

ALTAI Wireless Management System (AWMS)

Installation Guide for Windows Platform

AWMS Version 2.10.3

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1



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Table of Contents

1	INTRODUCTION			
A	Abbreviations and Acronyms4			
2	AWMS INTRODUCTION			
3	PRE-INSTALLATION			
3.1	SYSTEM CONFIGURATION REQUIREMENTS			
3.2	THIRD-PARTY APPLICATION REQUIREMENTS			
4	AWMS NEW INSTALLATION7			
4.1	UN-INSTALL PREVIOUS MYSQL SERVER			
4.2	INSTALL MICROSOFT .NET FRAMEWORK 2.0			
4.3	INSTALL MySQL VERSOIN 5.0.18			
4.4	INSTALL CENTRAL CONTROL SERVER AND PROXY SERVER IN THE SAME COMPUTER21			
4.5	INSTALL CENTRAL CONTROL SERVER AND PROXY SERVER IN SPERATE COMPUTERS40			
4.5.	1CENTRAL CONTROL SERVER (CCS) INSTALLATION			
4.5.	2PROXY SERVER (PX) INSTALLATION			
4.6	SET COMPATIBILITY MODE OF CENTRAL CONTROL SERVER			
5	AWMS UPGRADE			
6	LAUNCH AWMS SERVERS AND CLIENT			
6.1	IMPORTING LICENCE FILE			
6.2	START AWMS CCS AND PROXY			
6.3	START AWMS CLIENT			
7	ADVANCED CONFIGURATION FOR AWMS INSTALLATION			
7.1	REMOTE MANAGEMENT THORUHG INTERNAL NETWORK			
7.1.	1BIND IP ADDRESSES FOR PROXY SERVER60			
7.1.	2BIND AN IP ADDRESS FOR AWMS CCS			
7.1.	3BIND AWMS CCC TO A PARTICULAR AWMS CCS			
7.2	REMOTE MANAGEMENT THROUGH INTERNET NETWORK			
7.2.	1BIND IP ADDRESSES AND PORTS FOR PROXY SERVER			
7.2.	2BIND AN IP ADDRESS AND PORTS FOR AWMS CCS			
8	PORT MANAGEMENT FOR AWMS INSTALLATION			
8.1	PORT NUMBER MODIFICATION FOR MYSQL			
8.2	PORT NUMBER MODIFICATION FOR FIRMWARE MANAGEMENT			



1 INTRODUCTION

This installation guide takes you go though the steps of installing AWMS Central Control Server, Proxy Server, and Central Control Client GUI.

Abbreviations and Acronyms

ALTAI	Altai Technologies Limited	
AWMS	Altai Wireless Management System	
CCC	Central Control Desktop Client	
CCS	Central Control Server	
GUI	Graphical User Interface	
NE	Network Element – the network elements that AWMS handles currently are all APs. Therefore the terms "AP" and "NE" are used interchangeably.	
PX	Proxy	



2 AWMS INTRODUCTION

AWMS is composed of three subsystems, Central Control Server, Proxy and Central Control Desktop Client. The three subsystems can be installed in the same host or they can be installed separately in different hosts depending on the deployment scenarios.



Figure 1 AWMS Architecture

This installation guide demonstrates the installation procedures of the 3 subsystems into the same host.



3 PRE-INSTALLATION

3.1 SYSTEM CONFIGURATION REQUIREMENTS

The table below shows the maximum number of the AWMS components to support 500 NEs.

System capacity	
Number of NE supported:	Max.: 500
Number of Proxy per AWMS Server:	Max.: 4
Number of NE per Proxy:	Max.: 200
Number of concurrent AWMS user supported:	Max.: 4

Table 1 System Capacity

All AWMS components can be installed in a single server for a small network management system with not more than 100 NEs. For a large network deployment, each component should be installed in separate servers.

The table below lists the basic hardware / software requirements of each AWMS component for a network with not more than 100 NEs. Please make sure the requirements are met before continuing the installation.

For the other configuration, please refer to "TPS06-034_rev1.4_AWMS_Configuration_Spec".

AWMS Components	Hardware/Software Requirements
Central Control Server (including MySQL Server)	2u server, Intel Dual Core Xeon 5000 Series Processor, 2.33GHz, 2 GB RAM, 80 GB disk space, 100M Ethernet NIC card
	Windows server 2003 Std Edition Microsoft .Net Framework 2.0
	MySQL 5.0.18
	JDK 1.5.0_20
Proxy Server	(integrated in CCS)
Central Control Client (CCC)	(integrated in CCS)

Table 2 AWMS Requirements

3.2 THIRD-PARTY APPLICATION REQUIREMENTS

AWMS requires the following third-party applications to be installed to operate properly. These applications are not included in the AWMS license. Some of them need to be acquired and installed separately from the AWMS package.

- MySQL 5.0.18
- JDK 1.5.0_20
- Microsoft .Net Framework 2.0



4 AWMS NEW INSTALLATION

This part is applicable for AWMS new installation. If previous AWMS (e.g. version 2.10.0) is installed in your server, you only need to upgrade it. For the upgrading steps, please go to Section 5.

4.1 UN-INSTALL PREVIOUS MYSQL SERVER

If previous MySQL Server (e.g. version 4.0) is installed in your server, you **MUST un-install** it before installing MySQL version 5.0.18.

The following steps demonstrate how to remove MySQL version 4.0.

Step 1: Run a command prompt in Windows and enter "mysqld-nt --remove" under the directory "bin" of the MySQL Server. The following is an example of MySQL Server version 4.0.

> C:\Program Files\MySQL\MySQL Server 4.0\bin>net stop mysql The MySQL service is stopping.. The MySQL service was stopped successfully. C:\Program Files\MySQL\MySQL Server 4.0\bin>mysqld-nt --remove Service successfully removed.

If MySQL was not already installed as a service you will see

C:\Program Files\MySQL\MySQL Server 4.0\bin>mysqld-nt --remove The service doesn't exist!

- **Step 2**: Go to Control Panel -> Add or Remove Programs to uninstall the MySQL Server. Figure 2 shows the icon in Windows XP.
- **Step 3**: Restart your computer.



Figure 2 Add or Remove Programs in Windows XP

4.2 INSTALL MICROSOFT .NET FRAMEWORK 2.0

Please follow the below steps to install Microsoft .Net Framework 2.0.

Remark:

You can find the setup file in awms_installer_v2.10.3.3\files\conf\installers\dotnetfxsetup.exe.

Step 1: Double-click the file dotnetfx2setup.exe and click "**Next**" to start installation.

😽 Microsoft .NET Framework 2.0 Setup	
Welcome to Microsoft .NET Framework 2.0 Setup	
This wizard will guide you through the installation process.	
	Next > Cancel

Figure 3 Microsoft .Net Framework 2.0 Setup Window

Step 2: The End-User License Agreement window shows up. Please read the license agreement carefully and if you accept the mentioned terms, choose "I Accept the terms of the License Agreement" and click "Install >".

🖟 Microsoft .NET Framework 2.0 Setup		
End-User License Agreement		
End-User License Agreement		
MICROSOFT SOFTWARE SUPPLEMENTAL LICENSE TERMS MICROSOFT .NET FRAMEWORK 2.0		
Microsoft Corporation (or based on where you live, one of its affiliates) licenses this supplement to you. If you are licensed to use Microsoft Windows operating system software (the "software"), you may use this supplement. You may not use it if you do not have a license for the software. You may use a copy of this supplement with each validly licensed copy of the software.		
Print		
By clicking "I accept the terms of the License Agreement" and proceeding to use the product, I indicate that I have read, understood, and agreed to the terms of the End-User License Agreement.		
✓ I accept the terms of the License Agreement		
< Back Install > Cancel		

Figure 4 Microsoft .Net Framework 2.0 License Agreement Window



The Microsoft .Net Framework 2.0 is installing.

🙀 Microsoft .NET Framework 2.0 Setup	
Installing components	
The items you selected are being installed.	
Installation Progress:	
Validating install Property: DD_IE501FOUND_X86.3643236F_FC70_11D3_A536_0090278A1BB8, SearchForIE501_ENU_X86.3643236F_FC70_11D3_A536_0090278A1BB8	, Signature:
E	Cancel

Figure 5 Microsoft .Net Framework 2.0 Installation Progress

Step 3: Click "**Finish**" to complete the installation.

