

AIO RAGNAROK ONLINE v2

User Friendly

Judas Bible



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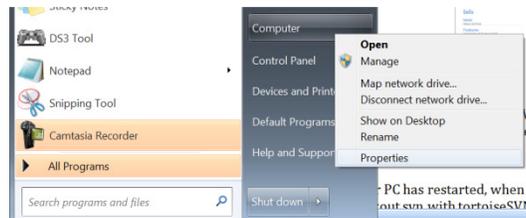
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i) Pre-requisites:

Grab tortoiseSVN from the link below:

<http://tortoisesvn.net/downloads.html>

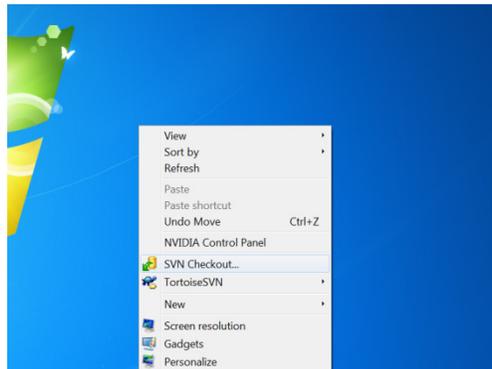
Note: Grab the correct version. Meaning that if you have 32-bit Windows grab the 32-bit installer and vice versa. To find out your windows "bit" version click the windows icon and right-click my computer>properties. You will be able to see the specs of your OS.





Once you have installed tortoiseSVN, you will be prompted to restart your PC, so make sure to restart your computer once it prompts you to.

Once your PC has restarted, when you right click, you will see a new addon that lets you checkout svn with tortoiseSVN.



Now, we will checkout a Ragnarok Server Revision. This is up to you. The options below are available to you:

eAthena (No Third Jobs Currently):

SVN Repository: <http://eathena-project.googlecode.com/svn/trunk/>
SVN Changes: <http://code.google.com/p/eathena-project/source/list>

3CeAM (Old RO Mechanics - Has working Third Jobs):

SVN Repository: <http://3ceam.googlecode.com/svn/trunk/>
SVN Changes: <http://code.google.com/p/3ceam/updates/list>

ReAM (Renewal Mechanics –Third Jobs Buggy but there are still updates going on):

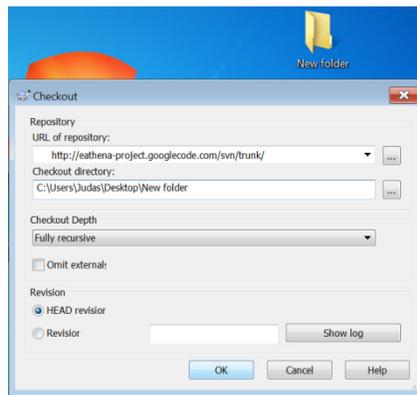
SVN Repository: <http://ream-project.googlecode.com/svn/>
SVN Changes: <http://code.google.com/p/ream-project/updates/list>

rAthena (Starting Third Jobs/Renewal/Non-Renewal Mechanics) [Some bugs and still working on implementing third jobs fully] || [May or may not support TXT in the future...]

SVN Repository: <https://rathena.svn.sourceforge.net/svnroot/rathena/trunk/>
SVN Changes: <http://sourceforge.net/apps/trac/rathena/timeline>

Eidolon Package (Renewal Mechanics – Has working Third Jobs|200 Customs (Optional) |Clean Src)
Paid: PM me on the forums (<http://www.supportmii.com/board>) or message me on Hotmail (zbui543@hotmail.com)

Once you have chosen which svn to checkout, copy the “SVN REPOSITORY” link you have chosen and create a new folder on your desktop and name it whatever you want. For this tutorial, I will just use the default “New Folder” on my desktop and checkout eAthena. Right-click the newly created folder and click “svn checkout” and hit “ok”. It will start to download the branch of the server you have chosen. Once it finished press “ok” to close the window and now you have your server files inside your newly created folder.



Let’s switch gears and move over to the Client Side pre-requisites. You will need Ragray and install it into a clean folder. Below are some alternatives to Ragray which will include everything you need for a clean RO folder.

Ragray Renewal - <http://ragray.net/>

→From the website, there are many alternatives to download Ragray. Either through Torrents or Direct Download via Rapidshare/FileServe.

Once you have installed Ragray, patch fully by clicking on the “ragray.exe”.

ii) Setting up your server:

Now, it’s time to install MYSQL Server and MYSQL GUI tools. These programs can be downloaded and installed by the links below:

MYSQL SERVER - <http://www.supportmii.com/ro1/tools/mysql-5.1.46-win32.msi>

MYSQL GUI TOOLS - <http://www.supportmii.com/ro1/tools/mysql-gui-tools-5.0-r17-win32.msi>

Now, we will install these packages to get it working with our server files.

Install MYSQL 5.1.46

Click Next

Click Typical

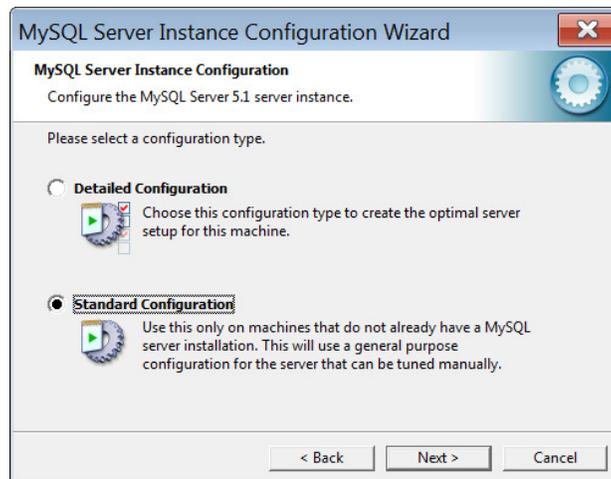
Click Next

Click Install

Choose Skip Sign-Up and click Next

Uncheck Register the MYSQL Server now
Make sure Configure the MYSQL Server now is checked
Click Finish

Now, you can either choose Detailed Configuration or Standard Configuration, which is up to you but if you are unsure, just choose Standard Configuration and click Next.



In Service Name: Pick MYSQL5 and click Next



Just enter the password you wish to use for root and MAKE SURE YOU REMEMBER IT!
Click Next



Just click the Execute button and when done, just click Finish.

Now Install MYSQL GUI TOOLS.

Click Next

Accept Terms and click Next

Click Next

Click Complete and click Next

Click Install

Click Finish

Now, start MYSQL Administrator and it will prompt a window

Fill in Host Name, Username, and Password

Leave the other fields blank

It should look like the following:

Stored Connection: (Just Leave Empty)

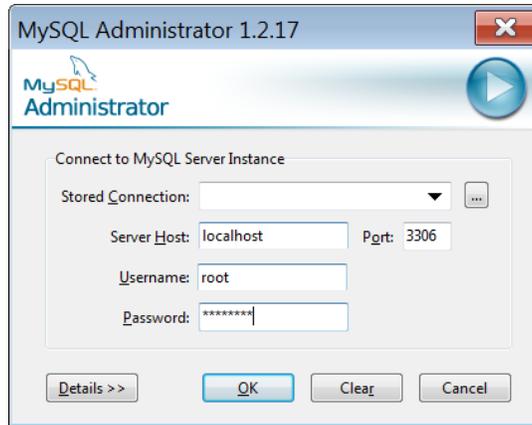
Server Host: localhost

Username: root

Password: (Enter the password we created for root | The one I said not to forget!)

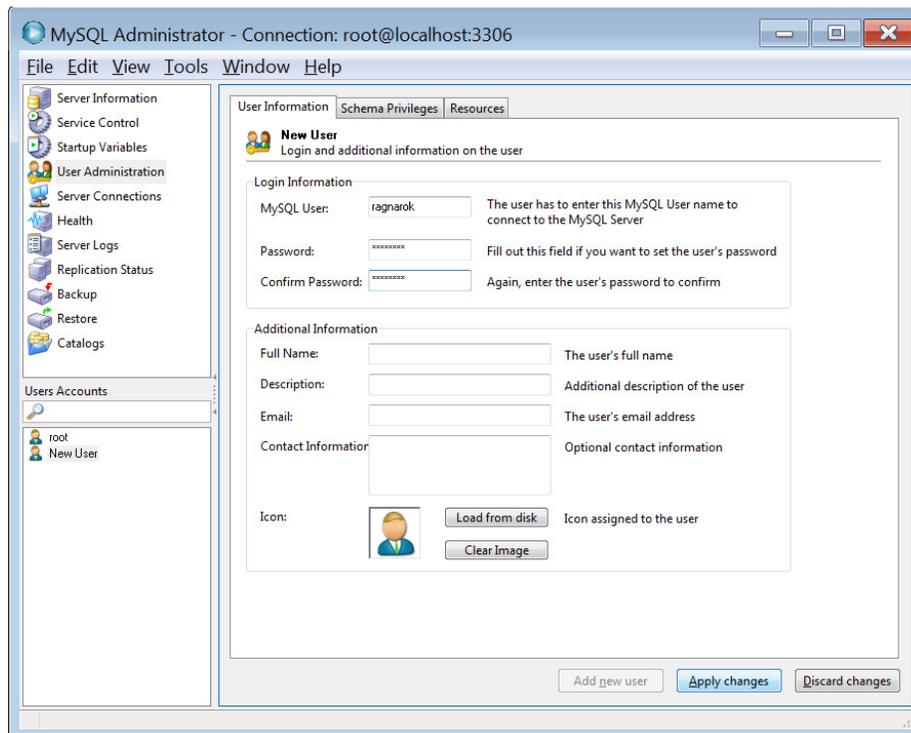
Port: 3306





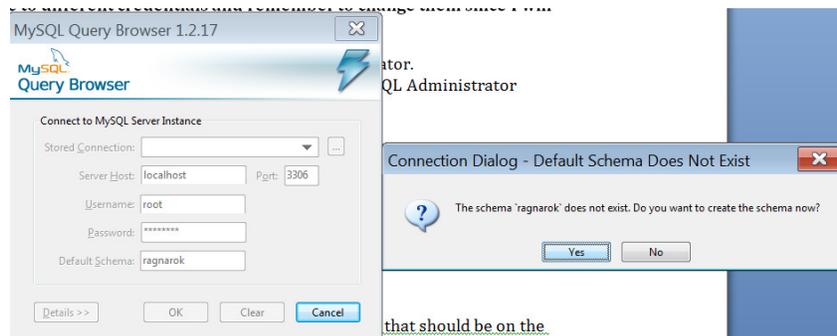
Click OK and you should be in MySQL Administrator now.
Go to User Administration and Click Add New User and enter this:

MYSQL User: ragnarok
Password: ragnarok
Confirm Password: ragnarok



Note: These are default settings for easy setup which I will be using. If you wish to be a little more secure, change these to different credentials and remember to change them since I will be using ragnarok credentials for this entire guide.

When you are done, then just click Apply changes and exit MYSQL Administrator.
Start MYSQL Query Browser and it will prompt a window that looks like MYSQL Administrator except there is a new field called Default Scheme. It should look like this:

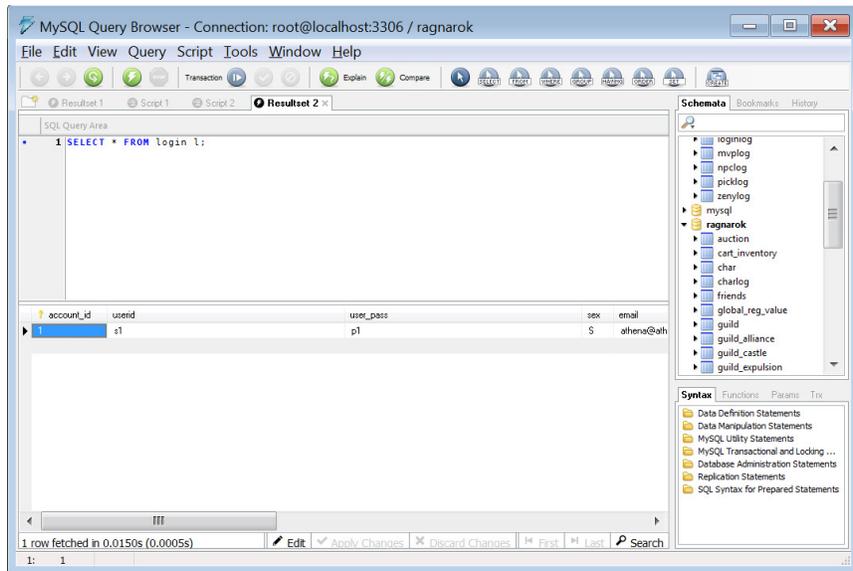
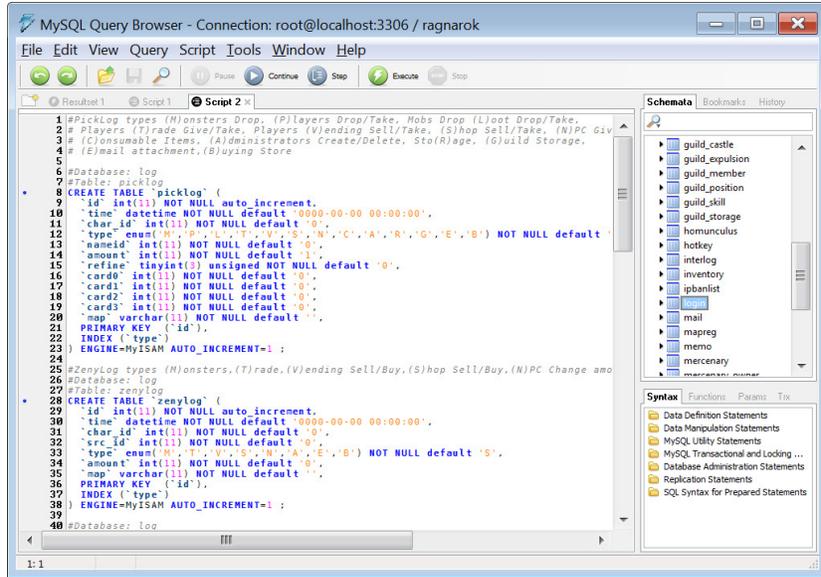


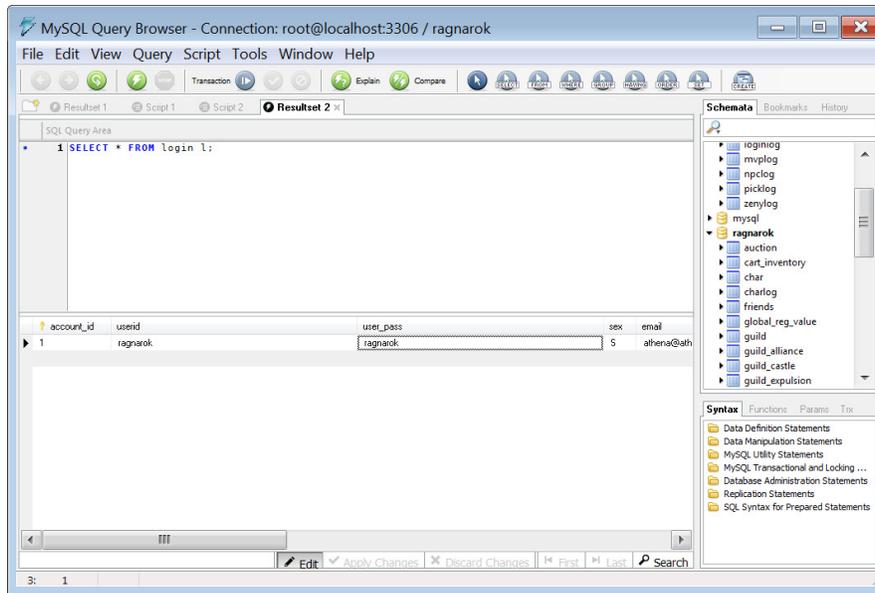
Stored Connection: (Just leave it empty)
Server Host: localhost
Username: root
Password: (Enter the password we created before for root)
Default Schema: ragnarok
Port: 3306

When you are in MYSQL Query Browser, make sure the ragnarok schema is bold by double clicking on it. Go to menu, click File and choose Open Script...
We need to execute "main.sql" and logs.sql, so look for the main.sql, which should be in the sql-files folder in your server files you checked out.
Pick main.sql and click open.
Make sure the ragnarok scheme is in bold, if not double click on it to make it bold.
Click the Green Execute Icon to the upper right to execute it into the ragnarok db

Now, we need to create log database by right-click somewhere within the table where the databases are and choose "Create New Schema and type in log and click OK.
Double click on the log database to make it bold
Go to menu, click File>Open Script...
Open logs.sql and click the execute button to make entries under the log db.

Next, double click the ragnarok database and expand it to see all the tables.
Look for login table and double click it, and double click it again to expand it inside the Query Browser
Near the bottom, click on the edit button, so we can edit the rows
For userid: and user_pass:, we will be using ragnarok/ragnarok, if you wish to be more secure then change these credentials to something else, and make sure to remember them so we can edit the server files with them





Additional SQL Injections & (If encounter login issues and see weird stuff in the map console):

3CeAM | Additional Injections:

Item_db.sql
 Item_db2.sql
 mob_db.sql
 mob_db2.sql
 upgrade_svn14672.sql
 upgrade_svn14700.sql
 upgrade_svn14797.sql
 3CeAM_svn320.sql
 3CeAM_svn491.sql
 3CeAM_svn506.sql
 3CeAM_svn519.sql
 3CeAM_svn_elemental.sql
 3CeAM_svn_update_item_db2.sql

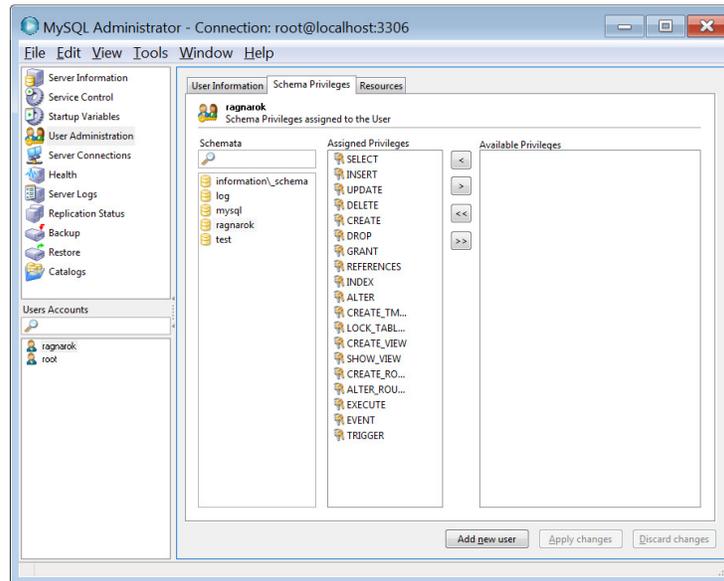
eAthena/ ReAM | Additional Injections:

Item_db.sql
 Item_db2.sql
 mob_db.sql
 mob_db2.sql
 upgrade_svn14672.sql
 upgrade_svn14700.sql
 upgrade_svn14797.sql

Note: If you see an error, saying duplicated entry in the Query Browser then ignore it since that means that the sql-file is already in the database.

Once that is done we will switch back to MYSQL Administrator
 In the menu of Query Browser, click Tools>MYSQL Administrator
 Go to User Administration and click the ragnarok user.

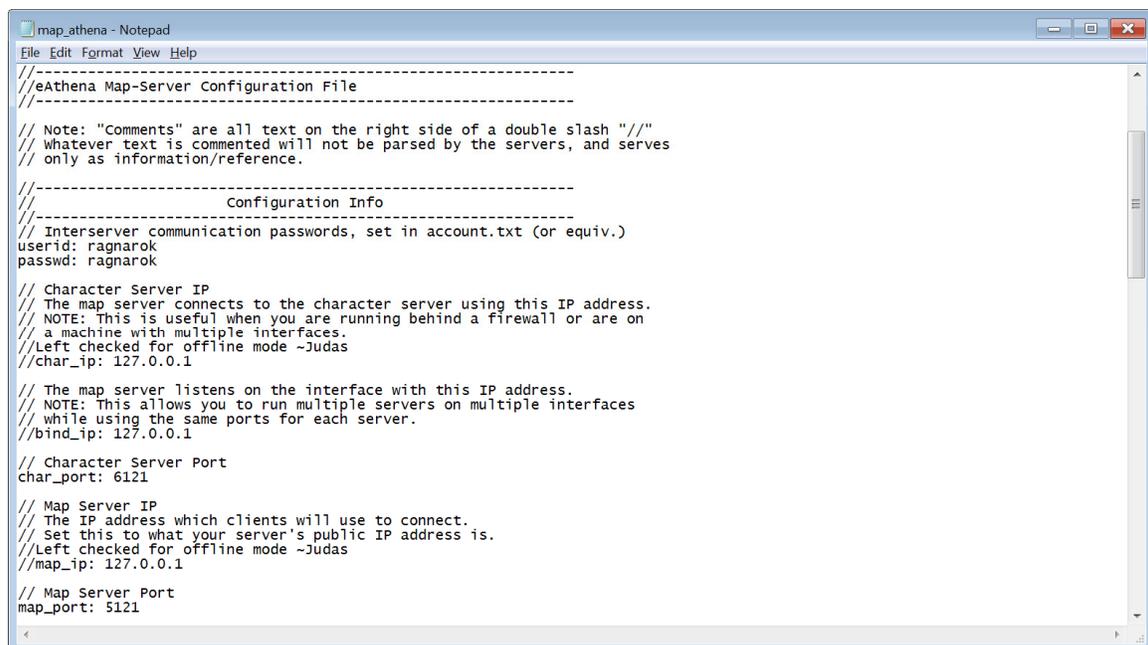
Now, go to Schema Privileges tab and click once on the ragnarok database/schema and click the “<<” button and then click Apply changes. Do the same with the log database/schema.



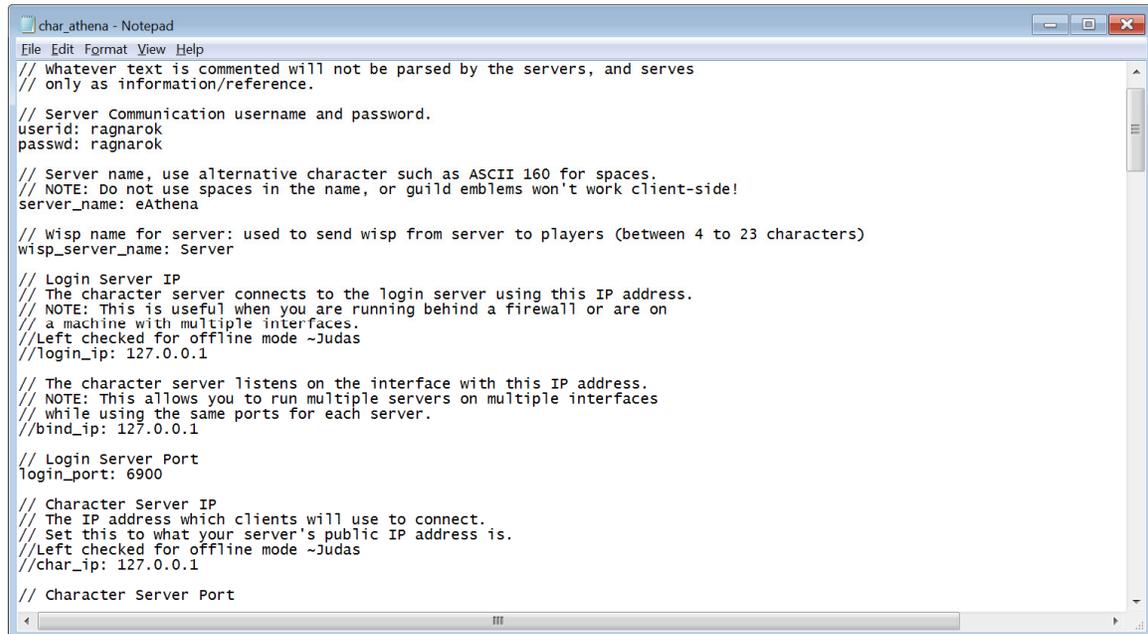
We are now done setting MYSQL server and our database. We will now be configuring our ragnarok server files to be able to connect to the MYSQL server. This is where we will need those credentials for the user/pass and as well as the database/schema name, and also the login table credentials.

Head to the server files you checked out and double click on conf/map_athena.conf [Edit with notepad]

map_athena.conf:



Now open char_athena.conf and we will do the same as we did for the “map_athena”



```
char_athena - Notepad
File Edit Format View Help
// Whatever text is commented will not be parsed by the servers, and serves
// only as information/reference.

// Server Communication username and password.
userid: ragnarok
passwd: ragnarok

// Server name, use alternative character such as ASCII 160 for spaces.
// NOTE: Do not use spaces in the name, or guild emblems won't work client-side!
server_name: eathena

// Wisp name for server: used to send wisp from server to players (between 4 to 23 characters)
wisp_server_name: Server

// Login Server IP
// The character server connects to the login server using this IP address.
// NOTE: This is useful when you are running behind a firewall or are on
// a machine with multiple interfaces.
// Left checked for offline mode ~Judas
//login_ip: 127.0.0.1

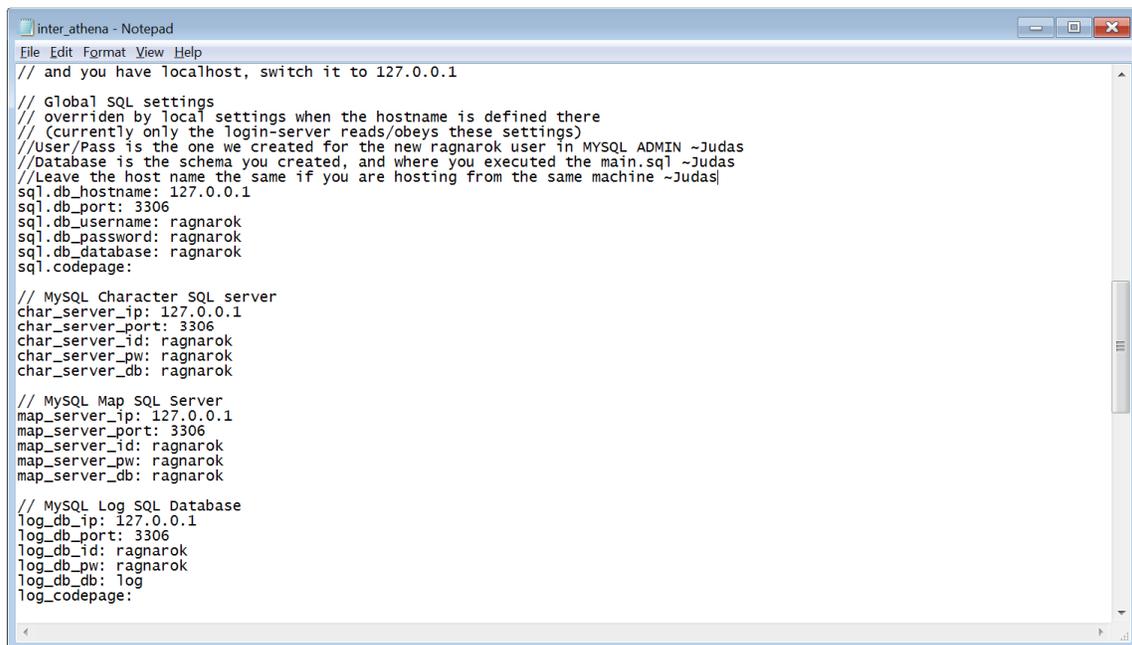
// The character server listens on the interface with this IP address.
// NOTE: This allows you to run multiple servers on multiple interfaces
// while using the same ports for each server.
//bind_ip: 127.0.0.1

// Login Server Port
login_port: 6900

// Character Server IP
// The IP address which clients will use to connect.
// Set this to what your server's public IP address is.
// Left checked for offline mode ~Judas
//char_ip: 127.0.0.1

// Character Server Port
```

Now open up iter_athena.conf and we will configure settings to connect to MYSQL



```
iter_athena - Notepad
File Edit Format View Help
// and you have localhost, switch it to 127.0.0.1

// Global SQL settings
// overridden by local settings when the hostname is defined there
// (currently only the login-server reads/obeys these settings)
//User/Pass is the one we created for the new ragnarok user in MYSQL ADMIN ~Judas
//Database is the schema you created, and where you executed the main.sql ~Judas
//Leave the host name the same if you are hosting from the same machine ~Judas
sql.db_hostname: 127.0.0.1
sql.db_port: 3306
sql.db_username: ragnarok
sql.db_password: ragnarok
sql.db_database: ragnarok
sql.codepage:

// MySQL Character SQL server
char_server_ip: 127.0.0.1
char_server_port: 3306
char_server_id: ragnarok
char_server_pw: ragnarok
char_server_db: ragnarok

// MySQL Map SQL Server
map_server_ip: 127.0.0.1
map_server_port: 3306
map_server_id: ragnarok
map_server_pw: ragnarok
map_server_db: ragnarok

// MySQL Log SQL Database
log_db_ip: 127.0.0.1
log_db_port: 3306
log_db_id: ragnarok
log_db_pw: ragnarok
log_db_db: log
log_codepage:
```

Once finished, we will need to know how to recompile.

iii) Compiling (Windows)

Below are some options for you to compile under Windows. Mainly I will be using Visual Studio 2010. I will not bother using cygwin to compile our server files.

Visual Studio 2010 Trial – <http://www.microsoft.com/visualstudio/en-us/try>

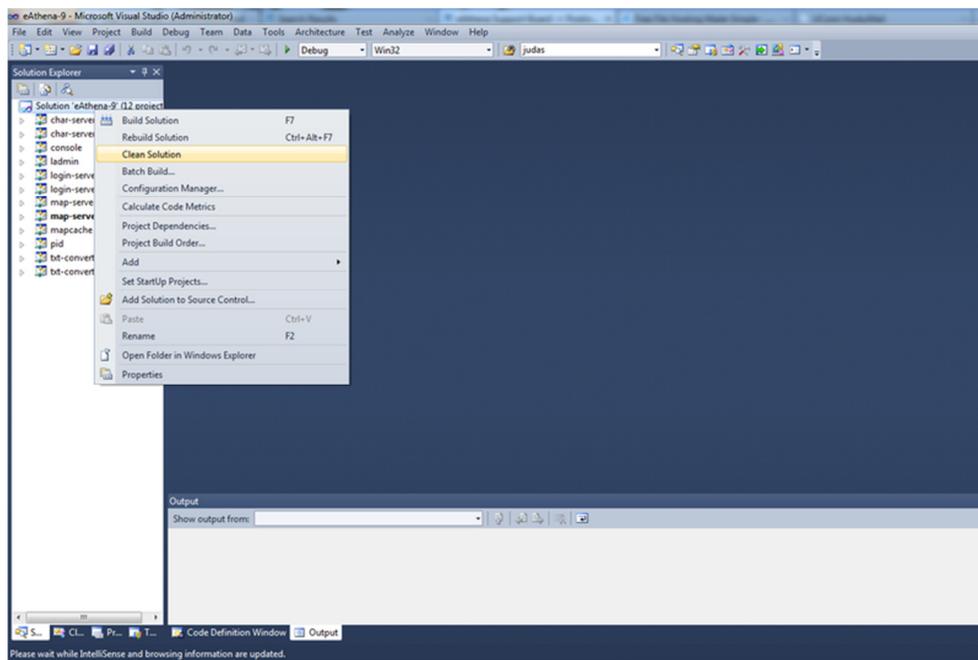
Visual Studio 2010 Ultimate Unlocked – <http://www.mediafire.com/?x71bzbq7dibfer>

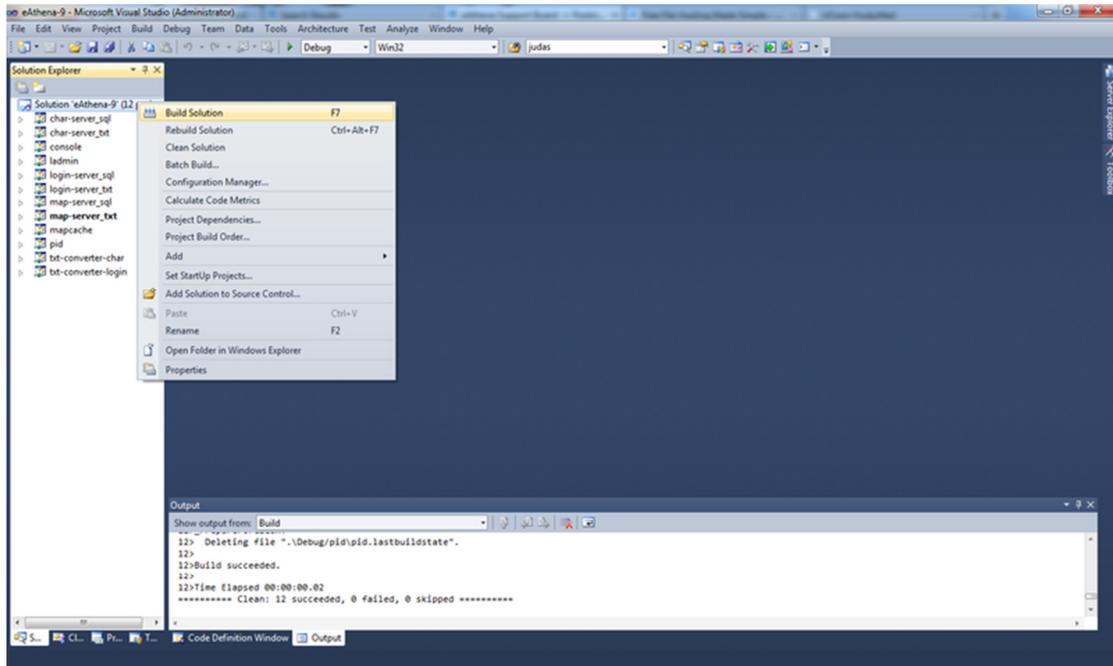
Once you have installed the whole package fully, restart your PC to finish the installing changes.

Once restarted, in your server files, click on “solution file 10” and the solution will open in Visual Studio 2010. However, if you use my special complete modified packages then use “solution file 9” (In this case, it isn’t released unless I get some donations to host a vps for compiling test/stability.)

