Hadoop Airlines Analysis Project with using HIVE

Step 1:

Creating the new airport table for airports_mod.dat dataset.

Command:

Create table airport (Airport_ID string, Name string, City string, Country string, IATA_FAA string, ICAO string, Latitude string, Longitude string, Altitude string, Timezone string, DST string, TZ string) row format delimited fields terminated by ',';

Screenshot:

```
hive> create table airport (Airport_ID string, Name string, City string, Country s tring, IATA_FAA string, ICAO string, Latitude string, Longitude string, Altitude s tring, Timezone string, DST string, TZ string) row format delimited fields termina ted by ',';
OK
Time taken: 0.204 seconds
hive>
```

Step 2:

Creating the new final airlines table for Final_airlines dataset.

Command:

Create table finalairlines(Airline string, Name string, Alias string, IATA string, ICAO string, Callsign string, Country string, Active String) row format delimited fields terminated by ',';

Screenshot:

```
hive> create table finalairlines (Airline string, Name string, Alias string, IATA string, ICAO string, Callsign string, Country string, Active string) row format de limited fields terminated by ',';
OK
Time taken: 0.058 seconds
hive>
```

Step 3:

Creating the new route table for routes.dat dataset.

Command:

Create table route (Airline string, Airline_ID string, Source_Airport string, Source_Airport_ID string, Destination_airport string, Destination_Airport_ID string, Codeshare string, Stops string, Equipment string) row format delimited fields terminated by ',';

Screenshot:

```
hive> create table route (Airline string, Aireline_ID string, Source_Airport string, Source_Airport_ID string, Source_Airport_ID string, Codeshare string, Stops string, Equipment string) row format delimited field s terminated by ',';
OK
Time taken: 0.038 seconds
hive>
```

Step 4:

Loading the dataset into airport table.

Command:

load data local inpath

'/mnt/home/edureka_1472935/Airlines_Analysis_Project/airport/airports_mod .dat' overwrite into table airport;

Screenshot:

```
hive> load data local inpath '/mnt/home/edureka_1472935/Airlines_Analysis_Project/airport/airports_mod.dat' overwrite into table airport;
Loading data to table default.airport
Table default.airport stats: [numFiles=1, numRows=0, totalSize=739515, rawDataSize=0]
OK
Time taken: 1.522 seconds
```

Step 5:

Loading the dataset into finalairlines table.

Command:

load data local inpath

'/mnt/home/edureka_1472935/Airlines_Analysis_Project/final_airline/Final_air lines' overwrite into table finalairlines;

```
hive> load data local inpath '/mnt/home/edureka_1472935/Airlines_Analysis_Project/final_airline/Final_airlines' overwrite into table finalairlines;
Loading data to table default.finalairlines
Table default.finalairlines stats: [numFiles=1, numRows=0, totalSize=316243, rawDataSize=0]
OK
Time taken: 0.672 seconds
hive>
```

Step 6:

Loading the dataset into route table.

Command:

load data local inpath

'/mnt/home/edureka_1472935/Airlines_Analysis_Project/routes/routes.dat' overwrite into table route;

Screenshot:

```
hive> load data local inpath '/mnt/home/edureka_1472935/Airlines_Analysis_Project/
routes/routes.dat' overwrite into table route;
Loading data to table default.route
Table default.route stats: [numFiles=1, numRows=0, totalSize=2375505, rawDataSize=
0]
0K
Time taken: 1.351 seconds
hive>
```

Solutions:

A.Find list of Airports operating in the Country India

Command:

create table india_airport122 as select * from airport where Country LIKE '%India%';

```
hive> Create table india_airport122 as select * from airport where Country LIKE '%India%';
Query ID = edureka_1472935_20210424204545_9ad19a32-0684-4058-89f7-a035f697140e
Total jobs = 3
Launching Job 1 out of 3
Number of reduce tasks is set to 0 since there's no reduce operator
Starting Job = job_1616262377730_6331, Tracking URL = http://ip-20-0-21-161.ec2.internal:8088/pr
oxy/application_1616262377730_6331/
Kill Command = /opt/cloudera/parcels/CDH-5.11.1-1.cdh5.11.1.p0.4/lib/hadoop/bin/hadoop job -kil
```

```
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 0

2021-04-24 20:45:43,713 Stage-1 map = 0%, reduce = 0%

2021-04-24 20:45:49,857 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 2.89 sec

MapReduce Total cumulative CPU time: 2 seconds 890 msec

Ended Job = job_1616262377730_6331

Stage-4 is selected by condition resolver.

Stage-3 is filtered out by condition resolver.

Stage-5 is filtered out by condition resolver.

Moving data to: hdfs://nameservice1/user/hive/warehouse/.hive-staging_hive_2021-04-24_20-45-23_6

89_7714171446873181838-1/-ext-10001

Moving data to: hdfs://nameservice1/user/hive/warehouse/india_airport122

Table default.india_airport122 stats: [numFiles=1, numRows=141, totalSize=11569, rawDataSize=114

28]

MapReduce Jobs Launched:

Stage-Stage-1: Map: 1 Cumulative CPU: 2.89 sec HDFS Read: 743864 HDFS Write: 11653 SUCCESS

Total MapReduce CPU Time Spent: 2 seconds 890 msec

OK

Time taken: 27.431 seconds

hive>
```

Command:

Select * from india_airport122 limit 10; (to show the first 10 observation since we have a big dataset.)

	•	5 uatas	•									
hive> so OK	elect * 1	from ind:	ia_airpo	rt122 li	mit 10;							
895	Diego Ga	arcia Nsi	f	Diego G	arcia Is	land	British	Indian (Ocean Tei	rritory		F
JDG	-7.31326	57	72.4110	89	9	6	U	Indian/	Chagos			
2994	Ahmedaba	ad	Ahmedab	ad	India	AMD	VAAH	23.0772	42	72.6346	5	1
89	5.5	N	Asia/Ca	lcutta								
2995	Akola	Akola	India	AKD	VAAK	20.69900	06	77.0586	28	999	5.5	Ν
Asia/Ca	lcutta											
2996	Aurangab	oad	Aurangal	bad	India	IXU	VAAU	19.8627	28	75.3981	14	1
911	5.5	N	Asia/Ca	lcutta								
2997	Chhatra	oati Shi	√aji Int	ι	Mumbai	India	BOM	VABB	19.08868	36	72.867	91
9	37	5.5	N	Asia/Ca	lcutta							
2998	Bilaspu	r	Bilaspu	r	India	PAB	VABI	21.9884	82.11098	33	899	5
.5	N	Asia/Ca	lcutta									
2999	Bhuj	Bhuj	India	BHJ	VABJ	23.28782	28	69.6701	47	268	5.5	Ν
Asia/Ca												
3000		Belgaum	India	IXG	VABM	15.85928	36	74.61829	92	2487	5.5	Ν
Asia/Ca												
3001	Vadodara		Baroda	India	BDQ	VAB0	22.33610	54	73.22628	39	129	5
.5	N	Asia/Ca										
3002		Bhopal	India	BH0	VABP	23.28746	57	77.3373	75	1719	5.5	Ν
Asia/Ca												
	ken: 0.04	13 second	ds, Fetc	ned: 10	row(s)							
hive>												

B. Find the list of Airlines having zero stops

Command:

Create table stop122 as select * from route where Stops LIKE '%0';

Screenshot:

```
hive> create table stop122 as select * from route where Stops LIKE '%0';
Query ID = edureka_1472935_20210424204949_e1816fcd-6dba-4ccb-84b0-931fb94e65ce
Total jobs = 3
Launching Job 1 out of 3
Number of reduce tasks is set to 0 since there's no reduce operator
Starting Job = job_1616262377730_6333, Tracking URL = http://ip-20-0-21-161.ec2.internal:8088/pr
oxy/application_1616262377730_6333/
Kill Command = /opt/cloudera/parcels/CDH-5.11.1-1.cdh5.11.1.p0.4/lib/hadoop/bin/hadoop job -kil
l job_1616262377730_6333
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 0
2021-04-24 20:49:12,842 Stage-1 map = 0%, reduce = 0%
2021-04-24 20:49:17,947 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 3.59 sec
MapReduce Total cumulative CPU time: 3 seconds 590 msec
Ended Job = job_1616262377730_6333
Stage-4 is selected by condition resolver.
Stage-3 is filtered out by condition resolver.
Stage-5 is filtered out by condition resolver.
Moving data to: hdfs://nameservice1/user/hive/warehouse/.hive-staging_hive_2021-04-24_20-49-06_9
99_950132857871916526-1/-ext-10001
Moving data to: hdfs://nameservice1/user/hive/warehouse/stop122
Table default.stop122 stats: [numFiles=1, numRows=67652, totalSize=2307487, rawDataSize=2239835]
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1 Cumulative CPU: 3.59 sec HDFS Read: 2379726 HDFS Write: 2307566 SUCCES
Total MapReduce CPU Time Spent: 3 seconds 590 msec
Time taken: 12.223 seconds
hive>
```