RMicrosoft .NET Framework 2.0 Setup	
Setup Complete	
Microsoft .NET Framework 2.0 has been successfully installed.	
It is highly recommended that you download and install the latest service packs and security updates for this product.	
For more information, visit the following Web site:	
Product Support Center	
	1000
Fit	nish

Figure 6 Completion of Microsoft .Net Framework 2.0 Installation



4.3 INSTALL MYSQL VERSOIN 5.0.18

Please follow the below steps to install MySQL Server version 5.0.18.

Remark:

You can find the setup file in awms_installer_v2.10.3.3\files\conf\installers\mysql-5.0.18-win32.exe.

Step 1: Double-click the file mysql-5.0.18-win32.exe. The MySQL Setup Wizard prompts up and click "Next >".



Figure 7 MySQL Setup Wizard



Step 2: Choose "Typical" for setup type and click "**Next** >".

🖟 MySQL Server 5.0 - Setup Wizard 🛛 🛛 🔀		
Setup Type Choose the setup type that best suits your needs.		
Please select a	setup type.	
⊙ <u>Typical</u> © © <u>C</u> omplete	Common program features will be installed. Recommended for general use. All program features will be installed. (Requires the most disk space.)	
Custom	Choose which program features you want installed and where they will be installed. Recommended for advanced users.	
	< <u>B</u> ack <u>N</u> ext > Cancel	

Figure 8 MySQL Setup Type

Step 3: Click "**Install**", MySQL Server is being installed.

🖟 MySQL Server 5.0 - Setup Wizard 🛛 🛛 🔀		
Ready to Install the Program The wizard is ready to begin installation.		
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard. Current Settings:		
Setup Type: Typical		
Destination Folder: C:\Program Files\MySQL\MySQL Server 5.0\		
< <u>B</u> ack [Install Cancel	כ	

Figure 9 MySQL Installation



HysQL	Server 5.0 - Setup Wizard	
Installing The prog	MySQL Server 5.0 gram features you selected are being installed.	\odot
i de la companya de l	Please wait while the Setup Wizard installs MySQL Server 5.0. This maseveral minutes.	ay take
	< <u>B</u> ack Next >	Cancel

Figure 10 MySQL Setup Wizard with installation progress

Step 4: Click "Next >".

MySQL Enterprise		
MySQL. Enterprise	A MySQL Enterprise subscription is the most comprehensive offering of MySQL database software, services and support to ensure your business achieves the highest levels of reliability, security and uptime. An Enterprise Subscription includes:	
 The MySQL Enterprise Server - The most reliable, secure, and up-to-date version of the worlds most popular open source database. 		
2. The MySQL Monitoring database assistant.	and Advisory Service - An automated virtual	
3. MySQL Production Support - Technical and consultative support when you need it, along with service packs, hot-fixes and more.		
Formore information click [More] or visit www.mysql.com/enterprise		
More	< Back Next > Cancel	

Figure 11 Introduction of MySQL Enterprise



Step 5: Click "Next >".

MySQL Enterprise	
	L Monitoring and Advisory Service
Automated monitoring	AAA Nobel Service Service Service Service
and notification of all your MySQL servers.	
 Over 70 database best practice rules ensure uptime and fast performance. 	
 Expert advice on how to fix problems and improve 	
MySQL performance.	[More] or visit www.mysql.com/enterprise
More	<back next=""> Cancel</back>

Figure 12 Introduction of MySQL Enterprise

Step 6: The installation completes. By default "Configure the MySQL Server now" is checked. Simply click "Finish" for database configuration.



Figure 13 Configuration of MySQL Server



Step 7: MySQL Server Instance Configuration Wizard prompts up. Click "Next >".

MySQL Server Instance Configuration Wizard					
	Welcome to the MySQL Server Instance Configuration Wizard 1.0.8 The Configuration Wizard will allow you to configure the MySQL Server 5.0 server instance. To Continue, click Next.				
	Next > Cancel				

Figure 14 MySQL Server Instance Configuration Wizard

Step 8: Choose "**Detailed Configuration**" for the configuration type and click "**Next** >".



Figure 15 Options of MySQL Server Configuration Type



Step 9:	Choose "Server Machine" for server type and click "Next >".				
	MySQL Server Instance Configuration Wizard				
	MySQL Server Instance Configuration				
	Configure the MySQL Server 5.0 server instance.				
	Please select a server type. This will influence memory, disk and CPU usage.				
	O Developer Machine				
	This is a development machine, and many other applications will be run on it. MySQL Server should only use a minimal amount of memory.				
	⊙ Server Machine				
	Several server applications will be running on this machine. Choose this option for web/application servers. MySQL will have medium memory usage.				
	O Dedicated MySQL Server Machine				
	This machine is dedicated to run the MySQL Database Server. No other servers, such as a web or mail server, will be run. MySQL will utilize up to all available memory.				
	<pre></pre>				

Figure 16 Options of MySQL Server Type for Configuration

Step 10: Select "Multifunctional Database" for database usage and click "Next >".



Figure 17 Options of MySQL Server Database Usage



Step 11: Choose the drive and directory to put the InnoDB datafile. You can use the default path. Click "Next >".

MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration Configure the MySQL Server 5.0 server instance.
Please select the drive for the InnoDB datafile, if you do not want to use the default settings. InnoDB Tablespace Settings Please choose the drive and directory where the InnoDB tablespace should be placed. C: Installation Path IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
< Back Next > Cancel

Figure 18 InnoDB Datafile Path for MySQL Server

Step 12: Set the number of concurrent connections to the MySQL Server. Choose "Manual Setting" and it is recommended to change the number to 100. Click "Next >".



Figure 19 Concurrent Connections to MySQL Server



Step 13:Select "Enable TCP/IP Networking" and set the network port number which is
3306 by default. Click "Next >".

Remark:

The port number 3306 is used for inter-connection between MySQL Server and CCS. If the administrator wants to use port number other than 3306, please refer to Section 8.1 for more details.

MySQL Server Instance Configuration Wizard	
MySQL Server Instance Configuration Configure the MySQL Server 5.0 server instance.	
Please set the networking options.	
Please set the server SQL mode. Finable Strict Mode This option forces the server to behave more like a traditional database server. It is recommended to enable this option.	
< Back Next > C	ancel

Figure 20 MySQL Server Networking Option

Step 14: For character set, select "Best Support For Multilingualism" and click "Next >".



Figure 21 Character Sets for MySQL Server



Step 15: Set the MySQL Server operation options in Windows. Select "Install As Windows Service" and "Launch the MySQL Server automatically". Click "Next >".

MySQL Server Instance Configuration Wizard	
MySQL Server Instance Configuration Configure the MySQL Server 5.0 server instance.	
Please set the Windows options.	
Launch the MySQL Server automatically Include Bin Directory in Windows PATH Check this option to include the directory containing the server / client executables in the Windows PATH variable so they can be called from the command line.	
<pre></pre>	incel

Figure 22 MySQL Server Operation Options in Windows

 Step 16:
 If you want to set security for MySQL Server login, select "Modify Security Settings", fill in a new root password and click "Next >".

Otherwise, you can simply click "Next >" to execute the above configurations.

MySQL Server Instance Configuration	on Wizard			
MySQL Server Instance Configuration Configure the MySQL Server 5.0 server instance.				
Please set the security options.				
Modify Security Settings				
New root password:	*****	Enter the root password.		
Confirm:	****	Retype the password.		
Enable root access from remote machines				
Create An Anonymous Account				
This option will create an anonymous account on this server. Please note that this can lead to an insecure system.				
	< Back	Next > Cancel		

Figure 23 MySQL Server Login with Password



MySQL Server Instance Configuration Wizard			
MySQL Server Instance Configuration Configure the MySQL Server 5.0 server instance.	\bigcirc		
Please set the security options.			
Modify Security Settings			
New root password;	Enter the root password.		
Confirm:	Retype the password.		
Enat	ble root access from remote machines		
Create An Anonymous Account This option will create an anonymou note that this can lead to an insecu	us account on this server. Please ire system.		
< Back	Next > Cancel		

Figure 24 MySQL Server Login without Password

Remark:

The use of security option depends on your actual situation. It should be reminded that if you do not set a password for the MySQL Server, it will not have security protection from illegal access of anonymous parties.

