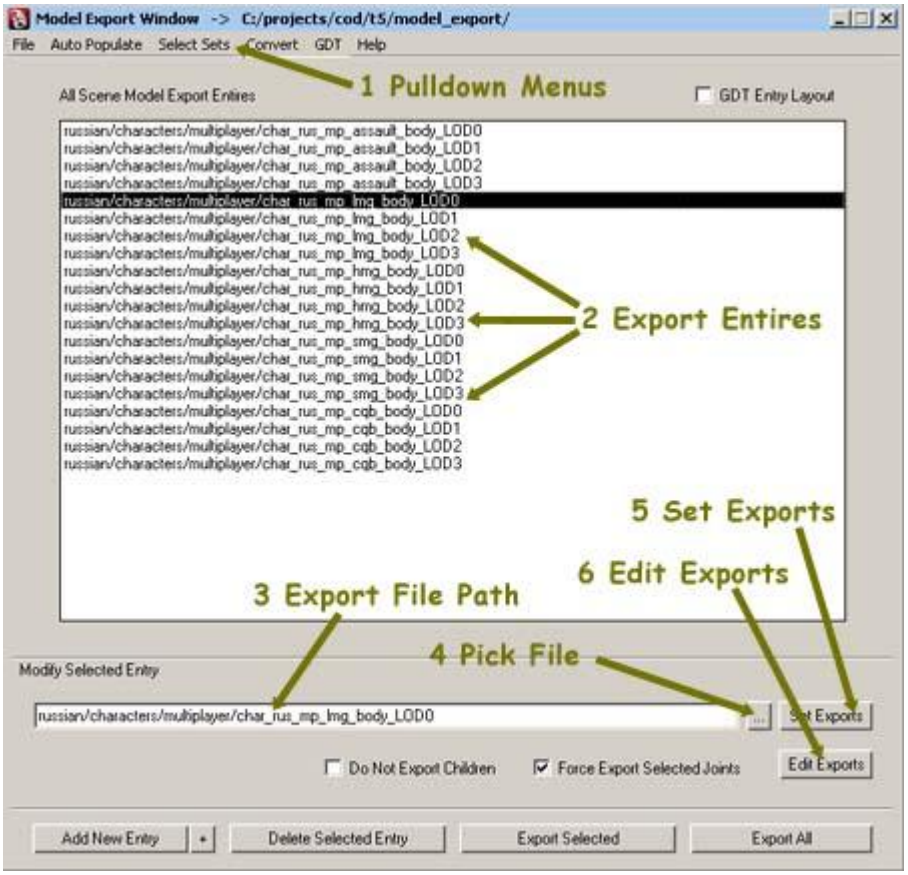
Model Exporter

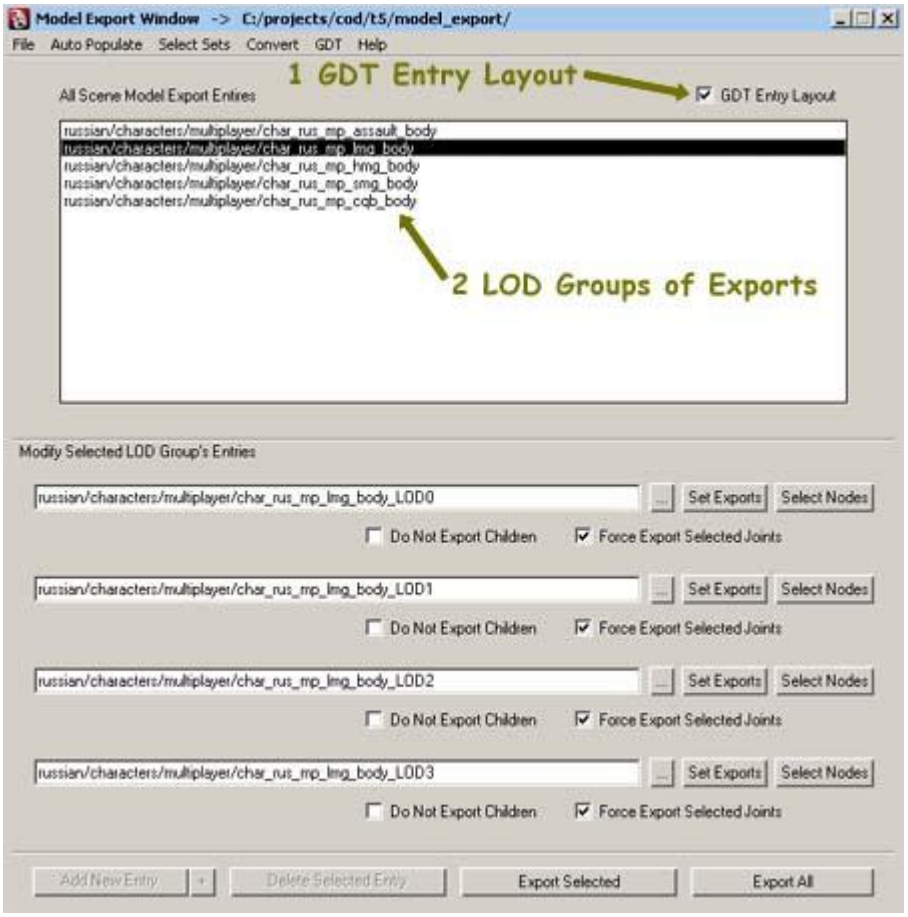
Layout Overview

Single Entry Layout



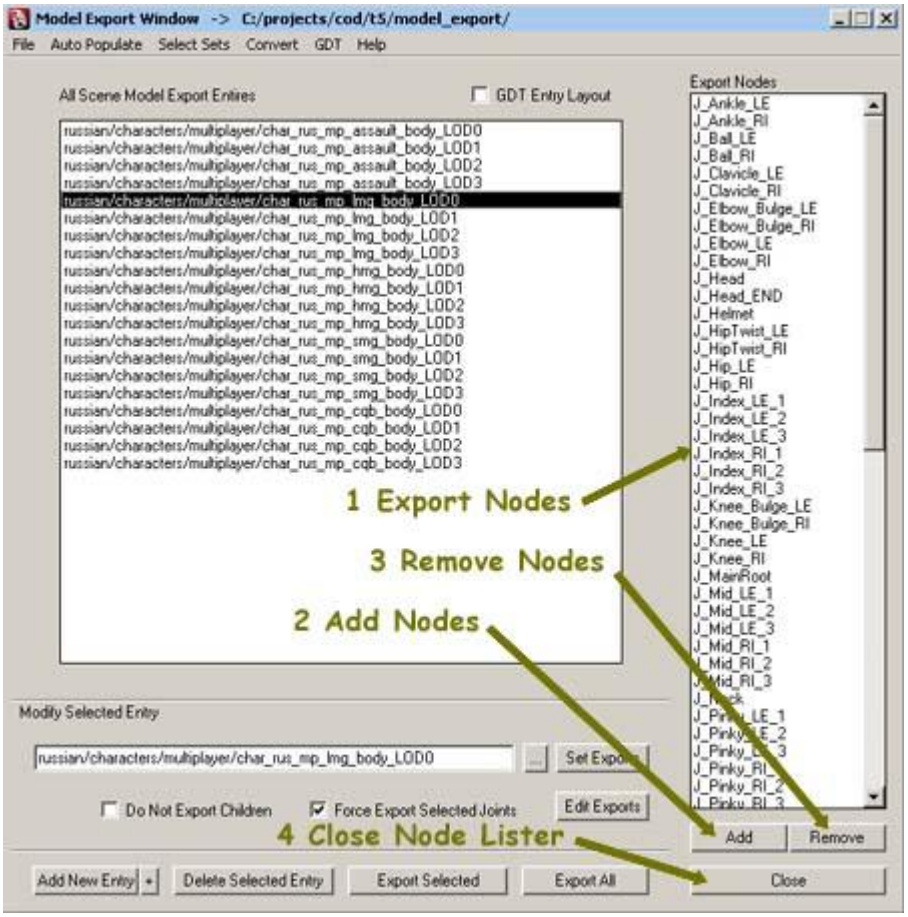
1. Pulldown menus – Some tools are only available in the pulldown menus.
2. Export Entries – Model export entries appear here. Single click an entry to edit the entry's file name and export nodes. Double click an entry to select the export nodes in the Maya scene.
3. Export File Path – The selected entry's file path can be edited here
4. Pick File – Use a file picker to choose the selected entry's file path
5. Set Exports – Set selected objects to be the entry's export nodes
6. Edit Exports – This will open the Node Lister so you can visually add and remove export nodes

