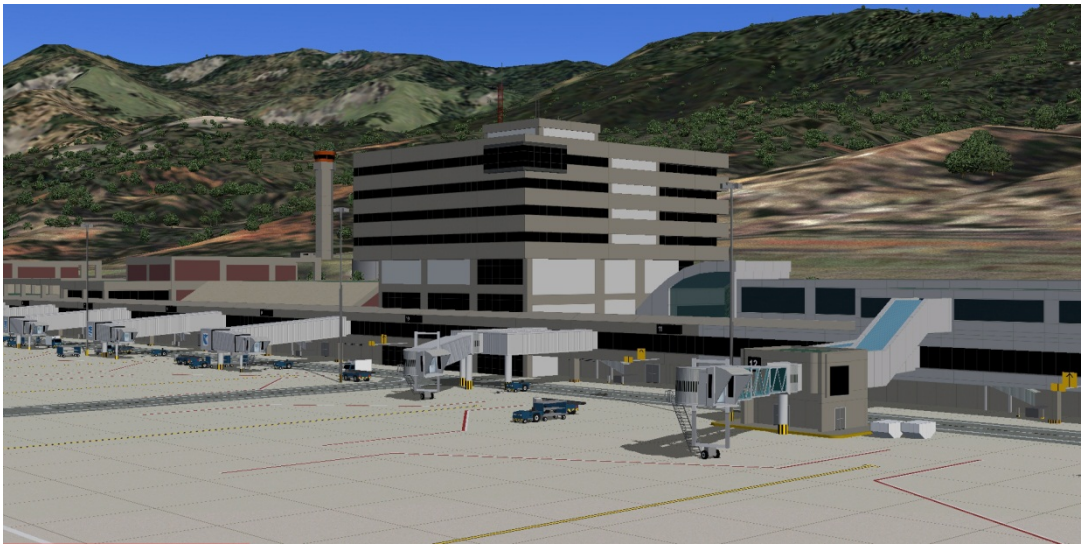
Presents

http://www.blueprintsimulations.com/



Contents

Scenery Features
Software Compatibility
Hardware Requirements

Parking spot configuration and airline gate assignments

Technical support and contact information
Scenery fixes and upgrades
Acknowledgements

Scenery Features:

1. Custom-made, optimized and fully three-dimensional (True 3D) Gmax models of the entire facility including:
    - Three terminals: Domestic, International and Auxiliary
    - Accurately located aircraft parking positions around every terminal and individually customized static jetways at every gate.
    - Static service vehicles (optional) and parking alignment aids at every gate
    - A significant fraction of the general aviation, aircraft maintenance and cargo facilities within the field's boundary. All aircraft hangars are fully three-dimensional and most are usable
    - Approach lighting fixtures and navigation aid antennae for every runway.
2. Custom-made, high-resolution textures for all Gmax generated models including transparency effects
3. Custom-made, high-resolution terrain elevation mesh covering Rio's entire metropolitan area
4. Custom-made, high-resolution photo real ground textures depicting seasonal changes and carefully blended with the surrounding terrain
5. Accurate runway and taxiway layout, including detailed markings and signs
6. Realistic taxiway and ramp markings and ramp illumination effects
7. Two levels of scenery complexity and detail:
    - NORMAL complexity includes terrain texturing, autogen vegetation, airport layout with taxiway signs and basic navigation equipment models (actual localizer and glide slope radio signals are available regardless of the scenery complexity setting), and most buildings within the field's boundaries including the terminals, the air traffic control tower and cargo and maintenance facilities
    - VERY DENSE complexity adds detailed instrument approach lighting system models, animated runway intersection lighting, gate parking position alignment aids, trees and static ramp vehicles (optional).
8. Advanced, custom-made AI mapping file (AFCAD) including realistic gate and parking spot layout as well as airline gate assignments. A basic AI mapping file without gate assignments is also available as an option.

