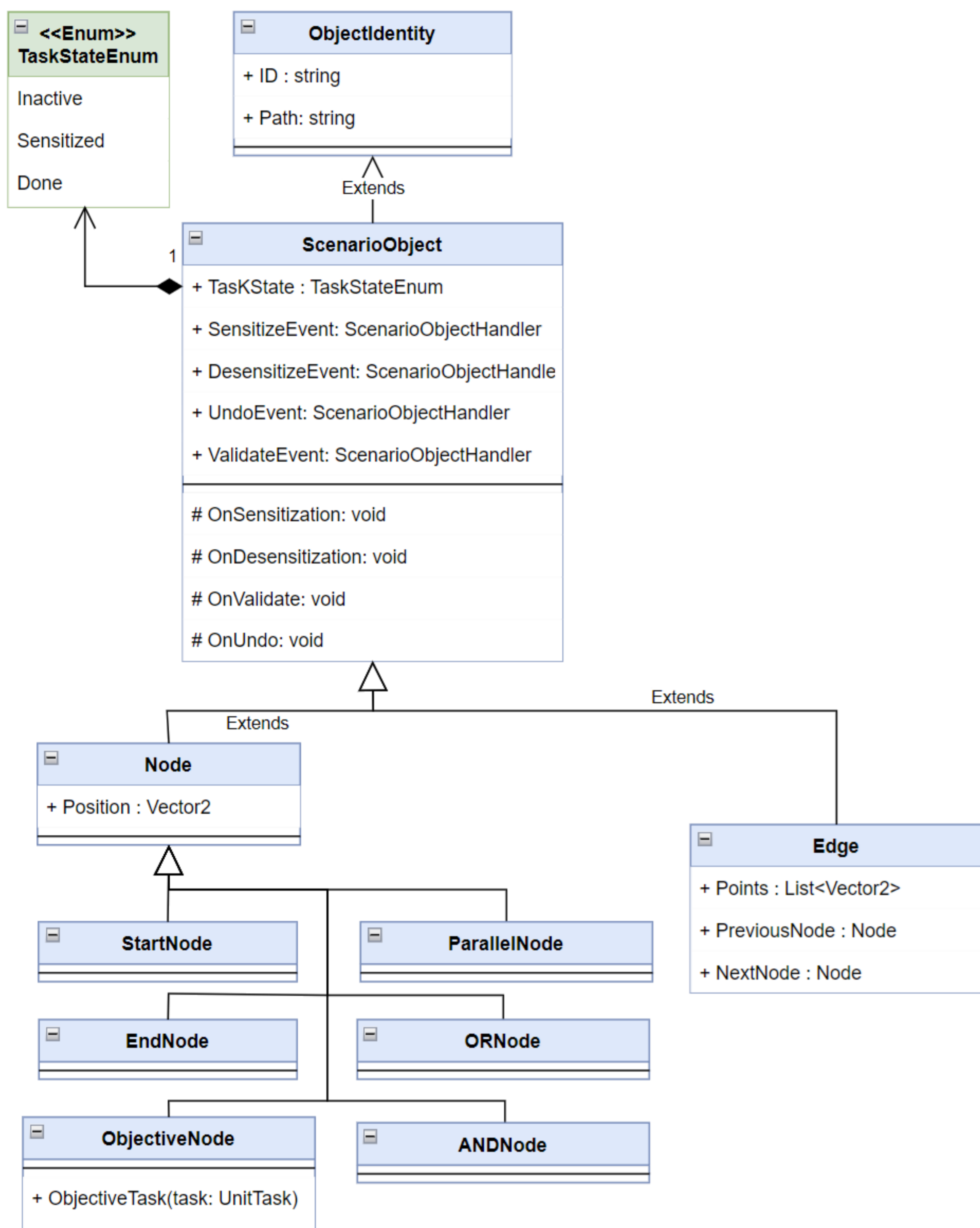


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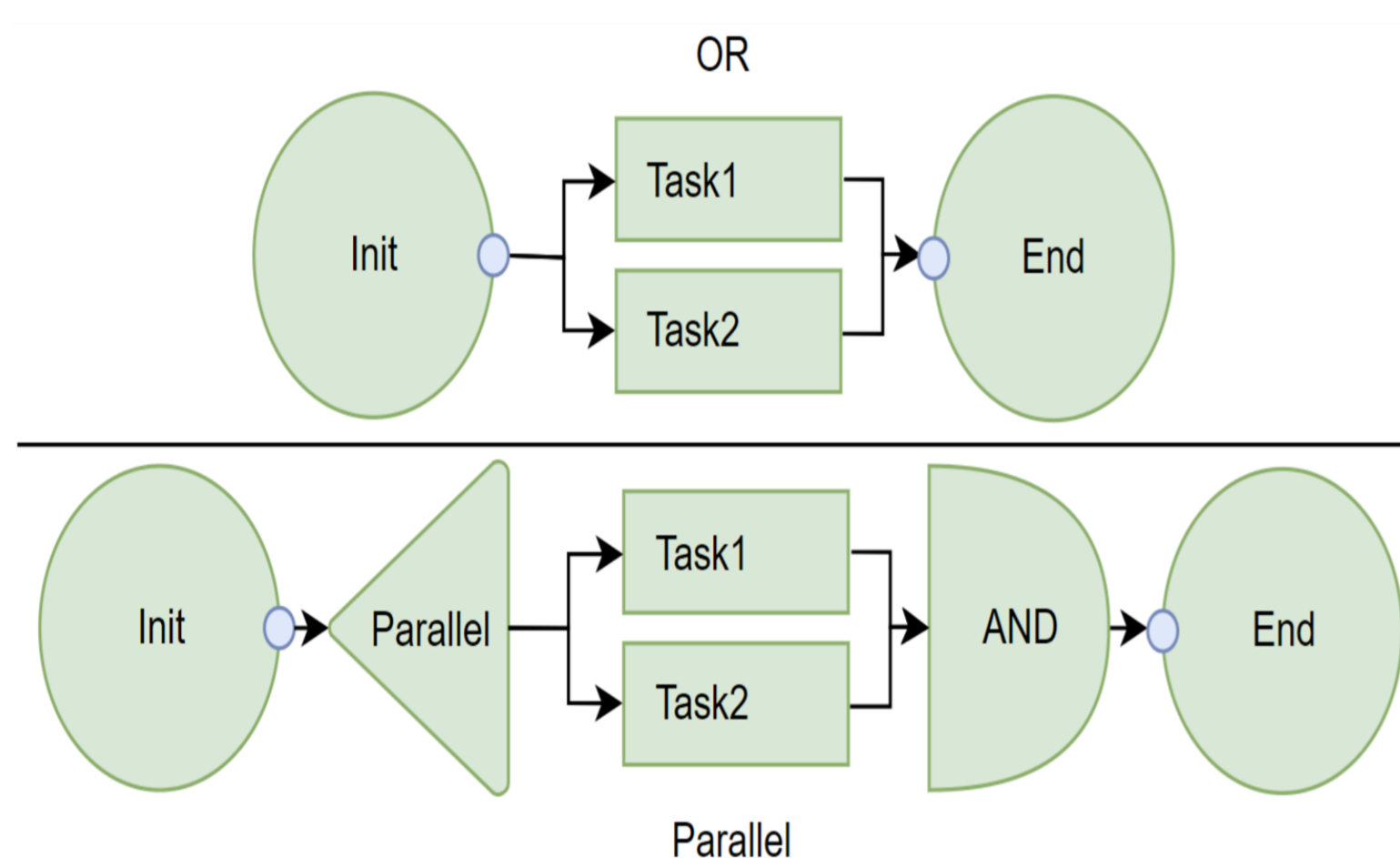
**Keywords :** Digital twin, mixed reality, virtual reality, augmented reality, scenario authoring, Human System Interaction, Industry 5.0, training, data modeling

**Context and problematic :** XR-interfaced digital twins have become more frequent the last few years. However, authoring training scenarios using these environments for both virtual and augmented realities is still a complex task asking for specific technical skills. As a module for the VR authoring framework INTERVALES, NEURONES intends to allow business experts to create easily complex scenarios with multiple autonomous or human agents thanks to a no-code approach.

