

# *Single Player Tactical Ops*

## *Mission definition*

This document explains how missions are defined in the `TO_SinglePlayerDef.ini` file.

Each mission definition is composed of a number of lines of the form:

```
Line1[0]=Something  
Line2[0]=12  
Line3[0]=abcd-efgh
```

The number in brackets is the number of the current mission. Each mission must have a unique mission number. These mission numbers define the order in which the missions are run. Note that the first mission is given the number 0.

This is a definition of the usage of each of the fields used in a single mission definition:

### **Mission definition**

This section specifies basic settings for the mission.

***Maps[x]=TO-RapidWaters.unr***

Specifies the name of the .unr file. The same map can be used multiple times.

***MapName[x]=RapidWaters***

Specifies the title of the mission. This is the text that will be displayed in the mission selection dialog. The text 'Mission x: ' will automatically be placed before the map name. For example, a map name of 'RapidWaters' for the mission #3 would yield an entry of 'Mission 3: RapidWaters' in the mission selection dialog box.

## **Story**

*Story1[0]=Your mission, soldier, is to dispatch of the ennemy forces.*

*Story2[0]=Use the river to get back to base after you accomplished your mission.*

*Story 3[0]=*

*Story4[0]=*

*Story5[0]=*

This defines the story, which is showed once when the mission is loaded.

## **Mission text**

This section defines the various texts uses trough the mission.

*ScenarioName[0]=Mission: Rapidwaters*

Defines the mission title. This is shown in the briefing screen.

*ScenarioDescription1[0]=Terrorists have taken hostages on some dam.*

*ScenarioDescription2[0]=The police have been dispatched.*

Again, this is shown in the briefing screen. Note that both these lines will be appended to form a single line of text. Use this to give background info on the mission.

***ScenarioText1[0]=Your mission, should you choose to accept it..***

***ScenarioText2[0]=Well you don't really have a choice. Anyways,***

***ScenarioText3[0]=You mission is to, er, 'dispose' of the opponents***

***ScenarioText4[0]=and return to base by following the river.***

This defines the mission text, again shown in the briefing screen. Use this to give specific information about the mission.

***AllEnemiesDeadMSG[0]=The resistance has been obliterated. You can now leave the premises by following the canal.***

Defines the text that will be shown when all enemies, including the special bots, have been killed. See the trigger types in *appendix A* for more info. If the string is left empty, no message will be displayed.

***VIPDeadMSG[0]=The VIP has been killed!***

This message is displayed when the VIP has been killed. See the trigger types in *appendix A* for more info. If the string is left empty, no message will be displayed.

***SpecialTriggersMSG[0]=Special Trigger activated***

Displayed when one of the special triggers is touched by a player. See the trigger types in *appendix A* for more information. If the string is left empty, no message will be displayed.

***C4ExplodedMSG[0]=The ammo crates have been blown up!***

Displayed when the C4 has successfully been detonated. See the trigger types in *appendix A* for more info. If the string is left empty, no message will be displayed.

***CongradMSG[0]=Congradulations, you completed your mission! Not bad for a newbie.***

Displayed on the debriefing screen when the round is won by the player. Can be of arbitrary length (the text will automatically be warped), though it would be best to keep it of 3-4 lines maximum.



## **Mission parameters**

This section defines more basic parameters.

### ***RoundDuration[0]=2***

Use this setting to set how much time the player will have to complete the mission. Time is given in minutes. Decimal numbers are not allowed, as are zero or negative numbers.

### ***Exterminate[0]=0***

When set to 1, the round will end if all opponents are dead. If set to 0, the round will only end when all objectives are accomplished, or when other special conditions are met.

### ***NeededTeamBotsSurvivors[0]=1***

Used to specify the number of required bot survivors on the player's team. As soon as there are less team bots alive than this number, the round is lost for the player. Do not abuse, as team bots tend to have a rather low IQ.

### ***NoHostages[0]=1***

When set to 1, no hostages are spawned in the level. If set to 0, the hostages are spawned as normal.

## **Player info**

This section contains information about the player.

### ***PlayerTeam[0]=1***

Specifies the player's team.

0 = terrorists

1 = special forces

### ***PlayerMoney[0]=2000***

Specifies how much money the player receives at the beginning of each round.

