Fleet Management API Documentation

Fleet manager

- Reporting Fault {Downtime, Result}

- AMR State Status {Health, Location, Battery, PayLoad(Loaded Item Detail), Current Task}

**Variables**

|  |  |
| --- | --- |
| **Variables** | **Values** |
| Token ID | Given main ID |
| Task ID | Assigned Designated ‘Task ID’ |
| Task Type | Defines the type of task |
| Priority | Used to Execute first in the Queuing System |

**1.0 Task Delegation**

**[1.1] - Task Received from E-Stocker**

|  |  |  |
| --- | --- | --- |
| **Endpoint** | **Description** | |
| **URL** | ‘/api/fm/fleet-manager/received-task’ | |
| **Method** | ‘POST’ | |
| **Description** | This endpoint is used by the E-Stocker to send instructions to the Fleet Manager's "Receive Instruction" component. It allows the E-Stocker to communicate tasks that need to be carried out by the Fleet Manager. | |
| Parameters | | |
| **Parameter** | **Type** | **Description** |
| Instruction Data | JSON |  |
| Response | | |
| **Response** | **HTTP Status** | **Description** |
| Acknowledgment (Success) | 200 |  |
| Error Response (Failure) | 4xx or 5xx |  |

**[1.1] - Create Task**

|  |  |  |
| --- | --- | --- |
| **Endpoint** | **Description** | |
| **URL** | ‘/api/fm/task/task-create’ | |
| **Method** | ‘POST’ | |
| **Description** | This endpoint is used by the Fleet Manager that creates a new task that it is given in the [fleet-manager/receive-instruction]. From that It Creates a new task and assigns it to the AMR. | |
| Parameters | | |
| **Parameter** | **Type** | **Description** |
| Task Creation Input Data | JSON | Input: (Token ID, Task ID, Task Type, AMR, Priority) |
| Response | | |
| **Response** | **HTTP Status** | **Description** |
| Success Response (Success) | 200 | Successfully created a task |
| Error Response (Failure) | 4xx or 5xx | Failed to create task |

**[1.2] - Delete Task**

|  |  |  |
| --- | --- | --- |
| **Endpoint** | **Description** | |
| **URL** | ‘/api/fm/task/task-delete’ | |
| **Method** | ‘DELETE’ | |
| **Description** | This endpoint deletes the task from the Task list. | |
| Parameters | | |
| **Parameter** | **Type** | **Description** |
| Task Delete | JSON | Input: (Task ID)  [Task ID]: ‘Assigned ID’, |
| Response | | |
| **Response** | **HTTP Status** | **Description** |
| Success Response (Success) | 200 | Successfully created a task |
| Error Response (Failure) | 4xx or 5xx | Failed to create task |

**[1.3] - Edit Task**

|  |  |  |
| --- | --- | --- |
| **Endpoint** | **Description** | |
| **URL** | ‘/api/fm/task/task-edit’ | |
| **Method** | ‘PUT’ | |
| **Description** | This endpoint enables to edit the task | |
| Parameters | | |
| **Parameter** | **Type** | **Description** |
| Edit Task | JSON | Input: (Task ID, Task Type, AMR, Priority)  Updates the Task |
| Response | | |
| **Response** | **HTTP Status** | **Description** |
| Success Response (Success) | 200 | Successfully Edited the Task |
| Error Response (Failure) | 4xx or 5xx | Failed to Edit task |

**[1.4] - Report Task**

|  |  |  |
| --- | --- | --- |
| **Endpoint** | **Description** | |
| **URL** | ‘/api/fm/task/task-report’ | |
| **Method** | ‘POST’ | |
| **Description** | This endpoint is used by the Fleet Manager to sends status report of the task to the E-Stocker, indicating the current state of the task | |
| Parameters | | |
| **Parameter** | **Type** | **Description** |
| Report Data | JSON | Containing acknowledgment information sent by the Fleet Manager to the E-Stocker.  Input: (Task ID, Task Type, AMR, Priority) |
| Response | | |
| **Response** | **HTTP Status** | **Description** |
| Success Response (Success) | 200 | Successfully reported the Data to E-Stocker |
| Error Response (Failure) | 4xx or 5xx | Failed to report Data to E-Stocker |

**2.0 Queuing System**

**[2.1] - Get Queuing System List**

|  |  |  |
| --- | --- | --- |
| **Endpoint** | **Description** | |
| **URL** | ‘/api/fm/queue/queue-list’ | |
| **Method** | ‘GET’ | |
| **Description** | This endpoint allows you to retrieve a list of tasks in the queue. It does not require any input parameters. | |
| **Response** | **HTTP Status** | **Description** |
| Success Response (Success) | 200 | Successful response containing a list of Task IDs currently in the queue. |
| Error Response (Failure) | 4xx or 5xx | Failed to retrieve List |

**[2.2] - Adding Task to Queuing System**

|  |  |  |
| --- | --- | --- |
| **Endpoint** | **Description** | |
| **URL** | ‘/api/fm/queue/queue-task-add’ | |
| **Method** | ‘POST’ | |
| **Description** | This endpoint is used by the Fleet Manager to assign a new task to the Queuing System. | |
| Parameters | | |
| **Parameter** | **Type** | **Description** |
| Creates a New Item in Queue | JSON | Input: (Token ID, Task ID, Task Type, AMR, Priority) |
| Response | | |
| **Response** | **HTTP Status** | **Description** |
| Success Response (Success) | 200 | Successfully added task to Que |
| Error Response (Failure) | 4xx or 5xx | Failed to add task to Que |

**[2.3] - Removing Task from Queuing System**

|  |  |  |
| --- | --- | --- |
| **Endpoint** | **Description** | |
| **URL** | ‘/api/fm/queue/queue-task-delete’ | |
| **Method** | ‘DELETE’ | |
| **Description** | This endpoint is used by the Fleet Manager to remove an existing task from the Queuing System. | |
| Parameters | | |
| **Parameter** | **Type** | **Description** |
| Remove Task in Queue | JSON | Input: (Token ID, Task ID, Task Type, AMR, Priority) |
| Response | | |
| **Response** | **HTTP Status** | **Description** |
| Success Response (Success) | 200 | Successfully removed task from queue |
| Success Response (Success) | 4xx or 5xx | Failed to remove task from queue |

**[2.4] - Editing Task from Queuing System**

|  |  |  |
| --- | --- | --- |
| **Endpoint** | **Description** | |
| **URL** | ‘/api/fm/queue/queue-task-edit’ | |
| **Method** | ‘PUT’ | |
| **Description** | This endpoint is used by the Fleet Manager to Edit an existing task from the Queuing System. | |
| Parameters | | |
| **Parameter** | **Type** | **Description** |
| Edit Task in Queue | JSON | Input: (Token ID, Task ID, Task Type, AMR, Priority) |
| Response | | |
| **Response** | **HTTP Status** | **Description** |
| Success Response (Success) | 200 | Successfully removed task from queue |
| Error Response (Failure) | 4xx or 5xx | Failed to remove task from queue |

**3.0 AMR Calls**