

# Change Log

Check out all the changes between versions as the project progresses. For upcoming features [click here](#).

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## UFE 2.x

[Major Update](#)

[1.0 to 2.0 Conversion instructions](#)

### Version 2.6.0

- All network synchronization issues fixed
- Major refactors all around the code base (renames, intellisense changes, removed redundancies and unused code)
- Larger files split into smaller classes/partial classes
- Reworked connection handlers
- Added ability to test network with AI controlled players
- Animation Mapper improved. Maps are now saved in a separated file and attached to each Move Set.
- Added support for Speed Key Frames on Animation Mapper
- Updated how Random Matches are searched (now uses JoinOrCreateRandomMatch)
- Particle Effects now properly sync up with rollbacks, pauses and replays
- Added new option under Network Connection screen: Region Select
- Added option for the player to change the desired input delay and the use of rollback in the demo
- "You" tag to local player during online games reinstated
- Improved and refactored stance changes
- Updated logo and menu backgrounds
- Refactored UFEScreens and derived classed
- Fixed several issues with menu interfaces while using controllers
- Added ability to select "Character Specific Moves" under Move Editor → Move Links
- Fixed issue with invincible frames would linger when linking multiple moves
- Fixed issue where characters stay crouched after round is over
- Added ability to add custom screens under Global → GUI (now called Custom Interfaces)
- Fixed window menu options and grouped into the correct group
- Removed Lan Options from Global Editor → Network Options (deprecated)
- Added new option to Global Editor → Network Options: Particle Control
- Fixed issue where projectiles would collide with inactive assists
- Added new input manager option: Native Touch Controls (uses a simple open source GUI solution for touch inputs)
- Refactored unique Id. Now its no longer attached to the move name (moves can have repeated names when mapping animations)

Forum Post: <http://www.ufe3d.com/forum/viewtopic.php?id=4305>

## Version 2.5.3

- Added new option under Move Editor → [Projectiles](#): Follow Caster
- Added option “Spin Around Character” when “Follow Character” is toggled under Move Editor → [Projectiles](#)
- Added new move to Mecanim Bot and Suzan: Spinning Orbs (Down + Forward Btn 1/2, cost 2 bars, creates two spinning orbs around character)
- Refactored and fixed issues introduced to Legacy Animation Control (LegacyControl.cs) from previous update
- Fixed issue with deterioration code being applied on the first hit of the combo
- Fixed combo hits so it accounts for hits done to assists
- Fixed issue on Hitbox Editor where the field names would not align with the active frames column
- Refactored debugger text to be an attachable game object under [Global Editor](#)
- Refactored Opponent Override's “Move To Position” option
- Added “Force Grounded” to Opponent Override
- Added option to use resource path instead of character prefab for character preview under Move files and Hitbox Editor
- Fixed issue where using the “Prefab” option under Move Editor → Cinematic Options would not terminate after duration ends
- Changed “Maximum Bounces” value type from Fix64 to int (value reset)
- Added a warning when a move being linked is not listed under the character's move set
- Fixed “Mirror on P2 side” for particles spawned under Move Editor
- Projectile collision and blockable area detection refactored into FluxCapacitor Check Hit segment
- Preview All Hitboxes is now true by default on HitboxScript (Displays both Blockable Area and Collision Mass)
- Fixed multiple blockable area values through out move templates (blockable area must be set at least 1 frame before the hit)
- Fixed issue with Story Mode Demo (TextureConversationBeforeBattleScreen delay was set to 0)

Forum Post: <http://www.ufe3d.com/forum/viewtopic.php?id=4177>

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## Version 2.5.2

- *General*
  - Fixed compatibility issues with Unity 2022.3 or higher
  - Added new Demo 2D Fighter template: Shell\_Mode (loads UFE on a secondary scene)
  - Fixed Pause Menu incorrectly being loaded from the wrong reference. Removed reference from BattleGUI
  - Fixed AlternativeCharacterSelectionScreen and made it default for the 2D Fighter Demo
  - New variables added to Global Editor → Camera Options: Left/Right boundaries
  - Reorganized and renamed demo scene files
- *Network*
  - Fixed conflict issues where room matches were to be found when searching random matches

