# 1Point2

# Passengers Simulation in Airport HUB

**Air France chose HUBSIM software to simulate passenger flows in Roissy-Charles-de-Gaule terminal T2.**
**The results, shared with Aéroports de Paris, allow Air France to provide better connection rates to passengers using CDG HUB.**

⇒ **ISSUES:**

- Simulate terminal 2G **before** its opening.
- Improve successful passenger transfer rate.
- Propose check point crewing.

⇒ **SOLUTIONS:**

- 1Point2 developed HUBSIM and adapted it to the specific needs of Air France.
- Air France users build by themselves different terminal structures to test them.

⇒ **ADVANTAGES:**

- Successful transfers improved by 1.5 points.
- Reorganization of shuttle timetables, providing lower costs and better service.

Every day, on average 100 000 passengers pass through T2 of CDG airport. Once having descended from the incoming plane, and before boarding the outgoing flight, the passenger goes through different steps: checking in, passport/security checks; departure lounge, etc. How does the passenger get from A to B? On foot, taking escalators, or by bus or airport shuttles? On his own or with the help of airport staff?

Before defining the new terminal 2G, Air France wanted a tool to analyze passenger flows. HUBSIM was chosen to simulate various possible infrastructures.

Based on discrete event simulation software ExtendSim, HUBSIM provides a friendly user-interface to build and simulate a terminal:
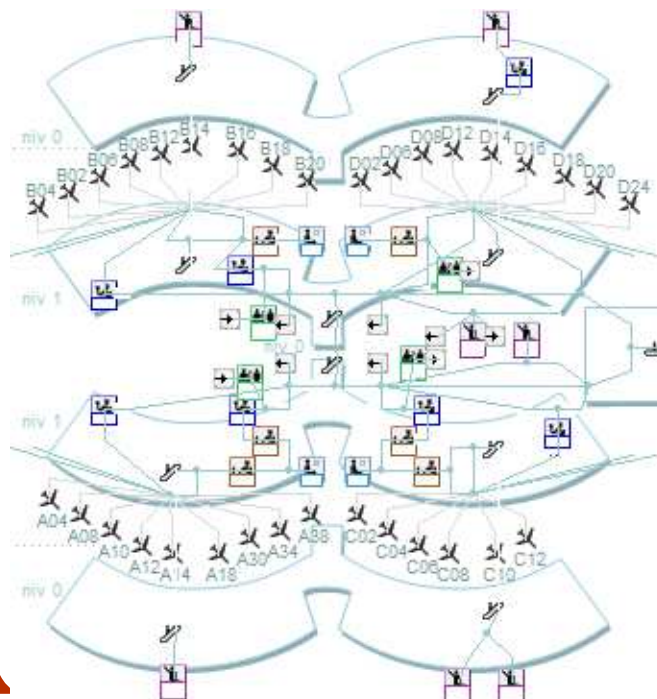
- Terminal cartography : waypoints, transportation devices, control points crewing.
- Bus & shuttle timetables.



- Flight schedules
- Taking into account different types of passengers (children, reduced mobility, VIPs, ...)

In less than 5 minutes, HUBSIM reproduces a day in the life of the airport for each single passenger. A large number of scenarios can thus be efficiently tested.

The results are exported to MS Access or MS Excel, letting the users customize management control data, or to create others.
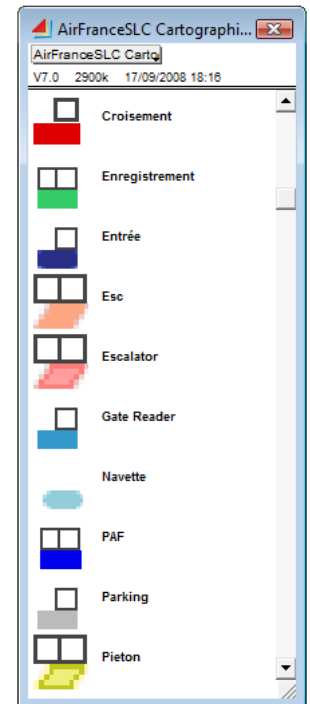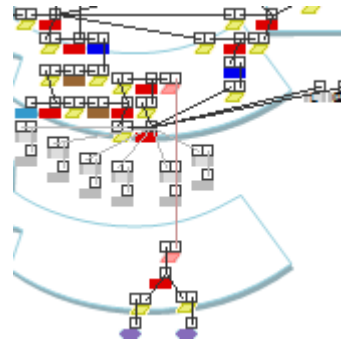


**Our customers in public transportation:**

Air France, Iberia, Aéroports de Paris, Transpole,-Kéolis RATP, SNCF, Tisséo.

Simulation is one of the most powerful tools for analyzing complex systems. Its benefits often exceed the initial aims. Simulation is a way to:

- **Understand thoroughly** your system dynamics. What is the minimum transfer time for a passenger? Where and when do long waiting lines tend to appear?

- **Anticipate** the functioning of a new terminal before it is opened. Which best physical layout? How many passport check points? With simulation, you can avoid small and big mistakes.

- **Enhance** the operation of existing terminals. Define where and when assign employees for passenger service. Discover the bottlenecks that impact the success of transfers.

## What the end-user says

« HUBSIM is a very useful application, at the core of our decision-making process.

HUBSIM is part of different actions made to obtain 1.5 percent more of successful transfers. That means several hundred passengers every day. If you multiply this by the cost of a missed transfer, it results in large amounts of money.

The simulation model was the strong point for redefining the shuttle timetables with our shuttle company. »

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**For more information, visit our website :**
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**Trained in industrial simulation in the United States and in France, the 1Point2 team provides since 1987 services, quality software, development, studies and training in the field of simulation.**

**1Point2 is the exclusive distributor of ExtendSim in France, Belgium, Italy, Spain, Portugal, and Greece.**

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