Step 17: Click "**Execute**" to start the MySQL Server configurations.

MySQL Server Instance Configuration Wizard	×
MySQL Server Instance Configuration Configure the MySQL Server 5.0 server instance.	0
Ready to execute	
Prepare configuration	
 Write configuration file 	
 Start service 	
 Apply security settings 	
Please press [Execute] to start the configuration.	
A Back Execute	Cancel

Figure 25 MySQL Server Configurations Execution



Step 18: Click "**Finish**" to complete the MySQL Server configuration.

MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration Configure the MySQL Server 5.0 server instance.
Processing configuration
Ø Prepare configuration
🧭 Write configuration file (C:\Program Files\MySQL\MySQL Server 5.0\my.ini)
Start service
Apply security settings
Configuration file created. Windows service MySQL installed. Service started successfully. Security settings applied. Press [Finish] to close the Wizard.
< Back Finish Cancel

Figure 26 Completion of MySQL Server Configuration



4.4 INSTALL CENTRAL CONTROL SERVER AND PROXY SERVER IN THE SAME COMPUTER

This section demonstrates how to install both AWMS CCS and proxy in the same computer. Before installing the AWMS subsystems, MySQL version 5.0.18 should exist in the computer.

If you want to install the two components in separate computers, please go to Section 4.5.

Remark:

If you have the previous AWMS installed in your computer, you only need to upgrade it. You can refer to Section 5 for the upgrading procedures.

Step 1: Double-click the file AWMS_Setup.exe. The AWMS Setup and Upgrade Wizard prompts up.

AWMS Setup and Upgrade Tool				
Welcome to AWMS Setup and Upgrade Wizard Altai Technologies Limited				
Welcome to AWMS Setup and Upgrade Wizard				
The Setup and Upgrade Wizard will allow you to setup , upgrade and configure the AWMS.Please set the options.To Continue,click Next.				
AWMS Server Setup or Upgrade				
AWMS Client Setup or Upgrade				
Language: English				
Mobile Internet for Everyone				

Figure 27 AWMS Setup and Upgrade Wizard

Remark:

You can also install AWMS Server and AWMS Client separately by unchecking the AWMS Client Setup or Upgrade.



Step 2: Choose "JDK", "Server" and "Client". Click "Next >".

A	AWMS Setup and Upgrade Tool					
	Welcome to AWMS Setup and Upgrade Wizard Altai Technologies Limited					
	Software Detec	tion				
	File Name	Status	File Size	Current Ver	Required V	Action
	Components					
	MySQL	Installed	35.96MB	5.0.18	5.0.18	NA
	🔽 JDK	Not Installed	52.95MB	NA	1.5	Install
	Servers					
	Server	Not Installed	85.72MB	NA	2.10.3.3	Install
	Clients					
	🔽 Client	Not Installed	62.75MB	NA	2.10.3.3	Install
J Disses should the software entires and state (Newt)						
r rease shoek the settimate options and ellek [rreak].						
N	Mobile Internet for Everyone < Back					

Figure 28 AWMS Setup and Upgrade Wizard

AWMS Setup	o and Upgrade	e Tool		X
Welcome to AWMS Setup and Upgrade Wizard Altai Technologies Limited				
Ready to exe	cute			
	JDK Server Client	Install Install Install		
Please press [Execute] to start.				
Mobile Internet	: for Everyone		< <u>B</u> ack Execute	<u>C</u> ancel

Figure 29 AWMS Setup and Upgrade Wizard



Step 3: Click "<u>**R</u>un**" to start installation.</u>

Open File - Security Warning 🛛 🔀				
Do you want to run this file?				
	Name:	jdk-1 5 0 20-windows-i586-p-iftw.exe		
	Publisher:	Sun Microsystems, Inc.		
	Type:	Application		
	From:	C:\Documents and Settings\admin\My Documents\		
		Run Cancel		
Always ask before opening this file				
While files from the Internet can be useful, this file type can potentially harm your computer. Only run software from publishers you trust. What's the risk?				

Figure 30 JDK Installer Security Warning

Step 4: The License Agreement window prompts up. Please read the license agreement carefully and if you accept the mentioned terms, select "I accept the terms in the license agreement". Click "Next >" to the Custom Setup window.

t	J2SE Development Kit 5.0 Update 20 - License	×		
	License Agreement Please read the following license agreement carefully.	un.		
	Sun Microsystems, Inc. Binary Code License Agreement	~		
	for the JAVA 2 PLATFORM STANDARD EDITION DEVELOPMENT KIT 5.0			
	SUN MICROSYSTEMS, INC. ("SUN") IS WILLING TO LICENSE THE SOFTWARE IDENTIFIED BELOW TO YOU ONLY UPON THE CONDITION THAT YOU ACCEPT ALL OF THE TERMS CONTAINED IN THIS BINARY CODE LICENSE AGREEMENT AND SUPPLEMENTAL LICENSE TERMS (COLLECTIVELY "AGREEMENT"). PLEASE READ THE AGREEMENT CAREFULLY. BY USING THE SOFTWARE YOU ACKNOWLEDGE THAT	>		
	⊙ I accept the terms in the license agreement			
	I do not accept the terms in the license agreement			
Ir	nstallShield Next > Cancel			

Figure 31 JDK License Window



Step 5: Select all listed features: 1) "Development Tools", 2) "Demos", 3) "Source Code" and 4) "Public Java Runtime Environment" for installation and click "Next >" to start installation.

🖶 J2SE Development Kit 5.0 Update 20 - Custon	1 Setup 🛛 🔀
Custom Setup Select the program features you want installed.	Sun.
Select optional features to install from the list below. You ca installation by using the Add/Remove Programs utility in the (n change your choice of features after Control Panel
Development Tools Demos Source Code Public JRE	Feature Description J2SE Development Kit 5.0, including private JRE 5.0. This will require 264 MB on your hard drive.
Install to: C:\Program Files\Java\jdk1.5.0_20\ InstallShield	Change
< Back	Next > Cancel

Figure 32 JDK Custom Setup Window

The installation is in progress.

😼 J2SE De	evelopment Kit 5.0Update 20 - Progress	
Installing The prog	gram features you selected are being installed.	<u>Sun</u>
1 6	Please wait while the Install Wizard installs J2SE Development Kit 5.0 Update 20. This may take several minutes.	
	Status:	
	Removing files	
InstallShield –		
	< Back Next >	

Figure 33 JDK Installation Progress Window



Step 6: Select all listed features: 1) "J2SE Runtime Environment", 2) "Support for Additional Languages" and 3) "Additional Font and Media Support" for installation and click "Next >" to move on to the Browser Registration window.

🛃 J2SE Runtime Environment 5.0 Update 20 - (Custom Setup 🛛 🔀
Custom Setup Select the program features you want installed.	SUN.
The J2SE Runtime Environment with support for European k optional features to install from the list below.	anguages will be installed. Select
	The J2SE Runtime Environment with European languages. This requires 131 MB on your hard drive.
Install to:	
C:\Program Files\Java\jre1.5.0_20\ InstallShield	Change
	Next > Cancel

Figure 34 JRE Custom Setup Window

Step 7: In the Browser Registration window, click "**Install** >" to start installation.

🛃 J2SE Runtime Environment 5.0 Update 20 - Browser Registration 🛛 🛛 🔀
Browser Registration Select the browsers you want to register with Java(TM) Plug-In.
Microsoft Internet Explorer
Mozilla and Netscape
You may change the settings later in the Java(TM) Control Panel.
Install5hield - Cancel Cancel

Figure 35 JDK Browser Registration Window



🙀 J2SE Runtime Environment 5.0 Update 20 - Progress		
Installing The prog	ram features you selected are being installed.	
1	Please wait while the Install Wizard installs J2SE Runtime Environment 5.0 Update 20. This may take several minutes. Status:	
InstallShield –	< Back Next >	

Figure 36 JRE Custom Setup Window

Step 8: Click "**Finish**" to complete installation.



Figure 37 Completion of JDK Installation



Step 9: The AWMS Servers Setup Wizard prompts up. Click "**Next** >".

