# **How to use CMAS**

2025-06-13



Creating change together.

### **Download CMAS**

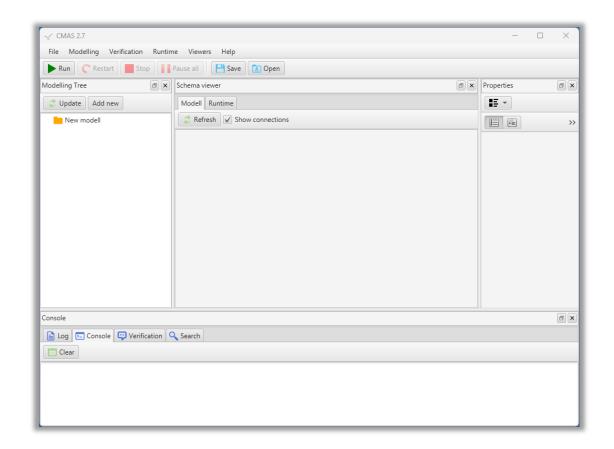
- Go to the GitHub page for CMAS:
  - https://github.com/UniversityWest-IndustrialAutomation/CMAS
- You will find the following two links for downloading CMAS and an example project

# Configurable Multi-Agent System (CMAS) Download CMAS Download Crane Example



## **Installing CMAS**

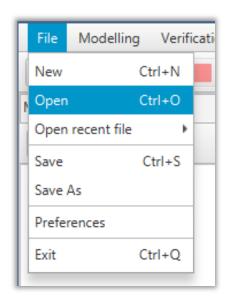
- Unzip CMAS at any location on your computer
- Run the cmas.exe to start the agent system
- Run the simulation.exe to start the simulation for an example of a Plug & Produce manufacturing system
- This simulation can be controlled from the CMAS system





# Open example project

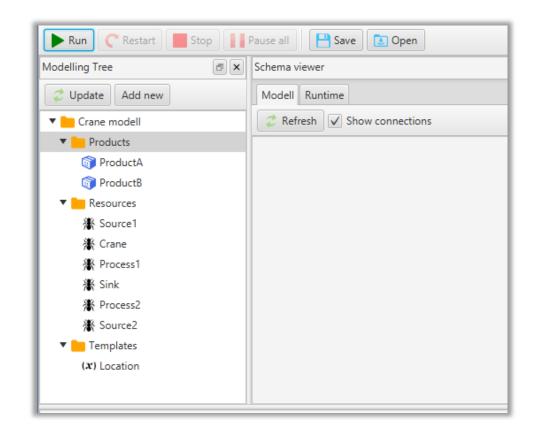
- Download the crane example project from GitHub
- Unzip at any location on your computer
- Open the example project:
  - From the CMAS software go to the top menu bar
  - Select: File > Open
  - Locate the example (.cmas file) and open it





## **Modelling Tree**

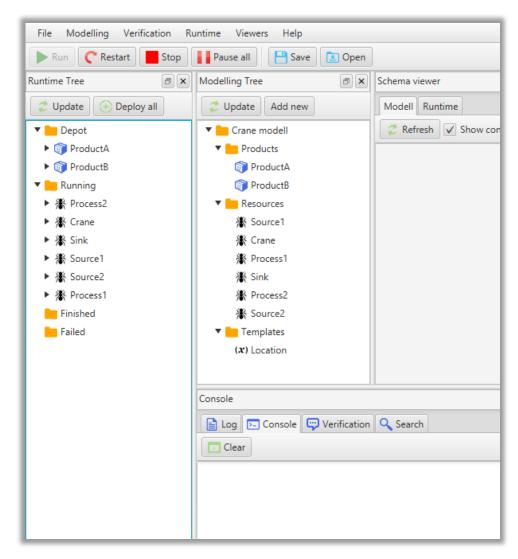
- You will see a Modelling Tree with all agents
- Here we can see two product agents: *ProductA* and *ProductB*
- There are six resource agents in the Model
- Each of these agents can also be seen in the simulation example





### **Runtime Tree**

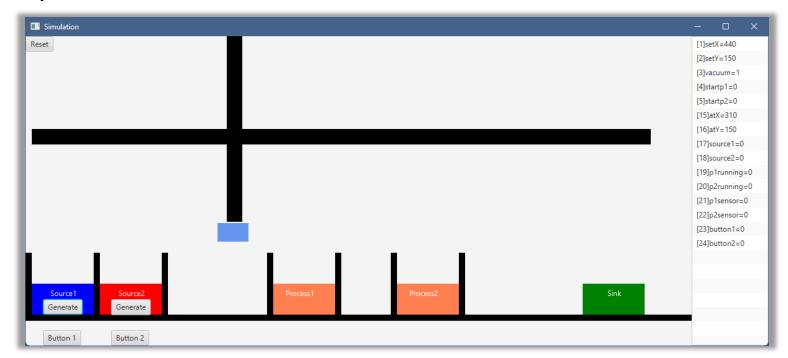
- Press the green Run button
- A Runtime Tree is opened where we can see that all resources are running
- The products are still in the *Depot* and will be deployed automatically when they are added to the simulation
- When a product agent is done with its manufacturing goals it jumps to Finished
- If an agent jumps to Failed it has some error that happened





## Plug & Produce Simulation

- In the simulation you can press *Generate* on *Source 1* or *Source 2*
- This adds that product to the Running state in the CMAS software
- In this example, only one product can be deployed at one time, so do not add more than one part at a time



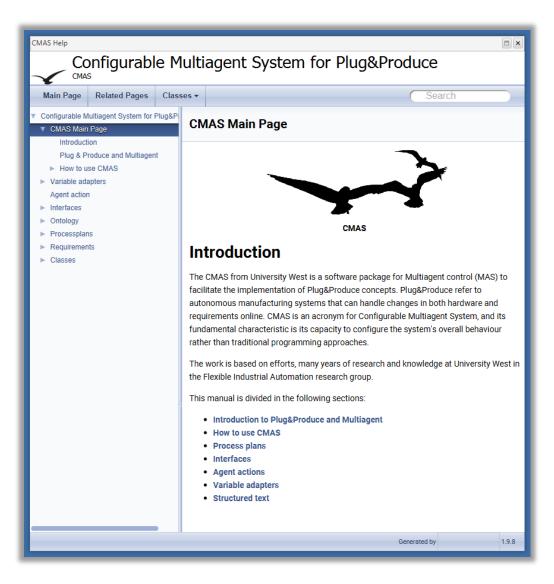


#### **Documentation**

- There is also comprehensive documentation built into the software
- Go to Help > Help



- This will open the documentation
- The chapter How to use CMAS gives a detailed introduction to how to use the software







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