Software Compatibility:

FS2004 (FS9) and Windows XP, Windows Vista or Windows 7 (All versions)

Note: A FSX compatible version is available and sold separately. Please visit our web site for additional information.

http://www.blueprintsimulations.com/

Hardware Requirements:

BluePrint sceneries are designed to work properly in the average computer at the time of each release. For optimum performance while taking advantage of most scenery features we suggest the following hardware configuration:

- Intel Core Quad CPU or better (Q9300 @ 2.50 GHz fully tested)
- 4 GB RAM (fully tested)
- nVidia 9000 series video processor with 256-bit memory interface and 512 MB dedicated video memory or better (nVidia GeForce 9800 GT fully tested).

Note: No measurable frame-rate degradation was observed using the hardware specified above as “fully tested”.

* BluePrint Simulations sceneries are designed and tested using nVidia GPU’s exclusively. For Current generation video card specifications visit http://nVidia.com. For ATI video card specifications visit http://ati.com.

Parking Spot Configuration and Airline Gate Assignments

As a fundamental rule, we seek to represent the airport as closely as possible to real life using every resource available in the flight simulator. By default our sceneries are configured to handle ATC operations and AI traffic as realistically as possible based on direct observation and/or airline gate assignment information available to the public via the airport's official website. Consequently, aircraft parking spots are configured to accommodate specific aircraft types according to the actual gate configuration and the airline and aircraft type that use that gate most often in real life. In order to ensure proper ATC and AI traffic operations you must take care of a few items that we consider and assume to be simple and basic knowledge for any user interested in our high-performance sceneries. If you are interested in AI traffic and realistic ATC operations you must ensure that your aircraft, be it the one you are flying or any AI traffic, is properly formatted as described below.

MSFS's parking spot configuration is based on the aircraft's wingspan and the location of its center of gravity (or C.G.) as specified in each individual aircraft model. The model refers to the simulated aircraft (i.e. MSFS's default B747-400) as opposed to the aircraft in real life! Consequently, proper handling of an aircraft by the AI traffic engine will depend on the proper configuration of the aircraft model by each individual flight simulator aircraft designer. The wingspan and C.G. location parameters are not easily accessible to the user so we must rely on the aircraft designer to accomplish the task properly. Improperly formatted aircraft models are simply not supported by our sceneries.

As scenery designers we do have access to the parking spot configuration and we are not only able but required to set at least four parameters: location as lat/lon coordinates, heading, radius and type. We are also given the option to specify a few other parameters including airline, and pushback direction preference. The values assigned to each parameter will determine the way any given aircraft will be handled by the simulator air traffic control engine. There is no way at this point to instruct the traffic engine to park or direct any given aircraft to any specific parking spot (or gate). All we can do is set parking spot parameters to provide the traffic engine with a basic set of rules to follow.

Assuming that the aircraft models are properly formatted, the simulator's AI traffic engine will accommodate AI aircraft in the available parking spots according to the parameters mentioned in the previous paragraph. The most basic parameters that we must consider are the location and heading. While heading is straightforward and simple to understand, location is not. The location of a parking spot is defined by a set of latitude/longitude coordinates. It is essential to understand that all the simulator's traffic engine can do is position aircraft that geographic location using one single point in the aircraft visual model as a reference. That point happens to be the C.G. It is also important to understand that the location of the front gear, the point actually used in real life to park an aircraft at the gate, is essentially irrelevant.

The next parameter to be considered is the parking spot radius. For any given parking spot, this parameter defines the maximum size of the aircraft that will be parked at that spot by defining a circular area around the parking spot location as defined above. All the simulator's traffic engine knows is that the aircraft must fit within that circular area using the model's wingspan as a reference. It is important to understand that this parameter only sets a restriction on the maximum size of the aircraft that will fit on a given spot. It sets no restrictions on the minimum size at all.

As all aircraft types and models have different wingspans and C.G . locations, not all aircraft will fit perfectly in each parking spot. For example, a Boeing 737 aircraft may not fit perfectly in a parking spot configured to fit a Boeing 777 aircraft. The front gear on a B777 is much further away from its C.G. than that of a B737 is from its own C.G. Nonetheless, the simulator's AI traffic engine may park a B737 aircraft in a parking spot configured for a B777 aircraft and it will not account for the need to move the B737 forward so that its front wheels end up at the same location where the B777's front wheels would be as it is done in real life. The bottom line is that by properly formatting the parking spot radius all we can do is prevent the simulator's traffic engine from parking a B777 aircraft in a parking spot that will only fit a B737 or smaller aircraft because otherwise it would end up impelled in the terminal building or its wing will crash with the aircraft parked in the adjacent gate. This is particularly important when, as in real life, some parking spots are designed and configured to fit only smaller aircraft.