- Fixed rollback mirror flip issue when characters were afk/idle
- Improved tracking and animation control methods for legacy animations
- Removed all UNet dependencies
- Added new Connection Screen before Network Options. Demos no longer connects to Photon on launch
- RandomMatchScreen renamed to QuickMatchScreen

Forum Post: <http://www.ufe3d.com/forum/viewtopic.php?id=4142>

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## Version 2.5.1

- *General*
  - Fixed Fuzzy AI on WebGL builds
  - Fuzzy API CPU optimization
  - Fixed projectile impact prefab mirror
  - Added new option under Global Editor → Network Options → Sync Test → Desync Action: Disabled
  - Fixed Global Editor → Network Options → Sync Test → Desync Action: Disconnect option
  - Added new option under Global Editor → Debug Options → Replay Tools: Display In Training Mode Only
  - Fixed Disconnections not triggering on both sides
  - Added "Hit Doesn't Kill" to Move Editor → Projectile Options
  - Fixed 2D sprite flip on replays and online rollback

Forum Post: <http://www.ufe3d.com/forum/viewtopic.php?id=3732>

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## Version 2.5.0

- *General*
  - Updated to Unity 2021.3
  - New gameplay type implemented: 3D Arena
  - Challenge Mode Fully Implemented
  - Fixed templates for online menus for PRO and Standard versions
  - Added 2 new outro animations: Round Won and Time Out Lost
  - Fixed ground bounce reset issue when "Force Grounded" is used
  - Fixed Global Editor → Character Rotation Options → Smooth Rotation
  - Added "Display Collision Mass Gizmo" under Global Editor → Debug Options → Hit Boxes
  - Added "Allow Corner Stealing" under Global Editor → Character Rotation
  - Added new option to cancel into a new move when using Move Editor → General → Cancel Move On Landing
  - Fixed issue with same prefab particle effects spawning on the same frame
  - Fixed issue caused by projectiles with "Limit Multicasting"
  - Fixed issue with Standing Up from Crouching while attacking
  - Added "Stick to Character" toggle under Global Editor → Hit Effects
  - Added "Ground Bounce" toggle to Move Editor → Projectiles
  - Fixed "Jump Lock" bug

- Fixed Character Editor → [Head Look](#)
- Added “Mirror on P2 Side” for projectile impact prefabs
- Added “Mirror on P2 Side” to override hit effects
- Added ability to use custom hitboxes on Move Editor → Particle Effects
- Characters can now change ground stances while in block stun (less chance of unintended unblockables)
- Fixed characters being stuck in “preblock” animation if a projectile is destroyed while in blockable area
- Added “block stunned” option to Move Editor → Player Conditions
- Added “Reset Stun Value” to possible Move Editor → Player Conditions (when down, block stunned or stunned)
- Fixed camera issues with 3D gameplay
- Fixed root motion animation issues when not using animation maps on 3D gameplay
- Fixed hit trading issue at certain scenarios with custom hitboxes
- Fixed issue with hurtbox position when disabling Character Rotation Options → Right Side Mirror on 3D gameplay
- Added “Block Hits” Move Editor → Armor Options
- Added Move Editor → Opponent Applied Forces
- Added “Always Face Opponent” Global Editor → Character Rotation Options
- Added new “Hit Info” parameter to the OnHit event
- Added new event: OnGaugeUpdate
- (Source/PRO) Added “Clear animation maps” button under MapRecorder

Forum post: <http://www.ufe3d.com/forum/viewtopic.php?id=3558>

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## Version 2.4.1

- *General*
  - Added new [Bluetooth Addon](#) support
  - Fixed PUN2 importing issues
  - Encapsulated main definitions under UFE3D namespace (less chance of name conflict)

Forum Post: <http://www.ufe3d.com/forum/viewtopic.php?id=2597>

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## Version 2.4.0

- *General*
  - Updated to Unity 2020.2
  - Added support for Photon Unity Networking 2 (PUN2)
  - Added option to override basic moves with move files
  - Core code refactored to accommodate future implementations of Team Mode
  - Fixed crouching interpolation glitches (crouching down and standing up act as “ClampOnce” regardless of WrapMode chosen)
  - Fixed issues with hitbox offset preview under Character Editor
  - Refactored network UI options screens so all connection options are in one screen
  - Network sync testing tools refined and optimized for more precise debugging

