

Centralised exchanges

Concept. Defining an archetype simulation environment for centralised exchanges. In our classification scheme, this archetype is defined by an bidirectional star state partition graph topology and would make sense for simulations of financial, betting and housing markets as well as other forms of resource exchange.

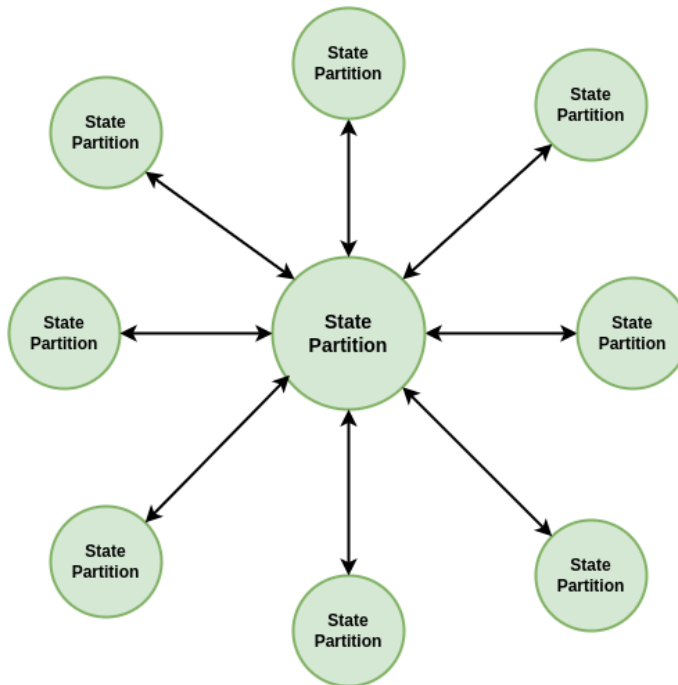


Figure 10.1: State partition graph topology for centralised exchange archetypes.

- Full sim: full event-based spatial stochastic model
 - Inference model: spatial mean field inference features using the probabilistic reweighting
 - Also use the likelihood-free inference model?
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- Humanitarian aid logistics in response to flooding, fire or other natural disasters
 - Routing of transportation
 - Where to focus searches
 - Transportation size distribution
 - Supply chain logistics of resources and allocation of budget
 - Example paper here with stochastic network models [\[1\]](#)

Bibliography

- [1] D. Alem, A. Clark, and A. Moreno, “Stochastic network models for logistics planning in disaster relief,” *European Journal of Operational Research*, vol. 255, no. 1, pp. 187–206, 2016.