

## What's New in Version 2.9

1. Added KinectUserVisualizer demo-scene, to present how to show the user personally in the scene, along with first-person interaction with the available scene objects.
2. Added KinectPoseDetector scene, to demonstrate how to solve the common pose-detection problem.
3. Updated background removal shaders to provide better, blurred edges.
4. Extended 2<sup>nd</sup> background removal demo with one more camera level - a halo behind user's head.
5. Added 3<sup>rd</sup> background removal demo, to show how images, objects and effects can be displayed behind the user's silhouette.
6. Added 'Textured model mesh'-setting of FacetrackingManager, to allow texturing of the face mesh, either from color camera image or from the faceMaterial's own texture mapped to the face rectangle.
7. Updated 4<sup>th</sup> face-tracking demo - the face model now overlays the color camera image.
8. Updated fitting-room demos, to use overlay positions over the color camera image.
9. Added several new settings of AvatarController – to allow finger orientation tracking, color camera overlay of the base joint, and inverted-z movement.
10. Added new setting of KinectManager – 'Wait time before remove', to prevent sporadic user losses.
11. Removed references to OpenCV-libraries. Please from now on, use Direct3D-11 with this package.
12. Version 2.9.5 features Kinect-data-server, package upgrade to Unity 5.3.0 and several important fixes.

## What's New in Version 2.8

1. Added new continuous gesture 'Run', in order to make it easier to detect running in games.
2. Added 'Max left right distance'-setting of KinectManager, to limit user tracking left and right.
3. Set primary user silhouette color to be always yellow, to be easily noticeable on the user-map.
4. Updated 'Compute user map'-setting of KM to be drop-down, providing more refined options.
5. Updated KinectGestures to be extendable gesture manager component, instead of static class.
6. Added 'Ignore Z-Coordinates'-setting of KinectManager, to provide support for 2D-scenes.
7. Added 2<sup>nd</sup> background removal demo, to show how to put 3d objects in front of the cut-out image.
8. Put back 4<sup>th</sup> face-tracking demo, to demonstrate how to use AUs, to emulate facial expressions.
9. Updated user-tracking in KinectManager, to prevent player-index changes of the same user.
10. Updated bone orientations filter, to provide better human limits for bone orientations.
11. Posted separate package for saving Kinect v2 mocap to fbx-model animation.

## What's New in Version 2.7

1. Added body recorder-and-player class and Kinect recorder demo, to allow body data recording.
2. Added 3<sup>rd</sup> overlay demo, to show how the user can draw lines on the screen with his hand.
3. Added color-collider demo to demonstrate AR interaction with scene objects.
4. Added 2<sup>nd</sup> gestures demo, to show how to use wheel and zoom-gestures to manipulate a model.
5. Added portrait-mode option to the fitting-room demos and background-removal demo.
6. Added adjusted-camera-offset setting to the fitting-room demos, to simplify offset minimization.

7. Added lean-left and lean-right gestures to the list of ready-to-use gestures.
8. Added allow-turn-arounds option to fix user tracking, when he turns around (experimental).
9. Updated avatar-controller to support model arm poses, different from the T-pose.
10. Updated user-tracking in avatar controller, to stick to the same user.
11. Updated speech-manager to always use the grammar from the Resources-folder.

## What's New in Version 2.6

1. Added second fitting-room demo scene that overlays a humanoid model over the user's image.
2. Added new face-tracking demo that overlays a hat over the user's head.
3. Added new face-tracking scene that tracks and displays user's face as a texture on screen.
4. Added second avatars-demo for tracking first-person shooters.
5. Added second interaction-demo for grabbing and turning a cube with hands.
6. Added option to show single user in the background-removal manager.
7. Added option to use dynamic grammars and rules in the speech-recognition manager.
8. Added tooltips to all public settings of the Kinect managers, scripts and samples.
9. Added code documentation to all public functions of the K. managers (demos will follow suit).
10. Added OpenNI2-sensor interface for Windows (experimental, Mac-interface will come out soon).
11. Fixed AvatarScaler-issue that scaled arms and legs disproportionately.

