of your network's client computers. This is dependent on your local network's domain policies.
Use by different networks connected to a wide area network (WAN)	If your Bridgit server will be used by different networks connected to a WAN, you'll need access to the following components of your LAN or WAN infrastructure:
	 Physical or remote login access to, and an administrator login account with configuration rights for, the routers, WAN firewalls, and proxy servers between different segments of your WAN.
	 Physical or remote login access to, and an administrator login account with configuration rights for, all DNS servers in each segment of your WAN.
Use by clients with an Internet connection	If your Bridgit server will be accessible to clients via the Internet, you need access to the following components:
	 Physical or remote login access to, and an administrator login account with configuration rights for, the routers, firewalls and proxy servers between your network and the Internet.
	 Login access with configuration rights to the Internet registrar which controls your company's public Internet DNS records.
Use of SMART Scheduler	If you want to use the Bridgit Outlook add-in and SMART Scheduler integration with Microsoft Exchange, you need physical or remote login access to, and an administrator login account with configuration rights for, your company's domain server. This server is used to create user accounts for use on your Microsoft Exchange server.

Installing Bridgit software

Administrator rights

After you install and configure Bridgit server software, you may want to administer the server to check information such as performance logs and use records. To do this, your administrator needs physical or remote login access and a user login account on the Bridgit server computer.

Bridgit security

Bridgit software complies with Secure Sockets Layer (SSL) 3.0 to encrypt data transmitted using a TCP connection. It uses OpenSSL to generate a self-signed SSL certificate used for data encryption. Each time the server starts, it generates a new 1024-bit SSL certificate and negotiates a new 256-bit encryption key with each client. However, if a client is unable to negotiate a set of encryption keys with the server, no connection is established.

Bridgit software also uses Secure Real-time Transport Protocol (SRTP) to encrypt audio traffic transmitted using a UDP connection. These encryptions prevent third parties from intercepting data transmitted between client and server.

The cipher suite negotiated between a Windows operating system server and client is an AES256-SHA cipher suite, including RSA encrypted key exchange, digest authentication and 256-bit SSL data encryption. Bridgit software for Mac OS X operating system software also implements 256-bit SSL encryption.

Installing Bridgit software

Client security

System administrators and meeting creators can set four types of passwords to enhance Bridgit software security. These passwords aren't mandatory.

TIMPORTANT

If you assign a server access password, SMART recommends that you also assign a meeting creation password.

Password type	Description
Server access password	An optional password that a meeting participant uses when connecting to a Bridgit server. The server access password allows the participant to access the server and view the list of meetings on it.
	TOTAL
	If you assign a server access password, you should also assign a meeting creation password.
Meeting creation password	An optional password that a meeting owner uses to create a meeting on the Bridgit server. Users who type the meeting creation password can also see the list of active meetings on the server.
	i NOTE
	After you install Bridgit server software, you can use SMART Bridgit Administration Tools to create additional server access and meeting creation passwords.
Meeting password	A password that a meeting participant uses to join a meeting. The meeting creator sets this password.
Administrator access password	A password that server administrators creates to join any meeting on the server. Administrators can then monitor meetings and ensure the server is being used appropriately.

Installing Bridgit software

Domain names

If you're using a public domain name, your Bridgit server is accessible to clients connecting via the Internet. If you use a private domain name, your Bridgit server is accessible only to clients connecting from within your LAN.

Registered domain name

To access a server over the Internet, you must use a fully qualified domain name (FQDN) that exists in the records of a public DNS server. If an FQDN isn't available for your server, users can access your server over the Internet using its IP address directly.

IMPORTANT

Do not mix FQDNs and unqualified domain names (those not registered on a DNS server) in the same Bridgit server GSN.

IPv4/IPv6 addresses

During the installation process, Bridgit software detects the IP addresses bound to the servers' network interface cards. You can choose to bind Bridgit software to one or all of the computers' IP addresses, if there is more than one IP address assigned to the computer.

To check if your public domain name resolves to an IP address

- 1. Select **Start > Run** on the computer where you'll install the Bridgit server software.
- 2. Type **cmd**, and then press ENTER.
 - A Command Prompt dialog box appears.
- 3. Use the **ipconfig** command to determine the server's IP address.
- 4. Use either the **nslookup** command or the **ping** command against the domain name for the Bridgit server to determine the IP address that the network's DNS returns.
- 5. Compare this IP address to the Bridgit server's IP address from step 3.
 - If the IP addresses are the same, the network's DNS is configured correctly.

I NOTES

- Your domain name must resolve to a valid IP address for you to be able to use it to configure your Bridgit server.
- The ping can fail for reasons unrelated to the public domain name and still resolve to a computer name or IP address.

Bridgit and firewalls

Bridgit software automatically detects and employs the most secure and efficient methods available to connect clients and to maintain optimal meeting performance. However, SMART recommends installing your Bridgit server behind a firewall to prevent unauthorized access.

The firewall must open port 80 for HTTP traffic coming into the server and going out to the client.

I NOTE

SMART doesn't recommend deploying Bridgit servers with only HTTP connectivity.

Configuring firewalls

You can install your Bridgit server software behind a software firewall, proxy server, hardware firewall or router. For optimal performance, enable both primary and secondary TCP ports and a range of UDP ports for VoIP audio on the server.

- Firewalls for the server should allow inbound communication to the server on all specified ports.
- Firewalls for the client should allow outbound communication from the client on all specified ports.

For best performance, allow inbound TCP and UDP traffic to the server on the default ports specified in the following table.

Default ports	Type/protocol	Use
80	TCP/HTTP	 Initial connection to the Bridgit server to display the web page from which the users download the Bridgit client.
		 Initial connection to the Bridgit server from the Bridgit client when looking for meetings to join or when creating new meetings.
		 Fallback communication method for all other Bridgit functions when other ports are unavailable (lower performance than other ports).
80	TCP/Bridgit	 Primary port for data, screen viewing and webcam traffic for Bridgit meetings.
		 If this port is limited to only HTTP, Bridgit software attempts to use the secondary port (9933) for this traffic.
		 If this port is blocked or unavailable, Bridgit software uses HTTP on the primary port, which can affect performance.
9933	TCP/Bridgit	Secondary port for data, screen viewing and webcam traffic for Bridgit meetings.

Installing Bridgit software

Default ports	Type/protocol	Use
9901 to 9920	UDP/Bridgit	 Primary port range for VoIP audio traffic for Bridgit meetings.
		 If these ports are blocked or unavailable, Bridgit software falls to TCP or HTTP on the primary or secondary port, which can negatively affect performance.

Configuring proxy servers

You can configure your Bridgit server software to work with any proxy server that adheres to the RFC 2068 HTTP standard. If you install your Bridgit server software behind a proxy server, you must create access policy rules for inbound and outbound traffic on that proxy server. You can further enhance your network security by enabling authentication, such as basic, digest or NT LAN Manager (NTLM) authentication.

NOTE

Although proxy servers protect internal networks from intruders, they unavoidably introduce network latency.

If you incorporate a proxy server, configure each meeting participant's Internet browser to allow access to the Bridgit server.

Bridgit client system requirements

Bridgit software allows meeting participants to interact and collaborate directly with each other and supports up to nine shared webcams and nine open microphones per meeting. In order for you to share audio and video with other meeting participants, your computer must meet the following minimum requirements.

Supported Windows operating systems

- Windows XP SP3
- Windows 7
- Windows 8

Supported Mac operating system software

- Mac OS X 10.6
- Mac OS X 10.7
- Mac OS X 10.8

Without VoIP audio or webcam video Windows

- · 2.0 GHz processor
- 1 GB of RAM
- Broadband Internet connection

Мас

- 2.0 GHz Intel® processor
- 1 GB of RAM
- Broadband Internet connection

Installing Bridgit software

With VoIP audio or webcam video Windows

- 2.33 GHz dual-core processor
- 2 GB of RAM
- Broadband Internet connection

Mac

- 2.4 GHz Intel dual-core processor
- 2 GB of RAM
- Broadband Internet connection

Proxy server requirements

If you are using a proxy server, you need to know the server's proxy settings so that you can configure the following:

Windows

- If you're using Internet Explorer® 6, Firefox® or Opera internet browsers, configure the browser's proxy settings and the operating system's proxy settings with the server's proxy settings.
- For all other browsers, configure the operating system's proxy settings with the server's proxy settings.

Мас

Configure the operating system's proxy settings with the server's proxy settings.

Installing Bridgit software

Webcam requirements Windows

- Compatibility with DirectShow® driver
- Supports 24-bit RGB color

Mac

- Internal webcam or iSight camera
- QuickTime application program

Audio requirements

- Sound card
- Speakers or headphones
- Microphone



You can download or update SMART software from smarttech.com/downloads.

SMART Scheduler requirements

SMART Scheduler server requirements

- 2.0 GHz processor
- 1 GB of RAM
- Windows Server 2008 R2 operating system
- 10 Mbps network interface card that supports the TCP/IP
- · Network connection to your Microsoft Exchange Server and Bridgit server
- You must have Bridgit server installed and running on either a separate computer (recommended) or, if required, on the same computer where you'll install SMART Scheduler server.
- CDO 1.2.1 (Microsoft Collaboration Data Objects), version 6.5.8165.0 or later. You can also download this software during the server installation.

Microsoft Exchange Server

Microsoft Exchange Server 2003, 2007 or 2010.

