EMS Quick Installation Guide

Revision 1.1

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1 INTRODUCTION

1.1 Purpose and Audience

This documentation provides Advance Management System (Hereinafter referred to AMS) quick installation information for all of AMS family. For more details, please see correspondent AMS product specifications, user guides and administrator guides.

1.2 Document Scope

This document focuses on presenting basic installation procedures for AMS family.

1.3 Overview

AMS is a comprehensive, distributed and scalable management system designed to provide FCAPS services to manage equipments. This document describes the following topics:

1. Software Requirements
2. Installation and Setup Options
3. Basic Configuration for AMS
4. Start AMS Server and Client
5. Device Management
6. Shutdown AMS Server

2 SOFTWARE REQUIREMENTS

2.1 Supported OS Platforms

AMS can run on different platforms such as Fedora, Solaris and Windows.

This guide introduces the quick start of AMS in Fedora Core 4 OS.

2.2 Supported Database Drivers

Database	JDBC Driver (AMS is JDBC 1.2 compliant)
My SQL	
MySQL 3.23.36	mysql_comp.jar v 2.0.4
Oracle	
Oracle 8.1.5.0.0	classes12.zip v 8.1.6.0.1
Oracle 8.1.6.0.0	classes12.zip v 8.1.6.0.1
Oracle 8.1.7.0.0	classes12.zip v 8.1.6.0.1

3 INSTALLATION AND SETUP OPTIONS

3.1 Installation of AMS in Fedora System

The AMS is available in a zip format. Get the zip file **AMS_Server_FC4.zip** and install AMS by unzipping the file.

3.2 Runtime licenses

A license file contains misc hardware information where AMS runs is used to enforce software control. There are three types of runtime licenses available as listed below:

1. Evaluation runtime license: This type of license can be installed on any PC, but it has only up to 45 days of evaluation period. This timeframe could be extended if necessary and upon request.
2. Test runtime license: It needs user to provide machine's UniqueID in advance to get its test runtime license, which can only run on that particular machine.
3. Official runtime license: It also needs user to provide machine's UniqueID in advance to get its test runtime license and cannot run on any other machines. Users also have to provide number of nodes under management by this AMS.

3.3 Procedure to Configure AMS for MySQL

MySQL is the default database bundled with AMS. AMS starts and initializes this database before starting the AMS modules.

3.4 Procedure to Configure AMS for Oracle

1. Edit the DB_CLASSPATH variable (which is by default set to mysqldriver) in **setEnv.sh** file under <*AMS_Home*> directory to set the JDBC Driver for Oracle. To set the JDBC Driver for Oracle 8.0.5, use **classes111.zip** and for Oracle 8.1.5, use **classes12.zip.** e.g. DB_CLASSPATH=<PATH>/classes12.zip where <PATH> is the location where **classes12.zip** is present.
2. If the AMS Server is already started, then do a proper and normal shutdown of Oracle. Do not terminate the process abruptly.
3. For Oracle 8.1.5 and 8.0.5, add the entry **open_cursors=300**. For example, you can edit the line as shown below. Go to ORACLE_HOME/Database/init<database name>.ora file, add/edit the line OPEN_CURSORS 250.
4. After changing the OPEN_CURSORS value, first start the TnsListener Service and then the Oracle database
5. Copy the **DatabaseSchema.conf** and **database_params.conf** from <*AMS_Home*>*/conf/Oracle* directory to *conf/* directory.

6. Change the **database_params.conf** file with the oracle database name in the URL.
7. Check if the Oracle server is listening to the port 1521.
8. Start the AMS server.

4 BASIC CONFIGURATIONS FOR AMS

4.1 Configure Device Trap Server

AMS has to be configured as a trap server from device sides in order to supervise all of devices installed in the network. It can be configured in several ways as follows:

1. From device console.
2. From Telnet console.
3. From LCT or Web browser.
4. From AMS Device View.

4.2 Other Device Configurations

Some of devices need more authentication and SNMP configurations, such as:

1. The AMS server IP address should be allowed as accessible IP.
2. Device SNMP community host setup should accept the AMS's community string.

4.3 Install Runtime License

To install runtime license file, just replace your license file in *AMS_HOME>/classes/AdventNetLicense.xml* with the one you would like to use.

4.4 Install a NTP Client

To utilize Network Time Protocol (NTP) to synchronize the AMS and all devices to a system-wide clock source for accurate time stamping, a NTP client has to be installed to the AMS server.

