



# Software Manual

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Product **Snow Inventory xClient**



Mac OSX version **2.0.00**

Linux version **1.4.00**

Date **2011-01-18**

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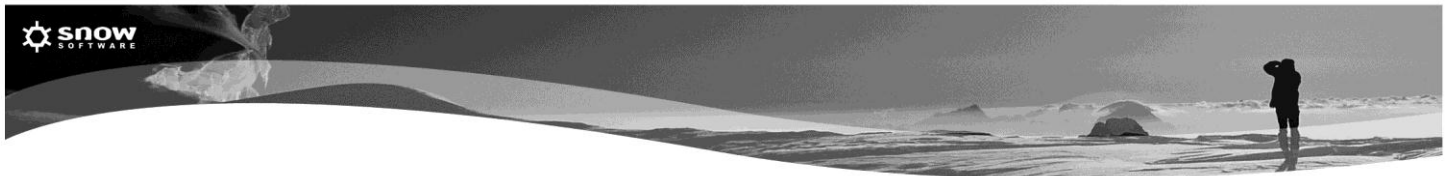
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## System Requirements

### Mac OS X

The OS X client is compiled as a Universal Binary with Intel x86 32 bit and ppc 32 bit binary fields.

### Linux

The Linux client is compiled for i386 and x86\_64 (64 bit) systems.

### Required libraries for the Linux client

libdl  
librt  
libidn  
libm  
libgcc\_s  
libc  
libpthread  
ld-linux

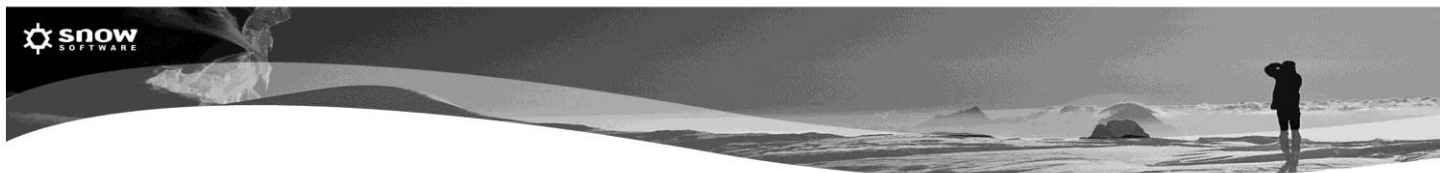
These libraries are installed by default in most Linux distributions. But except for being installed, they also need to be available to the xClient. They always are if the system isn't configured to hide specific libraries.

### Inventory version

3.x

### IDR version

1.0 to 1.6



## Configuration

Before you install xClient you need to do some configuration. We've included an example configuration file in Appendix A that you can edit to suit your system.

The configuration file is named "snowclient.conf" and should be located in "/etc/snowclient.conf".

## ConnectionSettings3x

### **SendToWebService**

yes - If the xClient should send the collected data to Snow Inventory Data Receiver.

### **SendToFile**

yes - If the xClient should save the collected data to a file.

### **SendToFolder**

yes - If the xClient should send the collected data to a samba shared folder.

### **DestinationWebService**

Full URL to the web service.

### **DestinationFile**

Path to the file you want to save.

### **DestinationFolder**

Path to the share. We recommend using IP address instead of hostname in the path.

## Settings

### **ID**

guid - The client creates a GUID (/etc/.snowguid) that it will always use as ID

localhostname - Use the first found hostname as ID

hostname - Use the manually set hostname as ID

filewave - Use filewave settings to find the ID

### **ConfigurationName**

Name of the configuration

### **CollectHardwareInfo**

yes - Collect information about the computer.

### **CollectSoftwareInfo**

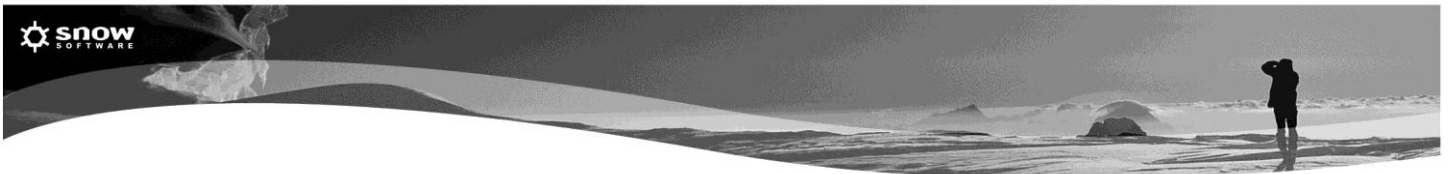
yes - Collect information about software installed on the computer.