SMART Scheduler Outlook add-in

- 2.0 GHz processor
- 1 GB of RAM
- Outlook 2003 SP3, 2007 SP2 or 2010
- Network connection to your Microsoft Exchange Server and Bridgit server

Installing Bridgit server software

Introduction

When you install Bridgit server software, consider the following points:

- If you install Bridgit server software on a dedicated server with one network interface card (NIC), select All (default) to bind Bridgit to all IP addresses. If your network uses network address translation (NAT), use port forwarding to redirect external requests to the NIC.
- If the server is multi-homed (has multiple NICs), select the internal IP address to bind Bridgit to the internal NIC. Use port forwarding to redirect external requests to the external NIC.
- If you install Bridgit server software on a server running other web server applications (for instance, Microsoft IIS or any other web server application using port 80), you can configure Bridgit in either of the following ways:
 - Using IP specific binding. Each server binds to a specific IP address. You can add multiple IP addresses to a single NIC on Windows servers by selecting Control Panel
 Network Connections > Internet Protocol (TCP/IP).
 - Customizing the default primary server port. In this case, multiple applications can bind to the same IP address but on different ports. This setup requires users to specify the port when connecting to Bridgit client (for example, server.company.com).

TIMPORTANT

Before you start SMART Bridgit Administration Tools, you might need to temporarily disable the other services listening on the same port as Bridgit services. When you finish configuring Bridgit server software, restart the services you disabled.

Installing the server software

To install Bridgit server software

- 1. Go to smarttech.com/downloads.
- 2. Download Bridgit software and run the **ConferenceServicesSetup.exe** file.

The SMART Bridgit - InstallShield Wizard opens and displays the start-up screen.

3. Click Next.

The License Agreement page appears.

Installing Bridgit software

4. Read the agreement. If you accept, click I accept, and then click Next.

I NOTE

If you want to keep a hard copy of the agreement for your records, click Print.

The Destination Folder dialog box appears.

5. Click **Next** to use the default destination folder.

OR

Click **Change** to select a new location for Bridgit software, and then browse to the desired folder and click **OK**.

6. Click Next.

The Server Address Configuration page appears.

7. Configure your server by selecting one of the following options:

IPv4 address and IPv6 address

The installation software detects all IP addresses assigned to the server. To use all the addresses, select **AII** in the *IPv4* address or *IPv6* address box.

NOTES

- If you select all addresses, Bridgit software clients can use any IP address assigned to the server computer to contact the Bridgit server. To restrict the IP addresses through which your server is reachable, select a specific IP address.
- If the IP address fields are unavailable, Bridgit software has automatically detected that you don't have more than one IP address to choose from.

Public domain name

Each Bridgit server requires a fully qualified domain name (for example, conference.company.com:88 or server.company.com:88) or a host name (for LAN access only).

IMPORTANT

If you use the computer's network host name as the domain name, the server is accessible only from within the LAN. Internet users do not have access to the server. Do not mix fully qualified domain names and computer host names within the same Bridgit GSN.

8. Click Next.

The Server Port Configuration page appears.

9. Configure the ports using the following options:

Primary TCP port	By default, Bridgit software uses port 80 as its primary port. If your server is running another application that uses port 80, you must assign Bridgit software to an unoccupied port. Configure your firewall to allow incoming and outgoing TCP traffic on your chosen port.
Enable secondary TCP port	By default, Bridgit software uses port 9933. If you want to use a different port, make sure it doesn't conflict with any other applications running on the server computer.
	NOTE
	If your server is running another application that uses either of these ports, you must assign Bridgit software's primary and secondary ports to unoccupied ports. Configure your firewall to allow incoming and outgoing TCP traffic on the chosen ports.
Enable UDP ports (audio optimization)	Whenever possible, Bridgit software uses UDP for audio transmission to avoid the additional overhead of TCP in a timing-sensitive situation. SMART strongly recommends that you enable UDP to minimize audio lag in Bridgit meetings. You must open a range of UDP ports (9901 to 9920) on your firewall to use this feature.
	NOTES
	 If you configure Bridgit server software to use a TCP port that isn't the default, users must specify the port when connecting to the server. For example, to connect to a Bridgit server on port 8080, users must type server.company.com: 8080.
	 A UDP port supports up to 10 participants with optimal performance. By default, Bridgit software opens 20 UDP ports to allow approximately 200 concurrent participants. Open more ports to accommodate more participants.
	o If your network uses a firewall, you must configure it to allow

incoming TCP and UDP traffic on these ports.

10. Click Next.

The Server Password Security page appears.

Installing Bridgit software

11. Optionally, create the following passwords for server password security:

Server access password

An optional password that a meeting participant uses when connecting to a Bridgit server. The server access password allows the participant to access the server and view the list of meetings on it.

TIMPORTANT

If you assign a server access password, you should also assign a meeting creation password.

Meeting creation password

An optional password that a meeting owner uses to create a meeting on the Bridgit server. Users who type the meeting creation password can also see the list of active meetings on the server.

NOTE

After you install Bridgit server software, you can use SMART Bridgit Administration Tools to create additional server access and meeting creation passwords.

12. Click Next.

The Ready to Install page appears.

13. Click **Back** to change the settings.

OR

Click **Install** to begin the installation.

The *Installing SMART Bridgit* dialog box appears and the installation validates. The setup status appears on the green status bar.

14. Click **Finish** in the *SMART Bridgit - InstallShield Wizard* to complete the installation.

After you finish installing the software, use SMART Bridgit Administration Tools to activate the server software using a valid server product key, to install user licenses, to change the server settings and to view status information. For more information on SMART Bridgit Administration Tools, click **Help** to open the *Bridgit Administrator's Help*.

IMPORTANT

The Bridgit software installation includes a 60-day evaluation license for the server and up to 500 concurrent users. See *Licensing Bridgit server software* on the next page for information on installing and activating server and user licenses.

Upgrading Bridgit server software

To upgrade your Bridgit server software

- 1. Go to smarttech.com/downloads.
- 2. Download Bridgit software and run the ConferenceServicesSetup.exe file.

A message appears asking if you want to upgrade or repair the program components from the previous version, and warning you that all open meetings will be closed during the upgrade.

3. Click **Yes** to close an open meeting and continue with the upgrade.

The SMART Bridgit - InstallShield wizard appears. Follow the procedure in Installing the server software on page 18.

OR

Click No, and then end the meeting using the on-screen instructions.

Licensing Bridgit server software

Once your 60-day trial expires, you must activate your server and user licenses to continue using Bridgit software.

I NOTES

- If you upgrade from version 3 to version 4, your version 3 licenses continue to work with version 4.
- If you upgrade from a version earlier than 3.1, the software's VoIP audio features aren't available.

Activating using the SMART activation server

To activate your license using the SMART activation server

- 1. Double-click the **SMART Bridgit Administration Tools** icon on the server's desktop, and then click the **Licensing** tab.
- 2. Select the server you want to activate from the Server list.
- 3. Click Install Server License.

The Install Server License dialog box opens.

4. Type your product key in the *Product Key* box, and then click **OK**.

Installing Bridgit software

After you activate the product key, your server software information appears in the *Licenses for selected server* table, the related status changes to *Activated*, and you have 500 installed licenses.

IMPORTANT

When you purchase the Bridgit 4.6 software service license, you're purchasing a server license and one product key that activates the server for up to 500 concurrent users.

Activating your license manually

To activate your license by e-mail

- Double-click the SMART Bridgit Administration Tools icon on the server's desktop, and then click the Licensing tab.
- 2. Right-click the license you want to activate in the *Licenses for selected server* table, and then select **Activate**.

The Activate License dialog box appears.

3. Click Activate manually, and then click Continue.

The Manual Activation dialog box appears.

TIMPORTANT

This dialog box contains your product key and installation ID which a SMART support specialist uses to create your activation key.

 E-mail your product key and installation ID to SMART support (smarttech.com/contactsupport).

You receive a reply e-mail with your activation key.

I NOTE

You have 60 days from the date of installation to enter the activation key.

- 5. Right-click the license you want to activate in the *Licenses for selected server* table, and then select **Activate**.
- 6. Click **Activate Manually**, and then type the activation key.
- 7. Click OK.

After you activate the product key, your license information appears in the *Licenses for selected server* table and the related license status changes to *Activated*.

To activate your license by phone

 Call SMART support (<u>smarttech.com/contactsupport</u>) and request your product key and installation ID.

The SMART support representative uses your product key and installation ID to create and provide your activation key.

- 2. Double-click the **SMART Bridgit Administration Tools** icon on the server's desktop, and then click the **Licensing** tab.
- 3. Right-click the license you want to activate in the *Licenses for selected server* table, and then select **Activate**.
- 4. Click **Activate Manually**, and then type the activation key.
- 5. Click OK.

After you activate the product key, your license information appears in the *Licenses for selected server* table and the related license status changes to *Activated*.

Removing server or user licenses

If you remove a server license or a bundle of user licenses, the product keys remain valid and you can add them again at any time.

To remove server or user licenses

- Double-click the SMART Bridgit Administration Tools icon on the server's desktop, and then click the Licensing tab.
- 2. Right-click the license you want to remove in the *Licenses for selected server* table, and then select **Delete**.

A confirmation dialog box appears.

3. Click OK.

Chapter 3

Configuring the server software

Setting passwords	
Changing the server access password	
Changing the meeting creation password	27
Changing the administrator access password	27
Assigning an API authorization password	28
Changing Bridgit server setup options	29
Setting meeting options	30
Disabling remote control	30
Disabling webcams	30
Disabling text chat	3′
Disabling the Raise Hand feature	3′
Disabling the Knock feature	32
Adding a message of the day	32
Configuring meeting audio settings	33
Third-party audio	33

You can use SMART Bridgit Administration Tools on any Bridgit server to assign client access and server access passwords, to create a message of the day, and to enable remote control. If you're using a GSN, these settings automatically update on all your Bridgit servers.

Setting passwords

You can assign, change or remove many of the passwords users and administrators use with Bridgit.

Changing the server access password

Server access passwords are optional. Assign a server access password if you want users to have to type a password before they can view the list of active meetings on a server. You can assign as many server access passwords as necessary.

IMPORTANT

If you assign a server access password, you should also assign a meeting creation password.

