

AIRPORT – Optimization and Simulation

Airport Management, Handling Companies and Airlines need high service level and high safety. Why risking with poor and unpredicted performances? ACT Solutions can support you without risks with what-if analysis and optimization based on powerful Airport Simulator.

Airport Optimization

Optimization for Airport Management, Handling Companies and Airlines. The Processes inside the Airport Management, Handling Companies and Airlines are complex and affected



by variability (for example just thinking about the peaks of passengers) and randomness (for example just thinking about the flight delays). Optimization can be used in several ways to improve

the systems performances, the service levels and also to reduce risks. Optimizing Airport Management, Handling Company and Airlines, in other words all airport sectors, means to support the design and the verification phases of infrastructures and systems. The Optimization is made to measure for your reality to resolve specific issues and to support specific analysis on sub-parts of the whole airport. It's important that the model has the right level of details and correctly describe the interaction between the variables to study.

ACT Solutions give you the needed specialist support to build the model to optimize your activity. Do the **IATA** (International Air Transport Association) or **ICAO** (International Civil Aviation Organization) procedures give you too many constrains to respect?

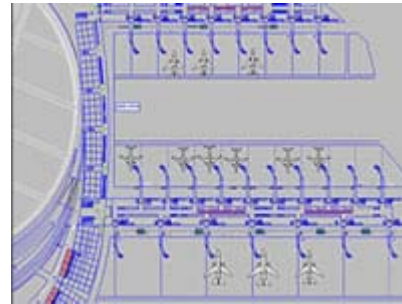
- **Optimization for Airport Management**
Have you never had some matter with baggages? Have you lost them? Or, again, have you had the saturation with consequent stop of the system? We can optimize your process and give you another way to operate!

- **Optimization for Handling Companies**
Handling Companies have to do with very many kinds of issues. For example with the optimal number of the Operators acting into the different qualifications; or, again, with the optimal number of hours worked;



Airport Simulation

Simulation for Airport Management, Handling Companies and Airlines.



Simulation can be used in several ways to improve the systems performances, the service levels and also to reduce risks. Airport Simulators support the designing and the

verification phases of infrastructures and systems. The Simulator can be used in real-time to predict future states or training for airport personnel. The simulation model usually is build to answer specifics questions and support specific analysis on sub-parts of the whole airport. It's important that the model has the right level of details and correctly describe the interaction between the variables to study. The Simulator can relate to only a sub-process or combine more of them. For example you can:

- Simulate the Check-in and the passengers control;
- Analyze the baggage handling system you are buying or designing;
- Evaluate the passengers flow;
- Verify and validate safety procedures;
- Study the gates allocation procedures;
- Study the traffic and congestions.



It's important that the model capture the randomness and that you analyze the trends of the variables over the time so to evaluate the peaks. Arena Simulation and SIMIO are the

most powerful and used tool to Simulate Airports, ACT Solutions give You the needed specialist support to build models. A Simulation Model is a virtual copy of your processes. Sometime you need both in real time and in the simulators to optimize to use at the best resources. For example to schedule personnel, to allocate gate, to get dynamically sequence a list of movements or task with different priorities. ACT Solutions is specialized to provide

AIRPORT – Optimization and Simulation

you have to provide a complete flight coordination service for the customer airlines, ranging from preparing the flight, ramp coordination, flight operations, crew administration and filing of all flight data. For doing that we can help you!

- **Optimization for Airlines**

Airline deals with a tremendous balancing of cost, service levels, safety. The cost of the recourses is significant and unlikely affects by randomness that can easily erode profits.



The best and rational use of assets and resources is a key element to win. Moreover with our scheduling components you can optimize crew and fleet, hotels

reservation policy.

ACT Solutions can support you to protect your profits using most advance simulation, optimization and forecasting technology.

optimization software to plan and schedule fleet and resources and activity.

- **Simulation for Airport Management**

Have you never had some matter with baggages? Have you lost them? Or, again, have you had the saturation with consequent stop of the system? We can simulate your process and give you another way to see your activity and use our tools to improve your!

- **Simulation for Handling Companies**

Handling Companies have to do with very many kinds of issues. For example with the optimal number of the Operators acting into the different qualifications; or, again, with the optimal number of hours worked; you have to provide a complete flight coordination service for the customer airlines, ranging from preparing the flight, ramp coordination, flight operations, crew administration and filing of all flight data. For doing that, we can help you!

- **Simulation for Airlines**

Airline deals with a tremendous balancing of cost, service levels, safety. The cost of the recourses is significant and unlikely affect by randomness that can easily erode profits.



The best and rational use of assets and resources is a key element to win. Arena Simulation and SIMIO permit you to predict cost taking into account all the constraints.

Moreover with our scheduling components You can optimize crew and fleet, hotels reservation policy. **ACT Solutions** can support you to protect your profits using most advance simulation, optimization and forecasting technology.