



FOUNDERS EDITION / DEVELOPER EARLY ACCESS

Your creator workspace.

The developer guide.

Install the Studio. Explore identities. Work with source assets.
A practical starting point for Unreal Engine 5.8 creators.

WINDOWS + LINUX CORE / WINDOWS CREATORS LAB

Linux Lab: experimental source add-on. Manual clothing preparation required.



01 / START HERE

A creative foundation for developers

Black Hole AI Studio + AI Creators Lab | Developer Early Access | September 2026

Our goal is to make creator development easier: browse identities, inspect source assets, and continue in Unreal's native editing tools. This is a developer package, not a finished one-click avatar dressing application.

You should be comfortable installing Unreal plugins, navigating the Content Browser, managing project folders and backups, and following import steps. Clothing conversion also requires 3D mesh, skeleton and skin-weight skills in a DCC tool such as Blender.

Windows: Studio core installer plus locally tested Creators Lab Win64 plugin and source. Linux: existing Studio core archive plus experimental Creators Lab source; the latest Lab has not been compiled or graphically tested on Linux.

Unreal Engine 5.8, Epic MetaHuman tools and optional preset content are installed separately. No Unreal Engine distribution is included. Use the supplied EULA and the separate terms for your dependencies.

No finished dress demo is included or advertised. Source packs download separately; internet access and disk space are required.



02 / WINDOWS SETUP

Install the core, then add the Lab

1. Extract the Windows ZIP into a normal local folder. Run BlackHoleAIStudioSetup-0.1.0-rc1.exe. Follow its included CORE-README.txt for engine detection and prerequisites.
2. Close Unreal. Copy the installed Studio folder to a writable development folder of your choice. The default core installation is %LOCALAPPDATA%/Programs/BlackHoleAIStudio. Work on the copy so the original installer integrity manifest stays intact.
3. Double-click Install-CreatorsLab.cmd in the extracted Windows download. Choose the .uproject in your working copy. The helper installs and enables the Lab and backs up the project descriptor. Close that project in Unreal before running setup.
4. Open the selected project with Unreal Engine 5.8. The Lab enables its required plugin dependencies. Install Epic optional MetaHuman preset content if identities are missing. Standalone buyers use their own project; they do not need the Studio core installer.
5. If Unreal reports incompatible modules, rebuild the included plugin source for your exact engine build with Unreal Build Tool and the required C++ toolchain. Win64 binaries match our local engine build; 5.8 alone does not guarantee binary compatibility.
6. Launch your copied project with -BHIdentityLabOpen after the quoted project path. This opens the maximized main editor and floating Lab with Orlando selected. You can also open the Lab from Tools. Use your own engine and project paths.

Example shortcut target: UnrealEditor.exe "D:/MyStudio/Black Hole AI Studio.uproject"
-BHIdentityLabOpen

Optional branding: copy Branding/EdSplash.png into the working project Content/Splash folder, backing up an existing file first. This changes the initial splash only.



03 / LINUX SETUP

Core available; new Lab is experimental

1. Extract the Linux ZIP, then extract BlackHoleAIStudio-Linux-0.1.0-rc1.tar.gz. In that extracted folder run `bash install.sh`. Python 3 is needed for integrity checks.
2. Install Unreal Engine 5.8 for Linux separately. Configure `UNREAL_ENGINE_ROOT` to your engine directory, then run `~/local/bin/black-hole-ai-studio`. Read `CORE-README.txt` for required plugins and alternate engine configuration.
3. The existing core has recorded native Linux project-load acceptance. That does not validate the new Creators Lab or every graphical desktop/GPU configuration. The current source add-on is experimental and is not a precompiled Linux plugin.
4. For the Lab, copy the installed Studio project to a separate writable development folder. Extract `BlackHoleIdentityLab-Source.zip` and place the plugin in that copy's Plugins folder.
5. Build using your Linux Unreal toolchain with all required MetaHuman editor and GeometryScripting modules available. Resolve compilation or platform compatibility issues before enabling the add-on. If you need a ready-tested Lab, use the Windows build instead.
6. Launch the copied project through `Engine/Binaries/Linux/UnrealEditor` with the quoted project path and `-BHIdentityLabOpen` only after a successful build.

Vault helper scripts supplied here are Windows PowerShell scripts. Linux users can download source ZIPs directly from the URLs in `Starter-Vault/starter-vault/manifest.json` and extract them manually. Automatic Linux vault preparation is not included.



04 / EVERYDAY WORKFLOW

Choose an identity and continue in 3D

1. Open AI Creators Lab. The identity library uses Epic presets installed on your machine. The add-on includes 29 portrait overrides; these are still images, not live animated viewports.
2. Click an identity tile to update the large preview. Use the search and library categories to browse. Orlando is selected on the normal automatic startup.
3. Click Preview / Edit to continue in Epic's native MetaHuman Character editor. The handoff creates or uses a working identity rather than editing the original Epic preset. Save your work in your project.
4. Use the native viewport to inspect the character and its toolbar to choose face or body framing. Animation requires a suitable rig; an unriggerd character may show playback disabled.
5. The Lab's Hair / Outfit / Accessories / Room selector previews source items. Selecting a source does not import it, fit it, or put it on the avatar.
6. Save before closing Unreal. Keep backups of your working project, especially before rebuilding plugins, importing assets or updating the package.

