Unreal Folder Structure

content

The unreal content browser root directory

assets

The Assets folder contains a libray of individual objects for reuse in multiple environments. For instance this is where you will find the characters for your project or set dressing pieces. These folders are all either modular pieces to use anywhere in the project or full sets legal (cleaned up in a specific way) to ship to the VFX house on a large virtual production project when required.

arch

Contains all building/architecture pieces. Each sub folder contains 1 group of assets such as fountain01 or the legal version of the set SciFiHallway6. Similar to what would be set construction drawings or locations

{category}

There are numerous folders inside the architecture folder for organization: setSpecific, walls, supports, ceilings, floors, doors, etc. per show requirements (try to keep as few broad categories as possible)

SM_{assetSource/envName}_{AssetName}

SM_{assetSource}_{AssetName}	Any number of associated static meshes for the asset
MI_{assetSource}_{AssetName}_{MaterialName}	Any number of associated material instances for the asset
TX_{assetSource}_{AssetName}_{MaterialName}_{texture suffix}	Any number of associated textures for the asset
ASB_{assetSource}_{AssetName}	An assembly of the imported files (optional)

audio

Contains audio files for use on stage or in editorial. Structure TBD/up to the show

backdrops

Contains meshes and materials for digital backdrops for sets. For example or SM_bkcom_newYork18thAve which might include several variations like time of day

MI_{assetSource}_{AssetName}

MI_{assetSource}_{AssetName}_{MaterialName}	Any number of associated material instances for the asset
TX_{assetSource}_{AssetName}_{MaterialName}_{texture suffix}	Any number of associated textures for the asset

cameras

Contains 3d models for camera bodies, lenses and csv files with lens information for use with the cinecamera storyboards

CAM_{brand}_{modelName}

SM_{brand}_{modelName}_body	A mesh of the camera body with the origin at the nodal point
SM_{brand}_{modelName}_lns-{lensName}	Any number of meshes for different camera lenses with the origin at the nodal point
SM_{brand}_{camName}_acc-{accessoryName}	Any number of meshes of specific camera accessories. with the origin at the nodal point
CAM_{brand}_{modelName}	A data table containing the camera/lens information (.CSV file)

character

Contains 3d models of rigged characters, baked poses of those characters and any generic animation assets for the characters

SK_{source}_{characterName}

SK_{source}_{characterName}	any number of skeletal meshes for the character. Add variation text after the characterName
SKA_{source}_{characterName}_{animationName}	any number of generic animation assets for the character such as poses/walk cycles. Not for sequences
SKP_{source}_{characterName}_{physicsAssetVar}	any number of associated physics assets for the character
SKS_{source}_{characterName}	a custom skeleton if required. If not using a custom skeleton try to use the fewest # of skeletons possible
ABP_{source}_{characterName}_{blueprintName}	any number of animation blueprints for the character (several posers and mocap inputs use these)
SM_{source}_{characterName}-{pose}	any number of static meshs of the character in predetermined poses
MI_{source}_{characterName}_{materialName}	any number of materials associated with this character
TX_{source}_{characterName}_{materialName}_{tex suffix}	any number of unique textures associated with this character
AC_{source}_{characterName}_{compositeName}	any number of animation composite assets
AM_{source}_{characterName}_{montageName}	any number of animation montage assets
BS_{source}_{characterName}_{blendSpaceName}	any number of blend space assets
MT_{source}_{characterName}_{morphTargetName}	any number of morph target assets
PS_{source}_{characterName}_{poseName}	any number of pose assets

common

generic skeletons and animations for use with multiple characters. Especially useful as a library for background characters

see contents of other character folder above

decals

Contains place-able 2d projected images called decals. Useful for adding detail such as signage/grime to a scene without extra modelling or texturing.