Configuring the server software

To change server access passwords

- 1. Double-click the **SMART Bridgit Administration Tools** icon on the server's desktop, and then click the **Security** tab.
- 2. Select Server access password in the Client access passwords area.
- 3. Type the passwords you want to use. Use a semicolon to separate multiple passwords (for example, apple; banana; pear).

I NOTES

- o To revoke a password, remove it from the list.
- If the server access password and meeting creation password are identical, you're prompted for only the server access password.

4. Click Apply.

I NOTES

- Remember to give the passwords to everyone who's authorized to view the list of active meetings.
- Participants who receive an e-mail invitation to join a meeting can click the link in the invitation to bypass the server access password. However, the participant can join only the meeting they're invited to. The participant can't view the list of other active meetings on the server.

Configuring the server software

Changing the meeting creation password

Meeting creation passwords are optional. Assign a meeting creation password if you want users to have to type a password before they can create a meeting. You can assign as many passwords as necessary.

TIMPORTANT

If you assign a server access password, you must also assign a meeting creation password.

To change meeting creation passwords

- 1. Double-click the **SMART Bridgit Administration Tools** icon on the server's desktop, and then click the **Security** tab.
- 2. Select **Meeting creation password** in the *Client access passwords* area.
- 3. Type the passwords you want to use. Use a semicolon to separate multiple passwords (for example, apple; banana; pear).

I NOTES

- o To revoke a password, remove it from the list.
- If the server access password and meeting creation password are identical, you're prompted for only the server access password.
- 4. Click Apply.

I NOTE

Remember to give the passwords to everyone who's authorized to create meetings.

Changing the administrator access password

Administrators can access and monitor any meeting on the Bridgit server using an administrator access password.

To assign an administrator access password

- 1. Double-click the **SMART Bridgit Administration Tools** icon on the server's desktop, and then click the **Security** tab.
- 2. Select Admin access password in the Client access passwords area.
- 3. Type the passwords you want to assign.

Configuring the server software

4. Click Apply.

I NOTES

- You can assign only one administrator access password.
- The administrator appears as Administrator in a Bridgit meeting's participant list but doesn't have any special capabilities in the meeting.
- If you create a meeting that uses the same password as the administrator's, no meeting members appear as Administrator in the participant list.

Assigning an API authorization password

Only original equipment manufacturers using the Bridgit application programming interface (API) use this authorization password.

To assign an API authorization password

- 1. Double-click the **SMART Bridgit Administration Tools** icon on the server's desktop, and then click the **Security** tab.
- 2. Select API authorization password in the Server access passwords area.
- 3. Type the password you want to assign.
- 4. Click Apply.

I NOTES

- You can assign only one API authorization password.
- To revoke the password, clear the **API authorization password** check box.
- Remember to give the password to third-party users whose systems are integrated with Bridgit software.

Changing Bridgit server setup options

Administrators can change server setup information including the registered domain name and primary and secondary port numbers.

To change the server setup options

- 1. Double-click the **SMART Bridgit Administration Tools** shortcut on the server's desktop, and then click the **Setup** tab.
- 2. Modify the options as required.

For information on the options, see the *Bridgit 4.6 installation and system administrator's guide* (smarttech.com/kb/170397).

Configuration changes on this page don't take effect until you restart both the Bridgit Master Service and the Conference Service in Windows Services Manager (see *Controlling Bridgit software services* on page 48).

Setting meeting options

You can configure, enable and disable several features of Bridgit that are available to meeting participants.

Disabling remote control

To prevent presenters from sharing control of their computers with other participants, disable the remote control setting in SMART Bridgit Administration Tools.

To disable remote control

- Double-click the SMART Bridgit Administration Tools shortcut on the server's desktop, and then click the Options tab.
- 2. Clear the Enable Remote Control check box.

I NOTES

- Remote control is available in active meetings until they end.
- Remote control is disabled in new meetings and the option doesn't appear to meeting participants.

Disabling webcams

To prevent participants from sharing video, disable the webcam setting in SMART Bridgit Administration Tools.

To disable webcams in Bridgit meetings

- 1. Double-click the **SMART Bridgit Administration Tools** shortcut on the server's desktop, and then click the **Options** tab.
- 2. Clear the **Enable Webcams** check box.

I NOTES

- Webcams are available in active meetings until they end.
- Webcams are disabled in new meetings and the option doesn't appear to meeting participants.

Configuring the server software

Disabling text chat

To prevent participants from sharing chat messages, disable the text chat setting in SMART Bridgit Administration Tools.

To disable text chat in Bridgit meetings

- Double-click the SMART Bridgit Administration Tools shortcut on the server's desktop, and then click the Options tab.
- 2. Clear the **Enable Chat** check box.

I NOTES

- o Text chat is available in active meetings until they end.
- Text chat is disabled in new meetings and the option doesn't appear to meeting participants.

Disabling the Raise Hand feature

To prevent participants from interrupting the meeting with the Raise Hand feature, disable the feature in SMART Bridgit Administration Tools.

To disable the raise hand feature in Bridgit meetings

- Double-click the SMART Bridgit Administration Tools shortcut on the server's desktop, and then click the Options tab.
- 2. Clear the Enable Raise Hand check box.

NOTES

- The Raise Hand feature is available in active meetings until they end.
- The Raise Hand feature is disabled in new meetings and the option doesn't appear to meeting participants.

Configuring the server software

Disabling the Knock feature

To prevent participants from knocking and entering a meeting without a password, disable the Knock feature in SMART Bridgit Administration Tools.

To disable the knock feature in Bridgit meetings

- 1. Double-click the **SMART Bridgit Administration Tools** shortcut on the server's desktop, and then click the **Options** tab.
- 2. Clear the **Enable Knock** check box.

I NOTES

- The Knock feature is available in active meetings until they end.
- The Knock feature is disabled in new meetings and the Knock to Join button doesn't appear to participants trying to join the meeting.

Adding a message of the day

Select this option to create a message users see when they open the Bridgit client.

To add a message of the day

- Double-click the SMART Bridgit Administration Tools shortcut on the server's desktop, and then click the Options tab.
- 2. Select the display frequency in the Message of the day area.
- 3. Type the message in the Message of the Day text box (maximum 256 characters).
- 4. Click Apply.

Configuring meeting audio settings

By default, Bridgit software's audio is enabled, allowing meeting participants to speak to each other during meetings.

Up to nine participants in a meeting can speak concurrently using Bridgit's Voice over Internet Protocol (VoIP) feature. Bridgit's VoIP implementation incorporates Secure Real-time Transport Protocol (SRTP) communication on UDP ports, processing audio data as a steady stream with minimal lag time. When more than nine people are in a meeting, participants can open and close their microphones to give others the opportunity to speak.

To disable meeting audio

- Double-click the SMART Bridgit Administration Tools shortcut on the server's desktop, and then click the Audio/Video tab.
- 2. Clear the **Enable Audio** check box.

I NOTES

- Meeting audio is available in active meetings until they end.
- Meeting audio is disabled in new meetings.

To select a default audio optimization when using VolP

- Double-click the SMART Bridgit Administration Tools shortcut on the server's desktop, and then click the Audio/Video tab.
- 2. Select **Use VolP Audio**, and then select one of the following:
 - Optimize for high audio quality provides the best quality meeting audio. It also consumes the most bandwidth.
 - Optimize for low bandwidth uses less bandwidth but doesn't provide optimal audio quality.

Third-party audio

If you're using a third-party voice bridge instead of VoIP, you can provide the telephone number and meeting code to participants so they can join the meeting.

To notify participants of a third-party voice bridge

- Double-click the SMART Bridgit Administration Tools shortcut on the server's desktop, and then click the Audio/Video tab.
- 2. Select Use a third-party Voice Bridge or audio-conferencing provider.

Chapter 4

Managing a Global Server Network (GSN)

About the Global Server Network (GSN)	
Bridgit servers in a GSN	36
Requirements and prerequisites	36
Setting up a local GSN server	36
Adding a remote Bridgit server to the GSN	37
Removing a local server from a GSN	37
Removing a Bridgit server from a GSN	38
Changing GSN server information	38
Manually reconnecting to a remote GSN server	38
Ending a GSN meeting	39
Bridgit clients in a GSN	40
Connecting to a GSN server	40
Connecting to a server in a GSN	40
Selecting or viewing GSN server information	40
Disabling the Pick fastest server option	41

About the Global Server Network (GSN)

A Bridgit GSN is a network of Bridgit servers in different geographical locations. A GSN optimizes bandwidth and reduces latency for enterprise Bridgit deployment.

You don't have to install the GSN separately. Install the Bridgit server software and use SMART Bridgit Administration Tools to configure the GSN options. See *Installing the server software* on page 18 for installation information.

Managing a Global Server Network (GSN)

Bridgit servers in a GSN

You install each server in a GSN as an independent Bridgit server. Once included in a GSN, each independent server becomes a node in the network with independent server capabilities.

Requirements and prerequisites

The requirements for a GSN server are the same as a standard Bridgit server. See *Preparing for installation* on page 6 for details.

Setting up a local GSN server

When you install Bridgit server software, a shortcut to SMART Bridgit Administration Tools appears on your desktop.

I NOTES

- Changes made on the Options, Audio and Security tabs in SMART Bridgit Administration
 Tools on one server in a GSN automatically apply to all servers in that GSN.
- Your server name should describe your local server in plain language.
- The server password is used by other servers in the GSN to add your server. This password
 is mandatory.

To set up your local GSN server

- 1. Double-click the **SMART Bridgit Administration Tools** shortcut on the server's desktop, and then click the **Servers** tab.
- 2. Type a name for your server in the Description box in the Server setup information area.
- 3. Type a password for the server in the Server password box.
- 4. Click Apply.



The Apply button is enabled when you enter a server password.

Managing a Global Server Network (GSN)

Adding a remote Bridgit server to the GSN

To add a remote Bridgit server to the GSN

- Double-click the SMART Bridgit Administration Tools shortcut on the server's desktop, and then click the Servers tab.
- 2. Click Add.