GDT Entry Layout



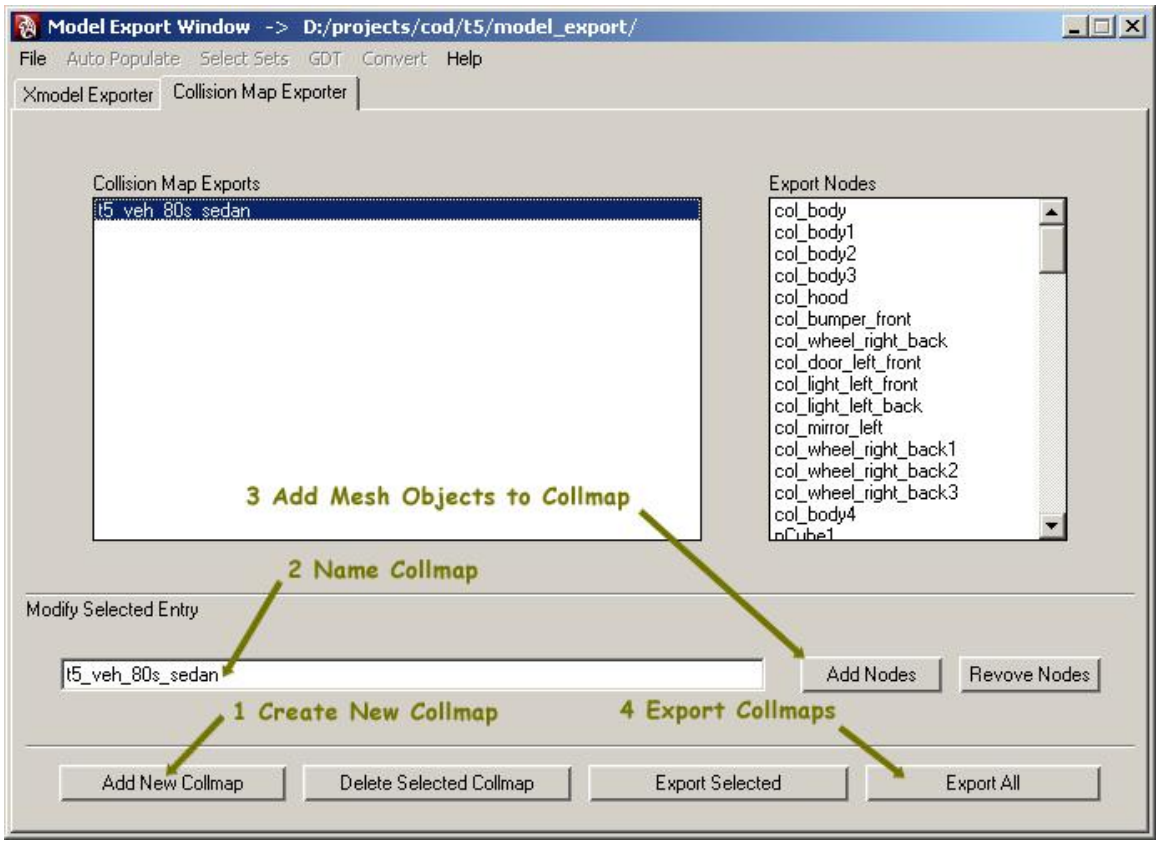
1. GDT Entry Layout – Check this box to use GDT entry layout mode. The UI will automatically group consecutive exports whose name ends in LOD#.
2. LOD Groups of Exports – These are the groupings of exports, there will be one entry for each set of LODs.

Node Lister



1. Export Nodes – The selected entry's export nodes will appear in this list.
2. Add Nodes – Select bones or meshes in the Maya scene and press this button to add the nodes to the selected entry's export nodes
3. Remove Nodes – Select nodes in the list and press this button to remove them from the selected entry's export nodes
4. Close Node Lister – This will close the list box for the export nodes. You will return to the Single Entry Layout.

Collision Map Exporter



1. Add New Collmap – This will add a new entry for a collision map export.
2. Collmap Name – Text field to edit the name of the selected Collision Map entry. You must press Enter to update the entry name.
3. Add Nodes – Add selected polygon mesh objects to the current Collision Map entry.
4. Export All – Export all collision map entries. Files will be added to Perforce.