Visual Studio Compiling:

Open your solution file up with Visual Studio and follow the pictures.
[Right Click for the options]





If you are using my compile, it is normal to see

===== Build: 11 succeeded, 1 failed, 0 up-to-date, 0 skipped =====

But in normal cases, you should see all of the solution files all succeed and compile with no errors

runserver [to run txt based server]

runserver-sql [to run sql based server - You need to configure server side settings though]

iv) Client Side Settings

There are different ways to diff your client for your server. First we must make sure you are using the right client for your server. In your server files folder, navigate to src>common>mmo.h and open it in visual studio 2010. You must have a client that corresponds with the packetver. Also for clientside you must use lub settings that corresponds to your packetver as well. For simplicity, we will be using client date 20110118. So in mmo.h make sure the packetver is set to 20110118 and recompile to save your settings. Make sure in src>map>clif.h, the packet is also set at 26 as well and recompile. Finally, make sure db>packet.db is set to 26.

```
CA\Program Files (x86)\RO MELFES SERVER FILES\3CeAM+613_eA14811_v1_renew_r13_The Promise\src\common\mmo.h - N...
File Edit Search View Encoding Language Settings Macro Run TextFX Plugins Window ?
update.txt quotes.txt important.txt mmo.h
25 // 20081126 - 2008-11-26aSakexe+ - 0x1a2, 0x441
26 // 20081210 - 2008-12-10aSakexe+ - 0x442
27 // 20090408 - 2009-04-08aSakexe+ - 0x44a (dont use as it overlaps with RE client packets)
28 // 20080827 - 2008-08-27aRagexeRE+ - First RE Client
29 // 20081217 - 2008-12-17aRagexeRE+ - 0x6d (Note: This one still use old Char Info Packet Structure)
30 // 20081218 - 2008-12-17bRagexeRE+ - 0x6d (Note: From this one client use new Char Info Packet Structu
31 // 20090603 - 2009-06-03aRagexeRE+ - 0x7d7, 0x7d8, 0x7d9, 0x7da
32 // 20090617 - 2009-06-17aRagexeRE+ - 0x7d9
33 // 20090715 - 2009-07-15aRagexeRE+ - 0x7e1
34 // 20090805 - 2009-08-05aRagexeRE+ - 0x7e2
35 // 20090922 - 2009-09-22aRagexeRE+ - 0x7e5, 0x7e7, 0x7e8, 0x7e9
36 // 20091103 - 2009-11-03aRagexeRE+ - 0x7f7, 0x7f8, 0x7f9, 0x7fb
37 // 20091110 - 2009-11-10aRagexeRE+ - 0x7f6
38 // 20100105 - 2010-01-05aRagexeRE+ - 0x133, 0x800, 0x801
39 // 20100126 - 2010-01-26aRagexeRE+ - 0x80e
40 // 20100217 - 2010-02-17aRagexeRE+ - 0xf4 -> 0x1c4 (guildstorage)
41 // 20100223 - 2010-02-23aRagexeRE+ - 0x80f
42 // 20100413 - 2010-04-13aRagexeRE+ - 0x6b (Note: Add support to the new char slots managment.)
43 // 20100629 - 2010-06-29aRagexeRE+ - 0x2d0, 0xaa, 0x2d1, 0x2d2
44 // 20100721 - 2010-07-21aRagexeRE+ - 0x6b, 0x6d
45 // 20100727 - 2010-07-27aRagexeRE+ - 0x6b, 0x6d
46 // 20100803 - 2010-08-03aRagexeRE+ - 0x6b, 0x6d, 0x827, 0x828, 0x829, 0x82a, 0x82b, 0x82c, 0x842, 0x84
47 // 20101124 - 2010-11-24aRagexeRE+ - 0x856, 0x857, 0x858
48 // 20110111 - 2011-01-11aRagexeRE+ - 0x6b, 0x6d
49 #ifndef PACKETVER
50     #define PACKETVER 20081126
51     #define PACKETVER 20110118
52 #endif
53 // backward compatible PACKETVER 8 and 9
54 #if PACKETVER == 8
55     #undef PACKETVER
56     #define PACKETVER 20070521
57 #endif
58 #if PACKETVER == 9
```

C++ source file length: 19068 lines: 784 Ln: 1 Col: 1 Sel: 0 Dos\Windows ANSI INS

```
dif.h - Notepad
File Edit Format View Help
// Copyright (c) Athena Dev Teams - Licensed under GNU GPL
// For more information, see LICENCE in the main folder

#ifndef _CLIF_H_
#define _CLIF_H_

#include "../common/cbasetypes.h"
// #include "../common/mmo.h"
struct storage_data;
struct guild_storage;
// #include "map.h"
struct block_list;
struct unit_data;
struct map_session_data;
struct homun_data;
struct pet_data;
struct mob_data;
struct npc_data;
struct chat_data;
struct flooritem_data;
struct skill_unit;
struct s_vending;
struct party;
struct party_data;
struct guild;
struct battleground_data;
struct quest;
struct party_booking_ad_info;
#include <stdarg.h>
// packet DB
#define MAX_PACKET_DB          0x900
#define MAX_PACKET_VER       26

struct s_packet_db {
    short len;
    void (*func)(int, struct map_session_data *);
    short pos[20];
};
```

```
packet_db - Notepad
File Edit Format View Help
// The packet database allows you to add support for new clients,
// because packets change every release.
// Note: Every packet version needs a wanttoconnection specification, since
// that is the packet used to identify a client's version.
// If multiple versions have the same connection packet, the higher version
// will be used (unless the lower one is specified as the default)

// Main packet version of the DB to use (default = max available version)
// Client detection is faster when all clients use this version.
// Version 23 is the latest Sakexe (above versions are for Renewal clients)
packet_db_ver: 26
//packet_db_ver: default

packet_ver: 5
0x0064,55
0x0065,17
0x0066,6
0x0067,37
0x0068,46
0x0069,-1
0x006a,23
0x006b,-1
0x006c,3
0x006d,108
0x006e,3
0x006f,2
0x0070,6
0x0071,28
0x0072,19,wanttoconnection,2:6:10:14:18
0x0073,11
0x0074,3
0x0075,-1
0x0076,9
0x0077,5
0x0078,54
0x0079,53
```

NOTE: Any changes to source code "src" you must recompile with Visual Studio 2010.

The easiest tool to diff clients is to use Shinyo's Diff Patcher.

Shinyo Diff Patcher – <http://www.eathena.ws/board/index.php?showtopic=269382&hl=>

Checkout out the diff patcher by copying the link below:

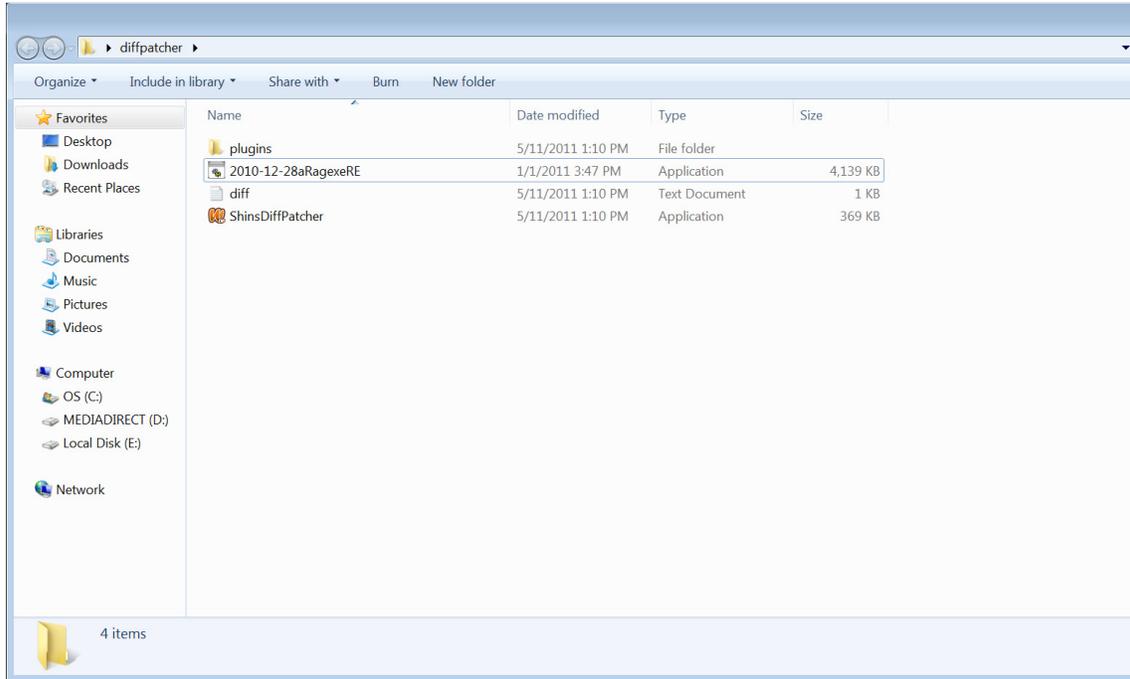
<https://subversion.assembla.com/svn/weetools/trunk/ShinsDiffPatcher/>

And creating a new folder on your desktop
Right Click and svn checkout
Make sure the link you copied is in the top box
Click Ok

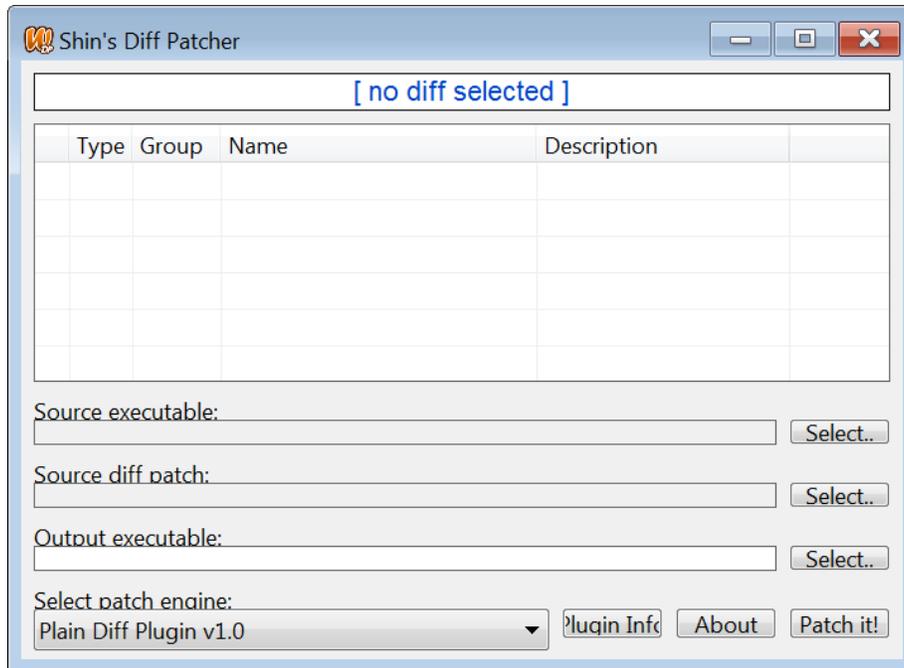
Now, for this tutorial we will be using clients 2010-12-28 and up. For Shin's Diff Patcher, only the client is needed, and not the diff file. Clients can be downloaded from the link below.

Renewal Clients - <https://subversion.assembla.com/svn/weetools/clients/>

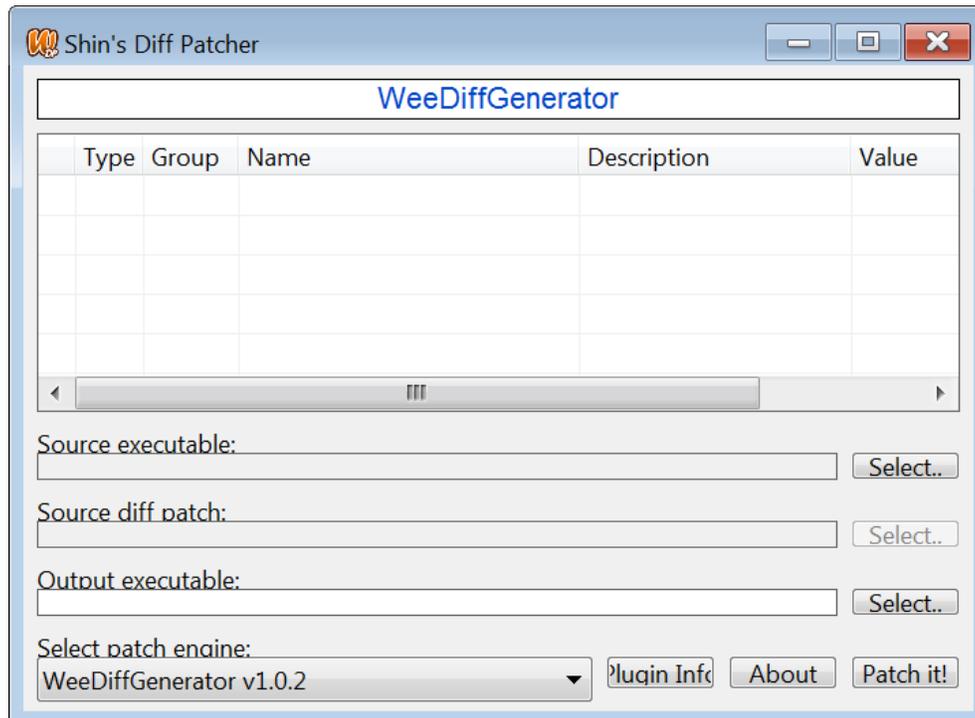
Now, place the client inside the diff patcher folder like so:



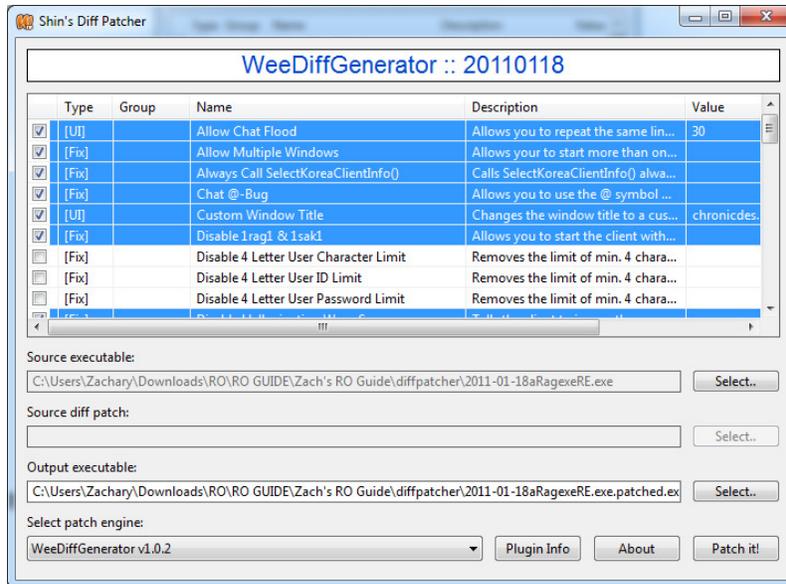
Then, double click on "ShinsDiffPatcher"



Under Select Patch Engine, Select, WeeDiffGenerator v1.0.2



For the Source executable row, hit select
 Open up the 2010-12-28aRagexeRE client
 It will load all the diffs in the window
 We will be able to customize settings now
 Select Yes to auto select patches when the windows comes up



The following patches are what I recommend for GRF/DATA type servers. Clients that are made must be executed in a clean RO folder dedicated for your server ONLY to avoid any conflicts. Select Patch It! When you are done adding your diffs to patch your client.

Type : [UI]

Group :

Name : Allow Chat Flood

Description : Allows you to repeat the same line n-times.

Value : 30

Note :

PL Author : Shinryo

=====

Type : [Fix]

Group :

Name : Allow Multiple Windows

Description : Allows your to start more than one client at the same time.

Value :

Note :

PL Author : Shinryo

=====

Type : [Fix]

Group :

Name : Always Call SelectKoreaClientInfo()

Description : Calls SelectKoreaClientInfo() always before SelectClientInfo() allowing you to use features that would be only visible on korean service type.

Value :

Note : Recommended

PL Author : Shinryo

=====

Type : [Fix]

Group :

Name : Chat @-Bug

Description : Allows you to use the @ symbol without changing shortcuts.

Value :

Note : Recommended

PL Author : Shinryo

=====

Type : [UI]

Group :

Name : Custom Window Title

Description : Changes the window title to a custom one.

Value : chronicdestiny.xlcnetwork.com - SupportMii

Note :

PL Author : Shinryo

=====

Type : [Fix]

Group :

Name : Disable 1rag1 & 1sak1

Description : Allows you to start the client without 1rag1 & 1sak1 as command line parameters.

Value :

Note : Recommended

PL Author : Shinryo

=====

Type : [Fix]

Group :

Name : Disable Hallucination Wavy Screen

Description : Tells the client to ignore the wavy screen effect.

Value :

Note : Recommended

PL Author : Shinryo

=====

Type : [Fix]

Group :

Name : Disable HShield

Description : Prevents AhnLabs HackShield from being loaded during client start up.

Value :

Note : Recommended

PL Author : Shinryo

=====

Type : [Add]

Group :

Name : Disable Nagle Algorithm

Description : The Nagle Algorithm delays packet transfer by combining small packets into a large one reducing bandwidth while increasing latency.

Value :

Note : Recommended

PL Author : Shinryo

=====

Type : [Fix]

Group :

Name : Disable RagexeRE Filename Check

Description : Allows you to rename the executable to whatever you want.

Value :

Note : Recommended

PL Author : Shinryo

=====

Type : [UI]

Group :

Name : Disable Swear Filter

Description : Allows you to skip the swear prevention function.

Value :

Note :

PL Author : Shinryo

=====

Type : [Add]

Group :

Name : Enable 127 Hairstyles

Description : Allows you to use more than the default max. 27 hairstyles.

Value :

Note :

PL Author : Shinryo

=====

Type : [UI]

Group :

Name : Enable Aura Over Level 99 And Level 150

Description : Allows the client to display standard auras over level 99 and 3rd class auras over level 150.

Value :

Note :

PL Author : Shinryo

=====

Type : [Add]

Group :

Name : Enable DNS Support

Description : Allows the client to read fully-qualified host names inside the clientinfo xml file.

Value :

Note : Recommended

PL Author : Shinryo

=====

Type : [Data]

Group :

Name : Enable Multiple GRFs

Description : Tells the client to load grf files based on a list within data.ini.

Value :

Note : Recommended

PL Author : Shinryo

=====

Type : [UI]

Group :

Name : Enable Title Bar Menu

Description : Changes the window style to display all buttons (minimize, maximize, close) and the icon in the title bar.

Value :

Note :

PL Author : Shinryo

=====

Type : [UI]

Group :

Name : Enforce Official Login Background

Description : Forces the client to use kRO login backgrounds on all langtypes.

Value :

Note :

PL Author : Shinryo

=====

Type : [UI]

Group :

Name : Extended Chat Box

Description : Increases max input chars of main/battle chat box from 70 to 88.

Value :

Note :

PL Author : Shinryo

=====

Type : [UI]

Group :

Name : Extended Chat Room Box

Description : Increases max input chars of chat room boxes from 70 to 88.

Value :

Note :

PL Author : Shinryo

=====

Type : [UI]

Group :

Name : Extended PM Box

Description : Increases max input chars of PM boxes from 70 to 88.

Value :

Note :

PL Author : Shinryo

=====

Type : [Fix]

Group :

Name : HKLM to HKCU

Description : Uses the windows registry HKEY_CURRENT_USER instead of HKEY_LOCAL_MACHINE to save registry entries.

Value :

Note :

PL Author : Shinryo

=====

Type : [UI]

Group :

Name : Ignore Missing File Errors

Description : Prevents the client from displaying error messages about missing files.

Value :

Note :

PL Author : Shinryo

=====

Type : [UI]

Group :

Name : Ignore Missing Palette Errors

Description : Prevents the client from displaying error messages about missing palettes.

Value :

Note :

PL Author : Shinryo

=====

Type : [Data]

Group :

Name : Increase Headgear View ID

Description : Allows you to increase the maximal view id used in LUA script files.

Value : 3000

Note :

PL Author : Shinryo

=====

Type : [UI]

Group :

Name : Increase Zoom Out 75%

Description : Allows you to zoom out 75% further from the ground.

Value :

Note :

PL Author : Shinryo

=====

Type : [Data]

Group :

Name : Load LUA Before LUB

Description : Allows you to load LUA files before LUB files are being loaded.

Value :

Note : Recommended

PL Author : Shinryo

=====

Type : [UI]

Group :

Name : Only First Login Background

Description : Displays always the first login background.

Value :

Note :

PL Author : Shinryo

=====

Type : [Data]

Group :

Name : Read Data Folder First

Description : Attempts to read files inside the data folder prior to those in grf archives.

Value :

Note : Recommended

PL Author : Shinryo

=====

Type : [Data]

Group :

Name : Read msgstringtable.txt

Description : Allows you to read the message string table on all languages.

Value :

Note : Recommended

PL Author : Shinryo

=====

Type : [Data]

Group :

Name : Read questid2display.txt

Description : Allows you to read the quest table on all languages.

Value :

Note : Recommended

PL Author : Shinryo

=====

Type : [UI]

Group :

Name : Remove Gravity Ads

Description : Removes advertisements from the login interface.

Value :

Note :

PL Author : Shinryo

=====

Type : [UI]

Group :

Name : Remove Gravity Logo

Description : Removes gravitys logo from the login interface.

Value :

Note :

PL Author : Shinryo

=====

Type : [Fix]

Group :

Name : Restore Login Window

Description : Tells the client to use the old login interface prior to Gravitys new token based login system.

Value :

Note : Recommended

PL Author : Shinryo

=====

Type : [UI]

Group :

Name : Skip License Screen

Description : Jumps directly to the login interface without displaying the license screen.

Value :

Note :

PL Author : Shinryo

=====

Type : [UI]

Group :

Name : Skip Resurrection Buttons

Description : Skips the resurrection button whenever you die or use Token of Siegfried.

Value :

Note :

PL Author : Shinryo

=====

Type : [UI]

Group :

Name : Skip Service Select

Description : Jumps directly to the login interface without asking to select a service.

Value :

Note :

PL Author : Shinryo

=====

Type : [UI]

Group :

Name : Translate Client Into English

Description : Translates hardcoded text inside the client into english.

Value :

Note : Recommended

PL Author : Shinryo

=====

Type : [UI]

Group :

Name : Use Arial On All Langtypes

Description : Changes the default font to Arial on all language types.

Value :

Note :

PL Author : Shinryo

=====

Type : [UI]

Group :

Name : Use Ragnarok Icon

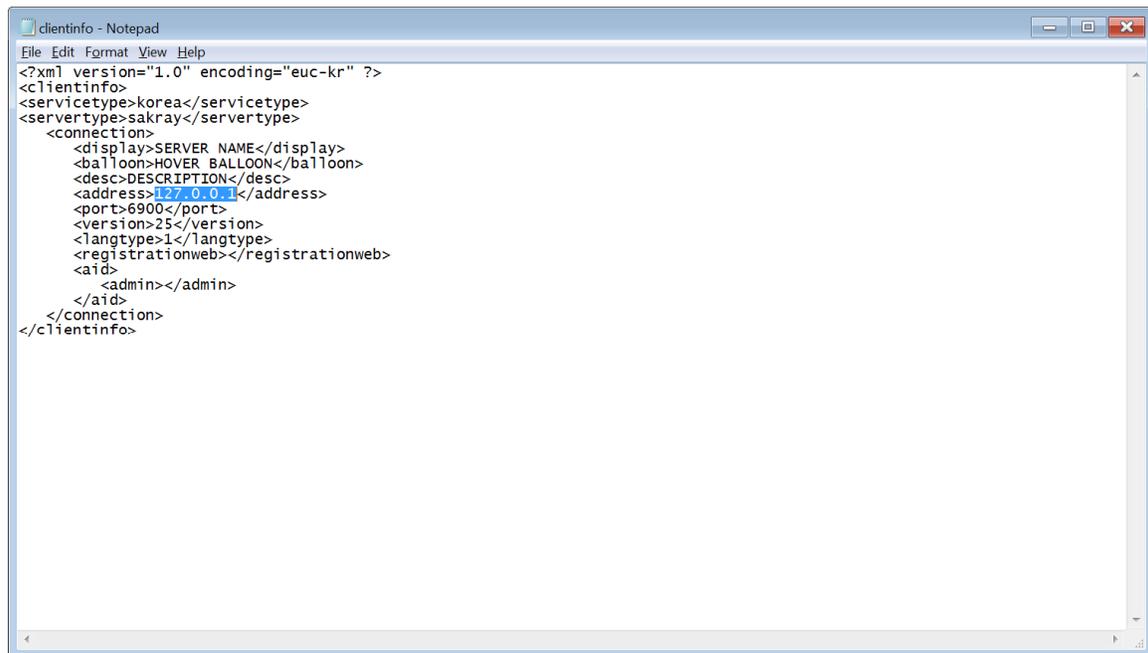
Description : Tells the client to use the default Ragnarok icon.

Value :

Note :

PL Author : Shinryo

Open the data folder and right-click and edit the clientinfo.xml



```
clientinfo - Notepad
File Edit Format View Help
<?xml version="1.0" encoding="euc-kr" ?>
<clientinfo>
<servicetype>korea</servicetype>
<servername>sakray</servername>
<connection>
  <display>SERVER_NAME</display>
  <balloon>HOVER BALLON</balloon>
  <desc>DESCRIPTION</desc>
  <address>127.0.0.1</address>
  <port>6900</port>
  <version>25</version>
  <langtype>1</langtype>
  <registrationweb></registrationweb>
  <aid>
    <admin></admin>
  </aid>
</connection>
</clientinfo>
```

To test it out on your test server, leave the settings as it is. If you are putting your server online, replace localhost/127.0.0.1 with your WAN IP. This will be discussed later in the guide.

For simplicity the correct lua files have been placed in the JUDAS AIO PACKAGE for the 20110118 client. Leaving files in lua format will be easier to test your customs and make changes easier. In essence, it will work out of the box.

Latest Lua files can be accessed at the link below:

Latest Lua – http://svn6.assembla.com/svn/ClientSide/Lua_Project/

Note: Lua Rev at the moment is 125, if any changes you must update it by checking out the branch as we did before. But in this case copy the link above and create a new folder and check out using that info!

v) Server Side Settings

This section will focus on the settings you can make to customize your server. The first few changes we will make will be in the source files so it will make things easier when we modify files outside the src files. REMEMBER ANY SRC CHANGES MEANS WE HAVE TO COMPILE USING VISUAL STUDIO 2010.

The first src file we will edit is the mmo.h. Open the file in visual studio. mmo.h is located in server files>src>common.

If you are using a default revision, you will find this

```
"#define MAX_CHARS 9"
```

This means that you will enable 9 available character slots that can be made by your players. You can increase it to any amount of slots you want as long as it is a multiple of 3. For example,

9,12,15,18,21,24,27,30.....”

Input your value and save your changes.

Next,

```
#define MAX_STORAGE 600
```

```
#define MAX_GUILD_STORAGE 600
```

These values should ideally stay the same to avoid any overflow errors to your consoles. If you had enabled 1000 storage/gstorage and reduced it you would lose your player's items.

```
#define MAX_PARTY 12
```

Put in a value if you wish to increase the amount of people in the party.

```
#define MAX_FRIENDS 40
```

Put in a value if you wish to increase the amount of friends that you can make.

Now save.

Close mmo.h and open src>map>map.h

```
#define MAX_LEVEL 99
```

Change this value to 1000 so anytime you wish to change levels, you will only have to make changes to the exp.txt file.

Note: In the db folder, make sure to rename the original exp.txt to exp_old.txt.

Rename exp2.txt to exp.txt.

This change will allow us to make level changes from 1-1000, so we can choose easier!

```
#define MAX_VENDING 12
```

Changing this value will allow you to vend more than 12 items if you wish.

Save changes and open src>map>pet.h

```
#define MAX_PET_DB 300
```

Change the value to 900 so if you wish to add any custom pets, you won't have console errors.

Save changes and open src>map>mob.h

```
#define MAX_MOB_DB 4000
```

Change this value to 10000, so any custom monsters, or mobs you add will still be able to be read by the console/server.

Save changes. And we are done with source edits for now. So that means RECOMPILE YOUR SERVER WITH VISUAL STUDIO 2010.

vi) Custom Window Title

REFER TO SECTION – CLIENT SIDE SETTINGS (USING SHINYO DIFF PATCHER)

From the diff patcher, you will be able to input your own custom title.

vii) Custom Login Screen

Usually splitting your image into 12 individual pieces can be confusing to new-comers, and even the php file to extract it can also be confusing. So the tool below will be able to cut your login screen in 12 pieces with ease.

1024x768 Login Screen Splitter –

<http://www.supportmii.com/ro1/tools/ROLSG%5b1024x768%5d.exe>



Note: Image must be 1024x768, usually better quality is when there is solid color and when you cut the pieces, make sure you cut each time in all 4 settings, which will override any default Gravity Screens!

Additional Notes (If not yet specified):

“Anyway load your JPG or any other format with this tool. The size should be exactly 1024x768 for this to work. Anyways, after it is loaded, hit “Convert” and select “1”, and then you will see 12 parts of your images sliced. Copy those files into the root of “texture/À`ÀúÀîÀíÆäÀì½º/” folder and you will see your custom login screen when you load up your client.

NOTE: Some users reported that if you don't use a solid color, the image will become distorted in such a way that the image quality is loss. Also, make sure you diff your client with “Only use First Login Background” and “Enforce Official Login Background. If options are not available then the above saying that cutting the 12 pieces under each option (1,2,3,4) will usually work as well”

viii Custom RO Icon

Note: This section includes a PDF and tools to create a new Icon image for your diffed client.

Custom RO Icon + Guide - http://www.supportmii.com/ro1/tools/RESHACKER%20-%20ICON_BUI.7z

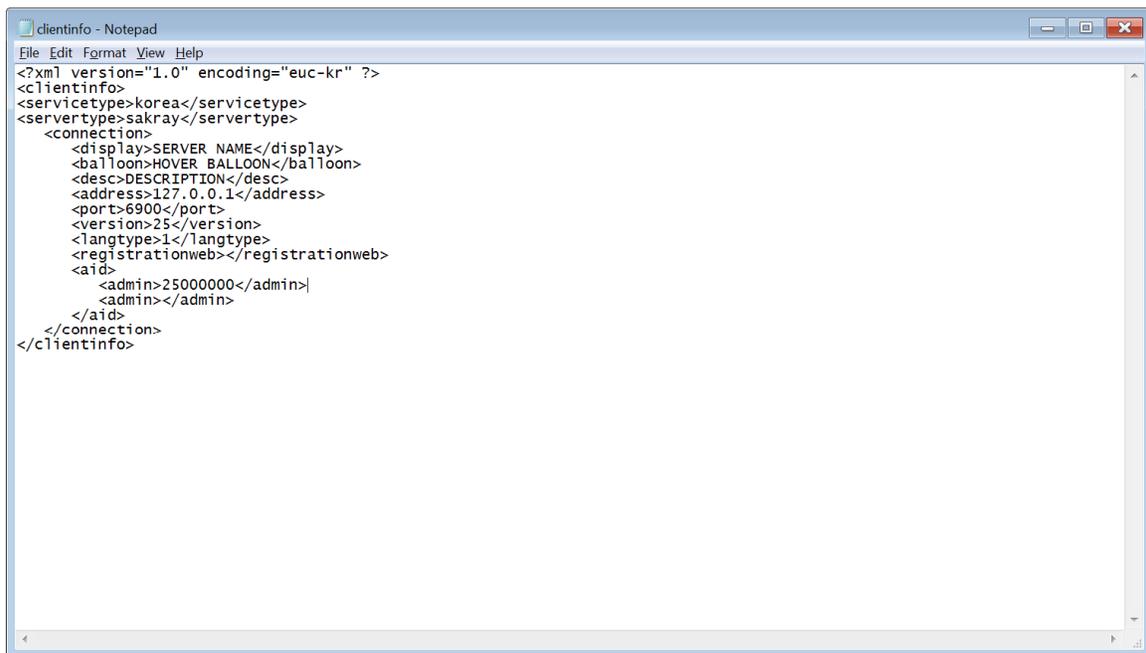
Custom RO Icon Images to Use -

<http://www.supportmii.com/ro1/tools/Custom%20Icons.7z>

xi Adding GM's to clientinfo.xml

This will show you how to add your GM's to the clientinfo to make them show up with GM clothes and a Yellow Name/Chat.

Open up clientinfo.xml in the data folder with notepad



```
clientinfo - Notepad
File Edit Format View Help
<?xml version="1.0" encoding="euc-kr" ?>
<clientinfo>
<servicetype>korea</servicetype>
<servertype>sakray</servertype>
  <connection>
    <display>SERVER_NAME</display>
    <balloon>HOVER_BALLOON</balloon>
    <desc>DESCRIPTION</desc>
    <address>127.0.0.1</address>
    <port>6900</port>
    <version>25</version>
    <langtype>1</langtype>
    <registrationweb></registrationweb>
    <aid>
      <admin>25000000</admin>|
      <admin></admin>
    </aid>
  </connection>
</clientinfo>
```

Then once finished, you should have a GM account, with GM clothes and Yellow Text. And at the moment, there is no way to make a GM with yellow text without GM clothes.

Note: You must remember to distribute/patch this file so other players can see the GM changes.

x Making a GM account SQL

Open up MYSQL Query Browser, and enter your credentials to access your ragnarok database

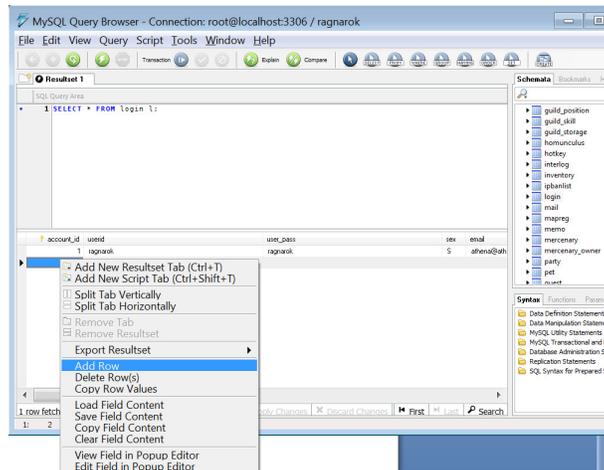
Double click ragnarok

Double click login table

Double click login table again to expand it into the Query Browser

Create a New Account by clicking the edit button

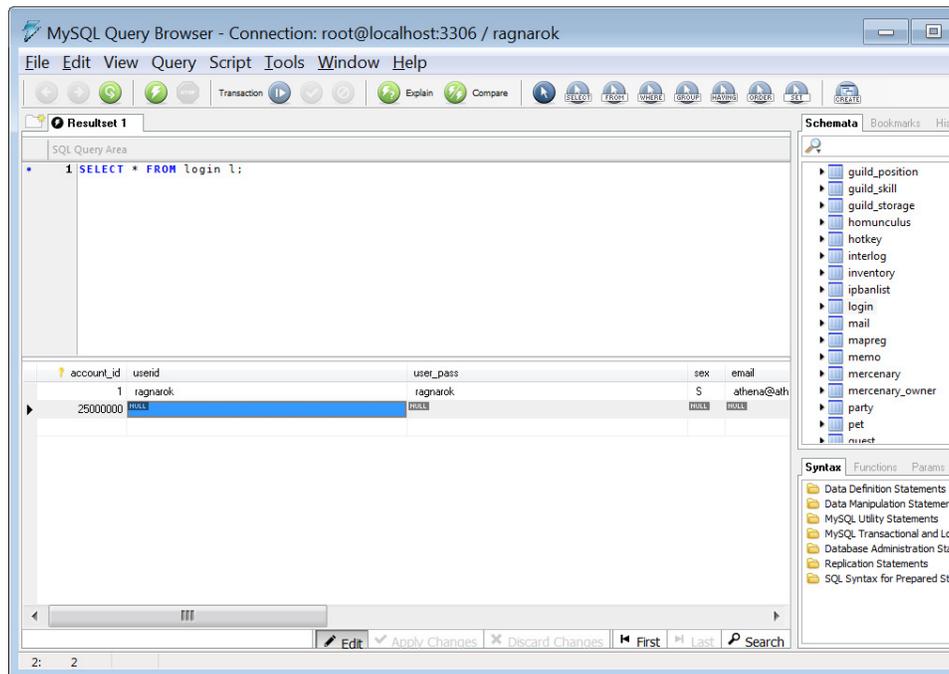
Right-Click on a new Row and click add Row



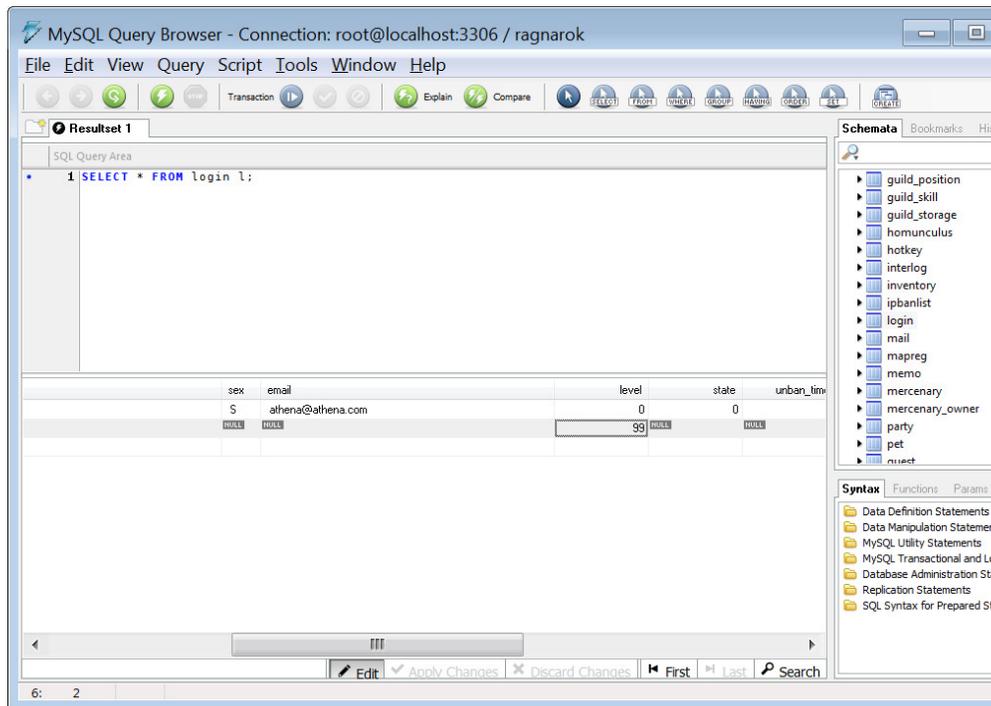
Input "25000000" and press Enter

Double click the userid and user_pass in the row and enter your user/password

Click Apply changes to save our settings

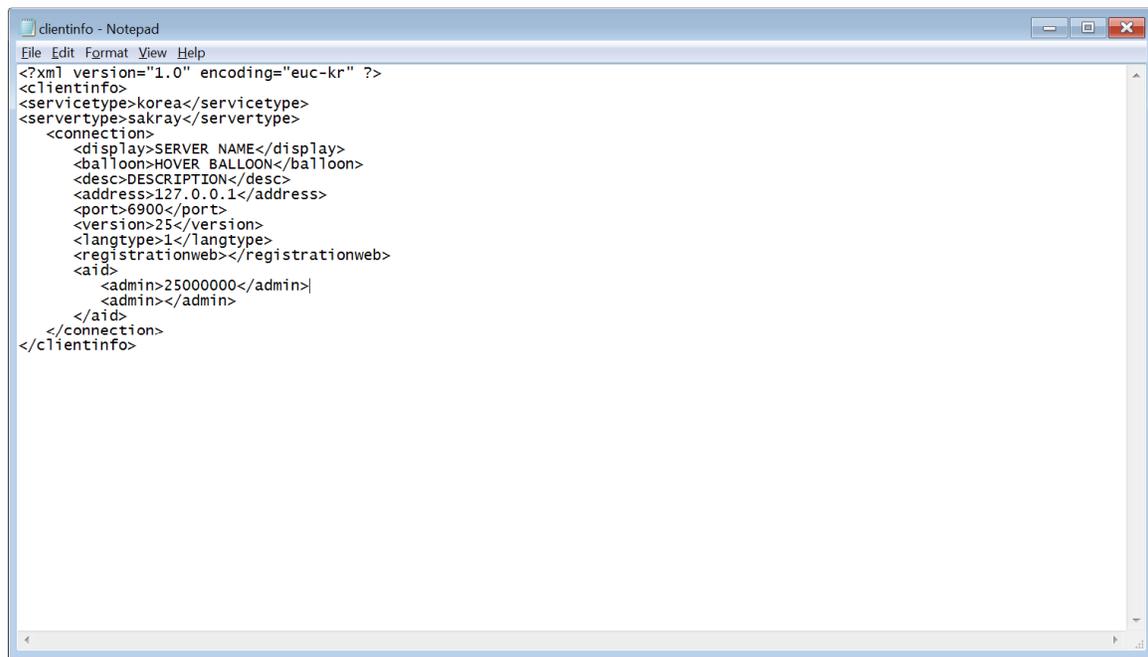


To make this account with GM powers/commands, click the edit button, and in the level column put in the level you want. For example, put in 99 for all GM powers/commands. Click on save changes to save your settings.



