Single player maps without 'test\_' :: [Jv\_map](http://www.mohaaaa.co.uk/phpBB2/profile.php?mode=viewprofile&u=146)   
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Most mappers will have noticed that when creating a single player map, they have to prefix 'test' to their map name to get the sounds and AI to work. There are however disadvantages of prefixing 'test'. If you do this, the game will load all sounds and all animation files when loading your map. This results in a long loading time and memory abuse during the game. A better way is described in this tutorial, but it's also more work. To get the sounds fixed please refer to one of my previous tutorials, [Ubersound Work-Around](http://www.mohaaaa.co.uk/mohaa/tutorials/ubersound.php). The tutorial you're currently reading is about how to get the AI to work.

-------------------------------------------------------------------------------  
Animation Files  
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In most single player maps the AI won't work because it cannot find the necessary animation files. MoHAA uses so-called aliases to refer to animation files. Animation aliases are defined in the TIKI files of all enemies. Every enemy has a specific TIKI file in the models/human folder of pak0.pk3. This TIKI file contains information about the 3D model of the enemy, the skin applied, the equipment he carries and the animation aliases that can be applied on this enemy. At the end of every German TIKI file, you'll find the line:

$include models/human/animation/dialogue/  
generic\_dialogue\_german.tik

This line loads all dialogue animations that German soldiers use when attacking. These are not animations like shooting, but mostly head and lip animations when saying things. At the end of American TIKIs, you'll find:

$include models/human/animation/dialogue/generic\_  
dialogue\_US.tik

This loads American conversations. At the end of every AI TIKI you'll find:

$include models/human/new\_generic\_human.tik

This is the line that loads running, shooting and all other animations and that's causing the problems. See the small section of the new\_generic\_human file below:

|  |
| --- |
| includes test utils {  // NPC weapon animations $include models/human/animation/human\_grenade.tik (...) $include models/human/animation/human\_unarmed.tik  // Level-specific scripted animations $include models/human/animation/scripted/ level\_m1l1.tik $include models/human/animation/scripted/ level\_m1l2.tik $include models/human/animation/scripted/ level\_m2l1.tik $include models/human/animation/scripted/ level\_m3l1.tik $include models/human/animation/scripted/ level\_m4l3.tik $include models/human/animation/scripted/ level\_m5l3.tik  // More scripted animations $include models/human/animation/scripted/dead\_poses.tik (...) $include models/human/animation/scripted/welding.tik  }  //------------------------------------- // Mission 1 //------------------------------------- // Intro, fight through town, ambush (Mackey) includes m1l1 {  $include models/human/animation/human\_grenade.tik $include models/human/animation/human\_pistol.tik $include models/human/animation/human\_thompson.tik $include models/human/animation/human\_rifle.tik $include models/human/animation/human\_mp40.tik $include models/human/animation/human\_bazooka.tik $include models/human/animation/human\_mg42.tik $include models/human/animation/human\_unarmed.tik  // Level-specific scripted animations $include models/human/animation/scripted/ level\_m1l1.tik  // More scripted animations $include models/human/animation/scripted/balcony.tik $include models/human/animation/scripted/ opeltruck.tik  } |

The 'includes' means: "does the file name of the map include this set of characters?". Thus, if your map name includes 'test', the TIKIs between the { and the } will be loaded. These TIKIs contain the animation aliases. The developers of MoHAA have made a separate section for every level which loads the necessary TIKIs. This prevents that too many animations are loaded for a mission. So if you want to load exactly the right number of animations for your level, you'll have to work around this file.

-------------------------------------------------------------------------------  
Working around the new\_generic\_human.tik  
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The only way to work around this file is to alter the TIKIs for AI soldiers. As these are original MoHAA files, that's not a good idea. So just create your own enemies. Find an enemy in MOHRadiant that you like and look for the corresponding TIKI in pak0.pk3, for example 'models/human/german\_panzer\_  
grenadier.tik' for the ai->german->panzer->grenadier enemy. Extract the TIKI file and open it with a text editor. Copy everything and paste it into an empty text file. Now change the line

$include models/human/new\_generic\_human.tik (line 147)

into

$include models/human/mymapname\_generic\_human.tik

and replace these lines

/\*QUAKED ai\_german\_panzer\_grenadier (1.0 0.5 0.0) (-16 -16 0) (16 16 92)  
\*/

with these

/\*QUAKED ai\_mymapname\_german\_panzer\_grenadier (1.0 0.5 0.0) (-16 -16 0) (16 16 92)  
\*/

This will make your new enemy appear in MOHRadiant in the popup menu under 'ai-> mymapname -> german -> panzer -> grenadier'. Save the file as 'mymapname\_enemyname.tik' in the models/human directory, for example 'models/human/  
mywonderfulmap\_german\_panzer\_grenadier'. Now extract the new\_generic\_human.tik file from pak0.pk3 and remove everything between

$include models/human/animation/scripted/balcony.tik (line 16)

and

animations // Now list all... (line 654)

