Version 1.0-1

LAN Manager
Updates and Deployments Documentation

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Change History

Version: 1.0-1
Modifier: Eric Henricks
Date: 08/24/2017
Description of Change: Added documentation of version 1.0-1 of lanManager.

Version:
Modifier:
Date:
Description of Change:

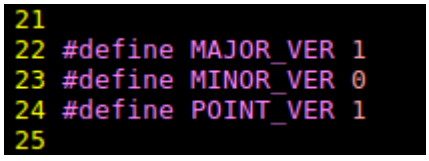
1 Updates

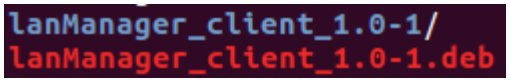
Note The lanManager software should only be updated if the developer has access to the following files…

- lanManager.c
- The lanman/ directory, and all of its' related web page contents
- An updated version of the sqlite3.c file (This is a file from sqlite3 and can be downloaded from an on line source)

When updating lanManager, it will be important to understand how a change in the program code might affect the lanManager database and the server's web page. An update to one aspect of lanManager may require multiple changes to the server side, client side, and web page code, so referring to the main program documentation file, lanManager_Documentation.odt (or .pdf), is recommended during this process. For instance, a developer might find it would be convenient for lanManager to display extra information, such as the current operating system version running on a client, on the server's web page, so it would make sense to update the web page to be able to display this new information. However, extra steps will be required to obtain this information as updates will need to be made to the client side code, server side code, and the database, in which these three aspects of lanManager can be updated in the lanManager.c file, to accommodate this new information.

After making any changes to lanManager, the developer should also update the program version by changing the three constant variables defined at the top of lanManager.c, as well as change the name of the Debian package to match the current version of the program.





For additional information about how lanManager works, and where to implement new code for updating lanManager, refer to lanManager_Documentation.odt (or .pdf).

To compile an updated version of lanManager, use the following command:

"gcc -o lanManager lanManager.c sqlite3.c -lpthread -ldl -lrt"

The stated command will create a new lanManager executable using the required command line options needed to execute all of the functions used in lanManager.

2 Deployment

> **Note** The deployment procedures for distributing the lanManager client software, via the server's web page, is covered in lanManager_Documentation.odt (and .pdf), and will not be covered again in this document.

Steps to follow when deploying lanManager:

- Create new / Remake old Debian package (Streamlined with RemakePackage.sh script)
- Verify configuration settings in labAuditConfig.ini file
- Transfer over and install lanManager_server_<*Version#*>.deb on desired server device(s).
- Transfer over and install lanManager_client_<*Version#*>.deb on desired server device(s). Alternatively, client installation can be handled via the server machine's lanManager web page as described in lanManager_Documentation.odt (and .pdf).

Creating a new / Remaking an old Debian package:

The process of creating/remaking a Debian package for lanManager has been streamlined with the usage of bash scripts. The three bash scripts are named Makepackage.sh, Makepackage_client.sh, and RemakePackage.sh. Makepackage.sh is used to created a new server Debian package, Makepackage_client.sh is used to make a new client Debian package, and RemakePackage.sh is used to run, both Makepackage.sh and Makepackage_client.sh, create the two Debian packages for lanManager, and install the server package onto the local device for usage. These three bash scripts require a version number to be input, such as 1.0-1, to determine the naming scheme for the newly created Debian packages. For example, if we wanted to use the RemakePackage.sh script to make Debian packages for a new version of lanManager, then we could call RemakePackage.sh and tell the script to use the version number 1.0-2 by using the command: "sudo ./RemakePackage.sh 1.0-2"

Verify configuration settings

Verifying the configuration settings for each package before deploying the new version of lanManager to other devices is important, as these configuration settings will be used for lanManager on all new devices. In some cases, a client may not want to use the default settings in the configuration file, so changing these settings appropriately, before the software is deployed, will remove the headache of having to change a configuration file on new device in the future. The configuration file for the new Debian package can be found at etc/lanManager/labAuditConfig.ini in every lanManager Debian package that is made by one of the previously described bash scripts.

Note After changes have been made to the configuration file, the Debian package may have to be remade using the dpkg command:

> "dpkg-deb --build -Zgzip *DirectoryName*"

Transferring over Debian packages and installing

Transferring over Debian packages manually is relatively quick and straightforward. The quickest way to install the client packages is via the server's web page as described in lanManager_Documentation.odt (and .pdf), however, this method isn't aways available, so we have to rely on slightly less convenient options. The best alternative to use in this situation would be the usage of the SCP (Secure Copy) command to quickly send over the desired Debian package to each

respective device, and then log onto each machine, with the SSH command, and install the package with sudo privileges. Another option available would be to put the desired Debian packages onto a flash drive and then install them by going from machine to machine, although this method does require direct access to each device.

Upon installation, lanManager will automatically launch a daemon using its' configuration settings, and will begin communicating on the local area network. For additional information regarding lanManager, please refer to lanManager_Documentation.odt (or .pdf).