

XCPT Messages

This document lists the various warnings and errors you may encounter during rendering. You can text search to find your error. Other errors may be bridge-specific and not related to the RenderMan core.

A00000	%s: No active context.
	You have made an Ri call without first activating a context with ``RiBegin()`` or ``RiContext()``
A00001	%s: unsupported by RifFilter.
	You have made an Ri call not supported by RifFilter. It will be passed to the target renderer without filtering.
A00002	Unknown unqualified RiOption context: %s.
	You have make a call to RiOption without an open Ri context and not to a known global option scope.
A00003	Invalid initialization state.
	A change to Ri Implementation can't be made midstream.
A00004	Invalid context passed to RiContext.
	An unrecognized RtContextHandle was given to RiContext. The context remains unchanged.
A00005	Invalid mode, cannot use -catrib or -capture during baking.
	A current restriction exists that prevents -catrib or -capture from interoperating while baking for re-rendering.
A00006	Invalid bake, cannot bake RIB stream.
	A error has ocured that prevents the baking of the RIB stream. for re-rendering.
A00007	Mismatched ArchiveBegin/ArchiveEnd pair.
	A mismatched ArchiveBegin/ArchiveEnd pair has been detected.
A00008	Invalid state for direct render request.
	RiBegin(RI_RENDER) will result in RIB, not rendering.
A00009	Invalid thread state for RiContext call.
	RiContext was called in a thread not initialized for use.
A00010	Invalid scope for rifcontrol edits.
	Currently invalid scopes for rif control edits: world, archiv, procpnim.
A00011	RiProcedural2V: memory allocation failure.
	``RiProcedural2V()`` failed to allocate memory for the filename parameter in capture mode.
A00012	ArchiveBegin has missing (invalid) name parameter.

	An ArchiveBegin call was made without a valid name parameter. No archive handle will be created.
A00014	Corrupted parameter list for %s.
	A bad variable length parameter list was detected. Ensure that all calls with a variable number of parameters are terminated with RI_NULL or the parameter count is correct.
A00104	Cannot create procedural primitive trace directory "%s"
	The renderer was unable to create a procedural primitive trace directory. Rendering will continue with procedural RIB tracing disabled.
A00300	Problem launching display server: %s
	Problem launching display server.
A01000	Out of memory creating echoer %s
	``RIBInit()`` could not create the specified file or pipe.
A06001	RIBOpen: Memory allocation failure.
	The library failed trying to allocate memory for the RIB stream.
A06005	RIBInit: Can't create file: %s
	``RIBInit()`` could not create the specified file or pipe.
A06006	RIBInit: Could not launch program: %s
	"launch" was passed to ``RiBegin()`` but the renderer could not execute the specified program.
A06010	RIBOpen: problem opening zip subfile for writing: %s
	The library failed trying to open a subfile within a .zip file.
A06012	RIBOpen: unexpected problem binding subfile: %s
	The library failed trying to bind a subfile within a .zip file.
A08002	RIBDoprnt: Warning: unrecognized format: %%%c
	The format string passed into ``RIBDoprnt()`` contained an invalid format.
A08003	RIBParameterList: Unknown parameter identifier: %s
	You have specified a parameter identifier which is not recognized by the library.
A08004	RibOutputStream::BinaryString: Null Ptr to binary string print
	A pointer passed in to RIB output routines is NULL. The parameter will be ignored.
A08005	RibOutputStream::BinaryParameterListVector: Null Pointer
	A pointer passed in a Parameter Vector is NULL. The parameter will be ignored.
A08006	RIBStringArray: Warning: Null Pointer.

	A list of strings was NULL.
A08007	RIBIntArray: Warning: Null Pointer.
	A list of integers was NULL.
A08008	RIBMatrix: Warning: Null Pointer.
	A matrix pointer was NULL when writing.
A08012	RIBDoprnt: Null string pointer.
	The format string to ``RIBDoprnt()`` included "%s", but there is no corresponding string.
A08013	RIBFloatArray: Warning: Null Pointer.
	A float array was NULL when writing.
A08014	RIBDoubleArray: Warning: Null Pointer.
	A double array was NULL when writing.
A08015	asciiStringArray: Warning: Null Pointer.
	A string array was NULL when writing.
A08016	asciIntArray: Warning: Null Pointer.
	An int array was NULL when writing.
A08017	asciiFloatArray: Warning: Null Pointer.
	A float array was NULL when writing.
A08018	ribWrite: Warning: Null Pointer.
	A string pointer was NULL when writing.
A08019	RIB buffer overflow.
	An internal RIB buffer exceeded the allowable size.
A08020	Attempting to write NaN to RIB stream in Ri%s. %s
	You are trying to write a NaN into the RIB stream. This is not allowed, and it will be replaced by a zero.
A08021	k__write: FATAL: Write failed. (Out of disk space?)
	The string write failed, out of disk space?
A08022	Broken pipe detected while writing to: %s
	A write to a pipe failed.
A08023	Problem enountered while finalizgin .zip file %s
	Problem enountered while finalizgin .zip file

A09001	DeclarePID: memory allocation failure.
	<code>``RIBDeclarePID()``</code> failed to allocate memory for a PID.
A09002	InitSymbolTable: hash table memory allocation failure.
	<code>``InitSymbolTable()``</code> failed to allocate memory for its hash table.
A09003	Illegal redeclaration of predefined symbol "%s".
	<code>``RiDeclare()``</code> attempted to redeclare a predefined symbol.
A09004	Invalid parameter declaration: "%s".
	Can't parse parameter declaration.
A09005	Corrupt symbol table detected.
	(programming error)
A09006	Inline declarations of Direct bxdx type isn't supported. Use reference bxdx instead. (%s)
	We don't currently support direct-linked, bxdx objects.
A13001	RiOptionV: "rib" parameter "%s" requires type %s; type %s specified.
	An incompatible type was specified for the given parameter.
A13002	RiOptionV: "rib" outputaldeclares is no longer supported
	"rib" outputaldeclares is no longer supported.
A27001	RiDeclare: syntax error for: %s
blocked URL	The type description of a token given to <code>``RiDeclare()``</code> is invalid or has a syntax error. The token will not be added to the symbol table.
A30002	Could not create %s handle hashtable.
blocked URL	An error code was returned while trying to create the object handle hashtable.
A30003	More calls to End routines than Begin routines.
	The stack used to maintain object handles and light handles has underflowed due to more calls to <code>``RiEnd()``</code> , <code>``RiFrameEnd()``</code> and <code>``RiWorldEnd()``</code> , than to <code>``RiBegin()``</code> , <code>``RiFrameBegin()``</code> and <code>``RiWorldBegin()``</code> .
A30004	Could not create new %s handle.
blocked URL	An error code was returned while trying to create an entry in the handle hashtable.
A38001	Ri Handles: memory allocation failure.
	<code>``RiLightSource()``</code> failed to allocate memory for the <code>__handleid</code> parameter.

A42001	RiVArchiveRecord: Unable to allocate memory for archive string.
	<code>``RiVArchiveRecord()``</code> was unable to allocate a temporary buffer to store the archive record. The record will be ignored.
A57001	Invalid light handle.
blocked URL	The <code>``RtLightHandle``</code> given to <code>``RiIlluminate()``</code> was not a valid handle. Either the data was never a valid handle, or the light has been deleted because it went out of scope (see the RenderMan Interface Specification for light handle scoping rules).
A57002	Invalid light handle.
blocked URL	The <code>``RtLightHandle``</code> given to <code>``RiEnableLightFilter()``</code> was not a valid handle. Either the data was never a valid handle, or the light has been deleted because it went out of scope (see the RenderMan Interface Specification for light handle scoping rules).
A60001	Invalid object handle.
blocked URL	The <code>``RtObjectHandle``</code> given to <code>``RiObjectInstance()``</code> was not a valid handle. Either the data was never a valid handle, or the object has been deleted because it went out of scope (see the RenderMan Interface Specification for object handle scoping rules). The instance request is ignored.
A88001	RiPatchMeshV: Bad patch type: %s
	A bad patch type was specified to <code>``RiPatchMeshV()``</code> . Valid types are <code>``RI_BILINEAR``</code> and <code>``RI_BICUBIC``</code> .
A88002	RiPatchMeshV: Bad unwrap type: %s
	A bad wrap type was specified as the unwrap parameter to <code>``RiPatchMeshV()``</code> . Valid types are <code>``RI_PERIODIC``</code> and <code>``RI_NONPERIODIC``</code> .
A88003	RiPatchMeshV: Bad vwrap type: %s
	A bad wrap type was specified as the vwrap parameter to <code>``RiPatchMeshV()``</code> . Valid types are <code>``RI_PERIODIC``</code> and <code>``RI_NONPERIODIC``</code> .
A91001	RiCurvesV: Bad curve type: %s
	A bad curve type was specified to <code>``RiCurvesV()``</code> . Valid types are <code>``RI_LINEAR``</code> and <code>``RI_CUBIC``</code> .
A91002	RiCurvesV: Bad wrap type: %s
	A bad wrap type was specified to <code>``RiCurvesV()``</code> . Valid types are <code>``RI_PERIODIC``</code> and <code>``RI_NONPERIODIC``</code> .
A94001	RiProcedural: Procedural definition not available.
	Procedural definitions are not available in the client/server environment.
A94002	RiProcedural2: definition not available.
	Custom procedural bound definitions are not available in the RIB-based environment.
A95000	%s: Stub function invoked directly.
	This is stub function, and is not meant to be invoked directly by client applications. It should only be passed as a function pointer to <code>RiProcedural</code> .
AC2001	RiTransformPoints: function not available.
	<code>``RiTransformPoints()``</code> is not implemented in the client/server environment.
B04001	tiffdiff: Missing channel list.

	The ``-ch`` option was specified without including a list.
B04003	tiffdiff: Missing offset.
	The ``-o`` option was specified without including x and y offsets.
B04004	tiffdiff: Missing driver specification.
	The ``-dspy`` option was specified without including the driver name.
B04005	tiffdiff: Missing file name.
	The ``-dspyfile`` option was specified without including the file name.
B04006	tiffdiff: Missing scale factor.
	The ``-scale`` option was specified without including a scale factor.
B04007	tiffdiff: Bad option "-%s".
	An unrecognized option was given to tiffdiff.
B04008	tiffdiff: Too many channels in channel list.
	Too many channels were specified in the channel list given with the ``-ch`` option.
B04009	tiffdiff: Unrecongized channel "%c" in list.
	An unrecognized channel was specified with the ``-ch`` option. Channels must be one of ``r``, ``R``, ``g``, ``G``, ``b``, ``B``, ``a``, and ``A``.
B04010	tiffdiff: Null channel list.
	A zero-length channel list was specified with the ``-ch`` option.
B04011	tiffdiff: Unable to open %s.
	TIFFOpen returned an error when attempting to open the specified TIFF file.
B04012	tiffdiff: Cannot handle %d-bit pictures.
	Tiffdiff can only handle 1, 2, 4, 8, 16, and 32-bit pictures.
B04013	tiffdiff: Cannot handle %d-channel pictures.
	Tiffdiff can only handle 1, 3, and 4-channel pictures.
B04015	tiffdiff: Can't handle 16-bit colormapped images.
	Tiffdiff can not handle 16-bit colormapped images.
B04016	tiffdiff: Missing colormap tag.
	The colormapped TIFF file is missing one or more of the required colormaps.
B04017	tiffdiff: Out of memory.
	Tiffdiff was unable to allocated a scanline buffer due to insufficient memory.

B04018	tiffdiff: Out of memory.
	Tiffdiff was unable to allocated an internal buffer due to insufficient memory.
B04019	tiffdiff: Image dimensions don't match. [%i x %i vs %i x %i]
	The two images supplied to tiffdiff must have the same width and height
B04020	tiffdiff: Display services initialization failure.
	Tiffdiff was unable to initialize the display services due to an error return from either ``DspyName`` or ``DspyOpen``.
B04021	tiffdiff: Out of memory.
	Tiffdiff was unable to allocate a display buffer due to insufficient memory.
B04023	tiffdiff: Missing bitdepth.
	The ``-bitdepth`` option was specified without including a value for it.

C00000	Rif missing plug-in name.
	No Rif name was provided on the command line.
C00001	Rif missing plug-in arg terminator (-rifend).
	No Rif terminator (-rifend) was provided on the command line.
C00002	Rif missing rifmarker name.
	No Rif marker was provided on the command line.
C00100	Invalid rifcontrol request.
	An invalid rifcontrol request was encountered.
C00101	Undefined or invalid rifcontrol marker %s.
	An undefined rifcontrol marker was encountered.
C00102	RifChain stack phase error (more pops than pushes).
	RifChain stack phase error (more pops than pushes).
C00103	RIB archive %s can't be opend.
	The RIB file specified to ``RifParseFile()`` could not be found or could not be opened.
C01001	Error opening DSO %s: %s
	An error occurred in opening a dynamic shared object. Either the file doesn't exist, or is not readable.
C01002	Error opening RifPlugin %s: %s (missing plug-in symbol)
	An error occurred in opening a dynamic shared object. The required entrypoint can't be found.

C01003	Version mismatch: %s version %d > library version %d.
	The DSO is newer than the library.
C01004	Acceptable Rif version mismatch: %s is %d < renderer is %d.
	The DSO is older than the library.

D01002	File name "%s" matches a directory, not a file.
	A provided file name (for a shader, texture, or some consumable) matches a directory rather than a true file.
D01016	ClientPortRead: Bad count: %ld
	An invalid count was received reading data from the dspy server.
D01017	ClientPortRead: Message size(%ld) > buffer size(%ld)
	An invalid count was received reading data from the dspy server.
D01018	ClientPortWrite: Bad size: %d
	An invalid count was received writing data to the dspy server.
D01019	ClientPortRead: No connection to server.
	The dspy client is attempting to read from the dspy server where no connection has yet been established.
D01020	ClientPortWrite: No connection to server.
	The dspy client is attempting to write to the dspy server where no connection has yet been established.
D02001	TgPathDLOpen: Bad DSO found: %s (%s)
	RenderMan found the specified DSO (dynamic shared object), but it was an invalid file. The file was probably built for the wrong architecture or has undefined symbols in it.
D02002	TgDLClose: unable to close handle: %x (%s)
	RenderMan was unable to close the specified DSO (dynamic shared object) handle.
D03001	%s: bad compression type %s': assuming "none".
	An illegal Z file compression type was specified. The only valid values are "zip" and "none".
D03002	Can not open Z file %s for writing
	The system call to open the specified Z file failed.
D04001	DspyName: couldn't find requested driver: %s (%s)
	You have specified a display driver which could not be located.
D04002	DspyClose: never got a response from display server.

	Never got a response to our close message from the display server.
D04003	DspyData: can't call DspyData on a "deep" channel. Use DspyDeepData.
	DspyData doesn't support channels with variable-sized pixel data. Use DspyDeepData.
D04004	DspyImage: deep channels can't resize format data
	A deep display driver has requested a data format with a different size than expected. This is not supported.
D04005	DspyImage: deep channels can't rearrange format data
	A deep display driver has requested data format rearrangement. This is not supported for deep data.
D04006	DspyImage: mixed byte-order netrender of deep data not supported.
	A deep display driver has requested data format in non-native byte-order. This is not supported for deep data.
D04007	DspyImage: can't open deep images over a pipe.
	The display system tried to spawn a deep display using the Pipe interface, which isn't supported for deep channels.
D04008	DspyImage: driver '%s' doesn't support deep data.
	You have specified a display driver which doesn't implement "DspyImageDeepData", but you have specified a mode which provides deep data.
D04009	DspyImage: driver '%s' doesn't support non-deep data.
	You have specified a display driver which doesn't implement "DspyImageData", but you have specified a mode which requires it.
D04010	DspySwapData doesn't support in-pixel byteswapping of dspy type '%d'.
	DspySwapData can't byteswap entries of that type. (See ndspy.h for reference of dspy type codes.)
D04011	DspyOpen: Don't support deep pixel format with heterogeneous byte orders.
	DspyOpen doesn't support pixel formats which include ArrayBegins and which have elements with different byte orders. Specify the same byte order mask for all pixel format elements.
D04012	Display driver '%s' does not support point cloud output.
	You are trying to send point cloud information to a display driver which does not support point cloud output (based on the PkPointCloudQuery).
D04013	DspyImage: driver '%s' doesn't support point cloud data.
	You are trying to send point cloud information to a display driver which doesn't implement "DspyImageDeepData".
D04021	Driver '%s' can't open output '%s'
	The output image can't be opened.
D04022	Unable to open file '%s' - too many opened display channels.
	The output image could not be opened due to a renderer limit on the number of simultaneously opened display channels, when using netrender or parallel mode renders.

D05001	Unterminated string found for map specification.
	A mapping was specified, but the mapping syntax was not terminated correctly with]. The mapping will be ignored.
D05002	Bad zone specified for directory mapping.
	A mapping was found to have an invalid zone syntax. The mapping will be ignored.
D05003	Bad 'from' directory specified for directory mapping.
	A mapping was specified with an invalid syntax for the 'from' directory. The mapping will be ignored.
D05004	Bad 'to' directory specified for directory mapping.
	A mapping was specified with an invalid syntax for the 'to' directory. The mapping will be ignored.
D05006	Cannot create temporary directory "%s"
	The renderer was unable to create a temporary directory. Rendering will continue without the directory.
D05007	Error copying file "%s" to "%s"
	The renderer had an error while copying a file. Rendering will try to continue without the copied file.
D05008	WIN32 System Error (%s) copying file "%s" to "%s"
	The renderer had an error while copying a file. Rendering will try to continue without the copied file.
D05666	ENV variable "%s" too long. Max size: %d
	The renderer was unable to expand the environment variable because it exceeded the maximum size allowed.
D06001	File name "%s" exceeds max pathlen for %ARCH.
	A provided file name (for a shader, texture, or some consumable) is exceedingly long and contains patterns which require substitution.