Then add in that location the animations you need. Choose from the following TIKIs:

|  |
| --- |
| // NPC weapon animations $include models/human/animation/human\_grenade.tik $include models/human/animation/human\_bar.tik $include models/human/animation/human\_thompson.tik $include models/human/animation/human\_pistol.tik $include models/human/animation/human\_mp44.tik $include models/human/animation/human\_rifle.tik $include models/human/animation/human\_mp40.tik $include models/human/animation/human\_bazooka.tik $include models/human/animation/human\_mg42.tik $include models/human/animation/human\_unarmed.tik  // Level-specific scripted animations $include models/human/animation/scripted/level\_m1l1.tik $include models/human/animation/scripted/level\_m1l2.tik $include models/human/animation/scripted/level\_m2l1.tik $include models/human/animation/scripted/level\_m3l1.tik $include models/human/animation/scripted/level\_m4l3.tik $include models/human/animation/scripted/level\_m5l3.tik  // More scripted animations $include models/human/animation/scripted/dead\_poses.tik $include models/human/animation/scripted/fallen.tik $include models/human/animation/scripted/crate\_carry.tik $include models/human/animation/scripted/hiding\_cabinet.tik $include models/human/animation/scripted/interrogation.tik $include models/human/animation/scripted/jeep.tik $include models/human/animation/scripted/scientist.tik $include models/human/animation/scripted/set\_explosive.tik $include models/human/animation/scripted/table.tik $include models/human/animation/scripted/throw\_helmet.tik $include models/human/animation/scripted/flak88\_animation.tik $include models/human/animation/scripted/prisoners.tik $include models/human/animation/scripted/lean.tik $include models/human/animation/scripted/pilot\_capture.tik $include models/human/animation/scripted/wallclimb.tik $include models/human/animation/scripted/sleep.tik $include models/human/animation/scripted/opeltruck.tik $include models/human/animation/scripted/vent.tik $include models/human/animation/scripted/alarm.tik $include models/human/animation/scripted/tank.tik $include models/human/animation/scripted/workers.tik $include models/human/animation/scripted/welding.tik |

If you're constructing a basic map, you'll only need the NPC weapon animations for the weapons the AI can use in the map. You only need the scripted animations if you use them in your script. When you've added all necessary TIKIs, save the file as 'models/human/mymapname\_generic\_human.tik'. Now just add your new enemy to your map (in the 'ai->mymapname' menu) and compile it. If you don't want to have the AI talking by script commands, you're ready now. Otherwise, keep on reading.

-------------------------------------------------------------------------------  
Dialogue Animations  
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When you've done everything above, it's time to fix the dialogue animations. All humans in MoHAA need an animation alias for everything they say. So if you're working on an US soldier, extract the file models/human/animation/dialogue/generic\_dialogue\_US.tik, if you're adding a German AI extract the file generic\_dialogue\_german.tik from the same directory of pak0.pk3. Open the file and remove everything above the line:

// REAL GENERIC US FILES (line 64, for US dialogue)  
// REAL GENERIC GERMAN FILES (line 29, for German dialogue)

Now you can add the TIKIs you need for your dialogue animations on top of this file. The following TIKIs are available:

|  |
| --- |
| // for US soldiers: $include models/human/animation/dialogue/M1L1\_dialogue\_US.tik $include models/human/animation/dialogue/M1L2\_dialogue\_US.tik $include models/human/animation/dialogue/M1L3\_dialogue\_US.tik $include models/human/animation/dialogue/M2L1\_dialogue\_US.tik $include models/human/animation/dialogue/M3L1\_dialogue\_US.tik $include models/human/animation/dialogue/M3L2\_dialogue\_US.tik $include models/human/animation/dialogue/M3L3\_dialogue\_US.tik $include models/human/animation/dialogue/M4L1\_dialogue\_US.tik $include models/human/animation/dialogue/M4L3\_dialogue\_US.tik $include models/human/animation/dialogue/M5L1\_dialogue\_US.tik $include models/human/animation/dialogue/M5L3\_dialogue\_US.tik $include models/human/animation/dialogue/M6L3\_dialogue\_US.tik  // for German soldiers: $include models/human/animation/dialogue/M1L1\_dialogue\_ german.tik $include models/human/animation/dialogue/M2L2\_dialogue\_ german.tik $include models/human/animation/dialogue/M3L1\_dialogue\_ german.tik $include models/human/animation/dialogue/M6L1\_dialogue\_ german.tik $include models/human/animation/dialogue/M6L3\_dialogue\_ german.tik |

If you open any of these TIKIs you can see exactly what aliases are available and thus what 'say' commands you can use in your script. You can also make your own dialogue TIKI. To do this, just copy aliases from any of the files above and put them in your own TIKI. Aliases look like the following:

|  |
| --- |
| **dfr\_M1L1\_add05** ACTOR\_m1l1\_add05.skc {         client /// Powell, check the door         {         first sound *dfr\_M1L1\_add05*         } } |

The bold text is the alias to use in a say command, for example:

$sergeant say dfr\_M1L1\_add05

The text in italics is the name of the sound alias used. It doesn't necessarily have the same name as the animation alias. When you've copied the aliases you need to your custom dialogue TIKI, save it using a filename that contains your map name, for example 'models/human/animation/dialogue/mywonderfulmap\_dialogue\_  
US.tik'. Also add an include line in the generic\_dialogue file. Anyway, when you're done, save the generic\_dialogue\_US file as 'models/human/animation/dialogue/mymapname\_generic\_  
dialogue\_US.tik' and the German dialogue file as 'mymapname\_  
generic\_dialogue\_german.tik' in the same folder. Now the last thing you have to do, is to include your new dialogue file in your AI TIKI. So replace this line

$include models/human/animation/dialogue/  
generic\_dialogue\_US.tik

with this one

$include models/human/animation/dialogue/  
mymapname\_generic\_dialogue\_US.tik

or this line

$include models/human/animation/dialogue/  
generic\_dialogue\_german.tik

with this

$include models/human/animation/dialogue/  
mymapname\_generic\_dialogue\_german.tik

If you've done all this, you're ready and you can use 'say' commands in your script and add custom sounds.   
Final Notes

I hope this tutorial has increased your understanding about animations in single player levels. If you have any problems, you can either [contact me](mailto:jv_map@quake3stuff.com) or post at the [forums](http://www.mohaaaa.co.uk/mohaa/forum/index.php)

Need any help : Ask in the [Forum](http://www.mohaaaa.co.uk/mohaa/forum/index.php)