Lockpicking Game System – Configurable & Modular

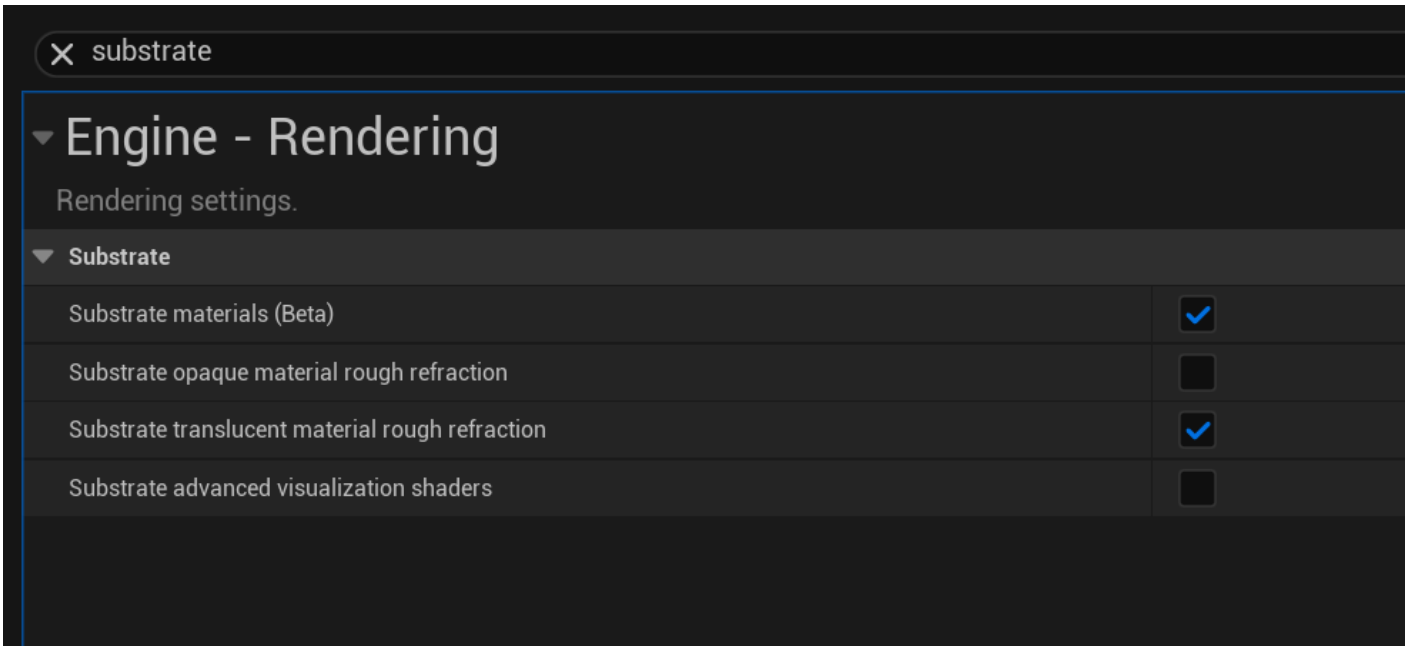
Documentation for the Lockpicking Game System – Configurable & Modular product on FAB.