G01001	Patches cannot be blurred from rational to non-rational.
	The renderer does not support motion blur of bilinear patches between rational and non-rational forms. Only the initial patch will be displayed.
G01002	Out of memory splitting a bilinear patch.
	Memory could not be allocated for a bilinear patch split.
G02001	Patches cannot be blurred from rational to non-rational.
	The renderer does not support motion blur of bicubic patches between rational and non-rational forms. only the initial patch will be displayed.
G03001	Unknown type in mesh vertex vector.
	Unable to turn periodic mesh into NURBS due to bug in the renderer.
G04001	NURBS patch %s with order %d exceeds maximum supported order %d %s.
	The order of the NURBS patch provided is greater than the maximum order the renderer supports.

G04002	Not enough memory to split NURBS.
blocked URL	Some part of a NURBS patch has been discarded because there is not enough memory to store it.
G04003	Attempted to create a degenerate NURBS patch %s %s.
	The u or v range of the NURBS patch provided was degenerate; the patch will be discarded.
G04004	Out of memory in NURBS module.
	The NURBS module was unable to allocate enough memory for a NURBS data structure.
G04006	Moving NURBS gprim "%s" has changing knot vectors %s.
	The knot vectors for a NURBS patch at two different points in time don't match. The patch will be discarded.
G13001	Procedural primitives cannot be diced.
blocked URL	Procedural primitives cannot be diced. Since the dicing subroutine should never be called, there must be a bug in the renderer.
G13002	Cannot restore unknown attribute state "%s" specified for Attribute "procedural" "attributes".
	The renderer could not restore the attribute state specified. Most likely this is because no such attribute state was saved using Resource "attributes", or that state is no longer within ResourceBegin scope.
G13003	Plugin %s has overwritten read-only data.
	The integrity of renderer's token store may have been undermined.
G17001	%s primitives cannot be diced.
blocked URL	Quadric primitives cannot be diced. Since the dicing subroutine should never be called, there must be a bug in the renderer.
G20001	Rational bilinear patch dice routine unimplemented.
	Due to a bug in the renderer, unimplemented dicing functionality was needed.
G29000	Bad length of point-blob array.
	The length of an Implicit's point-blob array must be a multiple of 18.
G29001	Bad length of segment-blob array.
	The length of an Implicit's segment-blob array must be a multiple of 21.
G29002	Ill-formed instruction for Implicit.
	An instruction in the code sequence defining an Implicit had an unrecognized opcode or a bad operand. The surface will be discarded.
G29003	Out of memory allocating an Implicit.
	Memory could not be allocated to hold the data describing an Implicit surface. The surface will be discarded.

G29005	Bad length of repulsion array
	The length of an Implicit's repulsion array must be 4 times the number of repulsion files.
G29006	Can't open %s in implicit.
	A zfile mentioned in an implicit repeller could not be opened.
G29007	%s: not a zfile.
	A zfile mentioned in an implicit repeller was of the wrong format.
G29008	%s: not an orthographic camera.
	A zfile mentioned in an implicit repeller must be created using an orthographic camera.
G29009	Can't allocate memory.
	An implicit repeller could not allocate space into which to read a zfile.
G29010	Blobby threshold offset out of range and ignored.
	The threshold offset specified for the RiBlobby is out of range, and would result in an invisible blob. The offset will be ignored.
G29011	Bad length of dso parameter array
	The length of an Implicit's dso parameter array must be 4 times the number of dso files.
G29013	Can't open Implicit plugin "%s".
	The given Implicit plugin cannot be opened. It will be ignored.
G29014	No version number in Implicit plugin "%s".
	The Implicit plugin has no "ImplicitFileVersion" variable defined. The plugin will be ignored.
G29015	Bad version number (%d) in Implicit plugin "%s".
	The version number in the Implicit plugin is outside the implemented range. The plugin will be ignored.
G29016	No "ImplicitFieldNew" function in Implicit plugin "%s".
	The Implicit plugin either must contain a function named "ImplicitFieldNew" to allocate and initialize the plugin. The plugin will be ignored.
G29017	The "ImplicitFieldNew" function in Implicit plugin "%s" returned NULL.
	The "ImplicitFieldNew" function in an Implicit plugin must allocate and initialize the plugin. Failing that, the plugin will be ignored.
G29018	Out of memory while freeing Implicit.
	Memory could not be allocated while freeing an implicit surface. This is a severe error, and the renderer should abort.
G29020	Out of memory while splitting Implicit.
	Memory could not be allocated while splitting an implicit surface. The implicit primitive will be dropped.

G29021	Out of memory while evaluating Implicit surface.
	Memory could not be allocated while evaluating an implicit surface. The implicit surface may render incorrectly as a result.
G29110	Blobby levelset out of range and ignored.
	The levelset specified for the RiBobby is out of range, and would result in an invisible blob. The offset will be ignored.
G31001	Out of memory allocating stitch data.
	Memory could not be allocated to hold data for crack elimination. Part of the surface may have cracks.
G32001	Out of memory allocating tessellation cache.
	Memory could not be allocated for the cache of tessellated ray-traced geometry. This is a severe error and the renderer should abort.
G32101	Out of memory allocating radiosity cache.
	Memory could not be allocated for the cache of color and opacity values for ray-traced geometry. This is a severe error and the renderer should abort.
G33001	Out of memory bounding primitive.
	Memory could not be allocated to bound a primitive.

H13001	Out of memory when allocating occlusion buffer.
	The renderer ran out of memory when trying to allocate an occlusion buffer for hiding. The renderer should abort.
H16002	Out of memory in hider initialization.
	The hider failed to allocate memory for one or more of its required structures.

J01001	Cannot create geometry of unknown type %s.
	An unknown type was passed to CreateGeometryMaster. The CreateGeometryMaster call will be ignored.
J01002	Invalid material id given to ModifyMaterial.
	An invalid material id type was passed to ModifyMaterial. The ModifyMaterial call will be ignored.
J01003	Invalid displacement id given to ModifyDisplacement.
	An invalid displacement id type was passed to ModifyDisplacement. The ModifyDisplacement call will be ignored.
J01004	CreateLightInstance does not support geometry of type: %s
	Curves, points and groups may not be used to create mesh lights. The CreateLightInstance call will be ignored.
J01005	Degenerate transform passed to %s.
	A transform with no samples was passed to a Riley function. The function call will have no effect.
J01006	Transform with invalid time values passed to %s.

	Transforms passed to Riley must have monotonically increasing time values. The function call will have no effect.
J01007	Invalid time values passed to CreateGeometryMaster.
	Deformation motion blurred geometry passed to Riley must have monotonically increasing time values. The function call will have no effect.
J01008	Non-supported CropWindow edit values.
	The new CropWindow values are outside of the original CropWindow.
J01009	A group cannot be instanced into itself.
	A group cannot be instanced into itself. The call to CreateGeometryMaster() will be ignored.
J01010	Invalid parameter given to %s: the parameter "%s" of type "%s%" wasn't recognized and will be ignored.
	An invalid parameter was given to a riley method() and will be ignored.
J01011	Invalid geometry id given to ModifyGeometryMaster.
	An invalid geometry id was passed to ModifyGeometryMaster. The call will be ignored.
J01012	Attribute %s isn't supported inside Groups or Procedurals (group master id: '%d').
	Some attributes definitions are not supported inside Groups or Procedurals, and will be ignored.
J01013	Setting attribute %s to 1 isn't supported inside Groups or Procedurals (group master id: '%d').
	Some attributes definitions are not supported inside Groups or Procedurals, and will be ignored.
J01014	Invalid shutteropening values
blocked URL	The values of the shutteropening argument to ``RiCamera()`` are not within the required ranges and will be ignored.
J01015	Invalid shutteropening curve
blocked URL	The values of the shutteropening argument to ``RiCamera()`` produce an invalid shutter curve and will be ignored.
J01016	Volumetric light shaders can only be used with RiVolume.
	Only RiVolumes can be used to instantiate volumetric light shaders. The CreateLightInstance call will be ignored.
J02002	Parameter list for geometry of type %s did not contain required param %s.
	The parameter list passed to CreateGeometryMaster did not contain a required parameter. The geometry call will be ignored.
J02003	Geometry master of type %s received invalid value for param %s, expected detail %s of length %d.
	Invalid data was passed to CreateGeometryMaster. The geometry call will be ignored.
J02004	Unknown procedural bound function %s.
	The renderer does not recognize the specified procedural primitive bound function, and therefore can not call it. The procedural primitive is ignored.

J02005	Unknown procedural subdivide function %s.
	The renderer does not recognize the specified procedural primitive subdivide function, and therefore can not call it. The procedural primitive is ignored.
J02006	Geometry master of type %s received invalid value for param %s, expected detail %s.
	Invalid data was passed to CreateGeometryMaster. The geometry call will be ignored.
J02009	instruction list ends prematurely.
	The instruction list in a Blobby did not end on an instruction boundary.
J02010	negative count in blobby.
	An instruction in a Blobby had a negative operand count.
J02011	bad index in blobby.
	An instruction in a Blobby has an out-of-range index into its float or string array.
J02013	Bad instruction in blobby.
	An instruction in a Blobby had an invalid opcode.
J02014	Out of memory in Ri%s
	A geometric primitive cannot be created due to insufficient memory. The primitive is discarded.
J02015	operand out of range
	An RiBlobby instruction had specified an operand that was not the result of a preceding instruction
J02016	bad leaf count in blobby.
	The number of leaves specified in a call to RiBlobby or RiBlobbyV does not match with the number of leaf instructions in the blobby's code array.
J02017	Missing bound values.
	The renderer couldn't find the procedural's bound values. The procedural primitive is ignored.
J02018	%s required vertex positions
blocked URL	Polygon and patch primitives cannot be created without some vertex positions (either ``P``, ``Pw`` or ``Pz``) supplied. The primitive will be discarded.
J02019	Discarding %s that has NaN/Inf vertex positions in %s.
	Primitives cannot be created with NaN or Infinite vertex positions. The primitive will be discarded.
J02020	Invalid sphere %s: %g %g %g
blocked URL	The arguments supplied for a sphere primitive are invalid. A sphere must have non-zero radius and height, and a sweep angle no larger than 360 degrees. The primitive is discarded.
J02021	Invalid cylinder %s: %g %g %g
blocked URL	The arguments supplied for a cylinder primitive are invalid. A cylinder must have non-zero radius and height, and a sweep angle no larger than 360 degrees. The primitive is discarded.

J02022	Invalid cone %s: %g %g %g
blocked URL	The arguments supplied for a cone primitive are invalid. A cone must have non-zero radius and height, and a sweep angle no larger than 360 degrees. The primitive is discarded.
J02023	Invalid paraboloid %s: %g %g %g %g
blocked URL	The arguments supplied for a paraboloid primitive are invalid. A paraboloid must have non-zero radius and height, and a sweep angle no larger than 360 degrees. The primitive is discarded.
J02024	Invalid torus %s: %g %g %g
blocked URL	The arguments supplied for a torus primitive are invalid. A torus must have a non-zero minor radius, and sweep angles no larger than 360 degrees. The primitive is discarded.
J02025	Invalid hyperboloid parameters for %s.
blocked URL	The arguments supplied for a hyperboloid primitive requested a degenerate primitive (either zero height or zero radius). This is invalid, so the primitive is discarded.
J02026	Degenerate disk %s.
blocked URL	The radius argument for a disk primitive was zero. This is invalid, so the primitive is discarded.
J02027	Degenerate volume bounds [%f %f %f %f %f %f] on %s.
blocked URL	The bounds argument for a volume primitive are degenerate. This is invalid, so the primitive is discarded.
J02029	Degenerate polygon mesh specified.
blocked URL	A degenerate polygon mesh with no faces was specified. It will be ignored.
J02031	Subdivision mesh %s has face with %d sides which specifies vertex %d more than once.
	A face on the mesh uses a vertex more than once. This topology is invalid for a subdivision surface, and the mesh will be ignored.
J02032	Unknown Patch type %s
blocked URL	The type argument supplied for a patch primitive was not one of the recognized values (<code>`Rix::k_bilinear`</code> or <code>`Rix::k_bicubic`</code>). The call is ignored.
J02033	Patch mesh was called with too few points %d,%d (needed %d,%d)
blocked URL	The number of points passed to <code>``CreatePatchMesh()``</code> was smaller than than the degree of the mesh. The mesh will be discarded.
J02034	Unknown PatchMesh type %s
blocked URL	The type argument supplied with a patchmesh primitive was not one of the recognized values (<code>`Rix::k_bilinear`</code> or <code>`Rix::k_bicubic`</code>). The call is ignored.
J02035	Degenerate subdivision mesh specified.
blocked URL	A degenerate subdivision mesh with no faces was specified. It will be ignored.

J02036	Degenerate curves primitive specified.
blocked URL	A degenerate curves primitive with no actual curves in it was specified. It will be ignored.
J02037	Unknown curve type "%s".
blocked URL	The ``type`` argument supplied with a curves primitive was not one of the recognized values (``Rix::k_linear or ``Rix::k_cubic). The call is ignored.
J02038	Too few vertices in a linear curve in %s (got %d; need at least 2).
blocked URL	A linear curve had less than 2 vertices. The call is ignored.
J02039	Too few vertices in a cubic curve in %s (got %d; need at least 4).
blocked URL	A cubic curve had less than 4 vertices. The call is ignored.
J02040	Bad number of vertices in a cubic curve in %s (got %d; need %i plus a multiple of %i).
blocked URL	A cubic curve had a number of vertices which did not match the basis defined. The call is ignored.
J02041	Degenerate points primitive specified.
blocked URL	A degenerate points primitive with no actual points in it was specified. It will be ignored.
J02042	Geometry master of type %s was created with multiple time samples, but did not contain motion blurred P or Pw values.
	CreateGeometryMaster was called with intent to create motion blurred geometry, but insufficient P values were supplied. The geometry call will be ignored.
J03002	Invalid "dice" "micropolygonlength" %f.
	The value of "dice" "micropolygonlength" was less than zero. This is invalid, and the setting will be ignored.
J03003	Invalid Ri:GeometricApproximationMotionFactor: %f
	GeometricApproximation motion factor was less than zero. This is invalid, and the call is ignored.
J03004	Invalid Ri:GeometricApproximationFocusFactor: %f
	GeometricApproximation focus factor was less than zero. This is invalid, and the call is ignored.
J03005	Invalid Ri:Orientation: %s
	The argument to Ri:Orientation is not one of the recognized values (Rix::k_inside, Rix::k_outside, Rix::k_rh, or Rix::k_lh). The call is ignored.
J03007	Out of range trace:intersectpriority: %d. Values in [0,15] expected.
	The number of nested dielectric materials is constrained for performance considerations.
J03008	Invalid referencecamera: %s
	An invalid camera was specified for dice:referencecamera. The default dicing camera will be used.

J03011	Out of range value %d specified for dice:watertight.
	Watertight value must be 0, 1, or 2. The attribute will be ignored.
J03012	Unknown dicing strategy %s specified for %s.
	An unknown dicing strategy was specified, and will be ignored.
J03013	Out of range value %d specified for boolean attribute %s.
	An out of range value was specified for the given attribute, and will be ignored.
J03014	Wrong type declaration specified for boolean attribute %s.
	An invalid type was used for a boolean attribute. It will be ignored.
J03015	Wrong type declaration specified for integer attribute %s.
	An invalid type was used for a integer attribute. It will be ignored.
J03016	Wrong type declaration specified for float attribute %s.
	An invalid type was used for a float attribute. It will be ignored.
J03017	Out of range value %d specified for dice:pretessellate.
	Dice pretessellate value must be 0, 1, or 2. The attribute will be ignored.
J03018	Wrong type declaration specified for string attribute %s.
	An invalid type was used for a string attribute. It will be ignored.
J03019	Wrong type declaration specified for point attribute %s.
	An invalid type was used for a point attribute. It will be ignored.
K00001	Requested primvar(s) (%s, %s) not found on object %s.
	A bake node requested rasterizing to a manifold that has not been defined on the primitive to which the node is bound.
K00002	Failed to open display for bake node %s
	The requested display driver was not able to support the requirements of the bake environment on the given node and object. Possible reasons for this include an resolution or channel format that is incompatible with the display driver. Only the first bake port encountered with the unsupported parameters is reported.
K00004	Bounds for primitive %s could not be computed for primitive variable(s) (%s, %s)
	The renderer was unable to bound the specified primitive variable for the specified primitive type. This is most likely due to a bug, or an unsupported primitive type being baked. The primitive will not be baked to the output defined by the bake port.
K00006	__faceindex is not a defined primitive variable on primitive %s
	The bake hider is attempting to bake PTEX data. One of the requirements for PTEX is a defined face index which has to be defined as a primitive variable called __faceindex. The bake hider will only write PTEX data for primitives with this primitive variable defined as the correct type (one value per face).
K00007	Failed to open display for writing to %s

	The display driver was unable to open the image for writing to the specified output file. All baking to this output will be skipped
K00008	The bake hider was unable to create buffers for baking
	The bake hider was unable to create memory into which baking occurs. This is likely due to a bug in the renderer, or the renderer ran out of memory
K00010	The bake hider was unable to create a thread work queue
	Construction of a work queue failed, most likely due to lack of memory available. This is a catastrophic scenario with no worst case handling. The renderer will bail.

blocked URL	Any Light Path Expression that uses with 'L' instead of '<L.>' to represent a light path that terminates at a light can not support light groups. Please modify your expression if you intend to output light groups by using '<L.>' instead of 'L' in your Light Path Expression text.
L61217	Round curves are not supported as light sources.
	Failed to create a light source from a round curve.
L61219	Primitive %s will not emit light, because it failed to dice due to an internal error
	Failed to create a light source from source primitive.