Pulldown Menus

File - This menu contains options to save and load exports information

- New - Creates a new set of exports, all existing exports will be deleted.
- Open - Opens a saved set of exports. The file type needed is ".EXPORTS.ma".
- Save - Saves all exports in a scene to an external file which can be loaded into another scene. This file will only contain exporter information such as export names and export nodes; and not meshes or bones which are in the actual Maya scene.
- Exit - Closes the Model Export Window.

Auto Populate - Based on the naming convention of scene models the auto populate will automatically create exports for you.

- Create Exports - Performs the auto populate.

Select Sets - Based on predefined lists of bones, options in this menu will select the set of bones if they are found in the current scene. This is used for certain model type which have a list of manditory bones which must exist in order to work properly, such as Characters for Viewarms.

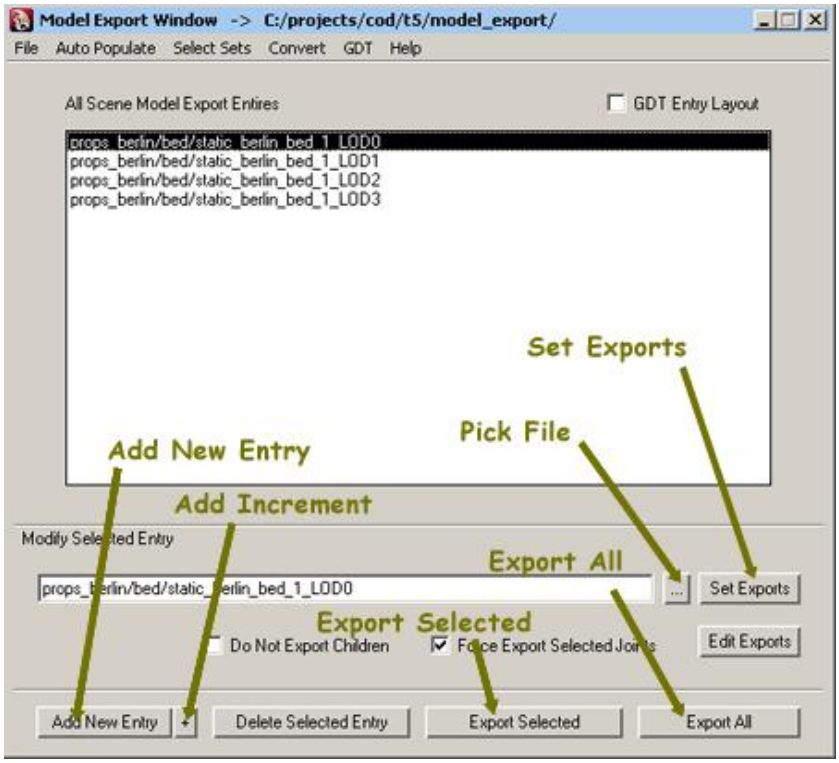
GDT - Tools for finding and creating GDT entries.

- Find Selected Materials - You can either select materials in the Hypershade or select entries in the export list. This option will then search all GDTs for the selected materials and report to you which materials are in which GDT.
- Create Selected Materials - This will create material GDT entries for all selected exports.
- Find Selected Xmodel - Based on the selected entries in GDT Entry Layout mode, this will scan all GDTs and report to you which models are in which GDT.
- Create Selected Xmodel - This will create GDT entries for all selected Xmodels in GDT Entry Layout mode.
- Update Selected Xmodel - This will update a GDT entry for one selected Xmodel in GDT Entry Layout mode.

Convert - Options in this menu will convert either "My Changes" or a single asset based on your selection in the GDT Entry Layout.