YouTube Preview

- Setup/Prerequisites
- Configuration
- Interfaces

Setup/Prerequisites

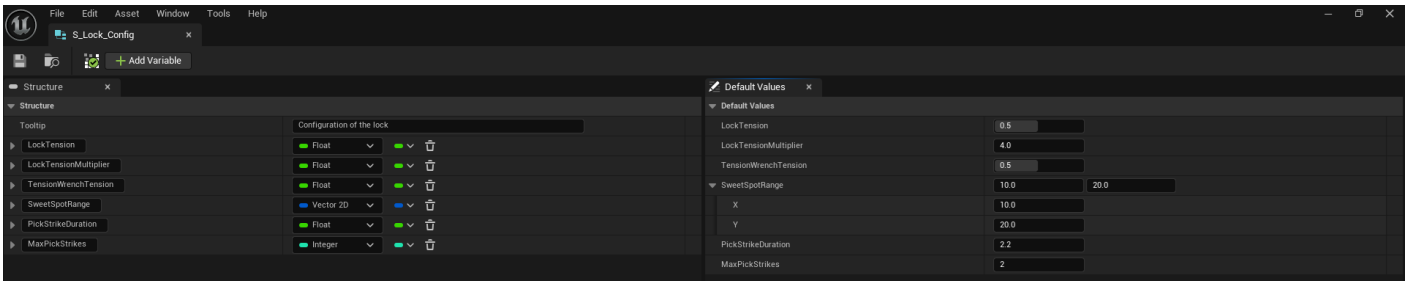
- In order for the minigame to work, you need to activate Substrate Materials from Project Settings



Configuration

> **/All/Game/LockpickMinigame/Structs**

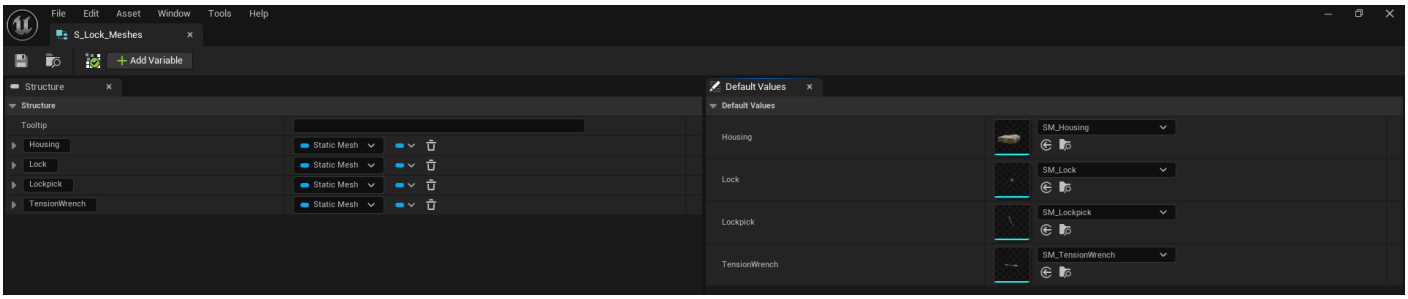
S_Lock_Config



Parameters:

- **LockTension** - The tension to be applied to the lock. How fast/easy the lock returns to initial position.
- **LockTensionMultiplier** - Multiplier used for the tension to be applied when sweet spot has just been lost. The tension will be higher if player was on sweet spot but it's no longer on it(has lost it).
- **TensionWrenchTension** - Same as the LockTension but for the TensionWrench. How fast/easy the tension wrench returns to initial position.
- **SweetSpotRange** - Bounds for the sweet spot. The sweet spot value is randomly determined at construction then the SweetSpotRange is used to check how big the sweet spot will be. It will take a random value between SweetSpotRange.X and SweetSpotRange.Y. i.e. if sweet spot will be 30(the pick degrees) and the sweet spot range is 5 and 10, the actual sweet spot will be anywhere between 20 and 40. If value from sweet spot range gets to be 8, then the sweet spot will be 26-34.
- **PickStrikeDuration** - How long the player has to force the current pick, in order to add a pick strike(for breaking it). i.e. how long the player has to stay outside the sweet spot while it's pushing the tension wrench.
- **MaxPickStrikes** - How many pick strikes before the pick actually breaks. This works together with the PickStrikeDuration.

