

Release Notes

Version 1.3.4 Changes:

- Abilities can be enabled or disabled
- Added an option to specify the layers to ignore when adding to the collision point list
- ShootableWeapon shell can be ejected with a delay
- MeleeWeapon can wait for the end use event
- Exposed target lock to the camera monitor shared fields
- Fixed the ShootableWeapon from continuing to fire if StopUse has been called as a result of the fire event
- Fixed the camera anchor from not being set correctly
- Fixed the joystick from indicating the button was just down when it wasn't
- Fixed button up from not being detected correctly when a joystick is connected
- Added [System.NonSerialized] to private/protected GameObject reference to prevent errors when in debug mode for the inspector
- Fixed the ShootableWeapon from not ending the use animation when out of ammo and the set to semi-auto instant
- UI elements should unsubscribe from events if destroyed
- Prevent the height change ability from starting while swimming
- Fixed the 2.5D fist from using the incorrect layers
- Generic ability will stop movement when starting
- Fixed the crosshairs from being disabled if no center sprite has been specified
- Fixed the pitch from not always being restricted correctly
- Fixed item from not always immediately firing when fire on used event is enabled
- Fixed the cover look rotation from not always being restricted correctly
- Fixed the camera aim state from not updating when switching between items with zoom states
- Fixed case where the ability was still registered for OnAnimatorItemUnequipped even when not active
- Fixed crossbow aim and axe attacks

Version 1.3.3.1 Changes:

- Fixed an edge case which would cause the character to lose its abilities. Take a look at [this post](#) for more information.

Version 1.3.3 Changes:

- Added split screen camera support
- Added a shield with recoil

- Added a smart pivot to the camera
- Added an experimental component copier
- Added a give up curve to the NavMeshAgentBridge
- Added the MagicItemParticle - allows the particle to do damage when it collides versus immediately after the magic item is used
- Added the ability to specify a position for the non-dominant hand using IK
- Added a medium item animation priority
- Added a debug ray visualization option to the ShootableWeapon and ShootableWeaponExtension
- Added an option to MeleeWeapon to only apply the hit to the first object
- Added use, reload, toggle flashlight, and toggle laser sight input names to the Input class instead of Constants
- The project layers can be updated with the new Update Project button in the Start Window
- Allow for auto reload while still aiming
- Added a reload sound delay to the shootable weapon
- Improved the hand IK within the CharacterIK component
- Removed the Collider Curve Data animator parameter - set on the ability instead
- Item initialization restructure
- ShootableWeapon's tracer now uses a LineRenderer instead of TrailRenderer
- Items should use the IgnoreRaycast layer
- Ignore collider improvements
- Cover animation events now use the Third Person Controller event system
- Fixed laser sight from not deactivating properly when holstered
- Custom damage events now take a fourth parameter: the damage originator
- Point Click Handler respects the OnAllowGameplayInput callback
- Fixed CameraController from not resetting the exclusive state
- LookDistance is now on the CameraMonitor/NetworkMonitor
- Fixed extension items from not reloading correctly
- Fixed not being able to use item extensions with a dual wielded item
- Extension Items now use the ExtensionItemUsed event instead of ItemUsed
- Fixed the ItemMonitor from not showing the correct unequip count for two dual wielded primary items
- Fixed MagicItem from not calculating the correct number of hit objects in Unity 5.2+
- RegisterAbilityInput/UnregisterAbilityInput can trigger on button down and up
- UnityVirtualButton correctly unsubscribes from events on scene reload
- Set frictionless material to the default grounded moving material
- Projectiles are now colliders instead of triggers
- Fixed pickup item from not working correctly
- Use a direction to aim instead of a position
- ObjectManager can use a null object
- Fixed the shootable empty clip sound from continuously being played over the network
- **Note: see [this post](#) for instructions on how to update**

Version 1.3.2 Changes:

- Added camera states
- Added the Die ability
- Added the Dodge ability
- Added respawning to the Network demo
- Added the CharacterCollider layer to index 27 – the lower layers must be rechecked
- Items use the CharacterCollider layer
- Top Down and 2.5D can look in the movement direction
- [SerializeField] private is now [SerializeField] protected for easier subclassing
- Health multiplier uses colliders instead of closest humanoid bone
- Improved input handling
- Character Ragdoll is now the Die ability
- MeleeWeapon can now only use hitboxes for hit detection instead of raycasts
- MeleeWeapon can recoil if it hits an object
- Items can be assigned at runtime
- Fixed the swim splash particles from not always playing in the correct position
- Added a lean to the ride ability while moving forward or on a slope
- Increased muzzle flash speed
- Added the Speed Change ability as a default ability when creating the character
- Renamed “Independent Look” to “Local Coop Character” on the RigidbodyCharacter
- **Note: see [this post](#) for instructions on how to update**

Version 1.3.1 Changes:

- Added the option for an item animation to force if root motion is used
- Improved AlignToGround handling
- Set the correct parameters for Network Doug
- Fixed clean controller from not containing an idle jump motion
- Fixed adventure controller from having an incorrect pipe state name
- Fixed VirtualButtons from requiring a singleton UnityInput object
- Fixed AllowGameplayInput from not preventing the character from rotating
- Destructable objects are aware of the originator
- Fixed “Force Standalone Input” from not working when a mobile platform is active
- Fixed Naomi textures from not fading correctly
- Fixed camera fade from not working correctly over the network
- Fixed the server character animations from not being synchronized on the client upon join
- Added Morph 3D integration

Version 1.3 Changes:

- Improved the item animator states – can specify the state for idle, movement, or ability
- Added a Four Legged movement type
- Added Item Extensions
- Added the Magic Item Type
- Added target locking
- Added hit point detection
- Added the ability for the character to be able to stay aligned to the ground
- Allowed for explicit item transitions
- Added a horse (named Blitz) to the clean scene
- Added the ability to fade the character when the camera gets too close
- Added the option to change GameObject layers upon death
- Added a Ride ability
- Added the ability to use a single CusumableItemType for multiple PrimaryItemTypes
- Added regenerative ammo
- Added a tracer option for hitscan bullets
- Added a dialog that will appear on first install asking if you want to update the input manager
- Added the option to wait until the used event occurs before the ShootableWeapon can fire
- Added a new adventure character to the clean scene which starts with a sword and shield
- Added a left and right hand layer
- Set Unity 5.0 to the base version
- Updated the shooter scene to PBR
- The PlayerInput component is no longer a singleton
- Inventory item order can be specified
- Improved item amount inspector
- Improved object pooling on the UNET client
- Reduced the number of required animations with the hand layers
- Removed the need for a separate idle state
- Removed the Item Use Rotation Threshold – use Combat Movement On Aim instead
- Renamed IUsableItem to IUseableItem
- Renamed ItemBaseType to ItemType
- GetDoublePress can work with any button name
- ShootableWeapon can wait for an event to fire
- RigidbodyCharacterController can set the physic material of multiple colliders
- Improved the detection for if the character should stop or step if an object is in the way
- CrosshairsMonitor will hide the sprite if the item has no image
- ShootableWeapon EmptyClip will repeatedly play with an automatic weapon out of ammo
- MeleeWeapon can use a collider to detect if it has collided with another object

- Abilities can optionally ignore the priority if both the active and current abilities allow the priority to be ignored
- Improved character stepping
- A CapsuleCollider can be placed on a child GameObject
- The RPG character in the clean scene will start with two magic items
- PlayerInput.IsDisabledButtonDown is no longer required
- Fixed the ControllerHandler from not respecting the ability order
- Fixed dual wield item from still being equipped when it shouldn't be with a single primary item
- Fixed clients from not receiving the aim event when called from the server
- Deprecated the ItemColliderPositioner

Version 1.2.2 Changes:

- Improved control responsiveness
- Cover polish
- NavMeshAgentBridge can work with off-mesh links
- Character Builder can optionally add the Jump and Fall abilities (on by default)
- Network Doug will reference the correct rocket prefab
- OnDamageDetails event now takes a fourth parameter - the object doing the attacking
- Added TryStopReload to IReloadableItem
- Scheduler.Cancel requires a reference to force the ScheduledEvent be null
- Stepping no longer uses the character's velocity
- Improved handing on rough terrain
- Increased ability inspector robustness
- Fixed JIT errors on WiiU
- Fixed the swimming from not starting when it should
- Fixed off by one spawn selection error
- Fixed the animator monitor from not checking the item's lower body item and movement states
- Fixed the ItemMonitor from not showing the loaded/unloaded text when there is no sprite
- Added integration with the following assets:
 - o Gaia
 - o InControl

Version 1.2.1 Changes:

- Added the Restrict Rotation ability
- Add a CameraController field that allows you to ignore a layer in the obstruction check
- Added a NavMeshBridge component to use with an AI character on Unity's NavMesh
- Fixed the character from going through the ground with a large radius and hilly terrain

- Fixed a race condition with UnityInput
- Fixed the jump ability from not stopping when jumping over a steep slope
- Fixed foot ik from not rotating the foot correct
- Fixed networking race condition which prevented the inventory from loading the items
- Fixed CheckMovement from not using the relative movement when it should
- Fixed controller from not going back into idle state
- Changed the CharacterIK Look Ray red to increase visibility
- Moved OnAnimatorMove to the AnimatorMonitor
- Abilities can be unregistered from the ControllerHandler
- Added integration with the following assets:
 - A* Pathfinding Project
 - Apex Path
- The following integrations have been updated:
 - Behavior Designer
 - Inventory Pro
 - UMA

Version 1.2 Changes:

- Added generic model support
- Added item holstering
- Added the following abilities:
 - Balance
 - Hang
 - Generic
 - Pickup Item
 - Short Climb
 - Quick Movement
- Added integration with the following assets:
 - Cinema Director
 - Inventory Pro
 - PuppetMaster
- Improved the inspector layout of the ability list
- Improved the jump/fall animations
- Improved the cover system – can pop from the center
- Improved dual wielding
- Added a jumping dive roll to the Roll ability
- Added a running vault to the Vault ability
- Added a uniform acceleration to the jump ability (thanks Joxxer)
- Added a splash particle when entering the pool from jumping
- Relocated the files within the Resources directory

- Renamed Ability.InputStopType to Ability.AbilityStopType
- Renamed Ability.InputStartType to Ability.AbilityStartType
- Ability overrides within the RigidbodyCharacterController loop return true instead of false if the RigidbodyCharacterController should continue execution of that method
- Deprecated RigidbodyCharacterController.LowerBodyMainSubstate
- Fixed the mouse from being used in top down mode with a controller connected
- Fixed the rocket launcher from not being able to be fired with a controller
- Fixed race condition with initializing the SharedFields of an item
- Fixed the swim ability from not moving when jumping into the water
- Fixed the katana from rotating the character after an attack on the x axis
- Updated all of the existing integrations

Version 1.1.1 Changes:

- Joined all of the prototype style demo scenes into the clean scene
- Improved the strafe animations
- Added an ImageFader UI component
- Renamed GroundAcceleration to GroundSpeed on the RigidbodyCharacterController
- Renamed AirAcceleration to AirSpeed on the RigidbodyCharacterController
- Respawner.Spawn is now public
- ItemMonitor can specify left or right hand
- Replaced the exposed variable comments with the tooltip attribute
- No root motion should take into account speed changes
- Cover will automatically move between standing and crouching cover when no standing cover exists
- Fixed not being able to vault with an item
- Fixed the touchpad virtual controller from repositioning
- Fixed dual wielding from being confused when switching items
- Fixed the shield from not having its BoxCollider enabled
- Remapped the water sources to prevent import conflicts if the standard assets folder already exists
- Fixed concurrent abilities from not checking if an ability can be started
- Fixed the character from sliding when moving horizontally along a slope
- Prevent the character from being able to pop out when there is a wall in front of the pop position
- Fixed the Swim ability from not starting correctly when jumping into the water
- Fixed Push from incorrectly using root motion

Version 1.1 Changes:

- Added mocap animations (idle, walk, run, strafe, backwards, jump, crouch, crawl – more will be added in the next release)
- Added a clean scene and a new character
- Added the ability to dual wield items
- Added the swim ability
- Added a shield
- Added a left arm and right arm Animator Controller layer
- Added a Double Press ability input start type
- Added a StaticItem component
- Added a DualWieldItemType
- Added a double jump option to the Jump ability
- Added a minimum height that can prevent the fall ability from starting
- Improved the handling of slopes and steps
- Footstep sounds are now handled by triggers instead of animation events
- Improved climbing to be able to vine climb at different angles and is no longer restricted to a BoxCollider
- Aiming is now controlled by the ControllerHandler
- Improved the camera positioning when obstructed by another object
- Simplified the handling of when the ShootableWeapon stops firing
- ItemUsed event uses an int value of 0 to indicate the PrimaryItemType and 1 to indicate the SecondaryItemType. DualWieldItemType uses a value of 2
- Fixed the climb ability from not always mounting in the correct position
- Fixed the controller from using the wrong direction when determining which way to move while in the air
- Fixed the incorrect Use State from playing with a MeleeWeapon
- Fixed melee weapon from not always having the character transform reference
- Fixed the character from not always being able to aim
- Fixed the character from respawning to an idle animation when he has an item
- Fixed SpeedChange from requesting AnimatorController
- Updated the sample scenes for all of the integration assets
- Added integration with the following assets:
 - Final IK
 - UMA

Version 1.0.3 Changes:

- Added a point and click demo
- Many input improvements:
 - Added the Opsive.ThirdPersonController.Input namespace
 - Refactored the input classes
 - Moved button names to a constants file

- Added Rewired integration
- Added Control Freak integration
- Fixed VirtualButton from not using the correct position
- Moved the ID from InteractableTarget into Interactable
- Added climbable object gizmos
- Fixed burst mode from not stopping when the burst limit has been reached
- Stop the item from being used if AllowGameplayInput is disallowed
- Stop the SpeedChange ability when the stamina runs out
- Fixed fall damage from not calculating the peak fall damage
- Fixed the ObjectPool.Destroy function from being called multiple times on the same object on the network
- Fixed auto reload from not always working while on the network
- Fixed the unequipped item from not being able to be used while on the network
- Added a minimum fall height to the fall ability
- Fixed the item from not being able to be used when the mouse button is held down continuously not stopping its aim after an empty clip

Version 1.0.2 Changes:

- Added a RPG and 2.5D character and camera modes
- Added a new ability which will play an animation when the character gets hit
- Added per-object effects (audio, decal, dust, spark)
- Added blood to the shooter and shooter AI demos
- Added a mobile joystick
- Added the ability to drop items upon death
- Added item switching with the scroll wheel
- Added camera zooming with the scroll wheel
- Added constraints to restrict the character's position to a specified area
- Added plyGame integration
- Improved the lower body IK
- Improved the pistol and knife idle/fall animations
- Switched the default camera anchor to be the base of the character
- Climb ability can move relative to the look direction
- Can specify an idle or moving animation state per item
- Added the OnAllowInventoryInput event which allows you to disable inventory input
- Removed Standing Aim Idle and Standing Aim Movement states
- Renamed Standing Idle to Idle and Standing Movement to Movement
- Replaced the shooter run with walk and sprint with run animations
- Fixed Top Down not rotating correct with non-root motion forces
- Fixed the item from not stopping its aim after an empty clip
- Set the correct rocket prefab reference for Network Doug

Version 1.0.1 Changes:

- Improved walking, running, and sprinting animations
- Moved ItemName from the ItemType to the Item component
- Added ShootableWeapon.FireType to specify how to fire (instant, charge and fire, or charge and hold)
- Fixed the character from going to the same spot on a second push for the PushableObject
- Fixed the climb ability from not being able to activate when the character is extremely close
- Speed Change ability will affect horizontal speed as well
- Added Inventory.SetItemCount
- Added a randomness to the Muzzle Flash Fade Speed
- Health.Damage will apply forces to the rigidbody
- Added a reload sound effect
- Changed the shootable and melee weapon sound effects to an array to be able to chosen randomly
- Added an option to destroy objects upon death
- Moved the Objects/Items folder to Items
- CharacterBuilder will ensure the character model is set to humanoid

