Final IK Release Notes

```
Version 1.1 - TBD
   Changes
   FullBodyBipedIK
   <u>VR</u>
   Grounder
   Demos
   Common
   Editor
Version 1.0 - 25.06.2015
   Interaction System
   Demos
   <u>2D</u>
   Finger Rig
   <u>VR</u>
   FullBodyBipedIK
   Common
   <u>Upgrade Guide</u>
Version 0.5 - 24.02.2015
   FullBodyBipedIK
   Interaction System
   <u>OVR</u>
   Documentation
   Common
   <u>Upgrade Guide</u>
Version 0.41 - 22.09.2014
   FullBodyBipedIK
   <u>AimIK</u>
Version 0.4 - 07.08.2014
   <u>AimIK</u>
   <u>FullBodyBipedIK</u>
   Interaction System
   Common
   LimblK
   Grounder
   <u>BipedIK</u>
   FABRIK
   Third Party Support
```

Upgrade Guide

Version 0.3 - 07.04.2014

FullBodyBipedIK

FABRIK

<u>LimbIK</u>

Grounder

Common

Version 0.22 - 13.03.2014

FullBodyBipedIK

<u>AimIK</u>

FABRIKRoot

<u>Upgrade Guide</u>

Version 0.21 - 20.02.2014

Version 0.2 - 19.02.2014

<u>FullBodyBipedIK</u>

LookAtIK

<u>AimIK</u>

Rotation Limits

Common

Documentation

<u>Upgrade Guide</u>

BETA (0.1) - 15.01.2014

Version 1.1 - TBD

Changes

- 1. IK.Disable() is deprecated. Use enabled = false instead.
- 2. Moved AimPoser, Amplifier, BodyTilt, HitReaction, Inertia, OffsetModifier, OffsetPose and Recoil to the RootMotion.FinalIK namespace.
- 3. Converted folder structure to:

```
Main Contents: Assets/Plugins/RootMotion/...
Editor Scripts: Assets/Plugins/Editor/RootMotion/...
```

This will make Final IK available for all compilation passes/languages, speed up compilation times and make it easier for other Asset Store developers to create compatible tools.

FullBodyBipedIK

- 1. FBBIK solver now survives assembly reload and can be updated in editor mode.
- 2. Fixed blending solver weight when using bend goals.
- 3. Added public bool ReferencesError(ref string errorMessage) and public bool ReferencesWarning(ref string warningMessage) so you can check if the FBBIK references are OK from your own scripts.
- 4. Fixed RagdollUtility for Unity 5.2 (worked around a 5.2 Mecanim bug)

VR

- 5. VR demos now check if "Virtual Reality Supported" is enabled in the Player Settings to avoid confusion.
- 6. Renamed OculusSetup to VRSetup and script names containing OVR to VR to get rid of device discrimination.

Grounder

- 7. Fixed a bug with GrounderFBBIK that created problems when updating FBBIK manually in FixedUpdate.
- 8. Fixed a bug with the "Third Person Humanoid" Animator Controller that appeared when jumping up from idle animation.

9. Added Grounder.Reset() that enables you to teleport a grounded character without problems.

Demos

- 1. Fixed joint ranges of the ragdolls in "Mapping To Ragdoll" and "Ragdoll Utility".
- 2. Fixed a bug in MechSpiderLeg.cs that might have set footsteps to wrong height.
- 3. MechSpider.cs "Min Height" parameter works as expected now.

Common

4. Added video tutorial links to the context menu of FullBodyBipedIK, AimIK and InteractionSystem components (others coming).

Editor

1. Reviewed the warning system. Solver setup warnings will be displayed in a warning box in the Inspector, no more "What's wrong?" button logging in the console.

Version 1.0 - 25.06.2015

Interaction System

- 4. Fixed a bug with picking up objects, where they were parented with a random offset.
- 5. When the InteractionObject is destroyed in the middle of interaction, will smoothly reset the interacting effectors to defaults.
- 6. Fixed a bug with the InteractionSystem.speed value, it can now be used without problems when pausing/picking up objects.

Demos

- 1. Restructured the 3rdPersionDummy demo. Made it use a simple upper-body aiming pose instead of 2 wasteful FBBIK passes.
- 2. Restructured CharacterThirdPerson, made the character controllers in the Grounder demo smoother and more responsive.
- 3. Removed CharacterControllerSimpleAim.cs (it is not needed anymore as IK solvers have "Target" properties).
- 4. Added the "Ragdoll Utility" demo scene.
- 5. Improved the "Mapping To Ragdoll" demo scripts to support smoothly blending in and out of the mapping.
- 6. Converted the "Aim Weapon" demo to Mecanim.
- 7. Deleted CarryBoxDemo.cs, just assigned the hand IK targets to the effector target slots.
- 8. Added "CCD IK 2D" and "FABRIK 2D" demo scenes.
- 9. Added the "Finger Rig" demo scene.
- 10. Converted the "Hit Reaction" demo to Mecanim.
- 11. Converted the "Full Body FPS" demo to Mecanim.
- 12. Converted all Viking demos to Humanoid.
- 13. Removed Generic Dummy and his animations and Animator Controllers, all using Humanoid now.
- 14. Cleaned up many unused demo assets, reducing considerably the size of the package and import time.
- 15. Renamed most of the demo assets for better readability and consistency.
- 16. Removed the old and very confusing Legacy-based demo character controllers (CharacterControllerBase.cs, CharacterControllerDefault.cs, CharacterControllerLegacy.cs, CharacterAnimationSimpleLegacy.cs). Replaced them all with SimpleLocomotion.cs that works on Mecanim.

2D

1. Added a "2D" toggle to all Heuristic solvers (CCD, Aim, FABRIK). If toggled, the chains will be solved only on the XY plane, meaning bones will be rotated around the Z axis only.

Finger Rig

1. Created the FingerRig component. Add it to the hand GameObject, fill in the Fingers (or right-click on the component header and have them automatically detected). See the "Finger Rig" demo scene.

VR

1. Updated all FinalIK VR Demos and scripts to Unity5.1, merged the external VR package into the main project.

FullBodyBipedIK

- 1. Auto-detecting bone references for Humanoid characters is more reliable (using Animator.GetBoneTransform()).
- 2. Fixed a bug with FBBIKHeadEffector, that did not disable it's behaviour when the component was deactivated or disabled.
- 3. Fixed ShoulderRotator.cs to account for FBBIK solver weight.
- 4. Fixed a bug with limb mapping, where the right shoulder was dislocated under extreme solver stress.
- 5. FBBIKHeadEffector.cs can now be added in runtime without errors.