N02001	Subdivmesh %s has invalid connection near %d.
	An edge was specified that connected a nonexistent vertex. The face which specified the edge will be ignored.
N02002	Subdivmesh %s has non-manifold edge connecting vertices %d and %d.
	A non-manifold edge incident to more than 2 faces was found. The face which specified the edge will be ignored.
N02003	Subdivmesh %s has duplicate edge connecting vertices %d and %d.
	An edge connecting two vertices was specified more than once. It's likely that an incident face was flipped (its orientation being defined by the right-hand rule around its constituent vertices). One of the faces which specified the edge will be ignored.
N02004	Subdivmesh %s contains unknown interpolate boundary method: %d
	The value supplied for the "interpolateboundary" tag to ``RiSubdivisionMesh()`` was not recognized. The tag will be ignored.
N02005	Subdivmesh %s has non-existent sharp edge (%d,%d).
	An edge of the subdivmesh specified to be sharp does not exist.
N02006	Subdivmesh %s has non-existent sharp vertex %d.
	A vertex of the subdivmesh specified to be sharp, does not exist.
N02007	Subdivmesh %s has hole at non-existent face %d.
	A face of the subdivmesh specified to be a hole, does not exist.
N02008	Subdivmesh %s contains unknown facevarying interpolate boundary method: %d
	The value supplied for the "facevaryinginterpolateboundary" tag to ``RiSubdivisionMesh()`` was not recognized. The tag will be ignored.

N02009	Subdivmesh %s contains unknown tag: %s
blocked URL	The tag argument to ``RiSubdivisionMesh()`` was not recognized. The tag is ignored.
N02010	Only %d of %d specified verts reachable in subdivmesh %s.
	The specified subdivmesh contains disconnected surface components. Some data will be lost when this mesh is rendered.
N02011	Subdivmesh %s is a trivial mesh (created 0 patches).
blocked URL	The given subdivmesh split into 0 surface patches. This may have been due to bad mesh data.
N02012	A Refined patch created 0 patches in subdivmesh %s.
blocked URL	Unable to refine a patch of the given subdivmesh. Either the input data is bad or there is a bug in the renderer.
N02013	Arbitrary limit on vertex valence exceeded (11).
	Crease vertex has edge valence >= 11, which exceeds pre-calculated table size. The normal at this vertex will be incorrect.
N02014	Dicing unexpectedly encountered points with %d components.
	The dice routine expects xyz points in order to calculate their normals.
N02015	Subdivmesh %s has degenerate edge at vertex %d.
	An edge was specified that connected a vertex to itself. The face which specified the edge will be ignored.
N02016	Subdivmesh %s has incomplete %s tag.
	A vertex or edge edit tag was specified with less than two integer values or with a number of string values that is not a multiple of three. This is an incomplete tag specification, and will be ignored.
N02017	Invalid face %d specified for %s tag on SubdivisionMesh %s.
	A hierarchical edit tag was specified with a base face index (first integer) which does not exist on the mesh. The tag will be ignored.
N02018	Invalid path component %d in %s tag on SubdivisionMesh %s.
	A hierarchical edit tag had a path component which pointed at a invalid subface or vertex. The component was probably greater in value than the possible number of subfaces at the level of subdivision. The tag will be ignored.
N02019	Out of memory while dicing subdivision surface.
	The subdivision surface module was unable to allocate enough memory for a grid data structure.
N02020	Out of memory while dicing subdivision surface.
	The subdivision surface module was unable to allocate enough memory for a grid data structure.
N02021	Out of memory splitting subdivision mesh.
	The renderer was unable to allocate memory during a subdivision surface split operation. This is a severe error and the renderer should abort.
N02022	SubdivisionMesh %s has a %s tag with an incomplete path.

	A hierarchical edit tag was specified containing a path which was incomplete (the given pathlength would cause the path specification to run off the list of supplied integers). This is an incomplete tag specification, and will be ignored.
N02024	%s tag for '%s %s' on Subdivmesh %s did not specify enough floats, expected at least %d.
	A vertex or edge edit tag was specified which did not supply the correct number of floating point values for the type of variable being edited. The tag will be ignored.
N02025	Vertexedit tag specifies invalid variable '%s' on Subdivmesh %s.
	A vertexedit tag was specified which references a variable which does not exist on the mesh. This tag will be ignored.
N02026	%s tag specifies invalid modifier '%s' on Subdivmesh %s.
	A vertex or edge edit tag was specified which specifies an invalid operation on the mesh. This tag will be ignored.
N02027	Variable %s has unsupported uniform or constant storage in vertexedit tag on Subdivmesh %s.
	A vertexedit tag was specified for a variable which had uniform or constant storage. This type of edit is not supported and the tag will be ignored. You should consider using a faceedit tag instead.
N02028	%s tag specifies invalid operation '%s %s' on Subdivmesh %s.
	A vertex or edge edit tag was specified which specifies an invalid operation on the mesh. This tag will be ignored.
N02029	Faceedit tag specifies invalid operation '%s' on Subdivmesh %s.
	A faceedge edit tag was supplied which specifies an invalid operation on the mesh. This tag will be ignored.
N02030	Faceedit set or add tag on SubdivisionMesh %s has a missing variable name.
	A faceedit set or add tag was specified which is missing a variable. The tag will be ignored.
N02031	Variable %s has unsupported nonuniform storage in faceedit tag on Subdivmesh %s.
	A faceedit tag was specified for a variable which does not have uniform storage. This type of edit is not supported and the tag will be ignored. You should consider using a vertexedit tag instead.
N02032	Faceedit tag specifies invalid variable '%s' on Subdivmesh %s.
	A faceedit tag was specified which references a variable which does not exist on the mesh. This tag will be ignored.
N02033	Faceedit tag for '%s %s' on Subdivmesh %s did not specify enough floats, expected at least %d.
	A vertex or edge edit tag was specified which did not supply the correct number of floating point values for the type of variable being edited. The tag will be ignored.
N02034	Faceedit set tag on SubdivisionMesh %s is missing string value for string variable %s.
	A faceedit set tag was specified which is missing the value for a string variable. The tag will be ignored.
N02035	Faceedit tag on SubdivisionMesh %s attempting to specify invalid math operation on string variable %s.
	A faceedit tag was specified which specifies an invalid mathematical operator such as "add" or "subtract" to a string variable. The tag will be ignored.
N02038	Creasemethod tag specifies unknown crease subdivision method '%s' on SubdivisionMesh %s.
	A creasemethod tag was supplied which specifies an unknown crease subdivision method. The known methods are "normal" and "chaikin". This tag will be ignored.

N02039	Creasemethod tag missing string argument on SubdivisionMesh %s.
	A creasemethod tag was supplied which did not have any string arguments. Exactly one string argument should be supplied specifying the crease subdivision method. This tag will be ignored.
N02040	Expecting single integer argument for "facevaryingpropagatecorners" on SubdivisionMesh %s.
	The values supplied for the "facevaryingpropagatecorners" tag to ``RiSubdivisionMesh()`` are invalid, a single integer should be specified. The tag will be ignored.
N02041	Subdivmesh %s has non-unique evaluation handle %s.
	There are at least two subdivision meshes that share the same evaluation handle. Because all evaluation handles must be unique, all duplicate evaluation handles will be ignored.
N02042	Subdivmesh %s has degenerate face %d with %d vertices.
	A face with less than 3 vertices was specified, and will be ignored.
N03001	Unknown subdivision scheme.
	Subdivision mesh primitive with unknown subdivision scheme was requested. The request is ignored.
N03002	Stitch curve %d: out of memory for subdiv mesh %s.
	Insufficient memory encountered.
N03004	Stitch curve %d: insufficient arguments in subdiv %s.
	A subdiv stitch curve has no ID or no edges.
N03005	Stitch curve %d: referenced 3 times (%s, %s, %s).
blocked URL	A subdiv stitch curve has too many references. Only the first two references will be used.
N03006	Stitch curve %d: length conflict (%s: %d vertices; %s: %d vertices).
	A subdiv stitch curve has multiple definitions.
N03007	Stitch curve %d: subdiv %s uses a bogus vertex %d.
	A vertex of the subdiv mesh specified to be on a stitch curve does not exist.
N03008	Stitch curve %d: sharpness conflict (%s: vertex %d is %g; %s: vertex %d is %g).
	A subdiv stitch curve has multiple definitions.
N03009	Stitch curve %d: vertices exceed stitchbound (%s vertex %d is (%g %g %g); %s vertex %d is (%g %g %g)).
	A subdiv stitch curve has vertices that don't match within "stitchbound" from reference to reference.
N03010	Stitch curve %d: "edge" (%d:%d) in subdiv mesh %s is not an edge.
	An edge of the subdiv mesh specified to be on a stitch curve does not exist.

N03011	Edge (%d:%d) exists on multiple stitch curves (%s:%d, %s:%d).
	An edge of the subdiv mesh specified to be on a stitch curve does not lie on the subdiv boundary.
N03012	Stitch curve %d: edge (%d:%d) in %s is not on the subdiv boundary.
	An edge of the subdiv mesh specified to be on a stitch curve does not lie on the subdiv boundary.
N03013	Stitch curve %d: sharpness conflict (%s: edge (%d:%d) is %g; %s: edge (%d:%d) is %g).
	A subdiv stitch curve has multiple definitions.
N03014	Stitch curve %d: only a single reference (%s).
blocked URL	A subdiv stitch curve was only referenced once.
N03015	Stitch curve %d: motion conflict (%s: %s motion blurred; %s: %s motion blurred).
	A subdiv stitch curve was defined for geometries which did not have the same motion blur status. The stitch curve will be ignored.
N04001	Out of memory splitting general polygon.
	Ran out of memory during splitting of a general polygon. The general polygon will be discarded.
N04002	Out of memory splitting polyhedra.
	The renderer was unable to allocate memory during a polyhedron split operation. This is a severe error and the renderer should abort.
N05001	Brick map '%s' for geometric primitive could not be opened.
	Brick map file '%s' could not be opened.
N05003	Gridsize is %i which is too small for efficient ray-tracing of brick map geometric primitives. Gridsize should be at least 128. Ray intersection testing may be twice as slow as it would be if gridsize was larger."
	Gridsize option too small to efficiently ray-trace brick map gprim.
N05004	Unable to acquire file data while rendering geometric brickmap.
	A handle to the file for a geometric brickmap could not be acquired during rendering. This could be due to a corrupted or removed brickmap file or clients using the Brickmap and pointcloud API are holding too many files open. Rendering for portions of the brickmap geometry will fail, and there is the possibility of failure in texture lookups.
N06001	Unknown Volume type %s
	The type argument to ``RiVolume()`` was not one of the recognized values. The volume will be treated as a box.
N06002	Cannot parse DSO string for RiVolume: %s
	The type argument to ``RiVolume()`` contained an unparseable plugin specification. The volume will be treated as a box.
N06003	DSO type string for RiVolume: %s should not contain hostname.
	The plugin specification URI could not be parsed, because a host was used in the form blobbydso://hostname/file. Use either full path, blobbydso:///file or relative path, blobbydso:file. The volume will be treated as a box.
N06004	Infinite density encountered in RiVolume '%s'. Parts of the volume will not render correctly.

	An infinite density value was encountered in a volume. Unless the volume is ignored, such values may lead to extremely slow renders and image artifacts.
N06012	Assigned maximum density %f of RiVolume '%s' exceeded by actual maximum density %f; biased rendering may occur.
	The maximum density claimed by the Bxdf assigned to the RiVolume is less than the actual maximum density encountered during shading. This may lead to a biased rendering; for example, the volume's shadows may not be as dark as they should be.
N06013	Minlength dicing may be underdicing '%s' by %d %s of magnitude.
	The dicing rate computed by minlength is at least one order of magnitude smaller than the standard dicing rate. This may mean either that minlength is set too high (or the renderer's automatic setting is failing due to very large world extents), or the ShadingRate itself is set too high for the desired detail and can be reduced. Note that in some cases, this underdicing may be acceptable, particularly when the volume is very close to the camera; in other cases, severe underdicing artifacts may result.
N07001	Out of memory while creating %s.
	The renderer was unable to allocate enough memory to create geometry.

P00001	Can't open RIB file: '%s' %s.
	The specified RIB file could not be opened.
P00002	Out of memory.
	The renderer cannot obtain sufficient storage for internal data structures. This is usually due to an attempt to render too complex a scene. Try simplifying the scene or model. Rendering is aborted.
P00004	Malformed prman runtime.
	The renderer cannot locate required entrypoints in libprman runtime.
P00005	Uncaught exception: %s.
	An unknown error occurred. Rendering is aborted.
P00006	can't locate prman runtime.
	An unknown error occurred. Execution is aborted.
P01001	Unregistered request: "%s" %s
	The specified request could not be found in the list of valid requests.
P03003	Incorrect number of %s "%s" values specified for %s (got %s, expected %d). %s
	An incorrect number of parameter values were specified. The primitive is ignored.
P04001	Invalid basis matrix name "%s". %s
	The named basis matrix is not one of the predefined basis matrices.
P04002	Bad ubasis array size: %d. %s
	The specified basis array is the wrong size. A basis array should be [4][4] or 16 elements.

P04003	No ubasis array. %s
	A ubasis array was specified, but no data was provided.
P04004	Bad vbasis array size: %d. %s
	The specified basis array is the wrong size. A basis array should be [4][4] or 16 elements.
P05001	Bad number of numeric parameters for bound: %d. %s
	``Bound`` needs six (6) numeric parameters.
P05002	No numeric parameters specified for bound. %s
	``Bound`` needs six (6) numeric parameters.
P08001	Wrong number of color samples: %d, expecting: %d. %s
	The specified number of color samples does not match the number required.
P08002	No color specified. %s
	The RIB parser found a color statement with no color specified.
P09001	Bad array sizes for color samples: %d %d. %s
	The sizes of the ``nRGB`` and ``RGBn`` arrays were not appropriate.
P10001	Bad number of numeric parameters to cone: %d. %s
	``Cone`` requires three (3) numeric parameters (``height``, ``radius``, ``thetamax``).
P10002	No numeric parameters specified to cone. %s
	``Cone`` requires three (3) numeric parameters (``height``, ``radius``, ``thetamax``).
P12001	Bad number of numeric parameters to CropWindow: %d. %s
	``CropWindow()`` requires four (4) numeric arguments.
P12002	No numeric parameters specified to CropWindow. %s
	``CropWindow()`` requires four (4) numeric arguments.
P13001	Bad number of numeric parameters to Cylinder: %d. %s
	``Cylinder`` requires four (4) numeric parameters.
P13002	No numeric parameters specified to Cylinder. %s
	``Cylinder`` requires four (4) numeric parameters.
P16001	Bad number of numeric arguments to Detail: %d. %s
	``Detail`` requires six (6) numeric parameters.

P16002	No numeric arguments specified to Detail. %s
	``Detail`` requires six (6) numeric parameters.
P16003	Bad number of numeric arguments to DetailRange: %d. %s
	``DetailRange`` requires four (4) numeric parameters.
P16004	No numeric arguments specified to DetailRange. %s
	``DetailRange`` requires four (4) numeric parameters.
P17001	Bad number of numeric parameters to Disk: %d. %s
	``Disk`` requires three numeric parameters (height, radius, thetamax).
P17002	No numeric parameters to Disk. %s
	``Disk`` requires three numeric parameters (height, radius, thetamax).
P28001	Invalid parameter type for FrameBegin. %s
	An improper frame number parameter was specified. The frame number should be a single integer.
P34001	Bad number of numeric parameters to Hyperboloid: %d. %s
	An invalid number of numeric parameters was specified for ``Hyperboloid``. Seven (7) numeric parameters are required.
P34002	No numeric parameters to Hyperboloid. %s
	No numeric parameters were specified for ``Hyperboloid``. Seven numeric parameters are required.
P38003	Invalid light handle for Illuminate: "%s". %s
	An invalid light handle was passed in to ``Illuminate``.
P38004	Invalid light handle for EnableLightFilter: "%s". %s
	An invalid light handle was passed in to ``EnableLightFilter``.
P45001	Incorrect number of order values in TrimCurve. found:%d, expected:%d. %s
	The number of trim curves differed from the number orders defined for those curves.
P45002	Incorrect number of min values in TrimCurve. found:%d, expected: %d. %s
	The number of trim curves differed from the number of minimum values defined for those curves.
P45003	Incorrect number of max values in TrimCurve. found:%d, expected: %d. %s
	The number of trim curves differed from the number of maximum values defined for those curves.
P45004	Incorrect number of n values in TrimCurve. found:%d, expected: %d. %s
	The number of trim curves differed from the length of the list which defines the number of control points in each curve.

P45005	Incorrect number of u values in TrimCurve. found:%d, expected: %d. %s
	The number of u values differed from the total number of control points in a trim curve.
P45006	Incorrect number of v values in TrimCurve. found:%d, expected: %d. %s
	The number of v values differed from the total number of control points in a trim curve.
P45007	Incorrect number of w values in TrimCurve. found:%d, expected: %d. %s
	The number of w values differed from the total number of control points in a trim curve.
P45008	Incorrect number of knot values in TrimCurve. found:%d, expected: %d. %s
	The number of knots differed from the sum of control points and orders.
P46001	Bad number of u knots in NuPatch: %d, expected: %d. %s
	A bad number of u knots was passed in to ``NuPatch``.
P46002	Bad number of v knots in NuPatch: %d, expected: %d. %s
	A bad number of v knots was passed in to ``NuPatch``.
P47003	Bad object handle for ObjectInstance: "%s". %s
	An invalid object handle was passed in to ``ObjectInstance``.
P50001	Bad number of numeric parameters to Paraboloid: %d. %s
	An invalid number of numeric parameters was specified for ``Paraboloid``. Four (4) numeric parameters are required.
P50002	No numeric parameters specified to Paraboloid. %S
	No numeric parameters were specified for ``Paraboloid``. Four (4) numeric parameters are required.
P51000	No data specified for procedural primitive. %s
	Procedural primitives require a data array.
P51001	Bad number of numeric parameters for bound: %d. %s
	Procedural bound needs six (6) numeric parameters.
P51002	No numeric parameters specified for bound. %s
	Procedural bound needs six (6) numeric parameters.
P51003	Unknown procedural primitive %s. %s
	The RIB parser does not recognize the specified procedural primitive, and therefore can not call it. The primitive is ignored.
P51004	Procedural primitive %s requires %d data strings. %s
	Each procedural primitive requires a particular number of data strings.

