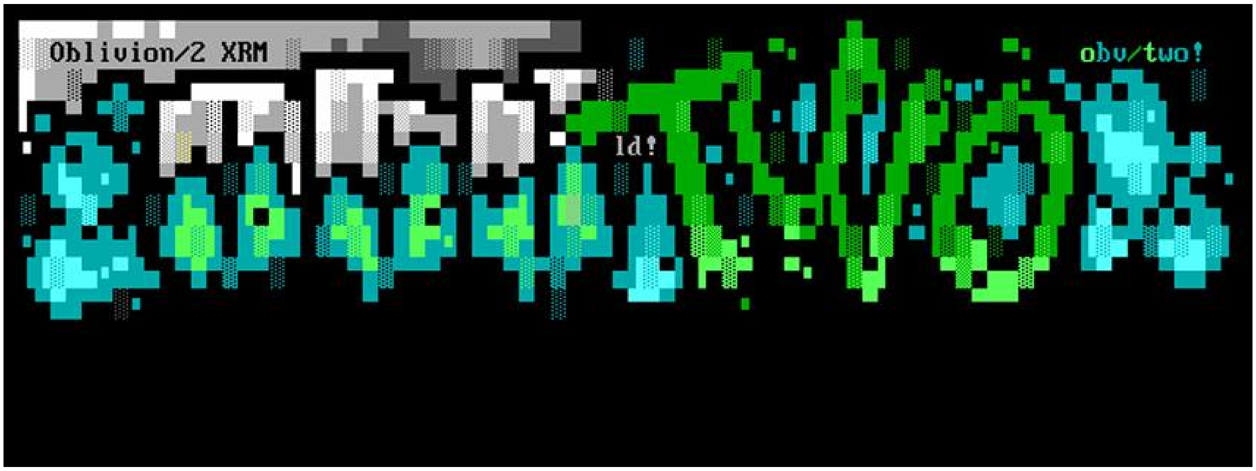
Oblivion2-XRM

Release 0.1

Graziella

Jun 18, 2022

CONTENTS



A text based bulletin board system served over Telnet. XRM for (Extreme Remake) is my attempt to recreate and emulate one of the most popular DOS based BBS software with its one of a kind interface and configurability.

CHAPTER

ONE

TABLE OF CONTENTS

CHAPTER TWO

PROJECT DETAILS

Important: This software is in very early development, and not a fully functional BBS.

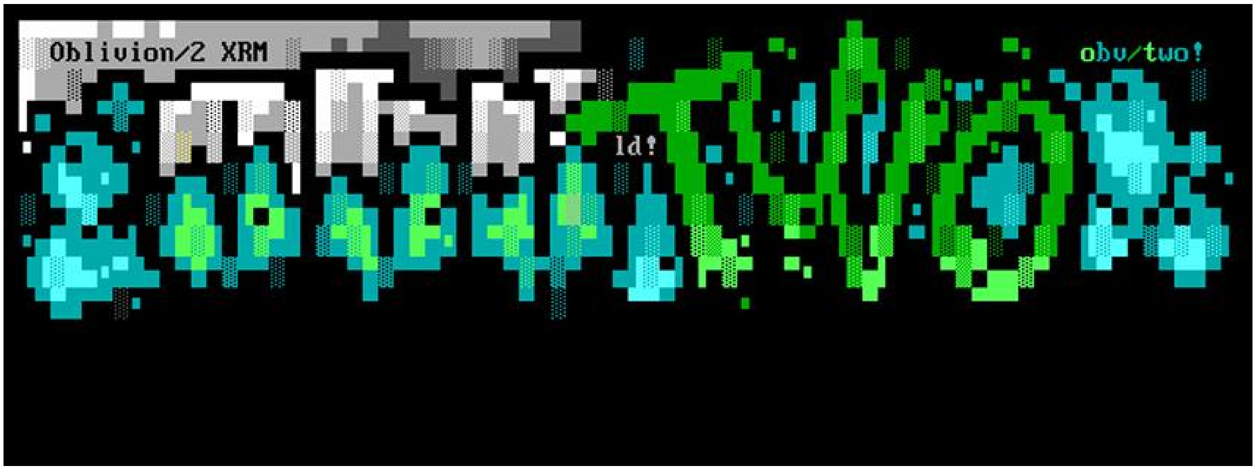
Follow Project Status Project Tracker
The Software is written in C++ supporting Windows, Linux, and OS/X at this time.
Build Documentation below will help you explore the system locally if you wish to build the application

CHAPTER

THREE

PROJECT AND BUILD DOCUMENTATION (WIP)

3.1 Install Guides



3.1.1 OS/X Setup and Build Guide

Table 1: Latest Content Changes

Date	Update Notes
09/16/2018	Initial Write up on Latest High Sierra distribution.
07/26/2019	Updated dependency paths and build scripts with documentation
05/08/2022	Updated dependencies that were missed also fixed Makefiles
05/17/2022	Updated guide to .RST format

Important: Latest Builds Tested on OS/X Catalina

Libraries to Install

Note: Boost is only used for the menu and prompt conversion utilities. Future plans are to remove this dependency.

List of Dependencies
sqlite yaml-cpp openssl libssh ossp-uuid boost unittest-cpp

Note: Some might not use Homebrew for their package management. However, I needed to setup specific Include file locations in the ".mk" Makefiles if you do NOT use Homebrew, then these Include paths would need to be updated manually.

Important: Requirements, you should have XCode w/ Command line Tools installed. If not, you can usually install this from the Apple Store.