How To…

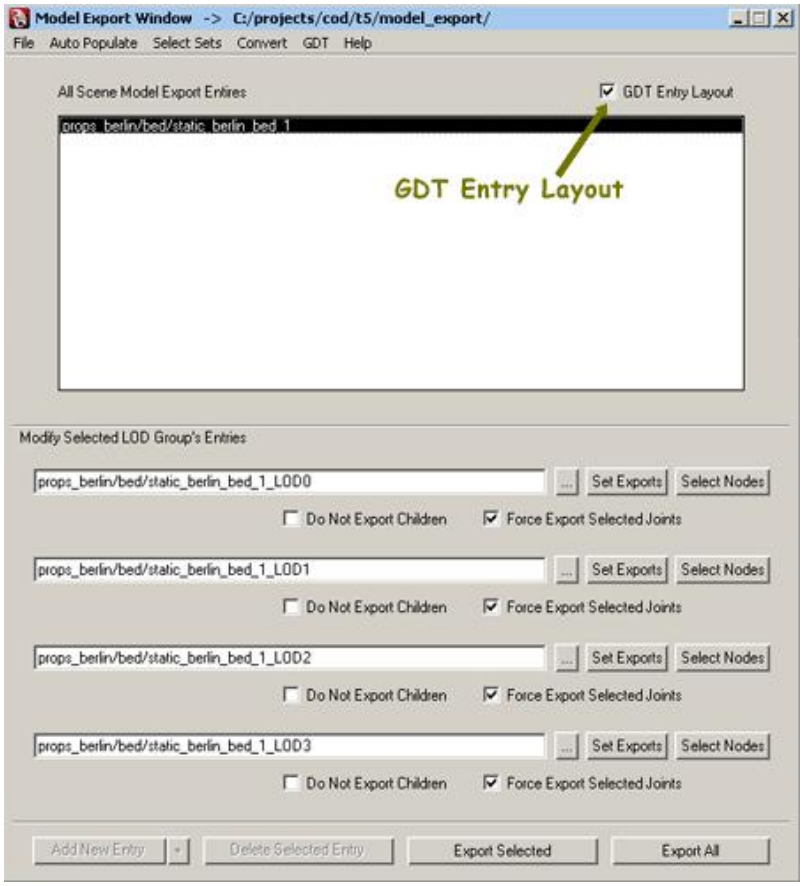
Create Exports



- Press the “Add New Entry” button.
- Press the “Pick File” button and navigate to the location of the XMODEL_EXPORT. You can also paste a file name in the text field and press Enter. Be sure to exclude the path name before the “model_export” folder since the exporter automatically adds this.
- Select the scene objects you wish to export for this entry and press “Set Exports”.
- Assuming your export name ends in “LOD0”, you can now press the “Add Increment” button and the next entry added will be named “LOD1”.
- Select the scene objects you want to export for this entry and press “Set Exports”.
- Repeat until you have created all your exports.
- Press Export All.

To review the export models you can simply double click the entry name in the list of exports and the export nodes will become selected. To preview how LODs will be grouped you can check the “GDT Entry Layout” box and the UI will organize the scene exports according to LOD0-LOD3. At any time you can edit the export nodes or file names by selecting an entry in the list box.

Find Models in GDT



The following tool assumes the naming convention of xmodels entered into the gdt have been named the same as the exports minus the "_LOD#".

- Open a Maya file whose exports have already been added to a GDT.
- Select xmodel entries in the list box.
- From the GDT pulldown menu, choose "Find Selected Xmodel".
- The tool will scan all gdts in the project's "model_export" folder and search for the entry names.
- You will receive a popup telling you where the xmodel is found, if at all.

Find Materials in GDT

The following tool assumes that the materials you are searching for have been created and entered into the gdt.

- Select exports in the Model Export Window then from the GDT pulldown menu choose “Find Selected Material”.
- The tool will scan all gdts in the project’s “model_export” folder and search for the material names.
- You will receive a popup telling you where the materials are found, if at all.

You can also select materials in the Hypershade and use the search.

Create Material GDT Entry

To create material gdt entries a material must properly be setup in Maya. The material type can either be “Phong” or “Blinn”. The following Maya attributes correspond to the following GDT maps.

Phong

GDT	*Maya*
Color Map	Color
Normal Map	Bump Mapping
Specular Color Map	Specular Color
Cosine Power Map	Cosine Power

Blinn

GDT	*Maya*
Color Map	Color
Normal Map	Bump Mapping
Specular Color Map	Specular Color
Cosine Power Map	Eccentricity

Once you have plugged these maps in correctly for each material on an xmodel you are ready to create Material GDT entries.