S_Lock_Meshes



Parameters:

- **Housing** - The static mesh for the lock housing(shell) - without the lock mechanism(where the key/pick enters)
- **Lock** - The static mesh for the lock mechanism - this needs to be different in order to rotate it independently
- **Lockpick** - The static mesh for the actual pick
- **TensionWrench** - The static mesh for the tension wrench

Notes:

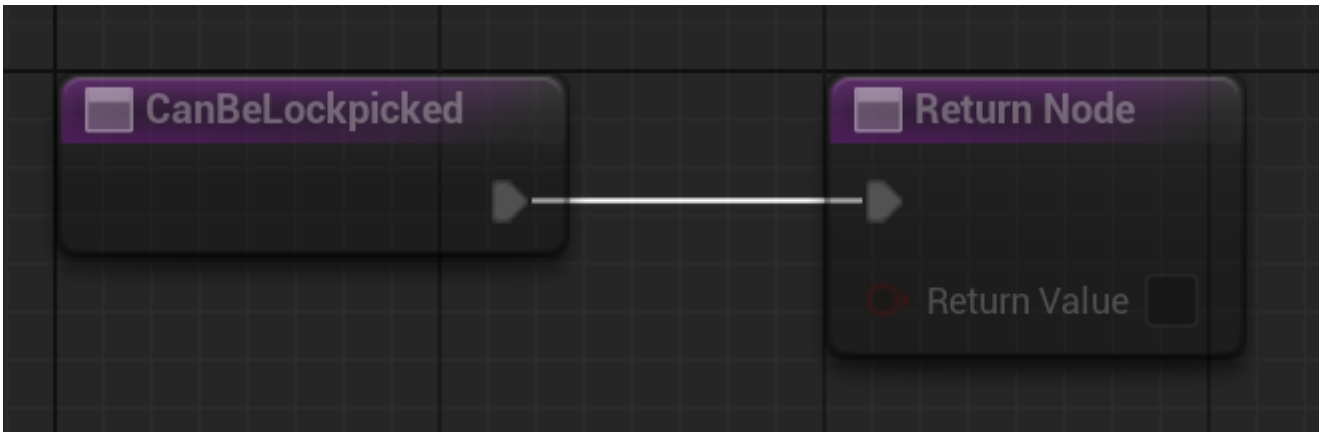
- For the Meshes configuration the actual pivot point should be in proper positions. The product also has an Example that should be used as reference.

Interfaces

> **/All/Game/LockpickMinigame/Interfaces**

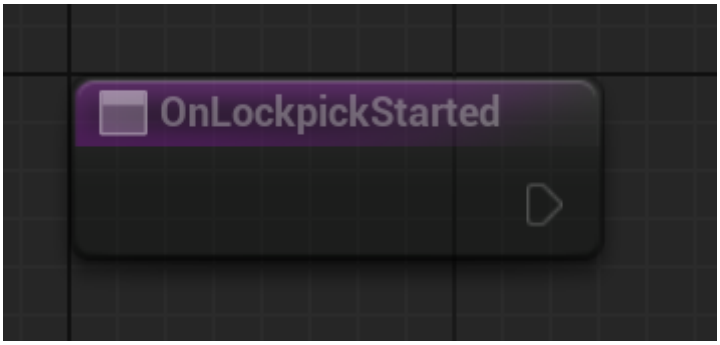
BPI_Lockpickable

CanBeLockpicked



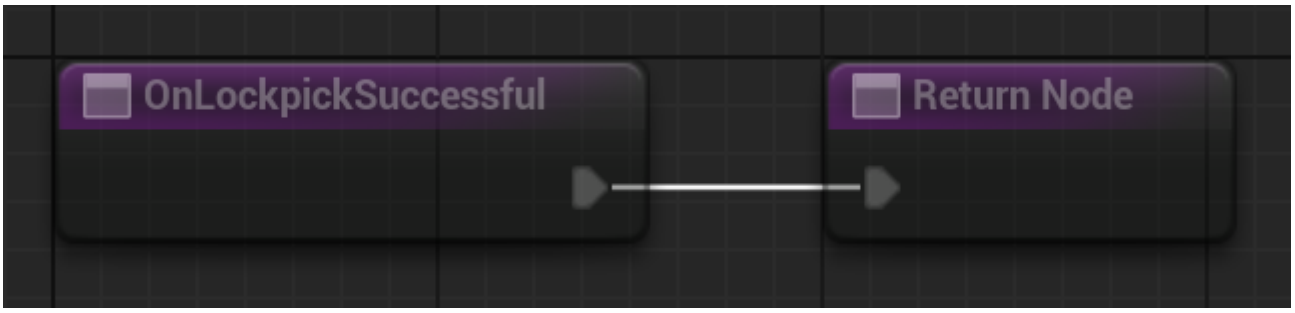
- Function which handles the condition about the object being lockpick able. For e.g. if the object is already lockpicked, this condition should return false.
- It can be used with other logic such as the lock being stuck, so lockpicking can't be started.