P51005	Procedural primitive "%s" requires a string array (enclose in []'s). %s
	Procedural primitives require a string data array.
P51010	Unknown procedural bound function %s. %s
	The RIB parser does not recognize the specified procedural primitive bound function , and therefore can not call it. The primitive is ignored.
P51011	Unknown procedural primitive subdivide function %s. %s
	The RIB parser does not recognize the specified procedural primitive subdivide function, and therefore can not call it. The primitive is ignored.
P52000	Old-style patchmesh requests are deprecated: %s
	the original Ri spec (3.0) supported patchmeshes in this form. Strictly speaking this is illegal.
P52001	Bad uniform parameter on patch mesh: %s
	Patch meshes require one uniform variable per patch, not one variable. The RIB parser will correct for this error, but it would probably crash any direct-linked renderer.
P53001	Bad number of numeric parameters for bound: %d. %s
	Volume bound needs six (6) numeric parameters.
P53002	No numeric parameters specified for bound. %s
	Volume bound needs six (6) numeric parameters.
P53003	Bad number of numeric parameters for dimension: %d. %s
	Volume dimension needs three (3) integer parameters.
P53004	No numeric parameters specified for dimension. %s
	Volume dimension needs three (3) integer parameters.
P55001	No points specified in Polygon. %s
	None of the parameters to ``Polygon`` were points.
P57001	Bad number of counts (%d) for the number of loops (%d) in PointsGeneralPolygon. %s
	The number of point counts specified in a call to ``PointsGeneralPolygon`` did not match the number of loops specified. There should be one point count for each loop specified.
P57002	Bad number of indices (%d) for number of vertices (%d) in PointsGeneralPolygon. %s
	The number of point indices specified in a call to ``PointsGeneralPolygon`` did not match the sum of the point counts specified. There should be one point index for each point specified.
P58001	Bad number of indices (%d) for number of vertices (%d) in PointsPolygon. %s
	The number of point indices specified in a call to ``PointsPolygon`` did not match the sum of the point counts specified. There should be one point index for each point specified.
P58002	Bad number of indices (%d) for number of vertices (%d) in PointsPolygon. %s

	The number of point indices specified in a call to ``PointsPolygon`` did not match the sum of the point counts specified. There should be one point index for each point specified.
P63001	Bad number of numeric parameters for ScreenWindow: %d. %s
	``ScreenWindow`` needs six (6) numeric parameters.
P63002	No numeric parameters specified for ScreenWindow. %s
	``ScreenWindow`` needs six (6) numeric parameters.
P70001	Bad number of numeric parameters to Sphere: %d. %s
	``Sphere`` requires four (4) numeric parameters.
P70002	No numeric parameters specified to Sphere. %s
	``Sphere`` requires four (4) numeric parameters.
P72001	Bad number of numeric parameters to TextureCoordinates: %d. %s
	``TextureCoordinates`` requires eight (8) numeric parameters.
P72002	No numeric parameters to TextureCoordinates. %s
	``TextureCoordinates`` requires eight (8) numeric parameters.
P73001	Wrong number of numeric parameters to Torus: %d. %s
	``Torus`` requires five (5) numeric parameters.
P73002	No numeric parameters to Torus. %s
	``Torus`` requires five (5) numeric parameters.
P74001	Bad number of numeric parameters to Transform: %d. %s
	``Transform`` requires a 4x4 matrix.
P77001	Protocol version number mismatch, version > %g.
	You are using a protocol version that this renderer cannot handle.
P77002	Cannot handle version %g.
	The major version of the input does not match the major version of the parser.
P79001	Lexical syntax error on token "%s" %s.
	The RIB input stream contained an illegal or illformed token or unrecognized character. The current RIB request will be ignored.
P79002	RIB parser string overflow on token "%s..." %s.
	The RIB parser found an unterminated string, or a string which was so long it overflowed the internal string buffer. The current RIB request will be ignored.
P79003	Mysterious parsing error %s.

blocked URL	The RIB-parser error handler was called with an error with which it was unfamiliar. There must be a bug.
P79004	Undefined binary opcode 0x%lx in RIB stream.
	An unrecognized opcode was found in the input RIB stream.
P79005	Undefined encoded string 0x%lx in RIB stream.
	An undefined encoded string was found in the input RIB stream.
P79006	DEFSTRING protocol botch, expecting string.
	A RIB define-string token in the input RIB stream was not followed by a string.
P79007	Out of memory for DEFSTRING.
	A string was unable to be defined in the input RIB stream due to insufficient memory.
P79009	DEFREQUEST protocol botch, expecting string.
	A RIB define-request token in the input RIB stream was not followed by a string.
P79010	Encoded request %d redefined from "%s" to "%s"
blocked URL	An encoded request in the input RIB stream was redefined.
P79011	Undefined binary token 0x%x. %s
	An undefined binary token was encountered in the input RIB stream.
P79013	Out of memory in RIB parser %s.
	The RIB parser ran out of memory while trying to read a string. The current RIB request will be ignored.
P79014	RIB syntax error %s.
	The RIB input stream contained an illegal token, was missing a required token, or had a token in an illegal place. The current RIB request will be ignored.
P79015	Missing closing quote %s.
	The RIB parser has detected that a required closing quotation mark (") is missing. The current RIB request will be ignored.
P80001	Invalid array in the RIB stream. %s
	An array in the RIB stream consists of invalid elements.
P80002	Mismatched "]" in the RIB stream. %s
	There is a "]" in the RIB stream without a corresponding "[".
P80003	Bad token type %d in the RIB stream. %s
	An invalid token was found in the RIB stream.

P80004	Not enough memory. %s
	The RIB parser ran out of memory attempting to expand a stack.
P80005	Parameterlist type mismatch in RIB stream. %s
	A type mismatch was detected when trying to parse the specification of a parameter list.
P80006	InitStack: Memory allocation failure.
	The RIB parser ran out of memory attempting to allocate a stack.
P80007	Out of memory for more than %d element parameterlist.
	Parameterlist pointer buffers could not be expanded beyond the indicated length. Parameterlists longer than that will be truncated.
P80008	RIB Parser token stack overflow %s.
blocked URL	The RIB parser token stack overflowed. This should not happen, and indicates either a bug in the parser or a serious error in the input RIB stream.
P80009	RIB Parser removing white space %s.
	The RIB Parser detected a token with either leading or trailing white space. The parse has treated this as if the white space characters did not exist.
P80010	NaN detected in RIB stream in %s. %s
	There is a NaN in the RIB stream. It will be replaced by a zero.
P80011	Invalid symbol table when parsing RIB stream. %s
	RiBegin was not called resulting in no symbol table.
P81001	Invalid filter name "%s". %s
	The named filter is not one of the predefined filters.
P83002	Number of points specified in Curve (%d) does not match vertex count (%d). %s
	There is an inconsistency in the ``Curve`` parameters.
P83003	No points specified in Curve. %s
	None of the parameters to ``Curve`` were points.
P83004	Converting segment-varying uniform curve parameter "%s" %s.
	A uniform curve parameter was specified per segment, rather than per curve, and the parameter was found to be non-constant over a curve. Change the parameter to "varying" or "vertex" to ensure no loss of data.
P84003	Mismatched number of mesh indices (%d) and vertices (%d). %s
	The number of vertex indices specified to ``SubdivMesh`` did not match the sum of the vertex counts specified. There should be a one-to-one correspondence.
P84007	Mismatched number of tags arguments lengths (%d) and tags (%d). %s
	The number of arguments' lengths specified to ``SubdivisionMesh`` has to be twice the number of tags.

P84008	Mismatched number of tags' integer arguments (%d) and declared one (%d). %s
	The number of tags' integer arguments specified to ``SubdivisionMesh`` has to be the same as the sum of the number of tags' integer arguments declared.
P84009	Mismatched number of tags' float arguments (%d) and declared one (%d). %s
	The number of tags' float arguments specified to ``SubdivisionMesh`` has to be the same as the sum of the number of tags' float arguments declared.
P84010	Bad number of tags in SubdivisionMesh: %s
	If tags are used in subdivision meshes, the tags array should have at least one tag.
P84011	Bad number of tags arrays to SubdivisionMesh: %d. %s
	``SubdivisionMesh`` requires either none or four arrays to specify tag information.
P84012	Bad number of tags in HierarchicalSubdivisionMesh: %s
	If tags are used in subdivision meshes, the tags array should have at least one tag.
P84013	Bad number of tags arrays to HierarchicalSubdivisionMesh: %d. %s
	``HierarchicalSubdivisionMesh`` requires either none or five arrays to specify tag information.
P84014	Mismatched number of mesh indices (%d) and vertices (%d). %s
	The number of vertex indices specified to * ``HierarchicalSubdivisionMesh`` did not match the sum of the vertex * counts specified. There should be a one-to-one correspondence.
P84016	Mismatched number of tags arguments lengths (%d) and tags (%d). %s
	The number of arguments' lengths specified to ``HierarchicalSubdivisionMesh`` has to be three times the number of tags.
P84017	Mismatched number of tags' integer arguments (%d) and declared one (%d). %s
	The number of tags' integer arguments specified to ``HierarchicalSubdivisionMesh`` has to be the same as the sum of the number of tags' integer arguments declared.
P84018	Mismatched number of tags' float arguments (%d) and declared one (%d). %s
	The number of tags' float arguments specified to ``HierarchicalSubdivisionMesh`` has to be the same as the sum of the number of tags' float arguments declared.
P84019	Mismatched number of tags' string arguments (%d) and declared one (%d). %s
	The number of tags' string arguments specified to ``HierarchicalSubdivisionMesh`` has to be the same as the sum of the number of tags' float arguments declared.
P85001	No points specified in Points. %s
	None of the parameters to ``Points`` were points.

R01001	Ri%s called before RiBegin.

blocked URL	An attribute subroutine was called before ``RiBegin()`` was called. This is illegal, and the attribute is ignored.
R01002	Ri%s called at illegal time.
blocked URL	An attribute subroutine was called when the RenderMan Interface was not accepting attributes. The attribute is ignored.
R01003	Invalid shading rate: %g
blocked URL	The argument to ``RiShadingRate()`` was less than zero. This is invalid, and the call is ignored.
R01006	Invalid geometric approximation: %s
blocked URL	The argument to ``RiGeometricApproximation()`` was not one of the recognized values. The call is ignored.
R01008	Invalid orientation: %s
blocked URL	The argument to ``RiOrientation()`` is not one of the recognized values (``Rix::k_inside``, ``Rix::k_outside``, ``Rix::k_rh``, or ``Rix::k_lh``). The call is ignored.
R01009	Invalid sides: %d
blocked URL	The argument to ``RiSides()`` is not one of the legal values (``1`` or ``2``). The call is ignored.
R01012	Invalid focus factor: %g
blocked URL	The argument to ``RiGeometricApproximation(Rix::k_focusfactor)`` was less than zero. This is invalid, and the call is ignored.
R01013	Invalid motion factor: %g
blocked URL	The argument to ``RiGeometricApproximation(Rix::k_motionfactor)`` was less than zero. This is invalid, and the call is ignored.
R01015	GeometricApproximation "flatness" is no longer supported.
	GeometricApproximation "flatness" is no longer supported. The attribute will be ignored.
R01016	Out of range trace:intersectpriority %d. Values in [0,15] expected.
	The number of nested dielectric materials is constrained for performance considerations.
R02001	Unknown geometry: %s
blocked URL	``RiGeometry()`` was called with a primitive type name which is not recognized by the renderer. The request is ignored.
R02002	RiProcedural request without required data.
blocked URL	``RiProcedural()`` must be supplied a bounding volume and pointers to both subroutines (subdivision and free). The incomplete primitive will be discarded.
R02004	Cannot motion-blur RiProcedural.
blocked URL	Motion blur of procedural primitives is not defined. The primitive request is ignored.

R02012	RiProcedural2 request without required arguments.
blocked URL	``RiProcedural2()`` must be supplied a both functions subroutines (subdivision and bound). The incomplete primitive will be discarded.
R03001	Syntax error in RiDeclare: %s
blocked URL	The type description of a token given to ``RiDeclare()`` is invalid or has a syntax error. The token will not be added to the symbol table.
R05001	RenderMan Interface already initialized.
blocked URL	``RiBegin()`` was called twice before ``RiEnd()`` was called. This is invalid, and the call is ignored.
R05002	Error initializing RenderMan Interface.
	The RenderMan Interface cannot be initialized during ``RiBegin()``.
R05003	RenderMan Interface already closed.
blocked URL	``RiEnd()`` was called before ``RiBegin()`` was called. The call is ignored.
R05004	RiEnd called before its proper nesting level.
blocked URL	``RiEnd()`` was called while there were still other levels of graphics-state nesting outstanding. All of the previous levels will be discarded and lost.
R05005	Ri%s called before RiBegin
blocked URL	A graphics-state manipulation subroutine has been called before ``RiBegin()`` was called. This is invalid and the call is ignored.
R05006	Bad nesting discovered in Ri%s
	An invalid nesting sequence of ``Begin/End`` pairs has caused an error to be discovered in the graphics state stack. The stack will be restored, but the incorrect levels will be discarded and information may be lost.
R05007	Out of memory for graphics state stack in Ri%s
	The graphics state stack cannot be pushed due to insufficient memory. This subroutine call will be ignored, leaving the graphics state as it was.
R05008	Invalid RiFrameBegin
blocked URL	``RiFrameBegin()`` was called when the graphics state was not in the correct state. ``RiFrameBegin()`` is only valid before ``RiWorldBegin()`` and cannot be nested.
R05009	Invalid RiWorldBegin
blocked URL	``RiWorldBegin()`` was called when the graphics state was not in the correct state. ``RiWorldBegin()`` cannot be nested.
R05011	Ri%s called outside of WorldBegin/End block
blocked URL	``Ri%s()`` was called when the graphics state was outside of the WorldBegin/End block. ``Ri%s()`` is only valid after ``RiWorldBegin()``.

R05012	Out of memory in RiFrameBegin for display state
	The preframe display state could not be saved due to insufficient memory. The graphics state will be left in its current state.
R05013	CSG is unimplemented. Ri%s will have no effect.
blocked URL	Constructive solid geometry (CSG) is no longer implemented in the renderer, so the call will be ignored.
R05014	Cannot restore unknown attribute state "%s".
	The renderer could not restore the attribute state specified. Most likely this is because no such attribute state was saved using Resource "attributes", or that state is no longer within ResourceBegin scope.
R05015	Attributes cannot be saved until FrameBegin.
	The renderer cannot save the attribute state using RiResource "attributes" "string operation" "save" until after FrameBegin has been encountered.
R05016	Attributes cannot be restored until FrameBegin.
	The renderer cannot restore the attribute state using RiResource "attributes" "string operation" "restore" until after FrameBegin has been encountered.
R05017	Unknown attribute restore subset "%s".
	The renderer did not understand the subset argument to Resource "attributes". The only valid subsets are currently "all", "transform", "geometrymodification", "geometrydefinition", "shading", and "hiding".
R05018	Attributes cannot be edited until FrameBegin.
	The renderer cannot edit the attribute state using RiResource "attributes" "string operation" "edit" until after FrameBegin has been encountered.
R05024	RiEditAttributeBegin is no longer supported.
	RiEditAttributeBegin is no longer supported.
R05025	RiEditAttributeEnd is no longer supported.
	RiEditAttributeEnd is no longer supported.
R05026	RiEditBegin is no longer supported.
	RiEditBegin is no longer supported.
R05027	RiEditEnd is no longer supported.
	RiEditEnd is no longer supported.
R05028	RiEditWorldBegin is no longer supported.
	RiEditWorldBegin is no longer supported.
R05029	RiEditWorldEnd is no longer supported.
	RiEditWorldEnd is no longer supported.
R06001	Ri%s called before RiBegin.

	The RenderMan Interface subroutines which create texture maps from images must be called after ``RiBegin()``. The call is ignored and the texture map is not made.
R06002	Wrong state to call Ri%s.
	The RenderMan Interface subroutines which create texture maps from images may only be called before ``RiWorldBegin()`` , while calls which set options are valid. The call is ignored, and the texture map is not made.
R06003	Disabled System call '%s' skipped.
	Indicates that RiSystem has been disabled at your site.
R06004	Error %d during RiSystem call '%s'
	Indicates that RiSystem encountered an error.
R06005	Error %d during net RiSystem call '%s'
	Indicates that RiSystem encountered an error.
R06066	Bump maps are no longer supported.
	Bump maps are obsolete in this implementation.
R06069	Unknown MakeBrickMap parameter '%s'.
	Unknown MakeBrickMap parameter '%s'.
R07002	Invalid argument to RiMotionBegin
blocked URL	The arguments to ``RiMotionBegin()`` are invalid. Either the number of time samples is negative or the times are ordered incorrectly. The motion block is discarded.
R07004	Illegal data in motion block
blocked URL	An ``RiMotionBegin()/RiMotionEnd()`` block was defined which contained either inconsistent subroutines called for the time samples or more time samples than expected. The erroneous data is discarded.
R07005	Premature RiMotionEnd
blocked URL	``RiMotionEnd()`` was called before all of the time samples were specified. The motion block is discarded.
R07006	Cannot conform motion samples
blocked URL	The time samples specified in the motion block do not match well enough to carry out the motion blur (there is probably an illegal topology change). The motion block is discarded.
R07008	Out of memory in RiMotionBegin.
blocked URL	The system ran out of memory. The call is ignored.
R08002	Invalid state for object instancing
blocked URL	Objects may only be instanced after ``RiWorldBegin()`` , or inside other objects. The requested instance is discarded.
R08003	Invalid object handle '%s'

blocked URL	The ``RtObjectHandle`` given to ``RiObjectInstance()`` was not a valid handle. Either the data was never a valid handle, or the object has been deleted because it went out of scope (see the RenderMan Interface Specification for object handle scoping rules). The instance request is ignored.
R08005	Retained geometry definition disallowed before WorldBegin.
blocked URL	RiObjectBegin was called when the RenderMan Interface was not accepting primitives. RenderMan will only accept retained geometry definitions after ``RiWorldBegin()`` and before ``RiWorldEnd()``. The call is ignored.
R08006	Object instanced within its own definition.
blocked URL	An object may not be instanced within its own definition. The requested instance is discarded.
R08007	Attribute %s isn't supported inside Objects (handle: '%s').
	Some attributes definitions are not supported inside Objects, and will be ignored.
R08008	Attribute %s isn't supported inside Procedurals.
	Some attributes definitions are not supported inside Procedurals, and will be ignored.
R08009	Setting attribute %s to 1 isn't supported inside Objects (handle: '%s').
	Some attributes definitions are not supported inside Objects, and will be ignored.
R08010	Setting attribute %s to 1 isn't supported inside Procedurals.
	Some attributes definitions are not supported inside Procedurals, and will be ignored.
R09001	Ri%s called before RiBegin
blocked URL	An option manipulation subroutine has been called before ``RiBegin()`` was called. This is invalid and the call is ignored.
R09002	Ri%s called in illegal state
blocked URL	An option manipulation subroutine has been called while the graphics state was not accepting options. Options must be specified before ``RiWorldBegin()``. The call is ignored.
R09004	Degenerate screen window.
blocked URL	The arguments to ``RiScreenWindow()`` ask for a window of zero width or height. This is invalid and the call is ignored.
R09007	Invalid clipping planes: %g %g
blocked URL	The arguments to ``RiClipping()`` must be strictly positive and far must be greater than near. The values given were invalid, and the call is ignored.
R09008	Invalid depth-of-field: (%g %g %g)
blocked URL	The arguments to ``RiDepthOfField()`` must be strictly positive. They were not, so the call is ignored.
R09009	Invalid shutter
blocked URL	The ``RiShutter()`` close time must be later than the open time. It was not, so the call is ignored.

