

# Strategy

## Summary

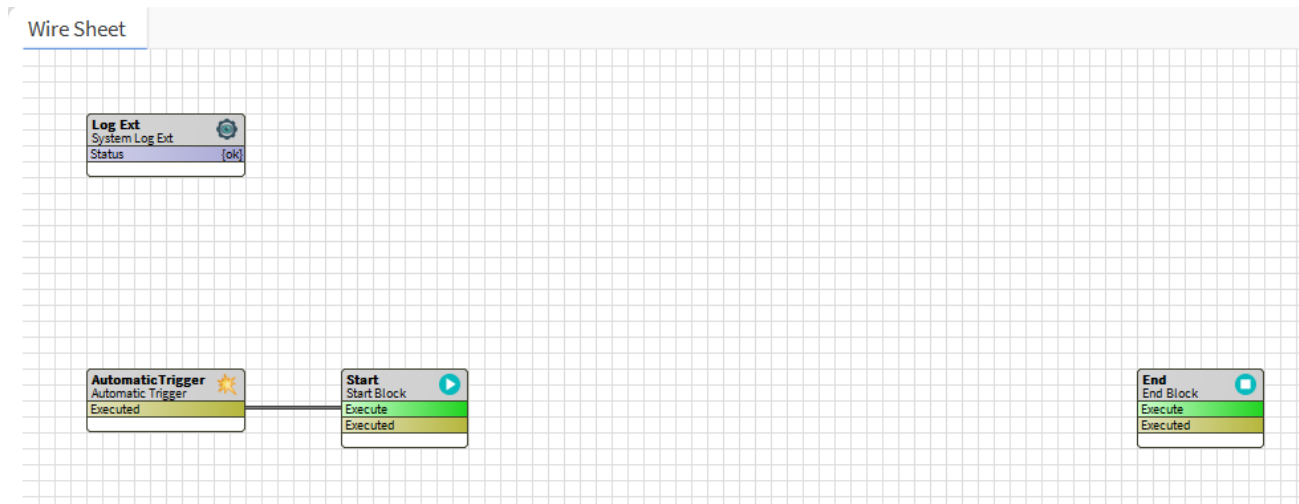
A Strategy is a workflow made of blocks that can be executed to automate every task such as:

- Add and set components to create or enhance logic
- Set parameters
- Create px views
- Add some widgets in views
- Invoke actions
- Process alarms
- Process histories
- ...

A strategy is triggered based on changes in the model and a source (a component that contains an InfoSource). When you create/edit/delete a Node, one or more strategies can be executed to automate some tasks (create a view on a building for example).

Strategies can also be used in a macro style to handle repetitive operations when you record a set of operations and replay the sequence on other targets (organize a wiresheet, create logics inside devices already deployed...)

## Implementation



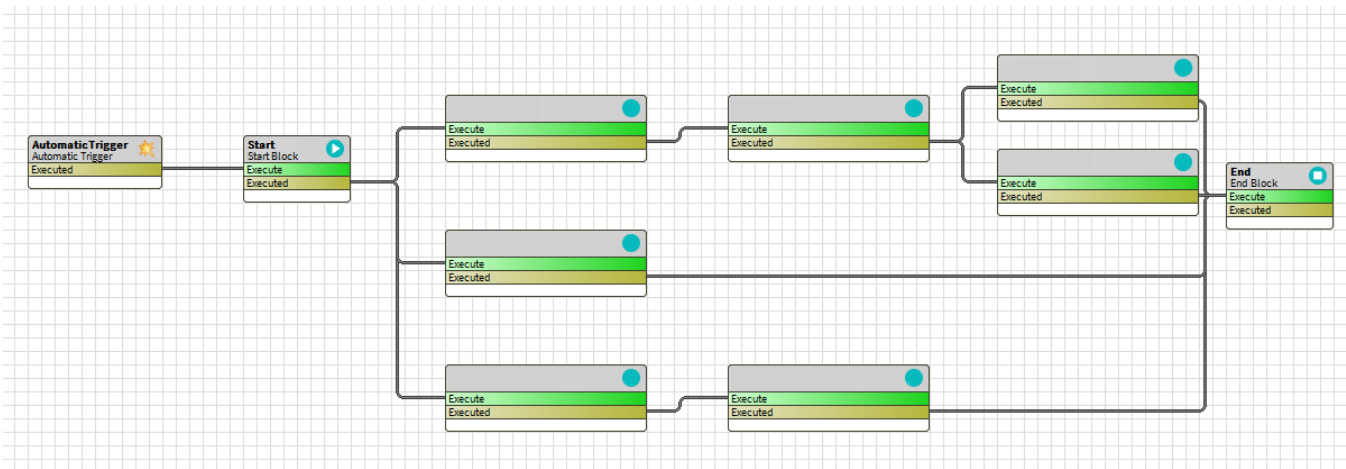
- Drag and drop a strategy from the palette or create a new one via the manager on the strategies folder (BtibService > StrategyFolder)
- Some details about the components always present in a strategy
  - **LogExt**: Used to override the strategies folder LogExt (that will be used by default for all strategies)
  - **Trigger**: To define the strategy execution (automatically, at regular intervals, manually...)
  - **Start**: The first block of the process. Other blocks should be added after this one. Only one Start block is allowed
  - **End**: The last block of the process. Every chain of blocks should be linked to this block to be executed. Only one End block is allowed

## Properties

- **Enabled**: Enables or disables the strategy.
- **CreatesTraces**: Enables or disables the creation of traces. Traces are used in some block to undo the done task.

## Creation

- **Trigger** Choose the trigger according to your needs:
  - AutomaticTrigger: to execute automatically strategies on Node and InfoSource's actions (initialize, disable and clean)
  - MacroTrigger: to execute macros manually from a selection. This trigger is actually automatically added when a macro is recorded.
- **Blocks** Every block has one action and one topic:
  - The "executed" topic should be linked to one or more "execute" actions to create a workflow. Blocks will be executed in the blocks order
  - All chains have to be linked from Start to End



## Undo

Some blocks have the possibility to undo the task previously done (in the documentation, those blocks have a **"Behavior: UNDO"** section)

The Undo in a block will be triggered if:

- the selection is changed
- the strategy is disabled or removed
- the link going from the executed slot in the start block is removed and the strategy is triggered
- an if block is added before the block

## Common issues

- *My strategy is not executed after an initialization of a node or InfoSource*
  - **Trigger**: ensure that an automatic trigger is linked to the start block
  - **Selection**: ensure that the selection is active and selects the targeted node or InfoSource
  - **Logs**: logs can be checked (Workbench > Logs Console) to see errors
  - Cache: some caches can be manually refreshed
    - Selection: BtibService > SelectionFolder > invoke action "RefreshCache"
    - Strategy: BtibService > StrategyFolder > invoke action "RefreshCache"
- *My block has not been executed*
  - Execute/Executed: ensure that executed topic from previous block is linked to execute of your block
  - Start/End: ensure that the flow including your block is correctly linked to start and end
  - **Logs**: you can check through logs if your block has actually been executed or not
- *My block doesn't work as expected*
  - **Debug**: you can check value of **SFormat** during execution by adding some debug blocks
- *I don't know if my strategy is still running*
  - Sidebar: a sidebar is available to monitor the status of the strategies' engine. Status can be:
    - Idle: all the strategies have been executed
    - Running: some strategies are still processing
  - Sidebar can be displayed via Workbench > Window > Side Bars > Monitor