Install Homebrew:

```
ruby -e "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install)"
```

Update Homebrew - And Possibly your OS to the latest version:

```
brew doctor
brew update
```

Install Dependencies via Brew:
All required libs are installed to **/usr/local/opt**

```
brew install sqlite3
brew install yaml-cpp
brew install ossp-uuid
brew install libssh
brew install openssl@3
brew install unittest-cpp
brew install boost
```

Optional Dependencies depending on your Development Environment
Install GIT to pull down project:

```
brew install git
```

Install latest compiler with c++11 compatibility as NEEDED!
You should have at least the following version installed or higher

```
Apple LLVM version 9.0.0 (clang-900.0.39.2)
Target: x86_64-apple-darwin17.4.0
Thread model: Posix
InstalledDir: /Library/Developer/CommandLineTools/usr/bin
```

Note: Only Need to install or upgrade if your compiler if the version is lower then this!

```
brew install clang
```

You can check check `/usr/local/Cellar` for program versions installed
All Lib and Include files are linked to `/usr/local/opt`

Clone the project

This will checkout and create project in an `Oblivion2-XRM` folder where you run the command.

```
git clone https://github.com/M-griffin/Oblivion2-XRM.git
```

```
cd Oblivion2-XRM
cd build
./build-osx.sh -j2
```

Note: -j# is number of cpu cores for faster compiling

`Build Script` compiles each part of the application and it's utilities and Unit Tests
The executable programs are copied to the build folder for running.

```
./xrm-server              - to start the bbs
./xrm-unittest            - to run the unit tests
```

Helper Applications Only used if you are converting legacy items or mods.

```
./xrm-menu-convert        - convert Legacy Obv/2 menus to yaml
./xrm-menu-prompt-convert - convert Legacy Obv/2 prompts to yaml
```

Note: Converters only tested on default Menu's and prompt files. Should work for menu and prompt mods too.

Running the BBS

`Default Telnet Port`: 6023

Ports and General Setup can be updated in the `xrm-server.yaml` configuration file
The **configuration** gets auto-generated once you start the system the first time.

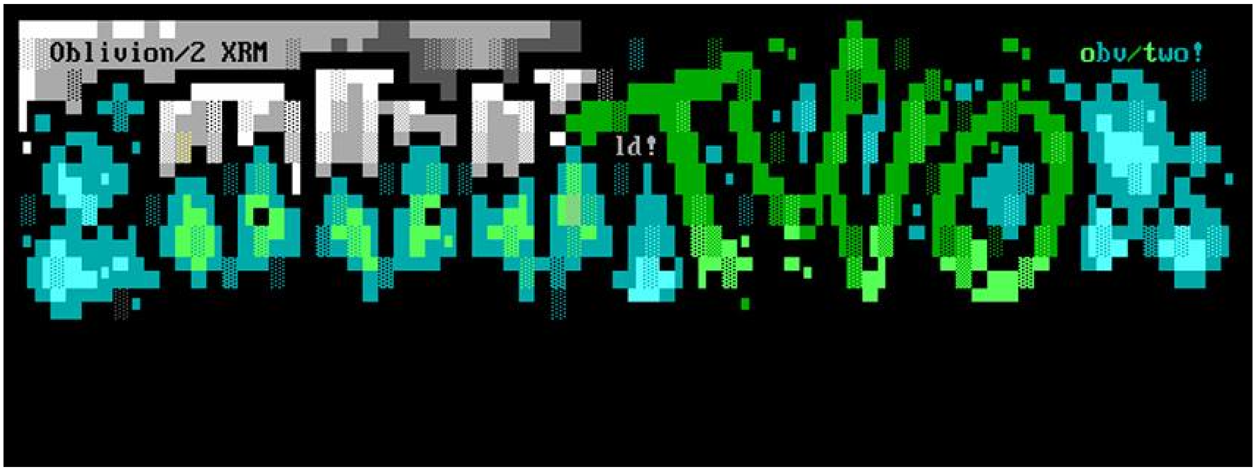
All data files, and configuration file are generated on the initial startup of the system. If you goof anything up, simply delete any of the `.yaml` file(s) you made a mistake and want to start over. Than re-start the program and the files regenerate to defaults.

Starting the BBS

```
./xrm-server  -  the main configuration file generates in the root bbs folder.
```

I’m playing around with a yaml logging format, any feedback is welcome. =)

New User Password: `newuser` The first created user becomes a SysOp set to level 255
All other users are normal access levels and can be adjusted in the | Sysop Menu | User Editor



3.1.2 Linux (Debian/Ubuntu/Mint) Setup and Build Guide

Table 2: Latest Content Changes

Date	Update Notes
07/26/2019	Initial Write up with new command line build script.
05/20/2022	Updated guide to .RST format

Important: Latest Builds Tested on Mint 20.3 (Cinnamon 64-Bit) and Ubuntu 22.04 (LTS 64-Bit)

Libraries to Install

Note: Boost is only used for the menu and prompt conversion utilities. Future plans are to remove this dependency.

List of Dependencies
sqlite yaml-cpp openssl libssh ossp-uuid boost unittest-cpp

Install Packages

```
sudo apt-get install build-essential
sudo apt-get install libyaml-cpp-dev
sudo apt-get install libssh-dev
sudo apt-get install libboost-all-dev
```

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(continued from previous page)

```
sudo apt-get install libsqlite3-dev
sudo apt-get install uuid-dev
sudo apt-get install libunittest++-dev
```

Optional Dependencies depending on your Development Environment

Install GIT to pull down project:

```
apt-get install git
```

Install latest compiler with c++11 compatibility.