In our effort to represent the airport as it is in real life we have also chosen to assign specific airlines to each terminal gate by setting the optional parameter mentioned above. Detailed information about the gate assignments is provided below. The option to disregard airline gate assignments is now provided during installation of our sceneries.

Please note that for a given aircraft to be directed toward or parked at a gate assigned to a specific airline the aircraft must be properly formatted. There are two parameters that must be configured within the "aircraft.cfg" file associated with each flyable or AI traffic aircraft. It is not enough that the aircraft is labeled according to the corresponding airline texture applied to each instance of a given aircraft model. You must make sure that the aircraft designer has properly formatted those two parameters for each texture associated with a given aircraft model or you must add those parameters to the aircraft.cfg file yourself. This can easily be accomplished by editing the aircraft.cfg file using a text editor such as "Window's Notepad". The two parameters are:

A parameter that defines the type of parking spot to be used. Values may be GATE for passenger terminal gates, CARGO for cargo ramp parking spots and MILITARY for military ramp parking spots and RAMP for general aviation ramp parking spots.
A parameter that specifies the airline such that the AI traffic engine can identify it.

Consequently, each instance of a given aircraft as defined in the aircraft.cfg file must contain these two lines:
atc_parking_types=
atc_parking_codes=

The following fictitious example corresponds to a properly formatted MSFS default 737-400 aircraft displaying textures representing the "Southwest Airlines" livery

```
[fltsim.0]
title=Boeing 737-400 Southwest Airlines
sim=Boeing737-400
model=
panel=
sound=
texture=SWA
kb_checklists=Boeing737-400_check
kb_reference=Boeing737-400_ref
ui_manufacturer=Boeing
```


ui_type="737-400"
ui_variation="Southwest Airlines"
atc_id=N737
atc_airline=SOUTHWEST
atc_flight_number=1123
atc_parking_types=GATE
atc_parking_codes=SWA
description="One should hardly …"

Note: parameters labeled ui_ correspond to the **U**ser **I**nterface only (i.e. to be used in the aircraft menu) while those labeled atc_ correspond to parameters to be used by the ATC and the AI traffic engine to properly identify and handle the aircraft.

If the two parameters mentioned above have not been properly configured or are missing, which is the most common occurrence unless the user has manually modified the file, the AI traffic engine will not know the intended parking spot type and corresponding airline associated with the aircraft. On the other hand, If the aircraft is properly formatted as shown in the example above, the aircraft will be swiftly and efficiently directed toward a passenger terminal gate that has been configured for a B737-400 or smaller aircraft and that has been assigned to "Southwest Airlines".

Unless the option to disregard airline assignments is selected during installation, there are very few unassigned parking spots available for the AI traffic engine to use in our sceneries. Consequently, this option should be selected unless care has been taken either by the manufacturers or by you to properly format the aircraft.cfg file for the aircraft that you intend fly or use as AI traffic

Domestic Terminal

Gate D	Maximum Aircraft Wingspan (ft)	Typical Aircraft	Formatted for AI Aircraft	Parking Type	Airline Codes
1	120	DC9-30, MD80, B737-200/300		GATE	ALV, BBR, LER, OCA, ROI, RUC, VCV
2	120	DC9-30, MD80, B737-200/300		GATE	ALV, BBR, LER, OCA, ROI, RUC, VCV
3	120	DC9-30, MD80, B737-200/300		GATE	ALV, BBR, LER, OCA, ROI, RUC, VCV
4	120	N/A	N/A	N/A	ALV, BBR, LER, OCA, ROI, RUC, VCV
5	120	N/A	N/A	N/A	ALV, BBR, LER, OCA, ROI, RUC, VCV
6	120	DC9-30, MD80, B737-200/300		GATE	ALV, BBR, LER, OCA, ROI, RUC, VCV
7	120	DC9-30, MD80, B737-200/300		GATE	ALV, BBR, LER, OCA, ROI, RUC, VCV
8	120	DC9-30, MD80, B737-200/300		GATE	ALV, BBR, LER, OCA, ROI, RUC, VCV
9	120	DC9-30, MD80, B737-200/300		GATE	ALV, BBR, LER, OCA, ROI, RUC, VCV
10	120	DC9-30, MD80, B737-200/300		GATE	ALV, BBR, LER, OCA, ROI, RUC, VCV
11	120	DC9-30, MD80, B737-200/300		GATE	ALV, BBR, LER, OCA, ROI, RUC, VCV
12 - 28	120	ATR-42/72, BE-1900, CRJ-700, DC9-30, MD80, B737-200/300	ANY	GATE	ALV, BBR, LER, OCA, ROI, RUC, VCV

