

Shorthand Communication System

Swarms Multi-Agent Framework

****The Enhanced Shorthand Communication System is designed to streamline agent-agent communication within the Swarms Multi-Agent Framework. This system employs concise alphanumeric notations to relay task-specific details to agents efficiently.****

Format:

The shorthand format is structured as `[AgentType]-[TaskLayer].[TaskNumber]-[Priority]-[Status]`.

Components:

1. Agent Type:

- Denotes the specific agent role, such as:

* `C`: Code agent

* `D`: Data processing agent

* `M`: Monitoring agent

* `N`: Network agent

* `R`: Resource management agent

* `I`: Interface agent

* `S`: Security agent

2. Task Layer & Number:

- Represents the task's category.

* Example: `1.8` signifies Task layer 1, task number 8.

3. Priority:

- Indicates task urgency.

* `H`: High

* `M`: Medium

* `L`: Low

4. Status:

- Gives a snapshot of the task's progress.

* `I`: Initialized

* `P`: In-progress

* `C`: Completed

* `F`: Failed

* `W`: Waiting

Extended Features:

1. Error Codes (for failures):

- `E01`: Resource issues

- `E02`: Data inconsistency

- `E03`: Dependency malfunction

... and more as needed.

2. Collaboration Flag:

- `+`: Denotes required collaboration.

Example Codes:

- `C-1.8-H-I`: A high-priority coding task that's initializing.

- `D-2.3-M-P`: A medium-priority data task currently in-progress.

- `M-3.5-L-P+`: A low-priority monitoring task in progress needing collaboration.

By leveraging the Enhanced Shorthand Communication System, the Swarms Multi-Agent Framework can ensure swift interactions, concise communications, and effective task management.