

Release Notes



Havok Common

Version : 6.6.0 Release

including all development since version 6.5.0 Release

Geometry

Improvements

COM-637	Implemented Ability to remove points from <code>hkFindClosestPositionUtil</code>	6.6.0 Beta
	<code>hkFindClosestPositionUtil::removePoint</code> was added.	

Graphics

Bugs

COM-716	Fixed Can't use display immediate modes with shapes that don't have <code>getWireframeGeometry</code> implemented (spheres, capsules)	6.6.0 Release
	<code>displayGeometry</code> uses the shape's <code>getWireframeGeometry</code> function, however, some shapes (ie spheres and capsules) don't have this function implemented. Additionally, the geometries passed in might actually have triangle/index information passed in, but these are never drawn.	
	You can now use <code>HK_DISPLAY_GEOMETRY</code> or <code>HK_DISPLAY_GEOMETRY_WITH_TRANSFORM</code> with objects that don't have <code>getWireframeGeometry</code> implemented by calling <code>buildGeometry</code> on the display object to generate triangles and indices before using the display macros.	

hkBase

Bugs



COM-424	Fixed	Havok fails to load files from the PLAYSTATION(R)3 HDD Cache	6.6.0 Beta
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The paths are not modified if they begin with SYS_APP_HOME, SYS_HOST_ROOT or SYS_DEV_.*.

COM-751	Fixed	hkPointerMapBase::getSizelnBytesFor() does not match the real size of map for 4 or less number of elements.	6.6.0 Release
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Fixed hkPointerMapBase initial capacity value in constructors, so the size of the map now matches the value returned from hkPointerMapBase::getSizelnBytesFor() for 4 or less number of elements.

New Features

COM-669	Implemented	Simple Aabb tree added.	6.6.0 Beta
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A simple hkAabbTree was added to support volume queries in tools and demos

COM-687	Implemented	Utility functions for finding the "best" element in an array	6.6.0 Beta
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findMinimumIndex, findMaximumIndex, findMinimumIndexAndValue, and findMaximumIndexAndValue were added to hkAlgorithm. See Common/Base/Algorithm/FindIndex/hkFindIndex.h.

Improvements

COM-474	Implemented	Symbol collision for SetThreadName	6.6.0 Beta
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The function has been removed.

Add asserts

COM-658	Implemented	hkArray constructor should check that size is non-negative.	6.6.0 Beta
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hkArray constructor now asserts if the size is negative.

Memory

Improvements

COM-215	Implemented	Fix spelling of Source\Common\Base\Memory\PlatformUtils Renamed to PlatformUtils	6.6.0 Beta
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Documentation Changes

COM-749	Implemented	Comments on alignment restrictions in hkMemory are incorrect. The comments on hkMemory now correctly state that all allocations must be 16-byte aligned.	6.6.0 Release
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Serialization

Bugs

COM-630	Fixed	Tagfile endian swapping is broken The endian swap of floating point data was incorrectly handled. Fixed.	6.6.0 Beta
COM-440	Fixed	hkCompat_hk330r1_hk400b1.cpp includes hkRootLevelContainer.h Fixed versioning the hkRootLevelContainer and hkRootLevelContainerNamedVariant classes from 330r1 to 400b1.	6.6.0 Beta
COM-600	Fixed	Patches version verify does not report class parent changes only. Fixed hkVersionCheckingUtils::verifyClassPatches() to report class parent changes only.	6.6.0 Beta
COM-608	Fixed	hkBinaryPackfileReader::getClassNameRegistry() not always return registry with up to date hkClass. Fixed hkBinaryPackfileReader::getClassNameRegistry() to return up to date class registry.	6.6.0 Beta

COM-649	Fixed	Patch for base class may not apply to all objects in hierarchy. Fixed applying base class patch to all objects of classes in the hierarchy.	6.6.0 Beta
COM-612	Fixed	hkPackfileObjectUpdate may not track locations of a pointer correctly. Fixed hkPackfileObjectUpdate tracking location of pointers.	6.6.0 Beta
COM-619	Fixed	AssetCC1 may fail to convert packfiles with non-virtual objects. Fixed AssetCC1 converting packfiles with non-virtual objects.	6.6.0 Beta
COM-645	Fixed	Large tagfiles may fail to load Loading failed If there were more than 65k objects a given type due to a refcount overflow in hkDataClassImpl.	6.6.0 Beta

New Features

COM-660	Implemented	Add c-string reflection type that automatically handles memory allocations/deallocation. Added c-string reflection type that automatically handles memory allocations/deallocation.	6.6.0 Beta
COM-588	Implemented	Add built-in TYPE_HALF to replace reflected hkHalf. Added support for TYPE_HALF to substitute the pair of reflected class hkHalf and TYPE_STRUCT.	6.6.0 Beta

Interface Change

Improvements

COM-593	Implemented	Loading a packfile object by base class name Base class name can be used to get access to top level virtual object in loaded packfile/tagfile.	6.6.0 Beta
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COM-175	Implemented	Make hkLoader functions virtual.	6.6.0 Beta
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The hkLoader::load() functions are virtual now.

Interface Change

COM-617	Implemented	Switch hkLoader to use hkSerializeUtil	6.6.0 Beta
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Behavior Change Added support for loading tagfiles using hkLoader. hkVersionRegistry is not used by hkLoader and arguments of this type have been removed from the hkLoader::load() functions.

Interface Change

Timers

New Features

COM-591	Implemented	Object-Name-Based Timers	6.6.0 Beta
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A new timer macro, HK_TIMER_BEGIN_OBJECT_NAME (char*) is now available for timers. It allows the use of runtime string for timers. Notice that it requires this string to be "alive" for the duration of the capture (it doesn't copy it).

Visual Debugger

Bugs

COM-702	Fixed	VDB client can crash when loading a corrupt HKM file	6.6.0 Beta
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Changes in the error handler caused error events to crash the client rather than failing gracefully. This has been fixed.

COM-655	Fixed	Visual Debugger can show incorrect shapes when bodies are being added and removed from world	6.6.0 Beta
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This would happen when a body's collidable used the same memory address as a previous collidable. In this case the VDB client would update the wrong display object. This has been fixed.

Improvements

COM-688 Implemented **Visual Debugger uses tagfiles to export scene geometry**

6.6.0 Beta

When exporting selected geometry the Visual Debugger now dumps raw geometry in tag file format.