### **RunJarScanner**

yes - Scan JAR files.

### **ReportAllJarFiles**

yes - Sends information about all JAR archives.

**ScanFolder**

[path] - Recursive binary scan from this folder.

**SkipFolder**

[path] - Do not scan the folders specified as a "SkipFolder".

**SetTemporaryFolder**

[path] - Put all temporary files in this folder.

**SetStorageFolder**

[path] - Put all non temporary data files in this folder.

**NumberOfLogFields**

[number] - Increase or decrease the number of saved time stamps in the log (default=6).

**AnonymousUsers**

yes - Replaces all usernames with SHA1 hashes.

**TrunkSoftwarePackages**

yes - Makes sure there is only one executable file reported for each package. Determined by Name, Version and Language.

*Only for OS X*

**UpdateDyldCache**

Forces an update of the dyld's cache. This option is only executed during client installation.

*Only for Linux and OS X 10.4.x*

**UseCronFile**

[path] - Puts the cron scheduling into a cron file instead of into the roots crontab.

**CronTimeSettings**

[standard cron time setting] - Uses this time setting instead of the default one. This configuration is only used during installation. If you change this setting, use the uninstall and install arguments to reinstall. Note that you should only write the time setting here, not the command part.

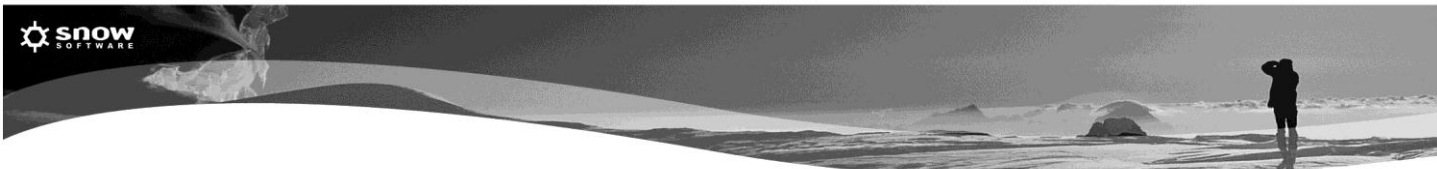
*Only for Linux*

**DisableRpmScan**

yes - The client does not try to find information about applications in the RPM database.

**RunRpmDbConditioner**

yes - Runs a checkup on the systems RPM Database to see if it's in good condition. If the test fails, the client will try to rebuild the database to increase system stability and performance.



## Manual installation

### Install

1. Copy the following files to the client machine

#### *OS X*

- xClient - Copy this to any folder.
- xMetering - Copy this to the same folder as xClient.
- snowclient.conf - Copy this to /etc/

#### *Linux*

- xClient - Copy this to any folder
- snowclient.conf - Copy this to /etc/

2. From a terminal, run xClient as a superuser with the argument install. The application will install the Inventory client and additional clients located in the same path.

Example: xClient install

### Uninstall

1. From a terminal, run xClient with the argument uninstall.

Example: xClient uninstall

2. Delete the files we've installed, data files and temporary files manually.

Example: `rm /usr/bin/xClient; rm /usr/bin/xMetering; rm /etc/snowclient.conf; rm -rf /Library/Application Support/Snow Software/`

### Install an update

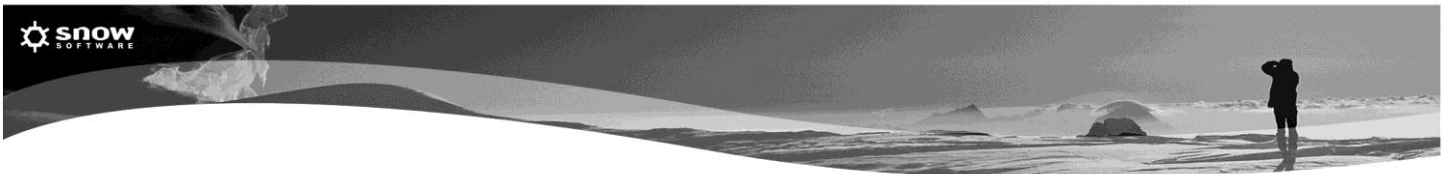
1. From a terminal, run xClient with the argument uninstall.