The Add Server dialog box appears.

3. Type the server address, server port and GSN password for the server you want to add, and then click **OK**.

I NOTES

- All three boxes must be filled in before the **OK** button is available.
- If you try to subscribe to your own server, an error message appears.
- If there's no GSN but you have two servers and want to form a GSN with them, you
 can use either server to add the other.
- If there are two or more servers in a GSN, you can't add your server to that GSN. An existing member must add your server.

Once you add the server, the *Server list* displayed on every member server of the GSN updates with the new server information. If meetings are running that include these servers, the *Conference Server* list on the *Meetings* tab also updates.

Removing a local server from a GSN

To remove a local server from a GSN

- Double-click the SMART Bridgit Administration Tools shortcut on the server's desktop, and then click the Servers tab.
- 2. Select the local server you want to remove in the Server list.
- 3. Click **Remove Local**, and then click **OK** to confirm.

NOTES

- The server is removed from every user's Server list.
- If clients are connected to meetings at the time of the server removal, they remain on the *Meetings* list of the server computer hosting them.

CHAPTER 4

Managing a Global Server Network (GSN)

Removing a Bridgit server from a GSN

To remove a Bridgit server from a GSN

- Double-click the SMART Bridgit Administration Tools shortcut on the server's desktop, and then click the Servers tab.
- 2. Select the server you want to remove in the Server list.
- 3. Click **Remove**, and then click **OK** to confirm.

NOTES

- The server is removed from every user's Server list.
- If clients are connected to meetings when the server is removed, they remain on the Meetings list of the server computer hosting them.

Changing GSN server information

To change GSN server information

- Double-click the SMART Bridgit Administration Tools shortcut on the server's desktop, and then click the Servers tab.
- 2. Type new information in the *Description* box or the *Server password* box.
- 3. Click Apply.

The new information is pushed to all other servers in the GSN.

Manually reconnecting to a remote GSN server

To manually reconnect to a remote GSN server

- Double-click the SMART Bridgit Administration Tools shortcut on the server's desktop, and then click the Servers tab.
- 2. Select the server you want to connect to in the Server list.
- 3. Click Reconnect.

I NOTE

The **Reconnect** button is unavailable when there's already a valid connection or when no server is selected.

CHAPTER 4

Managing a Global Server Network (GSN)

Ending a GSN meeting

To end a meeting on the local GSN server

- Double-click the SMART Bridgit Administration Tools shortcut on the server's desktop, and then click the Meetings tab.
- 2. Select a meeting in the list.
- 3. Click End meeting.

I NOTE

You can end meetings that exist on your local server only. If the meeting is created on a remote server, the **End Meeting** button is unavailable.

Managing a Global Server Network (GSN)

Bridgit clients in a GSN

Bridgit clients in a GSN detect and connect to the GSN server with the fastest connection speed. Once this selection and connection is complete, the GSN optimizes the bandwidth for the network.

Connecting to a GSN server

Connecting to a server in a GSN

Connecting to GSN servers is similar to connecting to a single Bridgit server. The main difference is that the SMART GSN client automatically detects the fastest server in the GSN and connects you to it, regardless of the server address you enter.

To connect to the GSN

- 1. In your Internet browser, go to your Bridgit server.
- 2. Click the **Download Software** link, and then run the client software.

Selecting or viewing GSN server information

To select or view a GSN server

- 1. Double-click the **SMART Bridgit** icon on your desktop.
 - The SMART Bridgit Software dialog box appears.
- 2. Click the server icon in the bottom-left corner of the SMART Bridgit Software dialog box, if you want to connect to a different server.

The Server Information dialog box appears.

I NOTES

- o Starting server is the name or address you typed into your browser.
- o Fastest server is the name or address of the fastest server in the GSN.
- 3. Type the name of the new server or select a server from the drop-down list.
- 4. Click Connect.

CHAPTER 4

Managing a Global Server Network (GSN)

Disabling the Pick fastest server option

I NOTE

For best results, SMART recommends always using the Pick fastest server option.

To disable the Pick fastest server option

- 1. Double-click the **SMART Bridgit** icon on the server's desktop. The *SMART Bridgit Software* dialog box appears.
- 2. Click the small **SMART Bridgit** icon in the upper-left corner.
- 3. Select About SMART Bridgit.

The About SMART Bridgit Software dialog box appears.

- 4. Click the **Technical Support** tab, and then click the **Troubleshooting** tab.
- 5. Clear the **Pick fastest server** check box in the *Connection* area.

The next time you connect to a GSN, you connect to the server you designate, regardless of connection speed and network traffic.

Chapter 5

Administering the server software

About SMART Bridgit Administration Tools	43
Viewing status information	44
Viewing active meetings	44
Broadcasting messages to meeting participants	
Viewing status information	45
Viewing and saving server usage reports	45
Setting log purge frequency	46
Managing servers and meetings	47
Placing a server on hold	47
Ending a meeting	47
Controlling Bridgit software services	48
Customizing the Bridgit server's web page	49
Downloading the Bridgit client	49

About SMART Bridgit Administration Tools

Bridgit server software includes an administration tools application. You can use SMART Bridgit Administration Tools to configure servers and view their statuses, manage your Bridgit software licenses, as well as to change passwords, sharing settings and remote control settings. You can also use the administration tools to set up a message of the day and to configure chat and video settings.

When you install Bridgit server software, a shortcut to SMART Bridgit Administration Tools papears on the server's desktop.

Viewing status information

You can use SMART Bridgit Administration Tools to view status information for Bridgit server software, including active meetings, licenses and server usage.

Viewing active meetings

To view active meetings

Double-click the **SMART Bridgit Administration Tools** shortcut on the server's desktop, and then click the **Meetings** tab.

A table of active meetings appears. The table includes the following information:

- When the meeting was created
- The meeting's name
- Who created the meeting
- o The number of participants
- The GSN server hosting the meeting

Broadcasting messages to meeting participants

To broadcast a message to all meeting participants

- Double-click the SMART Bridgit Administration Tools shortcut on the server's desktop, and then click the Meetings tab.
- 2. Select the meeting to which you want to broadcast a message, and then click **Send Message**.
- 3. Type the message you want to broadcast in the *Message* box.
- 4. Click OK.

Your message appears on each meeting participant's screen.

Viewing status information

To view status information

Double-click the **SMART Bridgit Administration Tools** shortcut on the server's desktop, and then click the **Servers** tab.

A table of active servers appears. The table includes the following information:

- o Server IP address or domain name
- o A description of the server
- The port being used for the server
- The number of active meetings
- The server's status, which can include the following:
 - Alive the server is active and users can connect.
 - o Offline the server is offline or the local server is unable to contact it
 - o On hold an administrator placed the server on hold

Viewing and saving server usage reports

To view server usage reports

 Double-click the SMART Bridgit Administration Tools shortcut on the server's desktop, and then click the Report tab.

A server usage report for the current week appears.

2. Use the **Report start date** and **Report end date** calendars to select report dates, and then click **Refresh**.

A report appears for the period you select.

To save a server usage report as a text file

 Double-click the SMART Bridgit Administration Tools shortcut on the server's desktop, and then click the Report tab.

A server usage report for the current week appears.

2. In the server usage report, select the entries you want to save.

OR

Ensure no entries are selected if you want to save the entire report.

3. Click Save Report.

If no entries are selected, a Save As dialog box appears. Skip to step 5.

OR

If entries are selected, a Save All Items dialog box appears. Proceed to step 4.

4. Click Save All Entries or Save Selection.

A Save As dialog box appears.

5. Enter a file name and destination, and then click **Save**.

Setting log purge frequency

You can control how long the log stores information about server usage. The default value is 30 days, which means log entries older than 30 days are automatically deleted from the log. You can use any setting between 1 and 120 days.

To set log purge frequency

- Double-click the SMART Bridgit Administration Tools shortcut on the server's desktop, and then click the Report tab.
- 2. Enter the number of days you want the log to store information for in the *Logs purged after* box.
- 3. Click Apply.

Managing servers and meetings

You can change the connection status of servers and end meetings using SMART Bridgit Administration Tools.

Placing a server on hold

When you place a server on hold, it doesn't allow users to connect, but it doesn't end active meetings.

Place a server on hold when you want to perform maintenance on the server. This allows active participants to finish their meetings, and allows you to maintain the server when they're finished.

To place a server on hold or reactivate it

- Double-click the SMART Bridgit Administration Tools shortcut on the server's desktop, and then click the Servers tab.
- 2. Select the server in the Server list that you want to place on hold or to reactivate.
- 3. Click **On Hold**, and then click **OK** when asked to confirm.

The server status changes to On Hold.

OR

Click Re-activate.

The server status changes to Alive.

Ending a meeting

To end a meeting

- Double-click the SMART Bridgit Administration Tools shortcut on the server's desktop, and then click the Meetings tab.
- 2. Select the meeting you want to end, and then click **End Meeting**.
- If you want to broadcast a message to meeting participants as the meeting ends, type it in the Message box.
- 4. Click OK.

A notification dialog box and your message appears on each meeting participant's screen, and the meeting ends.

Controlling Bridgit software services

You can use the Windows Services administration console to control Bridgit software services without restarting the computer.

TIMPORTANT

If you stop the services from the Windows Services administration console, all meetings currently running end without warning the users.

To control Bridgit software services

- Open the Windows Services administration console (Control Panel > System and Security
 Administrative Tools > Services).
- 2. Double-click SMART Bridgit Master Service.

The SMART Bridgit Master Service Properties dialog box appears.

- 3. Click Start, Stop, Pause, Restart or Resume in the General tab to control the service.
- 4. Click OK.
- 5. Double-click SMART Bridgit Meeting Service.

The SMART Bridgit Meeting Service Properties dialog box appears.