To make this account have GM clothes and Yellow text, remember/copy down the Account ID, which in this case is the "25000000".

Now return to your clientinfo.xml and input the Account ID like show below.



xi Compiling GRF

This section will focus on compiling your own grf to work for your server. Ideally, your data folder will be the one that will be turned into the GRF file. Below is a separate guide and tools to build your own server's grf file.

Gryff Builder - <http://www.supportmii.com/ro1/tools/gryff.7z>

Gryff PDF - <http://www.supportmii.com/ro1/tools/Compile%20GRF.pdf>

Usually to make changes to your GRF, one will have to patch in changes. This will be explained later in the tutorial.

xii Setup Patcher (Thor | Using a cheap webhost)

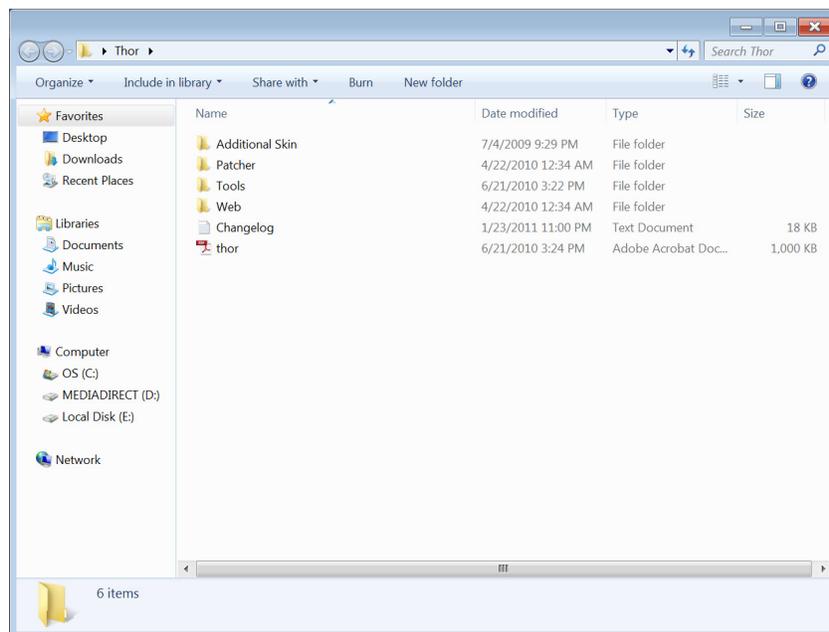
Usually a free webhost would work, but they are limited on how much space and bandwidth you can take up. It causes eA boards and other people problems when you are using a free webhost which might now support patching files. So for this guide, I will be using a cheap webhost to set up the patcher.

Webhost – <http://www.hostbig.com>

Download Thor Patcher from the link below:

Thor Patcher - http://thor.aeomin.net/Thor_Patcher%5b2.6.1.66%5d.7z

Extract the contents somewhere on your PC. In my case, I created a folder called Thor, and extracted the contents into that folder



For this guide, I will be using “hostbig.com” details to fill out the settings for the patcher to be able to patch files to my grf.

After paying for hostbig.com, (I did the Exite Plan, and with registering the domain, the total cost is \$22 without any addons)

After payment, after couple of hours, they will send you your webhosting information.
You want to scroll down to

#3 FTP – Uploading your website

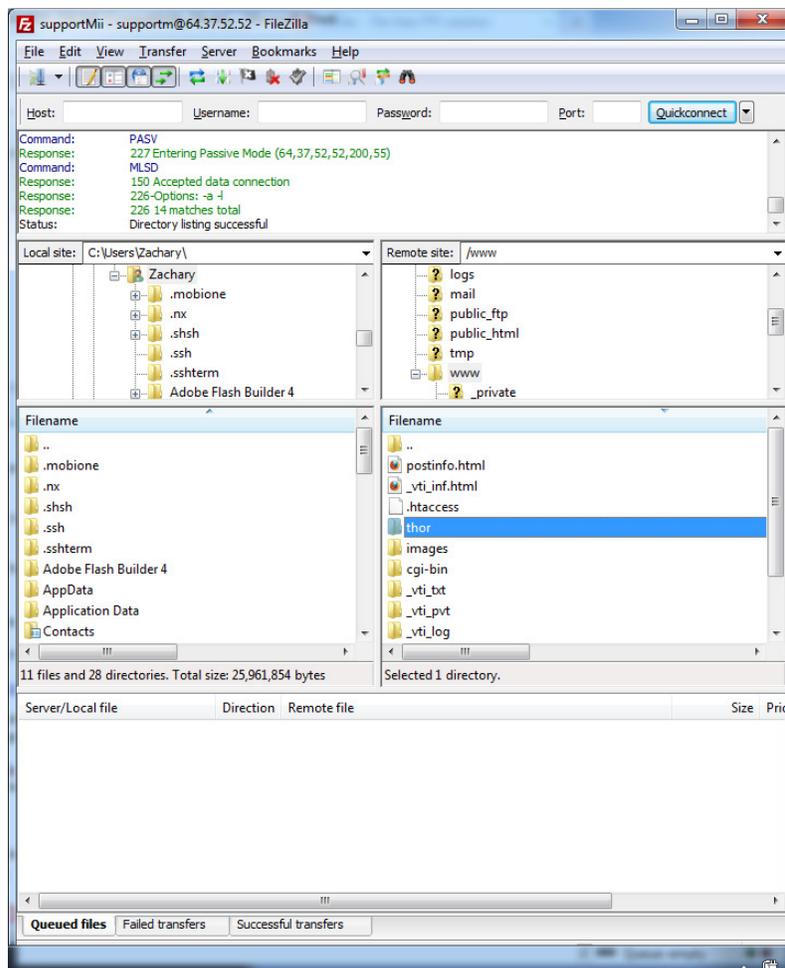
The client we will use to connect is Filezilla which can be downloaded below:

Filezilla Client - <http://filezilla-project.org/download.php?type=client>

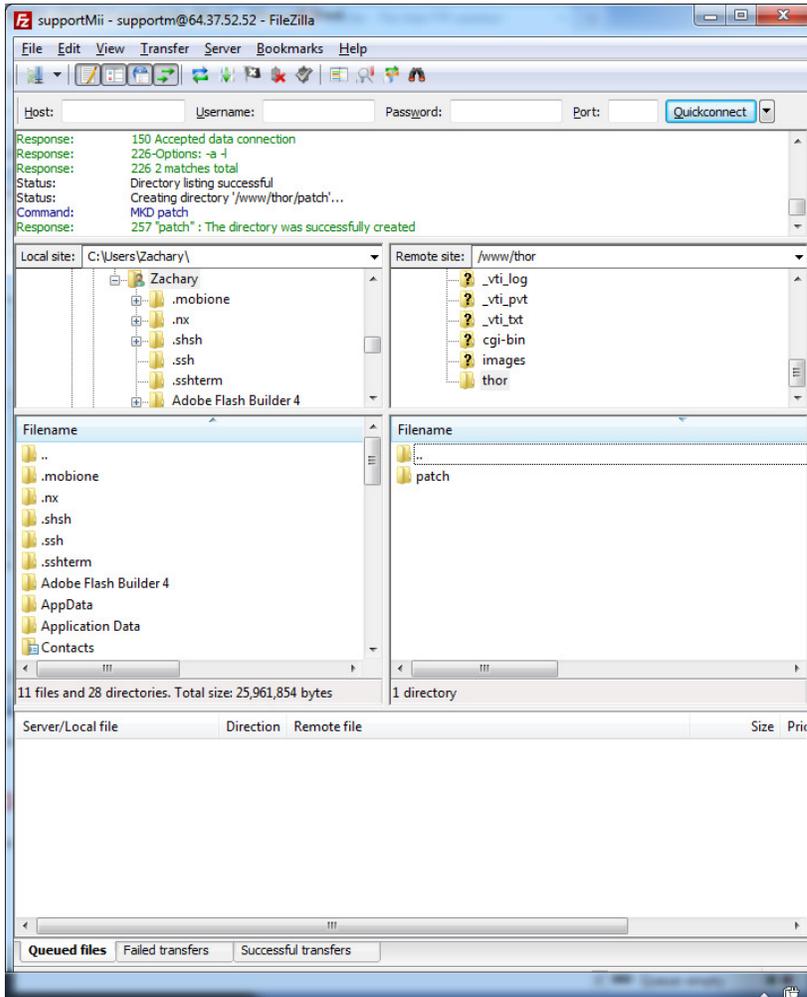
Go ahead and download and install it.
After installing it, open the program up

Enter your credentials in Filezilla
Host: Host Address, Given in email
Username: Given in email
Password: Given in email

Once connected go to “www” shortcut
Create a new folder called thor



Go inside the folder and create a new folder called patch



Now go back to your Thor folder with our patch utilities and navigate to Thor>Web
Edit plist.txt, and remove the two entries
Save and close the file.
Edit notice.html with notepad++ and edit to your liking
Save and close the file

```
1 <html>
2 <head>
3 <title></title>
4 </head>
5 <link rel="stylesheet" href="style.css" type="text/css">
6 <body>
7 <tr valign="top">
8 <td>
9 <div style="height:250px; width:100%;">
10 <table border="0" width="100%" cellspacing="4" cellpadding="4">
11 <tr>
12 <td width="100%"><span class="header">Welcome to SupportMii!</span>
13 <div class="content">
14 <ul>
15 <li>New I</li>
16 *Setting up Thor Patcher
17 <li>News II</li>
18 *Making a Patch
19 </ul>
20 </div>
21 </td>
22 </tr>
23 </table>
24 </div>
25 </td>
26 </tr>
27 </body>
28 </html>
29
```

Hyper Text Marku. length : 578 lines : 29 Ln:1 Col:1 Sel:0 Dos\Windows ANSI INS

Open up main.ini file

We will now edit it with our hostbig.com account settings

Look for this line

```
file_url=http://domain.com/patch/data/
```

We will change it so it looks like this (These are my settings...Domain Name is given to you in the email they sent)

```
file_url=http://supportmii.com/thor/patch/
```

```
main - Notepad
File Edit Format View Help
//Thor Patcher remote config file
[Main]
//Allow patching or not?
allow=true

//Should patcher ignore everything else and finish patch immediately?
Force_Start=false

//if not, what message should appear?
policy_msg=Server is taking a nap.

//file_url - patch files should ALL put here.
// This config entry will override the one in embed config.
// o HTTP:
// http://domain.com/dir/
// o FTP:
// ftp://domain.com/dir/
// o with <Username> [Password] [Port]
// ftp://username:password@domain.com:port/dir/
// o Note: username is required if want put password, otherwise everything is optional.
file_url=http://supportmii.com/thor/patch/

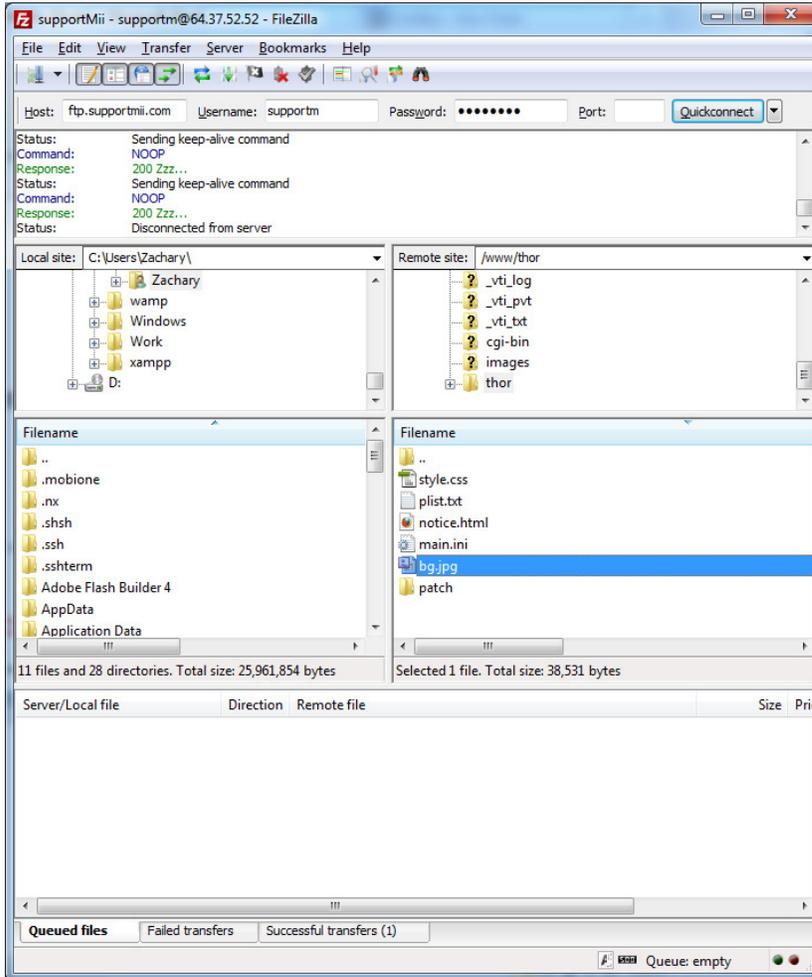
[Patch]
//use CheckSum tool, hash for client & patcher
// used to make sure exe is up to date
// (leave empty to disable this feature)
clientSum=
PatcherSum=

//This is compressed file for patcher & client update
// To make these work, clientSum and/or PatcherSum can't be empty
// Note: these files should put same place as patch file (file_url in internal config)
//Relative address, not FULL URL!
clientPath=
PatcherPath=

// Patch list file
PatchList=plist.txt
```

Save and close the file

Now, drag all the contents in the Thor>Web folder into the filezilla client
www shortcut>thor folder



Now navigate to your Thor Tools, Thor>Tools

Open up config.ini

Find

```
RootURL='http://127.0.0.1/patch/'
```

Change it to your account settings...Mine would be the following

```
RootURL='http://supportmii.com/thor/'
```

Find these three

```
StatusFile='server.dat'
```

```
DefaultGRF='server.grf'
```

```
ClientEXE='game.exe'
```

Change it to the name of your server, and name of client

StatusFile='test.dat'
DefaultGRF='mytest.grf'
ClientEXE='mytest.exe'

If you wish to add BGM when the user is patching then fine these lines

[Config:BGM]

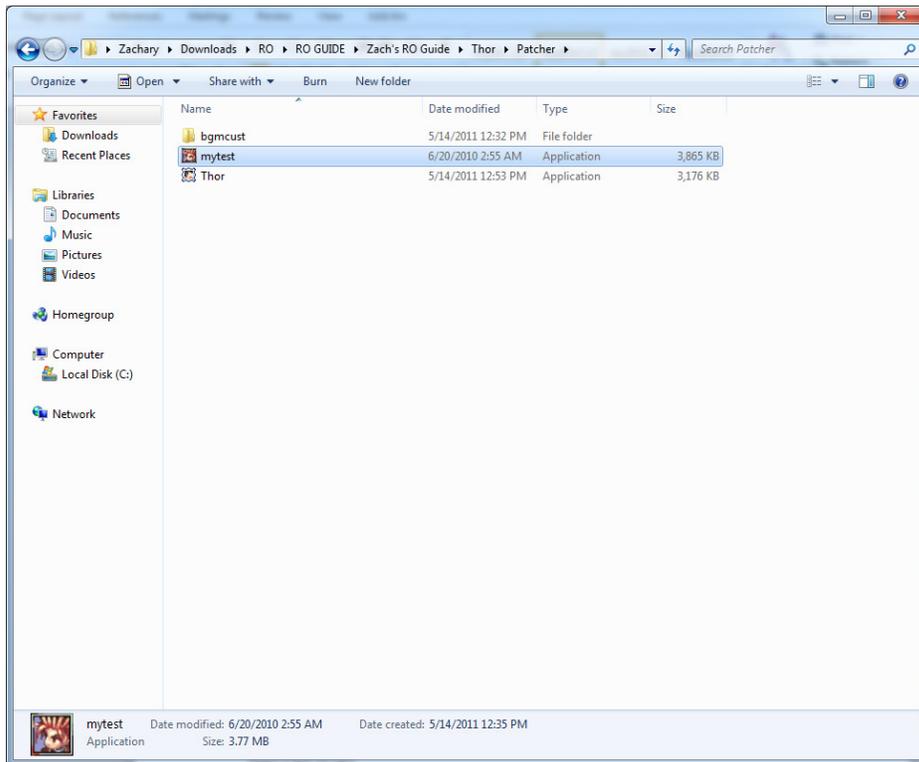
Directory=

The Patcher and bgm folder you name has to be in the same directory as each other.
I will create a new folder on my desktop and call it bgmcust.
So it will look like this

[Config:BGM]

Directory='bgmcust'

The format of the bgms you use have to be mp3 format



Find

Title='Thor Patcher'

Change it to the title of your server

Title='Making a Thor Patcher'

Finally, find

URL='http://127.0.0.1/opatch/Notice.html'

And change it to your account settings

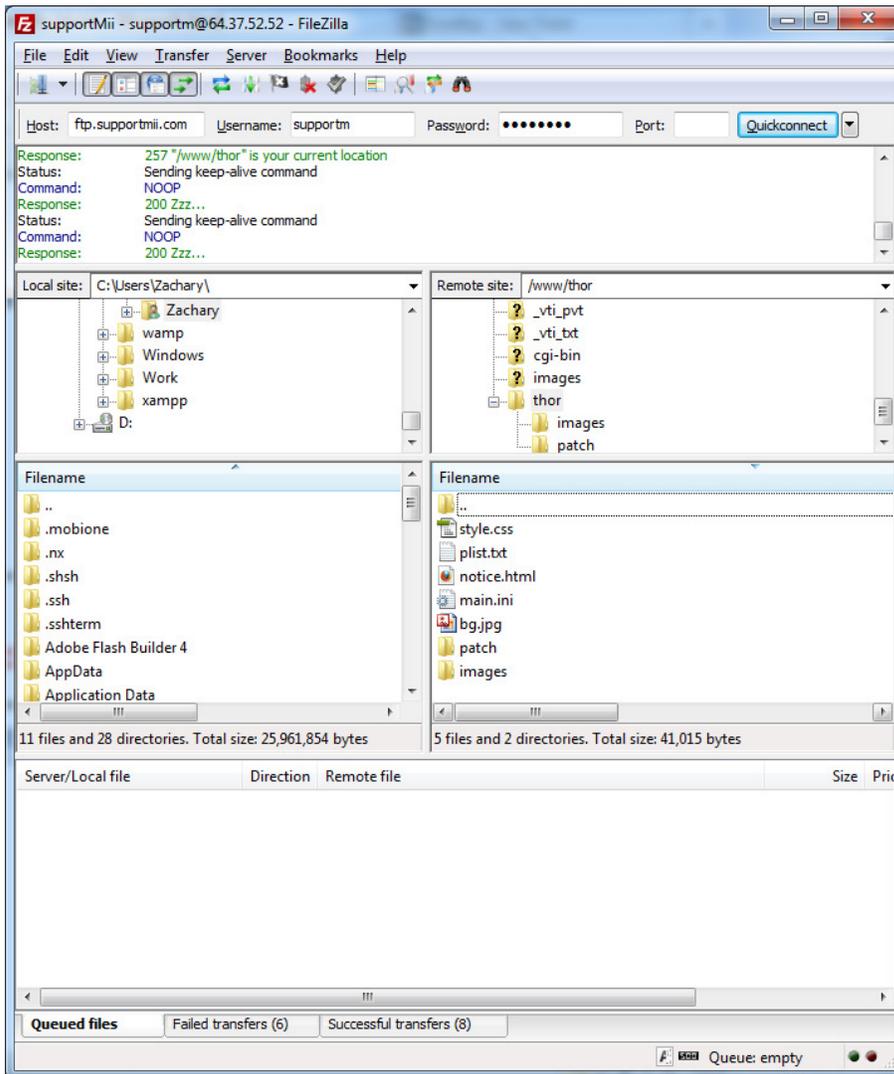
URL='http://supportmii.com/thor/notice.html'

Now run ConfigEmbedder.exe to compile our patcher

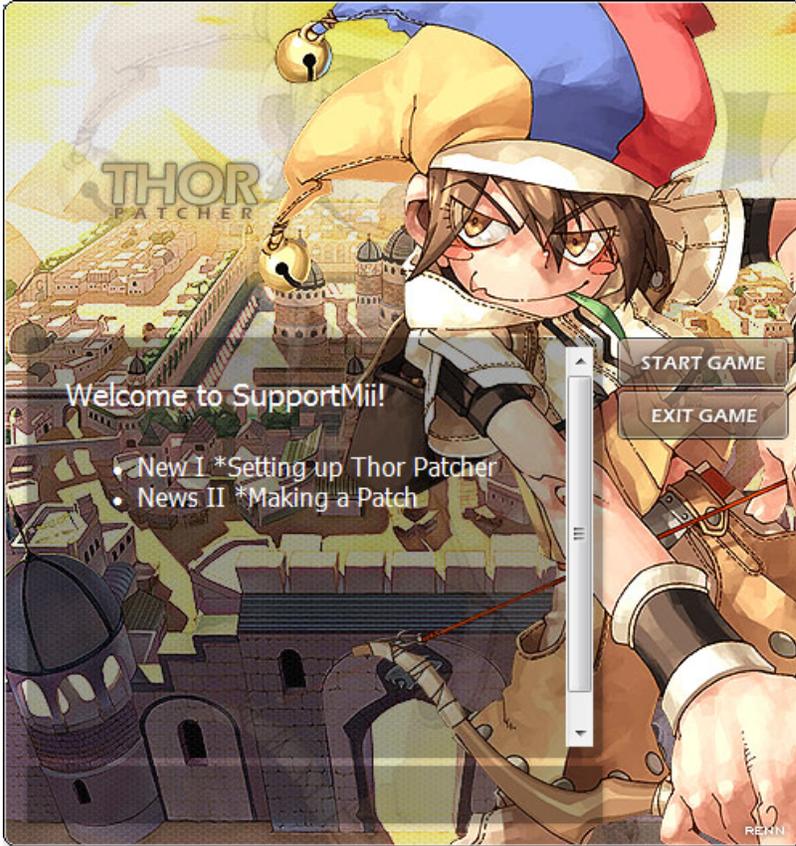
Browse to the patcher, Thor>Patcher>Thor.exe

Select it and hit Pack

In addition, drag the folder "images" from the Thor>Tools directory into your FTP.



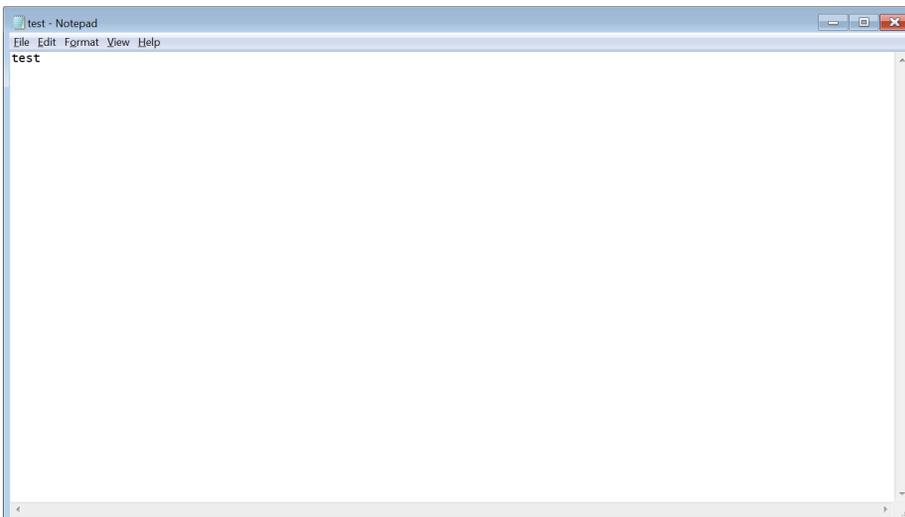
We are done for the most part, once you packed your config file test out the Patcher.



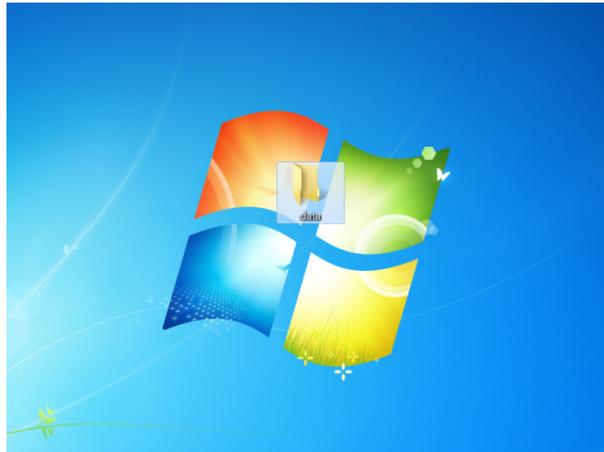
The next lesson will be making/uploading Patches

Xiii Making/Uploading Patches via Thor (GRF)

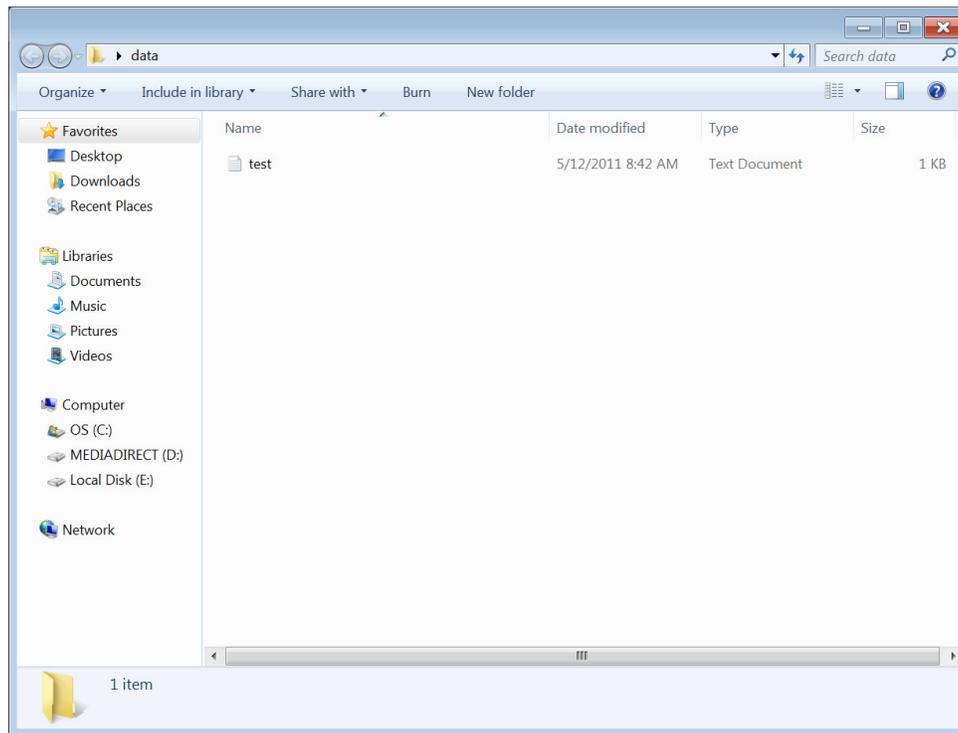
You must have changes ready to make a patch. So for example, I created a document called test.txt



Now, create a folder on your desktop called "data"

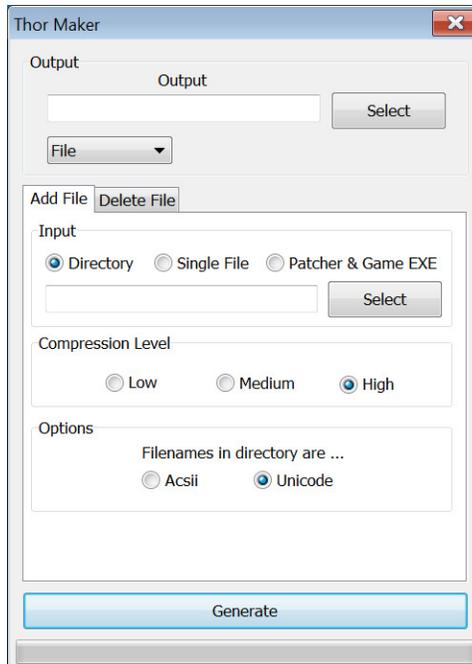


Place the test.txt file inside the data folder.



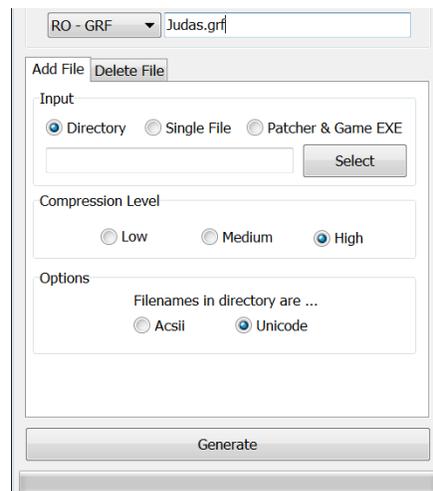
Note: That when you add files to make patches, they must be in the right structure where you want to update your files. Since this is just a test document when we patch it into our grf, it will just go into the root of our grf. So to make it clearer, if we wanted to add textures, they would have to go in our data folder in the structure data\texture\ À~ÀúÀîÀíÆäÀì½²

Now, in the Thor folder we made with all the contents of the package, navigate to Thor>Tools>Thor Generator.exe

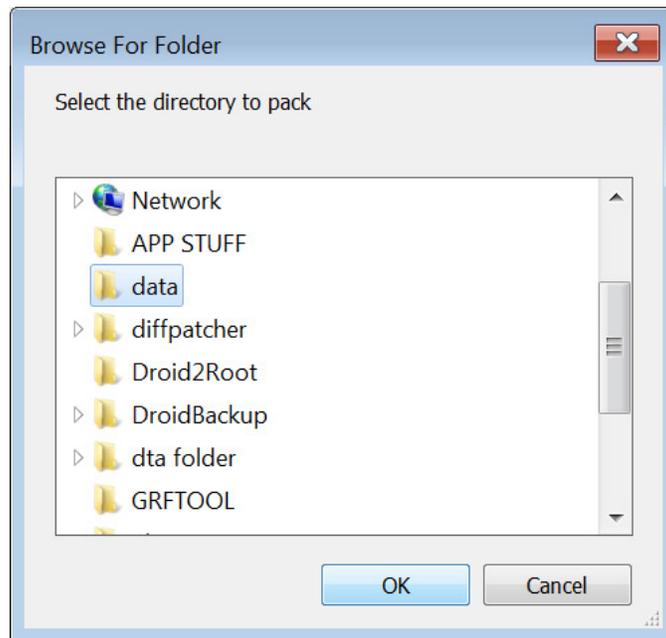


Under Output, click select, and enter an output filename for your patch.
For this guide, I will call my output filename testing.
It will have an automatic extension of .thor
So the complete output filename is testing.thor

In the box, where it says File, change it to RO-GRF
In the type in box, enter the name of your server's GRF
So if my server's grf was called Judas
In the type in box, I would put Judas.grf



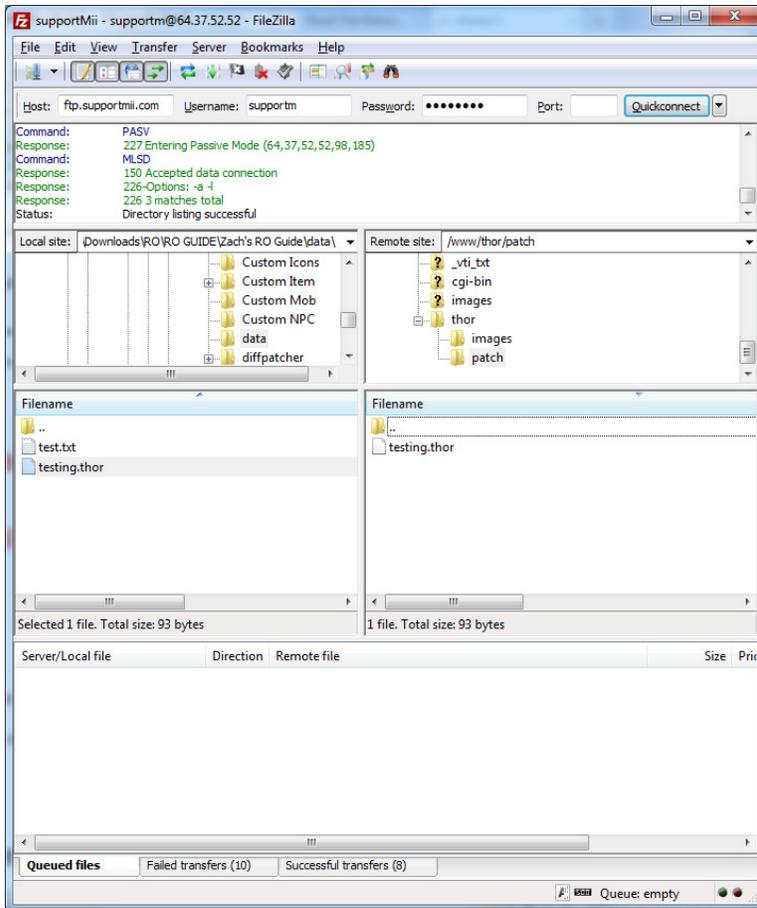
Under input, leave Directory selected
Click the select button and navigate to our data folder



Click once on the data folder, and press ok.
Under Compression level, leave the compression on high
Under options, tick the box called Acsii
Then click generate.
Our patch should appear on our desktop called testing.thor
We have just made our first patch using Thor!!!

Now, we will begin to upload our patch to our webhost to be patched into our server's grf file.