{category}

There are numerous folders inside the decals folder for organization: fingerprints, footsteps, imperfections, leaking, naturalDebris, buildingFacade, scratches, smear, streetDetails, tape, etc. per show

DMI_{source}_{decalName}

DMI_{source}_{decalName}	the decal material itself. Drag this into the scene to apply the decal
TX_{source}_{decalName}_{textureSuffix}	any number of unique textures associated with the decal

***Any time you see {text}, the included text should be written in camelCase with no spaces or special characters outside of the dash -**

Unreal Folder Structure

content

assets (cont.)

dressing

objects, usually man-made that add detail to a set and are not part of the greens category. Similar to the idea of traditional set decoration. If a dressing piece is rigged for animation, that variant would go into the props folder

{category}

There are numerous folders inside the dressing folder for organization:
furniture, practicals, debris, papers, etc. per show
(try to keep as few broad categories as possible)

SM_{source}_{meshName}

BP_{sourceName}_{importName}-{variation}	Any blueprint assemblies of the imported files, such as cabinets with doors that open
ASB_{sourceName}_{importName}	An assembly of the imported files (optional)
SM_{source}_{modelName}	any number of associated meshes
MI_{source}_{modelName}_{matName}	any number of associated material instances
TX_{source}_{modelName}_{matName}_{textureSuffix}	any number of unique associated textures

effects

Special effects for the project such as fire. Usually in the form of particle effects

{category}

There are numerous folders inside the effects folder for organization:
dust, fire, smoke, fog, explosions, etc. per show
(try to keep as few broad categories as possible)

SM_{source}_{effectName}

BP_{sourceName}_{effectName}-{variation}	any number of blueprints that make use of this effect
PFX_{source}_{effectName}	any number of particle effects and variations
MI_{source}_{effectName}_{matName}	any number of materials required by the effect
TX_{source}_{effectName}_{matName}_{textureSuffix}	any number of unique textures required by the effect

gaffGrip

general film equipment for use behind the scenes. Does not include lighting fixtures, see lights for those specifics

{category}

applebox, tripod, crane, dolly, telehandler, scaffold, cstand, ladder, fabric (bluescreens/rp/greenscreen/blacks etc), power, etc. per show
(try to keep as few broad categories as possible)

SM_{source/brand}_{name} or SK_{source/brand}_{name}

BP_{sourceName}_{importName}-{variation}	Any blueprint assemblies of the imported files, such as cabinets with doors that open
ASB_{sourceName}_{importName}	An assembly of the imported files (optional)
SM_{source}_{modelName}	any number of associated meshes
SK_{source}_{modelName} and any SKA, SKP, SKS, etc.	any number of rigged meshes/skeletons/physics assets/animations
MI_{source}_{modelName}_{matName}	any number of associated material instances
TX_{source}_{modelName}_{matName}_{textureSuffix}	any number of unique associated textures

greens

plants, rocks and any other natural or artificialy natural dressing for a set

{category}

plants, grass, trees, flowers, rocks, etc per show
(try to keep as few broad categories as possible)

SM_{source}_{name}

FT_{source}_{name}	any number of UE Foliage type objects related to the green
LG_{source}_{name}	any number of landscape grass type objects related to the green
SM_{source}_{name}	any number of static meshes related to the green
MI_{source}_{name}	any number of material instances related to the green
TX_{source}_{name}_{textureSuffix}	any number of unique textures associated with the green

lights

film lighting fixtures with associated blueprints, gobos/cookies/light functions, and prebuilt lighting scenarios

{category}

wash, spot, moving, practical

SM_{brand/source}_{name}

LGT_{source}_{name}	the blueprint of the light, this is what you place into the scene
SM_{source}_{name}	any number of static meshes related to the light
MI_{source}_{name}	any number of material instances related to the light
TX_{source}_{name}_{textureSuffix}	any number of unique textures associated with the light
IES_{source}_{name}_{iesName}	any number of IES files associated with the light

gobo

Gobos, often called cookies or (in UE) light functions. They adjust the intensity of a light based off a texture and are useful for dappled light/moving clouds etc.

LF_{source}_{name}

LF_{source}_{name}	the material instance(s) that create the lighting effect
TX_{source}_{name}	any unique textures required by the light function

lightscene

prebuilt lighting scenarios like outdoor day, indoor night, cave etc. to copy and use as a starting point for the lighting in a scene

LSL_{scenarioName}	any number of prebuilt lighting scenarios structured as singular levels

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content

assets (cont.)

materials

materials to apply to any object in a scene. Many are designed to be tiling and use PBR shading

{category}

abstract, bark, carpet, ceramic, concreteAsphalt, fabric, fence, ground, iceSnow, lava, leather, metal, naturalDebris, paintPlaster, paper, pavingFloor, plastic, prebuitFacade, refinedStone, rockStone, roofing, rope, skin, technologySciFi, tile, wallBrickBlock, wallpaper, wicker, wood
(try to keep as few broad categories as possible)