Known boundaries: no live 3D center inside the Lab, no universal automatic clothing fitting, no automatic conversion of raw source clothes into MetaHuman wardrobe items. Additional navigation labels should not be treated as a promise of completed generation or publishing services.



05 / SOURCE CLOTHING

Download and locate your packs

Windows: open PowerShell in the extracted Starter-Vault folder. Run the following three commands, using the same folder for every -VaultRoot argument:

```
./scripts/fetch-starter-vault.ps1 -VaultRoot "D:/CreatorVault"
```

```
./scripts/prepare-starter-vault.ps1 -VaultRoot "D:/CreatorVault"
```

```
./scripts/build-starter-vault-previews.ps1 -VaultRoot "D:/CreatorVault"
```

If script execution is restricted, review the scripts and follow your computer's normal PowerShell policy. The download helper reports per-pack failures; check its output and retry missing packs.

Raw downloads: CreatorVault/raw/makehuman-cc0. Expanded files: CreatorVault/expanded/makehuman-cc0. Dresses are under dress01; also look for shirts01, pants01, suits01, shoes01, hair01 and jewelry01.

To connect the Lab, create Saved/BlackHoleStarterVault/vault-root.txt inside your working project. Put the absolute path to CreatorVault on its only line. Restart the Lab after generating metadata and previews.

Metadata is written to CreatorVault/metadata/makehuman-source-assets.csv. Preview images are under CreatorVault/previews. Missing metadata means an empty source list; missing thumbnails do not mean that clothing has been fitted.

The included import-starter-vault.ps1 helper imports HDRI environments only. It is not a wearable clothing importer. Raw packs and downloaded preview images are not inside this sale ZIP.



06 / IMPORTING CLOTHES

From a source file to a wearable asset

First identify the asset type. A .mhclo file is a MakeHuman definition, not an Unreal garment. An OBJ is a mesh without skin weights. An FBX may contain a skeleton, but that does not prove it matches your MetaHuman.

For a source mesh: open it and a compatible body reference in your 3D tool. Correct scale and orientation, fit it around the body, assign materials, and bind/transfer skin weights to the intended skeleton. Check the mesh while posing, then export a compatible skeletal mesh such as FBX.

In Unreal: use the Content Browser Import command to bring the exported mesh into your own project folder. Check the import options, skeleton, materials and scale. Open the imported skeletal mesh and verify deformation before adding it to a wardrobe.

In the MetaHuman Character editor, open Hair & Clothing. Use the category matching your prepared asset: skeletal clothing belongs in Skeletal Clothing; an Outfit asset belongs in Outfit Clothing. Use the section's compatible-asset drop area to register supported assets.

Epic wardrobe workflows may require a MetaHumanWardrobeItem and the appropriate pipeline/principal asset. A raw OBJ or arbitrary static mesh cannot simply be clicked onto the character. Exact preparation depends on your asset type and installed engine build.

Once a supported item is registered, select it and use the available Wear control or the section's supported activation action. Remove the default garment if it intersects. Check the full body from multiple angles before saving.

If the section is empty, confirm the asset is prepared, supported by that section, and registered in its watched folder or presets. The source browser does not populate Epic's wearable library automatically.

This is a manual development workflow, not a tested guarantee for every pack. For engine-specific wardrobe authoring, consult the documentation shipped with your installed MetaHuman plugin.



07 / TROUBLESHOOTING

What to check before requesting help

Lab missing: confirm the plugin is in the working project Plugins directory, enabled, and compiled for your engine. Start with `-BHIdentityLabOpen` or use Tools.

No identities: verify MetaHumanCharacter and its optional preset content are installed. Portrait images alone do not contain the underlying character assets.

Slow first launch: allow Unreal asset discovery, shader compilation and Python initialization to finish. Later starts may be faster. The Lab waits for its dependencies; no fixed startup-time guarantee is offered.

Empty clothes list: check downloads, preparation output, the vault-root.txt marker and metadata CSV. Clothes visible in the source browser are still not automatically wearable.

White garment or body showing through: inspect fit, materials, weights and default garment visibility. This package does not solve body clipping or cloth simulation automatically.

Before an update: back up the project, close Unreal, and replace only the intended add-on. Never overwrite your saved characters with a fresh installer payload.

Support: info@blackholecapital.xyz. Include OS, exact Unreal build, package filename, steps to reproduce, and relevant Saved/Logs output. Remove passwords, tokens and unrelated personal data before sharing logs.

Release scope: Studio core 0.1.0-rc1; Creators Lab 0.2.0-preview1. Windows core installed and verified in an isolated local folder; Lab initialized in that project and a fresh standalone project. This shares the installed engine and OS, so it is not a clean-machine certification. Latest Linux Lab runtime unvalidated. Future updates are separate from the features delivered today.