🔀 AWMS Servers Setup	
	Welcome to AWMS Servers Setup Wizard
	The Setup Wizard will install AWMS Servers on your computer. Click Next to continue or Cancel to exit the Setup Wizard.
	< Back Next > Cancel

Figure 38 AWMS Servers Setup Wizard

Step 10: Type the corresponding Java Development Kit Installation path. By default, it is C:\Program Files\Javaljdk1.5.0_20\. Click "Next >".

🔂 AWMS Servers Setup	
Java SDK Installation Path Please enter Java SDK Installation Path	
Java Development Kit Installation Path:	
c.(Program nespayayayayaya	
Mehile Tetevezh far Evervope	
<pre>Mobile Internet for Everyone</pre>	Cancel

Figure 39 Define Java SDK Installation Path



Step 11: Choose the Setup Type and click "**Next** >". In this installation, "**Custom**" type is chosen for demonstration.

HAWMS Servers Se	tup 🛛 🔀
Choose Setup Type Choose the setup t	ype that best suits your needs
1	<u>Typical</u> Installs the most common program features. Recommended for most users. Custom Allows users to choose which program features will be installed and where they will be installed. Recommended for advanced users.
	All program features will be installed. (Requires most disk space)
Mobile Internet for Every	one

Figure 40 AWMS Servers Setup Type

Step 12: Both Proxy and CCS are selected in this stage. Click "**Next** >".

谩 AWMS Servers Setup	N 100 100 100 100 100 100 100 100 100 10		
Custom Setup Select the way you want features to be installed			
Click on the icons in the tree below to change the way features will be installed.			
CCS Proxy	Central Control Server		
	This feature requires 51MB on your hard drive.		
Location: C:\Program Files\Altai Technologies\AWMS\ Browse			
Mobile Internet for Everyone Reset Disk Usage < Back Next > Cancel			

Figure 41 Install both Proxy and CCS



Step 13:

Click "Install" to start the installation.

B AWMS Servers Setup	×
Ready to Install The Setup Wizard is ready to begin the Custom installation	
Click Install to begin the installation. If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.	
Mobile Internet for Everyone	cel

Figure 42 Ready to Install

记 AWMS Servers Setup	
Installing AWMS Servers	~
Please wait while the Setup Wizard installs AWMS Servers. This may take several minutes.	
Status:	
(**************************************	
Mobile Internet for Everyone	
< Back Next > Canc	el

Figure 43 Installing AWMS Servers



Step 14: Click "Finish".

🛃 AWMS Servers Setup	
	Completing the AWMS Servers Setup Wizard
	Click the Finish button to exit the Setup Wizard.
	< Back Finish Cancel

Figure 44 Completion of AWMS Servers Installation





Figure 45 AWMS Client Setup Wizard



Step 16: Fill in the corresponding AWMS server IP and port and click "**Next** >".

🙀 AWMS Client Setup	
AWMS Central Control Server Information Connection information of AWMS Central Control Server	
Server Hostname/IP:	
localhost	
Server Port:	
Mobile Internet for Everyone	Cancel

Figure 46 Fill in the corresponding both IP address/Hostname and Port Number of the AWMS Server

The following explains the parameters of the settings,

- 1. Server Hostname/IP IP address or hostname of the machine that you install AWMS CCS. By default, it is "localhost", i.e. the AWMS CCS is located in the local machine. If the AWMS CCS is installed in other machine, please input the hostname/IP of the machine. It can be changed after the installation, please refer to Section 7.1.3 for more details.
- 2. Server Port It defines port that the AWMS Clients use to communicate with the AWMS CCS. By default, it is "11111" and it is recommended that you leave it as it is unless you are sure about the change.



Step 17: Select the installation folder and click "Next >". By default, the path is "C:\Program Files\Altai Technologies\AWMS\".

🛃 AWMS Client Setup	
Select Installation Folder This is the folder where AWMS Client will be installed.	
To install in this folder, click "Next". To install to a different folder, enter it below "Browse". Folder:	or click
C:\Program Files\Altai Technologies\AWMS\ Bro	wse
Mobile Internet for Everyone	Cancel

Figure 47 Fill in AWMS Client Installation Path



i 🛱 AWMS Client Setup
Ready to Install The Setup Wizard is ready to begin the Typical installation
Click Install to begin the installation. If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
Mobile Internet for Everyone

Figure 48 Start AWMS Client Installation



🕼 AWMS Client Setup	
Installing AWMS Client	
Please wait while the Setup Wizard installs AWMS Client.This may take several minutes.	
Status:	
)
Mobile Internet for Everyone	
< <u>B</u> ack <u>Next</u> Can	icel

Figure 49 AWMS Client Installation Progress





Figure 50 Completion of AWMS Client Installation



Click "Next".

Step 20:

AWMS Setu	p and Upgrad	le Tool	
Welcome Altai Techno	to A₩MS Setu blogies Limited	ıp and Upgrade Wizard	
Ready to ex	ecute		
3 J J	JDK Server Client	Install success Install success Install success	
	Please press	[Execute] to start.	
Mobile Interne	t for Everyone	< <u>B</u> ack <u>N</u> ext >	<u>C</u> ancel

Figure 51 Success of JDK, AWMS Server and Client Installation

Step 21: Choose "Yes". Click "Next".

AWMS Setup and Upgrade Tool	
Welcome to AWMS Setup and Upgrade Wizard Altai Technologies Limited	
This machine already have a server installation, do you want to change any of your server settings?	
○ No	
Mobile Internet for Everyone <a> <a> <a> <a> <a> <a> <a> <a> <a> <a> <br <="" td=""/><td><u>C</u>ancel</td></br></br>	<u>C</u> ancel

Figure 52 AWMS Server Configuration



Step 22: Set the configuration information of AWMS Central Control Server. Click "Next".

AWMS Setup and Upgrad	le Tool 🛛 🔀
Welcome to AWMS Setu Altai Technologies Limited	up and Upgrade Wizard
Server IP address(es) Management Interface(s)	
	Specify interface (IP address) for CCC-CCS and CCS-Proxy communication, use comma as the delimiter. If not specified, all available interfaces will be used.
NE Communication	0.0.0.0.0 Interface to be used to communicate with NE (FTP).If not specified, sustem will randomly choose one interface from this machine
Server FTP Port	system will randomly choose one interface nonintriis machine.
AWMS Client	21
NE Communication	2100
Mobile Internet for Everyone	< <u>B</u> ack <u>N</u> ext > <u>C</u> ancel

Figure 53 AWMS Server Configuration

The following explains the parameters of the settings,

- Server IP address(es) for Management Interface(s) IP address(es) for CCC-CCS and CCS-Proxy communication, use comma as delimiter. If not specified, AWMS binds it to all interfaces. If the AWMS CCS is installed in other machine, please input the IP of the machine. It can be changed after the installation, please refer to Section 7.1.3 for more details.
- 2. Server IP address for NE communication IP address of the machine that NE can communicate with AWMS CCS. If not specified, system will randomly choose one interface installed on AWMS CCS. It can be changed after the installation, please refer to Section 7.1.3 for more details.
- 3. Server FTP Port for AWMS Client It defines port that the AWMS Clients use this port to transfer files with the AWMS CCS. By default, it is "21" and it is recommended that you leave it as it is unless you are sure about the change.
- 4. Server FTP Port for NE communication It defines port that the AWMS Clients use this port to transfer files with the AWMS CCS. By default, it is "2100" and it is recommended that you leave it as it is unless you are sure about the change.



Step 23: For AWMS Database Configurations, go to Step 24 if no password is defined for root of MySQL (refer to Step 16 of Section 4.3). Otherwise, enter the corresponding password in the field of "Admin User Password".

AWMS S	etup and U	ograde Tool		
Welco Altai Te	ome to AWMS echnologies Lim	Setup and Upgra ited	de Wizard	
Please : Acce	set the databas ss AWMS Da	e access options. tabase		
	Hostname	localhost	Admin User Name	root
_	Port Number	3306	Admin User Password	NNNN
	🗹 Access P	MDB from the same h	nost and use the admin user	
				Connection Test
Mobile In	ternet for Every	one	< <u>B</u> ack	lext >

Figure 54 AWMS Database Configurations with password

The following explains some of the parameters of the settings,

- 1. Hostname It defines the location of the database. By default, it is "localhost", i.e. the database is located in the local machine. If the database is installed in other machine, please input the hostname of the machine.
- 2. Port Number It defines the port number for inter-connection between MySQL Server and CCS. When you change the port number to other numbers during MySQL installation (Step 13 of Section 4.3), please input the port number accordingly and refer to Section 8.1 for more details.
- 3. Admin User Password This password MUST be matched the root's password of MySQL (Step 16 of Section 4.3).