Most systems within the last several years are recent enough to support C++11 Compatibility. Any version above GCC 4.8.1.

Note: Only Need to install or upgrade if your compiler is ancient dirt. :)

Clone the project

This will checkout and create project in an `Oblivion2-XRM` folder where you run the command.

```
git clone https://github.com/M-griffin/Oblivion2-XRM.git
```

```
cd Oblivion2-XRM
cd build
./build-linux.sh -j2
```

Note: -j# is number of cpu cores for faster compiling

`Build Script` compiles each part of the application and it's utilities and Unit Tests
The executable programs are copied to the build folder for running.

```
./xrm-server              - to start the bbs
./xrm-unittest            - to run the unit tests
```

Helper Applications Only used if you are converting legacy items or mods.

```
./xrm-menu-convert        - convert Legacy Obv/2 menus to yaml
./xrm-menu-prompt-convert - convert Legacy Obv/2 prompts to yaml
```

Note: Converters only tested on default Menu's and prompt files. Should work for menu and prompt mods too.

Running the BBS

`Default Telnet Port`: 6023

Ports and General Setup can be updated in the `xrm-server.yaml` configuration file
The **configuration** gets auto-generated once you start the system the first time.

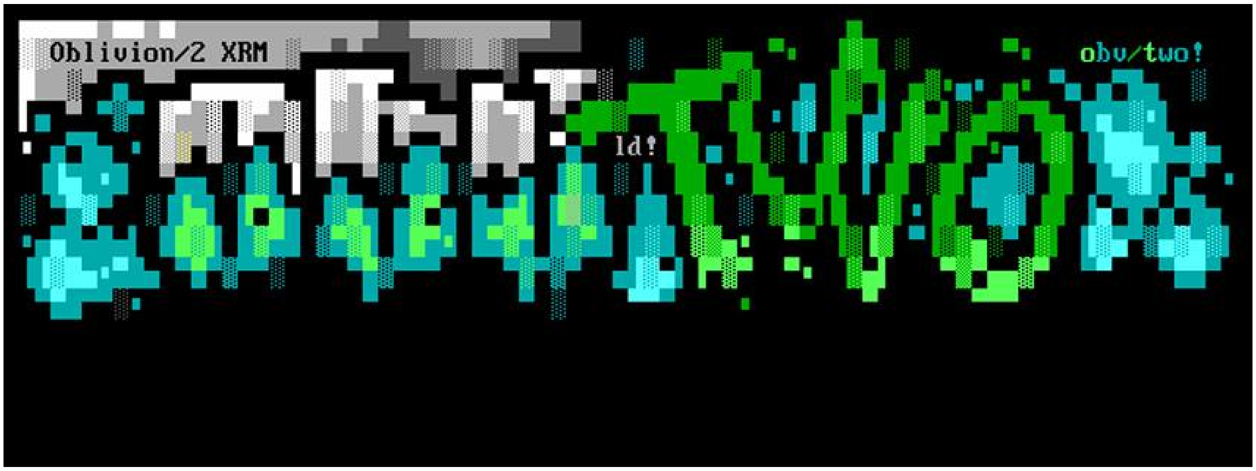
All data files, and configuration file are generated on the initial startup of the system. If you goof anything up, simply delete any of the `.yaml` file(s) you made a mistake and want to start over. Than re-start the program and the files regenerate to defaults.

Starting the BBS

```
./xrm-server  -  the main configuration file generates in the root bbs folder.
```

I'm playing around with a yaml logging format, any feedback is welcome. =)

New User Password: `newuser` The first created user becomes a SysOp set to level 255
All other users are normal access levels and can be adjusted in the | Sysop Menu | User Editor



3.1.3 Docker Image Creation and Run Guide

Table 3: Latest Content Changes

Date	Update Notes
05/21/2022	Initial Guide in .RST format

Important: Latest Tested in Windows 10 64 bit Docker with Linux Containers.

Clone the project

This will checkout and create project in an `Oblivion2-XRM` folder where you run the command.

```
git clone https://github.com/M-griffin/Oblivion2-XRM.git
```

```
cd Oblivion2-XRM
```

Next from the root project folder you can run the following docker commands.

Docker

Important: This is a preview of the development work, It's not a fully functional system You can browse Menu's, and some initial sysop functions such as the User, Menu, Message and Level editors. With the Full Screen Message editor in the works.

Note: Being this is a preview the default setup here is to build and run a preview, the `container` or `image` will not save any new users or configuration changes made while adventuring around. Once the application is more ready for release then some updated documentation will be created for using volumes to run your container's from.

Docker-Compose

The following commands should be run from the root `Oblivion2-XRM` folder.

First time setup or on changes `build` is used to create or update the docker image. recreating from any changes or updates when pulling down the branch.

Build and Startup Commands

```
docker-compose build && docker-compose up
```

Startup Command - All other times to startup the container you only need to run:

```
docker-compose up
```

Connecting to the BBS

`Default Telnet Port`: 6023
The **configuration** gets auto-generated once you start the system the first time.

New User Password: `newuser` The first created user becomes a SysOp set to level 255
All other users are normal access levels and can be adjusted in the | Sysop Menu | User Editor

Logging into the container

Logging in replace the *<CONTAINER ID>* below with the actual id of the container that is running.
use the `docker ps` to get a list of running containers.

```
docker ps
docker exec -it <CONTAINER ID> /bin/bash
```

You should now be in the logged in and in the following folder `/usr/src/Oblivion2-XRM/build` The root of the BBS executable folder. This folder also contains core of the bbs application. You'll find the main `xrm-server.yaml` configuration file with other data files in the `data` folder.