### ***PlayerHealth[0]=100***

Specifies how much health the player has upon starting the round. Do not set it lower than 0.. Setting this value too low also causes the player to bleed.

### ***AllowedPlayerWeapons[0]=\*\*\*\*\*\_\*\*\*\*\*\_\*\*\*\*\*\_\*\*\*\*\*\_\*\*\*M (gbumb-Basmm-rshfc-pamgs-marm)***

This encoded string specifies which weapons can be bought by the player, if he has the required money. See *appendix B* for more information.

### ***SelfSkin[0]=0***

Specifies which skin & model the player wears. See *appendix C* for more information.

## **Team bots info**

This section contains information about the player's team.

### ***TeamBots[0]=2***

Specifies how many teammates the player have.

### ***TeamBotsIntelligence[0]=10***

Specifies the team bots' skills. A difficulty of less 4 is considered 'novice'.

### ***TeamBotsMoney[0]=10000***

Specifies how much money the player's teammates will receive each round.

### ***TeamSkins[0]=2***

Specify which skin & model the player's teammates wear. See *appendix C* for more information.

### ***TeamBotsGivenWeapons[0]=gbumb-basmm-rShfc-pamgs-marm-HBL (gbumb-basmm-rshfc-pamgs-marm-hbl)***

This encoded string specifies which weapons the player's teammates get at the beginning of each round. If left empty, the bot will use its money to buy its weapons. See *appendix B* for more information.

### ***TeamBotsHealth[0]=100***

Defines how much health the player's team members will have. Note that a number lower than 100 will make the teammates 'bleed'. Do not abuse by putting, say, 1000 of health, as it would be too 'unreal'.

### ***TeamBotsNames[0]=Team dude #1,Team dude #2***

Comma-separated list of the team member's names. If left empty, a random name is picked from the user.ini file (not recommended.)

## **Opposing bots info**

This section lists the information required to spawn and initiate the player's opponents. These bots are spawned and setup at the beginning of the round.

### ***BotsDifficulty[0]=0***

Specifies the enemy bots' skills. A difficulty of less 4 is considered 'novice'. Note that all enemy bots (with the exception of the VIP) use this difficulty level.

### ***OpposingBots[0]=2***

Defines how many bots will be spawned at the opposing team's playerstarts.

### ***OpposingBotsMoney[0]=0***

Defines how much cash the bots will get.

### ***OpposingBotsNames[0]=Enemy dude #1,Enemy dude #2***

Comma-separated list of the bots' names. If left empty, a random name is picked from the user.ini file (not recommended.)

### ***OpponentSkins[0]=1***

Specify which skin & model the bots wear. See *appendix C* for more information.

### ***OpposingBotsGivenWeapons[0]=gbumb-basmm-rshfc-pamgs-marM-HBL (gbumb-basmm-rshfc-pamgs-marm-hbl)***

This encoded string specifies which weapons the bots get at the beginning of each round. If left empty, the bot will use its money to buy its weapons. See *appendix B* for more information.

### ***OpposingBotsHealth[0]=100***

Defines how much health the bots get.



***SpawnAdditionalEnemyBotAt[0]=s\_SWATPathNode14,Pathnode7***

Comma-separated list of additional bots spawn points. The specified names must be of valid navigation points within the level. Actors such as playerstarts, pathnodes, s\_swatpathnodes can be used. The number of specified navigation points indicates how many additional bots will be spawned.

***SpawnAdditionalEnemyBotName[0]=Special bot #1,Special bot #2***

Comma-separated list of the additional bots' names. If left empty, a random name is picked from the user.ini file (not recommended.)

***AdditionalEnemyBotAttitude[0]=6***

Specifies which attitude the additional bots will have. See *appendix D* for more information.

## VIP info

This section defines whether or not the map will have a VIP. Killing the VIP the sole objective of the map, it can be used to trigger other events, or simply to add a 'super-bot' to the game.

### ***VIPSpawnSpot[0]=PathNode20***

Specifies where the VIP will be spawned. Must be a valid NavigationPoint actor.

### ***VIPName[0]=The President***

Given name of the VIP. This shows up in the scoreboard.

### ***VIPSkin[0]=3***

Specifies which skin & model the VIP will wear. See *appendix C* for more information.

