**CD++ Model Data Form**

Title: Manufacturing Cell Control System

Type:

Acronym/Short name: MCCS

Purpose for which Developed: to model, simulate, and verify the behavior of an agent-based distributed manufacturing system that prepares batches of materials based on processing requests.

Other Applications for which it is Suitable: Any agent-based distributed system where agents have deterministic behavior and use message-passing and/or shared-variable communication

Date Developed/Implemented: 24-OCT-2020

Domain: Real-time systems, Artificial Systems

Current Version: 1.0

URL:

Description (including characteristics): The Control Agent C receives batches of requests from external entities. It activates the Storage Agent S to load the material storage and the Handling Agent H to move the material for processing once the inventory has been loaded. Every time a material is prepared, C sends a signal to external entities indicating that processing can begin. Finally, C notifies external entities and stops the production process once all materials have been prepared as requested.

Links to Related Documents

Short Title:

URL:

Description:

Keywords: Manufacturing Cell Control System, MCCS, Control Agent, Storage Agent, Handling Agent, Inventory Handler

Developer:

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Comments: This model works, it`s ok