Samples of 0 stop of the airline in the dataset.

hive>	select	* from s	top122 lir	nit 10	;		
0K							
2B	410	AER	2965	KZN	2990	0	CR2
2B	410	ASF	2966	KZN	2990	0	CR2
2B	410	ASF	2966	MRV	2962	0	CR2
2B	410	CEK	2968	KZN	2990	0	CR2
2B	410	CEK	2968	0VB	4078	0	CR2
2B	410	DME	4029	KZN	2990	0	CR2
2B	410	DME	4029	NBC	6969	0	CR2
2B	410	DME	4029	TGK	NULL	0	CR2
2B	410	DME	4029	UUA	6160	0	CR2
2B	410	EG0	6156	KGD	2952	0	CR2
Time '	taken:	0.045 sec	onds, Fet	ched:	10 row(s)		
hive>							

C.List of Airlines operating with code share

Command:

Create table codeshare 122 as select * from route where Codeshare LIKE '%Y%;

```
hive> create table codeshare 122 as select st from route where Codeshare LIKE 'stYst';
Query ID = edureka_1472935_20210424205252_870d0c9a-1d35-4b98-84f2-8cdb9afe223e
Total jobs = 3
Launching Job 1 out of 3
Number of reduce tasks is set to 0 since there's no reduce operator
Starting Job = job_1616262377730_6337, Tracking URL = http://ip-20-0-21-161.ec2.internal:8088/pr
oxy/application_1616262377730_6337/
Kill Command = /opt/cloudera/parcels/CDH-5.11.1-1.cdh5.11.1.p0.4/lib/hadoop/bin/hadoop job -kil
l job_1616262377730_6337
Hadoop job information for Stage—1: number of mappers: 1; number of reducers: 0
2021–04–24 20:52:31,488 Stage–1 map = 0%, reduce = 0%
2021–04–24 20:52:42,919 Stage–1 map = 100%, reduce = 0%, Cumulative CPU 3.25 sec
MapReduce Total cumulative CPU time: 3 seconds 250 msec
Ended Job = job_1616262377730_6337
Stage-4 is selected by condition resolver.
Stage-3 is filtered out by condition resolver.
Stage-5 is filtered out by condition resolver.
Moving data to: hdfs://nameservice1/user/hive/warehouse/.hive-staging_hive_2021-04-24_20-52-07_3
98 3743509910093708601-1/-ext-10001
Moving data to: hdfs://nameservice1/user/hive/warehouse/codeshare_122
Table default.codeshare_122 stats: [numFiles=1, numRows=14597, totalSize=511399, rawDataSize=496
802]
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1   Cumulative CPU: 3.25 sec   HDFS Read: 2379736 HDFS Write: 511483 SUCCESS
Total MapReduce CPU Time Spent: 3 seconds 250 msec
Time taken: 37.788 seconds
hive>
```

Examples:

LAGIIIP								
hive>	select :	* from co	deshare_	122 li	mit 10;			
0K								
2P	897	GES	6011	MNL	2397	Υ	0	320
2P	897	MNL	2397	GES	6011	Υ	0	320
4M	3201	DFW	3670	EZE	3988	Υ	0	777
4M	3201	EZE	3988	DFW	3670	Υ	0	777
4M	3201	EZE	3988	JFK	3797	Υ	0	777
4M	3201	JFK	3797	EZE	3988	Υ	0	777
5N	503	ARH	4362	CSH	6110	Υ	0	AN4
5N	503	ARH	4362	MMK	2949	Υ	0	AN4
5N	503	ARH	4362	USK	4369	Υ	0	AN4
5N	503	CSH	6110	ARH	4362	Υ	0	AN4
Time 1	taken: 0	.041 seco	nds, Fet	ched:	<pre>10 row(s)</pre>			
hive>								
	·	·		,		· · · · · · · · · · · · · · · · · · ·		

D.Which country (or) territory having highest Airports Answer is United State of America.