Example: xClient uninstall

2. Overwrite the old files with the new files (make sure the configuration file is still correct).

3. From a terminal, run the xClient as a superuser with the argument install.

Example: xClient install



## Installation from a prepared package

### **Installation from an OS X installation package.**

This is for the OS X client only.

Execute the installation package and follow the instructions.

### **Installation from a RPM package.**

This is for the Linux client only.

This section describes how to install, uninstall and update a RPM package from a terminal. If you use some kind of distribution system or package manager, take a look at that systems documentation instead.

#### *Install*

Execute the "rpm" command with the argument "-i".

Example: rpm -i xClient-1.4.00-1.i386.rpm

#### *Uninstall*

Execute the "rpm" command with the argument "-e".

Example: rpm -e xClient

#### *Install an update*

For now, we recommend that you uninstall the old package and then install the new package.

### **Installation from a DEB package.**

This is for the Linux client only.

This section describes how to install, uninstall and update a DEB package from a terminal. If you use some kind of distribution system or package manager, take a look at that systems documentation instead.

#### *Install*

Execute the "dpkg" command with the argument "-i".

Example: dpkg -i xclient-1.4.00-1.i386.deb

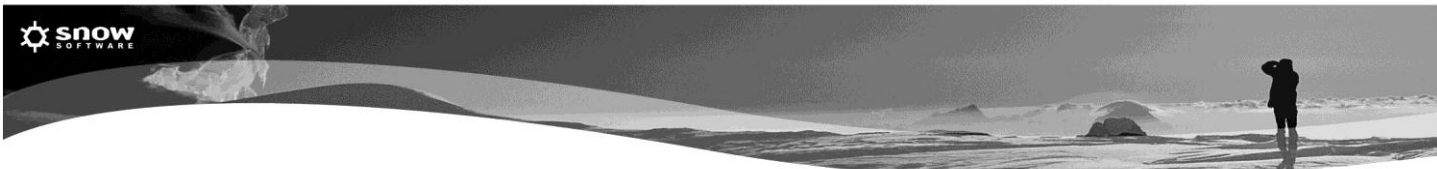
#### *Uninstall*

Execute the "dpkg" command with the argument "-r".

Example: dpkg -r xClient

#### *Install an update*

For now, we recommend that you uninstall the old package and then install the new package.



## Additional arguments

**-V or version**

Get client version.

**-C [filename] or ConfigFile [filename]**

Run client with this configuration file instead of the default one.

**-ZF or ZeroFootprint**

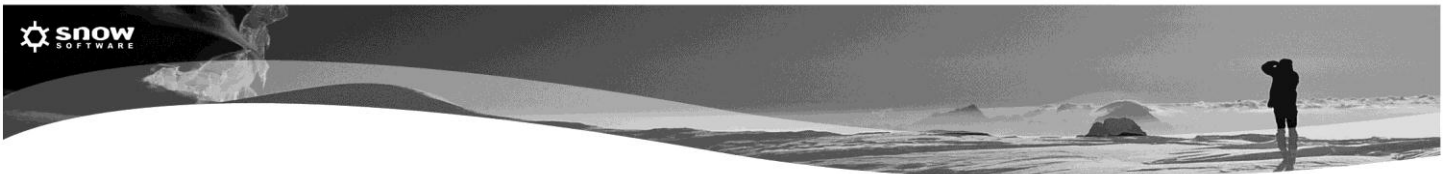
Zero footprint scan. No files are stored after scan.

**-stop**

Stop the scanner.

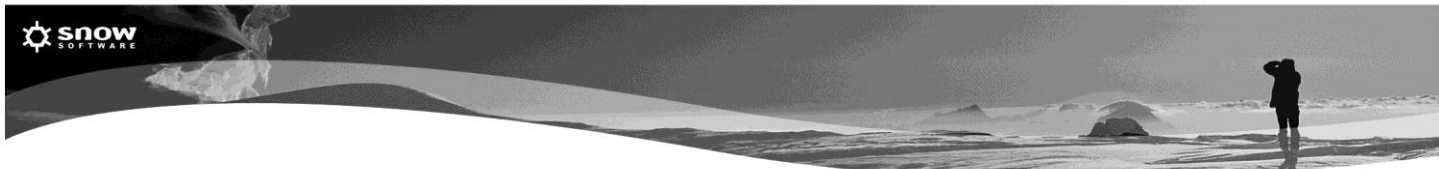
**-test**

Test connection to the selected Snow IDR server. Works only with IDR versions which contains the "GetServerDate" function.