### ***VIPHealth[0]=60***

Specifies how much health the VIP will get.

### ***VIPGivenWeapons[0]=gbumb-basmm-rshfc-pamgs-marm-HBL (gbumb-basmm-rshfc-pamgs-marm-hbl)***

This encoded string specifies which weapons the VIP get at the beginning of each round. If left empty, the VIP will use its money to buy its weapons. See *appendix B* for more information.

### ***VIPDifficulty[0]=5***

Specifies the skills of the VIP. A number below 4 is considered to be novice.

### ***VIPAttitude[0]=1***

Specifies which attitude the VIP bots will have. See *appendix D* for more information.

## Special enemy bots info

This section defines information required for the special bots. Special bots can be spawned when a specific event occurs, such as the death of the VIP.

### ***bSpawnSpecialEnemy[0]=3***

Specifies when, if ever, the special bots will be spawned. See appendix A for more information.

### ***SpawnSpecialEnemyBotAt[0]=PathNode55,PlayerStart25***

Comma-separated list of special bots spawn points. The specified names must be of valid navigation points within the level. Actors such as playerstarts, pathnodes, s\_swatpathnodes can be used. The number of specified navigation points indicates how many special bots will be spawned.

### ***SpawnSpecialEnemyBotName[0]=Swat dude #1,Swat dude #2***

Comma-separated list of the special bots' names. If left empty, a random name is picked from the user.ini file (not recommended.)

### ***SpawnSpecialEnemyBotGivenWeapons[0]=Gbumb-basmm-rsHfC-pamgS-marm-hbl (gbumb-basmm-rshfc-pamgs-marm-hbl)***

This encoded string specifies which weapons the bots get when they spawn. For special bots, this is required, as bots cannot buy anything once the round has begun. See *appendix B* for more information.

### ***SpawnSpecialEnemyBotAttitude[0]=0***

Specifies which attitude the special bots will have. See *appendix D* for more information.

### ***SpawnSpecialEnemyBotHealth[0]=200***

Defines how much health the special bots will get.

### ***SpawnSpecialEnemyBotSkin[0]=5***

Specify which skin & model the special bots wear. See *appendix C* for more information.

## **End game triggers info**

The end game triggers are used to end the mission when special missions are created. Such missions included assassinating the VIP or exploding the C4 and escaping. Once the end game triggers are spawned, the remaining bots will automatically cover the player. Once the player walks over one of the triggers, the round is won. Note that if the player is already in the trigger's radius when it spawns, the round will NOT end until the player reenters the trigger's radius.

### ***bSpawnEndGameTriggers[0]=1***

Specifies when, if ever, the end game triggers will be spawned. See *appendix A* for more information.

### ***SpawnEndGameTriggersAt[0]=Light53,Light64***

Comma-separated list of triggers' spawn points. The specified names can be of any actor. The number of specified actors indicates how many end game triggers will be spawned.

### ***SpawnEndGameTriggersHeight[0]=2000,1000***

Comma-separated list of triggers' collision heights.

### ***SpawnEndGameTriggersRadius[0]=3400,4500***

Comma-separated list of trigger's collision radiuses.

This example would spawn 2 end game triggers, one at the location of Light53 while using a radius of 3400 and a height of 2000, and one at the location of Light64 with a radius of 4500 and a height of 1000.

To facilitate the placement of such triggers, simply open the mission's map in unreal and find a suitable actor spawn point. Set the viewports to 'radii view', set `bCollideActors=true` on the spawn point actor, and use the spawn point actor's collision values to setup the trigger.

## Special Triggers info

Special triggers are spawned after a specific event has occurred, such as the death of the VIP. They are used to perform one of many functions, such as spawning special bots or spawning the end game triggers.

### ***bSpawnSpecialTriggers[0]=4***

Specifies when, if ever, the special triggers are spawned. See *appendix A* for more information.

### ***SpawnSpecialTriggersAt[0]=s\_ZoneControlPoint0,Light3***

Comma-separated list of triggers' spawn points. The specified names can be of any actor. The number of specified actors indicates how many special triggers will be spawned.

### ***SpawnSpecialTriggersHeight[0]=60,30***

Comma-separated list of triggers' collision heights.