- Fixed map recorder delta position issues (when root mode is applied)
  - Fixed animation speed inconsistency after hit stun
  - Fixed map recorder's mecanim animation issue
  - Fixed issue where tapping forward or back during taking off timer would trigger incorrect jump animation
  - Added more filters to plinking conditions
  - Fixed crouch stun animation issue (no longer plays crouching in animation when getting hit)
  - Fixed projectile not recognizing unblockable states
  - Fixed issue with projectile on projectile collision when limited duration is applied
  - Fixed conflict on auto moves and plinking incorrectly overriding buffer
  - Fixed minor UI issues in the templates
  - Fixed issue where pressing to go back to main menu under pause menu triggers story mode
  - Fixed total frame count inconsistency on the Move Editor and debug mode
  - Added new option under Character Editor → Move Sets: Normalize Animation Frames (useful for 2D)
  - Fixed cinematic options under 3D Fighter
  - Added new option for 3D Fighter under Global Editor → Character Rotation Options: Allow Airborne Side Switch
  - Added new option for 3D Fighter under Move Editor → General: Allow Side Switch
  - Added a second 3D Fighter gameplay template (3rd person view)
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## Version 2.3.0

- *General*
  - Updated to Unity 2019.3
  - (Standard+) New gameplay type added: 3D Fighter (Beta)
  - (PRO+) Added ability to record replays (Beta)
  - Demo folders reorganized to accommodate new gameplay option
  - (Standard+) New 3D Fighter template files have been added to the “demos” folder
  - (Runtime) Fixed network desync issues caused by previous updates
  - Compatibility with UFE 1.x files have been removed
  - Deprecated UFE 1.x variables removed, reducing size of asset files
  - Added compacted version of UFE 2.2.1 in a unitypackage file (in case you need to upgrade from 1.x)
  - (Runtime) Fixed VideoIntroScreen template
  - Fixed some editor UI issues caused by Unity 2019.3 update
  - (Source) Enum casting moved to individual files and stored in relative sub-folders
  - (Source) Collision system refactored. New static class created to handle all collision detection: `CollisionManager`
  - Copy/Paste editor functionality now stores the copied selection (instead of removing after paste)
  - (PRO+) Added open source replay tools script for maximum customization
- *Global Editor*
  - (Standard+) New mode option added: Gameplay Type (2D Fighter | 3D Fighter)
  - Debug Mode: Added Input Display options (select in which mode the input display appears)
  - (PRO+) Debug Mode: Added Recording Tools options

- Debug Mode: Start Game Immediately removed. (New options under Deployment Options)
- New section: Deployment Options
- New alternative options added for Camera Options when 3D Fighter mode is selected
- Camera Options: Added "Vertical Follow" option (controls the camera when character jumps)
- Camera Options: Added "Smooth Rotation" toggle
- Round Options: Added "Play intros at same time"
- Hit Effect Options: Added "Sort Layer on Hit" (2D animations only)
- (PRO+) GUI Options: Added Replay Tools UI Template
- (PRO+) Network Options: Added Synchronization Test segment (Set of tools to find desyncs caused by changes in the source code or different compiled versions)
- **Character Editor**
  - (Standard+) New mode option added: Gameplay Type (2D Fighter | 3D Fighter)
  - Physics: Jump forces are now individually controlled and no longer affected by remaining friction force
  - Physics: Added Jump Back Distance
  - Physics: Added Move Sideways Speed (3D Fighter)
  - New section: Custom Controls
  - Move Sets: New basic animation slot: Move Sideways (3D Fighter)
  - Move Sets: New clips added to the crouch state slot: "Crouching" and "Standing Up"
  - (Runtime) Fixed horizontal remaining forces affecting horizontal jump forces
- **Move Editor**
  - (Standard+) New mode option added: Gameplay Type (2D Fighter | 3D Fighter)
  - Animation: Added ability to rotate the character under preview mode
  - Cinematic: Added frame counter under preview mode
  - Chain Moves: Added "Ignore Gauge Requirements" toggle under linked moves
  - New section: Sort Layer (2D Fighter)
  - New section: Lock On (3D Fighter)
  - Added "z" variation for all force or position options when 3D Fighter is selected
  - (PRO+) Fixed inconsistency frame data caused when using cinematics and baked animation maps