4.5 Audio

If a client machine has an audio card, five different types of sound for different levels of alarms can be heard. The type of sound can be replaced if you like by using different .wav files under *HOME>/conf/*.wav* .

5 START AMS SERVER AND CLIENT

5.1 Install AMS in Fedora Core 4 System

1. Create a soft link for libdb-3.2.so pointing to libdb-4.x.so present in Fedore Core 4 system.

   For example : **ln -s /lib/libdb-4.3.so /lib/libdb-3.2.so**

2. Unzip the AMS_Server_FC4.zip.
3. Input **chmod -R 777 <AMS_Home>**.
4. Login as root user.

   Add the mysql user as useradd (or /usr/sbin/useradd) mysql if it doesn't exist.

   Go to *<AMS_Home>\mysql* directory.

   Change the permissions of the *<AMS_Home>\mysql* directory to mysql user as **chown -R mysql:mysql data.**

5. Go to *\usr\bin* directory.

   ln -sf <AMS_HOME>/mysql/bin/mysqladmin

6. From the *<AMS_HOME>/mysql* directory start the mysql using the command below.

   ./bin/safe_mysqld

5.2 Start AMS Server in Fedora

Now the AMS server can be started by connecting to the mysql bundled with the AMS.

Go to *<AMS_Home>\bin* directory to start the AMS using the command **./startnms.sh**.

5.3 Start AMS Application Client on Windows

The Application client can be started on **Windows** by executing the **startApplicationClient.bat** file from the *<AMS_Home>/bin* directory. The **AMS Authentication** dialog box is shown as the following image.

Figure 1 AMS Authentication dialog box

User has to fill the name of the host where AMS has to be connected. If the server and client are running in the same machine then user can specify host name as "localhost". The default password is “public” and default port number is 9090. If the port to which AMS server is listening is configured then user must specify the configured port number in the corresponding text field.

6 DEVICES MANAGEMENT

Before manage the target devices, you should manually add them to network by the following procedures:

11. Right-click on "*Location Map*" and then click "Add Location" to add a location to *Location Map*.

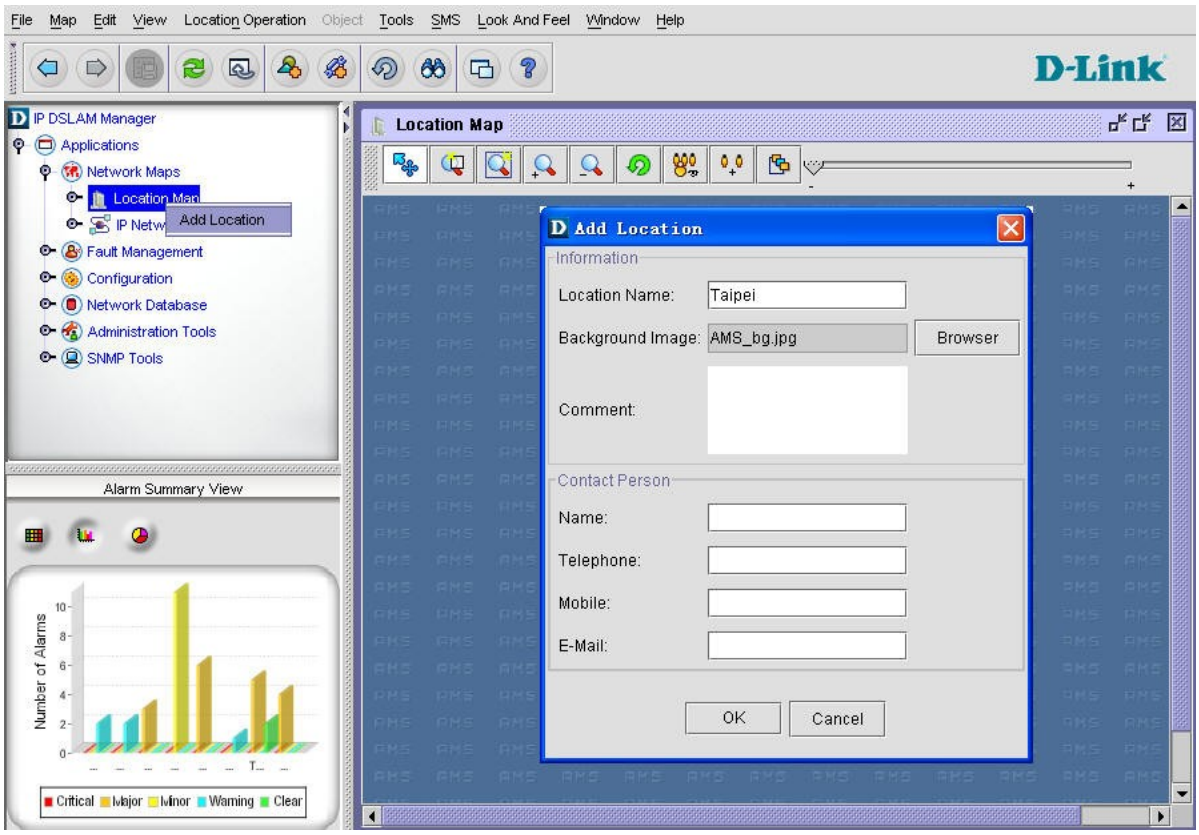

Figure 2 Add location window

22. Right-click on a location and then click "Add Device" to bring up the "*Add NE*" window.

3. Fill up necessary information about the device, and then the device will be added to current location accordingly.

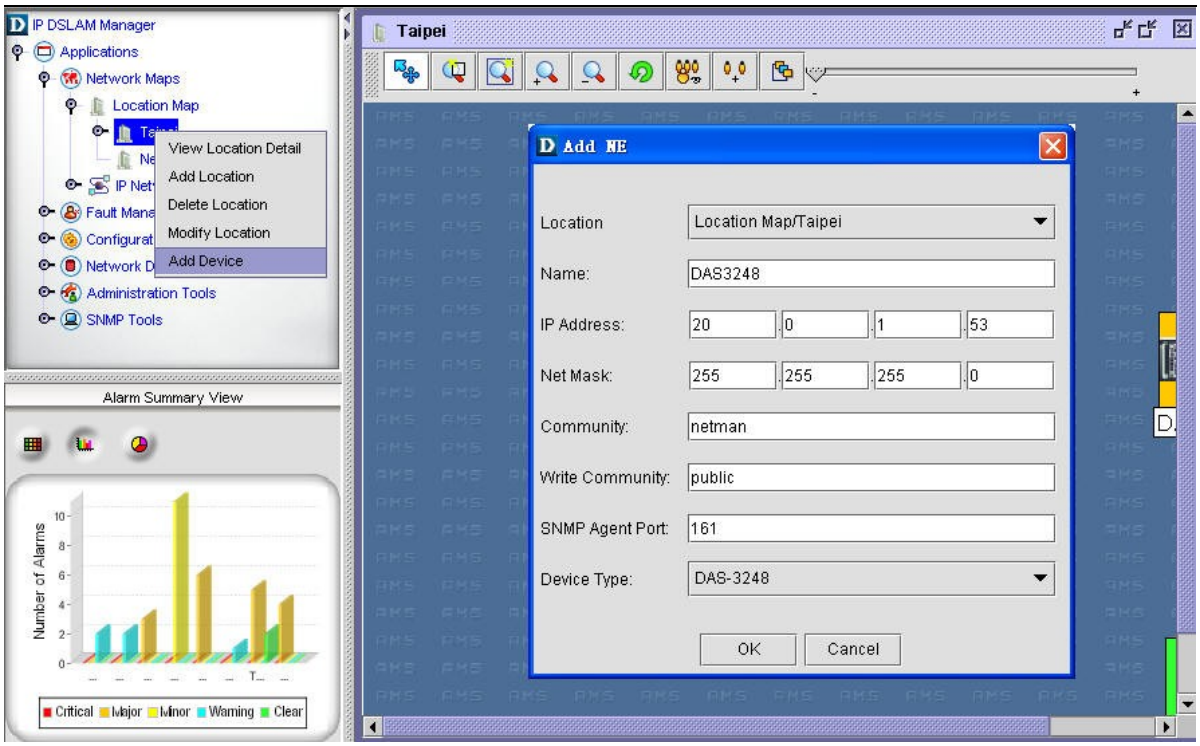

Figure 3 Add device window

7 SHUTDOWN AMS SERVER

To shutdown AMS Server through command line, invoke **ShutDown.sh** file from *<AMS Home>/bin* directory with **[User Name] [Password].** Default user name is "*root*" and default password is "*public*".

Figure 4 Shutdown AMS dialog box