OnLockpickStarted



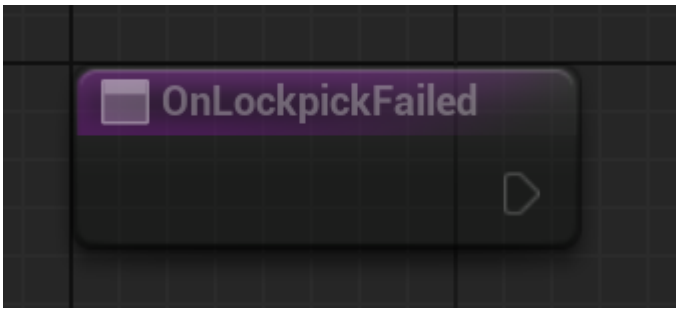
- Event to be called when the lockpicking starts.
- E.g. can be called when the BP_Lockpick_Minigame & W_Lockpick_Minigame are spawned and can be used to hide the "Interact" prompt from behind the lockpick widget

OnLockpickSuccessful



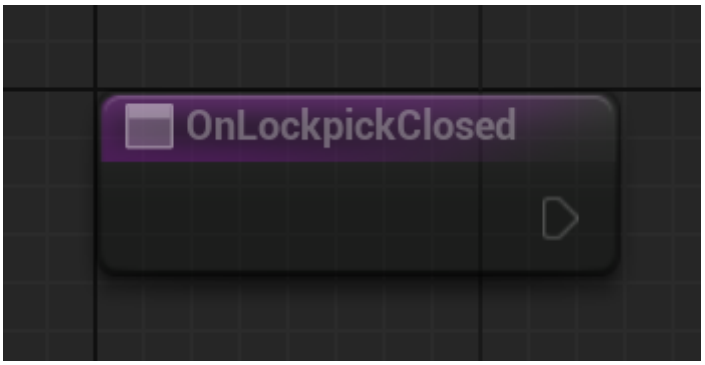
- Event to be called when the lockpick is successful
- Called by the BP_Lockpick_Minigame

OnLockpickFailed



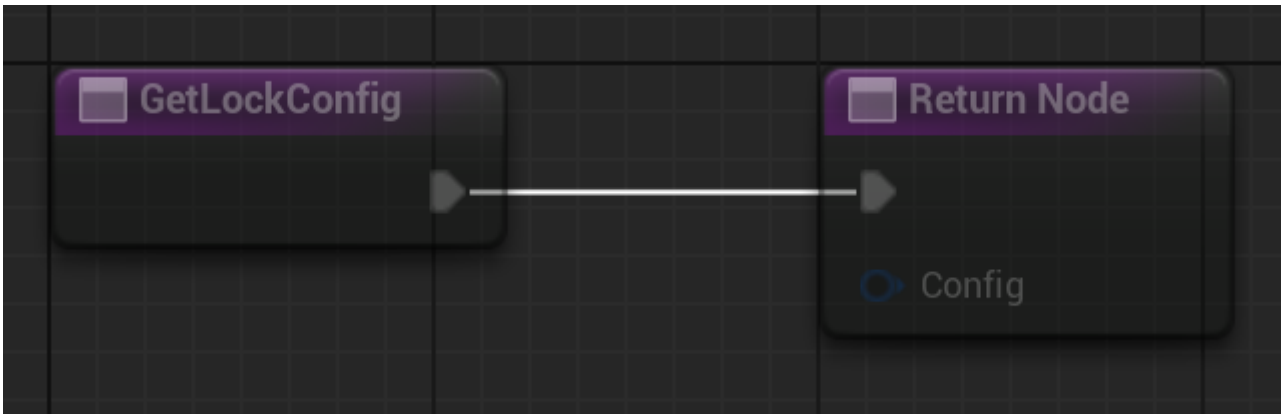
- Event to be called when the lockpick fails for given reason
- Called by the BP_Lockpick_Minigame when there are no more lockpicks available