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## Version 2.2.1

- Scripts updated to Unity 2019.2
- Fixed issue with speed values on custom hitboxes and basic moves
- Added option to switch between Mecanim's mirror functionality or scale flipping for when a character is on the right side under Character Editor. The same option switches the use of Sprite Renderer' flip to a scale flip technique when using 2D characters
- Added option to use FixedUpdate for input reading (instead of the classic Update) under Global Editor → Advanced Options. Useful if you are having issues with input delay
- Fixed issue with Scenes loaded as stages after Unity 2019 update
- When loading Scenes as stages, you can now use either the [name](#) or the [path](#) of the selected scene
- Fixed issue with incorrect frame values caused by certain instances of Custom Hitbox Editor
- Fixed issue with incorrect active frame values displayed under Move Editor Window
- Fixed issue with UI becoming unresponsive when one of the players disconnects after match is over

- Bluetooth addon updated to a cheaper alternative: [Simple Bluetooth](#)
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## Version 2.2.0

- Scripts updated to Unity 2019.1.3
  - Added support for 2D sprites
  - New editor added: [Custom Hitboxes](#)
  - New character added to the roster: Ellen (2D)
  - New character added to the roster: Suzan (3D - Mecanim Bot's moveset)
  - Fixed priority issues with plinking moves
  - Fixed issue when attempting to connect to a new match right after finishing an online match
  - Fixed after screen options after an online match
  - Added new GUI screen: Online Mode After Battle Screen
  - Fixed issue with changing the frames per seconds of your project to values different than 60
  - Added new option under Global Editor → Advanced Options → Auto Save UFE Assets
  - Added new option under Move Editor → General → Execution Cooldown
  - Fixed on-screen debug font size when using with "Start Game Immediately"
  - Fixed issue with custom stage position under Global Editor → Stages
  - Fixed issue with stage scene not properly changing when in Story Mode
  - Added new overload for UFE.SpawnGameObject (takes both frame count and seconds)
  - (Source) Core files moved under Script folder
  - (Source) All subclasses under GlobalInfo, MoveInfo and CharacterInfo moved to independent files
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## Version 2.1.1

- Scripts updated to Unity 2018.3
- Stages can now be loaded as individual scenes
- Added ability to record individual animation maps on the Animation Map Recorder
- Added option to change Hitbox colors under Global Editor → Debug Info
- Added new option under Character Editor Basic Moves → Down Clips: "Loop Down Clip"
- Added new variable under Global → Round Options: After Battle Menu Delay
- Removed UNet libraries from main scripts folder. UNet libraries are now inside a unity package under UFE\Scripts\ThirdParty
- (Source) Moved core script files from UFE\Scripts to UFE\Core due to a new assembly process
- More improvements done to plinking and move execution priority
- Fixed issue with move's auto-rotation option. It now triggers -before- the frame window value
- Fixed issue with Animation Recorder recording blending values on Mecanim animations
- Fixed issue with a few stand up animations not being properly automatically set
- Fixed issue with particle effects not working on 'outro' moves
- Fixed editor layout issue caused by Unity 2018.3 update
- (Pro/Source) Fixed issue with animation recorder and root motion caused by Unity 2018.3 update
- Fixed issue with plinking overriding certain moves when executed in a short interval
- Fixed issue with activating pull-in while in the corner (commonly used with opponent override)