Parking positions D12 - D28 are remote stands

International Terminal

Gate I	Maximum Aircraft Wingspan (ft)	Typical Aircraft	Formatted for AI Aircraft	Parking Type	Airline Codes
12	220	A340-300/600, B737-700, B757-200/300	B747-400	GATE	DLH, UAL
14	220	B767-300	B747-400	GATE	AZA, LAN
15	220	A340-300, B757-200, B767-300, B747-400, B777-300	B747-400	GATE	AFR, AMX, DAL
16	200	A330-200, A340-200	A340-300	GATE	ACA, TAP, VCV
17 - 21	N/A	N/A	N/A	N/A	N/A
22	200	B757-200, B767-300	A340-300	GATE	BBR, BWA, BXL
23	200	ERJ-190, A330-200, A340-300/600	A340-300	GATE	IBE, LRC, TAM
24	180	ERJ-190, B737-700/800, B757-200	B767-300	GATE	BBR, CMP, RPB
25	220	A319, A320, B767-300	B747-400	GATE	AEA, AVA, BBR
26	220	A319, A320, B767-300	B747-400	GATE	AVA, BBR
27	135	B737-800, B757-200	B757-200	GATE	AAL
28, 29	180	B727-200,B767-/200300	N/A	CARGO RAMP	N/A
30 - 32	200	Up to A340-300/B777-200	B767-300	GATE	N/A
33 - 36, 38 - 40	180	Up to B767-300	B767-300	GATE	N/A
37	260	Up to A380-800	N/A	GATE	N/A

Parking positions I30 - I37 are remote stands

Auxiliary Terminal

Gate	Maximum Aircraft Wingspan (ft)	Typical Aircraft	Formatted for AI Aircraft	Parking Type	Airline Codes
1 - 3	220	Up to B747-400	ANY	GATE	

Cargo Ramp

E Parking	Maximum Aircraft Wingspan (ft)	Typical Aircraft	Formatted for AI	Parking Type	Airline Codes
1 - 3, 5 - 7	180	B767-200/300, DC-10, MD11	ANY	CARGO RAMP	N/A
4	220	B767-200/300, DC-10, MD11, B747-200/400	ANY	CARGO RAMP	N/A

General Aviation Ramp

E Parking	Maximum Aircraft Wingspan (ft)	Typical Aircraft	Formatted for AI	Parking Type	Airline Codes
8 - 13	80		ANY	GA RAMP	
14 - 19	45		ANY	GA RAMP	
20 - 35	80		ANY	GA RAMP	

Scenery Fixes and Upgrades:

We are committed to providing the highest quality scenery add-ons for Microsoft Flight Simulator. Consequently, we issue fixes and upgrades for our products from time to time. The fixes and upgrades may include simple corrections and improvements (most thanks to the feedback of our customers) as well as significant changes and improvements resulting from technique evolution and refinement on the part of our designers. As our technique evolves, we update previously released products by issuing interim fixes or upgrades.
In order to stay current regarding these free fixes and upgrades please visit the "Downloads" page on our web site:

http://www.blueprintsimulations.com/

Technical Support:

Answers to the most common questions about our sceneries can be found in the FAQ section of our website at http://www.blueprintsimulations.com. Any other technical questions must be submitted via email to support@blueprintsimulations.com.

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We would like to acknowledge Lee Swordy for his AFCAD version 2.21 freeware, a CAD-style program used for the modification of facility data as well as some of the visible scenery used in Microsoft Flight Simulator.

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