OnLockpickClosed



- Event to be called when the lockpick minigame is closed by player - without it being successful or failed
- Called by the BP_Lockpick_Minigame on "CloseMinigame" event

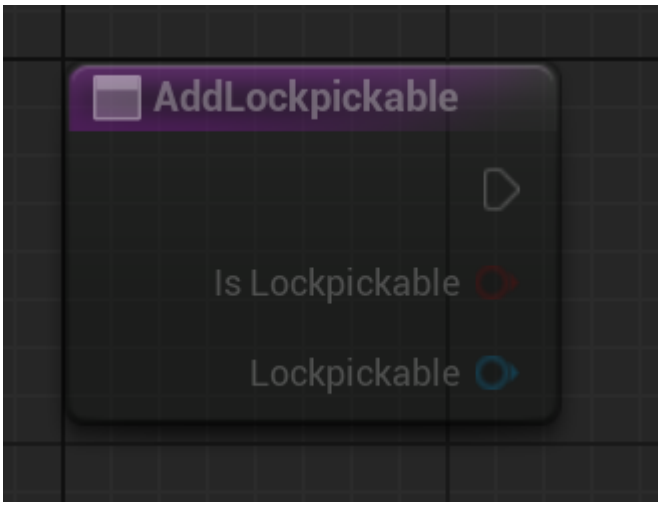
GetLockConfig



- Event that can be used to retrieve the current object lock configuration

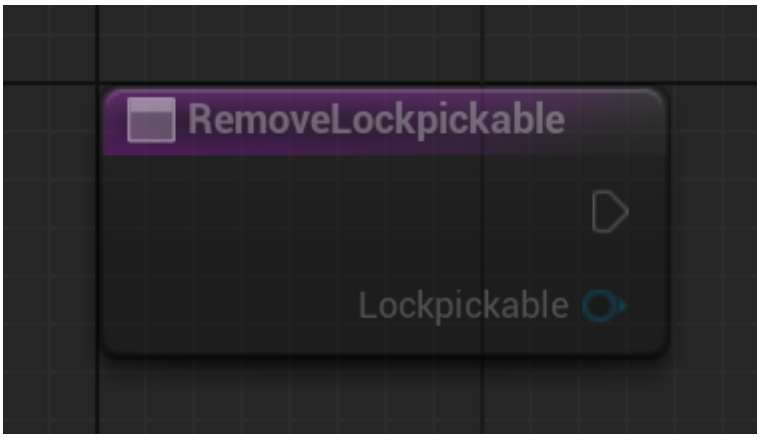
BPI_Lockpicker

AddLockpickable



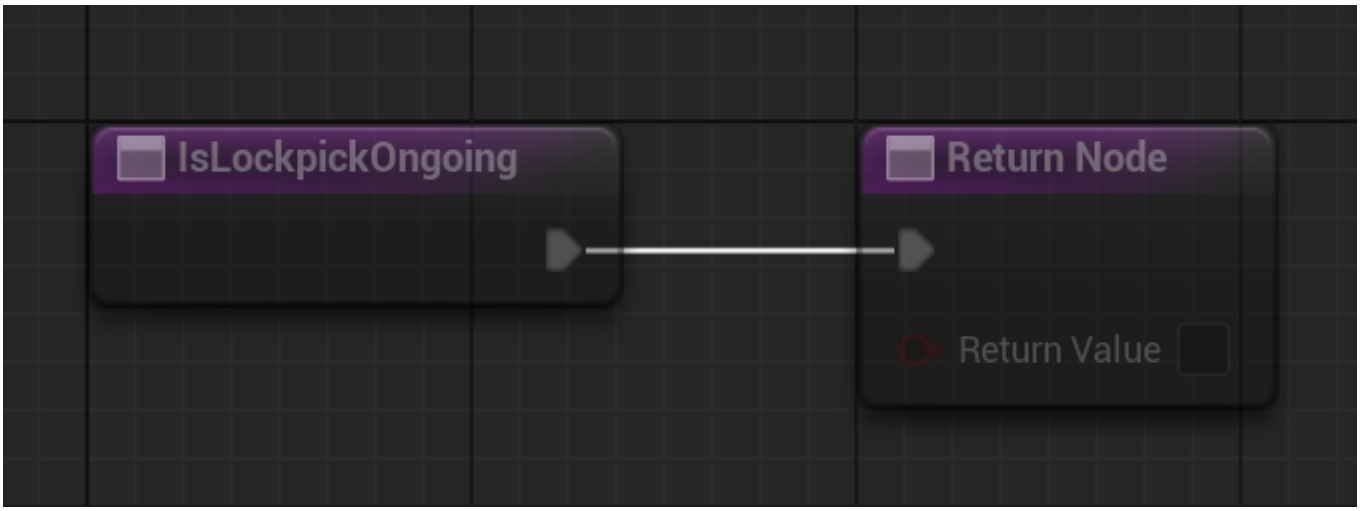
- Event that can be used to provide information to the lockpicker that there's a lockpick able object nearby
