AIS Server Installation Guide

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Overview of AIS Server

AIS Server is a software tool for a wide range of AIS (Automatic Identification System) users.

AIS Server connects AIS network nodes (AIS base stations/transponders/receivers, AIS services/clients, databases, and/or networks) and allows AIS messages to easily and efficiently flow from one node to another. It connects at least two nodes and sends each AIS message based on the current configuration of the nodes. You configure AIS Server to pass along certain messages to certain nodes on a network. AIS Server can also store all received AIS messages in the databases or text files.

SiiTech has developed a modular and scalable AIS Server solution that meets the needs of all kinds of AIS users. For shore-based networks, AIS Server enables the flow of information from one or more isolated base stations to a Vessel Traffic Services (VTS) centre. With AIS Server all VTS centers may be joined in a regional or national AIS network. The distribution of AIS data (standard and proprietary messages) from one central location to shared locations makes AIS Server essential in many diverse environments.

AIS Server performs a number of functions when data is passed into it; unlike hardware routers found on the internet that simply pass information from one network to another. AIS Server can filter data as it is received, and does not necessarily forward all received information. Nodes are allowed to forward and/or accept messages on a case by case basis. Proprietary message handling capability allows SiiTech to offer complete customization of AIS Server to meet your specific needs.

The future of your network is dependent on the flow of information from all nodes (AIS transponders/receivers, users, databases, and/or networks). AIS Server provides a reliable flow of AIS data to your environment that is flexible and highly configurable.

AIS Server designed to perform the following functions:

- Receiving AIS messages from AIS transponders/receivers through serial ports
- Receiving AIS messages from AIS transponders/receivers using TCP/IP protocol (e.g. through the Internet)
- Sending AIS messages to AIS transponders through serial ports
- Sending AIS messages to AIS transponders using TCP/IP protocol (e.g. through the Internet)
- Sending AIS messages to other AIS servers or clients using TCP/IP protocol (e.g. through the Internet)
- Supporting multiple TCP server/client connections
- Supporting multiple serial port connections
- Filtering AIS messages by IP addresses of clients
- Filtering AIS messages by MMSI numbers
- Filtering AIS messages by geographical coordinates (latitude/longitude)
- Saving AIS messages into the database or text file without any time or size limits

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• Ability to work as a service (e.g. when a computer is rebooted AIS Server starts automatically)

System Requirements

- Supported Operating Systems: Windows 2000 Service Pack 4; Windows Server 2003 Service Pack 1; Windows XP Service Pack 2
- Computer with Intel or compatible Pentium III 600 MHz or faster processor (1 GHz or faster is recommended.)
- Minimum of 192 MB of RAM (512 MB or more is recommended.)
- 100 MB of available hard disk space

Installation Sequence

The following software installation sequence is a general guideline. Unless otherwise instructed by SiiTech technical support, please follow these steps to ensure successful installation of your AIS network.

1. Download and install <u>Windows Installer 3.0</u>.

Note: If you are running Windows Server 2003 Service Pack 1 or Windows XP Service Pack 2, you already have Windows Installer 3.0.

2. Download and install Microsoft SQL Server 2005 Express Edition.

Note: You may use any version of Microsoft SQL Server. Skip this step if SQL Server already installed on your computer or on your local network.

3. Download and install AIS Server.

Installing SQL Server 2005 Express Edition

You must have administrative rights on the computer to install SQL Server.

- 1. Go to the SQL Server 2005 Express Edition Downloads on the Microsoft Web site (http://msdn.microsoft.com/vstudio/express/sql/download/).
- 2. Download the SQL Server 2005 Express Edition installation files to your computer and start the SQL Server 2005 Express Edition Setup program.

Note: If you selected **Run** on the **File Download** page, the SQL Server 2005 Express Edition Setup program will start automatically after the file is downloaded. If you selected **Save** on the **File Download** page, after the download completes, click the saved file to start the SQL Server 2005 Express Edition Setup program.

