

PathSkim - Quick Reference

Version 5.0.12



Usage

PathSkim [-flag] [control_file] [partition]

Optional Flags:

- Q[uiet] = execute without screen messages
- H[elp] = show program syntax and control keys
- C[ontrol] = create/update a default control file
- K[eyCheck] = list unrecognized control file keys
- P[ause] = pause before exiting
- N[oPause] = never pause before exiting
- D[etail] = execute with detailed status messages
- X[ML] = write an XML file with control keys

Purpose

Configuration Keys

REQ? KEY	TYPE	DEFAULT	VALUE RANGES
TITLE	Text		
REPORT_FILE	File		filename[_partition][.prn]
REPORT_FLAG	Bool	FALSE	TRUE/FALSE, YES/NO, 1/0, T/F, Y/N
PROJECT_DIRECTORY	Path		
MODEL_START_TIME	Time	0:00	>= 0 [seconds], 0.0 [hours], 0:00
MODEL_END_TIME	Time	24:00	> [model_start_time]
UNITS_OF_MEASURE	Text	METRIC	METRIC, ENGLISH
RANDOM_NUMBER_SEED	Int.	0	0 = computer clock, > 0 = fixed
MAX_WARNING_MESSAGES	Int.	100000	>= 0
MAX_WARNING_EXIT_FLAG	Bool	TRUE	TRUE/FALSE, YES/NO, 1/0, T/F, Y/N
MAX_PROBLEM_COUNT	Int.	0	>= 0
NUMBER_OF_THREADS	Int.	1	1..24
PATHSKIM_REPORT_*	Text		program report name

System File Keys

REQ? KEY	TYPE	DEFAULT	VALUE RANGES
<input checked="" type="checkbox"/> NODE_FILE	File		[project_directory]filename
<input checked="" type="checkbox"/> LINK_FILE	File		[project_directory]filename
<input checked="" type="checkbox"/> CONNECTION_FILE	File		[project_directory]filename
<input checked="" type="checkbox"/> LOCATION_FILE	File		[project_directory]filename
ZONE_FILE	File		[project_directory]filename
POCKET_FILE	File		[project_directory]filename
LANE_USE_FILE	File		[project_directory]filename
TURN_PENALTY_FILE	File		[project_directory]filename
PARKING_FILE	File		[project_directory]filename
ACCESS_FILE	File		[project_directory]filename
TRANSIT_STOP_FILE	File		[project_directory]filename
TRANSIT_FARE_FILE	File		[project_directory]filename
TRANSIT_ROUTE_FILE	File		[project_directory]filename
TRANSIT_SCHEDULE_FILE	File		[project_directory]filename
SELECTION_FILE	File		[project_directory]filename.*
HOUSEHOLD_FILE	File		[project_directory]filename.*
LINK_DELAY_FILE	File		[project_directory]filename
VEHICLE_TYPE_FILE	File		[project_directory]filename
VEHICLE_FILE	File		[project_directory]filename.*
NEW_LINK_DELAY_FILE	File		[project_directory]filename
NEW_PROBLEM_FILE	File		[project_directory]filename.*
NEW_PLAN_FILE	File		[project_directory]filename.*
NEW_SKIM_FILE	File		[project_directory]filename.*

File Service Keys

REQ? KEY	TYPE	DEFAULT	VALUE RANGES
NOTES_AND_NAME_FIELDS	Bool	FALSE	TRUE/FALSE, YES/NO, 1/0, T/F, Y/N

File Service Keys

REQ? KEY	TYPE	DEFAULT	VALUE RANGES
SKIM_OD_UNITS	Text	ZONES	DISTRICTS, ZONES, LOCATIONS
SKIM_TIME_PERIODS	List	ALL	e.g., ALL, 0..97200 seconds, 0.0..27.0 hours, 0:00..27:00
SKIM_TIME_INCREMENT	Time	0 minutes	0, 2..240 minutes
SKIM_TOTAL_TIME_FLAG	Bool	FALSE	TRUE/FALSE, YES/NO, 1/0, T/F, Y/N
NEAREST_NEIGHBOR_FACTOR	Dec.	0.0	0.0..1.0
MERGE_TIME_PERIODS	Bool	FALSE	TRUE/FALSE, YES/NO, 1/0, T/F, Y/N
ZONE_EQUIVALENCE_FILE	File		[project_directory]filename
ZONE_LOCATION_MAP_FILE	File		[project_directory]filename

Data Service Keys

REQ? KEY	TYPE	DEFAULT	VALUE RANGES
DAILY_WRAP_FLAG	Bool	FALSE	TRUE/FALSE, YES/NO, 1/0, T/F, Y/N
SUMMARY_TIME_RANGES	Text	ALL	e.g., ALL, 0..97200 seconds, 0.0..27.0 hours, 0:00..27:00
SUMMARY_TIME_INCREMENT	Time	15 minutes	0, 2..240 minutes