Command:

select Country,count(*) as cnt from airport group by Country SORT BY cnt DESC;

```
hive> \mathsf{select} Country,\mathsf{count}(*) as \mathsf{cnt} from \mathsf{airport} \mathsf{group} \mathsf{by} Country \mathsf{SORT} \mathsf{BY} \mathsf{cnt} \mathsf{DESC};
Query ID = edureka_1472935_20210424205555_a4191a93-1742-45b6-860b-8ded76700da2
Total jobs = 2
Launching Job 1 out of 2
Number of reduce tasks not specified. Estimated from input data size: 1
In order to change the average load for a reducer (in bytes):
    set hive.exec.reducers.bytes.per.reducer=<number>
In order to limit the maximum number of reducers:
  set hive.exec.reducers.max=<number>
In order to set a constant number of reducers:
  set mapreduce.job.reduces=<number>
Starting Job = job_1616262377730_6338, Tracking URL = http://ip-20-0-21-161.ec2.internal:8088/pr
oxy/application_1616262377730_6338/
Kill Command = /opt/cloudera/parcels/CDH-5.11.1-1.cdh5.11.1.p0.4/lib/hadoop/bin/hadoop job -kil
l job_1616262377730_6338
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2021-04-24 20:55:59,897 Stage-1 map = 0%, reduce = 0%
2021-04-24 20:56:05,324 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 3.03 sec
2021-04-24 20:56:10,504 Stage-1 map = 100%, reduce = 100%, Cumulative CPU 5.05 sec
MapReduce Total cumulative CPU time: 5 seconds 50 msec
Ended Job = job_1616262377730_6338
Launching Job 2 out of 2
Number of reduce tasks not specified. Estimated from input data size: 1
In order to change the average load for a reducer (in bytes):
  set hive.exec.reducers.bytes.per.reducer=<number>
In order to limit the maximum number of reducers:
 set hive.exec.reducers.max=<number>
In order to set a constant number of reducers:
 set mapreduce.job.reduces=<number>
Starting Job = job_1616262377730_6339, Tracking URL = http://ip-20-0-21-161.ec2.internal:8088/pr
oxy/application_1616262377730_6339/
Kill Command = /opt/cloudera/parcels/CDH-5.11.1-1.cdh5.11.1.p0.4/lib/hadoop/bin/hadoop job -kil
l job_1616262377730_6339
Hadoop job information for Stage-2: number of mappers: 1; number of reducers: 1
2021-04-24 20:56:16,302 Stage-2 map = 0%, reduce = 0%
2021-04-24 20:56:21,453 Stage-2 map = 100%, reduce = 0%, Cumulative CPU 2.25 sec
2021-04-24 20:56:26,557 Stage-2 map = 100%, reduce = 100%, Cumulative CPU 4.24 sec
MapReduce Total cumulative CPU time: 4 seconds 240 msec
Ended Job = job_1616262377730_6339
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1 Reduce: 1
                                            Cumulative CPU: 5.05 sec
                                                                              HDFS Read: 746587 HDFS Write: 7092
SUCCESS
Stage-Stage-2: Map: 1 Reduce: 1
                                            Cumulative CPU: 4.24 sec
                                                                              HDFS Read: 11766 HDFS Write: 3151
SUCCESS
Total MapReduce CPU Time Spent: 9 seconds 290 msec
United States
                    1697
Canada 435
Germany 321
Australia
                    263
Russia 249
France 233
China
          219
Brazil 213
United Kingdom 209
India
         140
          131
Japan
Indonesia
                    114
South Africa
                    103
Argentina
                    103
```

```
Mexico
Italy
        92
Sweden 86
Spain
        84
Iran
        81
Turkey 77
Colombia
                72
Norway 69
Philippines
                64
Greece 60
Venezuela
                58
Thailand
                58
Papua New Guinea
                        57
New Zealand
                56
Kenya 55
Switzerland
                53
inland 51
                47
Malaysia
Pakistan
                46
                45
Madagascar
Algeria 44
Burma 43
Peru
        43
                42
Maldives
                42
Saudi Arabia
```