- 3. In the End User License Agreement dialog box, review the terms, select the I accept the licensing terms and conditions check box, and then click Next.
- 4. In the **Installing Prerequisites** dialog box, click **Install**, and then click **Next**.
- 5. In the Welcome to the Microsoft SQL Server Installation Wizard dialog box, click Next.
- 6. In the **System Configuration Check** dialog box, click **Next**.
- 7. In the **Registration Information** dialog box, type your name, and then click **Next**.
- 8. In the **Feature Selection** dialog box, click **Next**.
- 9. In the Authentication Mode dialog box, select the Mixed Mode (Windows Authentication and SQL Server Authentication) option, type the SQL system administrator logon password, and then click Next.
- 10. In the **Configuration Options** dialog box, select the **Add user to the SQL Server Administrator role** check box, and then click **Next**.
- 11. In the Error and Usage Report Settings dialog box, click Next.
- 12. In the Ready to Install dialog box, click Install.
- 13. In the Setup Progress dialog box, click Next.
- 14. In the Completing Microsoft SQL Server 2005 Setup dialog box, click Finish.

Configuring SQL Server 2005 on Windows Vista

On Windows Vista you must grant administrative rights to the user who runs AIS Server:

- 1. Run the SQL Server 2005 Surface Area Configuration tool.
- 2. Click on Add New Administrator.
- 3. In the **SQL Server 2005 User Provisioning Tool for Vista** dialog click the >> button.
- 4. Click **OK**.
- 5. Close the SQL Server 2005 Surface Area Configuration tool.

Installing AIS Server

You must have administrative rights on the computer to install AIS Server.

1. Double click on the AisServerSetup.msi file. In the Welcome dialog box, click Next.



2. You will be presented with the AIS Server Software License Agreement. If you agree to the terms of this license agreement, select the **I Agree** radio button and click **Next**. If you do not agree to the terms of this license agreement click **Cancel** so that the installer does not continue. You will be unable to install this software application.

SiiTech AIS Server		
License Agreemen	t	
Please take a moment to read t Agree'', then ''Next''. Otherwise	he license agreement now. If you click "Cancel".	accept the terms below, click "I
SiiTech Inc. TERMS A The following are the te "Agreement") between SiiTech AIS Server, you agreed to be bound by applicable laws and reg conditions, do not use S SiiTech AIS Server is s for any use whatsoever	ND CONDITIONS OF USE rms and conditions of a lega you ("User") and SiiTech In acknowledge that you hav these terms and conditions ulations. If you do not agree SiiTech AIS Server. upplied 'as is' without warra	al agreement (the c. ("SiiTech"). By using e read, understood and and to comply with all e to these terms and nty of fitness of purpose
● I Do Not Agree	C I <u>A</u> gree	
	Cancel	< Back

3. The installer will install the AIS Server files into a default location. If you wish to install AIS Server to the default location, click **Next**. If you wish to have AIS Server installed to a different folder or disk, click **Browse** and then choose the target location. When you have selected the new target location click **Next** at the **Select Installation Folder** dialog box.

🙀 SiiTech AIS Server		X
Select Installation Folder		3 20
The installer will install SiiTech AIS Server to the f	following folder. a different folder, enter it below or click "Browse".	
<u>F</u> older:		
C:\Program Files\SiiTech\AIS Server\	Browse	
	Disk Cost	
C	ancel < <u>B</u> ack <u>Next</u> >	

4. Click **Next** at the **Confirm Installation** dialog box to begin copying the necessary AIS Server files to your computer. The installer will report its process as it installs the files.



5. You will be notified when installation has completed. Click **Close** at the **Installation Complete** dialog box.

🛃 SiiTech AIS Server			
Installation Complete			
SiiTech AIS Server has been successfu	ally installed.		
Click "Close" to exit.			
Please use Windows Update to check	for any critical up	dates to the .NET Fi	ramework.
-			
	Cancel	< <u>B</u> ack	Close
	- 50		and the second second

6. To launch AIS Server, select **Start** > **All Programs** > **SiiTech** > **AIS Server** from the Windows Start menu, or double-click on the **AIS Server** icon on the desktop.