Flow, Time Service Keys

REQ? KEY	TYPE	DEFAULT	VALUE RANGES
UPDATE_FLOW_RATES	Bool	FALSE	TRUE/FALSE, YES/NO, 1/0, T/F, Y/N
UPDATE_TURNING_MOVEMENTS	Bool	FALSE	TRUE/FALSE, YES/NO, 1/0, T/F, Y/N
CLEAR_INPUT_FLOW_RATES	Bool	FALSE	TRUE/FALSE, YES/NO, 1/0, T/F, Y/N
UPDATE_TRAVEL_TIMES	Bool	FALSE	TRUE/FALSE, YES/NO, 1/0, T/F, Y/N
LINK_DELAY_UPDATE_RATE	Int.	0	-1..5000
LINK_DELAY_FLOW_FACTOR	Dec.	1.0	1..100000
EQUATION_PARAMETERS_*	List	BPR, 0.15, 4.0, 0.75	BPR, 0.15, 4.0, 0.75

Router Service Keys

REQ? KEY	TYPE	DEFAULT	VALUE RANGES
IMPEDANCE_SORT_METHOD	Bool	FALSE	TRUE/FALSE, YES/NO, 1/0, T/F, Y/N
SAVE_ONLY_SKIMS	Bool	FALSE	TRUE/FALSE, YES/NO, 1/0, T/F, Y/N
WALK_PATH_DETAILS	Bool	FALSE	TRUE/FALSE, YES/NO, 1/0, T/F, Y/N
IGNORE_VEHICLE_ID	Bool	FALSE	TRUE/FALSE, YES/NO, 1/0, T/F, Y/N
LIMIT_PARKING_ACCESS	Bool	TRUE	TRUE/FALSE, YES/NO, 1/0, T/F, Y/N
IGNORE_TIME_CONSTRAINTS	Bool	FALSE	TRUE/FALSE, YES/NO, 1/0, T/F, Y/N
END_TIME_CONSTRAINT	Time	0 minutes	0..360 minutes
IGNORE_ROUTING_PROBLEMS	Bool	FALSE	TRUE/FALSE, YES/NO, 1/0, T/F, Y/N
PERCENT_RANDOM_IMPEDANCE	Dec.	0.0 percent	0.0..100.0 percent
HOUSEHOLD_TYPE_SCRIPT	File		[project_directory]filename
WALK_SPEED	Dec.	1.0 mps	0.5..4.0 mps
BICYCLE_SPEED	Dec.	4.0 mps	1.0..10.0 mps
WALK_TIME_VALUES_*	List	20.0 impedance/second	0..1000.0
BICYCLE_TIME_VALUES_*	List	15.0 impedance/second	0..1000.0
FIRST_WAIT_VALUES_*	List	20.0 impedance/second	0..1000.0
TRANSFER_WAIT_VALUES_*	List	20.0 impedance/second	0..1000.0
PARKING_TIME_VALUES_*	List	0.0 impedance/second	0.0..1000.0
VEHICLE_TIME_VALUES_*	List	10.0 impedance/second	0..1000.0
DISTANCE_VALUES_*	List	0.0 impedance/meter	0.0..1000.0
COST_VALUES_*	List	0.0 impedance/cent	0.0..1000.0
FACILITY_BIAS_FACTORS_*	List	1.0	0.5..2.0
LEFT_TURN_PENALTIES_*	List	0 impedance	0..10000
RIGHT_TURN_PENALTIES_*	List	0 impedance	0..10000
U_TURN_PENALTIES_*	List	0 impedance	0..10000
PARKING_PENALTY_FILE	File		[project_directory]filename
TRANSIT_PENALTY_FILE	File		[project_directory]filename
TRANSFER_PENALTIES_*	List	0 impedance	0..100000