- 6. Click the General tab.
- 7. Click Start, Stop, Pause, Restart or Resume to control the service.
- 8. Click OK.

Customizing the Bridgit server's web page

After you configure the Bridgit server, users can download the Bridgit client by visiting the server's address in an Internet browser.

To customize the Bridgit server's web page

- 1. Create a web page file called **CustomPage.htm**.
- 2. Customize the web page.

It should contain links to download the Bridgit client for both Windows operating systems and Mac OS X operating system software. You can also include the SMART Scheduler Outlook add-in installer.

The paths for these files are:

Windows	http:// <yourbridgitserverurl>/Bridgit.exe</yourbridgitserverurl>
Mac OS X	http:// <yourbridgitserverurl>/Bridgit.zip</yourbridgitserverurl>
SMART Scheduler Outlook add-in	http:// <pre>/SMARTSchedulerOutlookAddinSetup.msi</pre>

where <yourbridgitserverurl> is the URL of your Bridgit server.

3. Save the web page file in the server's application directory.

I NOTES

- The default directory location is C:\Program Files\SMART Technologies\SMART Bridgit.
- For enhanced security, Bridgit server makes CustomPage.htm available only to an Internet browser. If your custom page includes images or other files, those images and files must be hosted on a different server and referenced with absolute links in the custom page.

Downloading the Bridgit client

To download the Bridgit client

- 1. In your Internet browser, go to your Bridgit server.
- 2. Click the **Download Software** link, and then run the client software.

Chapter 6

Using SMART Scheduler

Introduction	51
Installing SMART Scheduler server software	51
Installing the software	52
Configuring SMART Scheduler server	53
Upgrading SMART Scheduler server	54
Installing the SMART Scheduler Outlook add-in	54
Installing the SMART Scheduler Outlook add-in from a command line	56
Removing the SMART Scheduler Outlook add-in	58
SMART Scheduler Outlook add-in product codes	58

Introduction

If you're using a Windows operating system, the SMART Scheduler option integrates the Bridgit server with Microsoft Exchange Server and Microsoft Outlook Clients. This enables you to schedule single or recurring meetings that use Bridgit software.

Installing SMART Scheduler server software

The SMART Scheduler server software installation file is included with your Bridgit server software.

To locate the SMART Scheduler server software installation file

On the computer where you're installing the software, browse to your Bridgit server by typing

http://<yourserver.com>/SMARTSchedulerServerSetup.exe

in the address bar, where <yourserver.com> is the URL of your Bridgit server.

OR

On your Bridgit server, go to

C:\Program Files\SMART Technologies\SMART Bridgit\SMARTSchedulerInstallers and then copy the SMARTSchedulerServerSetup.exe file to the computer you're installing it on.

CHAPTER 6

Using SMART Scheduler

Installing the software

The ports that the Microsoft Exchange Server or Exchange client use depend upon the versions installed. The network administrator can restrict the Exchange Server's range of allowed TCP ports or can map static TCP ports. Refer to the *Microsoft Exchange Server and Outlook clients* section in this article http://support.microsoft.com/kb/832017.

To install SMART Scheduler server software

1. Double-click the **SMARTSchedulerServerSetup.exe** installation file.

The SMART Scheduler server – InstallShield Wizard welcome screen appears.

I NOTE

The installer won't run on a computer with Microsoft Outlook.

2. Click Next to continue.

If you don't have Microsoft Collaboration Data Object (CDO) installed on your computer, the CDO Installation Required dialog box appears. Go to the To install Microsoft CDO procedure below.

If CDO is installed the Software License Agreement appears.

3. Read the agreement. If you accept it, click I accept, and then click Next.

NOTE

If you want to keep a hard copy of the agreement for your records, click **Print**.

The Destination Folder dialog box appears.

- 4. Click Next to install to the default folder, or click Change to specify another folder location.
- 5. Click Install.

If the installation is successful, the InstallShield Wizard Completed dialog box appears.

6. Click **Configure** to set up the mailbox.

The SMART Scheduler server Configuration dialog box appears.

7. Type your SMART Scheduler mailbox credentials and Windows authentication information in the appropriate boxes, and then click **OK**.

The setup application installs the SMART Scheduler server which runs as a service. The application then verifies that the specified Windows user account has access to the Microsoft Exchange mailbox and that the mailbox is functioning correctly. Any errors are reported to you.

To install Microsoft CDO

- 1. Select Download CDO Installer, and then click Finish.
- 2. Run the downloaded software.

The Choose Directory for Extracted Files dialog box appears.

3. Click **OK** to accept the default location, or type a new location.

The CDO Installation file downloads to the specified location.

- 4. Browse to where you saved the file and double-click the ExchangeMapiCdo.msi file.
- 5. To install SMART Scheduler server software, return to step 3 in *Installing SMART Scheduler* server software on page 51.

Configuring SMART Scheduler server

After you install SMART Scheduler server software, you can change the server name and password settings.

To change the SMART Scheduler server settings

 Browse to where you installed SMART Scheduler server and double-click the SMARTSchedulerServerConfig.exe file.

The SMART Scheduler Server Configuration dialog box opens.

- 2. Change your SMART Scheduler mailbox credentials or Windows authentication information as required.
- 3. Click **OK** to save the changes.

IMPORTANT

- If you change the name of your SMART Scheduler mailbox, none of the meetings scheduled using the old mailbox name will run.
- After changing the name of the mailbox on the server, you must also change the name of the
 mailbox in the SMART Scheduler Outlook add-in. For instructions, see *To change the*SMART Scheduler settings for all new meetings in your Bridgit 4.6 user's guide
 (smarttech.com/kb/170396) or Bridgit Help.

Upgrading SMART Scheduler server

To upgrade your SMART Scheduler server software

1. Upgrade your Bridgit server.

See *Upgrading Bridgit server software* on page 22 for instructions.

2. Upgrade your SMART Scheduler server software.

See Installing SMART Scheduler server software on page 51 for instructions.

Installing the SMART Scheduler Outlook add-in

The SMART Scheduler Outlook add-in enables you to automatically create a Bridgit meeting that accompanies a Microsoft Outlook meeting.

You can install the add-in on any computer that can communicate with your Bridgit server, but the add-in must be installed and configured by an administrator. Once the add-in is installed, any user can change individual profile settings. These changes affect only the profile of the user that set them. The administrator settings remain the same.

IMPORTANT

Close Outlook before you download the .msi file and install the add-in.

To download the .msi file

1. Go to:

for 32-bit versions of Outlook	http:// < <i>yourserver.com</i> > /SMARTSchedulerOutlookAddinSetupx86.msi
for 64-bit versions of Outlook	http:// <yourserver.com> /SMARTSchedulerOutlookAddinSetupx64.msi</yourserver.com>

where <yourserver.com> is the address for your Bridgit server.

- 2. Press ENTER.
- 3. Click Run to install the file.

The SMART Scheduler Outlook Add-in - Install Shield Wizard welcome page appears.

To install the SMART Scheduler Outlook add-in

1. Press Next in the welcome screen.

The Software License Agreement page appears.

2. If you accept, click I accept, and then click Next.

NOTE

If you want to keep a hard copy of the agreement for your records, click Print.

The Destination Folder page appears.

3. Click **Next** to install to the default folder, or click **Change** to specify another folder.

The SMART Scheduler Outlook Add-in Preferences page appears.

- 4. Type the name of the *Default Bridgit Server* to use when setting up Bridgit meetings.
- 5. Type the SMART Scheduler e-mail address.

I NOTE

The Microsoft Exchange Server administrator creates this address when he or she creates the mailbox on the Microsoft Exchange Server.

- 6. If you want the meetings to be password protected by default, leave **Password protect** meetings by default selected.
- If you want to use formatting in your messages, select Preserve Rich Text formatting.
 Otherwise, clear the check box to use plain text.

I NOTE

Rich text formatting can cause unexpected behavior when you use the SMART Scheduler Outlook Add-in with other third-party Outlook add-ins and extensions.

8. Click Next.

The Ready to Install the Program page appears.

9. Click Install.

When the add-in successfully installs, the *InstallShield Wizard Completed* page appears.

- If you want Outlook to start after the wizard closes, leave Start Outlook selected.
- 11. Click Finish to close the wizard.

Installing the SMART Scheduler Outlook add-in from a command line

To install the add-in from a command line

- Open a Command Prompt window, then type cmd in the Open box, and then click OK.
 The cmd.exe dialog box appears.
- 2. Type **cd** followed by a space, and then type the path to the directory that contains the installer.
- 3. Execute the installer with any appropriate msi-related parameters.

I NOTE

For a list of msi-related parameters, type **msiexec /?** and press ENTER.

4. Specify configuration options for the installer.

SERVERNAME	The address of the Bridgit server on which your SMART Scheduler meetings will run.	
USEPASSWORD	Whether your SMART Scheduler meetings are password protected (0 or 1).	
MAILBOX	The SMART Scheduler e-mail address	
	ii NOTE	
	The Microsoft Exchange Server administrator creates this address and the mailbox on the Microsoft Exchange Server at the same time.	
USERTF	Specifies whether your e-mail messages use rich text formatting (1) or plain text formatting (0).	

EXAMPLE

msiexec.exe /i "C:\<SourceFileLocation>\SMARTSchedulerOutlookAddinSetupx86.msi" /qn SERVERNAME=<yourserver.com> USEPASSWORD=1 USERTF=1 MAILBOX="<Scheduler Mailbox>"

where *SourceFileLocation*> is the path to the .msi file, *SourceFileLocation* is the URL of your Bridgit server, and *Scheduler Mailbox* is the SMART Scheduler e-mail address.

NOTE

If you have a space in your mailbox name, you must use double quotations marks before and after the name. If there is no space, quotation marks are not required.

5. Press ENTER.

The SMART Scheduler Outlook add-in installs.

