UML Class Diagram

Class Name
- Attributes
- Operations

1 — Aggregates →

GridVisualClass

Attributes:
- __grid_x
- __grid_y
- __grid_x_zig
- __grid_y_zig
- __points
- __data
- __frames
- __frame_data
- __fig

Operations:
- __init__
- create_grid
- create_nodes
- create_bots
- create_frames
- create_figure
- show_fig

Node

Attributes:
- __right
- __bottom_right
- __bottom_left
- __left
- __top_left
- __top_right
- __position
- __occupied
- __bot
- __debug

Operations:
- __init__
- get_node
- set_position
- set_node
- get_position
- arrival
- departure
- get_occupied
- toggle_debug

NodeManager

Attributes:
- __head
- __tail
- __node_array
- __point_array
- __number_of_nodes
- __cluster_info

Operations:
- __init__
- create_cluster
- plot
- get_node_array

BotManager

Attributes:
- __bots
- __paths

Operations:
- __init__
- activate
- bot_threads
- __activate_bot
- __add_bots
- mass_add_bots
- get_bots
- get_positions

Bot

Attributes:
- __choices
- __start
- __port_labels
- __port_structure
- __head
- __tail
- __bot_id
- __choices
- __scan_order
- __port_scan_order
- __port_scan_results
- __head_path_x
- __head_path_y
- _tail_path_x
- __tail_path_y
- __debug

Operations:
- init
- label_ports
- scan_ports
- status
- engine
- configure
- __set_position
- __collect_path
- _move

Agent

Attributes:
- __predecessor
- __successor
- __parent
- token_value
- candidacy
- angle
- active

Operations:
- publish_to_parent
- pull_from_parent
- compare
- activate
- deactivate
- wait

Link

Attributes:
- __bot_from
- __bot_to
- data
- acknowledgement

Operations:
- __init__
- publish_to

toggle_occupied
create_node
link_nodes

get_points
get_number_of_nodes

get_paths

_scan_for_open_ports
__orientate
scan_for_spaces
get_path
__set_id
toggle_debug
get_scan_order
set_head_node
get_head
get_position
create_on_the_move
orientate
__str__
__repr__

pull_from
acknowledge

Token
value
delim
active
__init__
activate
deactivate
compare

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