### ***SpawnSpecialTriggersRadius[0]=300,100***

Comma-separated list of trigger's collision radiuses.

### ***SpawnSpecialTriggersUtility[0]=1***

Specifies what the utility of the special triggers is. See *appendix A* for more information.

## Hard coded behaviors info

If additional code is required once the single player code has been finalized, a new package can be used. The class must extend `TO_SP_HardCodedBehaviors`.

### ***HardCodedBehaviorsClass[0]=mypackage.myclass***

Specifies which package and class should be used. Leave blank or set to 'None' to use the normal single player code.

The following functions can be used in the `TO_SP_HardCodedBehaviors` class:

### ***function PreBeginPlay()***

Called when the game has spawned

### ***function PostBeginPlay()***

Called after the game has spawned

### ***function SpecialTriggerCalled(TO\_SinglePlayerTrigger trigger)***

When a special trigger has been triggered, this function is called. The triggered trigger is passed as a parameter.

### ***function PreRestartRound()***

Called when the round is restarted, before the normal TO restarting code is called.

### ***function PostRestartRound()***

Called when the round is restarted, after the normal TO restarting code has been called.

### ***function bool BlockCheckEndRound()***

Called from `CheckEndRound`. Returning true will prevent the rest of the end round check from being run.

## *Sample definition for a single mission*

```
////////////////////////////////////
// MISSION DEFINITION //
////////////////////////////////////
Maps[1]=TO-Blister.unr
MapName[1]=Blister Bomb

// Mission text
ScenarioName[1]=Mission: Blister
ScenarioDescription1[1]=Terrorists in the middle-east, etc etc etc
ScenarioDescription2[1]=
ScenarioText1[1]=Blow up them ammo crates and make it back
ScenarioText2[1]=to the tank.
ScenarioText3[1]=
ScenarioText4[1]=
AllEnemiesDeadMSG[1]=The resistance has been obliterated. Now bomb
    them bitches!
VIPDeadMSG[1]=YAAAAAY!! >D
SpecialTriggersMSG[1]=
C4ExplodedMSG[1]=The c4 has exploded! Return to the tank.
CongradMSG[1]=That should teach them, er, ammo-having bastards.

// Mission parameters
RoundDuration[1]=4
Exterminate[1]=0
NeededTeamBotsSurvivors[1]=0

// Player info
PlayerTeam[1]=0
PlayerMoney[1]=6000
AllowedPlayerWeapons[1]=gBumb-basmm-rSHFC-pangS-marm    (gbumb-basmm-
    rshfc-pangS-marm)
SelfSkin[1]=12

// Team bots info
TeamBots[1]=1
TeamBotsMoney[1]=0
TeamSkins[1]=2
TeamBotsGivenWeapons[1]=gBumb-basMm-rsHFC-pangS-marm-HBL    (gbumb-
    basmm-rshfc-pangS-marm-hbl)
TeamBotsHealth[1]=200
TeamBotsNames[1]=James Bond

// Opposing bots info
BotsDifficulty[1]=7
OpposingBots[1]=3
OpposingBotsMoney[1]=10000
OpposingBotsNames[1]=Dr. No,Jaws,Goldmember
OpponentSkins[1]=5
OpposingBotsGivenWeapons[1]=    (gbumb-basmm-rshfc-pangS-marm-hbl)
OpposingBotsHealth[1]=100
```

```
SpawnAdditionnalEnemyBotAt [1]
    =PathNode40,PathNode214,PathNode238,PathNode249,PathNode24
SpawnAdditionnalEnemyBotName [1]=Dr. Henchman,Bad guy,Mister
    Evil,Scott,The Kitten
AdditionnalEnemyBotAttitude [1]=1

// VIP info
VIPSpawnSpot [1]=PathNode230
VIPName [1]=George W. Bush
VIPSkin [1]=0
VIPHealth [1]=200
VIPGivenWeapons [1]=gbumb-basmm-rsHFC-pamgS-marM-HBL    (gbumb-basmm-
    rshfc-pamgs-marm-hbl)
VIPDifficulty [1]=10
VIPAttitude [1]=0

// Special enemy bots info
bSpawnSpecialEnemy [1]=0
SpawnSpecialEnemyBotAt [1]=
SpawnSpecialEnemyBotName [1]=
SpawnSpecialEnemyBotGivenWeapons [1]=    (gbumb-basmm-rshfc-pamgs-marm-
    hbl)
SpawnSpecialEnemyBotAttitude [1]=
SpawnSpecialEnemyBotHealth [1]=
SpawnSpecialEnemyBotSkin [1]=

// End game triggers info
bSpawnEndGameTriggers [1]=5
SpawnEndGameTriggersAt [1]=BlockAll87
SpawnEndGameTriggersHeight [1]=128
SpawnEndGameTriggersRadius [1]=400

// Special triggers info
bSpawnSpecialTriggers [1]=0
SpawnSpecialTriggersAt [1]=
SpawnSpecialTriggersHeight [1]=
SpawnSpecialTriggersRadius [1]=
SpawnSpecialTriggersUtility [1]=

// Hard coded behaviors info
HardCodedBehaviorsClass [1]=None
```