## Version 2.1.0

- (*Standard+*) Character Assists: Summon a character any moment in battle to cast a move. Character can be hit along with caster as well as hit with caster to create even larger combos. Multiple characters can be summoned at once, and even do cinematic moves. This feature will receive several expansions in the upcoming months and is the predecessor to tag team functionality.
- (*Standard+*) Ethan joins the fight!
- Multi-gauge support: You can have as many power gauges you like. You can also decide which frame should the “meter gain on cast” and gauge drain should start.
- Input Viewer now supports diagonal inputs.
- Improved visuals to some of the Character Editor options.
- Expanded root motion options under Move Editor → Animations. You can now lock individual axis during an animation.
- Added a new option to Projectiles: Limit Multicasting. You can now limit how many active projectiles are on screen at the time.
- Added new option to Inputs: Force Axis Precision. Toggle it to discriminate diagonals when attempting a move sequence.
- Ability to add your own custom Input Manager class. Usage example can be found under UFE\Engine\Scripts\Input\GUIControlsInterface.cs. Use it by adding the component to UFE Manager (located under the hierarchy) and selecting Custom Class under [Input Options](#).
- Fixed issues with the disconnection screen after an online match.
- Fixed issues with Round Options > Reset Position.
- Fixed issue with throws when inverting rotation.
- Fixed issue with time over when it should be a draw.
- Fixed issue so moves can be set without animations in it.
- Fixed collision detection with rectangles when opponent was facing the wrong direction.
- Fixed issue with sticky particles initial position.

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## Version 2.0.3

- Updated to Unity 2018.2.12
- Move sequence and execution system reviewed and optimized
- Increased amount of possible custom animations for Hit Reactions (from 3 to 9)
- Added new option to Move → [Projectiles](#): Destroy On Camera Bounds
- Added new option to Move → [Projectiles](#): Apply Gravity (usage example under Robot Kyle's fireballs)
- Some refactors and reviews done on core scripts to allow for the new upcoming feature: Character Assist
- Fixed API Connector for the Bluetooth Addon
- Fixed issue when leaving the game through the menu causing the game to continue running on the background
- Added updates to Rewired system and support for second player controller
- New option under [Global -> Advanced](#): Lock Z Axis. If toggled, once a move stop playing the character will return to the locked 2D axis.



- Added option to lock specific axis if root motion is applied (both basic and special moves)
  - Changed how wallbounce distance works when bouncing off camera. To adjust the new value, use the new option under [Hit -> Stage Reaction](#): Camera Edge Offset
  - (Source Only) New move added to Ethan: Pressing Btn 1 + 2 makes all his attacks hit twice for a limited time (full gauge)
  - Added support for Projectile and Physical invulnerable hurt boxes (Allows for specific hitboxes to be immune to projectiles or physical attacks)
  - Fixed issue with rotation after specific moves switches character directions
  - Fixed issue with incorrect delta displacement values when using move orientation toggles with animation maps
  - Fixed some issues with UFE.timeScale and game speed manipulation
  - Fixed issue with timer not going down
  - Fixed description for languages → draw
  - Several reviews done to the template files
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## Version 2.0.2

- Updated to Unity 2018.2.8
  - Added support for trade hits and double K.O.
  - Added Apply Different Block Force to both regular hits and projectiles
  - Fixed issue with animation root motion and time manipulation options
  - Fixed issue with 'continuous hit' and game speed manipulation
  - Fixed UFE Input Setup. Now its located under Window → UFE → Project Settings
  - Added new option under MapRecorder: Bake Game Speed (Toggle to record the frames based on the game speed value set under UFE → Advanced Options → Game Speed)
  - Added individual shake density values for camera and character under Global → hit effects and Move Editor → override hit effects
  - Several reviews done to the template files
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## Version 2.0.1

- *General*
  - Updated to Unity 2018.2.5
  - UFE 2 now backwards compatible with Unity 2017+ (Source only)
  - Fixed issue with preloader not loading all possible effects (no more initial load hiccup)
  - Added option to disable Network options completely
  - Fixed rare collision issue causing different shapes to not be correctly detected
  - Added Apply Different Air Force, Reset Horizontal Force and Reset Vertical Force to [projectiles](#)
- *Templates*
  - New character: Ethan (Source only)
  - Fixed issue with story mode missing boss file
  - All character prefabs and movesets moved to the resource folder
  - Removed fade-out from Loading Screen (making 'loading...' visible during actual loading)
  - Projectiles now have controlled force in different states