Note: The BBS is running by default.

List of Executables

```
./xrm-server                - to start the bbs
./xrm-unittest              - to run the unit tests
```

Helper Applications Only used if you are converting legacy items or mods.

```
./xrm-menu-convert          - convert Legacy Obv/2 menus to yaml
./xrm-menu-prompt-convert - convert Legacy Obv/2 prompts to yaml
```

Note: Converters only tested on default Menu's and prompt files. Should work for menu and prompt mods too.

CHAPTER

FOUR

DEVELOPMENT GOALS

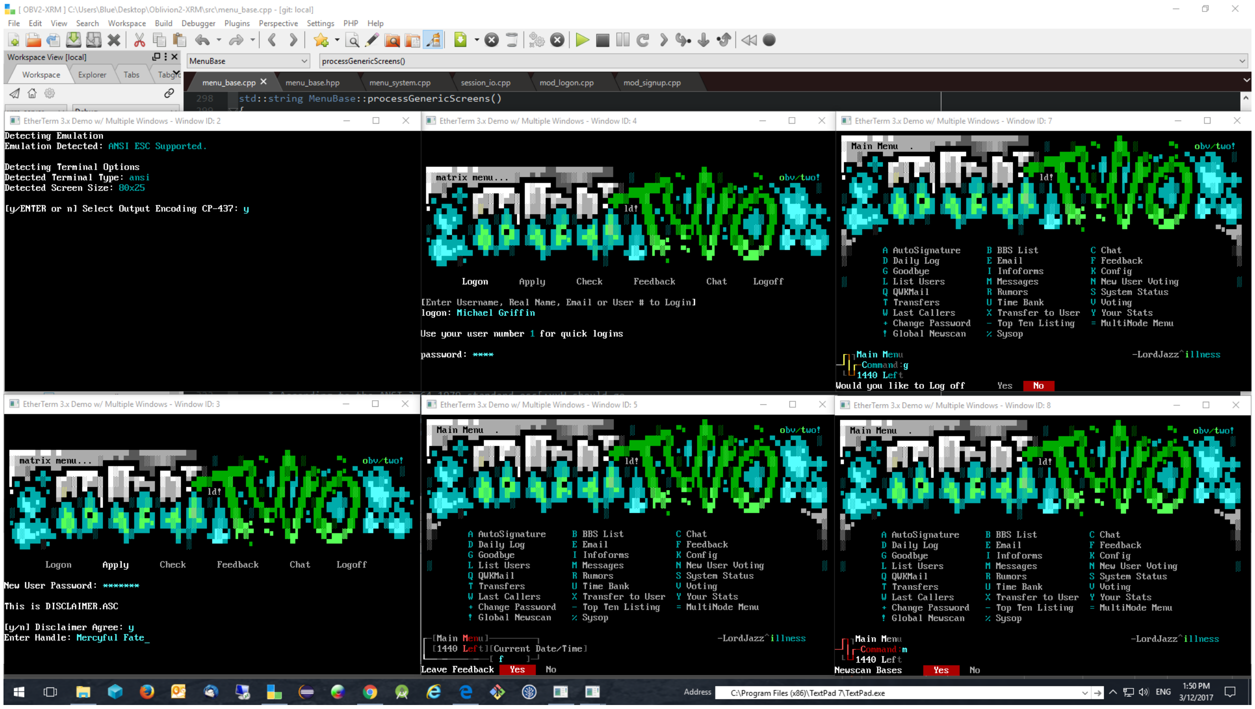
The initial goal is to implement all legacy system actions in use on the default setup/install. With options for extended customization added later on to keep progress going.

CHAPTER FIVE

PROGRESS NOTES

Screen shot showing some of the latest work on the menu system. The default theme template and menu prompt in action while switching menus. The menu system is still pretty raw and a lot of logic still needs to be completed.

Important: This is a preview of the development work, It's not a fully functional system You can browse Menu's, and some initial sysop functions such as the User, Menu, Message and Level editors. With the Full Screen Message editor in the works.


[OBV2-XRM] C:\Users\Blue\Desktop\Oblivion2-XRM\src\menu_base.cpp - [git: local]
File Edit View Search Workspace Build Debugger Plugins Perspective Settings PHP Help
Workspace View [local]
Workspace Explorer Tabs Tabgroups
MenuBase
processGenericScreens()
menu_base.cpp
menu_base.hpp
menu_system.cpp
session_io.cpp
mod_logon.cpp
mod_signup.cpp
EtherTerm 3.x Demo w/ Multiple Windows - Window ID: 2
EtherTerm 3.x Demo w/ Multiple Windows - Window ID: 4
EtherTerm 3.x Demo w/ Multiple Windows - Window ID: 7
EtherTerm 3.x Demo w/ Multiple Windows - Window ID: 3
EtherTerm 3.x Demo w/ Multiple Windows - Window ID: 5
EtherTerm 3.x Demo w/ Multiple Windows - Window ID: 8
matrix menu...
Main Menu .
obv/two!
ld!
Address
C:\Program Files (x86)\TextPad 7\TextPad.exe
ENG
1:50 PM
3/12/2017

```
std::string MenuBase::processGenericScreens()
```

```
Detecting Emulation
Emulation Detected: ANSI ESC Supported.

Detecting Terminal Options
Detected Terminal Type: ansi
Detected Screen Size: 80x25

[y/ENTER or n] Select Output Encoding CP-437: y
```

```
      Logon      Apply      Check      Feedback      Chat      Logoff

[Enter Username, Real Name, Email or User # to Login]
logon: Michael Griffin

Use your user number 1 for quick logins

password: ****
```