## Appendix A

This appendix describes the different events that can be caught, and what they can be used for.

### Event types

These event types are used by to determine when the special bots are spawned, when the end game triggers are spawned, or when the special triggers are spawned.

Used by the *bSpawnSpecialEnemy*, *bSpawnEndGameTriggers* and *bSpawnSpecialTriggers*.

| ID | Event name            | Notes   |
|----|-----------------------|---|
| 0  | Never                 | No event will be recorded. For example, if used with <i>bSpawnSpecialEnemy</i> , this will indicate that no special bots should ever be spawned.                      |
| -1 | Never / VIP           | Only used for <i>bSpawnEndGameTriggers</i> . Does the same function as ID 0, but allows the player to kill the VIP without ending the round.                          |
| 1  | All opponents dead    | Called when all opponents in the level are killed. Note that if special bots have not been spawned yet, they do NOT need to be killed in order to trigger this event. |
| 2  | VIP dead              | Called when the VIP has been killed.  |
| 3  | Special trigger       | Called when a special trigger has been touched by the player. Not used for <i>bSpawnSpecialTriggers</i>   |
| 4  | At beginning of round | Called when the round has begun. Not used for <i>bSpawnSpecialEnemy</i> (use the Additional Bot properties for this)  |
| 5  | C4 exploded           | Called when the c4 has exploded.  |
| 6  | C4 planted            | Called when the c4 has been planted.  |
| 7  | Special               | Used by <i>bSpawnEndGameTrigger</i> in HostageRescuePlus scenarios – prevents win with hostages   |

As an example, setting *bSpawnSpecialEnemy* = 2 allows 'backup' to arrive to help the VIP (albeit a bit too late). Setting *bSpawnSpecialTriggers* = 4 allows to make traps for the player.

## Special Triggers Utility

This is used by the Special Triggers. This property defines what the special triggers will be used for. Used for *SpawnSpecialTriggersUtility*.

| ID | Utility name            | Notes   |
|----|-------------------------|---|
| 0  | Not used                | Not used. Technically this would win the round for the player. Use <i>SpawnEndGameTriggers</i> instead.         |
| 1  | Spawn special bots      | When the player touches one of the special triggers, the special bots will be spawned.                          |
| 2  | Spawn end game triggers | When the player touches one of the special triggers, the end game triggers will be spawned.                     |
| 3  | Invoke coded hook       | Only used in special cases. Allows external code to be run when the player touches one of the special triggers. |
| 4  | Bots follow player      | When the player touches one of the special triggers, all bots start following the player                        |

## Notes

Each event can only occur **once**. This means that multiple special triggers set to spawn special bots will only spawn the special bots **once**.

When events 1, 2, 3 and 5 occur, a string of text can be displayed on the player's screen. See the section *Mission text* for more information.

## *Appendix B*

This appendix explains how the encoded strings are used limit or give weapons to the player or the bots. This is used by the *AllowedPlayerWeapons*, *TeamBotsGivenWeapons*, *OpposingBotsGivenWeapons*, *VIPGivenWeapons* and *SpawnSpecialEnemyBotGivenWeapons* properties.

