

Sandbox

- **New:** (FBX) Added support for 'pivot' attribute in export info file.
- **New:** (FBX) Updated dialog with static mesh import options.
- **New:** (Material) Option to convert single- to Multi-Material via right-click context menu (CE-4116).
- **Fixed:** (FBX) Some usability fixes for colors, default column widths.
- **Fixed:** (FBX) Changed implementation of QProgressDialog to custom implementation that actually blocks until the operation finishes.
- **Fixed:** (FBX) Remove many modal loops that are incompatible with current Qt usage, causing a crash on exit.
- **Fixed:** (FBX) Updated dialog with static mesh import options.
- **Fixed:** (FBX) No longer enumerate the rootnode when generating the node path name.
- **Fixed:** (FBX) Refactored scene/node access from INode* to IScene* & SNode.
- **Fixed:** (FBX) Update XML + world/local logic for RC.
- **Fixed:** (FBX) FBX origin was double-escaped.
- **Fixed:** Editor crashes during map load if the lighting tool is still open (CE-4139).
- **Fixed:** Several map contents missing when loading a map for second time after saving it (CE-3406).
- **Fixed:** Erasing heightmap also erases material painting (CE-364).
- **Fixed:** Don't attempt to load manifest file if it doesn't exist, or warnings will show in the log (CE-4284).
- **Optimized:** (FBX) Default save location is now inside sys_game_folder/Objects.
- **Optimized:** (FBX) Refactored tree background color to better solution.
- **Optimized:** (FBX) Refactored XML generator for better XML and RC escaping.

Audio

- **New:** (ACB) Added icon for sound banks. Show in connection panel instead of preload icon.
- **New:** (ACB) Added hardcoded defaults when config.xml file is not present.
- **New:** (ACB) Save with Ctrl+S.
- **New:** (ACB) Show all levels in the scope drop-down.
- **New:** (ACB) In the scope menu highlight levels not found in the project.
- **New:** (ACB) Prevent controls with the same name in the same scope.
- **New:** (ACB) Loads default controls when they don't exist in the project.
- **New:** Added AudioAreaAmbience entity for convenient implementation of area based audio ambiences.
- **Fixed:** (ACB) Remove extension when making a preload from a sound bank.
- **Fixed:** (ACB) Prevent controls with the same name when dragging directly from the middleware panel.
- **Fixed:** (ACB) Adding same control to different groups in a preload.
- **Fixed:** (ACB) Typo on the default controls folder name. Use lower case for the levels folder.
- **Fixed:** (ACB) Prevent dragging controls to the root of the tree view.
- **Fixed:** (ACB) Disable drag and drop from the ATL controls panel to the connection list
- **Fixed:** (ACB) Problems with controls getting added inside switches.
- **Fixed:** (ACB) Only alphanumeric characters and no spaces in a controls name.
- **Fixed:** AudioSystem handles blocking-sync-callback type PushRequests properly now.
- **Fixed:** Audio performance counter in the DisplayInfo (CE-4137).
- **Optimized:** (Editor) Removed obsolete audio options from Sandbox.
- **Optimized:** Eased out internal AudioThread to not busy loop.
- **Optimized:** Audio listeners are only informed if their request generally processed, removed event for signaling the audio thread as it proved too expensive.

Engine

- **Fixed:** (FBX) Updated FBX functionality to match dialog, other RC fixes.
- **Fixed:** (FBX) Properly handling Y-up and Z-up information from the scene, instead of ignoring it.
- **Fixed:** (FBX) Handling of non-identity transforms in root nodes.
- **Fixed:** (Steam) Crash when taskID was invalid.
- **Fixed:** (Steam) Guard for toomanytasks errors.
- **Fixed:** (Physics) Some rope collision fixes (line mode).
- **Fixed:** (Physics) CPhysArea.GetStatus now properly forwards to base class. Fixed improper transform in CGeometry::GetRandomPos.
- **Fixed:** (RC) Stopped making incorrect assumptions in ANMSaver.cpp about the order and the values of chunk ids in chunk files (CE-4182).
- **Fixed:** (Action) Timedemo - NULL pointer crash on Loading/Saving if m_pGameSerialize is not initialized.
- **Optimized:** Automatic rope assignment for bones not named "rope..."

Particles

- **Fixed:** More reliable phys area updates; EventPhysAreaChange now merges old and new area bounding boxes; SPhysEnviron event handler now updates area position synchronously, avoiding 1-frame delay in most cases. SPhysEnviron.GetWorldPhysAreas retains existing SArea objects rather than replacing them, to avoid references to obsolete SAreas.
- **Optimized:** Manager.Update optimisation. Removed some obsolete PS3 code. All emitters can now Update in threads. Fixed invalid asserts.

Game

- **Fixed:** Set hud_double_taptime CVar from 0 to 0.25 by default as it's required for gamepad grenade doubletap switching.
- **Fixed:** Set correct (case-sensitive) path for lightning entity particle effect (CE-4159).

- **Fixed:** Don't call profile save every time a server comes in.
- **Fixed:** Spawning a vehicle and entering it via FG causes a crash on exiting game mode (CE-4209).
- **Fixed:** Vehicle system assumes that actors have animated characters (CE-4133).

Assets

Several new assets have been implemented into the build. Feel free to start using them now! There will be further implementation script/code side to make these usable and further changes and more items will come in future updates.