## Additional information

- The clients log can by default be found in:
  - Linux: /etc/snow/client.lg
  - OS X: /Library/Application Support/Snow Software/client.lg
- Temporary files will be stored in /tmp/snow/  
They will all be deleted when not needed.
- The Inventory client will scan the computer once every 24 hours.
- If the client for any reason can't send data to the server it will store everything and try again every 15 minutes by default.
- Data not sent can by default be found in:
  - OS X: /Library/Application Support/Snow Software/\*.inv
  - Linux: /etc/snow/\*.inv
- If the scanner by any reason can't scan a binary, it might (by choice of internal logics) add it as a SkipFile in the configuration file so it isn't scanned in the future. The SkipFolders/SkipFiles are resetted/cleared when the client receives a new configuration file.
- To temporarily gain superuser privileges you can often send the command line as an argument to the command sudo. For example: sudo ./xClient test
- If the clients ID is a generated GUID, it will be stored in a file called /etc/.snowguid



## What's new

### **xClient for OS X version 2.0.00 - 2010 12 21**

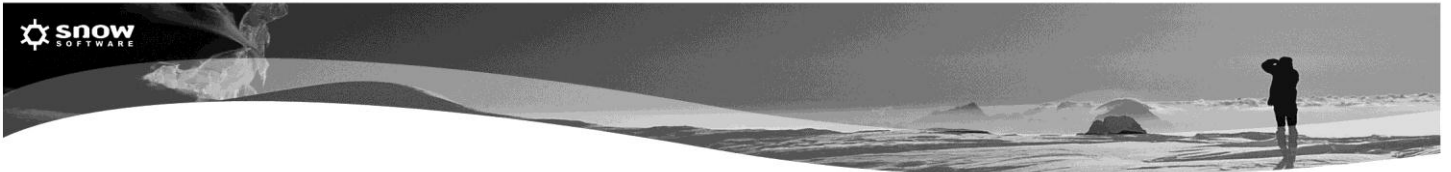
- New installers.
- Now the client works more as a typical daemon. New file structure and some internal changes in the event handling mechanisms.
- Improved software scanning system.
- Improved software filtering.
- More stable communication with the IDR server.
- Added new argument [test]. Test connection to server.
- Added new argument [stop]. Stop the scanner if it's working.
- Added configuration option [UpdateDyldCache]. Only executes during client installation.
- Added configuration option [TrunkSoftwarePackages].

### **xClient for Linux version 1.4.00 - 2010 12 17**

- Added support for reading software meta data from Debian based systems.
- Improved software scanning system.
- Improved software filtering.
- Added support for x86\_64 (64 bit) systems in a separate client.
- Added configuration option [TrunkSoftwarePackages].
- Added a configuration option to use a cron file instead of using the roots crontab [UseCronFile].
- Added support for discovering OS name and some additional info from more than 30 more linux distributions. Note: Those are still not supported distributions.
- Added new argument [test]. Test connection to server.
- Added new argument [stop]. Stop the scanner if it's working.
- Added the RPM Database Conditioner which tries to do a gentle service of the RPM database if it doesn't seem to be in good condition. Configuration option [RunRpmDbConditioner].
- Added scanning of Network Adapters for most linux distributions.
- Added basic scanning of Multimedia Adapters for most linux distributions.
- Added basic scanning of Video Adapters for most linux distributions.
- Added basic scanning of input devices for most linux distributions.
- Better scanning for information about local disks.
- Added Operating System Kernel Type.
- Flash memory modules are no longer reported as RAM modules.
- Small fix where Total Virtual Memory could show an unrealistic number when scanning a virtual machine. Now it shows "0" instead where there are no valid info.
- Hidden some irrelevant warnings from showing up when forcing a scan.
- Fixed some more text encoding problems and added some more text cleaning.

### **xMetering version 1.3.00**

- Updated to work with xClient version 2.0.00.



## Appendix A : Example configuration

SendToWebService=yes  
DestinationWebService=http://idr.company.com

SiteID=COMPANY  
ID=guid  
ConfigurationName=MyConfigurationName  
CollectHardwareInfo=yes  
CollectSoftwareInfo=yes  
RunJarScanner=yes  
ReportAllJarFiles=yes  
TrunkSoftwarePackages=yes