An encoded weapon string is of this form:

```
gbumb-basmm-rShfc-pamgs-marm-HBL (gbumb-basmm-rshfc-pamgs-marm-hbl)
```

When used for a bot, this string defines which weapons the bot will get at the beginning of each round. A lowercase letter (e.g. 'a') means that the bot will not get that weapon. An uppercase letter (e.g. 'A') means that the bot automatically gets that weapon at the beginning of each round. If the string is empty, or if it begins with a space, then the encoded string is not used and the bot buys its weapons with the provided money. When an encoded string is used, the bot does not receive its team default weapon unless it's specified in the string (e.g. the bot will not receive a glock or a beretta when the round begins.)

Special bots cannot buy their weapons, as they are spawned after the round has begun. The encoded weapon string **must** therefore be specified, else the bot will simply get a pistol and a knife when it is spawned.

The encoded string used for the player is a bit different. It does not automatically give the weapons to the player: rather, it limits the weapons the player can buy by hiding them from the buy menu. The hidden weapons cannot be bought with binds either. A lowercase letter means that the weapon is hidden from the player. An uppercase letter means that the player will be available to the player, even if this weapon is not normally available to that team. A star ('\*') means that the weapon should only be shown if it matches the player's team (e.g. only terrorists can buy the m60). Note that if the player does not have enough money to afford the specified gun, it will automatically be hidden from the buy menu. Also, do not make all rifles available to the player, as the selection box in the buy menu is not long enough to contain them all.

Note that the dashes ('-') are skipped over by the program and are only meant for easier location of weapon positions within the string. Also, any text left after the string is finished will be ignored. (The string in parenthesis is simply left there for reference)

| <b>I</b> | <b>Name</b>   | <b>Class (s_swat.*)</b> | <b>Team</b> | <b>Notes</b>     | <b>Price</b> |
|----------|---------------|-------------------------|-------------|------------------|--------------|
| <b>D</b> |               |                         |             |                  |              |
| <b>g</b> | GL 23         | s_glock                 | Terr        | Default for terr | 300 \$       |
| <b>b</b> | Black Hawk    | s_DEagle                | Both        |                  | 500 \$       |
| <b>u</b> | Uzi           | s_MAC10                 | Terr        |                  | 950 \$       |
| <b>m</b> | MP5 Navy      | s_MP5N                  | Terr        |                  | 1500 \$      |
| <b>b</b> | Berg 509      | s_Mossberg              | Terr        |                  | 1200 \$      |
| <b>b</b> | BW SPS 12     | s_M3                    | SF          |                  | 1400 \$      |
| <b>a</b> | AK 47         | s_Ak47                  | Terr        |                  | 3200 \$      |
| <b>s</b> | SW Commando   | TO_SteyrAug             | Terr        |                  | 4600 \$      |
| <b>m</b> | M4A1          | TO_M4A1                 | SF          |                  | 3300 \$      |
| <b>m</b> | M16           | TO_M16                  | Both        |                  | 3850 \$      |
| <b>r</b> | RK 3 Rifle    | TO_HK33                 | SF          |                  | 4400 \$      |
| <b>s</b> | SR 90         | s_PSG1                  | Both        |                  | 4300 \$      |
| <b>h</b> | HE Grenade    | TO_Grenade              | Both        |                  | 500 \$       |
| <b>f</b> | Flashbang     | s_GrenadeFB             | Both        |                  | 400 \$       |
| <b>c</b> | Conc. Grenade | s_GrenadeConc           | Both        |                  | 300 \$       |
| <b>p</b> | Parker Hale   | s_p85                   | SF          |                  | 8600 \$      |
| <b>a</b> | AS 12         | TO_Saiga                | Terr        |                  | 2100 \$      |
| <b>m</b> | MP5SD         | TO_MP5KPDW              | SF          |                  | 1500 \$      |
| <b>g</b> | 9F2 Glorietta | TO_Beretta              | SF          | Default for SF   | 300 \$       |
| <b>s</b> | Smoke Grenade | TO_GrenadeSmoke         | Both        |                  | 450 \$       |
| <b>m</b> | M4A1m203      | TO_M4m203               | SF          |                  | 10000 \$     |
| <b>a</b> | AP II         | TO_HKSMG2               | SF          |                  | 900 \$       |
| <b>r</b> | Raging Cobra  | TO_RagingBull           | SF          |                  | 700 \$       |
| <b>m</b> | M60           | TO_m60                  | Terr        |                  | 9600 \$      |
| <b>h</b> | Helmet        |                         | Both        | Only for bots    | 250 \$       |
| <b>b</b> | Body Armor    |                         | Both        | Only for bots    | 350 \$       |
| <b>l</b> | Leg Pads      |                         | Both        | Only for bots    | 300 \$       |

The last 3 letters of the encoded string is used to give armor to the bots. These cannot be used for the player, who will always be able to buy armor (if he has sufficient cash.)