R09013	Out of memory in RiDisplay.
	The display name could not be stored due to insufficient memory. The standard defaults will be used.
R09014	Unknown display mode "%s".
	An unrecognized mode was passed to RiDisplay. If an arbitrary output variable was intended, it may be missing a proper declaration. If a list of DisplayChannels was intended, the DisplayChannel invocations may be missing or malformed. The renderer will ignore this display.
R09017	Invalid number of color samples: %d
blocked URL	The number of color samples must be greater than zero. It was not, so this call is ignored.
R09018	Out of memory in RiColorSamples
	The ``RiColorSamples()`` matrices cannot be saved due to insufficient memory. The color space will not be changed from its original value.
R09020	Camera to screen matrix is deprecated.
	Declaring a camera-to-screen matrix before calling RiProjection isn't supported anymore. Previously, only X and Y transforms, as well as scale, were supported. Use RiScreenWindow instead.
R09021	Invalid pixel variance: %g
blocked URL	The argument to ``RiPixelVariance()`` must be strictly non-negative. It was not, so the call is ignored.
R09022	Degenerate crop window: (%g,%g,%g,%g)
blocked URL	Arguments to ``RiCropWindow()`` asked for a zero-width crop window. This is invalid and the call is ignored.
R09023	Too late to change shutter
blocked URL	The ``RiShutter()`` cannot be changed after camera motion blur has been initiated. The call is ignored.
R09027	Deep image has bad PixelFilter for alpha.
	Deep output has been requested with a pixel filter for alpha that has non-positive values where the corresponding pixel filters for color has positive values. This may cause the deep image to appear grainy with unexpected noise.
R09028	PixelFilter with negative values selected for deep output.
	Deep output has been requested with a sharpening filter that has negative values. These would cause negative colors and alphas in the pixel functions. The filter has been clipped to zero to prevent this but the deep image will be softer than the corresponding flat image as a result.
R09030	Clipping plane normal too close to zero: %g %g %g
blocked URL	The arguments to ``RiClippingPlane()`` should include a normal with length larger than zero. The values given were invalid, and the call is ignored.
R09031	Out of memory in RiDisplay.
	The display could not be created due to insufficient memory.
R09036	Must use PixelFilter "box" 1 1 when rendering deep shadow maps with netrender, filter reset.
	When rendering deep shadow modes with netrender, only box filtering of width 1 is supported.

R09039	Invalid display camera: "%s".
	An undefined camera was specified for ``RiDisplay``. The world camera will be used instead.
R09041	Out of memory for display mode hashtable.
	There is insufficient memory for the renderer to allocate a hashtable used for storing display modes in the display module. Display modes will be unuseable.
R09042	Out of memory for display mode %s.
	The requested display mode cannot be created due to insufficient memory, and will be ignored.
R09043	Undeclared channel %s in mode %s.
	The requested display channel was not previously declared with RiDisplayChannel. The renderer will assume a set of defaults for this channel which may be incorrect.
R09044	Invalid declaration for display channel "%s".
	The requested display channel had an invalid syntax, most likely arising from an incorrect inline type declaration. The channel will be ignored.
R09045	Unexpected declaration for display parameter "%s" of mode "%s", expected type %s
	A parameter with special meaning to the renderer was supplied to RiDisplay with an unexpected type (most likely due to a wrong or missing inline declaration). The renderer will ignore the parameter, which may result in unexpected AOV behavior. The parameter will still be passed to the display driver as a user parameter.
R09047	Option "shutter" "clampmotion" is no longer supported.
	The renderer no longer supports clamping motion to shutter boundaries.
R09048	Option "trace" "maxdepth" is no longer supported.
	The renderer no longer supports Option trace maxdepth.
R09050	Source declaration of "%s" for display channel "%s" cannot be resolved.
	An inline declaration for a display channel source could not be resolved. The source parameter will be ignored.
R09051	Type of source "%s" does not match type for display channel "%s".
	The type or array dimension of the source parameter did not match the declared type, or array dimension of the display channel. The declarations must match exactly. The source parameter will be ignored.
R09052	Exposure is unimplemented.
blocked URL	Exposure is no longer implemented directly in the renderer, so the call will be ignored. A display or sample plugin should be used instead.
R09053	Quantize is unimplemented.
	The RiQuantize call is unimplemented. Use the "int[4] quantize" display parameter with compatible display plug-ins.
R09054	Invalid filter name "%s" specified for display %s.
	The named filter is not one of the predefined filters, and will be ignored.

R09055	Invalid filter name "%s" specified for display channel %s.
	The named filter is not one of the predefined filters, and will be ignored.
R09058	Invalid statistics operation "%s" specified for display %s.
	The named statistics operation is unknown, and will be ignored.
R09059	Invalid statistics operation "%s" specified for display channel %s.
	The named statistics operation is unknown, and will be ignored.
R09060	Invalid shutteropening type
blocked URL	The type of the shutteropening argument to ``RiCamera()`` must be float[2] or float[10]; it is not and will be ignored.
R09061	Invalid shutteropening values
blocked URL	The values of the shutteropening argument to ``RiCamera()`` are not within the required ranges and will be ignored.
R09062	RiCamera parameter: %s was misdeclared, expected %s declaration.
blocked URL	The indicated parameter token was given to ``RiCamera()`` but was either missing a declaration or declared with the wrong type. It has been ignored.
R09063	Invalid focusregion
blocked URL	The focusregion argument to ``RiCamera()`` must be a float; it is not and will be ignored.
R09064	Invalid shutteropening curve
blocked URL	The values of the shutteropening argument to ``RiCamera()`` produce an invalid shutter curve and will be ignored.
R09065	Variance AOV of '%s' requires a matching original AOV.
	Computing the variance of an AOV requires that the original AOV also be output via a Display. It may be renamed via the DisplayChannel source parameter, but must use standard pixel filtering and match the filter function and size. The variance output will be black.
R09066	PixelFilter with negative values selected for filter importance sampling.
	Filter importance sampling has been requested with a sharpening filter that has negative values. These are not supported and have been clipped to zero. The image will be softer as a result.
R09067	Inconsistent filter on '%s' while filter importance sampling.
	When filter importance sampling is used, all active display channels must use the same pixel filter function and size. The filter on the primary display will be used for this channel instead.
R09068	Variance and MSE AOVs (and denoiser) work best with filter importance sampling.
	Variance and MSE statistics AOVs with filter widths larger than a pixel will have artifacts unless filter importance sampling is used. Note that the denoiser requires filter importance sampling on all channels in any case.
R09069	Both odd and even buffers must be specified.
	Computing the difference between two buffers requires that there is both an even and an odd buffer.

R09071	Unknown or unsupported hider "%s".
	An unrecognized hider type was passed to RiHider. The renderer will ignore this hider, and all arguments passed to it.
R09072	Camera "focusregion" is deprecated.
	Camera focusregion is deprecated, and may be removed in a future release.
R09073	Integer AOV '%s' should use only zmin or zmax filtering.
	An integer AOV was assigned a filter type other than zmin or zmax. Other filter types are not currently guaranteed to preserve integer values. The requested filter will be ignored and zmin used instead.
R09074	Deep image '%s' should include alpha channel.
	Alpha channels are not strictly required for deep images. If the image doesn't include an alpha channel we treat each sample as though it were fully opaque. However, this may produce unexpected results and common compositing apps expect to see an alpha channel.
R09080	Detail is unimplemented.
blocked URL	Detail is no longer implemented directly in the renderer, so the call will be ignored.
R09081	DetailRange is unimplemented.
blocked URL	DetailRange is no longer implemented directly in the renderer, so the call will be ignored.
R09082	RelativeDetail is unimplemented.
blocked URL	RelativeDetail is no longer implemented directly in the renderer, so the call will be ignored.
R09083	Option %s:%s is deprecated. Use %s.
	The indicated attribute is deprecated and may be removed in a future release.
R09084	PixelSamples is deprecated in RIS mode.
	The RiPixelSamples call is deprecated in RIS. Use the RiHider "maxsamples" option instead to set the number of samples per pixel. Setting PixelSamples for filter quantization is no longer needed.
R09085	VolumePixelSamples is deprecated in RIS mode.
	The RiVolumePixelSamples call is deprecated in RIS. Use the RiHider "maxsamples" option instead to set the number of samples per pixel. Setting PixelSamples for filter quantization is no longer needed.
R09090	Invalid stereoplanedepths type
blocked URL	The type of the stereoplanedepths argument to ``RiCamera()`` must be at most float[5]; it is not and will be ignored.
R09091	Invalid stereoplaneoffsets type
blocked URL	The type of the stereoplaneoffsets argument to ``RiCamera()`` must be at most float[5]; it is not and will be ignored.
R09092	Riley doesn't support partial RiProjection requests (%s).

	Riley doesn't support partial RiProjection requests Ri:ProjectionName.
R09093	Riley doesn't support partial RiFormat requests (%s).
	Riley doesn't support partial RiProjection requests // * Ri:FormatPixelAspectRatio or Ri:FormatResolution. // *
R09094	Riley doesn't support partial RiPixelFormat requests (%s).
	Riley doesn't support partial RiPixelFormat requests // * Ri:PixelFormatName or Ri:PixelFormatWidth. // *
R10001	Ri%s called before RiBegin.
blocked URL	A shader definition subroutine was called before ``RiBegin()`` was called. This is illegal, and the shader is ignored.
R10002	Ri%s called during illegal state.
blocked URL	A shader definition subroutine was called when the RenderMan Interface was not accepting attributes. The shader is ignored.
R10003	Ri%s unimplemented. Shader %s ignored.
blocked URL	The requested shader type is currently unimplemented, so the call will be ignored.
R10004	EnableLightFilter unimplemented. EnableLightFilter for <%s,%s> ignored.
	EnableLightFilter is currently unimplemented, so the call will be ignored.
R10005	Illuminate unimplemented. Illuminate for <%s> ignored.
	Illuminate is currently unimplemented, so the call will be ignored.
R10040	Reference parameter exceeded maximum length of 512: "%s".
	Reference parameter exceeded maximum length of 512.
R10041	Invalid or mismatched reference parameter "%s" was found for input "%s" of instance "%s" of plugin "%s" on gprim "%s".
	Invalid reference parameter.
R10042	No matching plugin with handle "%s" was found for input "%s" of instance "%s" of plugin "%s" on gprim "%s".
	Parameter mismatch in shading plugin graph: a referenced a plugin could not be found.
R10043	%s, unknown or mismatched input parameter of %s (%s).
	Ri parameterlist includes parameter unknown to plugin.
R10044	%s %s, is missing __instanceid parameter for an instance edit.".
	Ri parameterlist must include instanceid parameter.
R10045	Invalid state for editing Integrator instance parameters.
	Integrator parameters can only be changed within instance-edit contexts.

R10046	%s edit failed with unknown __instanceid "%s" to "%s".
	At attempt was made to edit an Ri parameter list with an unknown __instanceid.
R10047	Nested struct encountered in %s".
	Nested structs aren't supported in this release.
R10048	Struct mismatch detected %s.%s != %s.%s".
	Renderer will attempt to connect the subset of matching parameters.
R10049	Empty or invalid struct detected for %s "%s" of instance "%s" of plugin "%s" on gprim "%s".
	Renderer invalidates pattern graph reference.
R10050	Implicit conversion between color and point-like type for input "%s" of instance "%s" of plugin "%s".
	A connection has been made between a color and a point-like type. While this will be permitted, it may not lead to a desired result.
R10051	Ignoring network connection change in instance edit for input "%s" of instance "%s" of plugin "%s".
	Shading network connections must use attribute edits and re-emit the entire shading network. Connection changes in instance edits are disallowed.
R10052	Lights may not appear in procedurals. Ignoring light "%s".
	Lights may not appear in procedurals.
R11001	Ri%s called before RiBegin
blocked URL	A transformation subroutine has been called before ``RiBegin()`` was called. This is invalid and the call is ignored.
R11003	Ri%s cannot be motion-blurred
blocked URL	A transformation subroutine which does not support motion-blur has been called inside a motion block. The transformation will be ignored.
R11004	Out of memory in Ri%s
	A motion-blurred transformation data structure could not be saved due to insufficient memory. The transformation will be discarded.
R11005	Invalid perspective field-of-view (%g)
blocked URL	The argument to ``RiPerspective()`` must be strictly positive. It was not, so the call is ignored.
R11006	Zero-length rotation axis
blocked URL	The rotation-axis given to ``RiRotate()`` has all three components equal to zero. Rotation is not defined around this zero-length axis, so the rotation will be ignored.
R11007	Skew angle (%g) too large.
blocked URL	The angle argument to ``RiSkew()`` must be smaller in magnitude than the angle between the two vectors. This was not true, so the skew is ignored.
R11009	Unknown transform space (%s => %s)

	A coordinate-space name argument ``RiTransformPoints()`` was specified which does not match the names of any of the predefined or marked coordinate systems. No transformation is performed.
R11010	Noninvertable matrix (%s => %s)
	A coordinate-space transform requested in ``RiTransformPoints()`` cannot be computed because it requires the inversion of a non-invertable matrix. No transformation is performed.
R11011	Out of memory storing named coordinate system
	The renderer could not store the current transformation matrix due to insufficient memory. The naming of this coordinate system will not occur.
R12001	File %s cannot be opened by RiReadArchive.
	The RIB file specified to ``RiReadArchive()`` could not be found or could not be opened.
R12003	Invalid operation "%s" specified for RiResource "%s" "attributes".
	An invalid operation was specified for RiResource call of type "attributes". The only valid operations are currently "save" and "restore".
R12004	No operation specified for RiResource "%s" "attributes".
	No valid operation was specified for RiResource call of type "attributes". A "string operation" parameter must be supplied with the value "save" or "restore".
R13003	Bug: Vertex variable mismatch, %s.
blocked URL	A vertex variable mismatch occurred in copying data from one primitive to another. This indicates a bug in the renderer.
R13004	Undeclared primitive parameterlist token: %s.
	The primitive's parameterlist contained a token which had not been declared with ``RiDeclare()`` , so the rendering system does not recognize it. The token-value pair is ignored.
R13005	Invalid type for primitive parameterlist token '%s' (should be %s) %s.
	The primitive's parameterlist used the wrong type for a predefined primitive variable. The token-value pair is ignored.
R14001	Out of memory in Trim module.
	There was a memory allocation failure during processing of trim curve data. Parts of the trim curve may be ignored.
R14002	Trim Curve order greater than number of vertices.
	The order of the a trim curve was greater than the number of vertices specified. The order was then reduced to the number of vertices defined.
R14003	The max knot value specified for this trim curve is too large.
	The maximum value specified for evaluating a trim curve is larger than the nth knot value. This is undefined. The maximum value is then reduced to the nth knot value.
R14004	The min knot value specified for this trim curve is too small.
	The minimum value specified for evaluating a trim curve is less than the order-1st knot value. This is undefined. The minimum value is then raised to the order-1st knot value.
R14005	Trim weight (%f) is less than or equal to zero. Reset to 1.0

	The w vector defining trim curves had an element that was less than or equal to ``RATIONAL_THRESHOLD``, which for our purposes is undefined. The w was increased to 1.0.
R15002	Subdivision mesh face with fewer than 3 vertices.
blocked URL	All faces of the subdivision mesh must contain at least three vertices. A face with fewer than 3 was requested; it will be discarded.
R15003	Out of memory allocating subdivision mesh.
	Ran out of memory during allocation of a subdivision mesh. The mesh will be discarded.
R15005	Attributes faceedit with path length > 1 are no longer supported (subdivision mesh %s).
	The renderer no longer supports hierarchical attribute edits of faces deeper than the top level face. The edit will be ignored.
R15006	Attributes faceedit specifies unknown attribute state %s (subdivision mesh %s).
	The renderer did not recognize the attribute state specified in the hierarchical faceedit. Most likely this is because no such attribute state was saved using Resource "attributes", or that state is no longer within ResourceBegin scope.
R16001	Cannot load procedural primitive DSO %s.
	The DSO required to process a procedural primitive could not be loaded. The primitive is ignored.
R16002	Incomplete procedural primitive DSO (%s)
	The DSO loaded to process a procedural primitive does not contain all the required entrypoints. The primitive is ignored.
R16003	Cannot run procedural primitive program %s
	The program required to process a procedural primitive could not be launched. The primitive is ignored.
R16004	Missing program name for "RunProgram" procedural primitive.
	Procedural "RunProgram" was specified without a program to run. The primitive will be ignored.
R16005	Missing filename parameter DelayedReadArchive.
	Procedural2 "DelayedReadArchive" was specified without a filename. The primitive will be ignored.
R16010	Missing __dsoname parameter in parameterlist of DSO %s.
	The DSO required to process a procedural primitive could not be loaded. The primitive is ignored.
R16012	Incomplete procedural primitive DSO (%s.Subdivide2)
	The DSO loaded to process a procedural primitive does not contain all the required entrypoints. The primitive is ignored.
R16013	Procedural primitive DSO %s missing Bound implementation.
	The DSO loaded to process a procedural primitive does not implement Bound, and is therefore unable to service the DynamicLoad DSObound request. The primitive will have invalid bounds and may not render correctly.
R16015	Procedural2 is missing a bound (or bound0, bound1) parameter.
	Procedural2 was specified without one or two bound parameters in the parameterlist. The primitive may be sub-performant

R16016	Procedural2 bound parameters are invalid.
	Procedural2 was specified with both bound and bound0/bound1 parameters in the parameterlist. The primitive may be sub-performant
R16017	Procedural has large square bound, most likely with intent of immediatesubdivide. Photon targeting is likely broken
	Please replace your usage with Procedural2 DSONAME BOUNDMETHOD " __immediatesubdivide" 1.
R16066	Bad write to run procedural primitive program %s
	The program required to process a procedural primitive could not be sent data. The primitive is ignored.
R17002	Out of memory for point primitive.
	There was insufficient memory to process a point primitive. The primitive has been discarded.
R18003	Out of memory for curve primitive for %s.
	There was insufficient memory to process a curve primitive. The primitive has been discarded.
R19003	Out of memory in RiSphere.
	A primitive cannot be rendered due to insufficient memory. The primitive is discarded.
R19004	Out of memory in RiCylinder.
	A cylinder primitive cannot be rendered due to insufficient memory. The primitive is discarded.
R19006	Out of memory in RiCone.
	A cone primitive cannot be rendered due to insufficient memory. The primitive is discarded.
R19008	Out of memory in RiParaboloid.
	A paraboloid primitive cannot be rendered due to insufficient memory. The primitive is discarded.
R19010	Out of memory in RiTorus.
	A torus primitive cannot be rendered due to insufficient memory. The primitive will be discarded.
R19012	Out of memory in RiHyperboloid.
	A hyperboloid primitive cannot be rendered due to insufficient memory. The primitive is discarded.
R19014	Out of memory in RiDisk.
	A disk primitive cannot be rendered due to insufficient memory. The primitive is discarded.
R19015	Procedurals as mesh lights are not supported.
	The renderer does not support using a procedural as geometry master for mesh lights. The light shader is ignored.
R20001	Unknown RiAttribute parameter: %s %s
blocked URL	An unknown parameter token was given to ``RiAttribute()``. It has been ignored.