Go back to Filezilla, and go INSIDE the patch directory and upload the testing.thor file

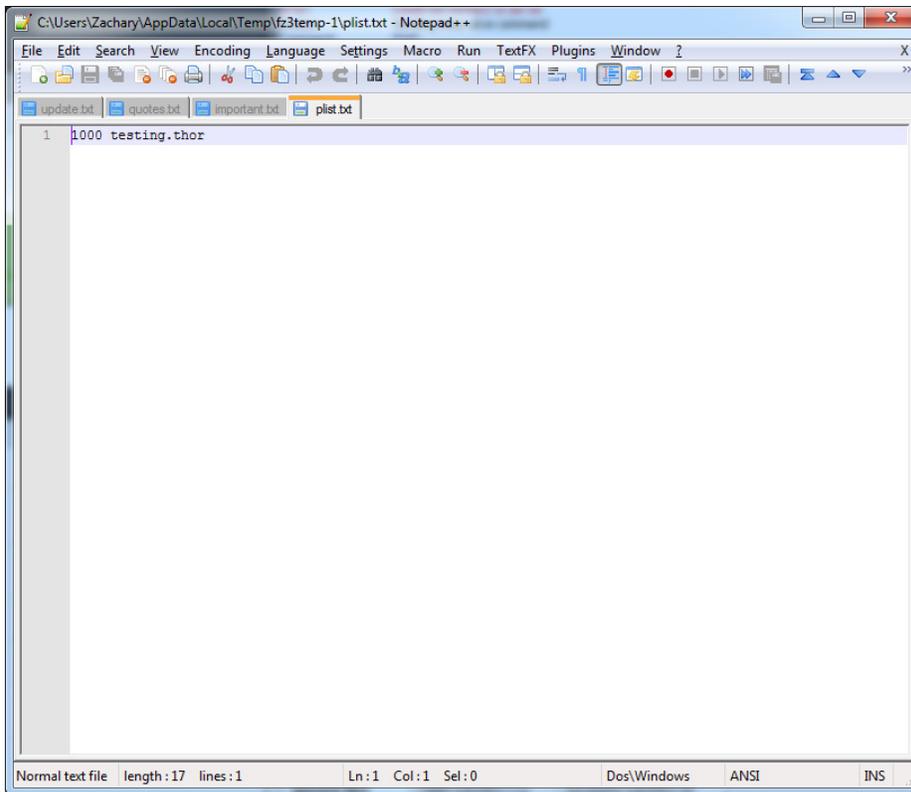


Go back in your Filezilla and open up plist.txt

We will add the patch to this file so when your players open the patcher, it will patch the file

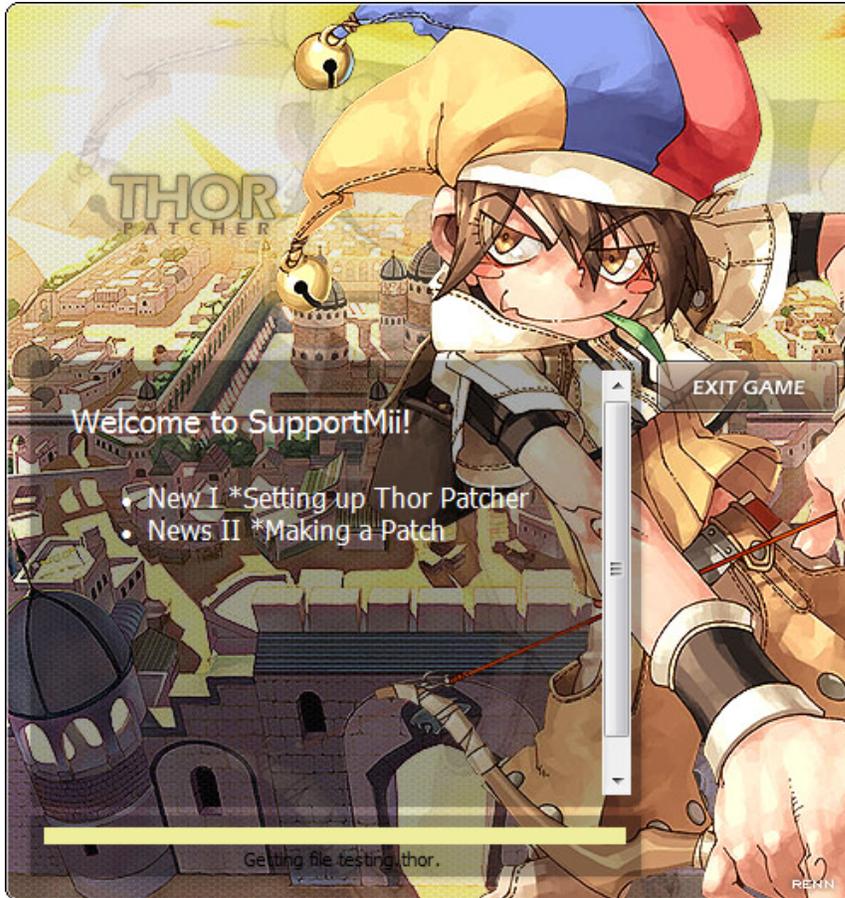
The format is:

Patchnumber(space)nameofpatch.thor



Close it, and filezilla will ask you to save the file, so please do.
You are now done! You have uploaded and made your first patch file!

Test it out by starting your Patcher.



If the patch doesn't work it may be because the file we used is just too trivial.

Xiv **Installing Flux CP (Disable _M/_F)**

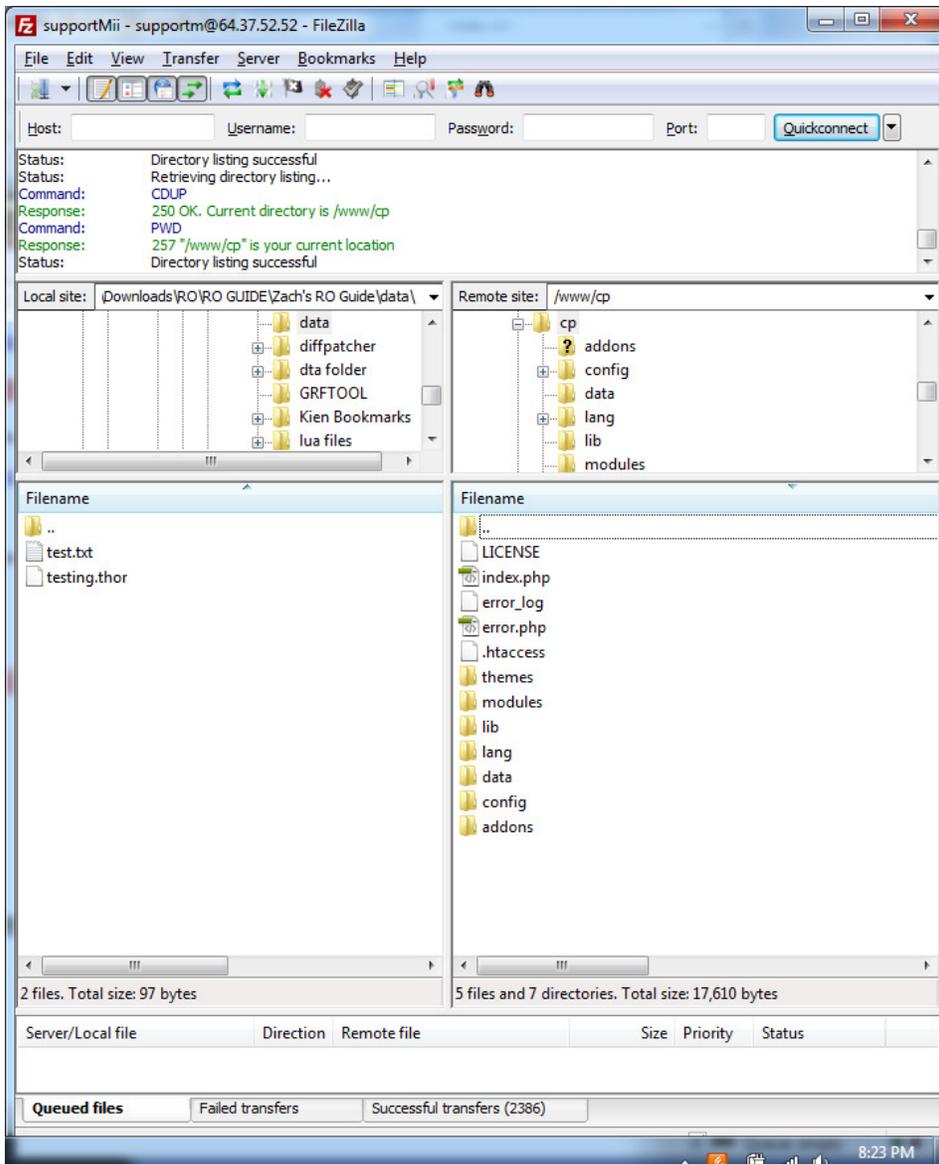
We will be using the same webhost to install FluxCP. You can download the Flux CP files here

Flux CP - <http://code.google.com/p/fluxcp/downloads/detail?name=fluxcp-1.0.0.962.rar&can=2&q=>

Create a new directory called "cp" in your ftp

www shortcut>cp

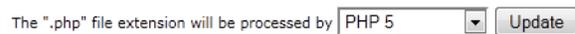
Drag the contents of the FluxCP archive into this directory



Now go to your Cpanel, the info is given in your email
 Once logged in, scroll down to Software/Services>PHP Configuration
 Click on it



In the drop down box, make sure PHP5 is selected



Press update to make the changes.

Go back to filezilla, and go to the cp>config folder

Extract the application.php file onto your desktop

You can do so by dragging the file onto your desktop

Open the file with notepad++

We will now use our credentials to be able to install Flux

Right now, I will be filling it in with my info as an example

Find: 'ServerAddress' => 'localhost',

To: 'ServerAddress' => 'http://supportmii.com',

Find: 'BaseURI' => "",

To: 'BaseURI' => '/cp',

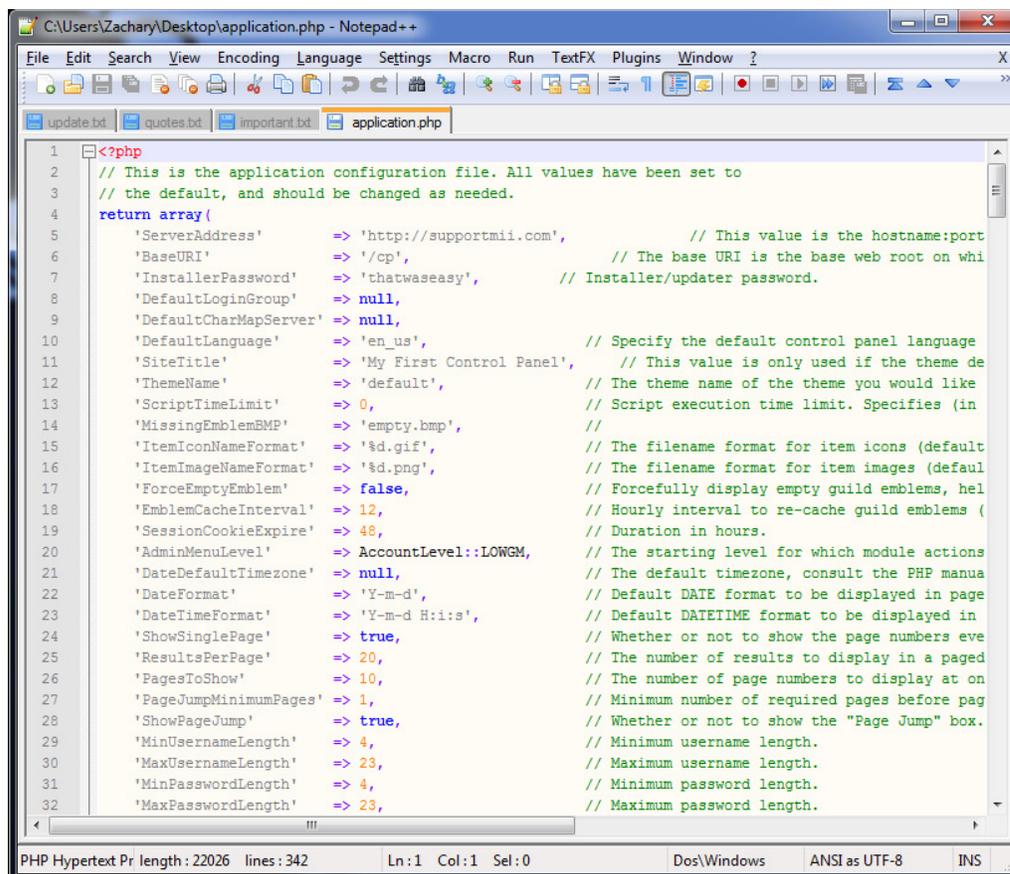
Find: 'InstallerPassword' => 'secretpassword',

To: 'InstallerPassword' => 'thatwaseasy',

Note: Make sure this password is secure so people won't be able to mess up your CP

Find: 'SiteTitle' => 'Flux Control Panel',

To: 'SiteTitle' => 'My First Control Panel',



```
1 <?php
2 // This is the application configuration file. All values have been set to
3 // the default, and should be changed as needed.
4 return array(
5     'ServerAddress' => 'http://supportmii.com', // This value is the hostname:port
6     'BaseURI' => '/cp', // The base URI is the base web root on whi
7     'InstallerPassword' => 'thatwaseasy', // Installer/updater password.
8     'DefaultLoginGroup' => null,
9     'DefaultCharMapServer' => null,
10    'DefaultLanguage' => 'en_us', // Specify the default control panel language
11    'SiteTitle' => 'My First Control Panel', // This value is only used if the theme de
12    'ThemeName' => 'default', // The theme name of the theme you would like
13    'ScriptTimeLimit' => 0, // Script execution time limit. Specifies (in
14    'MissingEmblemBMP' => 'empty.bmp', //
15    'ItemIconNameFormat' => '%d.gif', // The filename format for item icons (default
16    'ItemImageNameFormat' => '%d.png', // The filename format for item images (default
17    'ForceEmptyEmblem' => false, // Forcefully display empty guild emblems, hel
18    'EmblemCacheInterval' => 12, // Hourly interval to re-cache guild emblems (
19    'SessionCookieExpire' => 48, // Duration in hours.
20    'AdminMenuLevel' => AccountLevel::LOWGM, // The starting level for which module actions
21    'DateDefaultTimezone' => null, // The default timezone, consult the PHP manua
22    'DateFormat' => 'Y-m-d', // Default DATE format to be displayed in page
23    'DateTimeFormat' => 'Y-m-d H:i:s', // Default DATETIME format to be displayed in
24    'ShowSinglePage' => true, // Whether or not to show the page numbers eve
25    'ResultsPerPage' => 20, // The number of results to display in a paged
26    'PagesToShow' => 10, // The number of page numbers to display at on
27    'PageJumpMinimumPages' => 1, // Minimum number of required pages before pag
28    'ShowPageJump' => true, // Whether or not to show the "Page Jump" box.
29    'MinUsernameLength' => 4, // Minimum username length.
30    'MaxUsernameLength' => 23, // Maximum username length.
31    'MinPasswordLength' => 4, // Minimum password length.
32    'MaxPasswordLength' => 23, // Maximum password length.
```

These settings are good for now, we can update it anytime we want by just making changes and when asked to update just press update via the CP installer.

Now save the file and close it

Drag the file back into the cp>config folder and say yes to overwrite when asked

Now we have to drag cp>config>servers.php onto our desktop

Open the file with notepad++

Find: 'ServerName' => 'FluxRO',

To: 'ServerName' => 'SupportMiiRO',

We will now setup the rest of the file using our cpanel info

This information again is #2 – Master Account information

IP Address, Username, and Password

Now before doing this, go back to your cpanel and go under the Databases

Select MySQL Databases

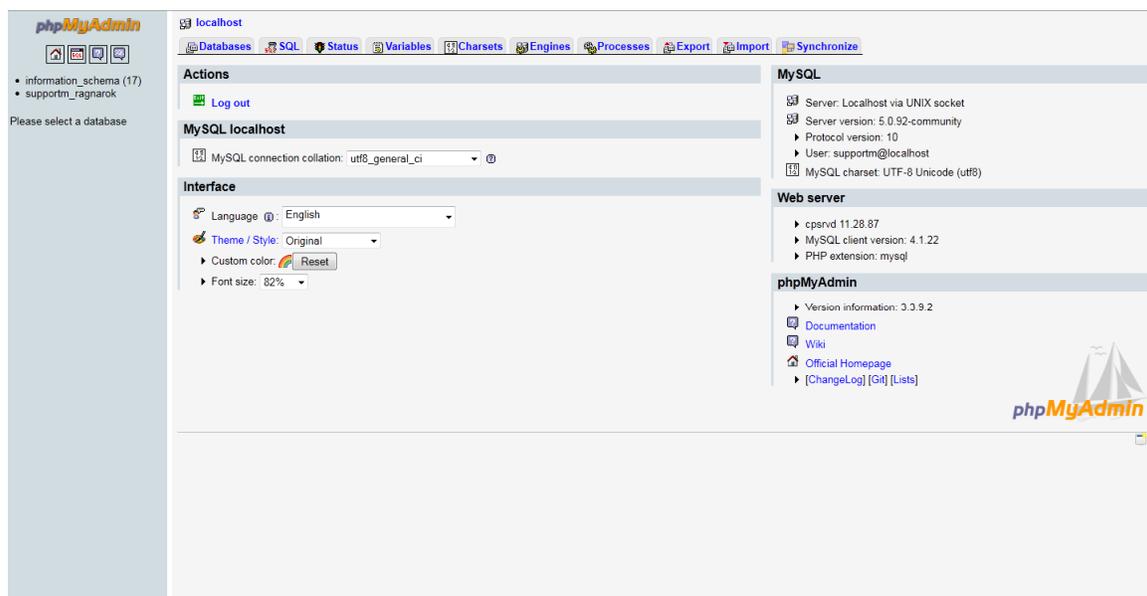


I will now create a new database called ragnarok in this case the prefix is support_ragnarok

Click create database

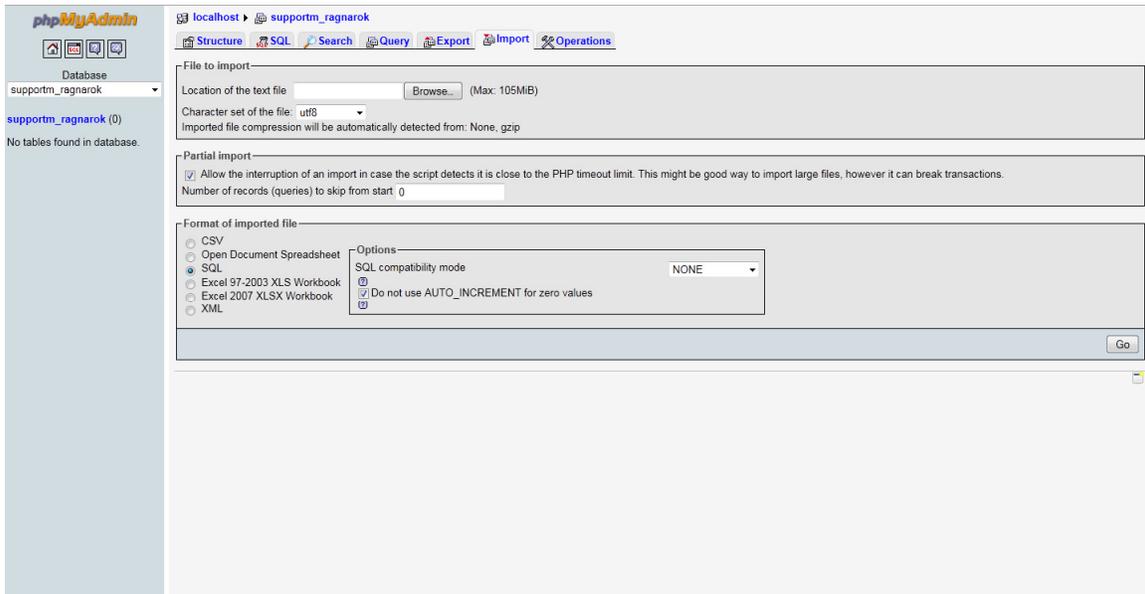
Once done, go back to cpanel and go under the Databases and Select phpMyAdmin

It will open a new page



Click on our new database “support_ragnarok”

Now click the import tab



We will now import some sql-files.

Go to your server files>sql-files and we will import the following

Main.sql

Click Browse, and click on server files>sql-files>main.sql

And click on Go to import the files into our database

And so on...Refer to section 2 "ii" to see the additional sql files to import and the other required sql files

Once finished head back to the servers.php file to fill in our details

Again, replace Hostname with the IP Address of your domain

Replace Username with the username of your domain

Replace Password with the password of your domain

Replace database with the name of our database. (In this case, remember we created a new mysql database...So mine would be supportm_ragnarok.

Scroll down a bit to do it a second time...

Under // Login server configuration.

Replace the 'Address' => '127.0.0.1', with the IP of the domain again

Find 'UseMD5' => true,

Change to: 'UseMD5' => false,

Replace 'ServerName' => 'FluxRO', with name of your server

To: 'ServerName' => 'SupportMii',

We can change the rest later if you wish. Right now we have everything working for the server to run and register.

Now save the close the file

Drag the file back to filezilla and overwrite the file when asked to

In your browser, go to your domain name

In my case it would be

<http://supportmii.com/cp>

Which will bring up the installation page

My First Control Panel Install & Update

Please enter your *installer password* to continue with the update.

Password:

Enter the secret password you chose from application.php file and press Authenticate

We will be presented with this screen:

SupportMii		
Alternative MySQL username/password		
MySQL username	<input type="text"/>	
MySQL password	<input type="password"/>	
<input type="button" value="Update SupportMii"/>		
Schema Name	Latest Version	Version Installed
cp_banlog	743	None
cp_createlog	743	None
cp_credits	743	None
cp_emailchange	743	None
cp_loginlog	743	None
cp_loginprefa	743	None
cp_pwchange	743	None
cp_resetpass	743	None
cp_trusted	743	None
cp_txnlog	791	None
SupportMii		
Schema Name	Latest Version	Version Installed
cp_charprefs	743	None
cp_itemshop	899	None
cp_redeemlog	743	None
cp_xferlog	743	None

Under Alternative MySQL username/password

Enter the Username and Password...Again use the info from the Master Account Information

Press Update to install the CP...

You may be presented by this screen

Error

An error occurred while trying to process your request.

Please try contacting an administrator: admin@localhost

To show the errors...go to cp>config>error.php

Drag it on to the desktop

Open with notepad++

Change this line: \$showExceptions = false;

To: \$showExceptions = true;

Drag back to filezilla, and refresh the browser to be able to see what is erroring us.

You will probably see PDO errors...

Anyway, go back to cpanel>Mysql Databases

Scroll down to "Mysql Users"

We want to add a New User

For this case, I will add a username called root

So in my case, it will be support_root

Input a password and make sure to remember it...

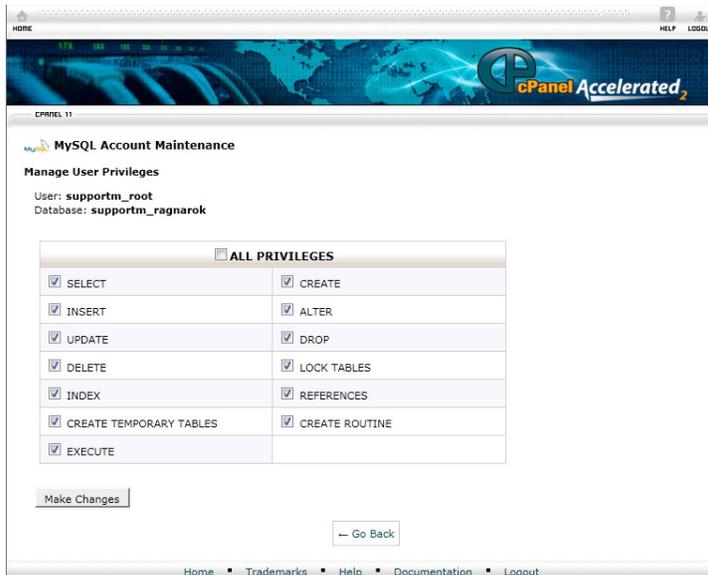
I'm just going to use root lol...

Create the user...

Once added, scroll to the bottom again to see this section "Add Users to database"

Make sure your user you made is selected, and the database is selected...the one we made earlier.

Click Add



Click on All Privileges, and hit make changes to save it. Now, go back and edit the servers.php

Go back to these settings: (Use localhost instead of your domain ip)

Username would be the user you created

Password would be the password for the user you created

Database would be the database we created in mysql database

'Hostname' => 'localhost',

'Username' => 'supportm_root',

'Password' => 'root',

'Database' => 'supportm_ragnarok',

Do the same below.

Like so:

```
13     'Convert'    => 'utf8',
14     // -- 'Convert' option only works when 'Encoding' option is specified and iconv (http://php.net/iconv) is available.
15     // -- It specifies the encoding to convert your MySQL data to on the website (most likely needs to be utf8)
16     'Hostname'  => 'localhost',
17     'Username'  => 'supportm_root',
18     'Password'  => 'root',
19     'Database'  => 'supportm_sagnareok',
20     'Persistent' => true,
21     'Timezone'  => null // Example: '+0:00' is UTC.
22     // The possible values of 'Timezone' is as documented from the MySQL website:
23     // "The value can be given as a string indicating an offset from UTC, such as '+10:00' or '-6:00'."
24     // "The value can be given as a named time zone, such as 'Europe/Helsinki', 'US/Eastern', or 'MET'." (see below continuation!)
25     // **Named time zones can be used only if the time zone information tables in the MySQL database have been created and populated."
26 },
27 // This is kept separate because many people choose to have their logs
28 // database accessible under different credentials, and often on a
29 // different server entirely to ensure the reliability of the log data.
30 'LogsDbConfig' => array(
31     // 'Socket'    => '/tmp/mysql.sock',
32     // 'Port'      => 3306,
33     // 'Encoding'  => null, // Connection encoding -- use whatever here your MySQL tables collation is.
34     'Convert'    => 'utf8',
35     // -- 'Convert' option only works when 'Encoding' option is specified and iconv (http://php.net/iconv) is available.
36     // -- It specifies the encoding to convert your MySQL data to on the website (most likely needs to be utf8)
37     'Hostname'  => 'localhost',
38     'Username'  => 'supportm_root',
39     'Password'  => 'root',
40     'Database'  => 'supportm_sagnareok',
41     'Persistent' => true,
42     'Timezone'  => null // Possible values is as described in the comment in DbConfig.
43 },
44 // Login server configuration.
45 'LoginServer' => array(
46     'Address'   => 'localhost',
47     'Port'      => 6900,
48     'UseMDS'    => false,
49     'NoCase'    => true, // ea account case-sensitivity; Default: Case-INsensitive (true).
50     'Level'     => 0, // Default account level during registration.
51     // 'Database' => 'sagnareok'
```

Save it and close it.

Drag the file back into filezilla and overwrite if asked.

Refresh the webbrowser to fix the problem!

Oh..make sure to change the settings in error.php back to false and drag it back to filezilla to save the changes



FLUX CONTROL PANEL

Updates for SupportMii have been installed.

Flux Control Panel

If you are seeing this page, it's likely that you've successfully installed Flux.
Would you like to change this page? Well, here's how you can:

1. **Open `"/home/supportm/public_html/cp/themes/default/main/index.php"` in your text editor.**
2. **Edit the file from your editor and save your changes.**

Thanks for using Flux!

Powered by Flux Control Panel (1.0.0) — Copyright © 2008-2010 Matthew Harris and Nikunj Mehta.
Page generated in 0.02921 second(s). Number of queries executed: 0.

The rest is self-explanatory... You can edit the message by going to that directory in our filezilla, and opening it via notepad++ to change it.
If any of the tabs error, it means you didn't execute the needed sql-files like item_db/mob_db sql files.

You will notice the Who's Online you will have to change the settings in servers.php to show online when the server is online. You would replace it with your server's IP

```
// Login server configuration.
```

```
'Address' => 'localhost',
```

```
'CharServer' => array(
```

```
'Address' => '127.0.0.1',
```

```
'MapServer' => array(
```

```
'Address' => '127.0.0.1',
```

So again, you would replace the 127.0.0.1 with the WAN ip or the vps ip. Once done, when the server is online it will show green.

If when you put in your vps ip and it is offline, then check with your webhost to see if the necessary ports are open...5121,6121,6900

If hosting from home, and using the webhost as a database for mysql/cp, then forward ports by going to

http://portforward.com/english/routers/port_forwarding/routerindex.htm

Select your router...select the game, and follow directions

Brand such as Linux, netgear...etc

The screenshot shows the Netgear Smart Wizard interface for configuring a RangeMax Wireless Router (model WPN824v3). The main configuration area is titled 'Ports - Custom Services' and contains the following fields:

- Service Name: Login
- Protocol: TCP/UDP
- Starting Port: 6900 (range 1-65535)
- Ending Port: 6900 (range 1-65535)
- Server IP Address: 192.168.1.10

Buttons for 'Apply' and 'Cancel' are located below the fields. A sidebar on the left lists various configuration options, with 'Port Forwarding / Port Triggering' selected. A help window on the right provides detailed information about Port Triggering and Port Forwarding.

As you can see, you would put Login, TCP/UDP/Login Port/Lan IP

Lan IP changes so it is not a good idea to host from home...

Lan IP found by cmd>ipconfig

To disable _M/_F register go to sever files>conf>login_athena.conf

Find:

```
// Can you use _M/_F to make new accounts on the server?  
new_account: yes
```

Change To:

```
new_account: no
```

You should be all set, being able to register from the control panel and refusing to register via _M/_F

Go back to your cPanel and select phpmyadmin, and select your ragnarok database

Scroll down and select login (left hand side)

You will see

The screenshot shows the phpMyAdmin interface for the 'supportm_ragnarok' database. The 'login' table is selected, and the following data is displayed:

account_id	userid	user_pass	sex	email	level	state	unban_time	expiration_time	logincount	lastlogin	last_ip	birthdate
1	s1	p1	S	athena@athena.com	0	0	0	0	0	0000-00-00 00:00:00	0000-00-00	0000-00-00

You see the char_athena and map_athena is set to s1/p1.

So right now I'm going to leave it like this for ease.

For secure, Press the pencil to edit it and change the userid and user_pass

Once changing s1/p1 press go to save changes

Change the values in the char_athena and map_athena conf files.

Now, open up server files>conf>inter.athena.conf so we can input our credentials to connect to the mysql. This is needed only if you decide not to host on a home based computer. Meaning your MYSQL is being hosted on cPanel. So there are two ways using a webhost or using a webhost. Most preferably is using the webhost. So don't get confused on the previous tutorial on setting mysql on homebase.

Find:

```
// Global SQL settings
```

Now change your configurations to look like the following: (replace with your values)

```
sql.db_hostname: domain ip given
```

```
sql.db_port: 3306
```

```
sql.db_username: userwecreated
```

```
sql.db_password: passforuserwecreated
sql.db_database: databasewecreated
sql.codepage:
```

Do the same for the two below since they are exactly the same...

```
// MySQL Log SQL Database
```

```
log_db_ip: domain ip given
log_db_port: 3306
log_db_id: userwecreated
log_db_pw: passforuserwecreated
log_db_db: databasewecreated
log_codepage:
```

Finally head back to cpanel>Databases>Remote Mysql
Input your outgoing IP
Found by going to:

<http://www.whatismyip.com/>

Enter the ip in the box and add host...We should now be able to start our SQL consoles and connect to our webhost/mysql database

Done...We have just made our server online SQL using a webhost with mysql...creating databases and installation fluxCP successfully. You have also learned debugging issues for flux as well.

Oh..one more thing to add icons and such...download them here

FluxCP Icons Items - <http://code.google.com/p/fluxcp/downloads/list>

Xv **Making your Server Online | Port Forwarding |**

Refer to Section Xvi

Xvi **Troubleshooting**

Incompatible lua files, char info errors – You must have lua files corresponding to your client date, and not anything below it.

Setup.exe pops up – You applied the HKLM to HKCU diff patch...Download the patched setup.exe here (Rename it setup.exe) and overwrite the original

Patched Setup.exe -

http://svn6.assembla.com/svn/ClientSide/Diff Project/HKCU Setup/Setup_patched.exe

Client won't start - Need squirrel files or bad syntax. Download the renewal data folder from the previous sections. If one of your text files such as displaynametable.txt is missing a # or funny syntax then the client will fail to open. A long way to debug is to back up your files, and get a fresh data folder and see if that works...Slowly paste files back in to see what file is causing it.

Accname/accessoryid error messages - If you see an error, it will show what line the error is from. Open the each lua file and search for that line...If you use notepad++ do ctrl+g and enter the line the error tells you. You look to see if you messed up on the syntax. Look carefully, if you still can't find it, post support on eA or email me.

Black screen, but sound - update drivers, try different client. Trying a different patched client usually works. Some diff options may cause some computers not to see anything.

Can't login to server - port forward 6900,6121,5121, allow firewall settings for your consoles.

Mysql settings, console won't start - Open logserv-sql.bat...not logserv-sql.exe so we can see the full error. If there is anything refer to loginlog, then check your credentials for mysql and your char/map conf files as well as your inter.conf

Settings won't save, can't see any messages - /nm /nm2, will save in data folder
Make sure the client reads data folder, you can do it...you diffed thte client. The settings will be saved in the data folder now

Tabs are gibberish - double click to change them, keyboard on side icon for settings. Settings will be saved in data folder

Hotkeys don't align - get older lub files, or keep updated with me for fixes. Usually test out diff clients with using lub files or load lua before lub and see if that fixes it.

Submit more error reports to keep this guide updated...Email me.

Xvii Adding Custom Auras

Trans Job Custom Aura Demo -

<http://www.supportmii.com/ro1/tools/Trans%20Job%20Custom%20Aura%20-%20Demo.7z>

3rd Job Custom Aura Demo -

<http://www.supportmii.com/ro1/tools/3rd%20Job%20Custom%20Aura%20-%20Demo.7z>

Custom Aura PDF -

<http://www.supportmii.com/ro1/tools/Add%20Custom%20Aura BUI.pdf>

Notes: ~ Forgot to mention that the “emp shock.tga” file is the one that shoots out of the aura and also is used as the “/aura” ~

~ The 3rd Job Custom Aura by “shadowe” is in the Demo Package and is much cleaner than the default one which was annoying~

~ More auras can be found in the graphic section on the eA boards~

Xviii Adding Custom Maps

~Below, is a guide that will show you the steps clearly, with pictures on how to add custom maps to your server!

Adding Custom Maps PDF|Tools -

<http://www.supportmii.com/ro1/tools/Add Custom Map BUI.7z>

Xix Adding Custom Items RagRE (Long Way)

For this section we will concentrate on adding custom items for RagRe the long way for now, so you know how implementing customs in RagRE is like. Sometime in the future, I will incorporate a new section for the easy way to add multiple customs fast. Remember, for this tutorial, we are dealing with lua files, so there is no reason to compile into lub files.

Too make this guide to add customs easy, we will be using an example since it’s easier to learn with examples!

Download the Custom item Example we will use to add to your server/client files below:

Custom Item Example - [http://www.green-peach.com/download.php?file=Wings%20-%20Fairy_Wings%20\[ToZorMan\]](http://www.green-peach.com/download.php?file=Wings%20-%20Fairy_Wings%20[ToZorMan])

The above link we will use to add just one item from the pack, since the rest are just recolors. The one we will use for this guide will be “Black_Fairy_Wings”

Once downloaded, just extract "Black_Fairy_Wings" folder onto your desktop
We will now proceed to add this custom to be fully functional on our server and client

Open up the Renewal Data folder in which you downloaded previously in this tutorial (If you followed the order).

Navigate to the sprite directory

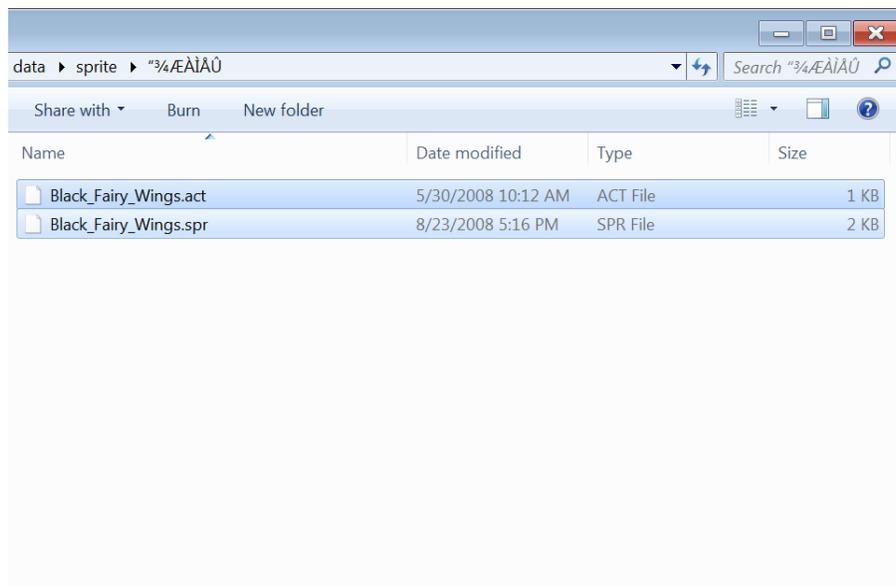
Create a new directory called "34ÆÀÌÀÛ"

So the directory should look like data>sprite>"34ÆÀÌÀÛ"

In "34ÆÀÌÀÛ" folder, you will put the drop sprites in that folder

So copy the sprite/act file from our Black_Fairy_Wings, **Drop Folder**

And Paste them into the directory we created



Next, we will add the texture, item icon and collection icon into our client files.

