

# Markup

Markup is additional information attached to input and output events in a plan. This contextual information can modify how the event is processed by the system, usually in the following ways:

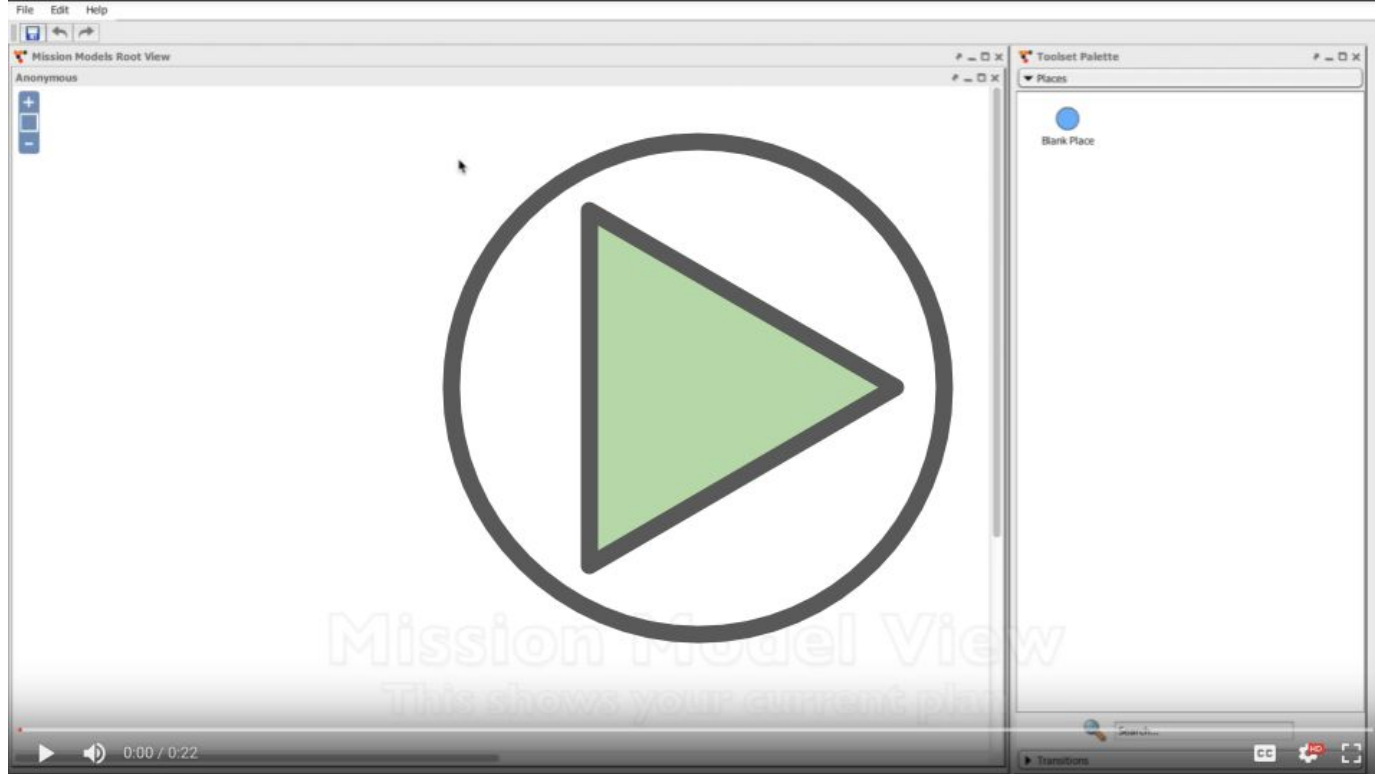
- Changing what or how information is shown in the GUI
- Changing how involved the operator is in decisions

The first markup we will look at is RelevantArea. It is used to ensure a certain area of the map is visible to the operator when a particular input event is received or output event is activated.