R20002	Unknown RiOption parameter: %s %s
blocked URL	An unknown parameter token was given to ``RiOption()``. It has been ignored.
R20004	Unknown RiHider parameter: %s
blocked URL	An unknown parameter was given to ``RiHider()``. It will be ignored.
R20007	Object %s has unknown %s space %s.
	A coordinate-space name, meant to transform a displacementbound, was specified which does not match the names of any of the predefined or marked coordinate systems. No transformation will be performed on the value of the displacementbound.
R20008	Trace maxspeculardepth limit of %d exceeds raydepth limit of %d.
	A maximum raydepth limit was specified which exceeds the Option "trace" "raydepth" limit. The raydepth limit will be clamped to the limit specified in the option.
R20009	Trace maxdiffusedepth limit of %d exceeds raydepth limit of %d.
	A maximum raydepth limit was specified which exceeds the Option "trace" "raydepth" limit. The raydepth limit will be clamped to the limit specified in the option.
R20012	Unknown type for user attribute "%s".
	The renderer could not find a type declaration (inline or otherwise) for a user attribute or option, and is therefore unable to set its value..
R20014	Unknown triangle dicemethod type: %s
blocked URL	An unknown method was specified for dicemethod. Valid types are ``blp`` and ``trim``. ``trim`` will be used.
R20016	Bad RiHider aperture parameter
blocked URL	A parameter was to ``RiHider()`` option ``"aperture"`` was out of range. The settings will be ignored.
R20018	Bad RiHider dofaspect parameter
blocked URL	A parameter was to ``RiHider()`` option ``"dofaspect"`` was out of range. The settings will be ignored.
R20023	Invalid # of threads specified: %d, using -t:1 (max=%d)
	An invalid number of threads was specified. A single thread will be used.
R20025	Invalid referencecamera: %s
	An invalid camera was specified for ``Attribute "dice" "referencecamera"``. The default dicing camera will be used.
R20031	RiAttribute parameter: %s %s was misdeclared, expected %s declaration.
blocked URL	The indicated parameter token was given to ``RiAttribute()`` but was either missing a declaration or declared with the wrong type. It has been ignored.
R20039	Deprecated RiOption: %s %s

blocked URL	A deprecated request was given to ``RiOption()``. It has been ignored.
R20042	Uniform strings are no longer supported parameters for visibility attributes: %s.
	A uniform string can no longer be used as a parameter for the visibility attribute.
R20043	PixelSamples is deprecated in RIS mode.
	The RiPixelSamples call is deprecated in RIS. Use the RiHider "maxsamples" option instead to set the number of samples per pixel. Setting PixelSamples for filter quantization is no longer needed.
R20050	Renderer recieved SIGUSR1 shutdown request; generating final checkpoint.
	The renderer recieved a USR1 signal and will exit after a final checkpoint is written.
R20092	Invalid shading rate: %f
blocked URL	An invalid shading rate was specified for Attribute shade. Will use a value of .25 instead.
R20093	Invalid relative shading rate: %f
blocked URL	An invalid relative shading rate was specified for Attribute shade. Will use a value of 1.0 instead.
R20094	Invalid light handle: %s
blocked URL	An invalid light handle was specified for Attribute "Ri" "Illuminate". Request is ignored.
R20095	Invalid IlluminateValue request
blocked URL	An associated light handle was not found.
R20100	Ignoring invalid "shade" "indexofrefraction" value %f
	Index of refraction must be a positive value
R20102	Out of range value %d specified for Attribute "dice" "pretessellate".
	Pretessellate value must be 0, 1, or 2. The attribute will be ignored.
R20104	RiAttribute parameter: %s %s is deprecated.
	The indicated attribute is no longer supported, and will be ignored.
R20105	Invalid relative pixel variance: %f
	Relative pixel variance for Attribute shade must be non-negative. Will use a value of 0.0 instead.
R20106	Out of range value %d specified for Attribute "dice" "watertight".
	Watertight value must be 0, 1, or 2. The attribute will be ignored.
R20108	Color is unimplemented.

blocked URL	Color is no longer implemented directly in the renderer, so the call will be ignored.
R20109	Opacity is unimplemented.
blocked URL	Opacity is no longer implemented directly in the renderer, so the call will be ignored.
R20110	TextureCoordinates is unimplemented.
blocked URL	TextureCoordinates is no longer implemented directly in the renderer, so the call will be ignored.
R20111	Attribute %s:%s is deprecated. Use %s.
	The indicated attribute is deprecated and may be removed in a future release.
R20112	Out of memory for trim curve.
	There was insufficient memory to process a trim curve. The trim curve has been discarded.
R20113	Heterogeneous bases are no longer supported.
blocked URL	Different bases for U and V directions are no longer supported by the renderer. The Basis call will have no effect.
R20114	Arbitrary basis matrices are no longer supported.
blocked URL	Bezier, B-Spline, and Catmull-Rom are now the only basis matrices supported by the renderer. The Basis call will have no effect.
R20115	Unknown or unsupported strategy "%s" specified for Attribute "dice" "%s".
	An unknown dicing strategy was passed to the renderer. The attribute will be ignored.
R20116	Inconsistent step value provided for the given basis (%s).
blocked URL	Step values provided to Basis need to be consistent with the given basis.
R20666	Hider '%s' is no longer supported; only the "raytrace" or "bake" hider can be used.
	Unsupported hider.
R21017	Out of memory for blobby primitive.
	There was insufficient memory to process a blobby primitive. The primitive has been discarded.
R22001	Ri%s called before RiBegin
	A camera manipulation subroutine has been called before ``RiBegin()`` was called. This is invalid and the call is ignored.
R22002	Ri%s called in illegal state
	A camera manipulation subroutine has been called while the graphics state was not accepting options. Camera specification must occur before ``RiWorldBegin()``. The call is ignored.
R23001	Unsupported type for display channel "%s" (requested display mode "%s").

	A display channel was declared with an unsupported type. Arbitrary output displays can use variables of type float, int, point, vector, normal, or color. The display will be ignored.
R25001	Ray tracing is spending %.1f%% of its time generating tessellation to trace against. Increasing geocachememory might help performance. (PERFORMANCE WARNING)
	The percentage time spent generating data gives an idea as to how effectively the cache is working. Increasing geocachememory may result in significant speedups.
R25002	Brick maps are spending %.1f%% of the total render time reading in bricks more than once and each brick was read about %f times. Increasing brickmemory might help performance. (PERFORMANCE WARNING)
	The percentage time spent reading brick data multiple times compared to total render time gives an idea as to how effectively the cache is working. If the many bricks are read more than once increasing brickmemory may result in significant speedups. As read time is a wall clock measure and total time is a cpu /sys measure, in extreme situations the percentages can go over 100%
R25003	Pointclouds are spending %.1f%% of the pointcloud time reading in point data. Increasing pointmemory and/or octreememory might help performance. (PERFORMANCE WARNING)
	The percentage time spent reading organized point data compared to using that data is a measure of how effectively the cache is working. If the percentage is high, increasing the pointmemory and/or theoctreememory limits may reduce non compulsory cache misses.
R25006	Opacity cache eviction rate %.2f is high. Increasing opacitycachememory might help performance.(PERFORMANCE WARNING)
	The number of opacity cache lookups causing evictions from the cache is too high. Increasing opacitycachememory may result in significant speedups.
R26002	Out of memory creating volume.
	The renderer ran out of memory during allocation of a volume primitive. The volume will be discarded.
R30003	Polygon with fewer than 3 vertices.
blocked URL	``RiPolygon()`` was called with fewer than three (3) vertices. This is invalid, and the primitive is discarded.
R30004	Out of memory for polygon primitive.
	There was insufficient memory to process a polygon primitive. The primitive has been discarded.
R31002	General polygon loop with fewer than 3 vertices.
blocked URL	All polygon loops must contain at least three vertices. A polygon with fewer than 3 was requested, and it will be discarded.
R31003	Out of memory allocating general polygon.
	Ran out of memory during allocation of a general polygon. The polygon will be discarded.
R31004	General polygon holes are no longer supported.
	Riley no longer supports general polygons with internal holes. The polygon will be discarded.
R31012	Points polygon loop with fewer than 3 vertices
blocked URL	All polygon loops must contain at least three vertices. A polygon with fewer than 3 was requested, and it will be discarded.
R31013	Out of memory allocating points polygon.
	Ran out of memory during allocation of a points polygon. The polygon will be discarded.

R31111	Too many parameters for IfBegin or Elseif %s.
blocked URL	The parameter list to ``IfBegin or Elseif()`` contained too many items. The call is ignored.
R31112	Elseif out of scope (no matching IfBegin) %s.
blocked URL	``RiElseif()`` was called before ``RiIfBegin()`` was called. This is invalid, and the call is ignored.
R31113	Elseif out of order (follows Else) %s.
blocked URL	``RiElseif()`` was called after ``RiElse()`` in the same If-block. This is invalid, and the call is ignored.
R31114	Else out of scope (no matching IfBegin) %s.
blocked URL	``RiElse()`` was called before ``RiIfBegin()`` was called. This is invalid, and the call is ignored.
R31115	Else out of order (follows another Else) %s.
blocked URL	``RiElse()`` was called after another ``RiElse()`` in the same If-block. This is invalid, and the call is ignored.
R31116	IfEnd out of scope (no matching IfBegin) %s.
blocked URL	``RiIfEnd()`` was called before ``RiIfBegin()`` was called. This is invalid, and the call is ignored.
R31120	Expression %s %s.
blocked URL	The conditional expression argument to ``IfBegin or Elseif()`` encountered parsing errors during evaluation. The call is ignored.
R31121	Expression error: %s operator '%s' %s.
blocked URL	The conditional expression argument to ``IfBegin or Elseif()`` encountered errors during operator evaluation. The call is ignored.
R31122	Malformed name in expr: %s %s.
blocked URL	The conditional expression attempts to dereference an empty or improperly formed Attribute or Option name. The call is ignored.
R31125	Unknown option/attribute name '%s' %s.
blocked URL	The name referenced by ``IfBegin or Elseif()`` is not associated with a defined Attribute or Option. The call is ignored.
R31126	Unexpected option/attribute result '%s' %s.
blocked URL	The referenced Attribute or Option returned more data than expected. The call is ignored.
R31127	Inline type mismatch, '%s' is type %s %s.
blocked URL	The name referenced by ``IfBegin or Elseif()`` has an inline type specification which doesn't match the Option or Attribute value of the same name. The call is ignored.

R31128	Unsupported array value stored in '%s' %s.
blocked URL	The Attribute or Option referenced by ``IfBegin or Elself()`` contains an array of values (array of floats, strings, matrices, etc) rather than a single item, which is currently unsupported. The call is ignored.
R32001	Ri%s called before RiBegin
blocked URL	A geometric primitive definition routine was called before ``RiBegin()``. This is invalid, and the call is ignored.
R32002	Ri%s called in wrong state
blocked URL	A geometric primitive definition routine was called when the RenderMan Interface was not accepting primitives. RenderMan accepts primitives only after ``RiWorldBegin()`` or ``RiObjectBegin()``. The call is ignored.
R32005	Unknown PatchMesh type %s
blocked URL	The type argument to ``RiPatchMesh()`` was not one of the recognized values (``Rix::k_bilinear`` or ``Rix::k_bicubic``). The call is ignored.
R32007	Unknown patch type %s
blocked URL	The type argument to ``RiPatch()`` was not one of the recognized values (``Rix::k_bilinear`` or ``Rix::k_bicubic``). The call is ignored.
R32008	Out of memory for patch primitive.
	There was insufficient memory to process a patch primitive. The primitive has been discarded.
R33004	Out of memory for mesh primitive.
	There was insufficient memory to process a patch mesh primitive. The primitive has been discarded.
R34009	Out of memory in RiNuPatch.
	A NURBS primitive cannot be rendered due to insufficient memory. The primitive is discarded.
R40097	Unimplemented or illegal parameter edit %s"
	Rerendering encountered an unexpected or unsupported parameter edit mismatch."
R40098	Invalid parameterlist entry declaration %s"
	Encountered a parameter of unknown type.
R40099	Out of memory parsing parameterlist entry %s"
	Exhausted memoory while parsing parameterlist.
R41030	The RixLPEInfo::StringToToken() API function is now deprecated; instead use the new RixLPE::StringToToken() API function call.
	The RixLPEInfo::StringToToken() API function is now deprecated; instead use the new RixLPE::StringToToken() API function call.
R50004	License warning - %s
blocked URL	The renderer requires a license to execute properly, but the application has lost contact with the license server. See the "Installation Guide" for information about configuring the license server daemon.

R50005	License error - %s
blocked URL	The renderer requires a license to execute properly, but it can not obtain one from a license server or file. See the "Installation Guide" for information about configuring the license server daemon.
R50006	Pixar license expires in %s
blocked URL	The license required by the renderer will expire shortly.
R50009	License location is not set in rendermn.ini - aborting.
blocked URL	The source for license data could not be found. Either rendermn.ini itself was not found, or there was no value defined for /licenseserver or /licensefile. A license server is specified using '9010
R50016	Important software updates are available from renderman.pixar.com
blocked URL	Please contact rmancusp(at)pixar.com for updates.
R51001	Can not allocate gprim.
	A primitives or part of a primitive has been lost due to insufficient memory to retain its description. Limited to 5 messages per processor.
R52003	Can not allocate space for grid (%ld bytes)
	A primitive cannot be processed because there is insufficient memory to allocate a grid structure.
R53001	Dangerous hither distance %f (should be > 1e-4)
blocked URL	The near clipping plane was placed very near zero. This is potentially dangerous.
R53002	Invalid hither distance %f (must be > 1e-9)
blocked URL	The near clipping plane was placed at or behind the eye plane. This is illegal, and will be set to 1.0 instead.
R53003	Invalid orthographic matrix
blocked URL	The orthographic matrix given to the matrix transformation module is not well-formed. The image generated will probably be incorrect.
R53004	Invalid perspective matrix
blocked URL	The perspective matrix given to the matrix transformation module is not well-formed. The image generated will probably be incorrect.
R53005	Singular transformation matrix for "%s".
	The modeling transformation for a primitive is not invertable, which may cause rendering errors (particularly when raytracing). The image generated may be incorrect.
R53010	Invalid camera: focal-length %f, f-stop %f, focal-distance %f
	The provided camera depth-of-field parameters are invalid. A pin-hole camera will be used instead.
R53011	Rotation axis vector has 0 length.
	The length of the a rotation axis vector was 0, which means the rotation is undefined and was not done.

R53014	Bad screen to eye matrix, p00:%g, p11:%g
blocked URL	The renderer couldn't convert a screen space point back to eye space.
R53015	Illegal screen to eye conversion. z=%g
	A point in screen space could not be converted back to eye space due to a z value at the perspective origin.
R53016	Invalid zblur distance parameters: %g [%g %g] %g
	The zblur parameters given to the matrix transformation module are invalid. A pinhole camera will be used instead.
R53017	ZBlur option overrides DepthOfField specification.
	Both ``DepthOfField`` and the ``ZBlur`` camera option were given. The ``DepthOfField`` specification is ignored.
R53018	RiDepthOfField focal length %.2f differs from focal length %.2f implied by perspective projection.
	The focal length specified in RiDepthOfField differs from the focal length implied by the FOV from RiProjection.
R56005	Renderer completing shutdown request.
	The renderer has received a shutdown request and is exiting.
R56006	Cannot create statistics file %s.
	The renderer could not create the specified statistics file.
R56007	Cannot create shader profiles file: %s.
	The renderer could not create a file for the shader profiling results.
R56008	Plugin timer statistic %s clashes with previous call to AddTimerStat.
	A call to AddTimerStat attempted to add a new plugin timer with the same name as a previously added one.
R56009	Plugin memory statistic %s clashes with previous call to AddMemoryStat.
	A call to AddMemoryStat attempted to add a new plugin memory statistic with the same name as a previously added one.
R56010	%s objects had displacement >%.1f%% of bound (max %.1f%%). See statistics for details.
	Detailed information about displacements exceeding bounds is reported in the statistics file.
R56011	%s objects had displacement <%.2f%% of bound. See statistics for details.
	Detailed information about displacements exceeding bounds is reported in the statistics file.
R56042	recover mode is not possible, given the current starting position: %d,%d
	The renderer has been asked to restart rendering at a pixel position that does not lie within the boundaries of the frame.
R56043	Incremental rendering recovery is not possible. Existing image %s does not match expected %s.