Now navigate in our data folder to data>texture>À-ÀúÀÍÀÍÆäÀÌ½º

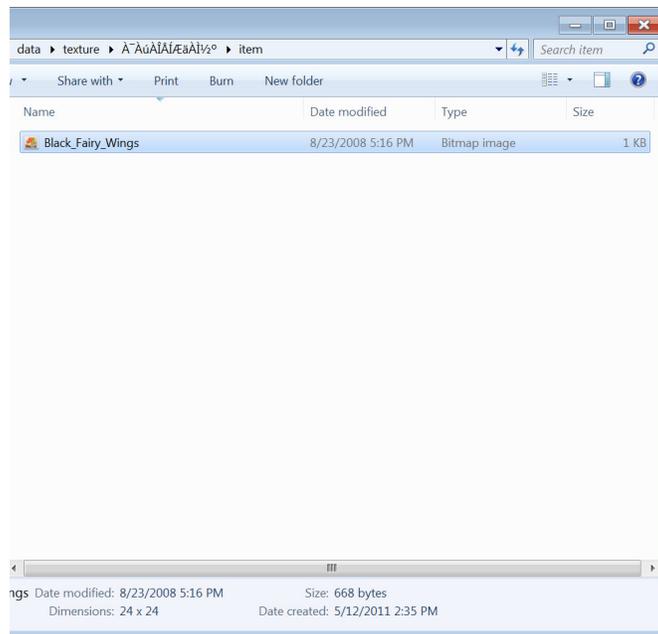
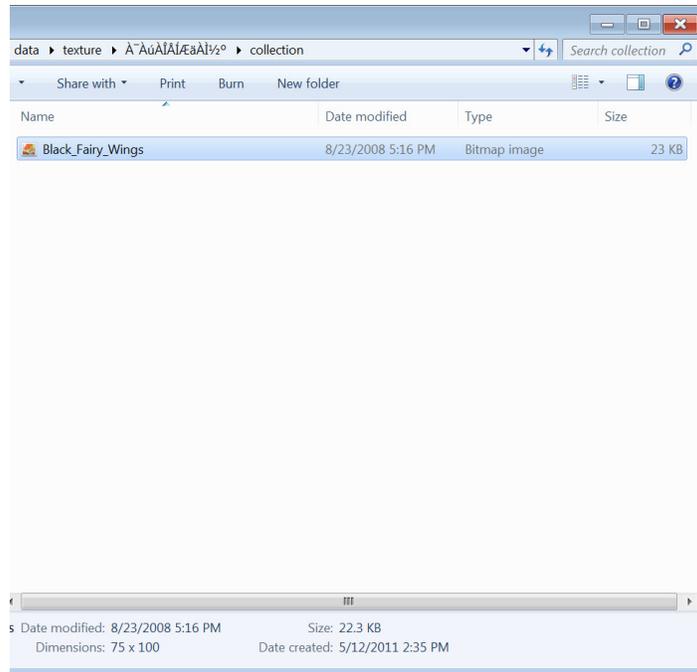
Create a new folder called item and another new folder called collection

So we should have directories for

data>texture>À-ÀúÀÍÀÍÆäÀÌ½º>item and

data>texture>À-ÀúÀÍÀÍÆäÀÌ½º>collection

Now, switch to our custom and copy the image from the collection folder into the collection folder in our data folder, and do the same for the item



We are done with that, now go to the sprite folder again, data>sprite and create a new folder called "♀♂"

So the directory should be, data>sprite>♀♂

Create new directories, ♀ and another new folder called ♂. (Female and Male respectively)

So the directories should look like the following:

data>sprite>♀♂>♀

data>sprite>♀♂>♂

Head back to our custom and copy the

```
ç©_Black_Fairy_Wings.spr
ç©_Black_Fairy_Wings.act
```

into the "data>sprite>¾Ç¼¼¼»ç,®>ç©"

And copy the

```
¾²_Black_Fairy_Wings.spr
¾²_Black_Fairy_Wings.act
```

into the "data>sprite>¾Ç¼¼¼»ç,®>¾²"

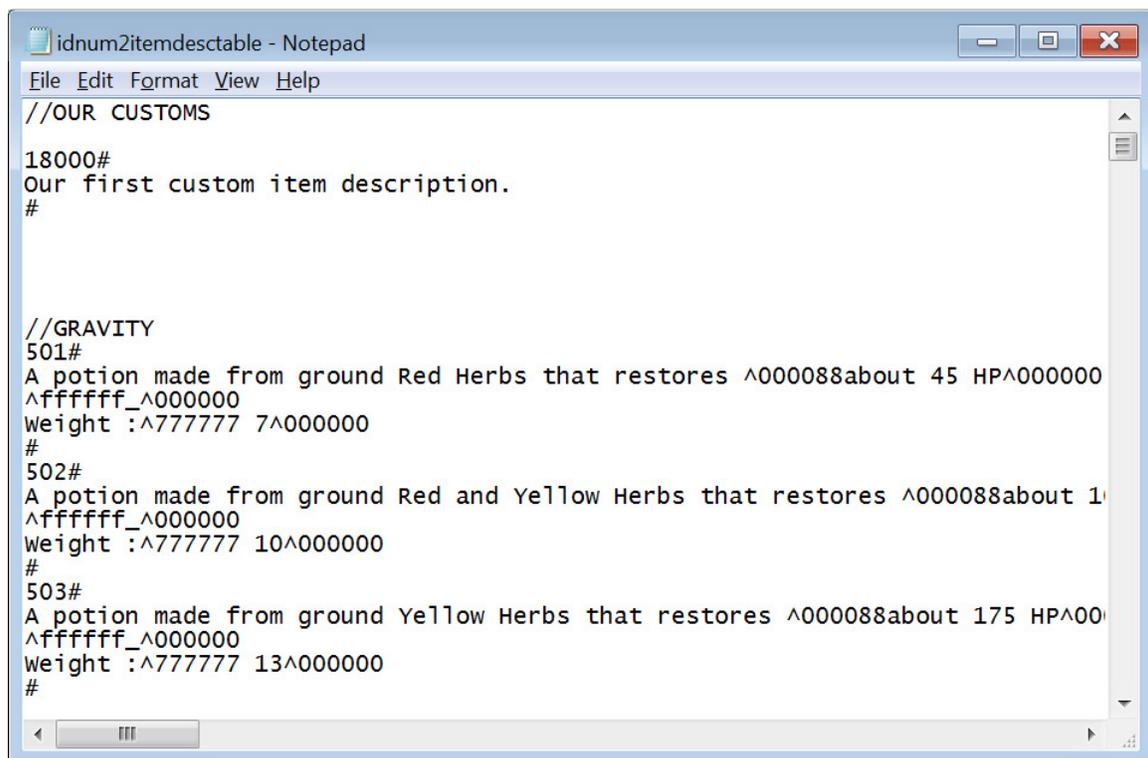
Once done with that, we can finally start working on the text documents to add the custom in.

We will first edit the "idnum2itemdesctable.txt" located in the root of your data folder. This document deals with adding descriptions for your custom item, when you right click your item ingame, the description will show.

Now first, choose an ID you wish to give this custom item. I would recommend anything from "18000-30000".

For this guide, I will be using "18000" for the Black_Fairy_Wings

Go ahead and open the idnum2itemdesctable.txt file
And your custom will look like the following:

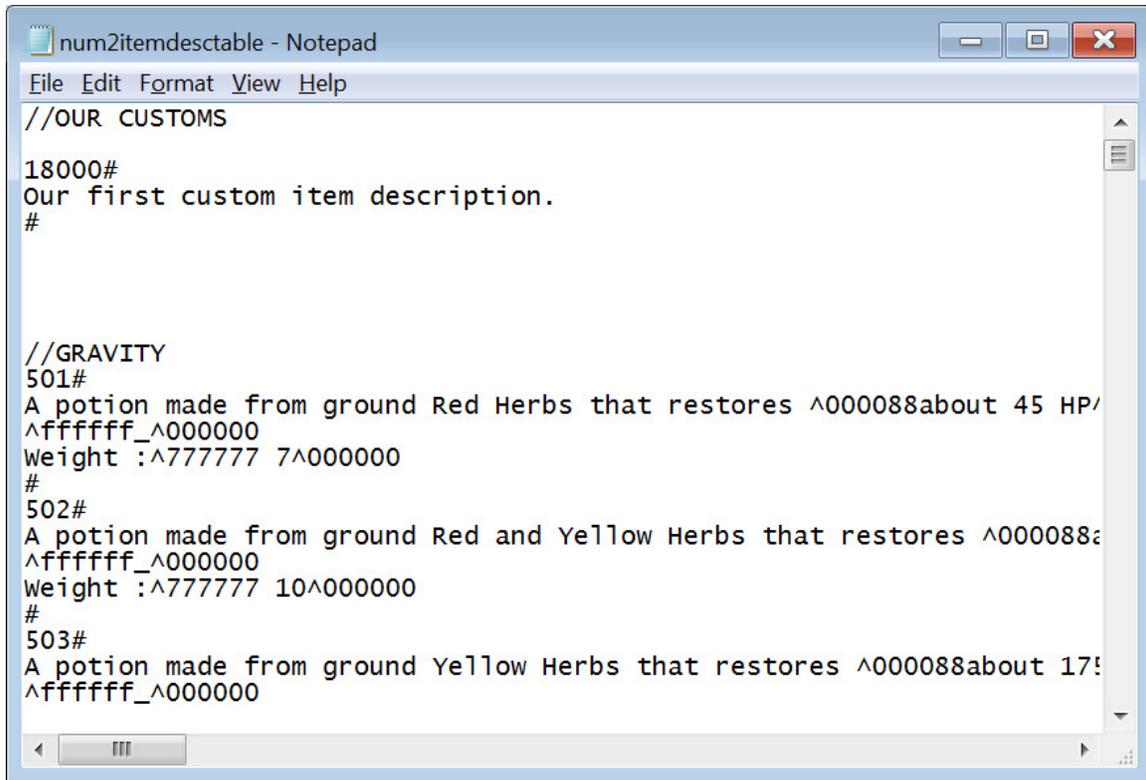


```
idnum2itemdesctable - Notepad
File Edit Format View Help
//OUR CUSTOMS

18000#
Our first custom item description.
#

//GRAVITY
501#
A potion made from ground Red Herbs that restores ^000088about 45 HP^000000
^ffffff_^000000
Weight :^777777 7^000000
#
502#
A potion made from ground Red and Yellow Herbs that restores ^000088about 10
^ffffff_^000000
Weight :^777777 10^000000
#
503#
A potion made from ground Yellow Herbs that restores ^000088about 175 HP^00
^ffffff_^000000
Weight :^777777 13^000000
#
```

For this guide, we will just use standard descriptions, and leave out formatting of weight or color. **Also do the same for num2itemdesctable.txt.** Meaning that it should look similar to the idum2itemdesctable.txt file.



```
num2itemdescstable - Notepad
File Edit Format View Help
//OUR CUSTOMS

18000#
Our first custom item description.
#

//GRAVITY
501#
A potion made from ground Red Herbs that restores ^000088about 45 HP/
^ffffff_^000000
Weight :^777777 7^000000
#
502#
A potion made from ground Red and Yellow Herbs that restores ^000088a
^ffffff_^000000
Weight :^777777 10^000000
#
503#
A potion made from ground Yellow Herbs that restores ^000088about 17!
^ffffff_^000000
```

Close those two files, and open up, "idnum2itemdisplaynametable.txt". This file deal with the name of the item you wish to see ingame. For example, if I wish to give the ID "18000" the name Judas Rocks, then I would put in Judas_Rocks, and in game the name of the wings would be called Judas Rocks.

Anyway, the syntax is ID#NAMEofITEM#

```
idnum2itemdisplaynametable - Notepad
File Edit Format View Help
//OUR CUSTOMS
18000#Black_Fairy_Wings#

//GRAVITY
501#Red_Potion#
502#Orange_Potion#
503#Yellow_Potion#
504#White_Potion#
505#Blue_Potion#
506#Green_Potion#
507#Red_Herb#
508#Yellow_Herb#
509#White_Herb#
510#Blue_Herb#
511#Green_Herb#
512#Apple#
513#Banana#
514#Grape#
515#Carrot#
516#Potato#
517#Meat#
518#Honey#
519#Milk#
```

Do the same for num2itemdisplaynametable.txt file

```
num2itemdisplaynametable - Notepad
File Edit Format View Help
//OUR CUSTOMS
18000#Black_Fairy_Wings#

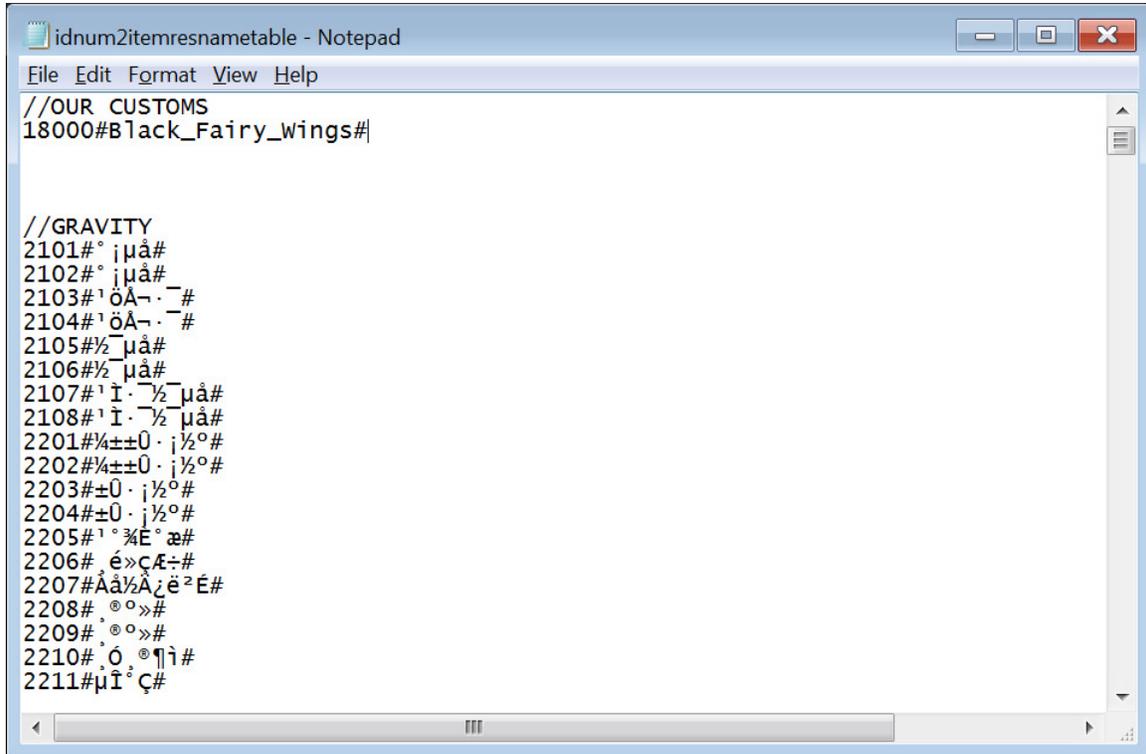
//GRAVITY
501#Red_Potion#
502#Orange_Potion#
503#Yellow_Potion#
504#White_Potion#
505#Blue_Potion#
506#Green_Potion#
507#Red_Herb#
508#Yellow_Herb#
509#White_Herb#
510#Blue_Herb#
511#Green_Herb#
512#Apple#
513#Banana#
514#Grape#
515#Carrot#
516#Potato#
517#Meat#
518#Honey#
519#Milk#
```

Save and close both those files, and open up our last text file to edit which is "idnum2itemresnametable.txt". This deals on how the custom item's sprite is read by the client. So this is VITAL to get this right.

Our syntax again for this document is

ID#SPRITENAME#

So for the Black_Fairy_Wings, it will look like this (You usually copy the name of the Drop Sprite):



```
idnum2itemresnametable - Notepad
File Edit Format View Help
//OUR_CUSTOMS
18000#Black_Fairy_Wings#

//GRAVITY
2101#° jµå#
2102#° jµå#
2103#¹ öÅ-·-#
2104#¹ öÅ-·-#
2105#½ µå#
2106#½ µå#
2107#¹ i·½ µå#
2108#¹ i·½ µå#
2201#¼±±0· j½°#
2202#¼±±0· j½°#
2203#±0· j½°#
2204#±0· j½°#
2205#¹ ° ¾E° æ#
2206# é»ÇÆ÷#
2207#Å½Å½ ç è²É#
2208# ° »#
2209# ° »#
2210# ö ° ¶ì#
2211#µ i ° Ç#
```

Do the same for num2itemresnametable.txt file

```
num2itemresnametable - Notepad
File Edit Format View Help
//OUR_CUSTOMS
18000#Black_Fairy_Wings#

//GRAVITY
2101#° jµâ#
2102#° jµâ#
2103#° jµâ#
2104#° jµâ#
2105#° jµâ#
2106#° jµâ#
2107#° jµâ#
2108#° jµâ#
2201#±0· j½°#
2202#±0· j½°#
2203#±0· j½°#
2204#±0· j½°#
2205#±0· j½°#
2206#Ä.#
2207#²È#
2208# ,°>#
2209# ,°>#
2210# ,ó ,¶ì#
2211#µî° Ç#
```

Save both these files and close them. We are finish with editing these text files.

Next up, are the lua files. Navigate to data>lua files>datainfo

For this section, we will be using the lua files that came with the Renewal Data Folder

You can open lua files with notepad if you wish

However, I would recommend downloaded notepad++ to edit better because of the formatting

Notepad++ - <http://download.tuxfamily.org/notepadplus/5.9/npp.5.9.Installer.exe>

Open up, accname.lua and scroll to the end of the document

Copy the last entry and paste it so it will look like the following:

```

accname - Notepad
File Edit Format View Help

[ACCESSORY_IDS.ACCESSORY_LITTLE_FHAT] = "_@Æ²Æä´õÇþ",
[ACCESSORY_IDS.ACCESSORY_LOVE_GUARD] = "_¹ú¾ÒÀÇ%öÈÉ",
[ACCESSORY_IDS.ACCESSORY_WITCHS_HAT] = "_¾³àÀÇ ðÀÚ",
[ACCESSORY_IDS.ACCESSORY_LOVER_IN_MOUTH] = "_ÀÓ¾ÈÀÇ¿-ÀÌ",
[ACCESSORY_IDS.ACCESSORY_CAMPUS_FESTIVAL] = "_À·ÆÙ½°Æä½°Æ¼¹ß",
[ACCESSORY_IDS.ACCESSORY_TAINI_CAP] = "_À,ÀÌ Ì ðÀÚ",
[ACCESSORY_IDS.ACCESSORY_BUTTERFLY_HAIRPIN] = "³ªºñ, Ó ©ÇÉ",
[ACCESSORY_IDS.ACCESSORY_ASGARD_BLESS] = "_¾Æ½°° i, fµáÀÇÄä°¹",
[ACCESSORY_IDS.ACCESSORY_GALAXY_CIRCLET] = "_°¾·½Ä¼-A-,´",
[ACCESSORY_IDS.ACCESSORY_MALANGDO_HAT] = "_¾»¾µµ, ðÀÚ",
[ACCESSORY_IDS.ACCESSORY_MINI_TREE] = "_¹Ì-ÌÆ°",
[ACCESSORY_IDS.ACCESSORY_KING_PRAWN_HAT] = "_¿Ö»õ¿ì ðÀÚ",
[ACCESSORY_IDS.ACCESSORY_GENERAL_HELMET] = "_Àá±°ÀÇÀõ±",
[ACCESSORY_IDS.ACCESSORY_SINSUNCHO_HAT] = "_½Ä¼±ÄÈ, ðÀÚ",
[ACCESSORY_IDS.ACCESSORY_BONE_HAT] = "_Çø°ñ, ðÀÚ",
[ACCESSORY_IDS.ACCESSORY_HEART_WING_HAIRBAND] = "_ÇÌÆ°³-°³Çì¾î¹êµá",
[ACCESSORY_IDS.ACCESSORY_LOVE_PIECE] = "_¾Ç¾¾ÀÇÀ¾°Ç",
[ACCESSORY_IDS.ACCESSORY_ST_PAT_HAT] = "_·¹ÇÀ,°ÁÁÀÇ ðÀÚ",
[ACCESSORY_IDS.ACCESSORY_NUT_DONUT_MOUTH] = "_ÀÓ¿ì¹°³ÈÆ°µµ³Ó",
[ACCESSORY_IDS.ACCESSORY_STRETCHED_NOSE] = "_À¾¹³-ÀÚ",
[ACCESSORY_IDS.ACCESSORY_ANCIENT_GOLD_ADORNMENT] = "_°¹´èÀÇ±ÝÀá½Ä",
[ACCESSORY_IDS.ACCESSORY_LUCKY_HAT] = "_Çà¿îÀÇ, ðÀÚ",

[ACCESSORY_IDS.ACCESSORY_LUCKY_HAT] = "_Çà¿îÀÇ, ðÀÚ",

}

```

We will not substitute "Black_Fairy_Wings" in place of this like so:

```
accname - Notepad
File Edit Format View Help

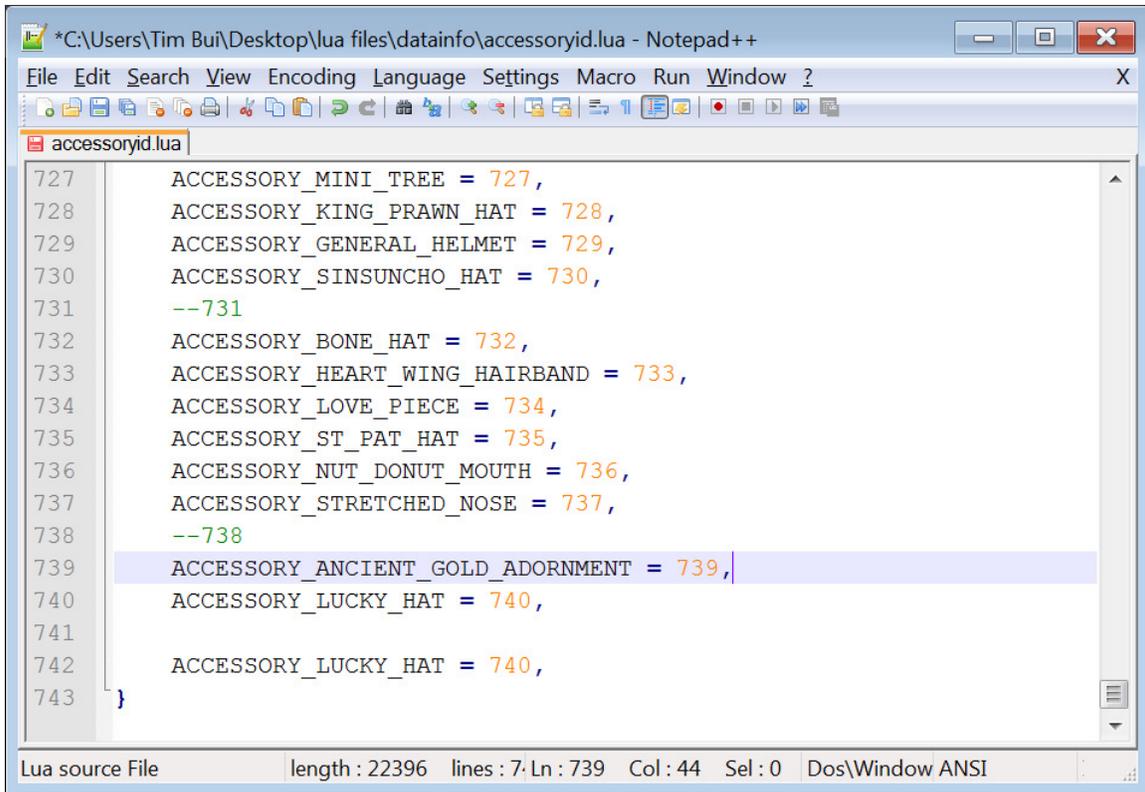
[ACCESSORY_IDS.ACCESSORY_LITTLE_FHAT] = "_@Æ²Æä´õÇþ",
[ACCESSORY_IDS.ACCESSORY_LOVE_GUARD] = "_¹Ú¾ÒÀÇ%öÈÉ",
[ACCESSORY_IDS.ACCESSORY_WITCHS_HAT] = "_¾³àÀÇ ðÀÚ",
[ACCESSORY_IDS.ACCESSORY_LOVER_IN_MOUTH] = "_ÀÕ¾ÈÀÇ¿-ÀÌ",
[ACCESSORY_IDS.ACCESSORY_CAMPUS_FESTIVAL] = "_À·ÆÙ½°Æä½°Æ¼¹B",
[ACCESSORY_IDS.ACCESSORY_TAINI_CAP] = "_À,ÀÌ Ì ðÀÚ",
[ACCESSORY_IDS.ACCESSORY_BUTTERFLY_HAIRPIN] = "³aõñ, Ó ©ÇÉ",
[ACCESSORY_IDS.ACCESSORY_ASGARD_BLESS] = "_¾Æ½°° i, fµáÀÇÄä°¹",
[ACCESSORY_IDS.ACCESSORY_GALAXY_CIRCLET] = "_°¾·½Ä¼-A-,´",
[ACCESSORY_IDS.ACCESSORY_MALANGDO_HAT] = "_¾»¾µµ, ðÀÚ",
[ACCESSORY_IDS.ACCESSORY_MINI_TREE] = "_¹Ì ÌÆ°",
[ACCESSORY_IDS.ACCESSORY_KING_PRAWN_HAT] = "_¿Ö»õ¿ì ðÀÚ",
[ACCESSORY_IDS.ACCESSORY_GENERAL_HELMET] = "_Àá±°ÀÇÁõ±",
[ACCESSORY_IDS.ACCESSORY_SINSUNCHO_HAT] = "_½Ä¼±ÄÈ, ðÀÚ",
[ACCESSORY_IDS.ACCESSORY_BONE_HAT] = "_Çøñ ðÀÚ",
[ACCESSORY_IDS.ACCESSORY_HEART_WING_HAIRBAND] = "_ÇÌÆ°³-°³Çì¾î¹êµá",
[ACCESSORY_IDS.ACCESSORY_LOVE_PIECE] = "_¾Ç¾¾ÀÇ¾¹°Ç",
[ACCESSORY_IDS.ACCESSORY_ST_PAT_HAT] = "_·¹ÇÀ,°ÁÁÀÇ ðÀÚ",
[ACCESSORY_IDS.ACCESSORY_NUT_DONUT_MOUTH] = "_ÀÖ¿ì¹°³ÈÆ°µµ³Ó",
[ACCESSORY_IDS.ACCESSORY_STRETCHED_NOSE] = "_À¾¹³-ÀÚ",
[ACCESSORY_IDS.ACCESSORY_ANCIENT_GOLD_ADORNMENT] = "_¹´èÀÇ±ÝÁá½Ä",
[ACCESSORY_IDS.ACCESSORY_LUCKY_HAT] = "_Çà¿ìÀÇ, ðÀÚ",

[ACCESSORY_IDS.ACCESSORY_Black_Fairy_Wings] = "_Black_Fairy_Wings",

}
```

Save this file, and open up accesoryid.lua.

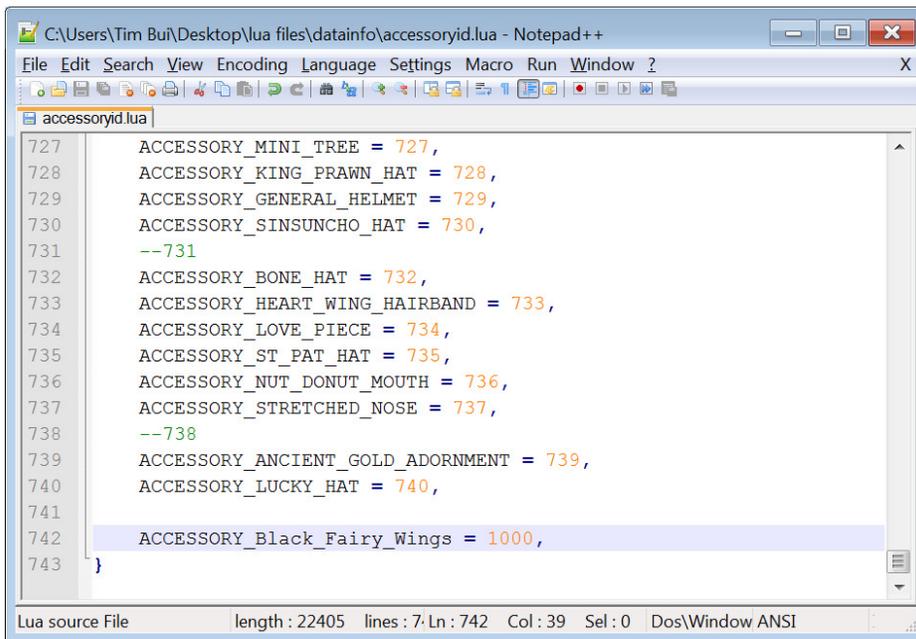
Scroll to the end of the document and copy the last entry and paste it onto a new row like so:



```
*C:\Users\Tim Bui\Desktop\lua files\datainfo\accessoryid.lua - Notepad++
File Edit Search View Encoding Language Settings Macro Run Window ?
accessoryid.lua
727     ACCESSORY_MINI_TREE = 727,
728     ACCESSORY_KING_PRAWN_HAT = 728,
729     ACCESSORY_GENERAL_HELMET = 729,
730     ACCESSORY_SINSUNCHO_HAT = 730,
731     --731
732     ACCESSORY_BONE_HAT = 732,
733     ACCESSORY_HEART_WING_HAIRBAND = 733,
734     ACCESSORY_LOVE_PIECE = 734,
735     ACCESSORY_ST_PAT_HAT = 735,
736     ACCESSORY_NUT_DONUT_MOUTH = 736,
737     ACCESSORY_STRETCHED_NOSE = 737,
738     --738
739     ACCESSORY_ANCIENT_GOLD_ADORNMENT = 739,
740     ACCESSORY_LUCKY_HAT = 740,
741
742     ACCESSORY_LUCKY_HAT = 740,
743 }
Lua source File      length : 22396  lines : 7 Ln : 739  Col : 44  Sel : 0  Dos\Window ANSI
```

And now, we will substitute our custom in place of that like so:

Note: For this guide, I will use Custom view ID 1000, for precaution in case KRO catches up and we lose that free ID space. In addition when you diff your client, you can specify how many custom view ids you need, which I would recommend around 3000-4000.



```
C:\Users\Tim Bui\Desktop\lua files\datainfo\accessoryid.lua - Notepad++
File Edit Search View Encoding Language Settings Macro Run Window ?
accessoryid.lua
727     ACCESSORY_MINI_TREE = 727,
728     ACCESSORY_KING_PRAWN_HAT = 728,
729     ACCESSORY_GENERAL_HELMET = 729,
730     ACCESSORY_SINSUNCHO_HAT = 730,
731     --731
732     ACCESSORY_BONE_HAT = 732,
733     ACCESSORY_HEART_WING_HAIRBAND = 733,
734     ACCESSORY_LOVE_PIECE = 734,
735     ACCESSORY_ST_PAT_HAT = 735,
736     ACCESSORY_NUT_DONUT_MOUTH = 736,
737     ACCESSORY_STRETCHED_NOSE = 737,
738     --738
739     ACCESSORY_ANCIENT_GOLD_ADORNMENT = 739,
740     ACCESSORY_LUCKY_HAT = 740,
741
742     ACCESSORY_Black_Fairy_Wings = 1000,
743 }
Lua source File      length : 22405  lines : 7 Ln : 742  Col : 39  Sel : 0  Dos\Window ANSI
```

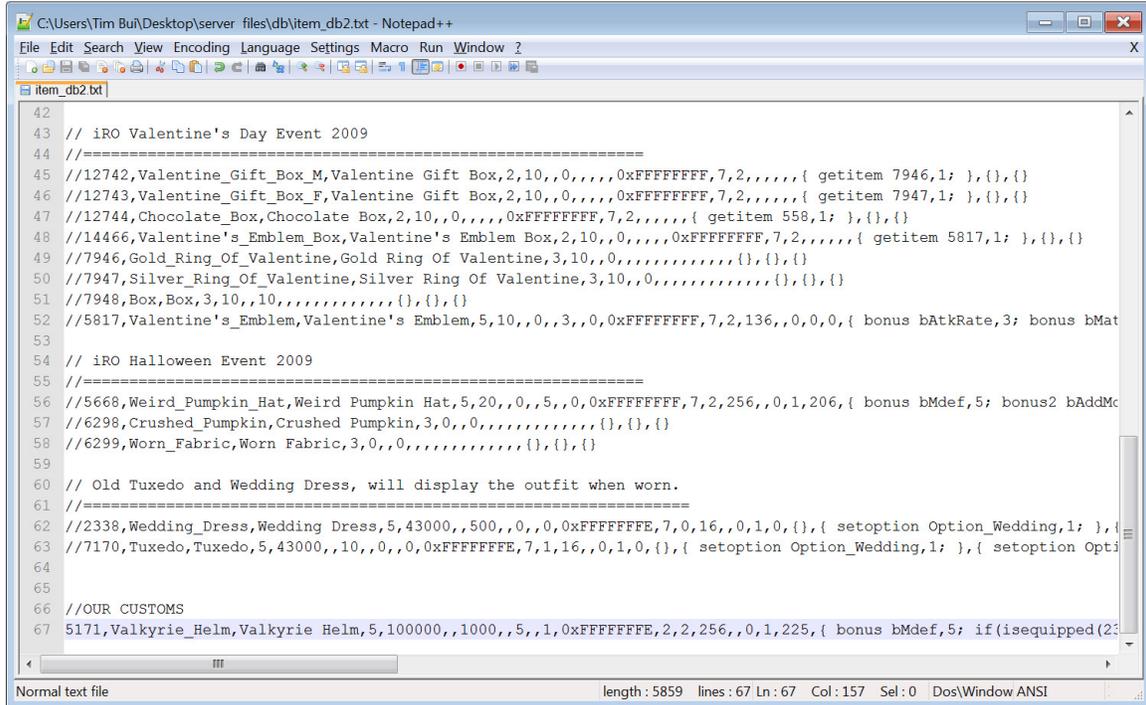
Remember the view id for this custom which is "1000", you will need it when we add it to the item_db2.txt file to add it to our server.

Save this file and close it.