Step 24: Click "**Connection Test**" to check if there is a successful connection with AWMS database.



Figure 55 AWMS Database Connection Test



Step 25: Click "Execute"

AWMS Setup and Upgrade Tool	
Welcome to AWMS Setup and Upgrade Wizard Altai Technologies Limited	
Ready to execute Prepare configuration Write configuration file	
Apply settings Please press [Execute] to start the re-configuration.	
Mobile Internet for Everyone	Cancel

Figure 56 Start AWMS Server Configuration

AWMS Setup and Upgrade Tool	
Welcome to AWMS Setup and Upgrade Wizard Altai Technologies Limited	
Ready to execute	
Mobile Internet for Everyone <a> Kext > <a> Kext > <a> Kext > <a> Kext > <a> Kext > <</br>	<u>C</u> ancel

Figure 57 Start AWMS Server Configuration



Step 26:

Choose "Create Database". Click "Next".

AWMS Setup and Upgrade Tool
Welcome to AWMS Setup and Upgrade Wizard Altai Technologies Limited
Please select the database operation.
Create Database
Choose this option to create new AWMS database. [Warning: All existing data will be removed!]
🔘 Up/Downgrade Database
Choose this option to up/downgrade AWMS database to latest AWMS version.
🔿 Skip
Mobile Internet for Everyone

Figure 58 Create Database

Step 27: Click "Next".

AWMS Setup and Upgrade Tool	
Welcome to AWMS Setup and Upgrade Wizard Altai Technologies Limited	
AWMS includes AWMS and Performance Statisitcs(PM) databases.Please set the database options.	
✓ Create AWMS database	
This option will create an AWMS database on the database server.	
Create AWMS performance statisites database This option will create a performance statisites database on the database server.	
Mobile Internet for Everyone	<u>C</u> ancel

Figure 59 Create Database

¥

<u>C</u>ancel

Create database successfully

Mobile Internet for Everyone



Step 29: Click "Finish" to exit AWMS Setup and Upgrade Tool.

AWMS Setup and Upgrade	Tool	
Welcome to AWMS Setup Altai Technologies Limited	and Upgrade Wizard	
Completing the Setup and Up	ograde wizard,click the finish button to exit the wizard.	
Mobile Internet for Everyone	< <u>B</u> ack Finish	Cancel
Mobile Internet for Everyone Figure 62	Completion of AWMS Setup and Upgrade	<u>C</u> ancel

< <u>B</u>ack

Figure 61 Completion of AWMS Database

<u>N</u>ext >

Commercially Confidential



4.5 INSTALL CENTRAL CONTROL SERVER AND PROXY SERVER IN SPERATE COMPUTERS

This section demonstrates how to install CCS and proxy in separate computers. For example, CCS is installed on computer A (IP: 192.168.1.10) while proxy is installed on computer B (IP: 192.168.1.20).

Before installation, MySQL version 5.0.18 should exist in computer A.

Remark:

If you have the previous AWMS installed in your computer, you only need to upgrade it. You can refer to Section 5 for the upgrading procedures.

Note:

In this section, it is assumed that the 1) CCS, 2) Proxy servers and the 3) NEs (i.e. Altai A8 and Altai A0) are located in the same IP SUBNET. If you want to install the CCS, Proxy servers and NEs in different IP subnets, please refer to "Application notes for installing CCS, Proxy and NE in different Subnets" for the details.

4.5.1 CENTRAL CONTROL SERVER (CCS) INSTALLATION

Step 1 to Step 11: Please refer to Section 4.4 Step 1 to Step 11.

Step 12: Select "Entire feature will be unavailable" for Proxy and click "Next >".

🔂 AWMS Servers Setup
Custom Setup Select the way you want features to be installed.
Click on the icons in the tree below to change the way features will be installed.
CCS Proxy Server
Will be installed on local hard drive
Entire feature will be installed on local hard drive
Feature will be installed when required
X Entire feature will be unavailable
Mobile Internet for Everyone
Reset Disk Usage < Back Next > Cancel

Figure 63 Install CCS in computer A

Step 13 to Step 21: Please refer to Section 4.4 Step13 to Step 21.



Step 22: Set the configuration information of AWMS Central Control Server. Click "Next".

AWMS Setup and Upgrad	le Tool 🛛 🔀
Welcome to AWMS Setu Altai Technologies Limited	ip and Upgrade Wizard
Server IP address(es)	
Management Interface(s)	192.168.1.10
	Specify interface (IP address) for CCC-CCS and CCS-Proxy communication, use comma as the delimiter. If not specified, all available interfaces will be used.
NE Communication	192 168 1 10
	Interface to be used to communicate with NE (FTP). If not specified, system will randomly choose one interface from this machine.
Server FTP Port	
AWMS Client	21
NE Communication	2100
Mobile Internet for Everyone	< <u>B</u> ack <u>N</u> ext > <u>C</u> ancel

Figure 64 AWMS Servers Setup

Step 23 to Step 29: Please refer to Section 4.4 Step 23 to Step 29.



4.5.2 PROXY SERVER (PX) INSTALLATION

Step 1 to Step 11: Please refer to Section 4.4 Step 1 to Step 11.

Step 12: Select "Entire feature will be unavailable" for CCS and click "Next >".

Click or	the icons in the tree below to change the way features will be in	stalled.
	CCS Central Control Service Will be installed on local hard drive B Entire feature will be installed on local hard drive Feature will be installed when required Entire feature will be unavailable	ver •s OKB on your
		Browse

Figure 65 Install Proxy Server in computer B

Step 13 to Step 21: Please refer to Section 4.4 Step13 to Step 21.

Step 22: Set the configuration information of AWMS Central Control Server. Click "Next".

AWMS Setup and Upgrad	e Tool 🛛 🔀
Welcome to AWMS Setu Altai Technologies Limited	p and Upgrade Wizard
Server IP address(es)	
Management Interface(s)	192.168.1.20
	Specify interface (IP address) for CCC-CCS and CCS-Proxy communication, use comma as the delimiter. If not specified, all available interfaces will be used.
NE Communication	192, 168, 1, 20
Server FTP Port	Interface to be used to communicate with NE (FTP). If not specified, system will randomly choose one interface from this machine.
AWMS Client	21
NE Communication	2100
Mobile Internet for Everyone	< <u>B</u> ack <u>N</u> ext > <u>C</u> ancel

Figure 66 AWMS Servers Setup

Step 23 to Step 29: Please refer to Section 4.4 Step 23 to Step 29.



4.6 SET COMPATIBILITY MODE OF CENTRAL CONTROL SERVER

Remark:

If your System is Windows 7 Professional, you need to set compatibility mode of Central Control Server as Windows XP. You only need to do this after AWMS new installation. The following steps demonstrate how to set it.

Step 1:AWMS CCS and CCC installers automatically create icons on the Windows Start
Menu for you. Right-click "Central Control Server". Choose "Properties". The
Central Control Server Properties window prompts up. As shown in Figure 67.

🔊 Central Contro	ol Serve	r Proper	ties			×
Compatibility	Sec	curity	D	etails	Previo	us Versions
General Sh	ortcut	Option	s	Font	Layou	t Colors
Ce	ntral Cor	ntrol Serv	er			
Target type:	Windov	vs Batch	File			
Target location:	bin					
Target:	Atai Te	chnologi	es\A	WMS\cc	s\bin\star	tCCS.bat"
Start in:	"C:\Pro	ogram File	es\Alt	ai Techn	ologies\A	WMS\ccs
Shortcut key:	None					
Run:	Norma	l window				•
Comment:	AWMS	Central (Contr	ol Server	8	
Open File Lo	cation	Cha	ange	lcon	Adva	inced
		ОК		Car	ncel	Apply

Figure 67 Central Control Server Properties



Step 2: Choose "Compatibility" tab.