E.Find the list of Active Airlines in United state

Command:

select * from finalairlines where Country like '%United States%' AND Active like '%Y%';

```
hive> select * from finalairlines where Country like '%United States%' AND Active like '%Y%';
Query ID = edureka_1472935_20210424205959_1998a9e5-3777-4785-b8bb-e7d3ca1d0fe9
Total jobs = 1
Launching Job 1 out of 1
Number of reduce tasks is set to 0 since there's no reduce operator
Starting Job = job_1616262377730_6342, Tracking URL = http://ip-20-0-21-161.ec2.internal:8088/pr
oxy/application 1616262377730 6342/
Kill Command = /opt/cloudera/parcels/CDH-5.11.1-1.cdh5.11.1.p0.4/lib/hadoop/bin/hadoop job -ki
l job_1616262377730_6342
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 0
2021-04-24 20:59:42,689 Stage-1 map = 0%, reduce = 0%
2021-04-24 20:59:48,812 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 2.37 sec
MapReduce Total cumulative CPU time: 2 seconds 370 msec
Ended Job = job_1616262377730_6342
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1 Cumulative CPU: 2.37 sec
                                                            HDFS Read: 320546 HDFS Write: 7886 SUCCESS
Total MapReduce CPU Time Spent: 2 seconds 370 msec
0K
```

10	40-Mile Air	NULL	Q5	MLA	MILE-AI	R	United	States	Υ	
22	Aloha Airlines	NULL	AQ	AAH	ALOHA	United	States	Υ		
24	American Airlin	es	NULL	AA	AAL	AMERICA	N	United	States	Υ
35	Allegiant Air	NULL	G4	AAY	ALLEGIA	NT	United	States	Υ	
109	Alaska Central	Express	NULL	K0	AER	ACE AIR	United	States	Υ	
149	Air Cargo Carri	ers	NULL	20	SNC	NIGHT C	ARG0	United	States	Υ
210	Airlift Interna	tional	NULL		AIR	AIRLIFT	United	States	Υ	
281	America West Ai	rlines	NULL	HP	AWE	CACTUS	United	States	Υ	
282	Air Wisconsin	NULL	ZW	AWI	AIR WIS	CONSIN	United	States	Υ	
287	Allegheny Commu	ter Airl	ines	NULL		AL0	ALLEGH	ENY	United	States Y
295	Air Sunshine	NULL		RSI	AIR SUN	SHINE	United	States	Υ	
315	ATA Airlines	NULL		AMT	AMTRAN	United	States	Υ		
397	Arrow Air	NULL	JW	APW	BIG A	United	States	Υ		
452	Atlantic Southe	ast Airl	ines	NULL	EV	ASQ	ACEY	United	States	Υ
659	American Eagle	Airlines	NULL	MQ	EGF	EAGLE F	LIGHT	United	States	Υ
792	Access Air	NULL	ZA	CYD	CYCLONE	United	States	Υ		
882	Air Florida	NULL	QH	FLZ	AIR FLO			States	Υ	
928	Atlas Air	NULL	5Y	GTI	GIANT	United	States	Υ		
1316	AirTran Airways		FL	TRS	CITRUS	United		Y		
1442	Bemidji Airline		NULL	CH	ВМЈ		United	States	Υ	
1472	Bering Air	NULL	8E	BRG	BERING			States	Y	
1629	Cape Air	NULL	9K	KAP	CAIR	United		Υ		
1739	Chautaugua Airl		NULL	RP	CHQ	CHAUTAU		United	States	Υ
1814	Coastal Air	NULL	DQ			rgin Isl			States	Ϋ́
1821	Colgan Air	NULL	9L	CJC		United		Y		
1828	Comair NULL	OH	COM	COMAIR	United		Υ			
1843	CommutAir	NULL	C5	UCA	COMMUTA		United	States	Υ	
1860	Compass Airline	S	NULL	CP	CPZ	Compass			States	Υ
1881	Continental Air		NULL	CO	COA	CONTINE			States	Ϋ́
1883	Continental Exp		NULL	CO			United		Υ	·
1884	Continental Mic		NULL	CS	CMI	AIR MIK			States	Υ
1931	Crown Airways	NULL		CR0	CROWN A			States	Υ	·
2009	Delta Air Lines		DL	DAL	DELTA	United		Υ		
2261	Evergreen Inter				NULL	EZ	EIA	EVERGRI	FFN	United S
tates	Y		7121 12110	9				2.72.1.0.1.1		0112000 5
2293	Express One Int	ernation	al	NULL	E0	LHN	LONGHO	RN	United	States Y
2295	ExpressJet	NULL	XE	BTA	JET LIN			States	Υ	
2404	Florida West In				NULL	RF	FWL	FLO WES		United S
tates	Υ	TOT HIGHT		-, -						J.112000 3
2454	Freedom Air	NULL	FP	FRE	FREEDOM	United	States	Υ		
2456	Freedom Airline		NULL		FRL	FREEDOM		United	States	Υ

