File Path Expressions

Support for the Maya Project Directory

Some attributes in *3Delight for Maya* are used to specify a file path name. These path names can be either absolute or relative. When they are relative, they will be considered relative to the current *Maya* project directory.

Support of Tokens

These file path names can contain various tokens; this allows the path to dynamically change to reflect the current value of a given token. The following tokens can be used in any file path:

Token	Description
$VAR	The value of the environment variable ‘VAR’ will replace ‘$VAR’ in the path.
%VAR%	The value of the environment variable ‘VAR’ will replace ‘$VAR’ in the path.
~	The value of the HOME environment variable will replace the tilde character.
@	The current frame number will replace the @ character.
#	The current frame number, padded to form a 4 digits number, will replace the # character.
{<frame><operator><operand>}	Simple expressions to produce a frame number can also be used as a part of the file name. The expression must be enclosed in curly braces. The expression components are: <frame> : Either ‘@’ or ‘#’ as described above. <operator> : An arithmetic operator. Valid operators are: + - * / % <operand> : An integer or floating point number. For instance, the following are valid frame number expressions: {#-10} {@*2.5} {#%5}
`MEL command`	The string enclosed in back quotes is evaluated as a MEL command and gets replaced with the command’s result.
<layer>	This string will be replaced with the currently rendered *Maya* render layer.
<project>	This string will be replaced with the path to the current *Maya* project directory.
<pass>	This string will be replaced with the name of the *Render Rass Node* used for rendering.
<shape_name>	This string will be replaced with the long name of the attached shape. This tag can currently only be used in light attributes nodes.
<scene>	This string will be replaced with the name of the scene.
<ext>	This string will be replaced with the file extension. File extensions are expanded for RIB files, shadow map files and any image file outputs.
<camera>	This string will be replaced with the name of the camera shape being used for rendering.
<fragment_set>	This string will be replaced with the name of the object set used by the RIB fragment being output. It is valid only for the *File name* rendering attribute (in the *RIB Fragment* group).
<aov>	This string will be replaced with the name of the variable being output in the display. It is valid only for the *Image Filename* rendering attribute (in the *Display* group).
<light>	When using the multi-light feature this token will contain the name of the light being rendering.
<output_variable>	This string is deprecated in favor of <aov>.

Expanding the List of Tokens

It is possible to programmatically define custom tokens that will be added to the ones described above. This is done using a provided API function named DL_userGetStringTokens(), it is further described in User Defined MEL Procedures.