Aimetis Symphony™

Mobile Bridge Installation Guide

August 2014

Disclaimers and Legal Information

Document History

Table 1. Changes to this manual

Date	Description
August 15, 2014	**Modifications** • Added configuration note - "If the installation environment includes one or more firewall(s), additional firewall configuration is necessary. See "Ports" on page 7 for details." on page 6 • Clarified firewall requirements - "Ports" on page 7
June 17, 2013	**Release 2.1** • Apple Push Notifications - " Push Notifications" on page 7 **Other** • Added " Introduction" on page 1
April 3, 2013	**Release 2.0.2** • No update to this document. • See KB article: Guidelines for Verifying Compatibility between Aimetis Product Versions and Devices
November 19, 2012	Symphony Release 6.10.1 , Mobile Release 2.0 • Expanded "Note: " on page 1 • SSL Certificate is now bound automatically: " Using SSL" on page 8.
August 22, 2012	Corrections in "Task 2: Bind the certificate to the port" on page 7. All ports in examples listed as 8433.
August 2012	Symphony Release 6.10, Mobile Release 1.0

Installation and Configuration Instructions

Introduction

The Mobile Bridge Server acts as a bridge between Symphony Server and your Mobile devices. You can install it on the same machine as your Symphony Server or on a separate machine. Android and iOS Mobile Clients connect to a Mobile Bridge, which is configured to communicate with a particular Symphony Server. The Mobile Bridge is capable of managing multiple user connections to the Symphony Server, and can do so securely via SSL if required.

The Mobile Bridge authenticates the Mobile Client user, and serves video and alarm information to the mobile clients. Requests for a particular camera's live or historical video are routed through the Mobile Bridge to the Symphony Server. The Mobile Bridge transcodes the video into a format that can be efficiently transmitted to and viewed on the Mobile Client. Currently, JPEGs are streamed to iOS devices, but Android clients are capable of also receiving h.264 video directly. Other useful functionality such as controlling PTZ camera positions, alarm acknowledgement are also possible via the Mobile Bridge since it routes these commands to the Symphony Server.

Installation

- **Where**: You can install Mobile Bridge on the Symphony Server machine <u>OR</u> on any machine that does NOT contain Symphony .
- **License**: You must have Symphony 6.10 or later installed and a valid Symphony Mobile Bridge Server License.
- **Security**: The Mobile Client automatically detects and uses HTTPS if it is available on your system; otherwise, HTTP is used.
- **Reinstall**: If for any reason you want to reinstall this version, you must **uninstall** Mobile Bridge (using Windows Remove Programs) first. Only then can you reinstall this version.

Note:

1. **On Windows 2003 only**, **.NET 4** installer fails due to missing Windows Imaging Component (WIC). User must install WIC on server. Microsoft WIC instructions available here.

2. **For Windows Server 2008 installations**, you must have Windows Desktop Experience installed on the Symphony Mobile Bridge machine. The Mobile Bridge Server installation will automatically detect if this component is missing and install it; however, you must RESTART your machine. If you do not restart your machine, you will not be able to view live video from your Symphony mobile device.

Procedure

To install Mobile Bridge:

1. Download (from Aimetis) and run the installer. If you do not have .**NET Framework 4** on your machine, click **Accept** and it will be installed.
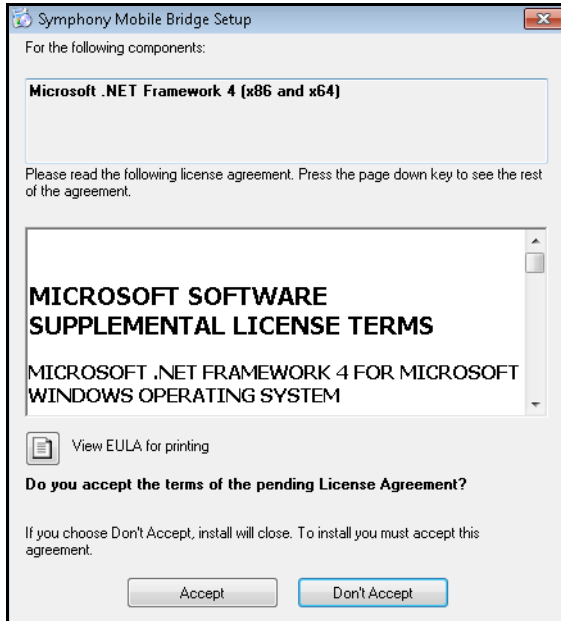