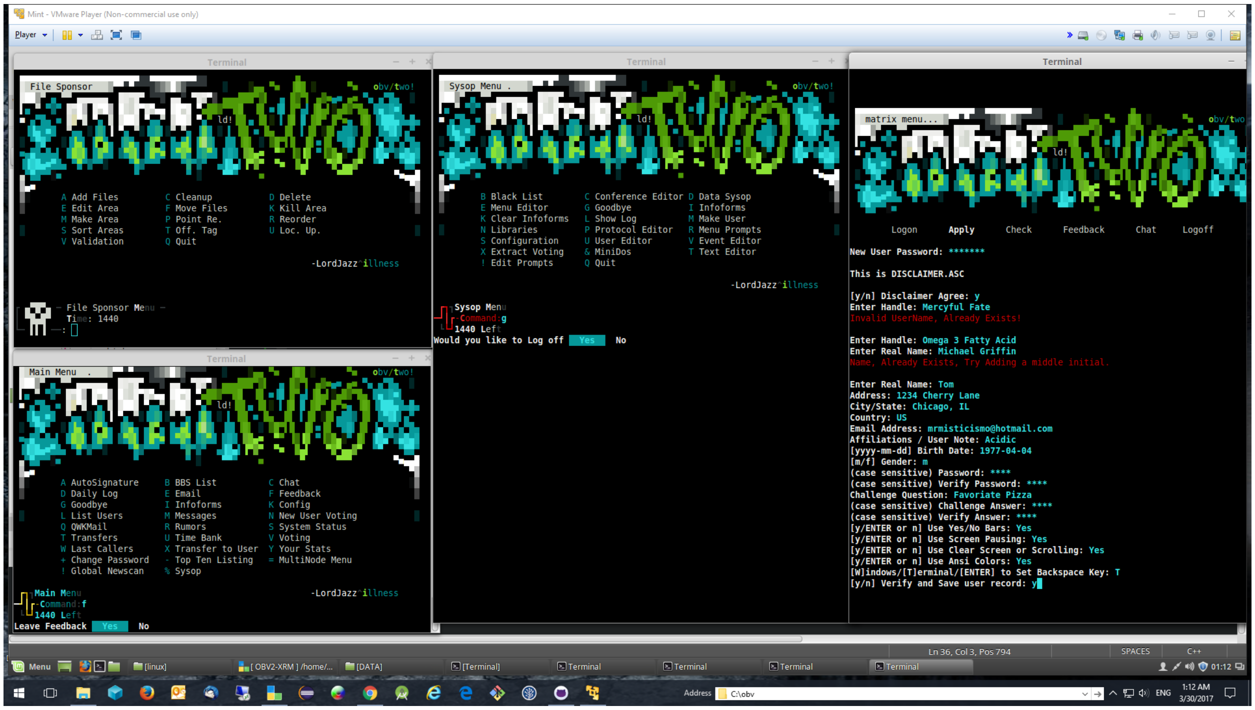
```
     A AutoSignature     B BBS List           C Chat
     D Daily Log         E Email              F Feedback
     G Goodbye           I Infoforms          K Config
     L List Users        M Messages           N New User Voting
     Q QWKMail           R Rumors             S System Status
     T Transfers         U Time Bank          V Voting
     W Last Callers      X Transfer to User   Y Your Stats
     + Change Password   - Top Ten Listing    = MultiNode Menu
     ! Global Newscan    % Sysop

  Main Menu                                           -LordJazz^illness
   Command:g
  1440 Left
Would you like to Log off      Yes   No
```

```
      Logon      Apply      Check      Feedback      Chat      Logoff

New User Password: *******

This is DISCLAIMER.ASC

[y/n] Disclaimer Agree: y
Enter Handle: Mercyful Fate_
```

```
     A AutoSignature     B BBS List           C Chat
     D Daily Log         E Email              F Feedback
     G Goodbye           I Infoforms          K Config
     L List Users        M Messages           N New User Voting
     Q QWKMail           R Rumors             S System Status
     T Transfers         U Time Bank          V Voting
     W Last Callers      X Transfer to User   Y Your Stats
     + Change Password   - Top Ten Listing    = MultiNode Menu
     ! Global Newscan    % Sysop

 ┌[Main Menu]─────────┐                               -LordJazz^illness
 [1440 Left][Current Date/Time]
 └──────────[ f    ]─┘
Leave Feedback  Yes   No
```

```
     A AutoSignature     B BBS List           C Chat
     D Daily Log         E Email              F Feedback
     G Goodbye           I Infoforms          K Config
     L List Users        M Messages           N New User Voting
     Q QWKMail           R Rumors             S System Status
     T Transfers         U Time Bank          V Voting
     W Last Callers      X Transfer to User   Y Your Stats
     + Change Password   - Top Ten Listing    = MultiNode Menu
     ! Global Newscan    % Sysop

  Main Menu                                           -LordJazz^illness
   Command:m
  1440 Left
Newscan Bases    Yes   No
```

Then some screen shots in Linux Mint (Vmware) of the most recent updates.