- Select the Export Entry in the Model Export window.
- From the GDT pulldown menu choose “Create Selected Materials”.
- With the file browser, choose the gdt file you wish to add the materials to.
- In the popup window set the Material Type and Surface Type

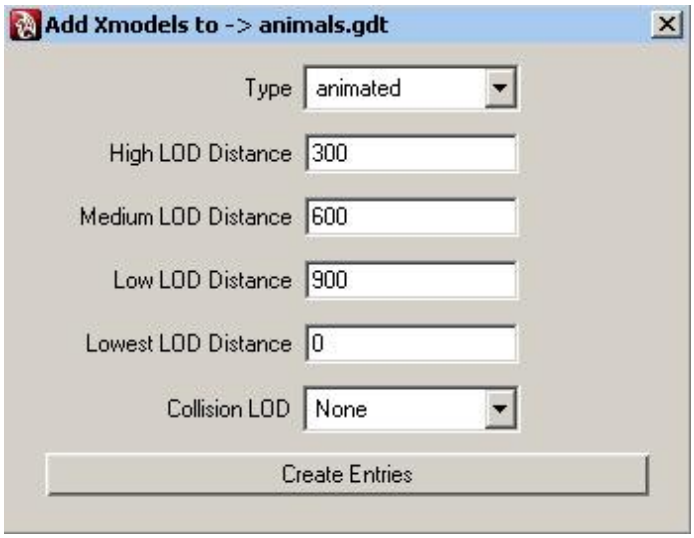
- Press “Create Materials for Selected Entries”.
- You will be prompted to open the gdt in P4 if it isn’t already.
- If the gdt scan finds any of the materials you are creating you will receive a dialog telling you which materials already exist. You have the option of skipping the existing materials or canceling.
- You will receive a dialog telling you which materials were created successfully.

Create Xmodel in GDT

To create xmodel entries automatically the names of your exports must end in "_LOD#". The Model Export window automatically groups exports according to this naming convention. The name of the xmodel entry will be the entire name of the export except the "_LOD#" at the end.

When you are ready to create your xmodels first create the materials. See the previous section Create Material GDT Entry.

- Check the "GDT Entry Layout" checkbox and choose the xmodels you wish to create.
- From the GDT pulldown menu choose "Create Selected Xmodel".
- With the file browser, choose the gdt file you wish to add the xmodels to.
- In the popup window set the xmodel Type, LOD distances, and Collision LOD.

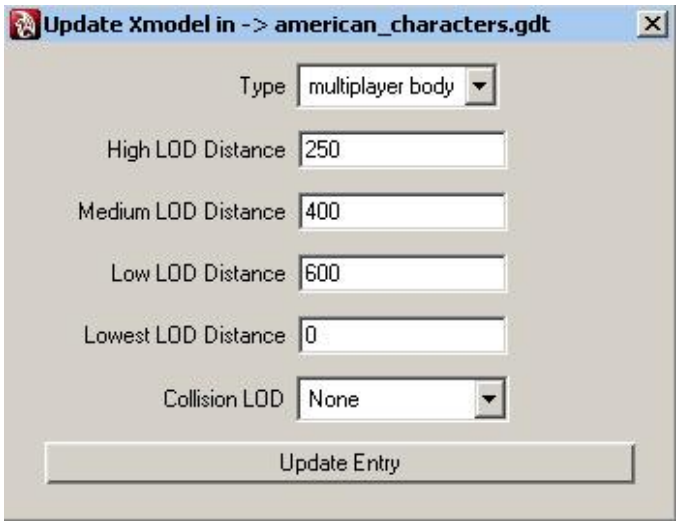


- Press "Create Entries".
- You will be prompted to open the gdt in P4 if it isn't already.
- If the gdt scan finds any of the xmodels you are creating you will receive a dialog telling you which xmodels already exist. You have the option of skipping the existing xmodels or canceling.
- You will receive a dialog telling you which xmodels were created successfully.

Update an Xmodel in GDT

This feature enables you to update the settings in the gdt of an xmodel you have already created. It works the same as when you create the xmodel entry, the only difference is you can only update one xmodel at a time. This is because the settings on could be different for each xmodel and you don't want the new values to overwrite something that may have been changed with the asset manager.

- Check the "GDT Entry Layout" checkbox and choose one xmodel you wish to update.
- From the GDT pulldown menu choose "Update Selected Xmodel".
- Now you will receive a popup window which resembles the one used to create xmodel entries. The window should be filled with the correct settings from the existing entry in the gdt.



- You can change the settings as needed. If you only want to update the gdt with new LODs, then you do not have to change any settings.
- Press "Update Entry".
- You will receive a popup window telling you if the xmodel was updated successfully.