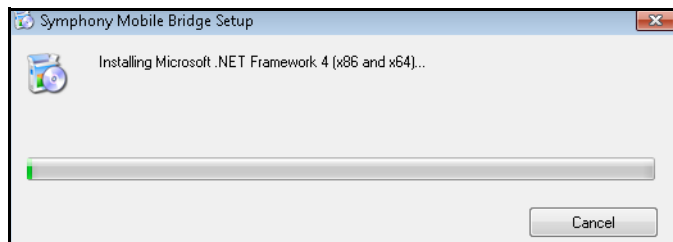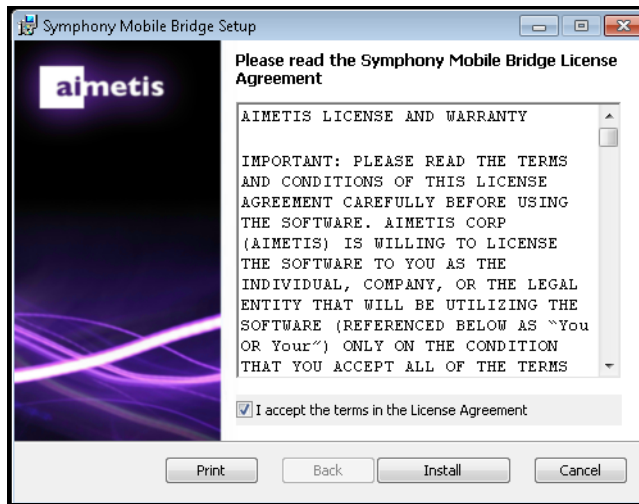**Figure 1. Microsoft .NET Framework installation**

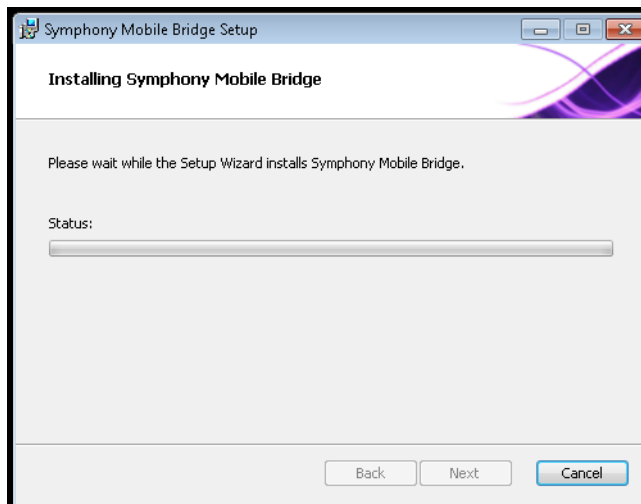
Figure 2. Installing .NET may take a few minutes

2. After reviewing the license and warranty information in the **License Agreement** screen, click **I accept the terms in the License Agreement**.

Figure 3. License Agreement screen

3. Click **Install**. The installation process begins.

Figure 4. Installation in progress

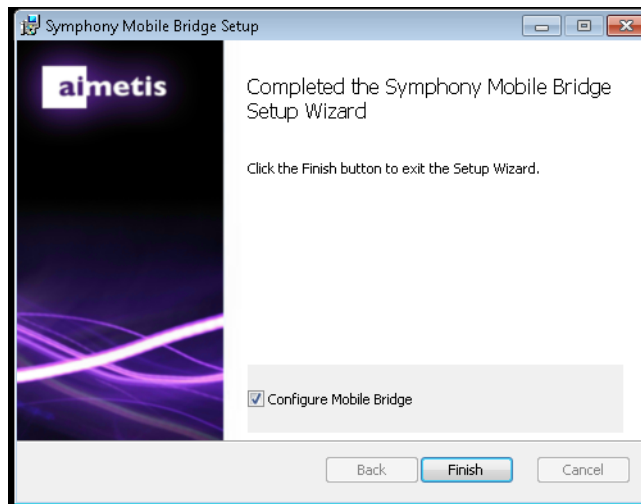4. To complete the installation, click **Finish**.