- Can be used for interaction

RemoveLockpickable



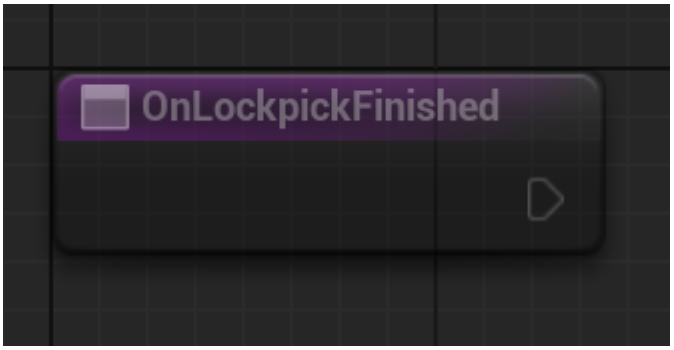
- Counterpart event for the "AddLockpickable" event

IsLockpickOngoing



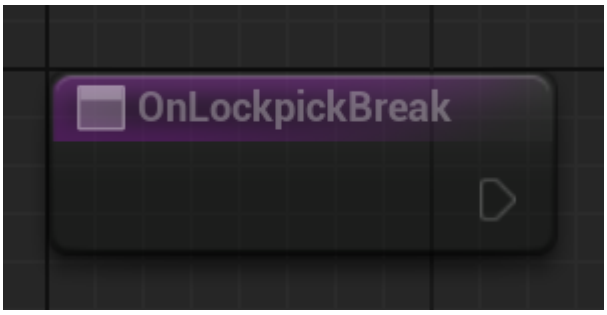
- Function with condition for ongoing lockpicking

OnLockpickFinished



- Event that can be called when lockpicking ends (successful or failed)
- Used by the BP_Lockpick_Minigame on "CloseMinigame" event and when lockpick is successful or failed

OnLockpickBreak



- Event that can be called when the pick breaks
- Used by the BP_Lockpick_Minigame