## Node-based architecture



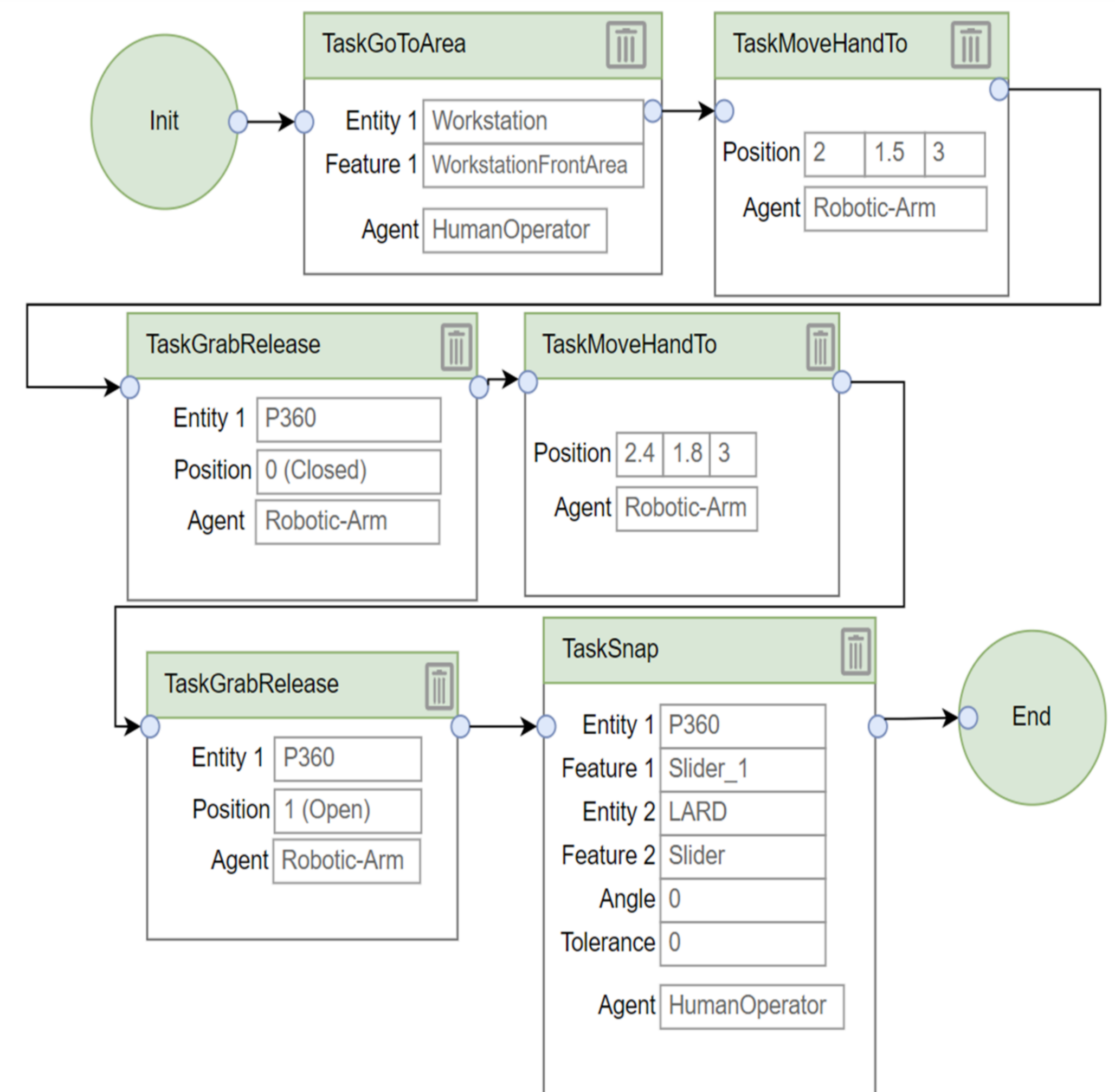
NEURONE scenarios architecture



OR and PARALLEL nodes principle

## Example of collaborative scenario

The following example is a procedural scenario with two agents: an operator and a robotic arm. When the operator enters the WorkArea, the arm takes an object and gives it to the operator.



## Future works : Distributed scenarios

- Dividing scenarios into sub-scenarios assignable to **Agents** or **Agent-skills**
- **Signals** to communicate between scenarios
- **Dynamic task assignment** based on Agent skills and availability