Navigate to your server folder and go to server files>db and open item_db2.txt
Scroll to the bottom of the document and copy this line:

We will be using the Valkyrie Helm as a dummy entry for our custom:
Paste this line near the bottom of your item_db2.txt as follows

```
5171,Valkyrie_Helm,Valkyrie Helm,5,100000,,1000,,5,,1,0xFFFFFFFFE,2,2,256,,0,1,225,{ bonus  
bMdef,5; if(isequipped(2357,2421,2524)) bonus bAllStats,1; },{} }
```



```
C:\Users\Tim Bu\Desktop\server files\db\item_db2.txt - Notepad++
File Edit Search View Encoding Language Settings Macro Run Window ?
item_db2.txt
42
43 // iRO Valentine's Day Event 2009
44 //=====
45 //12742,Valentine_Gift_Box_M,Valentine Gift Box,2,10,,0,,,,,0xFFFFFFFF,7,2,,,,,{ getitem 7946,1; },{} }
46 //12743,Valentine_Gift_Box_F,Valentine Gift Box,2,10,,0,,,,,0xFFFFFFFF,7,2,,,,,{ getitem 7947,1; },{} }
47 //12744,Chocolate_Box,Chocolate Box,2,10,,0,,,,,0xFFFFFFFF,7,2,,,,,{ getitem 558,1; },{} }
48 //14466,Valentine's_Emblem_Box,Valentine's Emblem Box,2,10,,0,,,,,0xFFFFFFFF,7,2,,,,,{ getitem 5817,1; },{} }
49 //7946,Gold_Ring_Of_Valentine,Gold Ring Of Valentine,3,10,,0,,,,,{} ,{} }
50 //7947,Silver_Ring_Of_Valentine,Silver Ring Of Valentine,3,10,,0,,,,,{} ,{} }
51 //7948,Box,Box,3,10,,10,,,,,{} ,{} }
52 //5817,Valentine's_Emblem,Valentine's Emblem,5,10,,0,,3,,0,0xFFFFFFFF,7,2,136,,0,0,0,{ bonus bAtkRate,3; bonus bMat
53
54 // iRO Halloween Event 2009
55 //=====
56 //5668,Weird_Pumpkin_Hat,Weird Pumpkin Hat,5,20,,0,,5,,0,0xFFFFFFFF,7,2,256,,0,1,206,{ bonus bMdef,5; bonus2 bAddMc
57 //6298,Crushed_Pumpkin,Crushed Pumpkin,3,0,,0,,,,,{} ,{} }
58 //6299,Worn_Fabric,Worn Fabric,3,0,,0,,,,,{} ,{} }
59
60 // Old Tuxedo and Wedding Dress, will display the outfit when worn.
61 //=====
62 //2338,Wedding_Dress,Wedding Dress,5,43000,,500,,0,,0,0xFFFFFFFFE,7,0,16,,0,1,0,{} ,{ setoption Option_Wedding,1; },{
63 //7170,Tuxedo,Tuxedo,5,43000,,10,,0,,0,0xFFFFFFFFE,7,1,16,,0,1,0,{} ,{ setoption Option_Wedding,1; },{ setoption Opti
64
65
66 //OUR CUSTOMS
67 5171,Valkyrie_Helm,Valkyrie Helm,5,100000,,1000,,5,,1,0xFFFFFFFFE,2,2,256,,0,1,225,{ bonus bMdef,5; if(isequipped(2357,2421,2524)) bonus bAllStats,1; },{} }
Normal text file length: 5859 lines: 67 Ln: 67 Col: 157 Sel: 0 Dos/Window ANSI
```

Now we will change it so our Black_Fairy_Wings will be shown

```

42
43 // iRO Valentine's Day Event 2009
44 //=====
45 //12742,Valentine_Gift_Box_M,Valentine Gift Box,2,10,,0,,0xFFFFFFFF,7,2,,,,,{ getitem 7946,1; },{}
46 //12743,Valentine_Gift_Box_F,Valentine Gift Box,2,10,,0,,0xFFFFFFFF,7,2,,,,,{ getitem 7947,1; },{}
47 //12744,Chocolate_Box,Chocolate Box,2,10,,0,,0xFFFFFFFF,7,2,,,,,{ getitem 558,1; },{}
48 //14466,Valentine's_Emblem_Box,Valentine's Emblem Box,2,10,,0,,0xFFFFFFFF,7,2,,,,,{ getitem 5817,1; },{}
49 //7946,Gold_Ring_Of_Valentine,Gold Ring Of Valentine,3,10,,0,,0,,,,,{}
50 //7947,Silver_Ring_Of_Valentine,Silver Ring Of Valentine,3,10,,0,,,,,{}
51 //7948,Box,Box,3,10,,10,,,,,{}
52 //5817,Valentine's_Emblem,Valentine's Emblem,5,10,,0,,3,,0,0xFFFFFFFF,7,2,136,,0,0,0,{ bonus bAtkRate,3; bonus bMat
53
54 // iRO Halloween Event 2009
55 //=====
56 //5668,Weird_Pumpkin_Hat,Weird Pumpkin Hat,5,20,,0,,5,,0,0xFFFFFFFF,7,2,256,,0,1,206,{ bonus bMdef,5; bonus2 bAddMc
57 //6298,Crushed_Pumpkin,Crushed Pumpkin,3,0,,0,,,,,{}
58 //6299,Worn_Fabric,Worn Fabric,3,0,,0,,,,,{}
59
60 // Old Tuxedo and Wedding Dress, will display the outfit when worn.
61 //=====
62 //2338,Wedding_Dress,Wedding Dress,5,43000,,500,,0,,0,0xFFFFFFFF,7,0,16,,0,1,0,{} { setoption Option_Wedding,1; },
63 //7170,Tuxedo,Tuxedo,5,43000,,10,,0,,0,0xFFFFFFFF,7,1,16,,0,1,0,{} { setoption Option_Wedding,1; { setoption Opti
64
65
66 //OUR CUSTOMS
67 18000,Valkyrie_Helm,Valkyrie Helm,5,10000,,1000,,5,,1,0xFFFFFFFF,2,2,256,,0,1,1000,{ bonus bMdef,5; if(isequipped

```

As you can see, we change the first entry to “18000” which was the ID we chose for this item. So if you did @item 18000 ingame when you started your server of did “@reloaditemdb” you would get the item.

Also the “1000” is our viewID, meaning that “1000” is the sprite view of the Black Fairy Wings that we decided in the accessoryID.lua file.

Save this file and close it. We are done with adding our very first custom!

Start your server up, and see if it works!

You should now be comfortable on adding more custom items.

NOTE: From the Black Fairy Wings entry you can see a 1 before the “0xFFFFFFFFE. That “1” represents the number of slots. So at the moment this custom has 1 slot. Changing it to 4 would mean that the item will have 4 slots.

Also, to see the number of slots ingame, you will have to edit the “[itemcountslottable.txt](#)” and follow the syntax. For example, to have 4 slots appear for this custom (You still have to define in the item_db2.txt that the custom is capable of having 4 slots) the syntax would look like the following:

```
18000#4#
```

Save the file, and once you start your server, and client again, you will see 4 card slot shadows available.

NOTE 2: The “256” in the custom item entry refers to the location of the custom item. Right now it is set at Upper Headgear. You can replace this number with the following if you wish to have it equipped on another location on your character:

- 512 = Middle Headgear
- 256 = Upper Headgear
- 1 = Lower Headgear
- 16 = Armor
- 2 = Weapon

32 = Shield
4 = Garment
64 = Footgear
8 = Accessory 1
128 = Accessory 2

Xx Adding Custom Mobs RagRE

For this section, we will be adding one custom mob. Once done, you should be able to add as many custom mobs as you want.

We will be adding a Boss Monster from Trickster Online

Captain Skull - [http://www.green-peach.com/download.php?file=Mob%20-%20Captain_Skull%20\[ToZorMan\]](http://www.green-peach.com/download.php?file=Mob%20-%20Captain_Skull%20[ToZorMan])

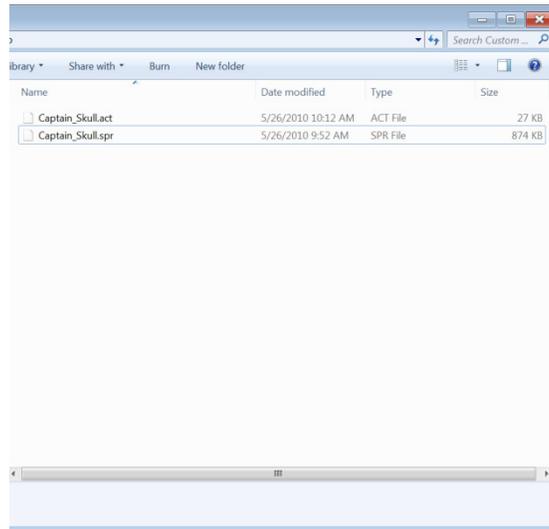
Once downloaded, extract it onto your Desktop

Delete the image called "Mise en Bouche"

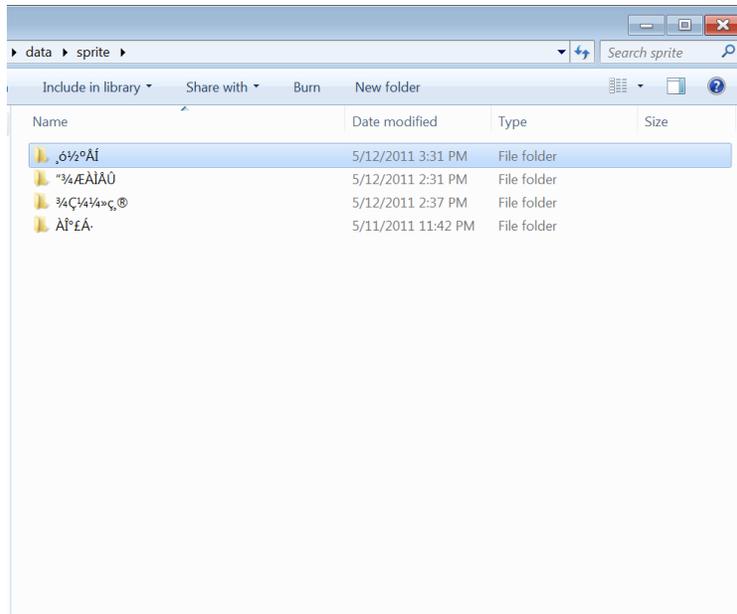
Delete the folder called "gif anime" (We don't need that)

Delete the "Card" folder as well. (In this tutorial we won't focus on adding custom illustration of cards)

Now we should have contents like this:



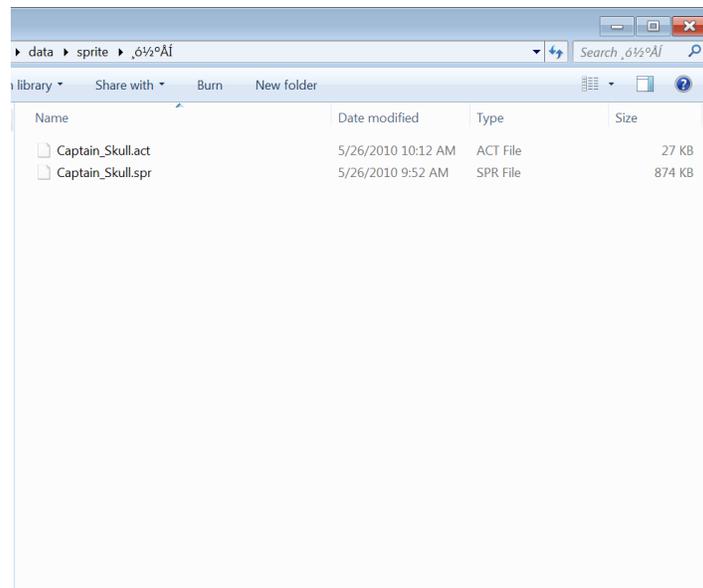
Navigate into our data folder, and go to data>sprite> ,ó½ºÁÍ
Create the folder ",ó½ºÁÍ" if you don't have it



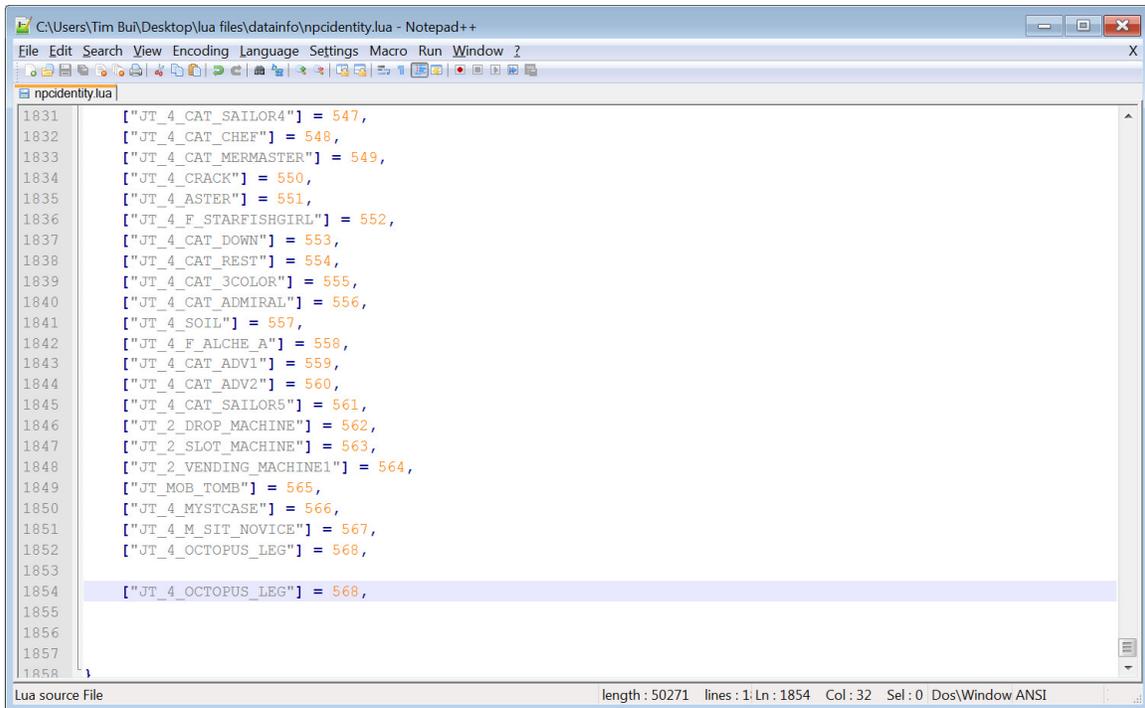
Open the folder and copy the two files

Captain_Skull.spr
Captain_Skull.act

inside the data>sprite> 0½°Áí folder

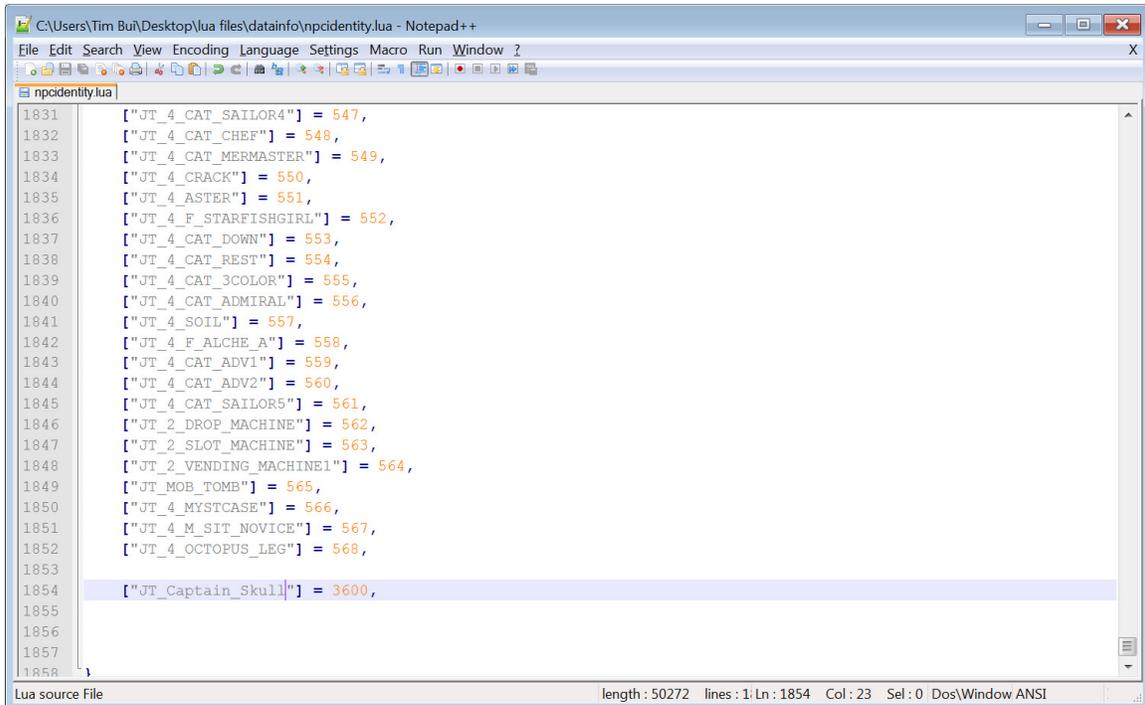


Now, navigate into data>lua files>datainfo>npcidentity.lua file
Scroll to the bottom of the document
Copy and paste the last entry onto another row



```
C:\Users\Tim Bu\Desktop\lua files\datainfo\npcidentity.lua - Notepad++
File Edit Search View Encoding Language Settings Macro Run Window ?
npcidentity.lua
1831 ["JT_4_CAT_SAILOR4"] = 547,
1832 ["JT_4_CAT_CHEF"] = 548,
1833 ["JT_4_CAT_MERMASTER"] = 549,
1834 ["JT_4_CRACK"] = 550,
1835 ["JT_4_ASTER"] = 551,
1836 ["JT_4_F_STARFISHGIRL"] = 552,
1837 ["JT_4_CAT_DOWN"] = 553,
1838 ["JT_4_CAT_REST"] = 554,
1839 ["JT_4_CAT_3COLOR"] = 555,
1840 ["JT_4_CAT_ADMIRAL"] = 556,
1841 ["JT_4_SOIL"] = 557,
1842 ["JT_4_F_ALCHE_A"] = 558,
1843 ["JT_4_CAT_ADV1"] = 559,
1844 ["JT_4_CAT_ADV2"] = 560,
1845 ["JT_4_CAT_SAILOR5"] = 561,
1846 ["JT_2_DROP_MACHINE"] = 562,
1847 ["JT_2_SLOT_MACHINE"] = 563,
1848 ["JT_2_VENDING_MACHINE1"] = 564,
1849 ["JT_MOB_TOMB"] = 565,
1850 ["JT_4_MYSTCASE"] = 566,
1851 ["JT_4_M_SIT_NOVICE"] = 567,
1852 ["JT_4_OCTOPUS_LEG"] = 568,
1853
1854 ["JT_4_OCTOPUS_LEG"] = 568,
1855
1856
1857
1858
Lua source File length: 50271 lines: 1 Ln: 1854 Col: 32 Sel: 0 Dos/Window ANSI
```

We will now substitute this with our custom mob
Recommend to use mobIDs from 3600-8000.
For this tutorial we will use 3600
Remember this value since we will need to add it to your mob_db2.txt



```
C:\Users\Tim Bu\Desktop\lua files\datainfo\npcidentity.lua - Notepad++
File Edit Search View Encoding Language Settings Macro Run Window ?
npcidentity.lua
1831 ["JT_4_CAT_SAILOR4"] = 547,
1832 ["JT_4_CAT_CHEF"] = 548,
1833 ["JT_4_CAT_MERMASTER"] = 549,
1834 ["JT_4_CRACK"] = 550,
1835 ["JT_4_ASTER"] = 551,
1836 ["JT_4_F_STARFISHGIRL"] = 552,
1837 ["JT_4_CAT_DOWN"] = 553,
1838 ["JT_4_CAT_REST"] = 554,
1839 ["JT_4_CAT_3COLOR"] = 555,
1840 ["JT_4_CAT_ADMIRAL"] = 556,
1841 ["JT_4_SOIL"] = 557,
1842 ["JT_4_F_ALCHE_A"] = 558,
1843 ["JT_4_CAT_ADV1"] = 559,
1844 ["JT_4_CAT_ADV2"] = 560,
1845 ["JT_4_CAT_SAILOR5"] = 561,
1846 ["JT_2_DROP_MACHINE"] = 562,
1847 ["JT_2_SLOT_MACHINE"] = 563,
1848 ["JT_2_VENDING_MACHINE1"] = 564,
1849 ["JT_MOB_TOMB"] = 565,
1850 ["JT_4_MYSTCASE"] = 566,
1851 ["JT_4_M_SIT_NOVICE"] = 567,
1852 ["JT_4_OCTOPUS_LEG"] = 568,
1853
1854 ["JT_Captain_Skull"] = 3600,
1855
1856
1857
1858
Lua source File length: 50272 lines: 1 Ln: 1854 Col: 23 Sel: 0 Dos/Window ANSI
```

Save this file, and open data>lua files>datainfo>jobname.lua file
Scroll to the end of the document and copy and paste the last entry onto a new row

```
C:\Users\Tim Bu\\Desktop\lua files\datainfo\jobname.lua - Notepad++
File Edit Search View Encoding Language Settings Macro Run Window ?
npcidentity.lua jobname.lua
1819 [jobtbl.JT_FLAMEL] = "FLAMEL",
1820 [jobtbl.JT_CELIA] = "CELIA",
1821 [jobtbl.JT_CHEN] = "CHEN",
1822 [jobtbl.JT_GERTIE] = "GERTIE",
1823 [jobtbl.JT_ALPHOCCIO] = "ALPHOCCIO",
1824 [jobtbl.JT_TRENTINI] = "TRENTINI",
1825 [jobtbl.JT_G_RANDEL] = "RANDEL",
1826 [jobtbl.JT_G_FLAMEL] = "FLAMEL",
1827 [jobtbl.JT_G_CELIA] = "CELIA",
1828 [jobtbl.JT_G_CHEN] = "CHEN",
1829 [jobtbl.JT_G_GERTIE] = "GERTIE",
1830 [jobtbl.JT_G_ALPHOCCIO] = "ALPHOCCIO",
1831 [jobtbl.JT_G_TRENTINI] = "TRENTINI",
1832 [jobtbl.JT_B_RANDEL] = "RANDEL",
1833 [jobtbl.JT_B_FLAMEL] = "FLAMEL",
1834 [jobtbl.JT_B_CELIA] = "CELIA",
1835 [jobtbl.JT_B_CHEN] = "CHEN",
1836 [jobtbl.JT_B_GERTIE] = "GERTIE",
1837 [jobtbl.JT_B_ALPHOCCIO] = "ALPHOCCIO",
1838 [jobtbl.JT_B_TRENTINI] = "TRENTINI",
1839 [jobtbl.JT_MD_DESERT_WOLF] = "DESERT_WOLF",
1840 [jobtbl.JT_MD_DESERT_WOLF_B] = "DESERT_WOLF_B",
1841 [jobtbl.JT_QUEST_CHEN] = "CHEN",
1842
1843
1844 [jobtbl.JT_QUEST_CHEN] = "CHEN",
1845
1846
Lua source File length : 75593 lines : 1 Ln : 1844 Col : 37 Sel : 0 Dos/Window ANSI
```

We will now substitute it for our custom mob

```
C:\Users\Tim Bu\\Desktop\lua files\datainfo\jobname.lua - Notepad++
File Edit Search View Encoding Language Settings Macro Run Window ?
jobname.lua
1820 [jobtbl.JT_CELIA] = "CELIA",
1821 [jobtbl.JT_CHEN] = "CHEN",
1822 [jobtbl.JT_GERTIE] = "GERTIE",
1823 [jobtbl.JT_ALPHOCCIO] = "ALPHOCCIO",
1824 [jobtbl.JT_TRENTINI] = "TRENTINI",
1825 [jobtbl.JT_G_RANDEL] = "RANDEL",
1826 [jobtbl.JT_G_FLAMEL] = "FLAMEL",
1827 [jobtbl.JT_G_CELIA] = "CELIA",
1828 [jobtbl.JT_G_CHEN] = "CHEN",
1829 [jobtbl.JT_G_GERTIE] = "GERTIE",
1830 [jobtbl.JT_G_ALPHOCCIO] = "ALPHOCCIO",
1831 [jobtbl.JT_G_TRENTINI] = "TRENTINI",
1832 [jobtbl.JT_B_RANDEL] = "RANDEL",
1833 [jobtbl.JT_B_FLAMEL] = "FLAMEL",
1834 [jobtbl.JT_B_CELIA] = "CELIA",
1835 [jobtbl.JT_B_CHEN] = "CHEN",
1836 [jobtbl.JT_B_GERTIE] = "GERTIE",
1837 [jobtbl.JT_B_ALPHOCCIO] = "ALPHOCCIO",
1838 [jobtbl.JT_B_TRENTINI] = "TRENTINI",
1839 [jobtbl.JT_MD_DESERT_WOLF] = "DESERT_WOLF",
1840 [jobtbl.JT_MD_DESERT_WOLF_B] = "DESERT_WOLF_B",
1841 [jobtbl.JT_QUEST_CHEN] = "CHEN",
1842
1843
1844 [jobtbl.JT_Captain_Skull] = "Captain_Skull",
1845
1846 }
Lua source File length : 75605 lines : 1 Ln : 1 Col : 1 Sel : 0 Dos/Window ANSI
```

Save this file, and close both lua files. Navigate to your server files

Server files>db>mob_db2.txt

Scroll to the end of the document, and for this mob, we will be using the MVP Drake as a dummy in place for our custom mob

1112,DRAKE,Drake,Drake,70,326666,0,28600,22880,1,1800,2100,20,35,85,80,49,75,79,50,10,12,1,1,

29,0x37B5,400,620,420,360,14300,10000,504,5000,719,500,0,0,1127,600,1125,950,1135,150,1128,
400,5019,350,985,3200,1189,100,0,0,0,0,4137,1

```
30 //1841,G_SNAKE_,Snake Lord's Minon,Snake Lord's Minon,15,471,0,72,48,1,46,55,0,0,1,15,15,10,35,5,10,12,1,2,22,0x81,
31 //1842,G_ANACONDAQ_,Snake Lord's Minon,Snake Lord's Minon,23,1109,0,300,149,1,124,157,0,0,1,23,28,10,36,5,10,12,1,2
32 //1843,SIDE_WINDER_,Snake Lord's Minon,Snake Lord's Minon,43,4929,0,1996,993,1,240,320,5,10,38,43,40,15,115,20,10,1
33 //1844,G_ISIS_,Snake Lord's Minon,Snake Lord's Minon,47,7003,0,3709,1550,1,423,507,10,35,38,65,43,50,66,15,10,12,2,
34
35 //iRO Christmas 2008 Event
36 //Uncomment if event is enabled, as these drops modifications are nessecary.
37 //1244,JAKK_XMAS,Christmas Jakk,Christmas Jakk,38,3581,0,1113,688,1,315,382,5,30,1,38,38,43,75,45,10,12,1,0,43,0x81
38 //1245,GOBLIN_XMAS,Christmas Goblin,Christmas Goblin,25,1176,0,282,171,1,118,140,10,5,1,53,25,20,38,45,10,12,1,7,2
39 //1246,COOKIE_XMAS,Christmas Cookie,Christmas Cookie,28,2090,0,461,284,1,140,170,0,50,1,24,30,53,45,100,10,12,0,7,4
40 //1247,ANTONIO,Antonio,Antonio,10,10,0,3,2,1,13,20,100,0,1,1,1,50,100,100,10,12,1,3,66,0xC1,100,720,720,432,0,0,0,0
41
42 //iRO Halloween 2009 Event
43 //Uncomment if event is enabled. Uncomment the skills for Halloween Whisper in mob_skill_db2.
44 //3014,HALLOWEEN_WHISPER,Halloween Whisper,Halloween Whisper,1,800,0,0,0,1,10,13,0,45,1,51,14,0,60,0,10,12,0,6,68,0
45 //3015,HALLOWEEN_DARK_LORD,Halloween Dark Lord,Halloween Dark Lord,1,45,0,0,0,1,10,13,0,45,1,51,14,0,60,0,10,12,2,6
46
47 //iRO Halloween 2008 Event
48 //Uncomment if event is enabled.
49 //3000,ZOMBIE,Zombie,Zombie,15,534,0,50,33,1,67,79,0,10,1,8,7,0,15,0,10,12,1,1,29,0x3885,400,2612,912,288,0,0,0,0,0
50 //3001,GHOUL,Ghoul,Ghoul,40,5418,0,1088,622,1,420,500,5,20,1,20,29,0,45,20,10,12,1,1,49,0x3885,250,2456,912,504,0,0
51 //3002,ZOMBIE_MASTER,Zombie Master,Zombie Master,62,14211,0,7610,2826,1,824,1084,37,26,25,20,30,5,77,35,10,12,1,1,2
52
53
54 //OUR CUSTOMS
55 1112,DRAKE,Drake,Drake,70,326666,0,28600,22880,1,1800,2100,20,35,85,80,49,75,79,50,10,12,1,1,29,0x37B5,400,620,420,
```

It will now look like this:

```
30 //1841,G_SNAKE_,Snake Lord's Minon,Snake Lord's Minon,15,471,0,72,48,1,46,55,0,0,1,15,15,10,35,5,10,12,1,2,22,0x81,
31 //1842,G_ANACONDAQ_,Snake Lord's Minon,Snake Lord's Minon,23,1109,0,300,149,1,124,157,0,0,1,23,28,10,36,5,10,12,1,2
32 //1843,SIDE_WINDER_,Snake Lord's Minon,Snake Lord's Minon,43,4929,0,1996,993,1,240,320,5,10,38,43,40,15,115,20,10,1
33 //1844,G_ISIS_,Snake Lord's Minon,Snake Lord's Minon,47,7003,0,3709,1550,1,423,507,10,35,38,65,43,50,66,15,10,12,2,
34
35 //iRO Christmas 2008 Event
36 //Uncomment if event is enabled, as these drops modifications are nessecary.
37 //1244,JAKK_XMAS,Christmas Jakk,Christmas Jakk,38,3581,0,1113,688,1,315,382,5,30,1,38,38,43,75,45,10,12,1,0,43,0x81
38 //1245,GOBLIN_XMAS,Christmas Goblin,Christmas Goblin,25,1176,0,282,171,1,118,140,10,5,1,53,25,20,38,45,10,12,1,7,2
39 //1246,COOKIE_XMAS,Christmas Cookie,Christmas Cookie,28,2090,0,461,284,1,140,170,0,50,1,24,30,53,45,100,10,12,0,7,4
40 //1247,ANTONIO,Antonio,Antonio,10,10,0,3,2,1,13,20,100,0,1,1,1,50,100,100,10,12,1,3,66,0xC1,100,720,720,432,0,0,0,0
41
42 //iRO Halloween 2009 Event
43 //Uncomment if event is enabled. Uncomment the skills for Halloween Whisper in mob_skill_db2.
44 //3014,HALLOWEEN_WHISPER,Halloween Whisper,Halloween Whisper,1,800,0,0,0,1,10,13,0,45,1,51,14,0,60,0,10,12,0,6,68,0
45 //3015,HALLOWEEN_DARK_LORD,Halloween Dark Lord,Halloween Dark Lord,1,45,0,0,0,1,10,13,0,45,1,51,14,0,60,0,10,12,2,6
46
47 //iRO Halloween 2008 Event
48 //Uncomment if event is enabled.
49 //3000,ZOMBIE,Zombie,Zombie,15,534,0,50,33,1,67,79,0,10,1,8,7,0,15,0,10,12,1,1,29,0x3885,400,2612,912,288,0,0,0,0,0
50 //3001,GHOUL,Ghoul,Ghoul,40,5418,0,1088,622,1,420,500,5,20,1,20,29,0,45,20,10,12,1,1,49,0x3885,250,2456,912,504,0,0
51 //3002,ZOMBIE_MASTER,Zombie Master,Zombie Master,62,14211,0,7610,2826,1,824,1084,37,26,25,20,30,5,77,35,10,12,1,1,2
52
53
54 //OUR CUSTOMS
55 3600,Captain Skull,Captain Skull,Captain Skull,70,326666,0,28600,22880,1,1800,2100,20,35,85,80,49,75,79,50,10,12,1,
```

As you can see, the main thing that is VITAL is the first number which is the mobID sprite which we decided in npcidentity.lua file. The Three names are which they are referred to. Usually it is set so you can do @spawn better, or look up their info easily with @mi

Now have successfully added your first custom mob!
You should be able to now add as many custom mobs as you want.

Note: Not discussed in this tutorial, but to add mob skills for your custom mob if you wish, refer to text document "mob_skill_db.txt" and follow the format.

Note 2: Changing stats/drops of mobs, one can refer to the syntax below:

```
// Monster Database  
// Structure of Database :
```

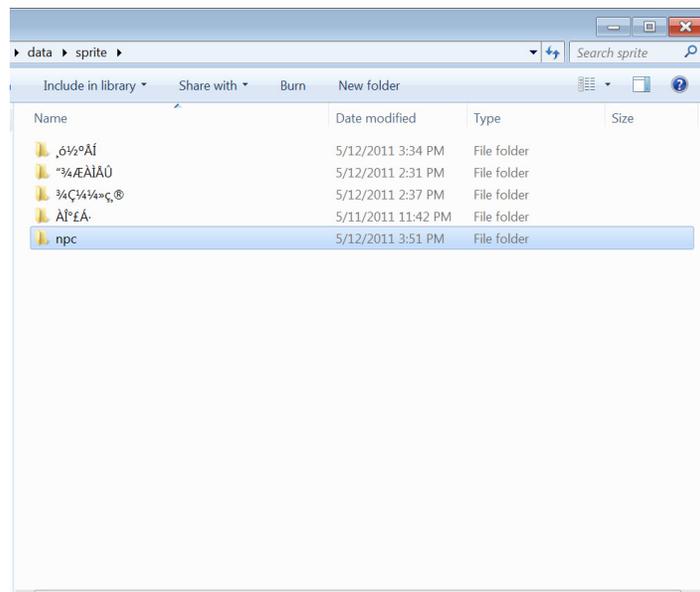
```
ID,Sprite_Name,kROName,iROName,LV,HP,SP,EXP,JEXP,Range1,ATK1,ATK2,DEF,MDEF,STR,AGI,VIT,I  
NT,DEX,LUK,Range2,Range3,Scale,Race,Element,Mode,Speed,aDelay,aMotion,dMotion,MEXP,ExpPer,  
MVP1id,MVP1per,MVP2id,MVP2per,MVP3id,MVP3per,Drop1id,Drop1per,Drop2id,Drop2per,Drop3id  
,Drop3per,Drop4id,Drop4per,Drop5id,Drop5per,Drop6id,Drop6per,Drop7id,Drop7per,Drop8id,Drop  
8per,Drop9id,Drop9per,DropCardid,DropCardper
```

Xxi Adding Custom NPCs RagRE

For this guide, we will be adding a custom npc sprite, Agav Dead. Once completed with this section, one will know how to add as much custom npcs.

