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Subject: Re: Change map

Posted by [reborn](#) on Sat, 02 Oct 2010 18:05:05 GMT

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This is the source to my random rotation plugin, it shows clearly how to change the next map.

```
#include "scripts.h"
#include <stdarg.h>
#ifdef WIN32
#define WIN32_LEAN_AND_MEAN
#include <windows.h>
#endif
#include "engine.h"
#include "gmmain.h"
#include <time.h>
#include "randomrotation.h"
```

```
RRSettingsStruct *RRSettings = 0;
char *mapname;
std::vector<int> LastMaps;
```

```
void RRSettingsStruct::Load() {
    SettingsLoader::Load();
    LoadInt(PreviousLimit,"PreviousLimit", 5, true, false, true);
}
```

```
int Get_Random_Int_Not_Crap(int n){
    return rand() % n;
}
```

```
//This just announces what the next map will be. The global variable "mapname" gets set by the
request random map code.
```

```
void mapnameannounce(){
    Console_Input(StrFormat("msg The next map will be %s",mapname).c_str());
}
```

```
//This function basically updates the most recently played maps, by pushing them along One each
time One is added, then "trimming" the vector using .resize()
```

```
//How many maps are kept track of depend on the setting in the ini file.
```

```
void addmap(int MapNumber){
    LastMaps.push_back(MapNumber);
    for(int i = 0; i <= RRSettings->PreviousLimit - 1; i++){
```

```

    LastMaps[i] = LastMaps[i + 1];
}
LastMaps.resize(RRSettings->PreviousLimit, MapNumber);
}

```

//This is the function that makes the next map a random one from the current list of maps on your server.

//You can call it at any time with "requestrandommap();".

```

void requestrandommap(){
    // initialise and declare the variable "numberofmaps here"
    int numberofmaps = 0;
    //Many thanks to Roshambo for this nice little "for" loop
    //The loop is basically responsible for getting the amount of maps in the rotation
    for(;*The_Game()->MapList[numberofmaps] != 0; numberofmaps++);
    //I get a random number between 0 (maps use 0 based indexing) and the amount of maps in
rotation (hence the need to know the amount of maps).
    int RandomNum = Get_Random_Int_Not_Crap(numberofmaps);
    if (RandomNum + 1 > numberofmaps - 1){
        RandomNum = 0;
    }
    //Code to make sure the next map will never be the same one as the current map
    for(int i = 0; i <= (RRSettings->PreviousLimit - 1); i++){
        if(RandomNum == LastMaps[i]){
            Console_Output("Had to re-request a new map, this One was recently played.\n");
            requestrandommap();
        }
    }
    //This code here makes the server think that the current map is a different one, so it logically
will play the map next in the list to the one it thinks is currently being played
    The_Game()->MapNumber = RandomNum;
    //Therefore the next map that will get played is the one after the one that the server thinks is
playing right now (but isn't), so this is how I get the name of the next map
    mapname = The_Game()->MapList[RandomNum +1];
    //Just log the next map on the console
    Console_Output("The next map will be: %s\n",mapname);
    //Call the function that announces the next map to be played in-game.
    mapnameannounce();
}

```

```

class mapChatCommand : public ChatCommandClass {
void Triggered(int ID,const TokenClass &Text,int ChatType) {
    mapnameannounce();
}
}

```

```
};
ChatCommandRegistrant<mapChatCommand>
mapChatCommandReg("!nextmap;!n;!N;!NEXT;!Nextmap;!next;!NEXTMAP",CHATTYPE_ALL,0,
GAMEMODE_ALL);
```

```
void Plugin_Load() {
    srand(time(NULL));
    RRSettings = new RRSettingsStruct("RandomRotation.ini");
    printf("Loaded reborns random rotation system plugin\n");
    RRSettings->Load();
    for(int i = 0; i <= RRSettings->PreviousLimit -1; i++){
        LastMaps.push_back(-1);
    }
}
```

```
void Plugin_Unload() {
    printf("Un-loaded reborns random rotation system plugin\n");
    delete RRSettings;
}
```

```
extern "C" {
    DLLEXPORT void SSGM_Level_Loaded_Hook() {
        int numberofmaps = 0;
        for(*The_Game()->MapList[numberofmaps] != 0; numberofmaps++);
        if(numberofmaps > RRSettings->PreviousLimit){
            addmap(The_Game()->MapNumber); // new map has loaded and is being played, add it to the
list of recently played maps
            requestrandommap(); // Choose the next map to be played (even though the current map has
just started)
        }
        else{
            printf("ERROR! You have less maps in rotation than what's set in the RandomRotation.ini file's
previous limit key.\n The plugin will not function as you want it to!\n");
        }
    }
}
```

```
#include "gmsettingsclass.h"

#define PluginName "reborn's random rotation plugin"
#define PluginVersion "1.1"

struct RRSettingsStruct : public virtual SettingsLoader {
    RRSettingsStruct(const char *ININame) : SettingsLoader(ININame) {
        PreviousLimit = 5;
    }
    void Load();
    int PreviousLimit;
};

int Get_Random_Int_Not_Crap(int n);
void mapnameannounce();
void addmap(int MapNumber);
void requestrandommap();

void Plugin_Load();
void Plugin_Unload();
```

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