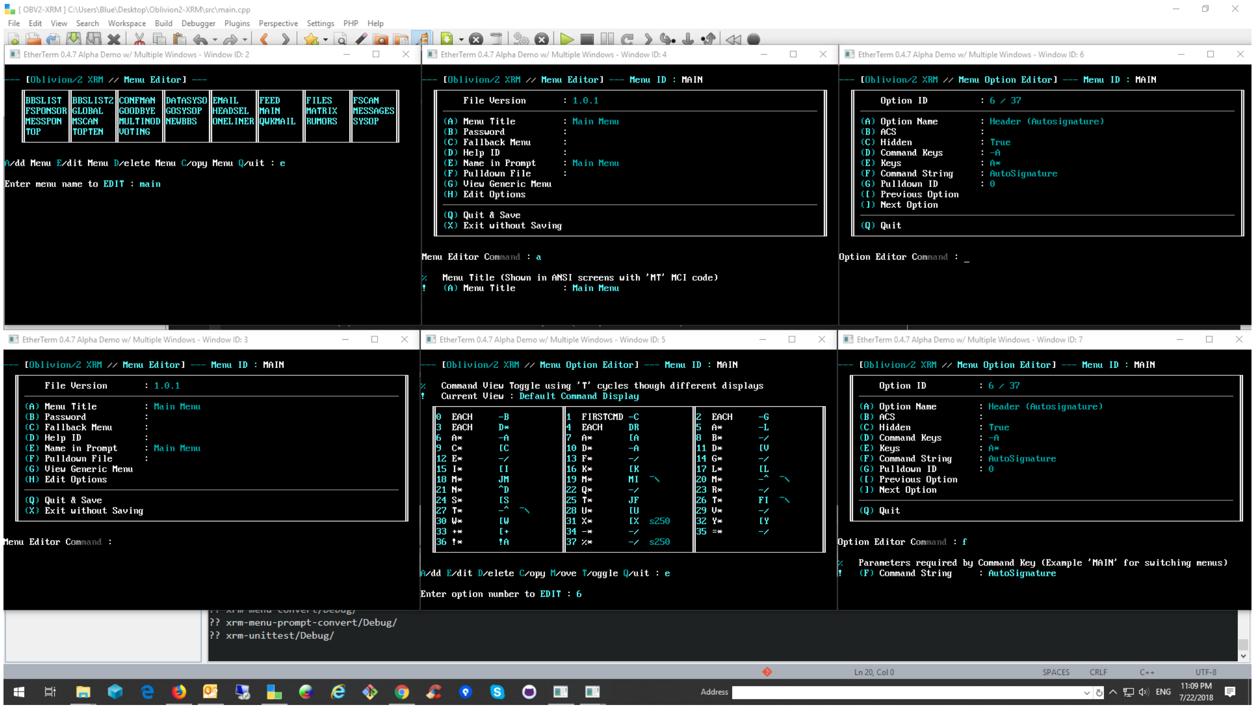
```
File Sponsor

     A Add Files       C Cleanup       D Delete
     E Edit Area       F Move Files    K Kill Area
     M Make Area       P Point Re.     R Reorder
     S Sort Areas      T Off. Tag      U Loc. Up.
     V Validation      Q Quit

                                          -LordJazz^illness

  - File Sponsor Menu -
  Time: 1440
 ──:
```

```
Sysop Menu .

     B Black List        C Conference Editor D Data Sysop
     E Menu Editor       G Goodbye           I Infoforms
     K Clear Infoforms   L Show Log          M Make User
     N Libraries         P Protocol Editor   R Menu Prompts
     S Configuration     U User Editor       V Event Editor
     X Extract Voting    & MiniDos           T Text Editor
     ! Edit Prompts      Q Quit

                                          -LordJazz^illness

  Sysop Menu
 -Command:g
  1440 Left
Would you like to Log off  Yes   No
```

```
Main Menu .

     A AutoSignature     B BBS List            C Chat
     D Daily Log         E Email               F Feedback
     G Goodbye           I Infoforms           K Config
     L List Users        M Messages            N New User Voting
     Q QWKMail           R Rumors              S System Status
     T Transfers         U Time Bank           V Voting
     W Last Callers      X Transfer to User    Y Your Stats
     + Change Password   - Top Ten Listing     = MultiNode Menu
     ! Global Newscan    % Sysop

  Main Menu                               -LordJazz^illness
 -Command:f
  1440 Left
Leave Feedback  Yes   No
```

```
matrix menu...

    Logon     Apply     Check     Feedback     Chat     Logoff
New User Password: *******

This is DISCLAIMER.ASC

[y/n] Disclaimer Agree: y
Enter Handle: Mercyful Fate
Invalid UserName, Already Exists!

Enter Handle: Omega 3 Fatty Acid
Enter Real Name: Michael Griffin
Name, Already Exists, Try Adding a middle initial.

Enter Real Name: Tom
Address: 1234 Cherry Lane
City/State: Chicago, IL
Country: US
Email Address: mrmisticismo@hotmail.com
Affiliations / User Note: Acidic
[yyyy-mm-dd] Birth Date: 1977-04-04
[m/f] Gender: m
(case sensitive) Password: ****
(case sensitive) Verify Password: ****
Challenge Question: Favoriate Pizza
(case sensitive) Challenge Answer: ****
(case sensitive) Verify Answer: ****
[y/ENTER or n] Use Yes/No Bars: Yes
[y/ENTER or n] Use Screen Pausing: Yes
[y/ENTER or n] Use Clear Screen or Scrolling: Yes
[y/ENTER or n] Use Ansi Colors: Yes
[W]indows/[T]erminal/[ENTER] to Set Backspace Key: T
[y/n] Verify and Save user record: y
```