Figure 5. Installation complete

Configuration

Procedure

To configure Mobile Bridge for your mobile device:

1. Ensure that you have the following server information from your Symphony installation:

    - User (username)
    - Password
    - Address of the machine on which Symphony server is installed

    You can obtain this information by right-clicking on the server in the **Server List** in Symphony. Select **Edit** and the **Edit** Symphony **Server Connection** dialog box is displayed.
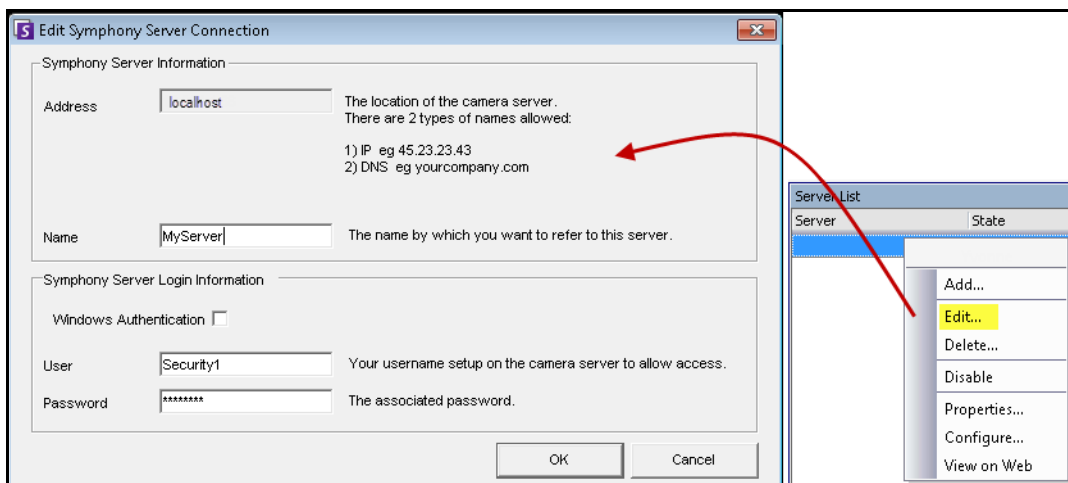

Figure 6. Server details obtained from Edit Symphony Server Connection dialog box in Symphony

2. The **Mobile Bridge Configuration** dialog box starts automatically.

- If not, from the **Start** menu in Windows, select the Symphony **Configure Mobile Bridge** application. The **Mobile Bridge Configuration** dialog box opens.
  Note: If UAC is enabled on your machine, you will be prompted to **Run as Administrator**.
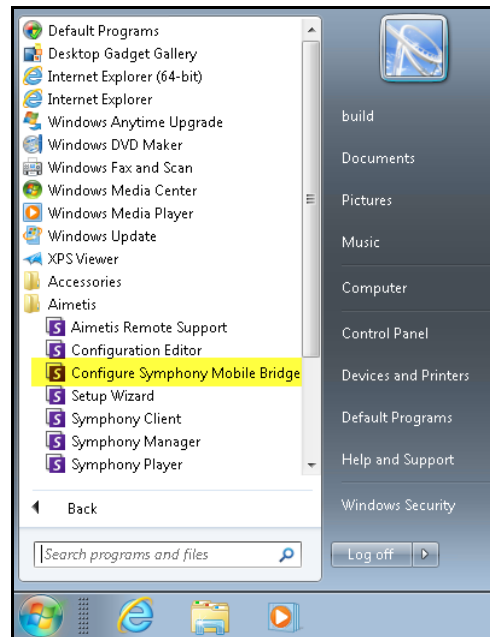
Figure 7. Windows Start menu featuring Configure Symphony Mobile Bridge application
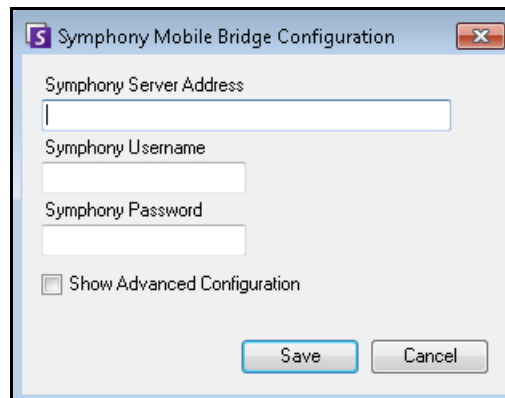
Figure 8. Mobile Bridge Configuration dialog box

1. Symphony **Server Address**: Enter the hostname or IP address of the server on which the Symphony server is installed. (The content of the **Address** field in **Edit** Symphony **Server Configuration** dialog box.)