CHAPTER 6

Using SMART Scheduler

To upgrade the add-in from a command line

Follow the steps in the *To install the add-in from a command line* procedure above, and then close and restart Outlook.

I NOTE

You can leave Outlook running during the upgrade, but you must restart it for the changes to take effect.

Removing the SMART Scheduler Outlook add-in

IMPORTANT

Do not remove files for other SMART software products you want to continue to use. If you are unsure, contact SMART support for more information.

Before you can perform the default removal procedure, you must obtain the product code for your version of SMART Scheduler Outlook add-in. You can find your product code in the following table.

SMART Scheduler Outlook add-in product codes

Software version	Product code	
4.0.500.0	{916243FB-5A56-4CF1-B75B-6F4236977C12}	
4.1.169.0	{EF2064B4-D050-4A45-B28A-F8BA573AB0B5}	
4.2.183.3	{2F255E33-D2B6-4EC5-BE45-124E7A6BE420}	
4.5.564	{2F255E33-D2B6-4EC5-BE45-124E7A6BE420}	
4.6 32-bit version	{B600355A-F5A2-44BA-8C3E-A56792F5654E}	
4.6 64-bit version	{B600355A-F5A2-44BA-8C3E-A56792F5654E}	

I NOTE

Include the braces when entering a product code value.

To remove the add-in from the uninstaller

- 1. Open Windows Control Panel's Install or Remove Programs tool.
- 2. Remove the installed SMART Scheduler Outlook add-in software.

To remove the add-in from a command line

- 1. Open a Command Prompt window.
- 2. Type the following command (including quotation marks), and then press ENTER:

msiexec.exe /x"path to .ms\SMARTSchedulerOutlookAddinSetupx86.msi" /q

OR

Type the following command, and then press ENTER:

msiexec.exe /x{ProductCode} /q

Chapter 7 Bandwidth and scalability

Bandwidth requirements	60
Examples of bandwidth requirements	60
Scaling Bridgit	61

Bandwidth requirements

Bridgit software performs best when you allocate at least 1 Mbps of network bandwidth on your server for each meeting participant, both inbound to, and outbound from, the server.

EXAMPLE

If you have a 5 Mbps bandwidth connection to your server, you can support up to five concurrent participants with four open microphones and four webcams at optimal performance (1 Mbps per user \times 5 users = 5 Mbps).

Use the following table to estimate bandwidth requirements for Bridgit software.

Bridgit software resource	Bandwidth required
One shared desktop with a 1024 ×768 resolution	9 Kbps
One open microphone using the standard quality setting	25 Kbps
One open microphone using the low quality setting	15 Kbps
One open webcam using the standard quality setting	250 Kbps
One open webcam using the moderate quality setting	200 Kbps
One open webcam using the low quality setting	60 Kbps

Ⅵ TIP

Most shared desktops maintain a bandwidth load of about 9 Kbps. However, the bandwidth required for a shared desktop depends on the display's resolution, the complexity of the content being shared and the frequency at which the content changes. For example, a shared desktop with a photographic desktop background requires more bandwidth than a shared desktop with a plain, solid colored background.

As an extreme example, a shared desktop with a complex photographic background and frequent content changes can peak at 1800 Kbps, while maintaining an average of 300 Kbps.

Examples of bandwidth requirements

The following table can help you determine typical bandwidth usage for Bridgit meetings.

Bridgit resource	Bandwidth required
One shared desktop with a resolution of 1024 × 768	9 Kbps
Four open microphones using the standard quality setting	25 Kbps × 4 = 100 Kbps
Four open webcams with moderate activity	200 Kbps × 4 = 800 Kbps

CHAPTER 7

Bandwidth and scalability

Bridgit resource	Bandwidth required
Total bandwidth required for each participant	9 Kbps + 100 Kbps + 800 Kbps = 909 Kbps
Total bandwidth required for all 4 participants	909 Kbps × 4 participants = 3,636 Kbps or 3.636 Mbps

Scaling Bridgit

Bridgit software is scalable. A Bridgit server software maintains its availability, reliability and performance when the number of meeting participants increases on the server.

Appendix A

Troubleshooting

Using the Bridgit troubleshooting tool	64
Screen capture technology	65
Information fields and options	65
Sharing color quality	67
Audio	67
Connection	68
Ink	68
Monitoring a meeting's performance – presenter	69
Improving performance	69
Monitoring a meeting's performance – participant	70
Improving performance	70
Minimizing network latency	71
Symptoms	71
Solution	71
Other suggestions	72
Verifying communication protocol	72
Checking for firewalls	72
Measuring latency and packet loss	73
Troubleshooting Bridgit server connections	73
Symptoms	73
Solution	74
Verifying the network's DNS configuration	74
Verifying Bridgit server configuration	75
Manually updating the Windows registry	76
Configuring the client's HOSTS file	77
Verifying port forwarding and firewall configuration	77
Troubleshooting administration tool connections	78
Symptom	78
Solution	78
Directing IP traffic to the Bridgit server	78
Moving the server's IP address to the top of the IP settings list	79
Stopping applications using the server's IP port	79
Troubleshooting SMART Scheduler	80

APPENDIX A

Troubleshooting

This section includes troubleshooting topics and information on how to get technical support. It also shows how you can use the Bridgit software troubleshooting tool to optimize your system configuration and resolve problems.

Using the Bridgit troubleshooting tool

Bridgit software has a troubleshooting tool that you can use to determine the cause of issues you could have.

To open the troubleshooting tool

1. Open Bridgit client software and create a test meeting.

The Bridgit lobby screen appears.

2. Select Menu > About SMART Bridgit.

The About SMART Bridgit Software dialog box appears.

3. Select Technical Support > Troubleshooting.

The Troubleshooting dialog box appears.

The features of the *Troubleshooting* dialog box are described in the following sections:

- Screen capture technology on the next page
- Sharing color quality on page 67
- Audio on page 67
- Connection on page 68
- Ink on page 68

For more assistance, contact SMART support (smarttech.com/contactsupport).

Troubleshooting

Screen capture technology

This section provides an overview of the various technologies that Bridgit software uses when you share your desktop during a meeting.

Bridgit software uses the following three types of technology to share screens during a meeting.

Type of technology	Description
Mirror drivers	Bridgit software attempts to use this sharing method first because it offers the best performance. It requires an installation which is automatically done if you have administrator rights.
	ii NOTE
	Mirror drivers behave unexpectedly on computers with Windows 7 operating systems.
Redraw hooks	Bridgit software reverts to using redraw hooks if it can't use mirror drivers. Redraw hooks are automatically downloaded from the server when needed and perform a screen capture every time something changes on the screen.
	i NOTE
	Redraw hooks behave unexpectedly on computers with Windows 7 operating systems.
Four times per second capture	If Bridgit software can't use either of the above technologies, it captures the shared screen four times per second, compresses the image, and then sends it to the recipient. This method offers the lowest performance, but it uses the lowest bandwidth.

Information fields and options

Use the options outlined in this section to resolve issues with sharing speed and image quality.

Field/option	Description	When to use / why it's important	
Presenting status	Displays either <i>Not</i> currently presenting or the method of screen capture in use:		
	 Capturing screen 4 times per second (display 0) 		
	 Using RedrawHooks.dll (display 0) 		
	 Using mirror driver (display 0) 		

Field/option	Description	When to use / why it's important
Hardware acceleration status	Indicates whether hardware acceleration is on or off.	If you use a low-end video card in your system and you disable hardware acceleration, you increase the performance of your computer.
Mirror driver availability	 available – The mirror driver is installed. unavailable – The mirror driver isn't installed. disable by OS – Your computer has Windows 7, which causes the mirror driver to behave unexpectedly. 	When video mirroring is active, each time the system draws to the primary video device at a location inside the mirrored area, a copy of the draw operation is executed on the mirrored video device in real time.
Enable redraw hooks	Select to share using redraw hooks.	If your pointer is flickering, you might want to try clearing this option.
	Redraw hooks behave unexpectedly with Windows 7 operating system.	
Enable mirror driver	Select to share using mirror driver.	If your shared applications aren't being captured correctly, you might want to try clearing this option. Otherwise, leave this option enabled.

Sharing color quality

Use the following options to adjust the quality of shared color images and video.

Field	Description	When to use / why it's important
Share in full color	 Select to share in the highest color depth available (usually 24 or 32 bits per pixel). 	Clearing this option causes bandwidth usage to drop, but it increases the load on the presenter's computer. The image quality of the shared screen is reduced.
	 Clear to share in 256 color mode. 	
Optimize desktop for sharing	Slows down the frequency of screen captures and removes your desktop background to decrease the amount of bandwidth used.	This option is cleared by default. You can select it to improve sharing when bandwidth is limited.

Audio

Use the following options to adjust your audio settings.

Option	Description	When to use / why it's important
Enable echo cancellation	Enables echo cancellation for VoIP audio.	Clear this option only if the computer's power is very limited, because it takes slightly more processing power to have this enabled.
		Some hardware devices contain echo cancellation that Bridgit's software-based echo cancellation can interfere with.
		Clear this option if you are having problems with echo cancellation.
Enable AGC	Enables automatic gain control (AGC).	AGC adjusts the volume of your microphone to a reasonable level in case you have your volume set too high.
		Clear this option if you prefer full control over the volume.

APPENDIX A

Troubleshooting

Connection

This section provides server connection status details, as well as information on ports and proxy connections.

Field	Description	When to use / why it's important
Starting server	Displays the server name that you typed when you connected Bridgit software to the server.	 Status only To change which server is in use, double¬click the SMART Bridgit client icon on your desktop or in the Dock, and then click the server icon
Fastest server	 Displays the server in the Global Server Network (GSN) that you're connected to. Bridgit software selected this server due to its speed of connection. 	 Status only Bridgit software detects this server automatically.
TCP port	Displays the port your system is using for screen sharing, video conferencing and chat.	Status only
UDP port	The port used for VoIP audio.	Status only
Proxy connection	Fallback communication protocol when TCP/UDP is restricted.	Status only
Pick fastest server	Select to enable the automatic selection of the fastest server.	If you clear this option, Bridgit software connects to the server you specified, regardless of whether there is a faster server available in the same GSN.