	The renderer has been asked to recover an incremental mode render. However, the scene and the existing images found are in an inconsistent state. Rendering will restart from the beginning.
R56044	Missing or invalid checkpoint in image %s; incremental rendering recovery is not possible.
	The renderer has been asked to recover an incremental mode render, but was unable to find a valid checkpoint in the existing image. Rendering will restart from the beginning.
R56045	Missing image channel %s; incremental rendering recovery is not possible.
	The renderer has been asked to recover an incremental mode render, but was unable to find a necessary existing image or channel. Rendering will restart from the beginning.
R56046	Image %s may be missing channels required for incremental rendering recovery because it is not an OpenEXR image.
	An existing image was found to be of a format other than OpenEXR, so it may not have the necessary channels for incremental render recovery.
R56047	OpenEXR exception %s; incremental rendering recovery is not possible.
	The renderer has been asked to recover an incremental mode render, but was unable to read the OpenEXR file. Rendering will restart from the beginning.
R56048	No OpenEXR displays found; incremental rendering recovery is not possible.
	The renderer has been asked to recover an incremental mode render, but was unable to find a necessary existing image or channel. Rendering will restart from the beginning.
R56049	Incremental rendering recovery succeeded; resuming render at checkpoint %i.
	The renderer was able to load a checkpoint image or images and will resume rendering of the scene starting at that checkpoint.
R56050	Checkpoints requested without incremental path tracing.
	The checkpoint interval and exitat parameters request checkpoint images to be written while rendering with incremental path tracing. It is ignored by other ray trace hider modes.
R56051	Recovering from finished image; extending to %i maxsamples.
	The renderer was asked to recover from a finished image. An additional set of samples will be added.
R56052	Checkpoints may not be recoverable; channel %s' should be saved to non-deep image.
	When checkpointing a deep EXR while using adaptive sampling, all of the AOVs considered by the adaptive sampler (e.g., normally the beauty) must be written as well to a shallow EXR. Otherwise, the checkpoint will not be recoverable.
R57044	Hider "incremental" parameter must be enabled to use incremental rendering recovery.
	The renderer has been asked to recover an incremental mode render, but this requires the hider "incremental" option to be set to 1. Rendering will restart from the beginning.
R57045	Cannot recover non-incremental render with bucket orders other than horizontal or vertical.
	The renderer has been asked to recover an non-incremental mode render, with bucket orders other than horizontal or vertical.
R58008	License acquisition error.
	A license error has prevented the render from proceeding.
R61006	Can not allocate space for gop (%d bytes)

	A primitive cannot be processed because a there is insufficient memory to allocate a gop structure.
R61007	Object %s requested unknown minimum dicing space %s.
	A coordinate space name, meant to describe the space in which a minimum dicing length is measured, was specified which does not match the names of any of the predefined or marked coordinate systems. No minimum dicing computation will be computed.
R72001	Malformed variable name "%c%s" in parameter string. %s
	The RIB input stream contained an illegal or illformed variable name in a parameter string. The variable name will be unexpanded.
R72002	Unknown option/attribute name "%c%s" in parameter string. %s
	A string parameter referenced an attribute or option name as a variable to be expanded, but the name does not correspond to a valid standard value or previously defined user value. The value will be unexpanded.
R72003	Unexpected variable expansion error for "%c%s" in string. %s
	A string paramter referenced an attribute or option as a variable to be expanded. An unexpected error was generated while expanding the value.
R72005	Internal buffer too short for variable expansion "%c%s". %s
	A string paramter referenced an attribute or option as a variable to be expanded. An internal buffer was too small to hold the resulting value.
R90000	%4d%%c
	This messages is used to print the percentage of the image rendered for monitoring rendering progress.
R90007	DisplayWindow failed to send display data
	For some unknown reason, the call to DspyData failed. The most common reason for this would be the user killing the display window while the renderer is still running.
R90010	Can't open display channel.
	The requested display channel could not be initialized.
R90011	Can't open display image %s
	The requested display image could not be initialized.
R90012	Out of memory for display channel name buffers.
	There is insufficient memory for the renderer to allocate required buffers for use in the display module. No pixels can be generated.
R90014	Bad prefix in AOV specifier: %s
blocked URL	The requested arbitrary output variable had an unexpected prefix. It should have the form "surface:varname", "light(handle):varname", etc.
R90016	DisplayWindow request too large (%d pixels requested).
	The bucket of pixels is larger than can be accomodated due to insufficient memory.
R90017	Display driver %s does not support multiresolution images. Progressive refinement for re-rendering has been disabled.
	The specified display driver does not support multiresolution images. Progressive refinement has been disabled and re-rendering will proceed at the highest resolution only. This may result in non-interactive updates.

R90018	Selecting array elements from array DisplayChannels is deprecated: '%s'. Display '%s' will be ignored.
blocked URL	Selecting array elements from array DisplayChannels is no longer supported. The renderer will ignore this display.
R90019	Selecting array elements from array DisplayChannels is deprecated: '%s'. DisplayChannel '%s' will be ignored.
blocked URL	Selecting array elements from array DisplayChannels is no longer supported. The renderer will ignore this DisplayChannel.
R90020	Selecting array elements from array DisplayChannels is deprecated. DisplayMode '%s' will be ignored.
blocked URL	Selecting array elements from array DisplayChannels is no longer supported. The renderer will ignore this DisplayMode.
R90021	File system directory for display image %s is not writable.
R90023	Fill is deprecated (for the Display '%s').
blocked URL	Fill is no longer supported. The renderer will ignore this parameter.
R90024	Volumeinterpretation is deprecated (for the Display '%s').
blocked URL	Volumeintepretation is no longer supported. The renderer will ignore this parameter.
S10002	Could not load pattern plugin "%s" from the plugin path "%s" or the shader path "%s".
	Could not load pattern plugin because it was not found.
S10004	Could not load pattern plugin "%s" because of a version mismatch. Got %d needed %d.
	Could not load pattern plugin because it was compiled against a different API version.
S10005	Could not load integrator plugin "%s" because a Create or Destroy function was not found.
	Could not load integrator plugin because it was missing a Create or Destroy function.
S10006	Could not load integrator plugin "%s" in the path "%s".
	Could not load integrator plugin because it was not found.
S10008	Could not load projection plugin "%s" because a Create or Destroy function was not found.
	Could not load projection plugin because it was missing a Create or Destroy function.
S10009	Could not load projection plugin "%s" in the path "%s".
	Could not load projection plugin because it was not found.
S10010	Could not load projection plugin "%s" because of a version mismatch. Got %d needed %d.
	Could not load projection plugin because it was compiled against a different API version.

S10011	Could not load light filter plugin "%s" because a Create or Destroy function was not found.
	Could not load light filter plugin because it was missing a Create or Destroy function.
S10012	Could not load bxdf plugin "%s" in the path "%s".
	Could not load bxdf plugin because it was not found.
S10013	Could not load bxdf plugin "%s" because a Create or Destroy function was not found.
	Could not load bxdf plugin because it was missing a Create or Destroy function.
S10014	Could not load default bxdf plugin "%s" in the path "%s".
	Could not load default bxdf plugin because it was not found.
S10015	Could not load light filter plugin "%s" in the path "%s".
	Could not load light filter plugin because it was not found.
S10016	Could not load light filter plugin "%s" because of a version mismatch. Got %d needed %d.
	Could not load light filter plugin because it was compiled against a different API version.
S10017	Could not load bxdf plugin "%s" because of a version mismatch. Got %d needed %d.
	Could not load bxdf plugin because it was compiled against a different API version.
S10018	Could not load integrator plugin "%s" because of a version mismatch. Got %d needed %d.
	Could not load integrator plugin because it was compiled against a different API version.
S10019	Could not load light plugin "%s" because a Create or Destroy function was not found.
	Could not load light plugin because it was missing a Create or Destroy function.
S10020	Could not load light plugin "%s" in the path "%s".
	Could not load light plugin because it was not found.
S10021	Could not load light plugin "%s" because of a version mismatch. Got %d needed %d.
	Could not load light plugin because it was compiled against a different API version.
S10022	Could not load sample filter plugin "%s" in the path "%s".
	Could not load sample filter plugin because it was not found.
S10023	Could not load sample filter plugin "%s" because a Create or Destroy function was not found.
	Could not load sample filter plugin because it was missing a Create or Destroy function.
S10024	Could not load sample filter plugin "%s" because of a version mismatch. Got %d needed %d.
	Could not load sample filter plugin because it was compiled against a different API version.

S10025	Could not load display filter plugin "%s" in the path "%s".
	Could not load display filter plugin because it was not found.
S10026	Could not load display filter plugin "%s" because a Create or Destroy function was not found.
	Could not load display filter plugin because it was missing a Create or Destroy function.
S10027	Could not load display filter plugin "%s" because of a version mismatch. Got %d needed %d.
	Could not load display filter plugin because it was compiled against a different API version.
S10028	Could not load geometric light plugin "%s" because of a version mismatch. Got %d needed %d.
	Could not load geometric light plugin because it was compiled against a different API version.
S10029	Could not load geometric light plugin "%s" because a Create or Destroy function was not found.
	Could not load geometric light plugin because it was missing a Create or Destroy function.
S10030	Could not load geometric light plugin "%s" in the path "%s".
	Could not load geometric light plugin because it was not found.
S10040	RixProjection::TransformOrigins is currently unimplemented.
	RixProjection::TransformOrigins is currently unimplemented.
S10041	RixProjection::TransformDirections is currently unimplemented.
	RixProjection::TransformDirections is currently unimplemented.
S10051	GetNearestHits not supporting for shading mode %d.
	Raytracing is disallowed during scene pre-processing and geometry dicing.
S10100	Invalid lobe traits passed to GetNearestHits.
	A single lobe is required to classify a ray, assuming specular.
S11003	Could not load pattern plugin "%s" because a Create or Destroy function was not found.
	Could not load pattern plugin because it was missing a Create or Destroy function.
S12012	Could not load displacement plugin "%s" in the path "%s".
	Could not load displacement plugin because it was not found.
S12013	Could not load displacement plugin "%s" because a Create or Destroy function was not found.
	Could not load displacement plugin because it was missing a Create or Destroy function.
S12017	Could not load displacement plugin "%s" because of a version mismatch. Got %d needed %d.
	Could not load displacement plugin because it was compiled against a different API version.

S13001	RixTransform interface will soon be deprecated for RixShadingPlugins.
	The RixTransform interface will soon be deprecated for RixShadingPlugins and will be removed in a future point release. The RixShadingContext::Transform routines should be used instead.
S14001	Requested sample filter "%s" is not actually a sample filter plugin.
	A request to create a sample filter failed because the plugin was of the wrong type.
S14002	Requested display filter "%s" is not actually a display filter plugin.
	A request to create a display filter failed because the plugin was of the wrong type.
S14003	Requested Bxdf "%s" is not actually a Bxdf plugin.
	A request to create a material failed because the plugin was of the wrong type.
S14004	Requested light "%s" is not actually a light plugin.
	A request to create a light failed because the plugin was of the wrong type.
S14005	Requested light filter "%s" is not actually a light filter plugin.
	A request to create a light filter failed because the plugin was of the wrong type.
S14006	Requested displacement "%s" is not actually a displacement plugin.
	A request to create a displacement failed because the plugin was of the wrong type.
S20001	OSL: [MESSAGE] %s
	Message was generated from the OSL runtime system.
S20002	Could not open OSL shader %s%s%s%s.
	The OSL runtime system was unable to open the named shader.
S20003	Could not find OSL builtin %s, returning zero.
	The OSL runtime system was unable to open the named shader.
S20004	%s is not an int/float/point/normal/vector/color/matrix/string.
	Outputs from OSL shaders must be an int/float/point/normal/vector/color/matrix/string..
S20005	OSL: %s
	Severe error was generated from the OSL runtime system.
S20006	OSL: %s
	Error message was generated from the OSL runtime system.
S20007	OSL: %s
	Warning was generated from the OSL runtime system.

S20008	OSL: %s
	Info message was generated from the OSL runtime system.
S20009	OSL: [DEBUG] %s
	Debug message was generated from the OSL runtime system.
S20010	Parameter "%s" (type %s) does not match RIB argument, ignoring.
	OSL and RIB do not agree on variable type.
S20011	Override for parameter "%s" has unimplemented RIB type %d.
	Override for parameter has an unimplemented type.
S20012	Could not set OSL %s path.
	Could not set OSL %s path.
S20013	Could not find %s.
	The Option to set the search path appears to be missing.
S20014	Could not set OSL %s path, OSL SIMD libraries not found in rixplugin search path. SIMD support disabled.
	Could find the per-architecture OSL %s path.
S20100	Could not find either shader/network for builtin OSL support.
	OSL needs the parameter list to contain either "string __{shader,network}", likely a bug.
S20101	Parameter %s is supposed to be a uniform string.
	BUG: OSL needs the parameter list to contain a uniform "string shader" parameter.
S21001	OSL could not access channel %d of texture "%s".
	The specified channel was an illegal index for the specified texture.
S21002	OSL could not open texture "%s".
	The specified texture could not be opened (bad format).
S22001	Attribute "%s" not found after resizing %d.
	Likely bug in OSL attribute handling.
S22002	Attribute array "%s" requested out of range index %d.
	Indexing problem in OSL array variable.
S22003	Attribute "%s" not found, returned %d.
	Could not find the named attribute.

S22004	Option "%s" not found after resizing %d.
	Likely bug in OSL option handling.
S22005	Option array "%s" requested out of range index %d.
	Indexing problem in OSL array option.
S22006	Option array "%s" not found or type mismatch, returned %d.
	Could not find the named attribute.
S22007	Option array "%s" too big to fit inside resized buffer, returned %d.
	Likely bug in space allocation.
S22008	Attribute "%s" not found or type mismatch, returned %d.
	Could not find the named attribute.
S22011	Option "%s" too big to fit inside resized buffer, returned %d.
	Likely bug in space allocation.
S22012	Could not find primvar "%s", returning OSL default.
	The primvar could not be found on the shading geometry, returning the default.
S22013	Type mismatch for param "%s".
	Type of requested input does not match the bound output.
S22014	Attribute "%s" too big to fit inside resized buffer, returned %d.
	Likely bug in space allocation.
S22015	Option "%s" not found or type mismatch, returned %d.
	Could not find the named attribute.
S22016	Attribute "%s" too big to fit inside resized buffer, returned %d.
	Likely bug in space allocation.
S22017	%s PrimVar "%s" unsupported.
	Currently primvars must be a single or array of float/float3/vector/point/normal/color/matrix.
S22018	Shading at OSL trace() hits is unsupported.
	A nonzero value for the "shade" parameter of trace() is not supported; rays will be traced without shading.
S22019	OSL trace() is unsupported during presence, opacity or displacement shading.
	Tracing of rays is not possible during presence, opacity or displacement shading; trace() will return 0.

S23100	Invalid OSL shader network file "%s".
	Internal format of OSL shader network appears to be corrupt.
S23101	Invalid OSL shader network file "%s", %s.
	Runtime error while building OSL shader network.
S23102	OSL network file "%s" not found.
	Runtime error while building OSL shader network.
S31006	Unknown grid type encountered in shading module.
blocked URL	An unknown type of grid was passed to the shading variable binding routines.
S31020	Inf/NaN detected in bounding of %s after displacement. Displacement will not be applied.
	Inf/NaN bounds were found for a primitive after it underwent displacement. Parts of the object will be rendered without displacement.
S35001	Shadeop match(): error %s.
	An error occurred in compiling or executing a regular expression in the match() shadeop. The pattern match fails.
S44017	texture3d or getpoints: variable '%s %s' does not exist in brick map / point cloud file '%s'.
	Variable not found in texture3d() file.
S44019	Texture3d(): brick map or point cloud "%s" does not contain enough data channels.
	The brick map or point cloud contains fewer data channels than requested in texture3d() call.
S44025	texture3d or getpoints: variable '%s %s' has wrong type or array length in brick map / point cloud / deep shadow map file '%s'.
	Variable type mismatch in texture3d() or getpoints() file.
S46001	texture: smooth derivatives required.
	The gprim requires the use of smooth derivatives in order to correctly calculate filter regions. Either disable the -nosd flag when running nshader, or change the shader not to use 1-point texture calls.
S48001	Origin for rays fired from volume computed inside varying conditional.
	The renderer computed the derivatives for the origin of a ray fired from a volume inside a conditional statement. This may lead to zero length derivatives leading to strange anti-aliasing, and should best be avoided by computing the ray origin outside the conditional statement.
S66619	Cannot launch rbug viewer.
	A system error has prevented the rbug viewer from launching.
S66620	Cannot write to rbug input.
	A system error has prevented the rbug viewer from receiving input.
S75000	Error parsing LPE: %s at char %d in expression "%s".
	The provided Light Path Expression is invalid.