2. Symphony **User**: Enter the user name of the user whose credentials are saved on the Symphony server.

- The authorization of the mobile device user is honored, but the Mobile Bridge user's authorization (restrictions) supersede the authorization of the mobile device user.

- • You could first create a "Mobile" username and password in Symphony with specific credentials (restrictions) and use that username/password as the designated mobile user for Mobile Bridge. Ideally, this user should have access to all cameras.

3. Symphony **Password**: Enter the password associated with the Symphony **User**.

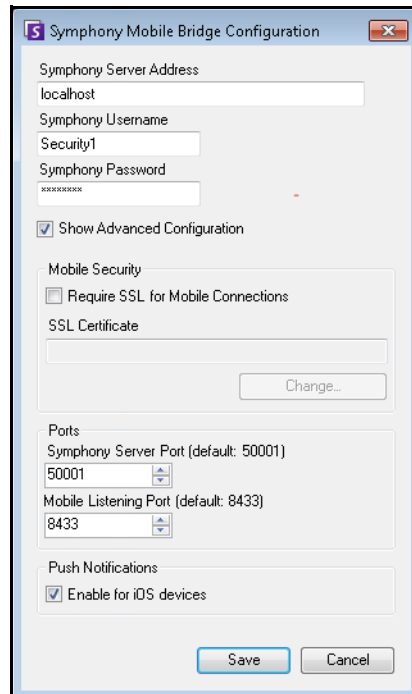4. Click **Save**. Download and install the Symphony Mobile app on your mobile device.

Note: If the installation environment includes one or more firewall(s), additional firewall configuration is necessary. See "Ports" on page 7 for details.

Advanced Configuration

In the **Mobile Bridge Configuration** dialog box, select the **Show Advanced Configuration** check box.

**Figure 9. Symphony Mobile Bridge Configuration dialog box
showing Advanced Configuration options**

Ports

The port numbers are set by default.

- **Mobile Listening Port**: The port number is the port on which the mobile client will connect to the server. By default, the port is set to **8433**. The mobile client must be configured to use the same port as specified on the server. Ensure that any existing firewall(s) have this port open.
- **Symphony Server Port:** This is the control and notification port of the WebService. By default, the port is set to **50001**. If Mobile Bridge is installed on a different machine than Symphony, you may need to open this port on any existing firewall(s).

Push Notifications

Any IOS App (iPhone, iPad) must use Apple Servers to use the notification service.

- If **Push Notifications** are enabled (**Enable for iOS devices** check box selected), mobile devices will receive notifications only if the firewall(s) allow the TCP outgoing ports (ports open) See also: Mobile Bridge 2.0.2 server and earlier crashes if specific ports closed because of firewall to review which ports must be open.
- If **Push Notifications** are disabled (**Enable for iOS devices** check box cleared) the mobile devices will NOT receive notifications and the server will NOT send information to Apple Servers. In this scenario ports on the firewall do not need to be open.

Using SSL
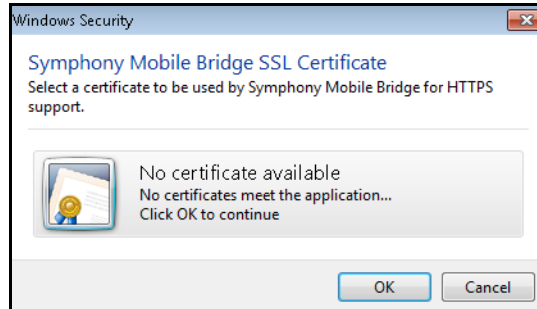
> **Note:** An SSL certificate must be imported into the Local Machine's Personal certificate store. For more information on certificate stores, see http://technet.microsoft.com/en-us/library/cc725751.aspx.