1828	Comair NULL	OH	COM	COMAIR	United :	States	Υ			
1843	CommutAir	NULL	C5	UCA	COMMUTA:	IR	United	States	Υ	
1860	Compass Airlines	S	NULL	CP	CPZ	Compass	Rose	United	States	Υ
1881	Continental Air	lines	NULL	C0	COA	CONTINE	NTAL	United	States	Υ
1883	Continental Exp	ress	NULL	C0		JETLINK	United	States	Υ	
1884	Continental Mic	ronesia	NULL	CS	CMI	AIR MIK	E	United	States	Υ
1931	Crown Airways	NULL		CR0	CROWN A	IRWAYS	United	States	Υ	
2009	Delta Air Lines	NULL	DL	DAL	DELTA	United:	States	Υ		
2261	Evergreen Inter	national	Airlines	5	NULL	EZ	EIA	EVERGRE	EN	United S
tates	Υ									
2293	Express One Inte	ernation	al	NULL	E0	LHN	LONGHOR	N	United	States Y
2295	ExpressJet	NULL	XE	BTA	JET LIN	<	United	States	Υ	
2404	Florida West In	ternatio	nal Airwa	ays	NULL	RF	FWL	FLO WES	ST .	United S
tates	Υ									
2454	Freedom Air	NULL	FP	FRE	FREEDOM	United	States	Υ		
2456	Freedom Airlines	S	NULL		FRL	FREEDOM	AIR	United	States	Υ
2468	Frontier Airline		NULL	F9	FFT	FRONTIE	R FLIGHT	United	States	Υ
2470	Frontier Flying	Service	NULL	2F	FTA	FRONTIE	R-AIR	United	States	Υ
2577	GoJet Airlines	NULL	G7	GJS	GATEWAY	United	States	Υ		
2607	Great Lakes Air	lines	NULL	ZK	GLA	LAKES A	IR	United	States	Υ
2645	Gulfstream Inte	rnationa	l Airline	es	NULL		GFT	GULF FL	_IGHT	United S
tates	Υ									
2657	Hageland Aviation		ces	NULL	H6	HAG	HAGELAN	D	United	States Y
2688	Hawaiian Airline		NULL	HA	HAL	HAWAIIA	N	United	States	Υ
2778	Horizon Air	Horizon	Airlines	5	QX	QXE	HORIZON		United	States Y
2855	Indigo NULL	19	IBU	INDIGO	BLUE	United	States	Υ		
2937	Island Airlines		IS			United	States	Υ		
3001	Jet Airways	NULL	QJ			United		Υ		
3029	JetBlue Airways		B6	JBU	JETBLUE	United	States	Υ		
3123	Kenmore Air	NULL	M5	KEN		United	States	Υ		
3466	Mesa Airlines	NULL	YV	ASH	AIR SHU		United	States	Υ	
3467	Mesaba Airlines		XJ	MES	MESABA	United	States	Υ		
3494	Midway Airlines	NULL	JI	MDW	MIDWAY	United	States	Υ		
3497	Midwest Airlines	S	NULL	YX	MEP		United	States	Υ	
3641	NetJets NULL	1I	EJA	EXECJET	United :	States	Υ			
3644	New England Air	lines	NULL	EJ	NEA	NEW ENG	LAND	United	States	Υ