Sample of the Menu Editor modeled after the classic style


[OBV2-XRM] C:\Users\Blue\Desktop\Oblivion2-XRM\src\main.cpp
File
Edit
View
Search
Workspace
Build
Debugger
Plugins
Perspective
Settings
PHP
Help
EtherTerm 0.4.7 Alpha Demo w/ Multiple Windows - Window ID: 2
EtherTerm 0.4.7 Alpha Demo w/ Multiple Windows - Window ID: 4
EtherTerm 0.4.7 Alpha Demo w/ Multiple Windows - Window ID: 6
EtherTerm 0.4.7 Alpha Demo w/ Multiple Windows - Window ID: 3
EtherTerm 0.4.7 Alpha Demo w/ Multiple Windows - Window ID: 5
EtherTerm 0.4.7 Alpha Demo w/ Multiple Windows - Window ID: 7
Ln 20, Col 0
SPACES
CRLF
C++
UTF-8
Address
ENG
11:09 PM
7/22/2018

```
--- [Oblivion/2 XRM // Menu Editor] ---

  ║BBSLIST ║BBSLIST2║CONFMAN ║DATASYSO║EMAIL   ║FEED    ║FILES   ║FSCAN   ║
  ║FSPONSOR║GLOBAL  ║GOODBYE ║GOSYSOP ║HEADSEL ║MAIN    ║MATRIX  ║MESSAGES║
  ║MESSPON ║MSCAN   ║MULTINOD║NEWBBS  ║ONELINER║QWKMAIL ║RUMORS  ║SYSOP   ║
  ║TOP     ║TOPTEN  ║VOTING  ║        ║        ║        ║        ║        ║

A/dd Menu E/dit Menu D/elete Menu C/opy Menu Q/uit : e

Enter menu name to EDIT : main
```

```
--- [Oblivion/2 XRM // Menu Editor] --- Menu ID : MAIN

      File Version          : 1.0.1

  (A) Menu Title            : Main Menu
  (B) Password              :
  (C) Fallback Menu         :
  (D) Help ID               :
  (E) Name in Prompt        : Main Menu
  (F) Pulldown File         :
  (G) View Generic Menu
  (H) Edit Options

  (Q) Quit & Save
  (X) Exit without Saving

Menu Editor Command : a

%   Menu Title (Shown in ANSI screens with 'MT' MCI code)
!   (A) Menu Title          : Main Menu
```

```
--- [Oblivion/2 XRM // Menu Option Editor] --- Menu ID : MAIN

      Option ID             : 6 / 37

  (A) Option Name           : Header (Autosignature)
  (B) ACS                   :
  (C) Hidden                : True
  (D) Command Keys          : -A
  (E) Keys                  : A*
  (F) Command String        : AutoSignature
  (G) Pulldown ID           : 0
  ([) Previous Option
  (]) Next Option

  (Q) Quit

Option Editor Command : _
```