General Sh	ortcut	Option	s Font	Layout	Colors
Compatibility	Sec	curity	Details	Previou	is Versions
If you have prob an earlier version matches that ea <u>Help me choo</u>	lems wit n of Win rlier vers se the s	h this pro dows, se sion. <u>settings</u>	gram and it v lect the com	worked corre patibility mod	ctly on e that
Compatibility m	node				
Run this	program	in compa	tibility mode	for:	
Windows X	P (Servio	ce Pack	2)	-	
Settings					
Run in 25	6 colors	;			
Run in 64	40 x 480	screen n	esolution		
Disable v	isual the	mes			
Disable d	esktop (compositi	on		
📃 Disable d	isplay so	aling on	high DPI set	tings	
Privilege Leve					
Run this	program	as an ad	ministrator		
Change se	ttings fo	r all users			

Figure 68 Compatibility Configuration



Step 3: Choose "Run this program in compatibility mode for Windows XP".

aene	ral	Sho	tcut	Optio	ns	Font	Layout Col				
Com	patibi	lity	Sec	curity		Details	Previous Versions				
lf you an ea matcl <u>Help</u> Cor	have arlier v nes th me npatib	e proble version nat earl <u>choos</u> pility mo	ems with of Win ier vers <u>e the s</u> ode rogram	h this pr dows, s ion. <u>ettings</u> in comp	ograr elect atibili	n and it w the comp tv mode fo	orked co atibility m	rrectly ode th	on hat		
N	Vindo	ws XP	(Servic	e Pack	2)		-				
SVVVV	Vindo Vindo Vindo Vindo Vindo	ws 98 ws NT ws 200 ws XP ws XP	/ Wind 4.0 (Se 00 (Servic (Servic	ows Me ervice P ce Pack ce Pack	ack { 2) 3)	5)					
v v v v v	Vindo Vindo Vindo Vindo Vindo	ws Ser ws Ser ws Vist ws Vist ws Vist	ver 20 ver 20 a a (Sen a (Sen	03 (Serv 08 (Serv vice Pac vice Pac	ice P ice P :k 1) :k 2)	Pack 1) Pack 1)					
Priv	rilege	Level									
E	Run	this p	rogram	as an a	dmini	strator					
	Chan	ge sett	ings for	r all user	s]					

Figure 69 Set Compatibility Mode



Step 4: Click "**Apply**". Click "**OK**" to close the window.

Central Cont	rol Serve	r Proper	ties		1	
General S	hortcut	Option	S	Font	Layour	t Colors
Compatibility	Sec	curity	Det	tails	Previou	us Versions
If you have pro an earlier versi matches that e <u>Help me cho</u> Compatibility	oblems wit on of Win arlier vers <u>ose the s</u> mode	h this pro dows, sel sion. settings in compa	gram a ect the	and it wo e compa mode fo	rked corre tibility mod	ectly on de that
Windows	XP (Servio	ce Pack 2	2)		•	
Settings						
🔲 Run in 2	256 colors	5				
🔲 Run in (640 x 480	screen re	solutio	n		
Disable	visual the	emes				
Disable	desktop o	compositio	n			
Disable	display so	aling on h	nigh D	PI settin	gs	
Privilege Lev	el					
Run this	s program	as an adr	ninistra	ator		
Change s	ettings for	r all users				
	ſ	ОК		Car		Apply

Figure 70 Click "Apply"



5 AWMS UPGRADE

If you have the previous AWMS installed in your computer, you only need to upgrade it. The following steps demonstrate how to upgrade AWMS.

Step 1: Double-click the file AWMS_Setup.exe. The AWMS Setup and Upgrade Wizard prompts up.

AWMS Setup and Upgrade Tool
Welcome to AWMS Setup and Upgrade Wizard Altai Technologies Limited
Welcome to AWMS Setup and Upgrade Wizard The Setup and Upgrade Wizard will allow you to setup , upgrade and configure the AWMS.Please set the options.To Continue,click Next.
 AWMS Server Setup or Upgrade AWMS Client Setup or Upgrade Language: English
Mobile Internet for Everyone

Figure 71 AWMS Setup and Upgrade Wizard

Remark:

You can also upgrade AWMS Server and AWMS Client separately by unchecking the AWMS Client Setup or Upgrade.

Step 2: Choose "Server" and "Client". Click "Next >".

AWMS Setup a	nd Upgrade To	ol			×
Welcome to A Altai Technologie	WMS Setup an es Limited	d Upgrade	₩izard		
Software Dete	ction				
File Name	Status	File Size	Current Ver	Required V	Action
Components					
MySQL	Installed	35.96MB	5.0.18	5.0.18	NA
🔲 JDK	Installed	52.95MB	1.5	1.5	NA
Servers					
Server	Previous Ve	85.72MB	2.10.3.1	2.10.3.3	Upgrade
Clients					
🔽 Client	Previous Ve	62.75MB	2.10.3.1	2.10.3.3	Upgrade
J Please check the software options and click [Next].					
Makin Jahawa Ga Faranana					
Mobile Internet for	E veryone		< <u>B</u> ack	<u>N</u> ext >] <u>C</u> ancel

Figure 72 AWMS Setup and Upgrade Wizard

Step 3: Click "**Execute**" to start upgrade.

AWMS Setu	ip and Upgrad	e Tool	
Welcome Altai Techn	to AWMS Setu nologies Limited	p and Upgrade Wizard	
Ready to ex	ecute		
6	Server Client	Upgrade Upgrade	
	Please press	Execute] to start.	
Mobile Interne	et for Everyone	< <u>B</u> ack Exec	ute <u>C</u> ancel

Figure 73 AWMS Setup and Upgrade Wizard



Server Upgrading	×
Server is upgrading, this may take some minutes, please wait	
12%	
Status:Copying poi-2.0-final-20040126.jar	

Figure 74 Server is upgrading

Client Upgrading	×
Client is upgrading, this may take some minutes, please wait	
82%	
Status:Copying registration.xml	

Figure 75 Client is upgrading

Step 4: Click "Next".

AWMS	Setu	p and Upgrade	Tool	
Welc Altai T	ome echno	to A₩MS Setup blogies Limited	and Upgrade Wizard	
Ready	to ex	ecute		
	*	Server Client	Upgrade success Upgrade success	
		Please press (E	xecute] to start.	
Mobile Ir	nterne	t for Everyone	< <u>B</u> ack <u>N</u> ext >	<u>C</u> ancel

Figure 76 Success of upgrading



Step 5: Choose "Yes". Click "Next".

AWMS Setup and Upgrade Tool	
Welcome to AWMS Setup and Upgrade Wizard Altai Technologies Limited	
This machine already have a server installation, do you want to change any of your server settings?	
 Yes 	
O No	
Mobile Internet for Everyone	<u>C</u> ancel

Figure 77 AWMS Server Configuration

Step 6: Set the configuration information of AWMS Central Control Server. Click "Next".

AWMS Setup and Upgrad	le Tool 🛛 🔀
Welcome to AWMS Setu Altai Technologies Limited	up and Upgrade Wizard
Server IP address(es)	
Management Interface(s)	
	Specify interface (IP address) for CCC-CCS and CCS-Proxy communication, use comma as the delimiter. If not specified, all available interfaces will be used.
NE Communication	0.0.0
	Interface to be used to communicate with NE (FTP).If not specified, sustem will randomly choose one interface from this machine.
Server FTP Port	system will rendering choose one intendee nom this machine.
AWMS Client	21
NE Communication	2100
Mobile Internet for Everyone	< <u>B</u> ack <u>N</u> ext > <u>C</u> ancel

Figure 78 AWMS Server Configuration



The following explains the parameters of the settings,

- Server IP address(es) for Management Interface(s) IP address(es) for CCC-CCS and CCS-Proxy communication, use comma as delimiter. If not specified, AWMS binds it to all interfaces. If the AWMS CCS is installed in other machine, please input the IP of the machine. It can be changed after the installation, please refer to Section 7.1.3 for more details.
- 2. Server IP address for NE communication IP address of the machine that NE can communicate with AWMS CCS. If not specified, system will randomly choose one interface installed on AWMS CCS. It can be changed after the installation, please refer to Section 7.1.3 for more details.
- 3. Server FTP Port for AWMS Client It defines port that the AWMS Clients use this port to transfer files with the AWMS CCS. By default, it is "21" and it is recommended that you leave it as it is unless you are sure about the change.
- 4. Server FTP Port for NE communication It defines port that the AWMS Clients use this port to transfer files with the AWMS CCS. By default, it is "2100" and it is recommended that you leave it as it is unless you are sure about the change.
- Step 7: For AWMS Database Configurations, go to Step 18 if no password is defined for root of MySQL (refer to Step 16 of Section 4.3). Otherwise, enter the corresponding password in the field of "Admin User Password".