MI_{source}_{surfaceName}

MI_{assetSource}_{surfaceName}	the core material instance
MI_{assetSource}_{surfaceName}-{variation}	a variation on the core material instance
TX_{assetSource}_{surfaceName}_{texture suffix}	any unique textures required for the material instances

misc

things that don't fit anywhere else. TBD per show, reference the other folders for how to set this folder up

post

contains post process materials, LUTS, and any other assets useful for post process effects such as color grading

PPM

post process materials

PPMI_{source}_{name}

PPMI_{source}_{name}	the material instance(s) of the post process material
TX_{source}_{name}	any unique textures required by the post process material(s)

LUT

contains any Look Up Tables to use with post process volumes

LUT_{source}_{lutName}	any number of look up tables

props

rigged objects that can be interacted with by a character

{category}

Categories are per show, you might organize your props by location, scene, type of prop or some other metric
(try to keep as few broad categories as possible)

SK_{source}_{propName}

see character folder for the types of assets that can exist in this folder. Replace {characterName} with {propName}

skies

360 images to be used as a surrounding for your environment. Used with a skysphere or sky blueprint

MI_{source}_{skyName}

MI_{source}_{skyName}	the material instance you will apply to the skySphere
MI_{source}_{skyName}-shadow	a special material to use with sky spheres blueprints that allows them to cast shadows
TX_{source}_{skyName}_{textureType}	any unique textures for the sky
TC_{source}_{skyname}	any texture cube (HDRI) images associated with the sky

stages

3d models of the physical stage buildings to show if your set and cameras will fit inside

{lotName}

the stages folder contains a list of lots such as fox, warner, etc

SM_{lotName}_{stageName}

SM_{assetSource}_{AssetName}	any number of associated meshes
MI_{assetSource}_{AssetName}_{MaterialName}	any number of associated material instances
TX_{assetSource}_{AssetName}_{MaterialName}_{texture suffix}	any number of unique associated textures
ASB_{assetSource}_{AssetName}	An assembly of the imported files (optional)

terrain

large natural features to add to a scene

{category}

cliff, mountain, water, etc. per show
(try to keep as few broad categories as possible)

SM_{source}_{meshName}

SM_{assetSource}_{AssetName}	any number of associated meshes
MI_{assetSource}_{AssetName}_{MaterialName}	any number of associated material instances
TX_{assetSource}_{AssetName}_{MaterialName}_{texture suffix}	any number of unique associated textures
ASB_{assetSource}_{AssetName}	An assembly of the imported files (optional)

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assets (cont.)

textures

reusable textures not associated with any one material or mesh

{category}

gradientMaps, imperfections, noise, etc. per show (try to keep as few broad categories as possible)

TX_{assetSource}_{AssetName}_{MaterialName}_{texture suffix}	any number of unique associated textures

vehicle

Contains 3d models of rigged vehicles, baked poses of those vehicles and any generic animation assets for them

SK_{source}_{characterName}

SK_{source}_{vehicleName}	any number of skeletal meshes for the vehicle. Add variation text after the vehicleName
SKA_{source}_{vehicleName}_{animationName}	any number of generic animation assets for the vehicle such as poses/walk cycles. Not for sequences
SKP_{source}_{vehicleName}_{physicsAssetVar}	any number of associated physics assets for the vehicle
SKS_{source}_{vehicleName}	a custom skeleton if required. If not using a custom skeleton try to use the fewest # of skeletons possible
ABP_{source}_{vehicleName}_{blueprintName}	any number of animation blueprints for the vehicle (several posers and mocap inputs use these)
SM_{source}_{vehicleName}-{pose}	any number of static meshs of the vehicle in predetermined poses
MI_{source}_{vehicleName}_{materialName}	any number of materials associated with this vehicle
TX_{source}_{vehicleName}_{materialName}_{tex suffix}	any number of unique textures associated with this vehicle
AC_{source}_{vehicleName}_{compositeName}	any number of animation composite assets
AM_{source}_{vehicleName}_{montageName}	any number of animation montage assets
BS_{source}_{vehicleName}_{blendSpaceName}	any number of blend space assets
MT_{source}_{vehicleName}_{morphTargetName}	any number of morph target assets
PS_{source}_{vehicleName}_{poseName}	any number of pose assets

environments

The Environments folder is where you find the sets and the quick imports from third party programs. It is the main folder for working in UE and if you want to view anything you generally start with opening the environments folder.