## What's New in Version 2.5

1. Utilized shaders in Directx3D-mode to increase performance - 'Use Direct3D 11'-player setting must be enabled. If it is disabled, no shaders are used and the image processing works the same way as before.
2. Added second face-tracking demo, to visualize the Kinect-generated face model over the user's face.
3. Added visual gesture manager for VGB gestures, and a sample VG-listener to the gestures demo.
4. Added 'Auto height angle'-setting to KinectManager, to allow auto-setup of the sensor's H&A.
5. Added 'Move rate'-setting to AvatarController, to allow faster or slower avatar movement.
6. Added 'Offset node'-setting to AvatarController, so avatar can move or rotate relative to another object.
7. Updated avatars in the AvatarsDemo to obey to physics, in means of collisions, gravity, etc.
8. Moved all demo scenes to KinectDemos-folder.

## What's New in Version 2.4

1. Added fitting-room demo scene, to demonstrate how 3d-models can overlay the color camera stream.
2. Added second overlay demo scene that includes overlaying of all skeleton joints and bones.
3. Added multi-scene demo, to demonstrate how the Kinect-related scripts might be reused across the game.
4. Updated background removal demo scene to provide a smoother background removal.

5. Added 'Late update avatars'-option to the KinectManager, to enable AvatarController updates during LateUpdate(). This is needed for integration with Mecanim animations.
6. Updated bone-orientations filter to filter out some unnatural bone orientations.
7. Multiple little updates, fixes and improvements.
8. Upgraded package to Unity 5.0.

## What's New in Version 2.3

1. Added depth-collider demo scene, to demonstrate the mapping of the Kinect space and depth coordinates to Unity world coordinates, and how this can be used for VR collisions.
2. Added simple background removal demo scene. A smoother background removal is in development.
3. Added sensor 'Hint height and angle'-setting to KinectManager, to provide information about the actual height and angle of the sensor (works only when there are users detected).
4. Added 'Gestures debug text'-setting to KinectManager, to make the development of gestures easier.
5. Added detection of four new gestures – LeanLeft, LeanRight, KickLeft and KickRight.
6. Updated detection of the available gestures, to make them more robust and easier to use.
7. Grouped native resources, depending on the supported sensor and used architecture.

## What's New in Version 2.2

1. Added speech recognition manager and speech recognition demo scene.
2. Improved head tracking, wrist/hand tracking and AllowHandRotations-option.
3. Added PointCloudView-demo script to show the Kinect camera view in 3d.
4. Updated GetJointPositionDemo-script to save the joints positions into csv-file.
5. Updated KinectOverlayer-script to mirror the joint rotation along with the position.
6. Improved Cubeman's joint orientation tracking. No more need for Ctrl-object.
7. Improved first run after standalone build. Fixed SharpZipLib-codepage issue.

## What's New in Version 2.1

1. Added face tracking manager and demo scene, working for both Kinect v2 and Kinect v1.
2. Added support for x32 and x64 architectures at run-time.
3. Added AvatarControllerClassic-component to allow manual assignment of bone transforms. Big thanks to Aaron Brooker!
4. Added automatic scan for gesture listeners in the scene.
5. Added option to AvatarController, to have offset relative to the sensor. Big thanks to Claudio Rufa!
6. Improved Zoom-in, Zoom-out, Wheel and Stop gestures. Big thanks to Shamil Bugdabayev!
7. Updated to Kinect-Unity plugin v.1410.

## What's New in Version 2.0

1. Added support for various depth sensors, currently Kinect v2 and Kinect v1.
2. Updated AvatarController to use the Mecanim configured bones. Big thanks to Mikhail Korchun!
3. Added reasonable constraints to the calculated bone orientations.
4. Added left-hand press and right-hand press detection to the InteractionManager.
5. Added function to set the primary user ID.
6. Added multi-source reader option (supported by Kinect v2 only).
7. Added parameter to set the image-map onscreen width as percent of the window width.
8. Updated KinectOverlayDemo to be full screen.

## What's New in Version 1.1

1. Added new Kinect-overlay demo scene – green ball, following user's right hand on a video wall.
2. Added simple GetJointPositionDemo-sample, as a pattern to be used in custom scripts.
3. Added sample colliders to the avatars in KinectAvatarsDemo-scene.
4. Added maxUserDistance-setting to KinectManager, as suggested by Eugene Cone. Thank you!
5. Added sensorAngle-setting to KinectManager, as required by many users.
6. Added PlaymakerKinectActions, utilizing several Kinect v2 features in Playmaker environment.
7. Several updates, improvements and fixes of bugs and issues, reported by package users.