

# Activity simulation

Activity simulations essentially require the Activity simulation engine in Magic Model Analyst to perform all Activity-based simulations. The details are outlined in the following topics:

- [Activity simulation engine](#)  
Running Activity Simulation in Activity diagrams or Activity elements.
- [Creating a model for Activity simulation](#)  
Simulating Classifiers defined by Activities.
- [Executing Activities](#)  
Suspending the simulation with breakpoints.
- [Activity duration simulation](#)  
Calculating and analyzing Activity duration and specifying duration constraints.
- [Duration analysis](#)  
Directing target objects to the callOperationAction.
- [Running a Call Action simulation without a target pin](#)  
Simulating a CallOperationAction that does not have a target pin to select a runtime object as a target.
- [Activity Partition execution and allocated Behavior](#)  
Using Activity Partition as an element in the Activity diagram to set the boundary of simulation of an execution.
- [Execution of incomplete/dummy models](#)  
Executing incomplete and dummy models with Behaviors of Actions when input or output pins or any properties of Actions are not specified or present.
- [Using utility functions of Simulation](#)  
Facilitating common tasks through Opaque Behaviors under **SimulationProfile::library::utils**.