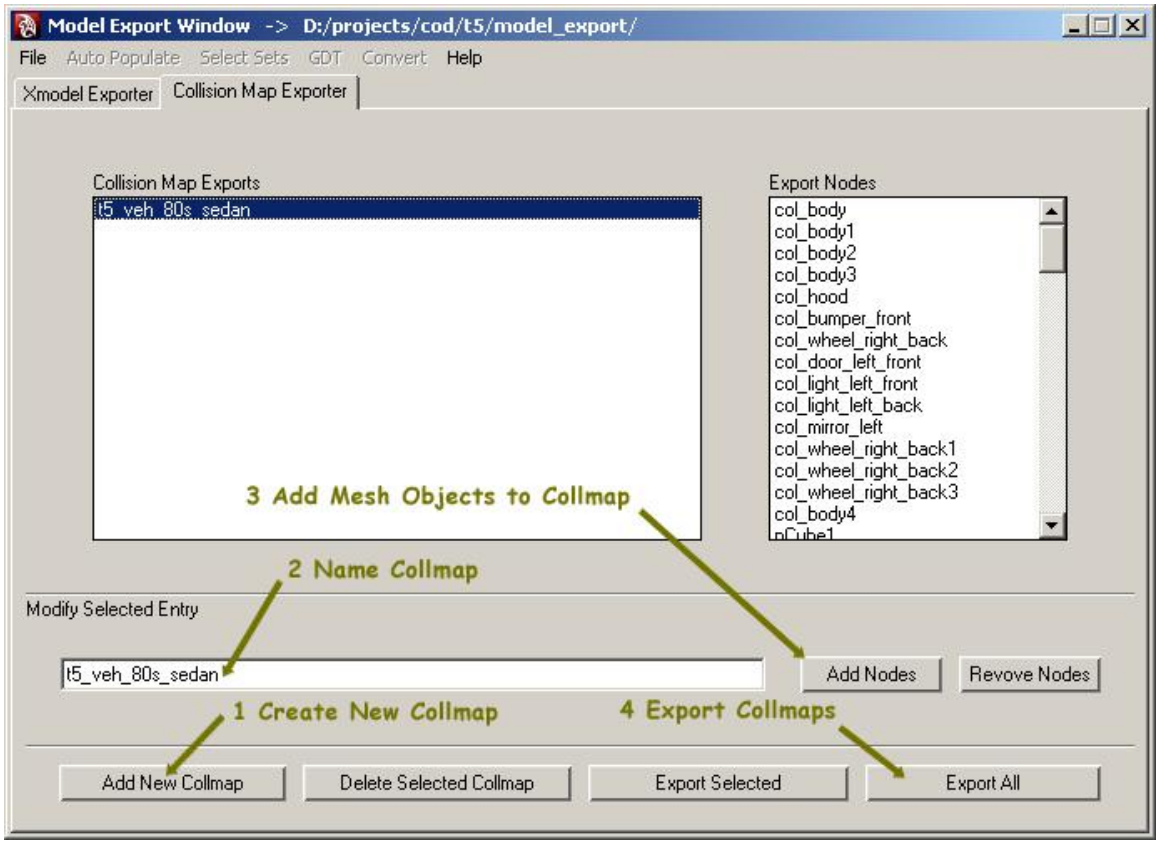
Export a Collision Map

Select the "Collision Map Exporter" tab to access the collmap exporter. A collmap in Maya can be separate mesh objects which all get exported as one collision map. The process to create an export a collision map consists of naming the collision map, assigning mesh objects to it, and then exporting.

Collision maps are automatically exported to this directory so there is no need to define the entire file path:

- `//depot/projects/cod/t5/share/raw/collmaps/`

Next is a step-by-step explanation of how to export a collmap.



From the COD Tools pulldown menu choose "Model Exporter". When the window opens select the Collision Map Exporter tab at the top.

- Press "Add New Collmap" button **(1)**.
- In the text field type the name of the collmap **(2)**. The collmap name must be unique so it should match the xmodel it will be used for.

- Select the mesh objects which make up the collmap and press the "Add Nodes" button **(3)**. The names of the selected meshes will be added to the "Export Nodes" list box on the right. Note you should not have any duplicate mesh names.
- When you are done creating all collision map exports, press "Export All" **(4)**. The .map files will automatically be added to Perforce.

If you need to edit the meshes which make up the collision map, you can select names in the "Export Nodes" list and press "Remove Nodes". To see which meshes currently make up the collmap, select them in the list and the scene mesh objects will become selected in the 3d view.

You can also rename an entry at any time by selecting the export name in the "Collision Map Exports" list, change the name in the text box at the bottom, and press Enter.