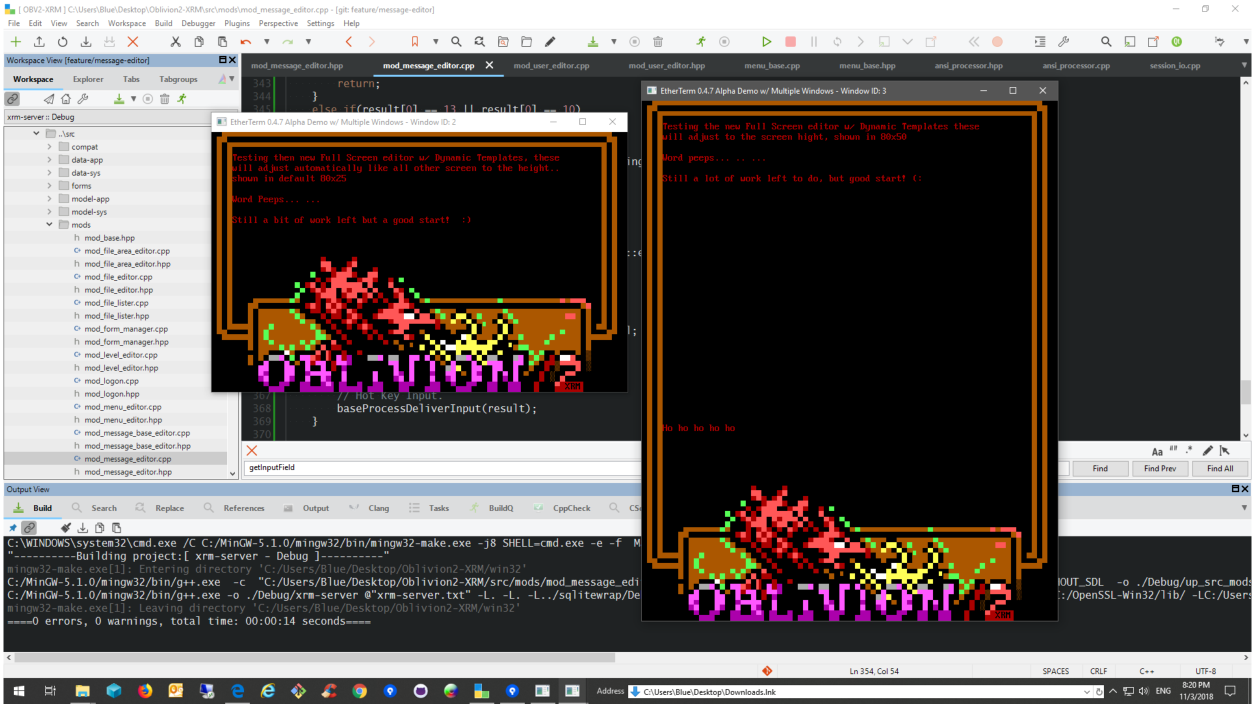
```
--- [Oblivion/2 XRM // Menu Editor] --- Menu ID : MAIN

      File Version          : 1.0.1

  (A) Menu Title            : Main Menu
  (B) Password              :
  (C) Fallback Menu         :
  (D) Help ID               :
  (E) Name in Prompt        : Main Menu
  (F) Pulldown File         :
  (G) View Generic Menu
  (H) Edit Options

  (Q) Quit & Save
  (X) Exit without Saving

Menu Editor Command :
```

```
--- [Oblivion/2 XRM // Menu Option Editor] --- Menu ID : MAIN

%   Command View Toggle using 'T' cycles though different displays
!   Current View : Default Command Display

  ║0  EACH     -B       ║1  FIRSTCMD -C       ║2  EACH     -G       ║
  ║3  EACH     D*       ║4  EACH     DR       ║5  A*       -L       ║
  ║6  A*       -A       ║7  A*       [A       ║8  B*       -/       ║
  ║9  C*       [C       ║10 D*       -A       ║11 D*       [V       ║
  ║12 E*       -/       ║13 F*       -/       ║14 G*       -/       ║
  ║15 I*       [I       ║16 K*       [K       ║17 L*       [L       ║
  ║18 M*       JM       ║19 M*       MI  ~\   ║20 M*       -^  ~\   ║
  ║21 N*       ^D       ║22 Q*       -/       ║23 R*       -/       ║
  ║24 S*       [S       ║25 T*       JF       ║26 T*       FI  ~\   ║
  ║27 T*       -^  ~\   ║28 U*       [U       ║29 V*       -/       ║
  ║30 W*       [W       ║31 X*       [X  s250 ║32 Y*       [Y       ║
  ║33 +*       [+       ║34 -*       -/       ║35 =*       -/       ║
  ║36 !*       !A       ║37 %*       -/  s250 ║                     ║

A/dd E/dit D/elete C/opy M/ove T/oggle Q/uit : e

Enter option number to EDIT : 6
```

```
--- [Oblivion/2 XRM // Menu Option Editor] --- Menu ID : MAIN

      Option ID             : 6 / 37

  (A) Option Name           : Header (Autosignature)
  (B) ACS                   :
  (C) Hidden                : True
  (D) Command Keys          : -A
  (E) Keys                  : A*
  (F) Command String        : AutoSignature
  (G) Pulldown ID           : 0
  ([) Previous Option
  (]) Next Option

  (Q) Quit

Option Editor Command : f

%   Parameters required by Command Key (Example 'MAIN' for switching menus)
!   (F) Command String      : AutoSignature
```

```
?? xrm-menu-convert/Debug/
?? xrm-menu-prompt-convert/Debug/
?? xrm-unittest/Debug/
```

Work In Progress (Latest Feature Branch) - Full Screen Message Editor Initial design concept with expanding height templates that the are used in the rest of the system.



```
            return;
        }
        else if(result[0] == 13 || result[0] == 10)
```

```
            // Hot Key Input.
            baseProcessDeliverInput(result);
        }
```

```
Testing then new Full Screen editor w/ Dynamic Templates, these
will adjust automatically like all other screen to the height..
shown in default 80x25

Word Peeps... ...

Still a bit of work left but a good start!  :)
```

```
Testing the new Full Screen editor w/ Dynamic Templates these
will adjust to the screen hight, shown in 80x50

Word peeps... .. ...

Still a lot of work left to do, but good start! (:
```

```
Ho ho ho ho ho
```

```
C:\WINDOWS\system32\cmd.exe /C C:/MinGW-5.1.0/mingw32/bin/mingw32-make.exe -j8 SHELL=cmd.exe -e -f  M
"----------Building project:[ xrm-server - Debug ]----------"
mingw32-make.exe[1]: Entering directory 'C:/Users/Blue/Desktop/Oblivion2-XRM/win32'
C:/MinGW-5.1.0/mingw32/bin/g++.exe  -c  "C:/Users/Blue/Desktop/Oblivion2-XRM/src/mods/mod_message_edi
C:/MinGW-5.1.0/mingw32/bin/g++.exe -o ./Debug/xrm-server @"xrm-server.txt" -L. -L. -L../sqlitewrap/De
mingw32-make.exe[1]: Leaving directory 'C:/Users/Blue/Desktop/Oblivion2-XRM/win32'
====0 errors, 0 warnings, total time: 00:00:14 seconds====
```

```
HOUT_SDL  -o ./Debug/up_src_mods
C:/OpenSSL-Win32/lib/ -LC:/Users
```

CHAPTER

SIX

SUPPORT

- Use the Issue Tracker
- **Discussions on Haunting The Chapel BBS!** - telnet://htc.zapto.org
- IRC: **#oblivion2** on **chat.freenode.net**
- Email: **mrmisticismo - at - hotmail.com**
- Facebook: **Oblivion/2 XRM** group
- Discord: Oblivion/2 XRM Channel

CHAPTER

SEVEN

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CHAPTER

EIGHT

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