Agav Dead NPC - [http://www.green-peach.com/download.php?file=NPC_Agav_Dead%20\[ToZorMan\]](http://www.green-peach.com/download.php?file=NPC_Agav_Dead%20[ToZorMan])

Extract the package onto your desktop.
In your data folder navigate to data>sprite>npc
Create the a new folder called npc if you don't have it

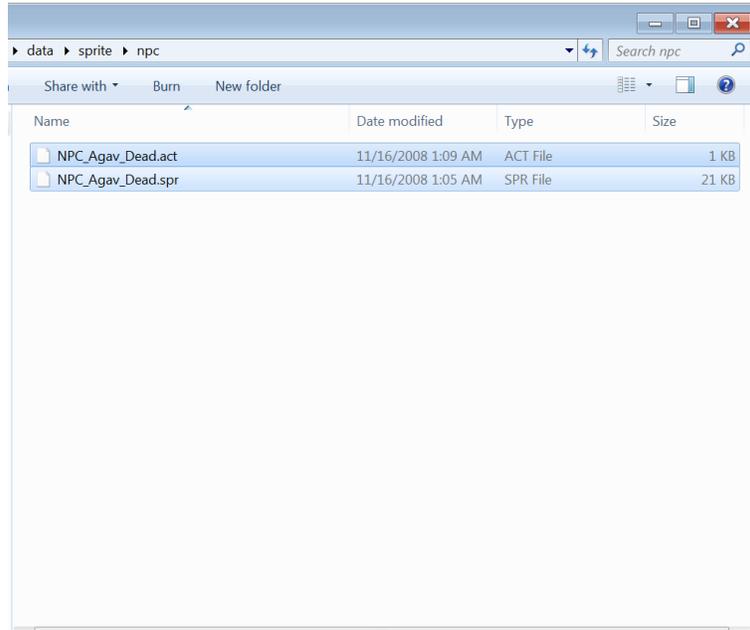


Copy and paste the custom npc files

NPC_Agav_Dead.spr

NPC_Agav_Dead.act

inside the data>sprite>npc folder

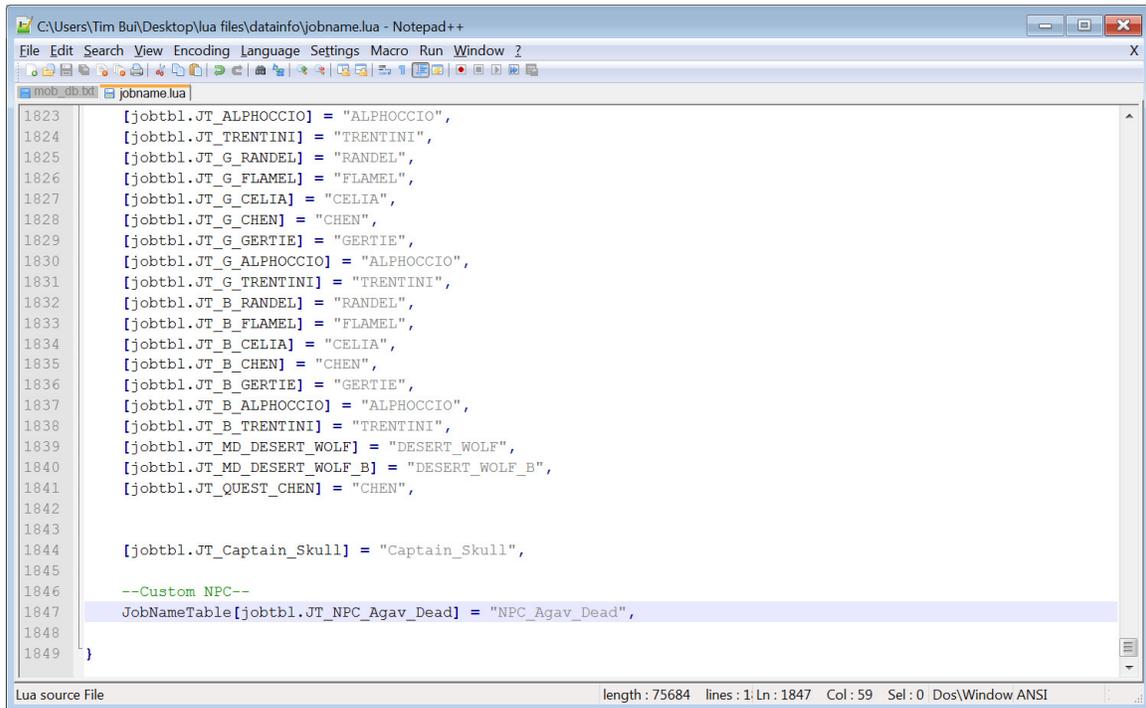


Once done, navigate to data>lua files>datainfo and open the jobname.lua file

Navigate to the bottom of the document and copy and paste the last entry onto the next row.

```
1823 [jobtbl.JT_ALPHOCCIO] = "ALPHOCCIO",
1824 [jobtbl.JT_TRENTINI] = "TRENTINI",
1825 [jobtbl.JT_G_RANDEL] = "RANDEL",
1826 [jobtbl.JT_G_FLAMEL] = "FLAMEL",
1827 [jobtbl.JT_G_CELIA] = "CELIA",
1828 [jobtbl.JT_G_CHEN] = "CHEN",
1829 [jobtbl.JT_G_GERTIE] = "GERTIE",
1830 [jobtbl.JT_G_ALPHOCCIO] = "ALPHOCCIO",
1831 [jobtbl.JT_G_TRENTINI] = "TRENTINI",
1832 [jobtbl.JT_B_RANDEL] = "RANDEL",
1833 [jobtbl.JT_B_FLAMEL] = "FLAMEL",
1834 [jobtbl.JT_B_CELIA] = "CELIA",
1835 [jobtbl.JT_B_CHEN] = "CHEN",
1836 [jobtbl.JT_B_GERTIE] = "GERTIE",
1837 [jobtbl.JT_B_ALPHOCCIO] = "ALPHOCCIO",
1838 [jobtbl.JT_B_TRENTINI] = "TRENTINI",
1839 [jobtbl.JT_MD_DESERT_WOLF] = "DESERT_WOLF",
1840 [jobtbl.JT_MD_DESERT_WOLF_B] = "DESERT_WOLF_B",
1841 [jobtbl.JT_QUEST_CHEN] = "CHEN",
1842
1843
1844 [jobtbl.JT_Captain_Skull] = "Captain_Skull",
1845
1846 --Custom NPC--
1847 [jobtbl.JT_Captain_Skull] = "Captain_Skull",
1848
1849 }
```

We will now substitute that entry for our Dead Agav npc sprite.

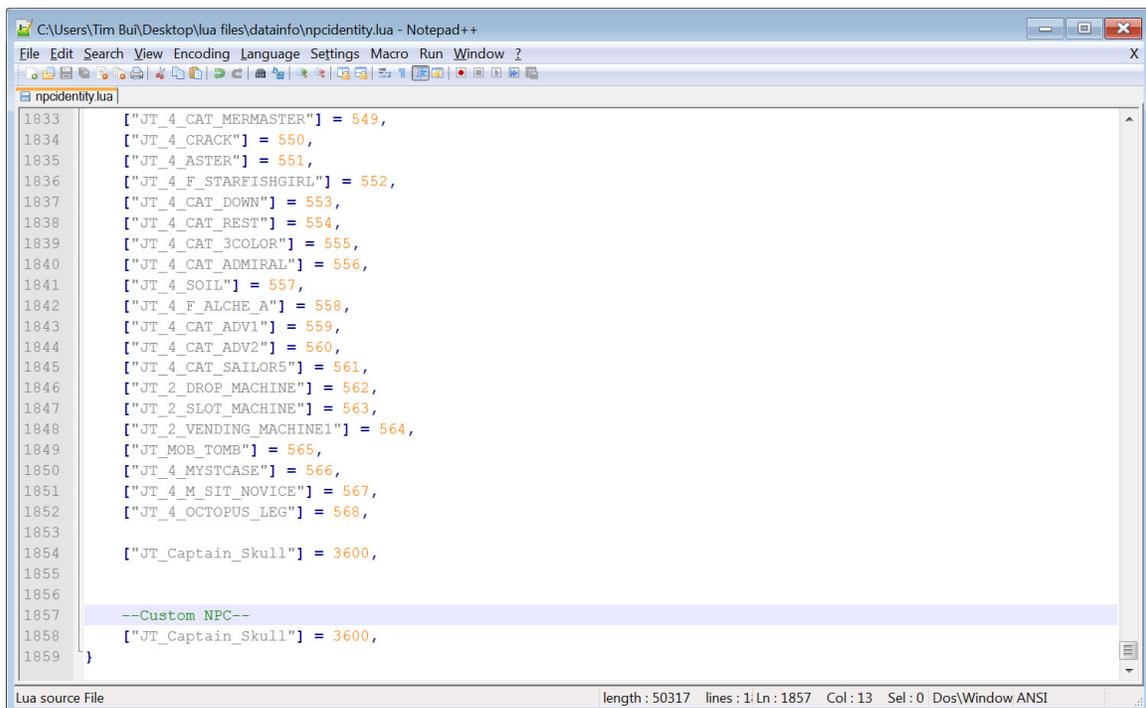


```
C:\Users\Tim Bu\Desktop\lua files\datainfo\jobname.lua - Notepad++
File Edit Search View Encoding Language Settings Macro Run Window ?
mob_db.tbl jobname.lua
1823 [jobtbl.JT_ALPHOCCIO] = "ALPHOCCIO",
1824 [jobtbl.JT_TRENTINI] = "TRENTINI",
1825 [jobtbl.JT_G_RANDEL] = "RANDEL",
1826 [jobtbl.JT_G_FLAMEL] = "FLAMEL",
1827 [jobtbl.JT_G_CELIA] = "CELIA",
1828 [jobtbl.JT_G_CHEN] = "CHEN",
1829 [jobtbl.JT_G_GERTIE] = "GERTIE",
1830 [jobtbl.JT_G_ALPHOCCIO] = "ALPHOCCIO",
1831 [jobtbl.JT_G_TRENTINI] = "TRENTINI",
1832 [jobtbl.JT_B_RANDEL] = "RANDEL",
1833 [jobtbl.JT_B_FLAMEL] = "FLAMEL",
1834 [jobtbl.JT_B_CELIA] = "CELIA",
1835 [jobtbl.JT_B_CHEN] = "CHEN",
1836 [jobtbl.JT_B_GERTIE] = "GERTIE",
1837 [jobtbl.JT_B_ALPHOCCIO] = "ALPHOCCIO",
1838 [jobtbl.JT_B_TRENTINI] = "TRENTINI",
1839 [jobtbl.JT_MD_DESERT_WOLF] = "DESERT_WOLF",
1840 [jobtbl.JT_MD_DESERT_WOLF_B] = "DESERT_WOLF_B",
1841 [jobtbl.JT_QUEST_CHEN] = "CHEN",
1842
1843
1844 [jobtbl.JT_Captain_Skull] = "Captain_Skull",
1845
1846 --Custom NPC--
1847 JobNameTable[jobtbl.JT_NPC_Agav_Dead] = "NPC_Agav_Dead",
1848
1849 }
Lua source File length: 75684 lines: 1:Ln: 1847 Col: 59 Sel: 0 Dos:Window ANSI
```

Don't get confused by the different syntax.

Save the file, and open the npcidentity.lua file

Navigate to the bottom of the document and copy and paste the last entry on to a new row



```
C:\Users\Tim Bu\Desktop\lua files\datainfo\npcidentity.lua - Notepad++
File Edit Search View Encoding Language Settings Macro Run Window ?
npcidentity.lua
1833 ["JT_4_CAT_MERMASTER"] = 549,
1834 ["JT_4_CRACK"] = 550,
1835 ["JT_4_ASTER"] = 551,
1836 ["JT_4_F_STARFISHGIRL"] = 552,
1837 ["JT_4_CAT_DOWN"] = 553,
1838 ["JT_4_CAT_REST"] = 554,
1839 ["JT_4_CAT_3COLOR"] = 555,
1840 ["JT_4_CAT_ADMIRAL"] = 556,
1841 ["JT_4_SOIL"] = 557,
1842 ["JT_4_F_ALCHE_A"] = 558,
1843 ["JT_4_CAT_ADV1"] = 559,
1844 ["JT_4_CAT_ADV2"] = 560,
1845 ["JT_4_CAT_SAILOR5"] = 561,
1846 ["JT_2_DROP_MACHINE"] = 562,
1847 ["JT_2_SLOT_MACHINE"] = 563,
1848 ["JT_2_VENDING_MACHINE1"] = 564,
1849 ["JT_MOB_TOMB"] = 565,
1850 ["JT_4_MYSTCASE"] = 566,
1851 ["JT_4_M_SIT_NOVICE"] = 567,
1852 ["JT_4_OCTOPUS_LEG"] = 568,
1853
1854 ["JT_Captain_Skull"] = 3600,
1855
1856
1857 --Custom NPC--
1858 ["JT_Captain_Skull"] = 3600,
1859 }
Lua source File length: 50317 lines: 1:Ln: 1857 Col: 13 Sel: 0 Dos:Window ANSI
```

We will now substitute that entry for our Dead Agav npc sprite.

```
C:\Users\Tim Bu\Desktop\lua files\datainfo\npcidentity.lua - Notepad++
File Edit Search View Encoding Language Settings Macro Run Window ?
npcidentity.lua
1833 ["JT_4_CAT_MERMASTER"] = 549,
1834 ["JT_4_CRACK"] = 550,
1835 ["JT_4_ASTER"] = 551,
1836 ["JT_4_F_STARFISHGIRL"] = 552,
1837 ["JT_4_CAT_DOWN"] = 553,
1838 ["JT_4_CAT_REST"] = 554,
1839 ["JT_4_CAT_3COLOR"] = 555,
1840 ["JT_4_CAT_ADMIRAL"] = 556,
1841 ["JT_4_SOIL"] = 557,
1842 ["JT_4_F_ALCHE_A"] = 558,
1843 ["JT_4_CAT_ADV1"] = 559,
1844 ["JT_4_CAT_ADV2"] = 560,
1845 ["JT_4_CAT_SAILOR5"] = 561,
1846 ["JT_2_DROP_MACHINE"] = 562,
1847 ["JT_2_SLOT_MACHINE"] = 563,
1848 ["JT_2_VENDING_MACHINE1"] = 564,
1849 ["JT_MOB_TOMB"] = 565,
1850 ["JT_4_MYSTCASE"] = 566,
1851 ["JT_4_M_SIT_NOVICE"] = 567,
1852 ["JT_4_OCTOPUS_LEG"] = 568,
1853
1854 ["JT_Captain_Skull"] = 3600,
1855
1856
1857 --Custom NPC--
1858 ["JT_NPC_Agav_Dead"] = 600,
1859 }
```

NOTE (From Ai4rei): There is only one catch...You cannot use IDs 126~400.
Also, you need to use an ID beyond the latest npc ID currently 568, before 700
Beware of putting sprites after 568, since KRO custom npcs may be released which will force you too redo the lua files.

NOTE 2: You should now be able to use the npc, as well as @disguise into that NPCID you chose.
In this case @disguise 600 will disguise me into Agav Dead.

Xxii Adding Custom Weapons

We will be using an example, since after adding one custom weapon it should be easier to add as many as you want!

Custom Weapon Example -

<http://www.supportmii.com/ro1/tools/Custom%20Bow%20Archer.7z>

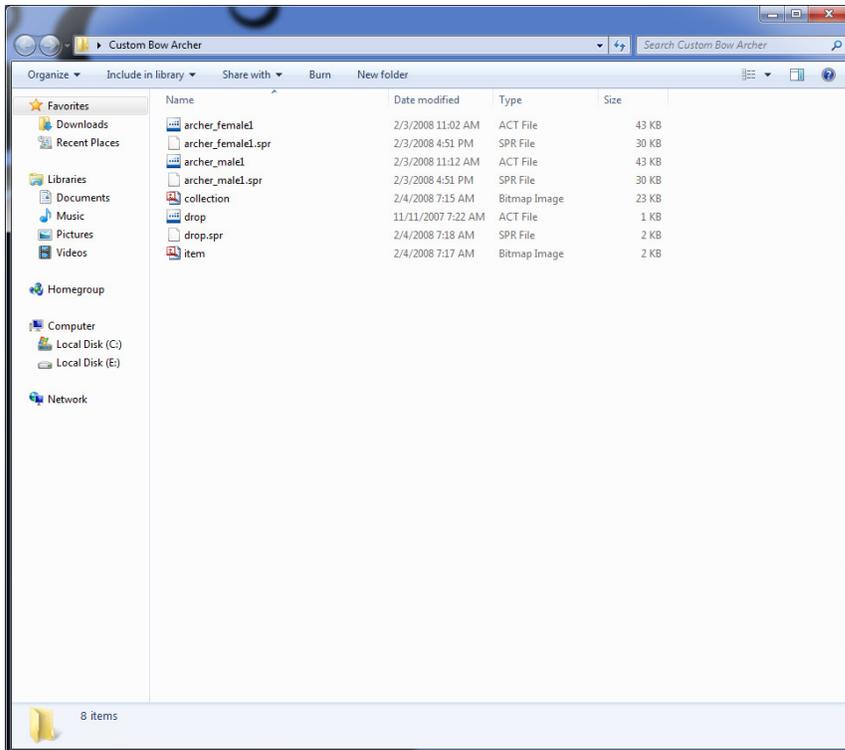
We will also need reference...using the sprite bible at ratemyserver

Sprite Bible Reference - http://ratemyserver.net/index.php?page=riot_bible_section§ion=6

So we are adding a custom weapon for the archer branch. I recommend the following diffs NOT to be checked...

Ignore Errors..(Think there are 3 of them or 2) [When you start your client ignore any errors, or cancel when it says setup has changed.] What we want to look for is if we equip the weapon will errors be reported when we try to attack.

Anyway...Extract the contents onto your desktop



Now, we refer to the sprite bible site to look for the archer name.

Directory: /data/sprite/ÀË-±¼ö
Archer weapons

FILENAME	DESCRIPTION
±¼ö_ì©_1207.spr	Main Gauche (Female)
±¼ö_ì©_1208.spr	Main Gauche (Female)
±¼ö_ì©_1216.spr	Stiletto (Female)
±¼ö_ì©_1217.spr	Stiletto (Female)
±¼ö_ì©_1219.spr	Gladius (Female)
±¼ö_ì©_1220.spr	Gladius (Female)
±¼ö_ì©_1238.spr	Zeny Knife (Female)
±¼ö_ì©_1239.spr	Poison Knife (Female)
±¼ö_ì©_1240.spr	Princess Knife (Female)
±¼ö_ì©_1710.spr	Crossbow (Female)
±¼ö_ì©_1711.spr	Crossbow (Female)
±¼ö_ì©_1713.spr	Arbalest (Female)
±¼ö_ì©_1714.spr	Gakkung Bow (Female)
±¼ö_ì©_1715.spr	Arbalest (Female)

So the break down is this:

±¼ö_ì©_1710

*±¼ö – Refers to the archer name

*_ì© or _³² refers to female and male respectively

*1710 (Or any other number after) refers to the custom weapon sprite, and weapon entry ID for item_db.txt

Now that we know this, we need to find some free ids. Normally I look for entries after the weapon type.

For example, open server files>db>item_db.txt

Search for “// Bows”

We see that 1749 hasn't been used yet. (I haven't really tested out what happens if you don't use a freeID outside of the bow area)

Now, remember let's copy an entry to use as a dummy

We will use the ordinary bow

1701,Bow,Bow,4,1000,,500,15,,5,3,0x000A0848,7,2,34,1,4,1,11,{}, {}, {}

and add the entry

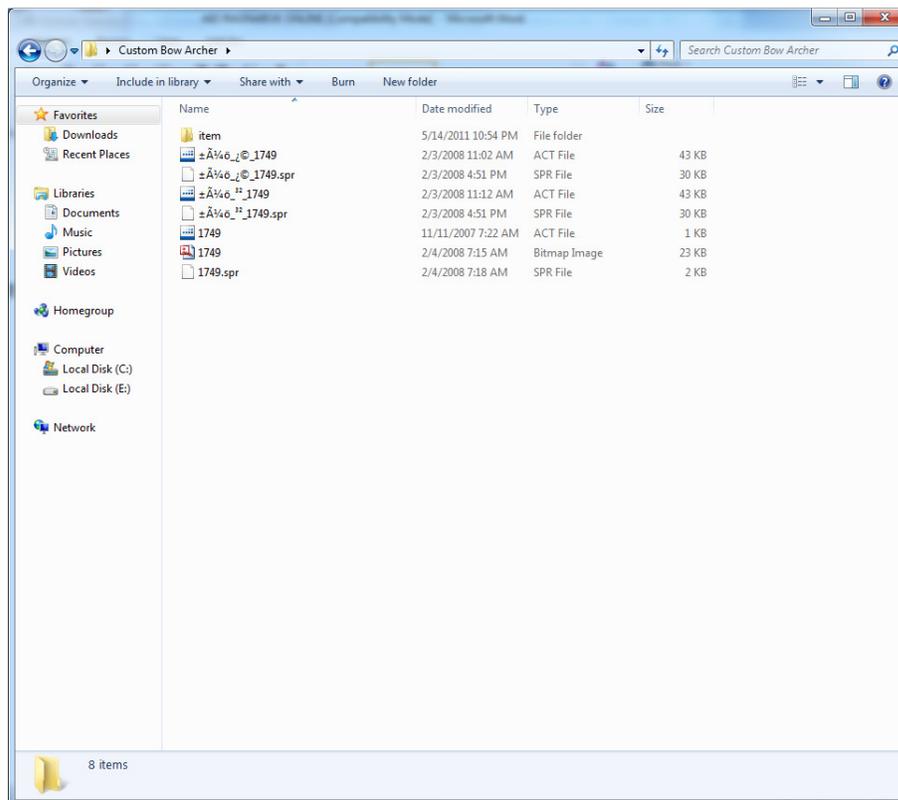
1749,Custom Bow, Custom Bow,4,1000,,500,15,,5,3,0x000A0848,7,2,34,1,4,1,11,{}, {}, {}

*Just for people who don't know, by looking at this, it has 3 slots, only useable by archer branch

*To show slots remember to add it to the itemslotcounttable.txt in the syntax 1749#3#

Now that we have that, return to the Custom Bow Archer folder and let's rename our files.

Rename like shown, I created a new folder called item, because you can't have two files in the same directory having the same name.



Now, navigate to your data folder, and add these entries into your text files

idnum2itemdesctable

idnum2itemdisplaynametable

idnum2itemresnametable
num2itemdesctable
num2itemdisplaynametable
num2itemresnametable

It will be mostly 1749#1749# for most of them.
For the displaynametable it would be 1749#NameYouWantOfWep#

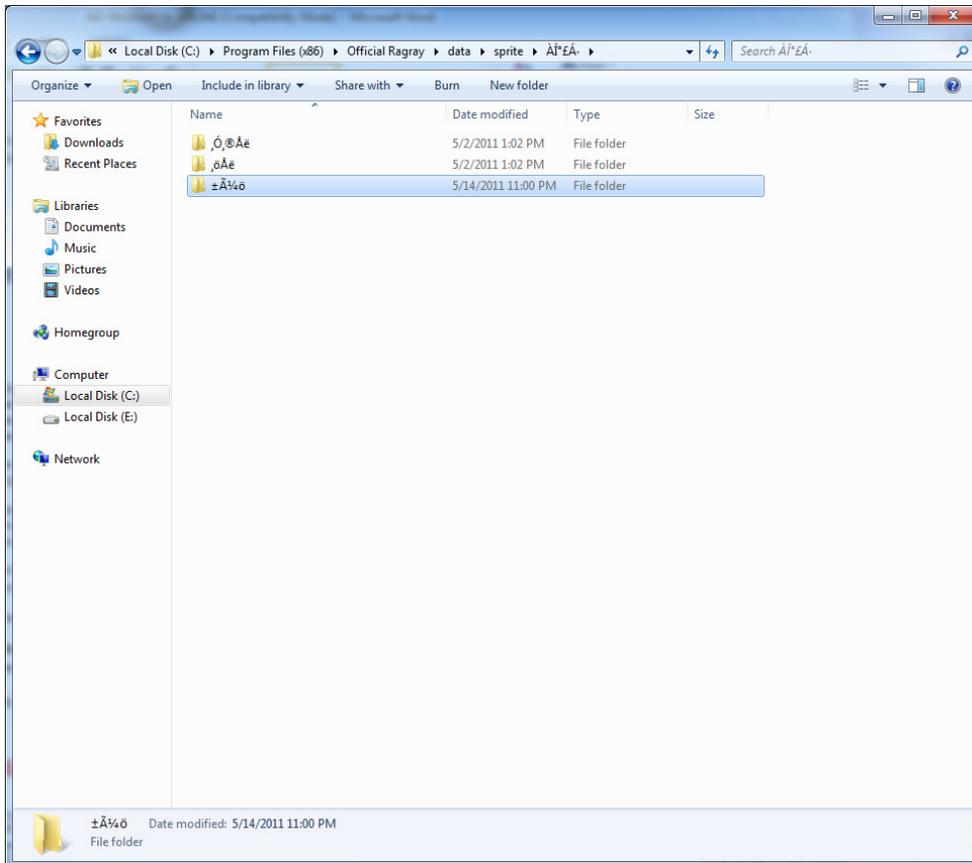
Once done editing all those files, save and close them
Now navigate to texture>À-ÀúÀÎÀÍÆäÀÌ½º>item and paste the 1749.bmp into that folder
Now navigate to texture>À-ÀúÀÎÀÍÆäÀÌ½º>collection and paste the 1749.bmp into that folder

Now navigate to data>sprite>¾ÆÀÏÀÛ and drag the the two drop files 1749.act/spr into it
Now navigate to data>sprite>ÀÏ°ÉÁ·

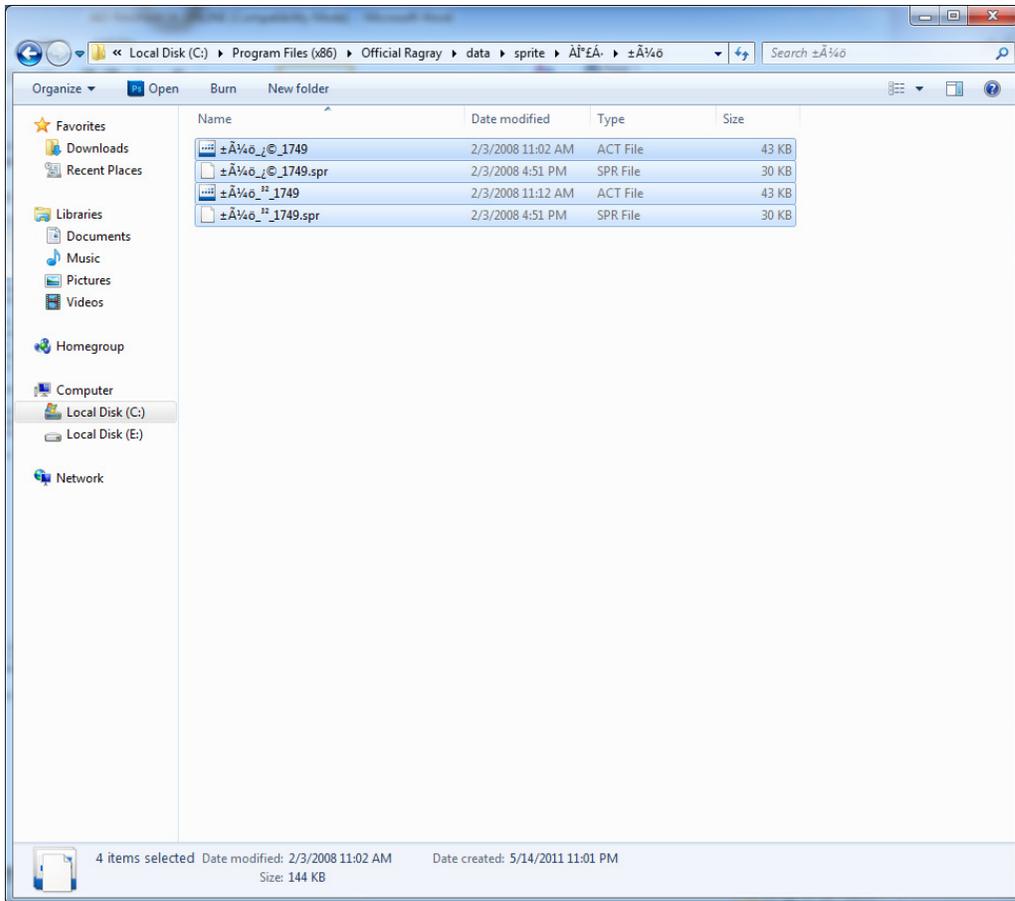
Remember from the sprite bible:

Directory: /data/sprite/ÀÏ°ÉÁ·/±Ã¼ö Archer weapons

Meaning we create a new folder called “±Ã¼ö”



Now, go inside the folder, and drag the female and male sprites inside



We are now done adding your first custom weapon for archer. Go ingame and test it out... @item 1749. Remember you must be an archer branch to use these items. Make sure the sprite/collection/drop sprite/item is working correctly.

Email me if you have any problems with the guide.

Xxiii Adding Custom Pets

For this guide, we will be adding multiple custom pets.

They will be using default values, and using default feed and tames.

To change values for attacking that will have to deal with pet_db.txt which I will past over. I will give you some syntax you can look over so you can do it yourself.

Also, the src>map>pet.h should be at a value of 900 to support the amount of pets we are implementing.

Pet Creator - <http://meixsell.net/public/Pet%20Creator%20GUI.zip>

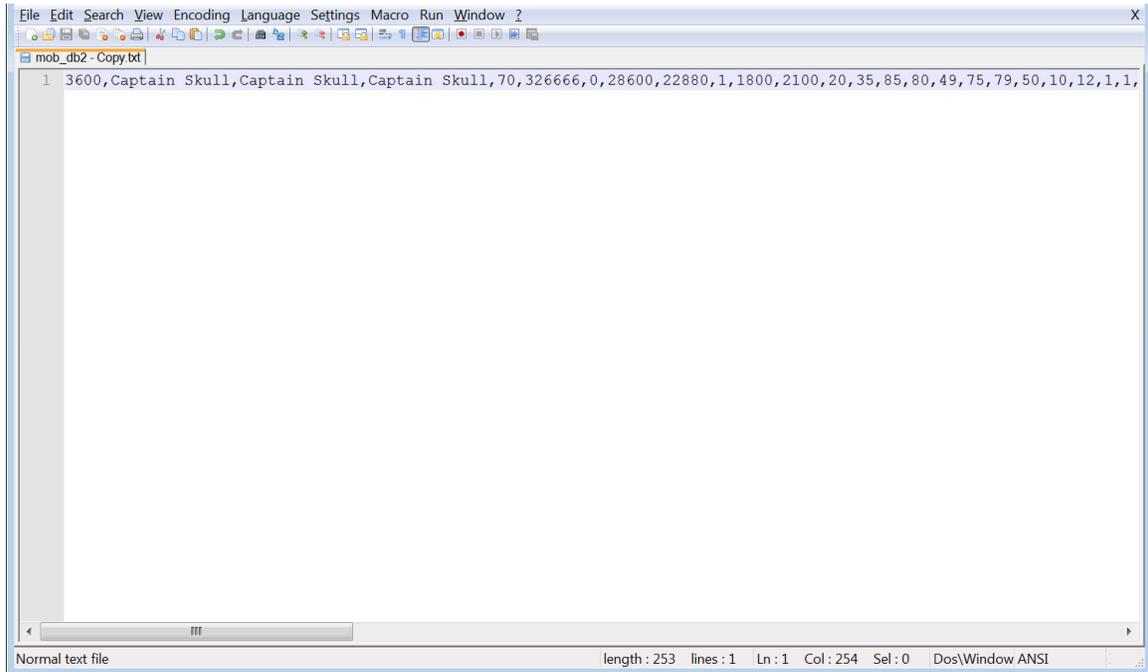
Extract the contents onto your desktop in a new folder called "Pet Creator"

First, make a copy of your mob_db2.txt in case we mess up. Our job is to remove any lines that have //, and any spaces.

For reference, it should look similar to what the default mob_db.txt file in the Pet Creator folder looks like.

For this guide, we will be implementing only the custom mob we created in the previous section...Captain Skull

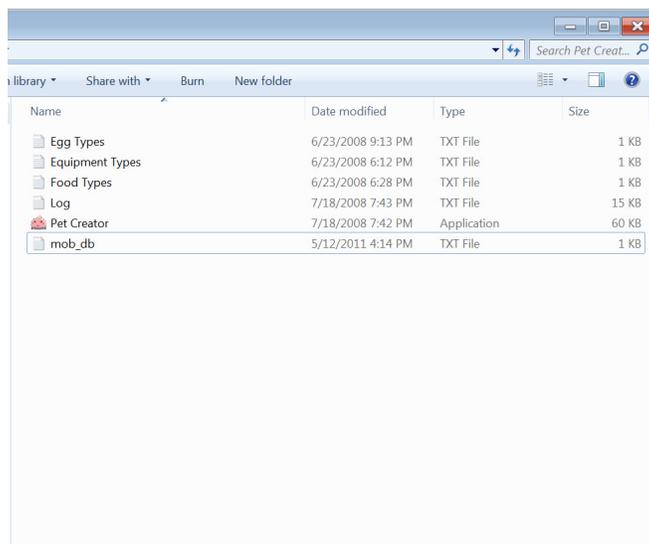
So the copy of the mob_db2.txt should look like this



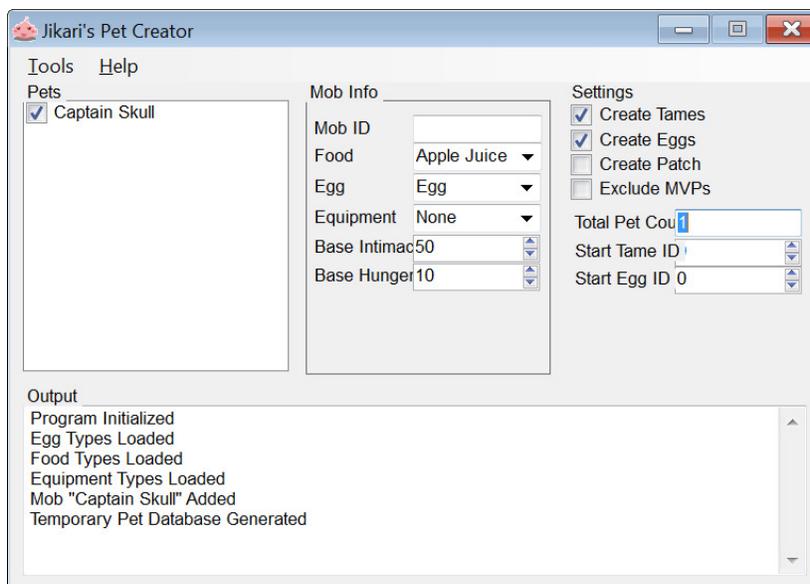
Rename “mob_db2 – Copy.txt” to “mob_db.txt” and copy and paste it and overwrite the file in the Pet Creator

Now open up Pet Creator.exe

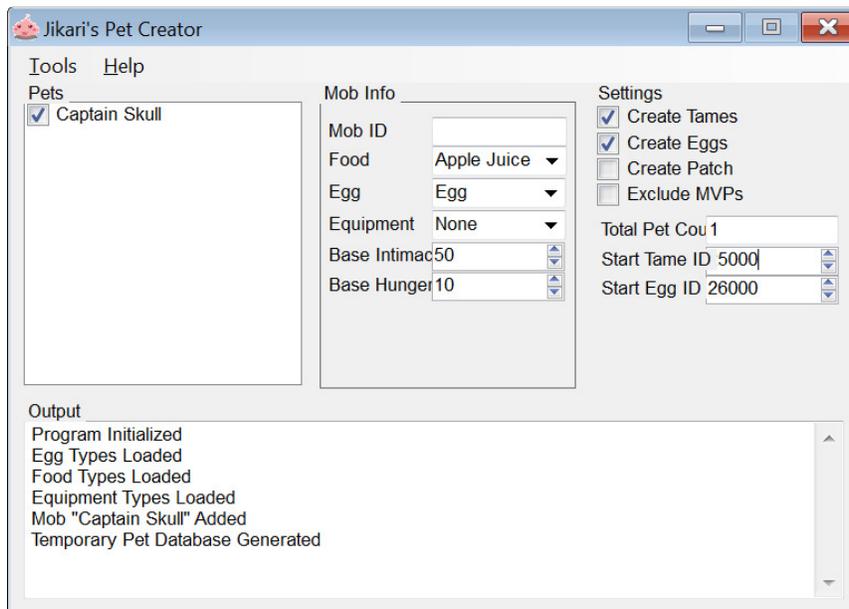
NOTE: THE FOLLOWING IMAGES SHOULD HAVE “CREATE PATCH” TICKED



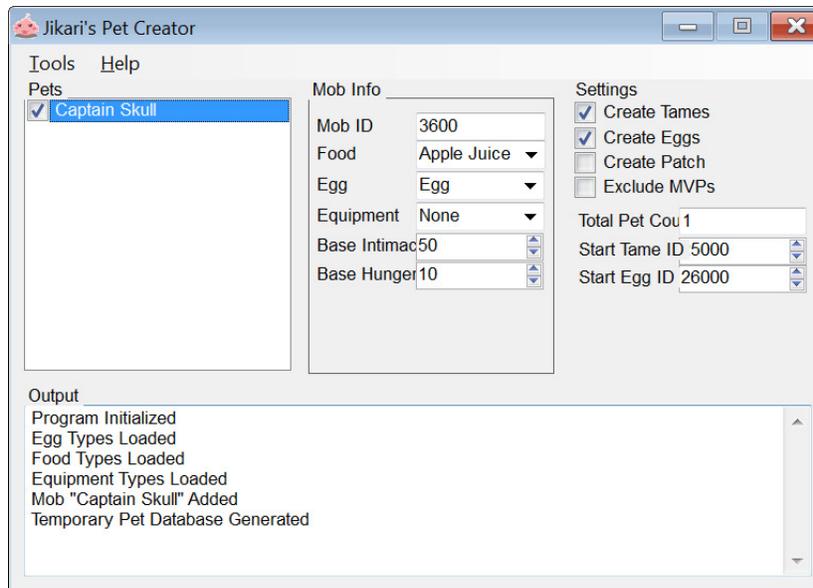
Under Tools click Load Mob Db and select the mob_db in your Pet Creator that we overwrote



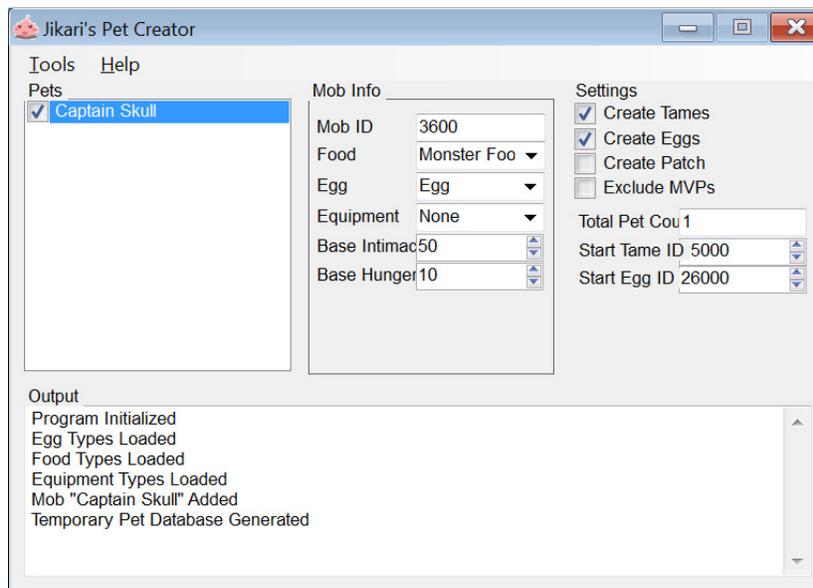
For this guide I will start Tame ID at 25000 and start Egg ID at 26000



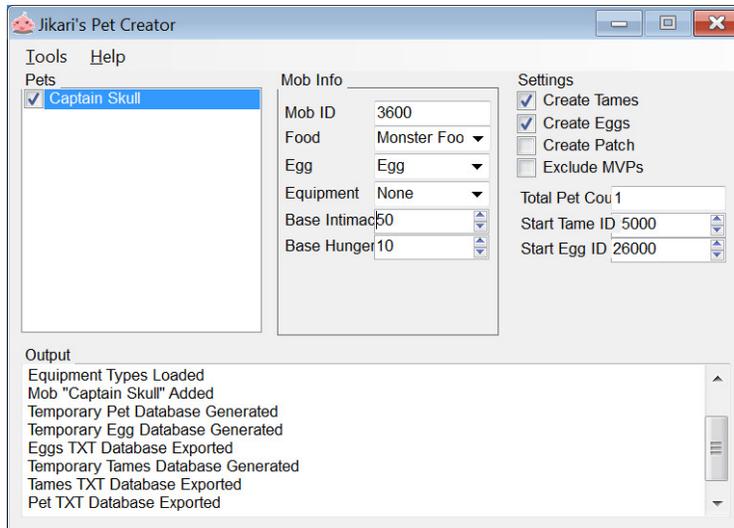
It says 5000, but something is blocking it so it's really 25000.
Click the Captian Skull entry to display the info in the Mob Info Area



I will do default settings like so:



Now click tools>export
Click Make New Folder and name it New Pets
Press Ok to export the text documents to be added to our clientside files.
When asked, click Text button
Text documents will now be exported



Now go to the "New Pets" folder that the documents were exported to.