T01001	Can't use missing channel %d of "%s".
	The specified channel number does not exist in the specified texture file. An attempt to access this channel of the file has failed. The most likely cause is an error in the use of ``texture``, ``Cshadow``, or ``Cenvironment`` in one of your shaders.
T02001	Can't open texture "%s". (filename or texture path incorrect?)
	The specified texture file could not be used, because the file doesn't exist or a system limit has been exceeded.
T02002	"%s" is not a texture file.
	The specified texture file could not be used, because the file is not in the correct format for a texture file.
T02003	"%s" file format is a later version than renderer.
	The specified texture file could not be used, because the file is in a texture format which is not understood by the renderer. This might result from making the texture file with a later release of the software and then trying to use the texture file with an earlier release.
T02004	No shadow matrices in "%s".
blocked URL	The specified shadow texture file doesn't contain the transformation matrices which are needed to convert points to shadow space. The shadow can still be used, but points must be converted to shadow space in the light shader before calling the ``shadow`` function.
T02005	"%s" is a compressed file with wrong byte order.
	The specified texture file could not be written to because it is a compressed texture file created on a computer system whose byte order does not match the byte order of this computer system.
T02020	Can't open 3D texture "%s".
	The specified 3D texture file could not be used, because the file doesn't exist or because it is neither a brick map, point cloud(or because a system limit has been exceeded).
T02030	Can't open texture part %d. Invalid part requested or non multi-part EXR specified
	The part index supplied to AcquireTexturePart is invalid or underlying EXR is not a multi-part EXR.
T02038	Can't open texture "%s". OS out of file descriptors.
	The operating system won't allow more open files. lower the file descriptor limit in the .ini file to below the OS limit. Account for untracked file descriptors in plugins.
T02040	Can't open texture atlas "%s". The requested style does not match the atlas tile filenames.
	The requested texture atlas has already been opened different style to that provided. Use the correct style when acquiring the texture atlas.
T02041	Can't open texture atlas "%s". No texture maps found for atlas.
	The texture atlas resulted in no valid filenames. Ensure the atlas token correctly identifies atlas tiles on disk.
T02050	Can't open ptex face %d.
	The supplied face index does not exist. Rebuild the ptexture file or check the face indices on the geometry.
T03002	Res power range (%d,%d) in "%s".
blocked URL	The specified texture file could not be read or written because of a bug in the renderer.

T03003	No data for res (%d,%d) in "%s".
blocked URL	The specified texture file could not be read or written because of a bug in the renderer or because the texture file is not in the correct format. Try to recreate the texture file (if possible) and render again.
T03004	Texture write error on "%s"
	Some texture operation has failed because of a system write error.
T03005	Texture read error%s on "%s"
	Some texture operation has failed because of a system read error or premature EOF. The texture file name and system error explanation are included in the message if available.
T03007	Bad texture data in "%s".
blocked URL	The specified texture file could not be read or written because the texture file is not in the correct format.
T04000	Invalid filter used to get texture derivatives.
	Only bspline, bilinear and nearest texture filters allow for the provision of derviative results when texturing. Use a different filter for the texture call or use NULL pointers for the derivative results.
T04001	Invalid filter for texture call
	An invalid filter was used for the texture type or texture derivatives were not supplied that the filter type requires. Change the filter type or supply all required derivatives to the texture call
T04002	Invalid texture properties for texture call
	Texture properties were supplied to a texture call that were not not acquired with the correct parameters. For example a ptex file was acquired and used in a Texture or TextureDerviatives call or vica-versa.
T04003	Invalid built-in error handler '%s'
	An invalid error handler was specified. Valid values are ignore, print, printonce, abort, or conditionalabort.
T05001	Could not find channel "%s" in file "%s".
	The specified texture channel does not exist in the specified texture file. This channel will be filled with the next available channel that does exist.
T05002	Channel "%s" refers to more channels than exist in file "%s".
	There are more references to channels than exist in the texture file. This and all additional references will be ignored.
T05003	The texture file "%s" does not support access by channel name.
	The specified texture file type does not support lookup by channel name.
T05004	The texture file "%s" does not support the Lagrangian filter in point filter mode.
	The specified texture file type does not support the Lagrangian filter in point filter mode.
T06606	Invalid channel [%d] specified for the texture file "%s".
	The specified texture file type does not have the given channel.

T06607	Invalid number of channels [%d] specified for the texture file "%s".
	The specified texture file type does not have that many channels.
T10004	Can't find res for %g x %g.
blocked URL	The texture subsystem of the renderer is unable to locate a suitable texture resolution.
T11001	RxTexture3d() variable name "%s" without inline type
	RxTexture3d() variable names must have inline declaration.
T13001	Invalid texture datatype %d (%d of "%s").
	The renderer attempted to access a texture channel with an invalid channel datatype.
T16001	Texture "%s" accessed in shader "%s" with out-of-range %s (%f).
	The current texture access to the specified texture file attempted to use a coordinate or width that was out side the valid range. The coordinate or width is clamped to a more appropriate value. This error is often the result of texture coordinates that were undefined in one fork of an if statement in the shading language.
T16666	Cannot load texture plugin [%s]. ERROR: [%s]
	The plugin required to process a texture plugin could not be loaded. The plugin is ignored.
T16667	No version number present in texture plugin (%s)
	The texture plugin has no "RtxPluginVersion" variable defined. The plugin is ignored.
T16668	Bad version number (%d) present in texture plugin (%s)
	The version number in the texture plugin is outside the implemented range. The plugin is ignored.
T16669	Incomplete texture plugin (%s)
	The texture plugin does not contain all the required entrypoints. The plugin is ignored.
T16670	The "RtxPluginNew" function in texture plugin (%s) returned NULL.
	The texture plugin function "RtxPluginNew" must allocate and initialize the plugin. Failing that, the plugin is ignored.
T16671	Cannot parse texture plugin string: %s.
	The plugin specification URI could not be parsed. The plugin could not be loaded.
T16672	Cannot parse texture plugin parameters: %s.
	The plugin specification URI could not parse the user parameters. The plugin could not be loaded.
T16673	The "Open" function in texture plugin (%s) was given an invalide data type.
	The texture plugin "Open" function must be given either a byte or float data type. Failing that, the plugin is ignored.
T16674	Close() in the texture plugin (%s) returned an error.
	The "Close()" function in the texture plugin returned an error. Most likely resources were not released correctly.

T16675	Texture plugin string: %s should not contain hostname.
	The plugin specification URI could not be parsed, because a host was used in the form rtplugin://hostname/file. Use either full path, rtplugin:///file or relative path, rtplugin:file. The plugin could not be loaded.
T16677	Texture plugin string: %s should contain a scheme.
	The plugin specification URI could not be parsed, because a host was used in the form rtplugin://hostname/file. Use either full path, rtplugin:///file or relative path, rtplugin:file. The plugin could not be loaded.
T17001	Environment map "%s" accessed in shader "%s" with zero-length direction vector.
	The current access to the specified environment map attempted to use a direction vector that was zero-length. No lookup is possible, so black is returned.
T21001	Unknown texture compression method (type %d) file "%s".
	The texture compression algorithm type code stored in the texture file is unknown to the renderer. This is most likely due to a version mismatch between the renderer and the texture file. The texture file was compressed with an algorithm unknown to this renderer.
T22001	TIFF texture contains invalid Pixel Aspect Ratio, please regenerate: "%s".
	The TIFF texture was generated with an older tmake using -resize none, which resulted in an invalid Pixar Aspect Ratio, it will be reset to 1.0. Regenerating the texture with a newer version of tmake will correct this problem.
T23001	Texture filtering is spending %.1f%% of its time reading tiles and each tile was used %.2f times. Increasing texturememory might help performance.(PERFORMANCE WARNING)
	The percentage time spent reading tile data is a clue to how effectively the cache is working. Increasing texturememory may result in significant speedups.
T23004	Unable to open texture file, maxtextures already held open.
	A handle to the texture could not be acquired during rendering. This is due to too many files being held open, including those accessed through the Brickmap and Pointcloud APIs. This will result in dropped textures and failures to open brickmaps and pointclouds.
T42001	ptex cubemap reflection direction is invalid. Was it computed inside a varying conditional?
	The reflection vector used in environment() on a ptex cubemap contains NaNs. This is most often caused by computing the reflection vector inside a varying conditional.
T42042	Can't use missing channel: %s "channel-%03d" from "%s".
	The specified channel does not exist in the specified EXR texture file. An attempt to access this channel of the file has failed. The most likely cause is an error in the use of a texture call in one of your shaders.
T43035	Point cloud file read error on "%s"
	Point cloud file read operation has failed because of a system error.
T43037	Brick map creation: point cloud file read error on "%s"
	Point cloud file read operation has failed because of a system error.
T43050	Organized point cloud file '%s' is gzipped; will be treated as unorganized.
	Gzipped organized point cloud file will be treated as unorganized.
T43051	Point cloud file '%s' has unreadable points.
	Point cloud file cannot be read.

T43052	Organized point cloud file '%s' has unreadable tree nodes.
	Organized point cloud file cannot be read.
T43053	Can't handle more than 100 pointclouds per lookup.
	There's a hard limit on the number of pointclouds per lookup.
T43055	Brick map '%s' is in old format (version <= 4). Data details may be lost near edges and on thin or double-shaded geometry. Please regenerate the brick map.
	Old brick map format (data details may be lost).
T43060	Brick map write error on "%s"
	Cannot write file header.
T43076	Could not open point cloud file '%s'."
	Point cloud file header read has failed. Non- existing file, not a point cloud, or future format version?
T43077	read negative data point radius (%f): point skipped.
	The data point radius is negative. Point skipped.
T43079	Problem opening brickmap file %s for writing.
	A problem was encountered whilst opening a brickmap file for writing.
T43080	Cache "%s" does not contain the requested data.
	The cache was called earlier with fewer or different data than now.
T43082	All points had zero or negative radii; aborting.
	All data points had invalid radii; no data to be inserted into brick map.
T43083	%i points had zero or negative radii and were ignored.
	Points which have zero or negative radii will not contribute to the brick map.
T43086	Existing channel %s %s prevents automatic addition of P and N channels."
	An existing channel named P prevents -addpn functionality.
T43087	Existing channel %s %s prevents addition of _presence channel."
	An existing channel named _presence prevents -addpresence functionality.
T43090	Brickmake: too many data points to fit in memory.
	The point cloud file cannot be converted to brick map.
T43092	Brickmake could not allocate space for voxel data.
	The point cloud file cannot be converted to brick map.

T43093	Brickmake could not allocate space for octree node.
	The point cloud file cannot be converted to brick map.
T43094	Brickmake could not allocate space for brick.
	The point cloud file cannot be converted to brick map.
T43095	Brickmake could not (re)allocate space for brick and location table.
	The point cloud file cannot be converted to brick map.
T43096	Brickmake could not allocate space for brick and table and location table.
	The point cloud file cannot be converted to brick map.
T43097	Brickmake could not allocate space for octree roots.
	The point cloud file cannot be converted to brick map.
T43099	Brickmake: data size %i too large to fit in memory.
	The point cloud file cannot be converted to brick map.
T43104	Subsurface(): negative albedo.
	Albedo clamped to 0.
T43105	Subsurface(): albedo is larger than 0.999.
	Albedo clamped to 0.999.
T44000	Cannot obtain license - %s
blocked URL	The renderer requires a license to execute properly, but it can not obtain one from a license server. See the "Installation Guide" for information about configuring the license server daemon.
T44001	License warning - %s
blocked URL	The renderer has been configured to require a license in order to execute. The message indicates a change of state with regard to the license server. See the "Installation Guide" for information about configuring the license server daemon.
T44002	License file setting is not set in rendermn.ini - aborting.
blocked URL	The /licensefile setting could not be found in rendermn.ini. Either it is set incorrectly, or rendermn.ini could not be found. Since PRMan will not be able to locate a license server, execution will immediately abort.
T44003	Brick map "%s" could not be opened.
	Brick map file header read error?

U10000	Zip Read Error for %s: %s
	An error occurred while reading the TOC of the named .zip file.

U10001	Zip Read Error for subfile %s!%s: %s
	An error occurred while reading the named subfile of the associated .zip file.
U10009	Zip decompression error for %s/%s: %s
	An error occurred while decompressing a subfile the named .zip file.
U10010	Active Zip files found while writing %s
	Zipwrite found untidy state, cleaning up and proceeding
U10011	Problem closing active subfiles in %s
	Zip writer found untidy state, cleanup failed
U10012	Problem writing zip central dir entry %s.%s
	Zip writer bailing on fatal error.
U10013	Questionable nesting of Zip subfiles encountered %s/%s
	Zip files must be written serially. Nesting is supported but parents should usually be fully buffered.

V01001	AOV using zmax/zmin filter has matte 0, Z output will also ignore matte.
	A arbitrary output variable was specified that uses a combination of "pixel" "zmin/zmax" and "matte" [0]. Due to limitations in the renderer the primary Z output will also ignore Matte directives. Workaround: use "z" in a secondary AOV.
V01002	Visible point buffers: Out of memory.
	Failed to allocate memory for one or more required structures for visible-point resolution.

X00002	Plugin error: %s
	A plugin function reported an error.
X00003	Plugin warning: %s
	A plugin function reported a warning.
X00004	%s
	A plugin function reported info.
X00005	RixInterface is not available or unsupported: id = %d
	A plugin requested an interface that is not available in this context, or not supported by this version of the renderer.
X00006	Could not obtain license for RixSubdivisionSurfaceEvaluation Interface.
	The requested interface was not able to obtain a license, maybe the license count has been exceeded?

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Y01001	Multiple scenes are not supported
	RenderMan only supports a single scene per process.
Y01002	Edit %s called in illegal state
	RenderMan is not in an ediable state.
Y01003	Cannot delete '%s'
	Dag node not recognized by scene.
Y01004	Invalid render command '%s'
	RenderMan does not recognize render command.
Y02001	Ambiguous coordinate system for '%s'
	Scene cannot uniquely identify scoped coordinate system.
Y02002	No renderable camera found
	Scene contains no renderable cameras.
Y02003	Wrong type declaration specified for integer attribute %s.
	An invalid type was used for an integer attribute. It will be ignored.
Y02004	Wrong type declaration specified for integer attribute %s.
	An invalid type was used for an integer attribute. It will be ignored.
Y02005	Wrong type declaration specified for string attribute %s.
	An invalid type was used for a string attribute. It will be ignored.
Y02006	RIB file is not writable: %s
	Cannot write to RIB file path.
Y03001	%s invalid pointer.
	RenderMan does not recongnize scene data.
Y03002	Unknown quadric type '%s' for '%s'
	Unknown quadric type.
Y03003	No "float[6] bound" for Procedural '%s'
	RiProcedural requires bounds.
Y03004	No "string __dsoname" for Procedural '%s'
	DynamicLoad procedural requires valid DSO.

Y03005	No "string filename" for Procedural '%s'
	DelayedReadArchive procedural requires valid filename.
Y03006	No SubdivFunc for Procedural '%s'
	procedural requires subdivision function.
Y03007	No BoundFunc for Procedural '%s'
	RiPocedural2 requires bound function.
Y03008	Bad Ri:uknot for NuPatch '%s'
	NuPatch must contain "float[] Ri:uknots" primvar of length nu + uorder.
Y03009	Bad Ri:vknot for NuPatch '%s'
	NuPatch must contain "float[] Ri:uknots" primvar of length nv + vorder.
Y03010	No P/Pw for NuPatch '%s'
	NuPatch must contain "vertex point P" or "vertex hpoint Pw" primvar.
Y03011	No "string filename" for Procedural '%s'
	RunProgram procedural requires valid filename.
Y03015	Bad Ri:Basis '%s' for Curves '%s'
	Curves basis must be bezier, b-spline, catmull-rom, hermite, or power.
Y03016	Bad Ri:type '%s' for Curves '%s'
	Curves type must be linear or cubic.
Y03017	Bad Ri:wrap '%s' for Curves '%s'
	Curve wrap must be periodic or nonperiodic.
Y03018	No P for Curves '%s'
	Curves must contain "vertex point P" primvar.
Y03019	No Ri:nvertices for Curves '%s'
	Curves must contain "uniform integer Ri:nvertices" primvar.
Y03020	Bad Ri:nleaf of %d for Blobby '%s'
	Blobby Ri:nleaf must be greater than zero.
Y03021	Bad Ri:code for Blobby '%s'
	Blobby must contain Ri:code primvar.

Y03022	No P for Points '%s'
	Points must contain "vertex point P" primvar.
Y03023	No Ri:type for Volume '%s'
	Volume must contain "string Ri:type" primvar.
Y03024	No Ri:Bound for Volume '%s'
	Curves must contain "float[6] Ri:Bound" primvar.
Y03025	No P for Mesh '%s'
	Mesh must contain "vertex point P" primvar.
Y03026	No Ri:nvertices for Mesh '%s'
	Mesh must contain "uniform integer Ri:nvertices" primvar.
Y03027	No Ri:vertices for Mesh '%s'
	Mesh must contain "facevarying integer Ri:vertices" primvar.
Y03028	Failed to create camera for '%s'
	RenderMan was unable to create camera.
Y04001	Failed to create bxdf material
	Failed to create bxdf material
Y04002	Failed to create light and lightfilter material
	Failed to create light and lightfilter material
Y04003	Failed to create displacement material
	Failed to create displacement material

Z10001	Multiple reference instances for master "%s" are not supported; reference instance "%s" will be ignored.
	Only one reference instance can be specified per master. The new reference instance will be ignored.
Z10002	Exceeded top-level BVH capacity, disabling splits rebraiding.
	Splits rebraiding improves raytracing performance at the cost of higher memory utilization. The current implementation of the ray acceleration structure supports up to 2^{31} entries in the top-level BVH and re-braiding was exceeding that capacity, therefore it was disabled.
Z10003	Many instances have invalid bounds, only the first 1000 will be reported.
	Objects in the scene are ill-defined and many appears to be corrupted with invalid bounds. In order to limit the log size only the first 1000 are reported.
Z10004	Instance %s has invalid bounds and it will not render.
	Instances with invalid bounds cannot be raytraced, it is possible that the instance transform is malformed, or that the primitive itself is empty or containing points with infinities or NaNs.

Z10005	Detected displacement shader on curves primitive "%s". Curves do not support displacement.
	Curves do not support displacement. Any displacement shader assigned will be ignored.
Z10006	Instance %s of a group cannot be a geometric area light. This may cause the geometry in the group to disappear.
	Objects inside groups cannot inherit geometric area light properties from instances of the group. Please make geometric arealight the individual objects inside the group.
Z10010	The group %s has been instanced at a nesting depth that is not supported by the renderer. This instance will be ignored.
	A group was instanced at a nesting depth that is not supported by the renderer. The instance will be ignored.
Z10011	The group instance '%s' has been marked for automatic flattening.
	A group was instanced at a nesting depth that is not supported by the renderer. The instance has been marked for automatic flattening.