AWMS S	etup and Up	ograde Tool		
Welco Altai Te	ome to AWMS echnologies Limi	Setup and Upgra	de Wizard	
Please Acce	set the databas ss AWMS Da	e access options. tabase		
	Hostname	localhost	Admin User Name	root
_	Port Number	3306	Admin User Password	XXXXX
	🗹 Access P	MDB from the same h	nost and use the admin user	
				Connection Test
Mobile In	ternet for Every	one	K Back	<u>l</u> ext > <u>C</u> ancel

Figure 79 AWMS Database Configurations with password

The following explains some of the parameters of the settings,

1. Hostname – It defines the location of the database. By default, it is "localhost", i.e. the database is located in the local machine. If the database is installed in other machine, please input the hostname of the machine.



- 2. Port Number It defines the port number for inter-connection between MySQL Server and CCS. When you change the port number to other numbers during MySQL installation (Step 13 of Section 4.3), please input the port number accordingly and refer to Section 8.1 for more details.
- 3. Admin User Password This password MUST be matched the root's password of MySQL (Step 16 of Section 4.3).

Step 8: Choose "Up/Downgrade Database". Click "Next".

AWMS Setup and Upgrade Tool	
Welcome to AWMS Setup and Upgrade Wizard Altai Technologies Limited	
Please select the database operation.	
🔿 Create Database	
Choose this option to create new AWMS database. [Warning: All existing data will removed!]	be
Op/Downgrade Database	
Choose this option to up/downgrade AWMS database to latest AWMS version.	
🔿 Skip	
Mobile Internet for Everyone	<u>C</u> ancel

Figure 80 Up/Downgrade Database

Note:

Do not choose "Create Database", otherwise all existing data will be removed. Choose "Up/Downgrade Database" to up/downgrade AWMS database.

Step 9: Click "Yes".



Figure 81 Upgrade Database

Step 10:



"Next"

AWMS Setup and Upgrade Tool	
Welcome to AWMS Setup and Upgrade Wizard Altai Technologies Limited	
Database upgrade complete	
100%	
Details	
[2010-11-25 16:38:02,561] INFO: Created SP TONEUTRAL to Schema pmdbv0.1 [2010-11-25 16:38:02,561] INFO: Creating SP PMSTAT to Schema pmdbv0.1 [2010-11-25 16:38:02,702] INFO: Created SP PMSTAT to Schema pmdbv0.1 [2010-11-25 16:38:02,702] INFO: Creating SP CLEARFK to Schema pmdbv0.1 [2010-11-25 16:38:02,717] INFO: Created SP CLEARFK to Schema pmdbv0.1 [2010-11-25 16:38:02,717] INFO: Creating SP CLEARFK to Schema pmdbv0.1 [2010-11-25 16:38:02,717] INFO: Creating SP CLEARDB to Schema pmdbv0.1 [2010-11-25 16:38:02,717] INFO: Created SP CLEARDB to Schema pmdbv0.1	
Upgrade database successfully	~
Mobile Internet for Everyone <a>K Back <a>Mext >	<u>C</u> ancel

Figure 82 Upgrade database successfully

Step 11: Click "**Finish**" to exit AWMS Setup and Upgrade Tool.



Figure 83 Completion of AWMS Setup and Upgrade



6 LAUNCH AWMS SERVERS AND CLIENT

The AWMS CCS and CCC installers automatically create icons on the Windows Start Menu for you to launch the system.

6.1 IMPORTING LICENCE FILE

Before the AWMS Central Control Server to be activated, a **license file** must be imported using the tool "License Tool". "License Tool" can be found under Windows Menu as shown in **Error! Reference source not found.**



Figure 84 Place a license file under the folder "CCS"

Step 1: Select the directory of license file and click "Next >".

AWMS License Setup	
English Select license file	繁體 简体
License file: C:\license\license.txt	Browse
Next>	Cancel

Figure 85 AWMS license file window



Step 2: Click "**install**" to begin installation.

🗠 AWMS License Setup	
Ready to install	English 繁體 简体
Click Install to begin the installation. If you want to r installation settings, click Back. Click Cancel to exit th	review or change any of your ne wizard.
<pre.< pre=""></pre.<>	install Cancel

Figure 86 AWMS License installation

🗠 AWMS License Setup	
~ Installing AWMS License	English 繁體 简体
Please wait while the setup wizard installs AWMS Li minutes.	cense.This may take several
Status: Copying License file	
<pre.< td=""><td>Next> Cancel</td></pre.<>	Next> Cancel

Figure 87 AWMS license installation progress



Step 3: Click "Finish" to complete the AWMS License Installation.

AWMS License Setup	
Completing the AWMS License Setup	English 繁體 简体
Completing the AWMS License Setup wizard, click the fir	nish button to exit the wizard.
<pre,< td=""><td>finish Cancel</td></pre,<>	finish Cancel

Figure 88 Completion of AWMS license installation

6.2 START AWMS CCS AND PROXY

You can start AWMS Central Control Server and AWMS Proxy by separately clicking their icons on the Windows Menu.

Note:

You should start AWMS Central Control Server and AWMS Proxy separately if they are installed on different hosts.



Figure 89 Start AWMS Servers from Windows Start Menu

Two consoles shows up when AWMS servers are starting. One of them is for AWMS CCS and another is AWMS Proxy.

You should see "----- CCS is started -----" when AWMS CCS has successfully started up, as shown in Figure 90.



🚇 Central Server (Altai Wireless Management System)	- 🗆 🗙
[2010-11-24 16:24:28,044] INFO: Resynchronizing NE service status [2010-11-24 16:24:28,060] INFO: Resynchronizing NE online status [2010-11-24 16:24:28,216] INFO: System Polling Services [2010-11-24 16:24:28,221] INFO: Proxy Services [2010-11-24 16:24:30,341] INFO: Network Element Health Monitor [2010-11-24 16:24:30,357] INFO: Report Manager [2010-11-24 16:24:30,357] INFO: Desktop Initialization Manager [2010-11-24 16:24:30,364] INFO: Desktop Initialization Manager [2010-11-24 16:24:30,404] INFO:	•
ALTAI Wireless Networks Management System - Central Control Server Version: 2.10.3.3 Date: 9 Sep 2010	
Copyright @ 2004-2007. ALTAI, Inc. All rights reserved.	
System Addresses: eth0: eth1: 10.6.127.97 eth2: 10.6.127.59	
	-

Figure 90 AWMS CCS console

You should see "----- **Proxy is started** -----" when AWMS Proxy has successfully started up, as shown in Figure 91.



Figure 91 AWMS Proxy Console



6.3 START AWMS CLIENT

Start AWMS Client by doubling clicking its icon. The AWMS Client will start with the login prompt asking you for AWMS login name and password.

🖾 Login Altai Wirele	ss Management System 🛛 🛛 🔀
Altai Technologie	s Limited
Welcome t	0
Altai Wirel	ess Management System
Please type y	our user name and password.
User Name:	root
Password:	***
Language:	English
Login	Reset Exit

Figure 92 AWMS Client Login Interface

The default login name is "**root**" and password is "**ims**". You may refer to AWMS User Guide for a full set of AWMS features.



7 ADVANCED CONFIGURATION FOR AWMS INSTALLATION

It is possible to install the AWMS subsystems (i.e. CCC, Proxy and CCS) on machines located in different domains. In this case, multiple IP addresses may raise problems if the machine has more than one network interfaces and the AWMS is bound to an inappropriate network interface as a result.

7.1 **Remote management thorung internal network**

This section shows the advanced configuration of the AWMS subsystem installation when they are installed in different servers / computers with multiple internal network.