1. Select the **Require SSL for Mobile Connections** check box only if you have an SSL certificate on the local machine (the machine on which you are installing the Mobile Bridge).
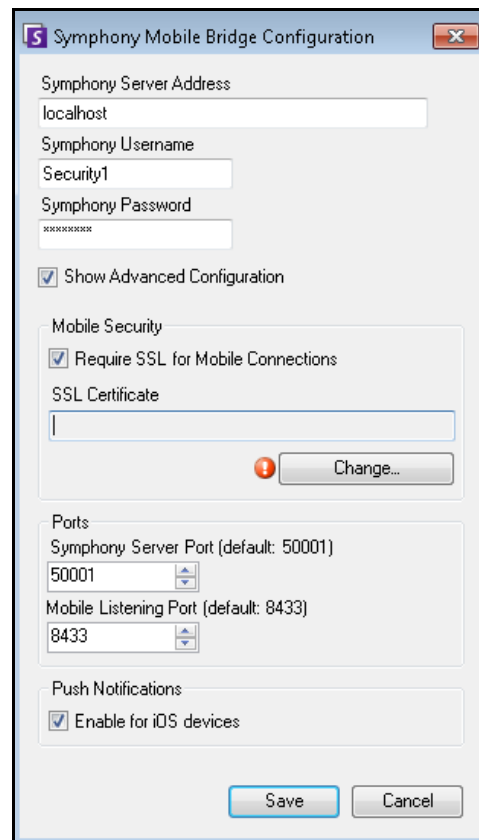
Figure 10. Symphony Mobile Bridge Configuration - Require SSL for Mobile Connections check box

2. Click the **Change** button. The **Mobile Bridge SSL Certificate** dialog box opens.
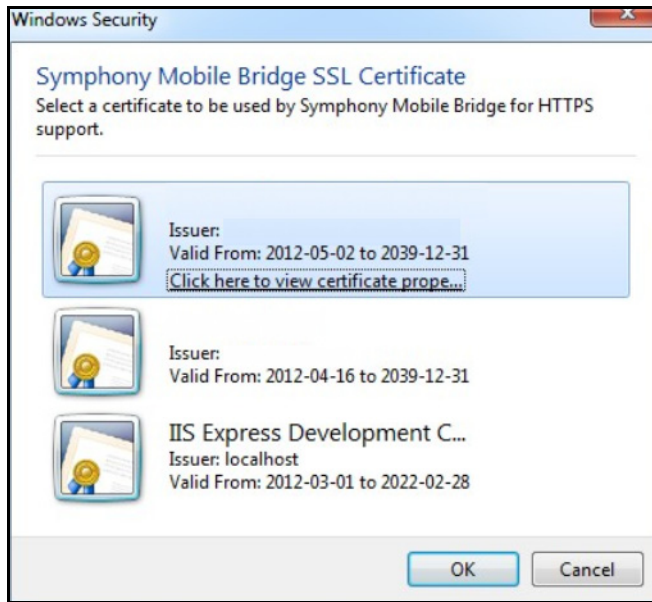

Figure 11. Symphony Mobile Bridge SSL Certificate dialog box

3. Select a certificate and click **OK**. The certificate number is displayed in the **SSL Certificate** field.

Troubleshooting

Reinstallation

If for any reason you want to reinstall this version, you must **uninstall** Mobile Bridge (using Windows Remove Programs) first. Only then can you reinstall this version.

Windows typically will NOT uninstall an application where files associated with the application appear to be in use.

*   If you are connected to a client running live video, you may be prompted to restart your computer during an uninstall.
*   If you have the Windows **Services** dialog box open and the **AI Mobile Service** (inadvertently) selected, Windows will not complete the uninstallation process until the dialog is closed. Only then will you be able to reinstall the version.

Figure 12. Windows error messages

Appendix

To create a self-signed certificate:

1. Download **makecert.exe** (Certificate Creation Tool) from Microsoft.

2. Use the following command to create and import a self-signed key:

    ```
    makecert -r -pe -n "CN=<my_local_host_machine_name>" -ss my -sr localMachine -sky exchange
    ```

    For certificates in Windows 8, 8.1, or Server 2012 see
    https://www.aimetis.com/Xnet/KB/KBArticleView.aspx?ID=10372