Ink

Clear this check box to disable Bridgit's remote and local ink ability. This is useful if you want to write on a SMART Board interactive whiteboard instead of using Bridgit software's ink capability.

Monitoring a meeting's performance – presenter

When you present in a meeting, an hourglass could appear on the **Show/Hide Participant List** button while Bridgit software sends updates to the other participants. The hourglass disappears once all the participants can see your desktop.

If the hourglass remains, one or more participants are lagging behind the meeting.

To view the meeting performance for each participant

Click the Show/Hide Participant List button 3.

The participant list appears. The delay interval (in seconds) appears to the right of the name of the participant who's lagging. The chat icon is also covered by an hourglass.

If participants continue to lag behind the meeting, you can take steps to improve the meeting's performance.

Improving performance

If you're presenting a meeting and you find that some participants are seeing events on your desktop several seconds after they happen, you can try a number of things:

- Use a solid-color desktop background rather than a complex wallpaper.
- Disable animations or fades in list boxes, windows, menus, ToolTips and so on.
- · Stop sharing your webcam.
- Optimize your desktop for sharing. Select Menu > About SMART Bridgit > Technical Support > Troubleshooting, and then select Optimize desktop for sharing and click OK.

Troubleshooting

Reduce the screen resolution in your operating system's display settings or share only a
portion of the desktop.

I NOTES

- The procedure for reducing the desktop resolution varies between versions of Windows operating system. However, the option is always available in Control Panel > Display > Settings.
- The procedure for reducing the desktop resolution varies between versions of the Mac operating system software. However, the option is always available in Apple (É) menu > System Preferences > Displays.
- If you're the meeting owner, you can choose an audio optimization setting that could improve performance.

If none of these options helps significantly, contact your network administrator and report that you're experiencing slow network performance.

Monitoring a meeting's performance – participant

When you view the shared desktop, the **Show/Hide Participant List** button turns yellow upon computer is 5 to 10 seconds behind the presenter's. If your computer is more than 10 seconds behind the presenter's, the **Show/Hide Participant List** button button turns red.

To view the meeting performance for your computer

Click the Show/Hide Participant List button 🛂 .

The delay interval (in seconds) appears to the right of your name.

If your computer continues to lag behind the meeting, you and the presenter can take steps to improve performance.

Improving performance

If you're participating in a meeting and you see events on the presenter's desktop several seconds after they happen, you can try a number of things:

- · Hide the webcam window.
- Stop sharing your webcam.
- Stop using audio and use text messaging (chat) instead.

Troubleshooting

Avoid using the Fit presenter's desktop to dialog box option if you're using a less powerful
computer. If your desktop is the same size or larger than the presenter's, you can view the
shared desktop in Full Screen mode without using scroll bars.

I NOTE

This can improve performance for slow computers, but not for slow networks.

Reduce the level of Windows hardware acceleration. Select Control Panel > Display >
Settings > Advanced. Click the Troubleshoot tab and drag the level of Hardware
acceleration toward None. Test Bridgit software's performance and reduce the hardware
acceleration more if necessary.

I NOTE

This can improve performance for slow computers, but not for slow networks.

If none of these options helps significantly, contact your network administrator and report that you're experiencing slow network performance.

Minimizing network latency

This topic details steps you can take if your client's program is slow or unresponsive during a meeting. Latency, the time lag between sending a message to a remote computer and receiving a response, can cause noticeable performance issues in Bridgit software.

Symptoms

- Connecting to the Bridgit server takes a long time.
- The screen updates slowly when you view a shared desktop.
- Bridgit software doesn't respond to your mouse or keyboard when you use remote control.

Solution

Try the following to troubleshoot network latency issues:

- Verify that you're using TCP and UDP network protocols. See Verifying communication protocol on the next page.
- Check if you're connecting through a proxy server. See Bridgit and firewalls on page 12.
- Check your network bandwidth. See Examples of bandwidth requirements on page 60.
- Measure latency and packet loss rate. See Measuring latency and packet loss on page 73.

Other suggestions

Because you have limited control over the network outside of your LAN, you have limited control over network latency issues. However, you might be able to improve the connection between your LAN and your Internet Service Provider (ISP).

You can try these options:

- Read the specifications of your server and client computer Ethernet card throughput rates. Also, check your network device rates. If they're low, upgrade the hardware.
- Verify that your Internet transmit and receive speeds match the speed guaranteed by your ISP.

Verifying communication protocol

Bridgit software uses three types of network protocols:

- TCP for data and video
- UDP for VoIP audio
- HTTP if a client is unable to connect to the server using TCP

Communications using TCP and UDP have lower network delays than those using HTTP protocol, and using them helps to prevent latency issues.

Use Bridgit software's troubleshooting tool to determine the network protocol you're using. See *Using the Bridgit troubleshooting tool* on page 64.

Ensure that values appear in the *TCP Port* and *UDP Port* fields. If these fields have *N/A* in them, or if the *Proxy Connection* option is selected, contact your administrator to open the TCP and UDP ports to connect to the Bridgit server. See *Administering the server software* on page 43. See *Bridgit and firewalls* on page 12 for information about configuring firewalls and proxy servers.

Checking for firewalls

To determine if the client is behind a firewall

- 1. On the client computer, open the Bridgit troubleshooting tool. See *Using the Bridgit troubleshooting tool* on page 64.
 - The *Connection* area displays the ports and protocols the client computer is using to communicate with the server. If a client is communicating through a proxy server or if the client's UDP and secondary TCP ports are blocked by a firewall, the *Proxy Connection* check box is selected.
- Contact your administrator to open the TCP and UDP ports to connect to the Bridgit server.

Measuring latency and packet loss

Packet loss occurs when one or more packets of data traveling across a computer network fail to reach their destination. Packet loss rates depend on factors including bandwidth, communication path reliability and router buffer size. When packets are lost, latency increases as the network devices try to recover the information.

Windows operating systems include the PathPing tool to measure packet loss rate and latency. PathPing sends packets to each router on the path to a destination for an interval, and then it computes results based on the packets returned from each hop. Since PathPing shows how much packet loss is seen for any router or link, you can determine which routers or links are causing network problems. For more information on using PathPing to determine network latency and packet loss, see the Microsoft website.

Troubleshooting Bridgit server connections

This section helps you resolve connection issues that are caused by your Bridgit server software or your network environment.

Bridgit server connection issues can result from an incorrect domain name server (DNS) configuration for routing to the Bridgit server or from the server computer's domain and IP address and port forwarding settings on the network servers, routers or firewalls.

Symptoms

 When a Bridgit client connects to a Bridgit server that's running on the same computer, a The <servername.com> server is not available. Try again later or select another server error message appears.

This error message can also appear when a client's software causes the issue.

When you're unable to connect to Bridgit software server and Bridgit client software is causing the issue, see *You're unable to connect to the Bridgit server because of issues with the Bridgit client computer* (smarttech.com/kb/099567).

An error message appears when you connect to a Bridgit server from an Internet browser.

Solution

Verify that you're using the latest version of Bridgit server software. See *Upgrading Bridgit server* software on page 22. If the software upgrade doesn't resolve the issue, try these procedures:

- Verifying the network's DNS configuration below
- Verifying Bridgit server configuration on the next page
- Manually updating the Windows registry on page 76
- Configuring the client's HOSTS file on page 77
- Verifying port forwarding and firewall configuration on page 77

Verifying the network's DNS configuration

Verify that the network's DNS is configured correctly so the IP address resolved by the network's DNS is the same as the Bridgit server's IP address.

To verify that the DNS is configured correctly

- Open a Command Prompt window on the Bridgit server, type ipconfig and then press ENTER.
 The server's network configuration information appears, including its IP address.
- 2. Type nslookup <ServerDomainName> and then press ENTER.

OR

Type **ping <ServerDomainName>** using the domain name for the Bridgit Server, and then press ENTER.

The IP address that the network's DNS resolves to appears.

3. Compare the IP addresses.

I NOTES

- If the IP addresses are the same, the network's DNS is configured correctly. See
 Troubleshooting Bridgit server connections on the previous page.
- If the IP addresses are different, the network's DNS isn't configured correctly.

OR

The Bridgit server is located on a LAN or virtual LAN but the domain name resolves to a router on a different LAN, and your network's router doesn't allow loop-back communication. See *Configuring the client's HOSTS file* on page 77 to add the domain name to the Windows HOSTS file.

Verifying Bridgit server configuration

Verify the domain name or IP address, and then configure the Bridgit server software.

To verify the domain name or IP address

 Double-click the SMART Bridgit Administration Tools shortcut on the server's desktop, and then click the Setup tab.

For more information, see Configuring the server software on page 25.

I NOTE

If the *SMART Bridgit Administration Tools* window doesn't appear, see *Manually updating the Windows registry* on the next page to enter the domain name or IP address manually in the Windows registry.

- Compare the domain name or IP address in the Registered Domain Name box to the domain name or IP address you compared in Verifying the network's DNS configuration on the previous page.
- If the domain names or IP addresses are the same but clients are still unable to connect to the server, see Verifying the network's DNS configuration on the previous page to verify the port forwarding and firewall configurations.

If the domain names or IP addresses are different, type your Bridgit server's domain name or IP address in the *Registered Domain Name* box, and then click **Apply**.

The Restart Services dialog box appears.

4. Click Close Administrative Tools.

The SMART Bridgit Administration Tools dialog box closes.

5. Select Start > Control Panel > System and Security > Administrative Tools > Services.

The Services dialog box appears.

Troubleshooting

6. Right-click SMART Bridgit Master Service, and then select Restart.

The SMART Bridgit Master Service restarts.