{envName}

The shortname for the environment in question. Shortnames should be fewer than 15 characters in length and unless you can guarantee they will not change, not include setnumbers.
Splitting a show into shortnames is dependent on the show in question. For some each set might be its own environment, for others you might combine several sets into one environment if they need to be seen in relation to eachother

incomingGeo

dated imports for the environment. These imports follow the dirty import process and can include illegal names/structure. If the show requires legalization (special cleanup), the final look to be handed off to VFX would be cleaned up and re-imported into the assets-architecture folder. See import documentation for more info

{YYMMDD}_{importDesc}_{artistInitials}

each import gets its own dated folder to keep them sterile and easily tell when a file was imported

SM_{assetSource}_{AssetName}	any number of associated meshes
ASB_{assetSource}_{AssetName}	An assembly of the imported files (optional)

levels

folder containing all version of the environment in question. If you are looking to view an environment, go here

{envName}_v{version#}suffix

a folder containg all level files for a specific version of the set
version # is a 3 number code to identify the level eg. v002
the suffix denotes variations on the standard version. Generally if there is a suffix the previous version should be considered the ground truth. See the naming conventions document for more info

ML_{envName}_v{version#}suffix	the master level for this environment version. this is the file you open to view the environment

subLevels

a folder containing any subLevels for the environment.

SL_{envName}_{desc}_v{version#}suffix	Any number of subLevels containing geo for the scene. Similar to layers in most programs
LSL_{envName}_{desc}_v{version#}suffix	Any number of subLevels containing lighting scenarios for the scene. Only 1 should be active at a time
ASL_{envName}_{desc}_v{version#}suffix	any number of animation sublevels containing non-sequnce animated assets, eg. street traffic
ALQ_{envName}_{desc}_v{version#}suffix	any number of animation sequences containing non-sequence animated data, eg. street traffic
BSL_{envName}_{desc}_v{version#}suffix	any number of storyboard sublevels containing posed characters, lighting, geo and cameras for a storyboard

materials

contains all materials and textures associated with the environment. If you want to alter a material from the assets folder, make a copy in this folder with a variation note. Unless you are going to edit them, do not duplicate textures from the assets folder into this folder

MI_{assetSource}_{materialName}	
MI_{assetSource}_{materialName}-{variation}	any number of materials for the environment
TX_{assetSource}_{materialName}_{texture suffix}	any number of unique textures for the environment

python

The python folder includes some scripts for use by the tools. It will look empty in UE4. You will not have to edit this folder

screenshots

The screenshots folder contains any screenshots imported by the cinecamera storyboards or other tools. It is organized by environment and then date

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sequences

The sequences folder is where all animations done by previs can be found with their associated master levels.

{sequence 3 letter code}

each sequence is defined by an uppercase 3 letter code, short for a full name. eg. BEC for Bea eats cake
A good practice is to keep a cheatsheet of sequence descriptions readily available to your production
A sequence is a series of scenes strung together to form one narrative beat, frequently obeying unity of place and/or time

{sequence 4 # code}

sequences are split into shorter sections by 4 number codes eg. 0100, 1011,40800
these numbers are usually a single short section of a scene with the 100's place stringing a group of them together as the full scene

ML_{sequence 3 letter code}_{seq 4# code}_v{version#}	A master level for each version of this sequence section. Streams in any required geo/lighitng as sublevels
MS_{sequence 3 letter code}_{seq 4# code}_v{version#}	A level sequence for each version of this sequence section. Can stream in sub-sequences from the animations folder

animations

contains the animations for this scene section

ASL_{sequence 3 letter code}_{seq 4# code}_desc_v{version#}	Any number of animation sublevels containing the additional geo/lighting/characters for this section
ASQ_{sequence 3 letter code}_{seq 4# code}_desc_v{version#}	Any number of sub-sequencers for organizing the section's animation
SKA_{sequence 3 letter code}_{seq 4# code}_desc_v{version#}	Any number of animation assets for the section

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