## Appendix C

Each bot as well as the player is given a specific model and skin. To do this, simply give one of these numbers to the Skin property. This is used by *SelfSkin*, *TeamSkins*, *OpponentSkins*, *VIPSkin* and *SpawnSpecialEnemyBotSkin* properties.

Note that those models and skins are based on the 3.1.5 code. More models/skins are being added, and the current ones might change.

| ID | Name             | Model                                 | Team        | Gender      |
|----|------------------|---------------------------------------|-------------|-------------|
| 0  | Hostage          | SkeletalMesh'TOPModels.Hostage'       | Hostage     | Male        |
| 1  | SWAT light       | SkeletalMesh'TOPModels.Terror2'       | SF          | Male        |
| 2  | Urban Camp       | SkeletalMesh'TOPModels.Terror2'       | Terrorists  | Male        |
| 3  | Urban Cargo      | SkeletalMesh'TOPModels.Terror2'       | Terrorists  | Male        |
| 4  | WoodLand         | SkeletalMesh'TOPModels.Terror2'       | Terrorists  | Male        |
| 5  | Navy Seal        | SkeletalMesh'TOPModels.Seal'          | SF          | Male        |
| 6  | Polizei          | SkeletalMesh'TOPModels.Seal'          | SF          | Male        |
| 7  | Police female    | SkeletalMesh'TOPModels.Jill'          | SF          | Female      |
| 8  | SWAT female      | SkeletalMesh'TOPModels.Jill'          | SF          | Female      |
| 9  | <i>None</i>      | <i>None</i>                           | <i>None</i> | <i>None</i> |
| 10 | Police heavy     | SkeletalMesh'TOPModels.PoliceGoggles' | SF          | Male        |
| 11 | Urban Gang       | SkeletalMesh'TOPModels.Terror2'       | Terrorists  | Male        |
| 12 | Forza Armada     | SkeletalMesh'TOPModels.Jill'          | Terrorists  | Female      |
| 13 | Hostage 2        | SkeletalMesh'TOPModels.Hostage'       | Hostage     | Male        |
| 14 | <i>None</i>      | <i>None</i>                           | <i>None</i> | <i>None</i> |
| 15 | Arctic           | SkeletalMesh'TOPModels.Terror2'       | Terrorists  | Male        |
| 16 | Arctic female    | SkeletalMesh'TOPModels.Jill'          | Terrorists  | Female      |
| 17 | Red masks leader | SkeletalMesh'TOPModels.TerrorBelt'    | Terrorists  | Male        |
| 18 | SWAT heavy       | SkeletalMesh'TOPModels.SWATGoggles'   | SF          | Male        |



## Appendix D

This section lists the different attitude that bot can be given. This is used by the *AdditionnalEnemyBotAttitude*, *VIPAttitude* and *SpawnSpecialEnemyBotAttitude* properties.

| ID | Attitude      | Notes   |
|----|---------------|---|
| 0  | Normal        | Bot will use the level's objectives to determine what to do.                              |
| 1  | Hold          | The bot will hold position at his spawn spot.   |
| 2  | Freelance     | Allows the bot to do whatever he pleases...Not recommended, use an attitude of 0 instead. |
| 3  | Roaming       | Bot will roam freely in the level. Not recommended, use an attitude of 0 instead.         |
| 4  | Follow VIP    | The bot will follow the VIP wherever he goes.   |
| 5  | Defend        | The bot will defend at his spawn point. <b>BROKEN</b> , does not work with tactical ops.  |
| 6  | Attack player | The bot will seek and attack the player. Does not seem to work.                           |
| 7  | None          | Experimental – Do not use   |
| 8  | None          | Experimental – Do not use   |
| 9  | Follow player | Bots will keep following the player.  |

Note that setting an attitude other than 0 to a bot will prevent him from receiving any objectives.