I NOTE

Other Bridgit clients disconnect from the Bridgit server when you complete this procedure.

7. Right-click SMART Bridgit Conference Service, and then select Restart.

The SMART Bridgit Conference Service starts.

I NOTES

If clients are still unable to connect to the server, see *Verifying the network's DNS* configuration on page 74 to verify the port forwarding and firewall configurations.

Manually updating the Windows registry

CAUTION

Use caution when you open the Windows registry editor. If you incorrectly modify the Windows registry, you can damage your computer's operating system. Back up your registry before performing the following procedure.

- To enter the domain name or IP address in the Windows registry
 - Start the Windows registry editor and browse to HKEY_LOCAL_ MACHINE\SOFTWARE\SMART Technologies Inc.\Bridgit DataconferencingSoftware\3.0.
 - Type your Bridgit server's domain name or IP address in the MasterServerDomainName boxes.
 - 3. Exit the Windows registry editor.
 - 4. Select Start > Control Panel > System and Security > Administrative Tools > Services.

The Services dialog box appears.

5. Right-click SMART Bridgit Master Service, and then select Restart.

The SMART Bridgit Master Service restarts.

I NOTE

Other clients disconnect from the Bridgit server when you complete this procedure.

6. Right-click SMART Bridgit Conference Service, and then select Restart.

The SMART Bridgit Conference Service restarts.

Troubleshooting

If clients are still unable to connect to the server, see *Verifying port forwarding and firewall configuration* below to verify the port forwarding and firewall configurations.

If the domain name resolves to your router's public IP address, and your router doesn't allow loopback communication, see *Configuring the client's HOSTS file* below to add the domain name to the Windows HOSTS file.

Configuring the client's HOSTS file

If the domain name resolves to your router's public IP address, and your router doesn't allow loop-back communication, follow this procedure to add the domain name to the Windows HOSTS file.

To add the domain name to the Windows HOSTS file

- 1. Go to **C:\Windows\system32\drivers\etc** on the Bridgit client computer, and then open the **HOSTS** file.
- 2. Add an entry so that the domain name you're using to connect to the Bridgit server resolves to the server's IP address.
 - This procedure is effective for Bridgit clients on this computer only. Other clients can use a direct IP address or the IP address resolved from the domain name by your network's DNS server.
- 3. See *Troubleshooting Bridgit server connections* on page 73 to configure the Bridgit server software.

Verifying port forwarding and firewall configuration

If clients are still unable to connect to the server, verify that port forwarding on the network routers is configured to give clients access to the server, and that firewalls protecting the Bridgit server allow clients to access the server. See *Verifying communication protocol* on page 72 and *Checking for firewalls* on page 72.

If the problems persist, the Bridgit client (not the server) could be the cause. See You're unable to connect to the Bridgit server because of issues with the Bridgit client computer (smarttech.com/kb/099567).

Troubleshooting administration tool connections

Symptom

When you install Bridgit software with IP binding, SMART Bridgit Administration Tools doesn't connect to the Bridgit server.

Solution

Use one of the following procedures to connect SMART Bridgit Administration Tools to the Bridgit server:

- Directing IP traffic to the Bridgit server below (recommended solution)
- Moving the server's IP address to the top of the IP settings list on the next page
- Stopping applications using the server's IP port on the next page

Directing IP traffic to the Bridgit server

To direct IP traffic to the IP address bound to the Bridgit server

- Open a Command Prompt window, type **hostname**, and then press ENTER.
 Note the computer name that appears.
- If you don't know the IP address that was entered when the server was installed, open SMART Bridgit Administration Tools, and then select the **Setup** tab. For more information, see *Verifying* Bridgit server configuration on page 75.

Note the server's IP address in the IPv4 Address drop-down list.

- 3. Go to C:\WINDOWS\system32\drivers\etc\, and then open the HOSTS file.
- 4. Type your IP address and host name on a new line at the bottom of the file.

EXAMPLE

192.168.0.8 bridgitserver.

5. Save the **HOSTS** file.

You can now open SMART Bridgit Administration Tools and configure the Bridgit server software. See *Configuring the server software* on page 25.

IMPORTANT

Because other applications can use the hostname, you should remove the line you added in step 4 after you configure the Bridgit server. You can remove the line or comment it out (by inserting a "#" character at the beginning of the line).

Moving the server's IP address to the top of the IP settings list

To move the server's IP address to the top of the IP settings list

 If you don't know the IP address that was entered when the server was installed, open SMART Bridgit Administration Tools, and then select the **Setup** tab.

Note the server's IP address in the IPv4 Address drop-down list.

- 2. Select Start > Control Panel> Network Connections.
- 3. Right-click the network device that Bridgit software is bound to, and then select **Properties**.
- 4. Click Internet Protocol (TCP/IP) in the This connection uses the following items list.
- 5. Click Properties.
- 6. Select the General tab, and then click Advanced.

The Advanced TCP/IP Settings dialog box appears.

- 7. Click the IP Settings tab.
- 8. Remove all the IP addresses above the Bridgit server's address.
- 9. Replace the addresses below the server's address.
- 10. Restart the server.

Stopping applications using the server's IP port



Perform this procedure when it won't affect other users.

To make Bridgit software's primary port available

- 1. Stop applications that use Bridgit software's primary port.
- 2. Open SMART Bridgit Administration Tools and configure Bridgit software. For more information, see *Verifying Bridgit server configuration* on page 75.

- 3. Close SMART Bridgit Administration Tools.
- Start the applications that you stopped in step 1.

Troubleshooting SMART Scheduler

After the you install and configure SMART Scheduler, it runs silently as a Windows service. It doesn't have a user interface when running, and it doesn't create a log file by default. Follow these steps to gather more information when troubleshooting.

To display a SMART Scheduler server log

1. Open a Command Prompt window, and then browse to the SMART Scheduler Server folder.

The default folder is C:\Program Files\SMART Technologies\SMART Scheduler Server.

2. Type **net stop "SMART Scheduler Server"**, and then press ENTER.

The SMART Scheduler server service stops.

3. Type SMARTSchedulerServer.exe, and then press ENTER.

The SMART Scheduler server service starts. A series of text lines appear.

- 4. Look for and record any error information in the log that can help you identify a problem.
- 5. Press CTRL+C.

The server stops and the command prompt returns.

6. Type **net start "SMART Scheduler Server"**, and then press ENTER.

The SMART Scheduler server service starts.

To create a server log file

1. Open a **Command Prompt** window, and then browse to the *SMART Scheduler Server* folder.

The default folder is C:\Program Files\SMART Technologies\SMART Scheduler Server.

Type net stop "SMART Scheduler Server", and then press ENTER.

The SMART Scheduler server Windows service stops.

3. Type **SMARTSchedulerServer.exe>>log.txt**, and then press ENTER.

The SMART Scheduler server service starts. The log information re-directs to the log.txt file.

4. Wait a few minutes, and then press CTRL+C.

The server stops and the command prompt returns.

Troubleshooting

5. Type **net start "SMART Scheduler Server"**, and then press ENTER.

The SMART Scheduler server service starts.

6. Locate the **log.txt** file, and then open it in a text editor.

Index

A	D
access requirements 7 activating manually 23 using the SMART activation server 22 administering the server software 43 audio settings 33, 67	disable remote control 30 text chat 31 webcams 30 DNS configuration verifying 74 domain names 11
	E
bandwidth and scalability 59	and the second transfer of 7
bandwidth requirements 60 examples 60	ending a meeting 47
Bridgit client downloading 49	F
Bridgit server software installing 18	firewall configuration verifying 77
Bridgit Server software upgrading 22	firewalls checking for 72
broadcasting messages 44	configuring 12
C	G
chat disabling 31 color quality 67	Global Server Network (GSN) 3 adding a remote server 37
configure	changing server information 38
firewalls 12	ending a meeting 39 removing a Bridgit server 38
HOSTS file 77	GSN 3
server software 25	connecting to a server 40
configuring firewalls 12	manually reconnecting to a remote
configuring proxy servers 13 connection 68	server 38
customizing the server's web page 49	removing a local server 37 setting up a local server 36
	Setting up a local server 50

H	pick fastest server option disabling 41
HOSTS file, configuring 77	port forwarding, verifying 77 proxy servers
To the second se	configuring 13
ink 68	R
install	
Bridgit server software 18	remote control
Bridgit software 5	disabling 30
SMART Scheduler Outlook add-in 54	removing server or user licenses 24
SMART Scheduler server software 51	reports
IP address	usage reports 45
move to the top of the IP Settings list 79	0
IP traffic	S
directing to the Bridgit Server 78	
1	screen capture technology 65
L	server setup options 29
	setting meeting options 30
licenses	setting passwords 25
Bridgit Server software 22	SMART Scheduler 3
removing server or user licenses 24	Outlook add-in 3
	prerequisites 17
M	removing Outlook add-in 58 using 51
measuring latency and packet loss 73	SMART Scheduler Outlook add-in
meeting performance	installing 54
participant 70	SMART Scheduler server
message of the day 32	installing 51
minimizing network latency 71	upgrading 54
This is the second second of the second of t	software components 2
P	software licensing 7
1	system requirements
	Bridgit client 14
password	server 6
API authorization 28	_
changing the administrator access 27	
changing the conference creation 27	
changing the server access 25	troubleshoot
setting 25	Administration Tool connections 78
performance	Bridgit Server connections 73
presenter 69	SMART Scheduler 80
	troubleshooting tool 64

U

updating the Windows registry 76 upgrading server software 22 usage reports viewing and saving 45



```
verify
Bridgit server configuration 75
communication protocol 72
network's DNS configuration 74
port forwarding and firewall configuration 77
view
active meetings 44
status information 45
usage reports 45
viewing status information 44
```



webcam requirements 16 webcams disabling 30 Windows registry updating 76

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