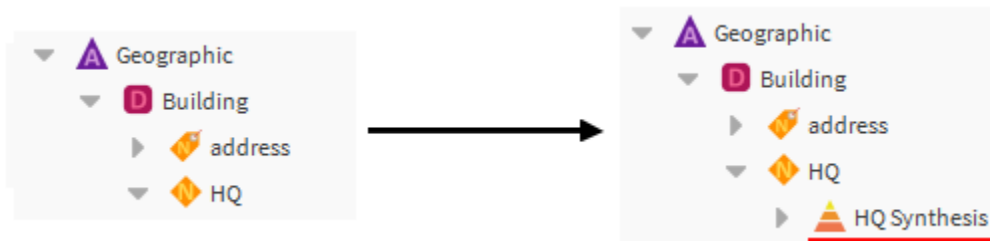# AddComponent

Summary

This block is used to add a component in a target.

Implementation

- Drag and drop the block from the palette
- Link the "execute" action from the "executed" topic of the previous block

Example

This block creates a synthesis (a SmartStatus from btibToolkit) and put it in the origin of the event (which is a node representing a building).

Properties

- *Artifacts:* Artifacts created by this block
    - Added: component created. Ex: the SmartStatus added in the target (HQ Synthesis)
- *Target:* SFormat to define the parent of the component to add. Ex: the origin of the event: a building (HQ)
- *SlotName:* SFormat to define the name of the component to add. Ex: the display name of the origin of the event (HQ) followed by "Synthesis": HQ Synthesis

- *Policy {AddOnlyIfNotExists, AddAlways, AddOrMerge, AddOrReplace}:* Define the behavior of the component to add if it already exists:
  - Add only if not exists: nothing will happen if a slot already exists with the same name in the target
  - Add always: it will add a suffix number after the slotName like HQ Synthesis1, HQ Synthesis2... for each execution of the block
  - Add or merge: it will recursively merge properties from the value to the existing component. Ex: if a property of the SmartStatus is updated in the bog file. This policy will apply the change in the HQ Synthesis
  - Add or replace: the existing component is removed before the new one is added
- *Value:* Define the component to add in the target. See General strategy parameters. Ex: a SmartStatus is extracted from a resource which is a bog file

Behavior: DO

A component is added in a target.

Behavior: UNDO

The added component is removed from the target.

⚠️ A component can be added by several pairs of block-origin. It will be removed only if all pairs block-origin are undone.

Example: A block creates a General console and use a policy "Add if not exists". Several Nodes triggers this same block but only one console is created. **Removing some Nodes will not remove the console as long as one of these Node still exists**.