Version 1.0 Changes:

- Added the adventure scene (requires Unity 5)
- Added the following Items:
 - o Axe
 - o Bow
 - o Crossbow
 - o Dagger
 - o Katana
 - o Slingshot
- Added the following abilities:
 - o Climb
 - Ladder
 - Pipe
 - Vine
 - o Crawl
 - o Ledge Strafe
 - o Push
- Renamed the following abilities:
 - o Crouch to Height Change

- Sprint to Speed Change
- Added a CameraMonitor component – the CameraController component is no longer required
- Added a Scene Setup option within the Start Window
- Simplified the Character and Item Builder windows
- Added an option to not use root motion, used by the Platformer demo
- Each Item can have its own Aim, Use, Reload, Equip, and Unequip state
- Multiple Interactable abilities can be added, specify the target by ID
- Moved the PrimaryItemType UI, IK, and Animator fields to the Item component
- Add the option of having multiple types of Aim and Use States
- Renamed the Animator Controller Vertical Input parameter to Forward Input
- Ability.StartAbility and Ability.StopAbility is no longer virtual – use AbilityStarted and AbilityStopped instead
- Previous Unity networking bugs have been fixed, networking scene requires Unity 5.1.2+
- Improved the Vault ability
- Various bug fixes and other minor improvements

Version 0.90 Changes:

- Non-networked characters can be created with the CharacterBuilder without the NetworkIdentity component from being added
- Added the ENABLE_MULTIPPLAYER platform symbol – must be set for multiplayer to work
- Fixed crouch from not being able to stop while moving
- Fixed the controller from not recognizing that it can step within Unity 5
- Fixed adventure mode from only moving forward when aiming
- Fixed the camera from staying at a static height when the character rolls off of a ledge

Version 0.89 Changes:

- Added support for Unity 5 networking
- Items can be added to the dominant or non-dominant hand
- Added an invincibility time after spawn
- Object builders can reference objects within the project instead of requiring the object to be dragged into the scene
- ThrowableItem no longer needs the throw point - the item can be placed in either hand
- Added max step height/speed to the character controller
- Added a max slope to the character controller
- Added a workaround for getting Unity Remote to work
- Added IDs to all of the ItemTypes
- Added speed multipliers to root motion and the animator

- DecalManager, ObjectPool, and Scheduler will create themselves if not already created (editor only)
- Pickup objects can play a pickup sound
- Crouch will use the Float Curve Data to determine the collider height
- Crouch will not stop if there is an object obstructing the standing position
- Can toggle between Combat and Adventure movement types
- Camera smoothing improvements
- Compatibility with Windows Store
- Renamed Quick Use Item to Secondary Item
- Relocated shooter animation directory
- Stop the character from moving when about to run into a wall
- Fix dive animation length
- Improved the variable reset when the character respawns
- ShootableWeapon's projectile will ignore the character's colliders to prevent that projectile from colliding with the player
- Fixed the Rigidbody jerking after death
- Fixed ShootableWeapon from firing after switching back to the item
- Fixed the character from stopping the jump when running into a wall
- Fixed adventure mode from not being able to shoot
- Fixed a race condition when the item is being switched and readied at the same time
- Fixed a race condition which prevented the character from being able to shoot after picking up a weapon

Version 0.88 Changes:

- Exposed the Animator input dampening speed to the inspector
- Reworked the CameraController character options to allow the camera to follow a dynamically spawned character
- Fixed the jump ability from stopping while the character is moving forward in a wall
- Fixed the knife from not always attacking
- Replaced the BoxCollider with a MeshCollider in the prototype scene to work around Unity 5 not correctly reporting a SphereCast
- Fixed StartAim has no receiver error – replaced the StartAim animation event with ExecuteEventNoUpperTransition
- Fixed the weapon wheel from not being selectable within a web player build

Version 0.87 Changes:

- Use IK for aiming instead of blending the aim animations

- Jumping polish
- Controller ground check polish
- Fixed the interact event from not always firing
- Improved the Character/Item Builder to display an error if the model is a prefab and not within the scene – the Character/Item Builder has to operate on scene objects
- Added VisualEffect to the Ground layer to prevent the character from detecting the ground from a visual effect
- Reset the IK when the character respawns
- Fixed the trail renderer from showing its trail when it changes positions within the object pool
- Initialize the UI Item Monitor when it is enabled
- Improved camera controller character collision detection
- Inventory cleanup
- Fixed the camera from continuing to move when the weapon wheel is opened
- Removed StartAim animation event - replaced with a more generic
ExecuteEventNoUpperTransition

Version 0.86 Changes:

- Added a top down demo
- Switched to using Unity's IK solution
- Added colliders to Items to prevent clipping with walls
- Added an idle Animator state
- Added uGUI support
- Added a sniper rifle
- Restructured the Demo folder
- Custom events can be called when an item does damage
- Added Adventure Creator and PlayMaker integration

Version 0.85 Changes:

- Abilities can prevent other abilities from starting with Ability.CanStartAbility(ability)
 - Added Ability.CanUseItem – allows an item to be reloaded but not used
 - Improved animation layer synching
 - Improved the cover and jumping ability
 - Improved the walking animation
 - Fixed the Character Builder from not adding the Animator Monitor
 - Fixed Always Aim from not aiming
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Version 0.84 Changes:

- New ability system allows for easy ability and animation creation. The following RigidBodyCharacterController features are now abilities:
 - o Jump
 - o Fall
 - o Sprint
 - o Crouch
 - Added the following abilities:
 - o Roll
 - o Vault
 - Added a Vault layer
 - Reworked the Animator controller to go along with the new ability system
 - Removed ID from the PrimaryItemType and added lower and upper states
 - Added the GUI image to the PrimaryItemType and QuickUseItemType
 - Added an option to add IK to the character within the Character Builder
 - Improved the Unity 5 error when the input buttons are not mapped
 - The active abilities will be shown as "Running" within the RigidBodyCharacterController inspector
 - Added an option to the Item Builder to automatically add the ItemType to the Inventory's Default Loadout
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Version 0.83 Changes:

- Added a VisualEffect layer for objects such as the shells. This layer will not collide with the character
 - Reduced the lightmap resolution for a smaller file size
 - Fixed the Interactable component causing a NullReferenceException when the character leaves the trigger
 - The object builders will add the wrapper components in all cases instead of the non-wrapper component
 - Fixed the SpawnSelection component from choosing an array element out of bounds
 - Prevented the empty clip sound from playing if the player tries to shoot while the weapon is being reloaded
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Version 0.82 Changes:

- Added integration with the Behavior Designer Movement Pack
- Character Builder will add default AnimatorMonitor values
- Switched to use non-allocating raycasts

- Fixed not being able to strafe while in cover after popping and getting hit with an external force

Version 0.81 Changes:

- Separated out the character abilities from the RigidBodyCharacterController – cover and interact are now in their own files
- Updated AnimatorMonitor to not have the state transitions hardcoded
- MovingPlatform uses waypoints instead of triggers
- Adding a mapping of the 1-5 keyboard keys to an Item
- Added laser sight and flashlight attachments
- Added an option to delay the deactivation on death within the Health component
- Added an option for the ShootableWeapon to overheat
- Added a HealthPickup
- Individual Items can have an infinite amount of ammo
- Clip sizes can be infinitely large
- Added icons that will appear on the GUI when an ability can be used
- Made more methods virtual
- Added more Health component events
- Smoothed the animation when transition between strafe and run
- Stop an Item use if the Item is empty
- Fixed the character from staying in the jump state when landing on an object above the initial jump point
- Fixed ShootableWeapon from not being able to be fired after quickly firing the weapon many times while not aiming
- Smoothed the cover animations
- Fixed the Inventory from not correctly unequipping the knife
- Animation transition timing improvements
- Moved the Animator controller layers up a level so the base layer is no longer empty

Version 0.8 Changes:

- Lots of animation polish
- Added the ability to punch while unarmed
- Changes to make integration with Behavior Designer easier
- Added a right arm layer to the animator
- Improved cover handling
- Corrected footsteps animation event
- Don't aim when the camera isn't focused (zoomed)