Open up eggs_db.txt

Add the entry inside our item_db2.txt file (server files>db>item_db2.txt)

Navigate to the bottom of the file and paste the entry inside the eggs_db.txt into the item_db2.txt file.

```

File Edit Search View Encoding Language Settings Macro Run Window 2
eggs_db.txt item_db2.txt
44 //=====
45 //12742,Valentine_Gift_Box_M,Valentine Gift Box,2,10,,0,,,,,0xFFFFFFFF,7,2,,,,,{ getitem 7946,1; },{},{ }
46 //12743,Valentine_Gift_Box_F,Valentine Gift Box,2,10,,0,,,,,0xFFFFFFFF,7,2,,,,,{ getitem 7947,1; },{},{ }
47 //12744,Chocolate_Box,Chocolate Box,2,10,,0,,,,,0xFFFFFFFF,7,2,,,,,{ getitem 558,1; },{},{ }
48 //14466,Valentine's_Emblem_Box,Valentine's Emblem Box,2,10,,0,,,,,0xFFFFFFFF,7,2,,,,,{ getitem 5817,1; },{},{ }
49 //7946,Gold_Ring_Of_Valentine,Gold Ring Of Valentine,3,10,,0,,,,,0xFFFFFFFF,7,2,,,,,{ getitem 7946,1; },{},{ }
50 //7947,Silver_Ring_Of_Valentine,Silver Ring Of Valentine,3,10,,0,,,,,0xFFFFFFFF,7,2,,,,,{ getitem 7947,1; },{},{ }
51 //7948,Box,Box,3,10,,10,,,,,0xFFFFFFFF,7,2,,,,,{ getitem 7948,1; },{},{ }
52 //5817,Valentine's_Emblem,Valentine's Emblem,5,10,,0,,3,,0,0xFFFFFFFF,7,2,136,,0,0,0,{ bonus bAtkRate,3; bonus bMat
53
54 // iRO Halloween Event 2009
55 //=====
56 //5668,Weird_Pumpkin_Hat,Weird Pumpkin Hat,5,20,,0,,5,,0,0xFFFFFFFF,7,2,256,,0,1,206,{ bonus bMdef,5; bonus2 bAddM
57 //6298,Crushed_Pumpkin,Crushed Pumpkin,3,0,,0,,,,,0xFFFFFFFF,7,2,,,,,{ getitem 6298,1; },{},{ }
58 //6299,Worn_Fabric,Worn Fabric,3,0,,0,,,,,0xFFFFFFFF,7,2,,,,,{ getitem 6299,1; },{},{ }
59
60 // Old Tuxedo and Wedding Dress, will display the outfit when worn.
61 //=====
62 //2338,Wedding_Dress,Wedding Dress,5,43000,,500,,0,,0,0xFFFFFFFF,7,0,16,,0,1,0,{ setoption Option_Wedding,1; },{
63 //7170,Tuxedo,Tuxedo,5,43000,,10,,0,,0,0xFFFFFFFF,7,1,16,,0,1,0,{ setoption Option_Wedding,1; },{ setoption Opti
64
65
66 //OUR CUSTOMS
67 18000,Valkyrie_Helm,Valkyrie Helm,5,100000,,1000,,5,,1,0xFFFFFFFF,2,2,256,,0,1,1000,{ bonus bMdef,5; if(isequipped
68
69 26000,Captain Skull Egg,Captain Skull Egg,7,20,0,0,,,,,0xFFFFFFFF,7,2,,,,,{ getitem 26000,1; },{},{ }

```

Open up tames_db.txt

Add the entry inside our item_db2.txt file (server files>db>item_db2.txt)

Navigate to the bottom of the file and paste the entry inside the tames_db.txt into the item_db2.txt file.

```

File Edit Search View Encoding Language Settings Macro Run Window ?
eggs_db.txt item_db2.txt james_db.txt
46 //12743,Valentine_Gift_Box_F,Valentine Gift Box,2,10,,0,,,,,0xFFFFFFFF,7,2,,,,,{ getitem 7947,1; },({})
47 //12744,Chocolate_Box,Chocolate Box,2,10,,0,,,,,0xFFFFFFFF,7,2,,,,,{ getitem 558,1; },({})
48 //14466,Valentine's_Emblem_Box,Valentine's Emblem Box,2,10,,0,,,,,0xFFFFFFFF,7,2,,,,,{ getitem 5817,1; },({})
49 //7946,Gold_Ring_Of_Valentine,Gold Ring Of Valentine,3,10,,0,,,,,({},{})
50 //7947,Silver_Ring_Of_Valentine,Silver Ring Of Valentine,3,10,,0,,,,,({},{})
51 //7948,Box,Box,3,10,,10,,,,,({},{})
52 //5817,Valentine's_Emblem,Valentine's Emblem,5,10,,0,,3,,0,0xFFFFFFFF,7,2,136,,0,0,0,{ bonus bAtkRate,3; bonus bMat
53
54 // iRO Halloween Event 2009
55 //=====
56 //5668,Weird_Pumpkin_Hat,Weird Pumpkin Hat,5,20,,0,,5,,0,0xFFFFFFFF,7,2,256,,0,1,206,{ bonus bMdef,5; bonus2 bAddMc
57 //6298,Crushed_Pumpkin,Crushed Pumpkin,3,0,,0,,,,,({},{})
58 //6299,Worn_Fabric,Worn Fabric,3,0,,0,,,,,({},{})
59
60 // Old Tuxedo and Wedding Dress, will display the outfit when worn.
61 //=====
62 //2338,Wedding_Dress,Wedding Dress,5,43000,,500,,0,,0,0xFFFFFFFFE,7,0,16,,0,1,0,({ setoption Option_Wedding,1; },{
63 //7170,Tuxedo,Tuxedo,5,43000,,10,,0,,0,0xFFFFFFFFE,7,1,16,,0,1,0,({ setoption Option_Wedding,1; },{ setoption Opti
64
65
66 //OUR CUSTOMS
67 18000,Valkyrie_Helm,Valkyrie Helm,5,100000,,1000,,5,,1,0xFFFFFFFFE,2,2,256,,0,1,1000,{ bonus bMdef,5; if(isequipped
68
69 26000,Captain Skull Egg,Captain Skull Egg,7,20,0,0,,,,,({},{})
70 25000,Captain Skull Tame,Captain Skull Tame,2,1000,0,20,,,,,0xFFFFFFFF,7,2,,,,,{ pet 3600; },({})
71
Normal text file length: 6039 lines: 71 Ln: 71 Col: 1 Sel: 0 DosWindow ANSI

```

Save and close those files.

Open up the pet_db.txt in the New Pets folder

Copy and paste the entry inside into the server files>db>pet_db.txt like so:

```

*C:\Users\Tim Bu\Desktop\server files\db\pet_db.txt - Notepad++
File Edit Search View Encoding Language Settings Macro Run Window ?
pet_db.txt pet_db.txt
100
101 38,0,554,80,60,30,100,250,20,800,150,0,0,300,300,800,{ petskillattack "CR_SHIELDCHARGE",5,5,5; },{}
102
103
104 ,,6111,80,60,20,100,250,20,500,150,0,0,300,300,800,({ bonus bMaxHP,100; bonus bFlee,-5; }
105 9043,10025,6098,80,60,10,100,250,20,500,150,0,0,300,300,800,({ bonus bSPrecovRate,3; }
106 32,6108,80,60,10,100,250,20,200,150,0,0,300,300,800,({ bonus bVit,1; bonus2 bResEff,Eff_Stone,500; }
107 0027,6100,80,60,20,100,250,20,500,150,0,0,300,300,800,({ bonus bFlee,7; bonus bDef,-3; }
108 12364,9046,10028,6104,80,60,10,100,250,20,50,150,0,0,300,300,800,({ bonus2 bAddRace,RC_DemiHuman,3; }
109 ,,10037,6113,80,60,10,100,250,20,200,150,0,0,300,300,800,({ bonus2 bHpDrainRate,50,5; }
110 0034,6110,80,60,10,100,250,20,50,150,0,0,300,300,800,({ bonus bMaxSPRate,5; }
111 error,12372,9054,10036,6112,80,60,10,100,250,20,200,150,0,0,300,300,800,({ bonus2 bResEff,Eff_Sleep,10000; }
112 0026,6099,80,60,20,100,250,20,500,150,0,0,300,300,800,({ bonus bAgi,2; }
113 366,9048,10030,6106,80,60,15,100,250,20,200,150,0,0,300,300,800,({ bonus bInt,1; bonus bCastrate,-3; }
114 5,9047,10029,6105,80,60,15,100,250,20,500,150,0,0,300,300,800,({ bonus bMaxSP,30; bonus bSPrecovRate,5; }
115 12369,9051,10033,6109,80,60,20,100,250,20,500,150,0,0,300,300,800,({ bonus2 bSubEle,Ele_Fire,3; }
116 ,,10031,6107,80,60,10,100,250,20,200,150,0,0,300,300,800,({ bonus bCritAtkRate,5; }
117 42,10024,6097,80,60,15,100,250,20,200,150,0,0,300,300,800,({ bonus bMaxHPRate,3; bonus3 bAutoSpellWhenHit,"AL_HE
118 ,,9040,10022,6095,80,60,10,100,250,20,500,150,0,0,300,300,800,({ bonus bMaxSP,10; }
119 ,,10023,6096,80,60,20,100,250,20,200,150,0,0,300,300,800,({ bonus2 bSubRace,RC_Brute,3; }
120 039,10021,6094,80,60,10,100,250,20,2000,150,0,0,300,300,800,({})
121 8,6114,80,60,10,100,250,20,200,150,0,0,300,300,800,({ bonus2 bSubEle,Ele_Fire,2; bonus2 bAddEle,Ele_Fire,2; }
122
123
124
125 25000,26000,0,350,10,20,50,100,50,20,2000,400,1,0,350,400,800,{}
Normal text file length: 11942 lines: 1 Ln: 125 Col: 98 Sel: 0 DosWindow ANSI

```

However, looking at the others, you must add an extra “,{}” to complete the syntax.

It will look like the following:

```
C:\Users\Tim Bui\Desktop\server files\db\pet_db.txt - Notepad++
File Edit Search View Encoding Language Settings Macro Run Window ?
pet_db.txt pet_db.txt
100
101 1963,P_CHUNG_E,New Year Doll,0,9038,0,554,80,60,30,100,250,20,800,150,0,0,300,300,800,{ petskillattack "CR_SHIELDCH
102
103 // New pets JapanRO Mobile
104 1040,GOLEM,Golem,12371,9053,10035,6111,80,60,20,100,250,20,500,150,0,0,300,300,800,({ bonus bMaxHP,100; bonus bFl
105 1143,MARIONETTE,Marionette,12361,9043,10025,6098,80,60,10,100,250,20,500,150,0,0,300,300,800,({ bonus bSPrecovRat
106 1148,MEDUSA,Medusa,12368,9050,10032,6108,80,60,10,100,250,20,200,150,0,0,300,300,800,({ bonus bVit,1; bonus2 bRes
107 1179,WHISPER,Whisper,12363,9045,10027,6100,80,60,20,100,250,20,500,150,0,0,300,300,800,({ bonus bFlee,7; bonus bF
108 1299,GOBLIN_LEADER,Goblin Leader,12364,9046,10028,6104,80,60,10,100,250,20,50,150,0,0,300,300,800,({ bonus2 bAddf
109 1370,SUCCUBUS,Succubus,12373,9055,10037,6113,80,60,10,100,250,20,200,150,0,0,300,300,800,({ bonus2 bHpDrainRate,5
110 1374,INCUBUS,Incubus,12370,9052,10034,6110,80,60,10,100,250,20,50,150,0,0,300,300,800,({ bonus bMaxSPRate,5; }
111 1379,NIGHTMARE_TERROR,Nightmare Terror,12372,9054,10036,6112,80,60,10,100,250,20,200,150,0,0,300,300,800,({ bonus
112 1401,SHINOBI,Shinobi,12362,9044,10026,6099,80,60,20,100,250,20,500,150,0,0,300,300,800,({ bonus bAgi,2; }
113 1404,MIYABI_NINGYO,Miyabi Doll,12366,9048,10030,6106,80,60,15,100,250,20,200,150,0,0,300,300,800,({ bonus bInt,1;
114 1416,WICKED_NYMPH,Evil Nymph,12365,9047,10029,6105,80,60,15,100,250,20,500,150,0,0,300,300,800,({ bonus bMaxSP,30
115 1495,STONE_SHOOTER,Stone Shooter,12369,9051,10033,6109,80,60,20,100,250,20,500,150,0,0,300,300,800,({ bonus2 bSul
116 1504,DULLAHAN,Dullahan,12367,9049,10031,6107,80,60,10,100,250,20,200,150,0,0,300,300,800,({ bonus bCritAtkRate,5;
117 1505,LOLI_RURI,Loli Ruri,12360,9042,10024,6097,80,60,15,100,250,20,200,150,0,0,300,300,800,({ bonus bMaxHPRate,3;
118 1513,CIVIL_SERVANT,Mao Guai,12358,9040,10022,6095,80,60,10,100,250,20,500,150,0,0,300,300,800,({ bonus bMaxSP,10;
119 1586,LEAF_CAT,Leaf Cat,12359,9041,10023,6096,80,60,20,100,250,20,200,150,0,0,300,300,800,({ bonus2 bSubRace,RC_Br
120 1630,BACSOJIN_White Lady,12357,9039,10021,6094,80,60,10,100,250,20,2000,150,0,0,300,300,800,({ }
121 1837,IMP,Fire Imp,12374,9056,10038,6114,80,60,10,100,250,20,200,150,0,0,300,300,800,({ bonus2 bSubEle,Ele_Fire,2;
122
123
124 //OUR CUSTOMS
125 3600,Captain Skull,Captain Skull,25000,26000,0,350,10,20,50,100,50,20,2000,400,1,0,350,400,800,({ }

Normal text file length: 11945 lines: 1 Ln: 125 Col: 101 Sel: 0 Dos/Window ANSI
```

Save those files, and close them.
Now, open up the " patch_desc.txt" in the New Pets folder
We need to copy this entry into our

idnum2itemdesc.txt
num2itemdesc.txt

```
File Edit Search View Encoding Language Settings Macro Run Window ?
num2itemdesc.txt idnum2itemdesc.txt
1 //OUR CUSTOMS
2
3 18000#
4 Our first custom item description.
5 #
6
7 // Custom Tames
8 25000#
9 An egg that carries a Captain Skull within, can be hatched by using a ^33CC33Pet Incubator^000000.
10 Class: ^777777Monster Egg^000000
11 Weight: ^7777770^000000
12 #
13
14 // Custom Eggs
15
16 26000#
17 A tame for the monster: Captain Skull, Happy Catching
18 Class: ^777777Pet Tame^000000
19 Weight^77777720^000000
20 #
21
22
23
24 //GRAVITY
25 501#
26 A potion made from ground Red Herbs that restores ^000088about 45 HP^000000.
27 ^fffff^000000
28 Weight :^777777 7^000000

Normal text file length: 1617621 lines Ln: 21 Col: 1 Sel: 0 Dos/Window ANSI
```

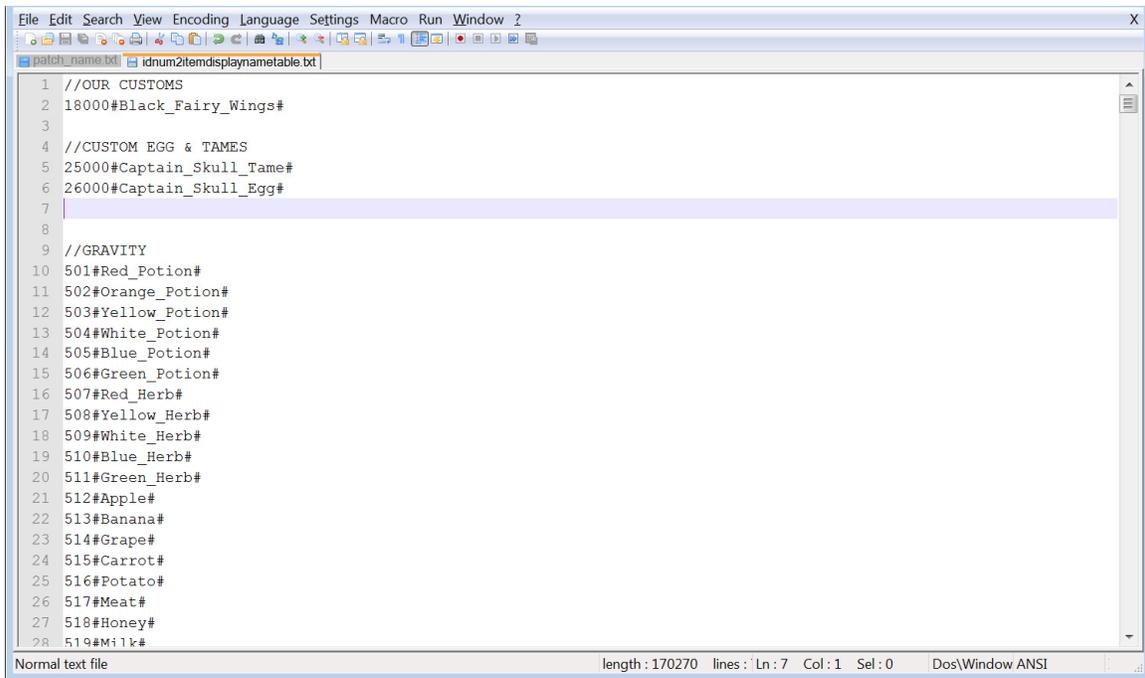
```
1 //OUR CUSTOMS
2
3 18000#
4 Our first custom item description.
5 #
6
7 // Custom Tames
8 25000#
9 An egg that carries a Captain Skull within, can be hatched by using a ^33CC33Pet Incubator^000000.
10 Class: ^777777Monster Egg^000000
11 Weight: ^7777770^000000
12 #
13
14 // Custom Eggs
15
16 26000#
17 A tame for the monster: Captain Skull, Happy Catching
18 Class: ^777777Pet Tame^000000
19 Weight^7777720^000000
20 #
21
22
23
24 //GRAVITY
25 501#
26 A potion made from ground Red Herbs that restores ^000088about 45 HP^000000.
27 ^ffffff_^000000
28 Weight :^777777 7^000000
```

Save and close both of these files
Open patch_name.txt
It should have contents...If not, the syntax is

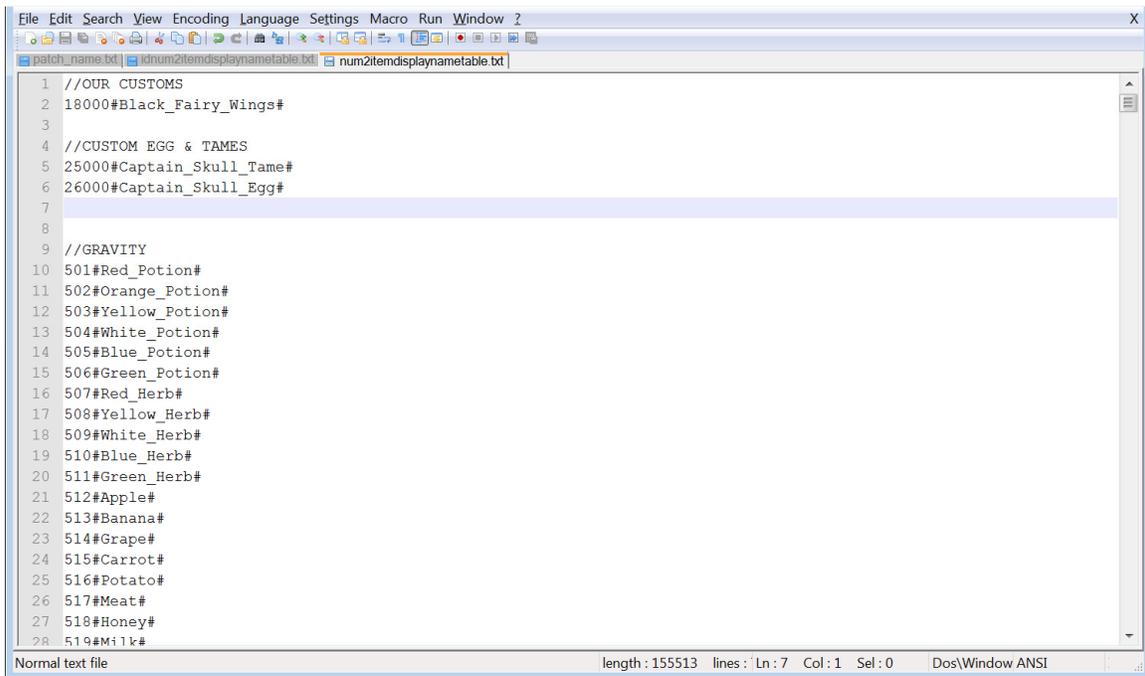
```
25000#Captain_Skull_Tame#
26000#Captain_Skull_Egg#
```

And paste these inside our

```
idnum2itemdisplaynametable.txt
num2itemdisplaynametable.txt
```



```
File Edit Search View Encoding Language Settings Macro Run Window ?
patch_name.txt idnum2itemdisplaynametable.txt
1 //OUR CUSTOMS
2 18000#Black_Fairy_Wings#
3
4 //CUSTOM EGG & TAMES
5 25000#Captain_Skull_Tame#
6 26000#Captain_Skull_Egg#
7
8
9 //GRAVITY
10 501#Red_Potion#
11 502#Orange_Potion#
12 503#Yellow_Potion#
13 504#White_Potion#
14 505#Blue_Potion#
15 506#Green_Potion#
16 507#Red_Herb#
17 508#Yellow_Herb#
18 509#White_Herb#
19 510#Blue_Herb#
20 511#Green_Herb#
21 512#Apple#
22 513#Banana#
23 514#Grape#
24 515#Carrot#
25 516#Potato#
26 517#Meat#
27 518#Honey#
28 519#Milk#
Normal text file length: 170270 lines: Ln: 7 Col: 1 Sel: 0 DosWindow ANSI
```



```
File Edit Search View Encoding Language Settings Macro Run Window ?
patch_name.txt num2itemdisplaynametable.txt
1 //OUR CUSTOMS
2 18000#Black_Fairy_Wings#
3
4 //CUSTOM EGG & TAMES
5 25000#Captain_Skull_Tame#
6 26000#Captain_Skull_Egg#
7
8
9 //GRAVITY
10 501#Red_Potion#
11 502#Orange_Potion#
12 503#Yellow_Potion#
13 504#White_Potion#
14 505#Blue_Potion#
15 506#Green_Potion#
16 507#Red_Herb#
17 508#Yellow_Herb#
18 509#White_Herb#
19 510#Blue_Herb#
20 511#Green_Herb#
21 512#Apple#
22 513#Banana#
23 514#Grape#
24 515#Carrot#
25 516#Potato#
26 517#Meat#
27 518#Honey#
28 519#Milk#
Normal text file length: 155513 lines: Ln: 7 Col: 1 Sel: 0 DosWindow ANSI
```

Save and close those files.
Open patch_sprite.txt in our New Pets folder
In this file, you may see gibberish...Either way it is the wrong format.

The correct syntax is the following:

Custom Eggs: #µ¶¼Ó¼º¼Ë#

Custom Tames: #¼öÃËÀ°ò,í#

Paste these lines for each incorrect entry in these text files below:

idnum2itemresnametable.txt
num2itemresnametable.txt

Now, you are able to add as many custom pets as you want as long as its within 900 which was defined in the src>pet.h.

NOTE: To change attributes for the pet, look in server files>db>pet_db.txt.

Near the top, you will see the syntax for what each entry in the column affects.

Pets are also affected by the server files>conf>battle>pet.conf file.

In there, you can change how the pet behaves, like is it able to attack without an item equipped of the pet.

Xiv Adding Custom Diffs Manually (Custom Source Mods)

For this tutorial, we will be adding a simple source mod. This source mod will be @identifyall. Usually it's easier to just apply tortoisenvn to apply the diff. But here, I will show how to manually add it so you know what you are doing. Open atcommand.c since that is the file that the code will be placed in since it says

"Index: src/map/atcommand.c"

```
Index: src/map/atcommand.c
=====
--- src/map/atcommand.c (revision 14676)
+++ src/map/atcommand.c (working copy)
@@ -8609,7 +8609,29 @@
     return 0;
 }

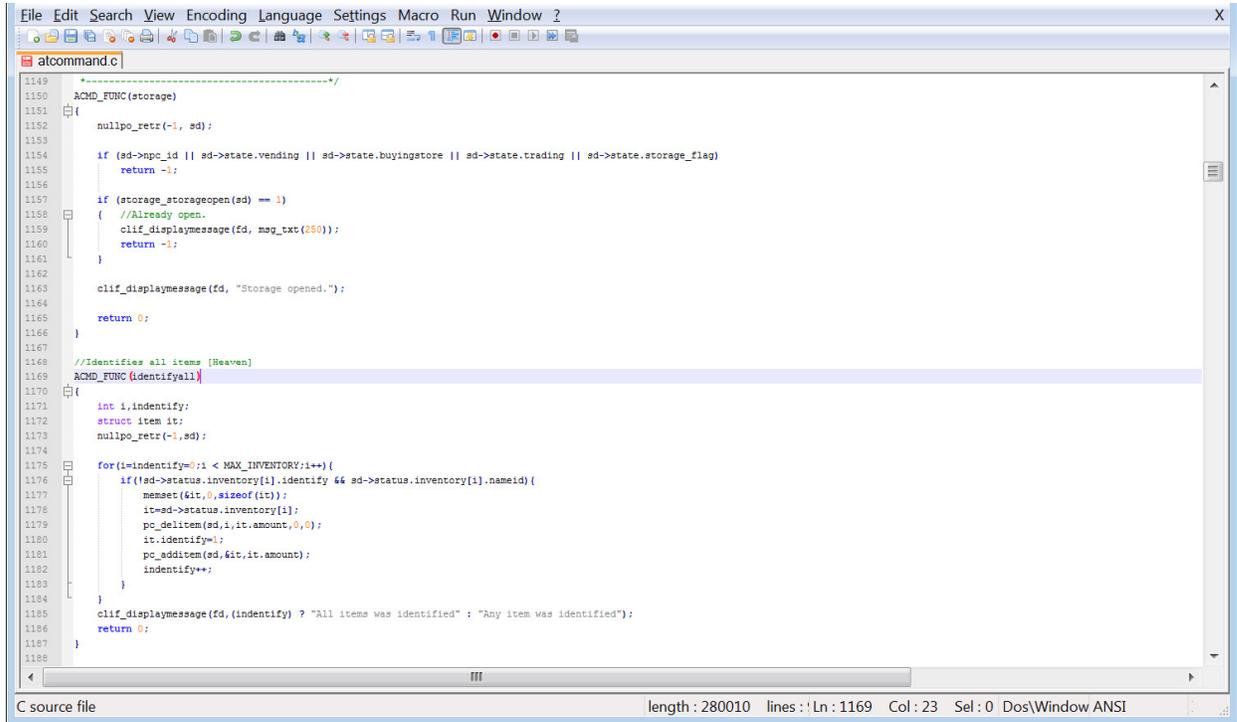
+//Identifies all items [Heaven]
+ACMD_FUNC(identifyall)
+{
+ int i,identify;
+ struct item it;

+ nullpo_retr(-1,sd);
+
+ for(i=identify=0;i < MAX_INVENTORY;i++){
+ if(!sd->status.inventory[i].identify && sd->status.inventory[i].nameid){
+ memset(&it,0,sizeof(it));
+ it=sd->status.inventory[i];
+ pc_delitem(sd,i,it.amount,0,0);
+ it.identify=1;
+ pc_additem(sd,&it,it.amount);
+ identify++;
+ }
 }
```


}

To paste these lines without error into the visual studio 2010, you must remove the + for each line

The end result should look like this. I included the storage part just for reference



```
1149
1150 ACHD_FUNC(storage)
1151 {
1152     nullpo_retr(-1, sd);
1153
1154     if (sd->npc_id || sd->state.vending || sd->state.buyingstore || sd->state.trading || sd->state.storage_flag)
1155         return -1;
1156
1157     if (storage_storageopen(sd) == 1)
1158     {
1159         //Already open.
1160         cliff_displaymessage(fd, msg_txt(260));
1161         return -1;
1162     }
1163
1164     cliff_displaymessage(fd, "Storage opened.");
1165
1166     return 0;
1167 }
1168
1169 //Identifies all items [Heaven]
1170 ACHD_FUNC(identifyall)
1171 {
1172     int i, identify;
1173     struct item it;
1174     nullpo_retr(-1, sd);
1175
1176     for(i=identify=0; i < MAX_INVENTORY; i++){
1177         if(!sd->status.inventory[i].identify && sd->status.inventory[i].nameid){
1178             memset(&it, 0, sizeof(it));
1179             it=sd->status.inventory[i];
1180             pc_delitem(sd, i, it.amount, 0, 0);
1181             it.identify=1;
1182             pc_additem(sd, &it, it.amount);
1183             identify++;
1184         }
1185     }
1186     cliff_displaymessage(fd, (identify ? "All items was identified" : "Any item was identified"));
1187     return 0;
1188 }
```

We will now deal with:

```
/*=====
 * atcommand_info[] structure definition
 *-----*/
@@ -8914,6 +8936,8 @@
 { "delitem", 60,60, atcommand_delitem },
 { "charcommands", 1,1, atcommand_commands },
 { "font", 1,1, atcommand_font },
+// Heaven MODs
+ { "identifyall", 1,60, atcommand_identifyall },
};
```

Find in the document atcommand.h:

```
{ "rura", 40,40, atcommand_mapmove },
```

Below it paste the following so it looks like this:


```
// valid range of dye's and styles on the client
```

And change it so it looks like this:

```
// valid range of dye's and styles on the client  
min_hair_style: 0  
max_hair_style: 46  
min_hair_color: 0  
max_hair_color: 251  
min_cloth_color: 0  
max_cloth_color: 553
```

Now just download this custom dye.txt to use on your server. It's configured for the complete palette package. You just need to change its coordinates to your map.

Custom Dye Npc - <http://www.supportmii.com/ro1/tools/dye.txt>

Save the file, and place it in your server files>npc>custom folder
Add the custom by going into server files>npc>scripts_custom.conf

Open it up and find this line:

```
//npc: npc/custom/dye.txt
```

To

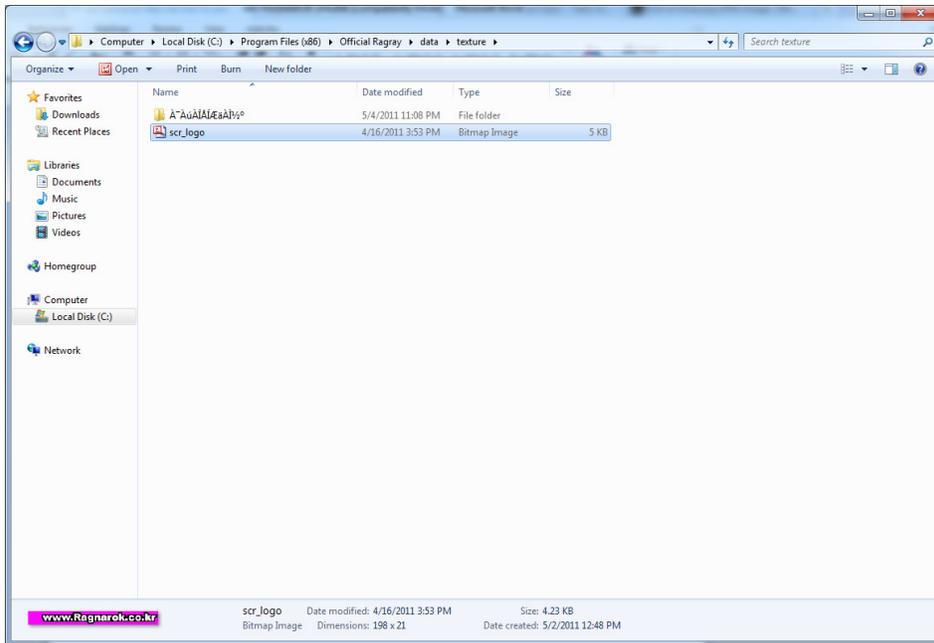
```
npc: npc/custom/dye.txt
```

You have added the dye.txt npc!
You can follow the same format/syntax to add more npc scripts.

Xvi Adding Loading Screens and Logo

Logo goes in texture folder...

The name would be scr_logo.bmp, there should already be a logo in there so you will know how it should look like.



The background color should be transparent. In this picture, the magenta/pink is transparent.

Next, the loading screens go in the texture/À- ÀúÀÎÁÍÆäÀÌ½° folder. The loading screens should be in jpg format.

For example: Loading00.jpg

Then add it in your clientinfo.xml like so:

```

<?xml version="1.0" encoding="euc-kr" ?>
<clientinfo>
<servicetype>korea</servicetype>
<servertime>sakray</servertime>
<connection>
<display>Your Server</display>
<balloon>Your Server</balloon>
<desc>YAY</desc>
<address>127.0.0.1</address>
<port>6900</port>
<version>25</version>
<langtype>3</langtype>
<registrationweb></registrationweb>
<loading>
<image>Loading00.jpg</image>
<image>Loading01.jpg</image>
<image>Loading02.jpg</image>
<image>Loading03.jpg</image>

```

<image>Loading04.jpg</image>
<image>Loading05.jpg</image>
<image>Loading06.jpg</image>
<image>Loading07.jpg</image>
<image>Loading08.jpg</image>
<image>Loading09.jpg</image>
<image>Loading10.jpg</image>
<image>Loading11.jpg</image>
<image>Loading12.jpg</image>
<image>Loading13.jpg</image>
<image>Loading14.jpg</image>
<image>Loading15.jpg</image>
<image>Loading16.jpg</image>
<image>Loading17.jpg</image>
<image>Loading18.jpg</image>
<image>Loading19.jpg</image>
<image>Loading20.jpg</image>
<image>Loading21.jpg</image>
<image>Loading22.jpg</image>
<image>Loading23.jpg</image>
<image>Loading24.jpg</image>
<image>Loading25.jpg</image>
<image>Loading26.jpg</image>
<image>Loading27.jpg</image>
<image>Loading28.jpg</image>
<image>Loading29.jpg</image>
</loading>
<aid>
<admin></admin>
</aid>
</connection>
</clientinfo>