RelevantArea has one piece of information to fill out:

Area: What locations should be visible in the map? This may cause the map to be zoomed out and panned to make the locations visible. There are 3 options:

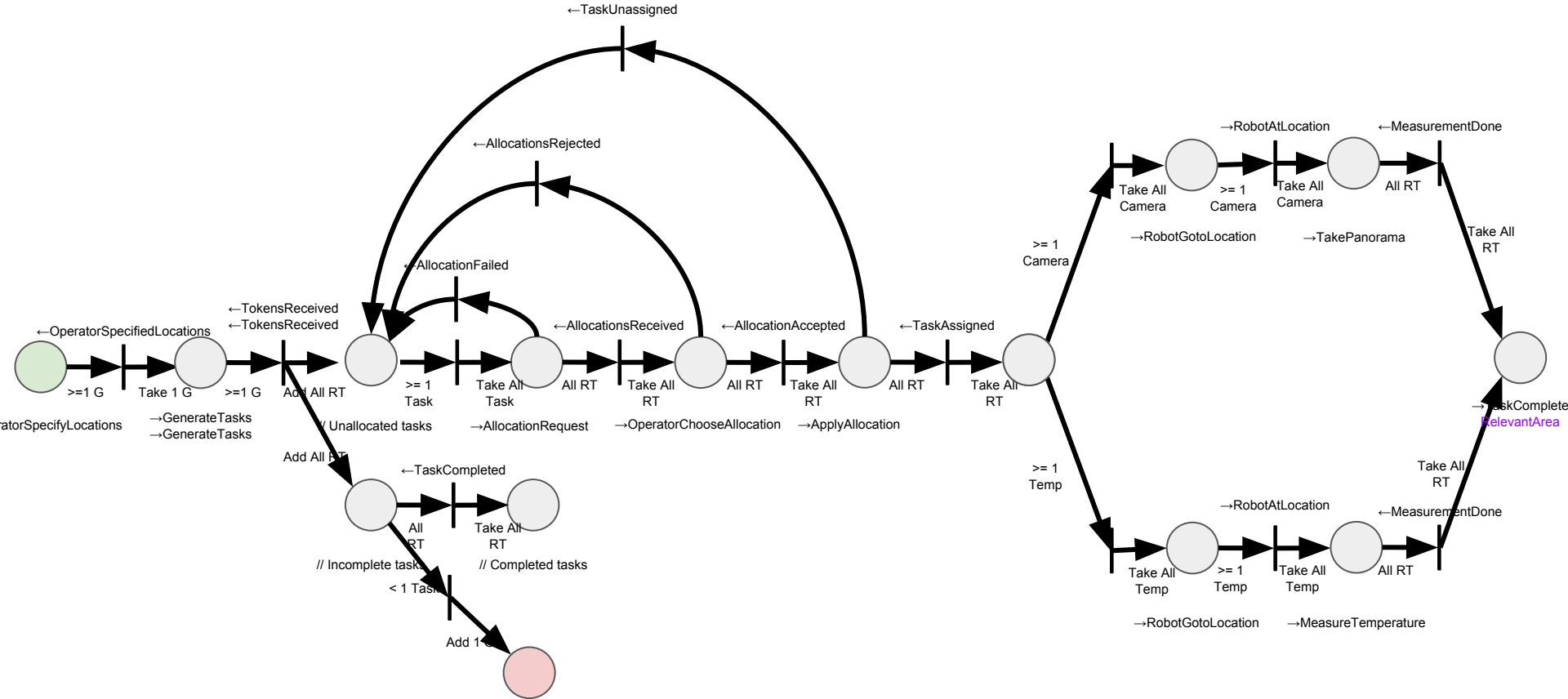
- Area: A specific area should be visible on the map.
  - If you select Area, you will need to specify the Area
- All Robots: All robots should be visible on the map.
- Relevant Tokens:
  - If placed on an input event: For all Relevant Tokens which are robot tokens, make sure the robot is visible. For all Relevant Tokens which are task tokens, make sure the allocated robot (if one exists) is visible.
  - If placed on an output event: For any robot token which activates the output event, make sure the robot is visible. For any task token which activates the output event, make sure the allocated robot (if one exists) is visible.



Watch “Adding Markup”: This video will show you how to add markup to an existing event.