## Version 2.0.0

- *General*
    - Updated to Unity 2018.2
    - Removed deprecated network libraries
    - All files reorganized into better folder structures
    - No more warnings: Code and templates cleaned and refactored
    - Code is now deterministic and supports [rollback](#) input
    - UFE now supports UNet and [Photon](#) as Network services
  - [Global Editor](#)
    - Added new section: [Challenge Mode](#) (WIP)
    - Added new network options under [Debug Options](#)
    - New option added to Bounce and Hit Effects: *Stick to Character*
    - New option added to Hit Effects: *Mirror on P2 Side*
    - [Network Options](#) vastly expanded
  - [Character Editor](#)
    - [Character prefabs](#) can now be loaded from the *Resource* folder
    - New section added: Custom Controls (WIP)
    - [Movesets](#) (stances) can now be loaded from the *Resource* folder
  - [Move Editor](#)
    - Added support for [diagonal inputs](#)
    - Added support for [alternative inputs](#)
    - Fixed issue where a character being hit (reset force on) while jumping would retain some of its momentum
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## UFE 1.x

[Click here](#) to view the full development history.

### Version 1.8.6

- Updated to Unity 2018
  - Fixed the 1 frame disparity between the values in the [move editor](#) and gameplay
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### Version 1.8.5

- Updated to Unity 2017.3
- Fixed Input issues caused by version 1.8.4
- js files removed from project so it complies with the new [Unity's guidelines](#)
- Renamed Gradient.cs so it doesn't conflict with similar third party scripts

## Version 1.8.4

- Updated to Unity 2017.2
  - Added support for [Rewired](#) (custom input manager)
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## Version 1.8.3

- *General*
  - Updated to Unity 2017
  - Added Custom value option to every Size Enum Field (Continuous Hit, Bounce Forces, Deterioration values, etc.)
- [Global Editor](#)
  - Added *Motion Sensor* to [Camera Options](#)
  - Added effect position offset to all [Bounce options](#)
  - Added *Allow Move Canceling* to [Block Options](#)
- [Character Editor](#)
  - Added [Body Part Visibility Change](#) to [Basic Moves](#)
  - Added new option to [Body Part Visibility Change](#): *Save as default*
- [Move Editor](#)
  - Fixed issue with [Animation Speed Keyframes](#) freezing the Editor
  - Added *Apply Different Air Force* to [Hit -> Force Options -> Self](#)
  - Added *Override On Air Hit Only* under [Hit -> Override Events -> Override Hit Animation](#)

## Older Versions

[Click here.](#)

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## How to update your UFE build

### Remember to backup your project before you proceed!

Keep a backup of your configuration files at all times!

### Download new package:

- [Asset Store](#): Under Unity, click on Window → Package Manager. Find your UFE version and click “download”, then “import”. If you are seeing errors or file conflicts that means some files might have changed. In this case, **delete** the original UFE folder first.
- [Payhip](#): Use the **same link** that was provided when you first purchased the product to download this update. If you run into issues send me a [private message](#) with the e-mail used in the purchase so I can validate it and help you.

If you prefer to manually update your files, follow these procedures:

### Update (Entire Project):

- Close Unity.
- **Replace**<sup>1)</sup> all files under <Project Folder>\Assets\UFE\ with the ones inside the package.
- Follow the [Project Settings update instructions](#) if needed.

### Update (Scripts Only):

- Close Unity.
- All versions: Under <Project Folder>\Assets\ **remove**<sup>2)</sup> all content from the folder UFE\Engine and replace it with the new version of UFE. If you made modifications to specific files, make sure you use a [compare software](#) to analyze the changes and move any additional files outside the scope.
- Follow the [Project Settings update instructions](#) if needed.

### Update (Global, Character and Move Templates):

- Characters & Moves: **Replace**<sup>3)</sup> everything under .\UFE\Demos\\_2DFighter and .\UFE\Demos\\_3DFighter with the ones inside the package.
- Entire Demo: **Replace**<sup>4)</sup> the entire .\UFE\Demos\ folder with the new version from UFE package.
- If you are replacing files individually, make sure you also copy dependencies (Resources and Shared\_Assets)



## Video

If you are updating from **UFE 1** to **UFE 2**, follow [these instructions](#) after importing your project.

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[< Back to Universal Fighting Engine - Introduction](#)

<sup>1)</sup> , <sup>3)</sup> , <sup>4)</sup>

DELETE the old folder, don't just move the new files over

<sup>2)</sup>

^ I can't stress this enough

From:

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Permanent link:

<http://www.ufe3d.com/doku.php/changelog?rev=1704347902>

Last update: **2024/01/04 00:58**