Figure 93 An example of installing AWMS subsystems in different servers / computers

Note:

AWMS subsystems can be installed in different IP subnet. Make sure all of them are "reachable" by each other and the ports which are used by the AWMS subsystems are not blocked by firewall or mapped by NAT.

Subsystem	Port(s)
NE	162 (for SNMP Trap)
Proxy Server	21 (for FTP control traffic)
	161 (for SNMP)
	22222 (for AWMS CCS)
	22223 (for AWMS CCS)
AWMS CCS	21 (for FTP control traffic)
	3306 (for MySQL)
	11111 (for AWMS CCC)

Table 3	Corresponding	Ports for AWMS	Subsystems
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7.1.1 BIND IP ADDRESSES FOR PROXY SERVER

In this section, administrator has to determine 2 IP addresses; one connects to the network where NEs exist and the other one connects to the network where it is near to the AWMS CCS. In this demonstration, the former is 192.168.2.1 and the latter is 192.168.1.2, as shown in **Error! Reference source not found.**

Step 1: Go to Command Prompt by typing "cmd" in "Run...".

Step 2: Type command: ipconfig

Then following results (similar) will be shown on the screen. This demonstration shows there are two network interfaces in the Proxy Server.

If the server / computer has more than one network interface, administrator has to determine which interface is connected to the network where it is near to the AWMS CCS and which interface is connected to the network where NEs exist.

- Step 3: Edit the file "awms-px.conf" with a text editor (e.g. notepad) which is under the folder "C:\Program Files\Altai Technologies\AWMS\Proxy".
 - I. Add the IP address in file awms-px.conf for AWMS CCS connection. Enter the IP address, as shown in the example, into the field "awms.proxy.ip".

awms.proxy.ip=192.168.1.2

II. Add the IP address in file awms-px.conf for NEs connection. Enter the IP address, as shown in the example, into the field "service-ip".

awms.ne.ip= 192.168.2.1

Step 4: Save and close the file.



7.1.2 BIND AN IP ADDRESS FOR AWMS CCS

In this section, administrator has to determine an IP address; the one connects to the network where it is near to the AWMS Proxy Server. In this demonstration, it is 172.16.0.2, as shown in Figure 93.

- **Step 1**: Refer to Step 1 and Step 2 in section 7.1.1 to check whether the server / computer has more than one network interface.
- Step 2: Edit the file "awms-ccs.conf" with a text editor (e.g. notepad) which is under the folder "C:\Program Files\Altai Technologies\AWMS\CCS". Add the IP address in file awms-ccs.conf for AWMS Proxy connection. Enter the IP address, as shown in the example, into the field "pcc-ip".

awms.ccs.ip=172.16.0.2

Step 3: Save and close the file.

7.1.3 BIND AWMS CCC TO A PARTICULAR AWMS CCS

In this section, it provides a method if administrator wants to change the AWMS CCS IP address for AWMS CCC (refer to Section 4.5). The following shows how to bind the AWMS CCC to a particular AWMS CCS. In this demonstration, it is 172.16.0.2, as shown in Figure 93.

- Step 1: Edit the file "clientparameters.properties" which is under the folder "C:\Program Files\Altai Technologies\AWMS\Client\conf". Modify the IP address which in the field "pri_server" in file clientparameters.properties.
 - I. Locate the line.

pri_server=localhost:11111

II. Enter the IP address, as shown in the example, into the field "pri_server"

pri_server=172.16.0.2:11111

Step 2: Save and close the file.



7.2 REMOTE MANAGEMENT THROUGH INTERNET NETWORK

This section shows the advanced configuration of AWMS subsystem installation when they are installed on different servers / computers in multiple internal networks.



Figure 94 An example of installing AWMS subsystems in different servers / computers

Note:

AWMS subsystems can be installed in different IP subnet. Make sure all of them are "reachable" by each other and the ports which occupied by the AWMS subsystems are not blocked by firewall or mapped by NAT. Port forwarding should be done on routers connecting to Internet.

Subsystem	Port(s)
NE	162 (for SNMP trap)
Proxy Server	161 (for SNMP request)
	2121 (for NE passive FTP)
	2100 (for NE passive FTP)

Table 4 Corresponding Ports for AWMS Subsystems

Router	Incoming Destination	Forward to Destination
R1	205.200.1.54:162	10.1.1.100:162
	205.200.1.54:2121	10.1.1.100: 2121
	205.200.1.54:22100	10.1.1.100: 2100
R2	202.100.1.32:20001	10.1.3.5:161
	202.100.1.32:20002	10.1.3.7:161

Table 5 Example Port Forwarding



7.2.1 BIND IP ADDRESSES AND PORTS FOR PROXY SERVER

In this section, administrator has to determine 2 IP addresses; one connects to the network where NEs exist and the other one connects to the network where it is near to the AWMS CCS. In this demonstration, the former is 192.168.2.1 and the latter is 192.168.1.2, as shown in Figure 93.

- **Step 1**: Refer to Step 1 and Step 2 in section 7.1.1 to check whether the server / computer has more than one network interface.
- Step 2: Edit the file "awms-px.conf" with a text editor (e.g. notepad) which is under the folder "C:\Program Files\Altai Technologies\AWMS\Proxy". Add the IP address in file awms-px.conf for AWMS CCS connection. Enter the IP address, as shown in the example, into the field "awms.proxy.ip".

awms.ne.ext.ip= 205.200.1.54

Step 3: Save and close the file.

7.2.2 BIND AN IP ADDRESS AND PORTS FOR AWMS CCS

In this section, administrator has to determine an IP address; the one connects to the network where it is near to the AWMS Proxy Server. In this demonstration, it is 172.16.0.2, as shown in Figure 93.

awms.ne.ftp.port=2100

Step 3: Add the IP address into the field "awms.ne.ext.ip" for AWMS FTP connection as shown in the example:

awms.ne.ext.ip=205.200.1.54

Step 4: Modify the passive ftp port (default: 2100) "awms.ne.ftp.ext.port" for AWMS FTP connection as shown in the example:

awms.ne.ftp.ext.port=22100

Step 5: Save and close the file.



8 PORT MANAGEMENT FOR AWMS INSTALLATION

It is possible to modify the port numbers, such as port number of MySQL, when installing the AWMS. If port number is being changed, administrator has to modify the corresponding configuration file(s) in order to make the applications can communicate to each other.

8.1 PORT NUMBER MODIFICATION FOR MYSQL

In this section, administrator has to modify some of the configuration files **if default port number 3306 is not being used by MySQL**, as shown in Step 13, Section 4.3.

In the following demonstration, <u>assume administrator would like to change the default port</u> <u>number of MySQL, i.e. 3306, to 4567</u>.

Step 1: Edit the file "awms-ccs.conf" which is under the folder "C:\Program Files\Altai Technologies\AWMS\CCS".

Modify the port number in file awms-ccs.conf for MySQL, it is 3306 by default. In this demonstration, we would like to change it to "4567".

awms.database.port=4567

Step 2: Save and close the file.

8.2 PORT NUMBER MODIFICATION FOR FIRMWARE MANAGEMENT

In this section, administrator has to modify some of the configurations **if default port number 21 is being used by other applications or port forwarding is done over router**. As the firmware management is done via FTP, the following steps must be preceded.

In the following demonstration, **assume administrator would like to change the default port number of Firmware Management**, i.e. 21, to 1234. Also, FTP passive ports is configured to 2121 and the NE firmware FTP port is configured to 20000. The gateway port for firmware update is mapped to the same port 20000.

Step 1:	Edit the file "awms-ccs.conf" which is under the folder "C:\Program Files\Altai Technologies\AWMS\CCS". Modify the port number in file awms-ccs.conf for FTP, it is 21 by default.
	awms.mgmt.ftp.port=1234
Step 2:	Modify the passive FTP port number, it is 2101-2199 by default.
	awms.ftp.pasv.ports=2121
Step 3:	Modify the FTP port number for NE firmware upgrade, it is 2100 by default.
	awms.ne.ftp.port=20000
Step 4:	Modify the gateway mapped port for NE firmware upgrade in file awms- ccs.conf for FTP, it is 2100 by default.
	awms.ne.ftp.ext.port=20000
Step 5:	Save and close the file.