# Job 10-1 Solution



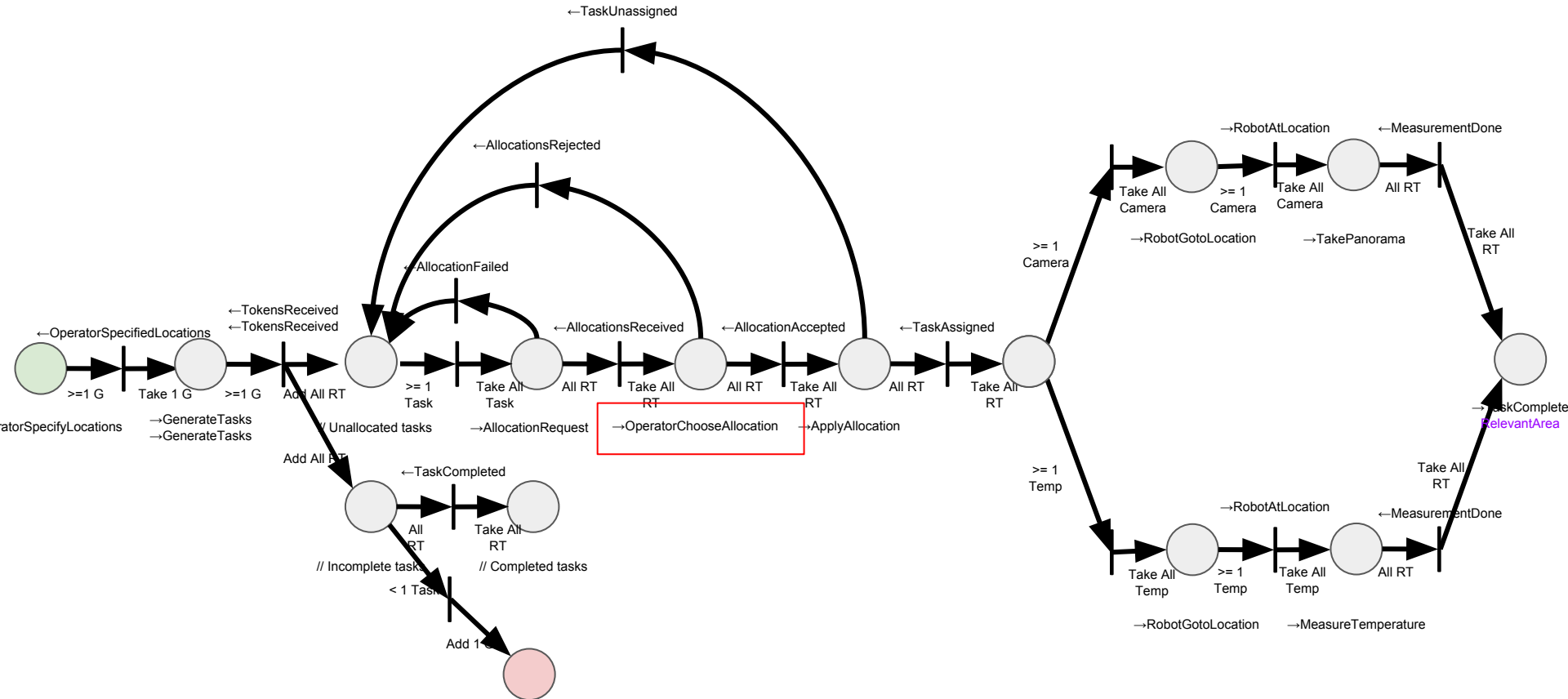
The second markup we will look at is Mixed Initiative. It is used on output events which involve the operator making a decision. Using this markup can give AI permission to make decisions when the operator is too busy, allowing the plan to progress. Some decisions may be trivial and can always be always given to the AI. Others may be very complex and should only be given to the operator, even if it means waiting until the operator isn't busy.

MixedInitiative has one piece of information to fill out:

Trigger: When should the system AI make the decision instead of the operator? There are 3 options:

- Never: Never allow the AI to make this decision.
- Immediate: Do not show the decision to the operator, let the AI decide immediately.
- Timeout: Show the decision to the operator, but remove it after x seconds and let the AI decide.
  - If you select Timeout, you must specify the number of seconds.

# Job 10-2: Add MixedInitiative markup to →OperatorChooseAllocation, using Timeout after 10 seconds





# Job 10-2 Solution

