

# Release Notes



## Havok Animation

### Version : 6.6.0 Release

*including all development since version 6.5.0 Release*

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## Animation Demos

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### Demos

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<b>HKA-1191</b>	Implemented	<b>Dismemberment Demo: Improve Quality</b>	6.6.0 Release
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The dismemberment demo has been polished to include high quality art assets. Demo control has been improved to show extracted motion and removing multiple limbs at the same time.

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<b>HKA-1170</b>	Implemented	<b>Dismemberment demo limb (parts) need additional damping or inertia to prevent endless rolling.</b>	6.6.0 Beta
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Angular damping added to the ragdoll rigid bodies to prevent excessive rolling.

## Animation Runtime

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### Improvements

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<b>HKA-1178</b>	Implemented	<b>Delta and Wavelet Decompression does not take into account the m_offset member when computing DataChunk addresses in SPU decompression</b>	6.6.0 Beta
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The m\_offset member is now properly taken into account in SPU decompression. This issue only affects customers altering the m\_offset member to a non-default value.

## Compression

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### Bugs



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<b>HKA-1162</b> Fixed	<b>hkaSplineCompressedAnimation::evaluateSIMD reads potentially uninitialized memory</b>	6.6.0 Beta
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hkaSplineCompressedAnimation::evaluateSIMD has been removed and replaced with a new implementation which does not have the potential to read uninitialized memory. Three new functions hkaSplineCompressedAnimation::evaluateSimple[1,2,3] have been created to efficiently evaluate spline curves of known degree [1,2,3].

### Interface Change

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<b>HKA-1204</b> Fixed	<b>Differences between floating point math on the SPU and PPU can cause Spline Animation to decompress the wrong time/block</b>	6.6.0 Release
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Spline compression has been updated to use an unambiguous representation for the current time of the animation, eliminating problems due to the different precisions of the PPU and SPU. The hkaAnimation base class has been updated to prevent this problem in any other compression scheme.