Router Service Keys

REQ? KEY	TYPE	DEFAULT	VALUE RANGES
STOP_WAITING_PENALTIES_*	List	0 impedance	0..100000
STATION_WAITING_PENALTIES_*	List	0 impedance	0..100000
BUS_BIAS_FACTORS_*	List	1.0	1.0..3.0
BUS_BIAS_CONSTANTS_*	List	0 impedance	0..10000
RAIL_BIAS_FACTORS_*	List	1.0	0.1..1.0
RAIL_BIAS_CONSTANTS_*	List	0 impedance	-1000..0
MAX_WALK_DISTANCES_*	List	2000 meters	100..20000 meters
WALK_PENALTY_DISTANCES_*	List	2000 meters	100..10000 meters
WALK_PENALTY_FACTOR	Dec.	0.0	0.0..25.0
MAX_BICYCLE_DISTANCES_*	List	10000 meters	1000..40000 meters
BIKE_PENALTY_DISTANCES_*	List	10000 meters	1000..20000 meters
BIKE_PENALTY_FACTOR	Dec.	0.0	0.0..25.0
MAX_WAIT_TIMES_*	List	60 minutes	5..400 minutes
WAIT_PENALTY_TIMES_*	List	60 minutes	5..200 minutes
WAIT_PENALTY_FACTOR	Dec.	0.0	0.0..25.0
MIN_WAIT_TIMES_*	List	0 seconds	0..3600 seconds
MAX_NUMBER_OF_TRANSFERS_*	Int.	3	0..10
MAX_NUMBER_OF_PATHS_*	Int.	4	1..10
MAX_PARK_RIDE_PERCENTAGE_*	Int.	50 percent	1..100 percent
MAX_KISS_RIDE_PERCENTAGE_*	Int.	35 percent	1..100 percent
KISS_RIDE_TIME_FACTOR_*	Dec.	2.5	1.0..4.4
KISS_RIDE_STOP_TYPES	Text	EXTERNAL	
MAX_KISS_RIDE_DROPOFF_WALK	Dec.	100 meters	10..500 meters
MAX_LEGS_PER_PATH	Int.	1000	10..10000
FARE_CLASS_DISTRIBUTION	List	0	
DEFAULT_PARKING_DURATION	List	0.0 hours	0.0..24.0 hours
LOCAL_ACCESS_DISTANCE	Dec.	2000 meters	100..7500 meters

Router Service Keys

REQ? KEY	TYPE	DEFAULT	VALUE RANGES
LOCAL_FACILITY_TYPE	Text	EXTERNAL	MAJOR..LOCAL, EXTERNAL
LOCAL_IMPEDANCE_FACTOR	Dec.	0.0	0.0..25.0
MAX_CIRCUITY_RATIO	Dec.	0.0	0.0..10.0
MIN_CIRCUITY_DISTANCE	Dec.	2000 meters	0..10000 meters
MAX_CIRCUITY_DISTANCE	Dec.	20000 meters	0..100000 meters
MIN_DURATION_FACTORS	List	0.1, 0.5, 0.8, 1.0	0.0..1.0

Control Keys

REQ? KEY	TYPE	DEFAULT	VALUE RANGES
ROUTE_FROM_SPECIFIED_LOCATIONS	List	ALL	
ROUTE_TO_SPECIFIED_LOCATIONS	List	ALL	
ROUTE_AT_SPECIFIED_TIMES	List	ALL	e.g., ALL, 0..97200 seconds, 0.0..27.0 hours, 0:00..27:00
ROUTE_BY_TIME_INCREMENT	Time	0 minutes	0, 2..240 minutes
ROUTE_WITH_TIME_CONSTRAINT	Text	START_TIME	NONE, START, ARRIVE, FIXED, DURATION, PASSENGER
ROUTE_WITH_SPECIFIED_MODE	Text	DRIVE	WALK, BIKE, DRIVE, RIDE, TRANSIT, PNR_OUT, PNR_IN, KNR_OUT, KNR_IN, TAXI, OTHER, HOV2, HOV3, HOV4
ROUTE_WITH_SPECIFIED_USE_TYPE	Text	CAR	ANY, WALK, BIKE, CAR, TRUCK, BUS, RAIL, SOV, HOV2, HOV3, HOV4, LIGHTTRUCK, HEAVYTRUCK, TAXI, RESTRICTED, NONE
ROUTE_FROM_SPECIFIED_ZONES	List	ALL	
ROUTE_TO_SPECIFIED_ZONES	List	ALL	
ORIGIN_LOCATIONS_PER_ZONE	Int.	0	0..100
DESTINATION_LOCATIONS_PER_ZONE	Int.	0	0..100
LOCATION_SELECTION_METHOD	Text	RANDOM	USER, RANDOM, CENTROID, DISTRIBUTED
ORIGIN_ZONE_FILE	File		[project_directory]filename
DESTINATION_ZONE_FILE	File		[project_directory]filename
ORIGIN_LOCATION_FILE	File		[project_directory]filename
DESTINATION_LOCATION_FILE	File		[project_directory]filename
NEW_ORIGIN_LOCATION_FILE	File		[project_directory]filename

Control Keys

REQ? KEY	TYPE	DEFAULT	VALUE RANGES
NEW_DESTINATION_LOCATION_FILE	File		[project_directory]filename

Notes

Each '_FILE' key has a corresponding '_FORMAT' key. The following file formats can be used for input and output files.
TEXT, BINARY, FIXED_COLUMN, COMMA_DELIMITED, SPACE_DELIMITED, TAB_DELIMITED, CSV_DELIMITED, DBASE, SQLITE3, VERSION3