- **New:** Added sniper scope asset.
- **New:** Added assault scope asset.
- **New:** Added knife asset.
- **New:** Added character glasses asset.
- **New:** Added assets for daytime ambience.
- **New:** Added forest/hangar reverb environment.
- **New:** Adding Object and Animations and Libs for new boids.
- **New:** Added environment_listener and environment_sound parameter.
- **New:** Added v_shared_a bank.
- **New:** Added wind_intensity game parameter.
- **New:** Added new metal cable mat and textures.
- **New:** Created soundcaster session for airfield.
- **New:** Animations for the spider boid.
- **New:** Added assets to originals folder for general_ambience.
- **New:** Added Sound layer to Airfield Level. Removed Sound Objects from Airfield Layer and added to Sound Layer.
- **New:** Added forest and airfield reverb auxiliary.
- **New:** Added several archetype examples for Light setups.
- **New:** Added forest reverb and created a shareset workunit for the sdk reverb presets.
- **New:** Added AS_wind_intensity on mountain.
- **New:** Game parameter general_ambience_wind_intensity in ACB.
- **New:** Added v_shared_a, containing shared vehicle media.
- **New:** Added Generic Leaderboard (CE-3527).
- **New:** Lobby can support voice chat between teammembers, or everyone in the lobby (CE-3525).
- **New:** User stats for Steam (CE-4128).
- **New:** Create dialog spinner for waiting times (CE-4178).
- **Fixed:** Issue with Humanoid character not holding weapon correctly by adding 'weapon' bone joint.
- **Fixed:** (UIActions) Re-implement loading screen for loading levels in menu (CE-4184).
- **Fixed:** (UIActions) Disable mistakenly activated scrollbar in leaderboard.
- **Fixed:** (UIActions) Coordinates for setting images in Main UI now are positioned with origin point in 0/0.
- **Fixed:** (UIActions) Added visible attribute to addImage FG node to make image visible once it's loaded (CE-3793).
- **Fixed:** (UIActions) Remove auto search link (CE-4180).
- **Fixed:** (UIActions) Scrollbar is now its own reusable component.
- **Fixed:** Updated Beech tree assets: Fixed LODs. Fixed and simplified beech_bush material, halved SubIDs. Added additional versions hidden in Max file.
- **Fixed:** Forest: Removed Lighthouse visarea/portal setup. Redid lighting setup in Lighthouse. Fixed doors not opening correctly (CE-4167). Removed FG logic related to doors.
- **Optimized:** Deleted Jointed_breakable library and moved two archetypes into Destroyable library.
- **Optimized:** Tweaked attenuation settings on jet. Enabled send to virtual voice on jet.
- **Optimized:** Changed environmental_sound parameter range to 1.
- **Optimized:** Tweaked mass, damage and other various physics settings for physics/destroyable archetype libraries.
- **Optimized:** Renamed to wind_intensity and relinked with gameparameter.
- **Optimized:** Added comments to flowgraph.
- **Optimized:** Tweaked attenuation settings on jet_engine_idle.
- **Optimized:** Tweaked reverb sharesets.
- **Optimized:** (Audio) Renamed tod to time_of_day.
- **Optimized:** Tweaked reverb levels.
- **Optimized:** Enabled use shareset on reverbs / auxiliary reverbs.
- **Optimized:** Enabled game defined auxiliary on footsteps
- **Optimized:** (ActionMaps) Removed unused MP radio commands. Removed commented out use functions. Re-added toggle_explosive/special actions for special weapon selection. Moved quick-throw grenades to player_mp actionmap. Readded zoom_toggle action for scope use. Cleaned out alternative controller maps with invalid setups. Increased version number.
- **Optimized:** Widened crossfade in tail blendcontainer.
- **Optimized:** Created Hangar Ambience Blend Container and Play Event.
- **Optimized:** Enabled random_crow media in l_forest_a. Disabled random_crow media in g_environment_a.
- **Optimized:** Cleaning duplicate warnings, moved shared environment media from levels to g_environment_a, excluded media and data from testsoundbank.
- **Optimized:** Enabled streaming on ambience loops.
- **Optimized:** Changed virtual voice setting to kill voice - was set to continue, so every tail would stack up when firing inside and play when you would enter an outside area.
- **Optimized:** Set up reverb environment for AAEs.
- **Optimized:** Set virtual voice behaviour on actormixers.
- **Optimized:** Renamed general_ambience_wind_intensity to wind_intensity.
- **Optimized:** Used seagull from forest for airfield.
- **Optimized:** Set attenuation for ambiances to 3D.
- **Optimized:** Disabled shadow casting on lighthouse glass submat.
- **Optimized:** Enabled Game Defined Auxiliary Sends.
- **Optimized:** Recreated woodpath LODs. Fixed proxies. Deleted 'pillars_b_0x' cgfs not in Max scene.
- **Optimized:** Changed attenuations on jet_engine_idle.
- **Optimized:** Changed hangar verb volume.

- **Optimized:** Added rtpc in flowgraph to receive tod in wwise.
- **Optimized:** Enabled overwrite g.d. auxillary on cave_psycho_tone.
- **Optimized:** Enabled random_crow_37 in crow_oneshot.
- **Optimized:** Changed game defined aux send level on footsteps.
- **Optimized:** Added AS and AAE for the hangar buildings.
- **Optimized:** Tweaked blend containers.
- **Optimized:** Set room small environment for forest hut.
- **Optimized:** Excluded newly imported environment sounds from g_environment_a to avoid duplicate media.
- **Optimized:** Switched loading screens and minimaps for Forest and Airfield to SF_Image preset (CE-4174).
- **Optimized:** Named audiotrigger spot on jet.
- **Optimized:** Excluded duplicate media now contained in v_shared_a from other vehicle soundbanks.
- **Optimized:** Added rtpc control for general_ambience_ss_wind.
- **Optimized:** Selected added shareset for cave reverb.