3731	Northwest Airlines	NULL	NW	NWA	NORTHWEST	United	States	Υ
3781	Omni Air International	NULL	0Y	0AE	OMNI-EXPRESS	United	States	Υ
3860	Pacific Island Aviation	NULL		PSA	PACIFIC ISLE	United	States	Υ
3865	Pacific Wings NULL	LW	NMI	TSUNAMI	United States	Υ		
3935	Peninsula Airways	NULL	KS	PEN	PENINSULA	United	States	Υ
3969	Piedmont Airlines (1948	-1989)	NULL	PΙ	PDT PIEDMO	NT	United	States Y
3976	Pinnacle Airlines	NULL	9E	FLG	FLAGSHIP	United	States	Υ
4026	Potomac Air NULL	BK	PDC	DISTRIC	T United	States	Υ	
4187	Republic Airlines	NULL	RW	RPA	BRICKYARD	United	States	Υ
4294	Ryan Air Services	NULL		RYA	RYAN AIR	United	States	Υ
4295	Ryan International Airl	ines	NULL	RD	RYN RYAN II	NTERNATIO	ONAL	United S
tates	Y							
4335	Seaborne Airlines	NULL	BB	SBS	SEABORNE	United	States	Υ
4342	Scenic Airlines NULL		SCE	SCENIC	United States	Υ		
4356	Sun Country Airlines	NULL	SY	SCX	SUN COUNTRY	United	States	Υ
4370	Southeast Air NULL		SEA	SOUTHEA:	ST AIR United	States	Υ	
4411	Skagway Air Service	NULL	N5	SGY	SKAGWAY AIR	United	States	Υ
4547	Southwest Airlines	NULL	WN	SWA	SOUTHWEST	United	States	Υ
4589	Skywalk Airlines	NULL	AL	SYX	SKYWAY-EX	United	States	Υ
4687	Spirit Airlines NULL	NK	NKS	SPIRIT \	WINGS United	States	Υ	
4738	SkyWest NULL 00	SKW	SKYWEST	United :	States Y			
4804	Southern Airways	NULL		SOU	SOUTHERN EXPRE		United	
4816	South Pacific Island Ai	rways	NULL			PACIFIC	United	States Y
4822	Shuttle America NULL	S5	TCF		United States	Υ		
5160	Trans States Airlines	NULL	AX	L0F	WATERSKI	United	States	Υ
5207	USA3000 Airlines	NULL	U5	GWY	GETAWAY United	States	Υ	
5209	United Airlines NULL	UA	UAL	UNITED	United States	Υ		
5265	US Airways NULL	US	USA		United States	Υ		
5268	US Helicopter NULL		USH		United States	Υ		
5279	United States Air Force			AIO	AIR CHIEF		States	Υ
5284	US Helicopter Corporati		NULL	UH			States	Υ
5331	Virgin America NULL	VX	VRD		United States	Υ		
5424	Western Airlines	NULL	WA	WAL	WESTERN United		Υ	
5465	World Airways NULL	WO	WOA	WORLD	United States	Υ		
8461	Carnival Air Lines		KW	NULL	Carnival Air		States	Υ
8809	Island Air (WP)	WP	MKU		United States	Υ		
9833	Epic Holiday Epic Ho		FA	4AA		States	Υ	
10123	Texas Wings	TQ	TXW	TXW	United States	Υ		
10226	Atifly A1	A1F	atifly	United :				
10739	Air Choice One	3E	NULL		United States	Υ		

10748	Locair ZQ	L0C	LOCAIR	United :	States	Υ				
10765	SeaPort Airlines		K5	SQH	SASQUAT	CH	United	States	Υ	
10776	Salmon Air	S6	NULL		United		Υ			
10912	Alaska Seaplane Service		J5	NULL		United	States	Υ		
12961	Gryphon Airlines		6P	NULL		United	States	Υ		
13391	U.S. Air	-+	+		United	States	Υ			
13633	PanAm World Airways		WQ	PQW		United	States	Υ		
15887	CBM America		XBM	AIRMAX	United	States	Υ			
15975	Black Stallion Airways		BZ	BSA	Stallio	n	United	States	Υ	
16135	Yellowstone Club Private	Shuttle	e		Y1	NULL	YCS	United	States	Υ
16264	Trans Pas Air	T6	TP6		United	States	Υ			
16625	Papillon Grand Canyon He	elicopte	rs		HI	NULL		United	States	Υ
16702	Usa Sky Cargo USky	E1	ES2	USKY	United	States	Υ			
16726	Era Alaska	7H	ERR	ERAH	United	States	Υ			
16735	Hankook Air US	H1	HA1		United	States	Υ			
16932	Orbit Airlines Orbit		OBT	0rbit	United	States	Υ			
17519	SENIC AIRLINES	YR	NULL		United	States	Υ			
17563	XOJET	XOJ		United :	States	Υ				
17628	Orbit International Air				OAI	0A	United	States	Υ	
17629	Orbit Regional Airlines			0AR	0A	United		Υ		
17630	Orbit Atlantic Airways			OAN		United		Y		
17841	Aws express	В0	666	aws	United		Υ			
17859	Southjet	76	SJS		United		Ý			
17860	Southjet connect		77	ZCS	0.1.2.00	United		Υ		
17862	Southjet cargo	78	XAN		United		Υ			
18169	Patriot Airways	P4	NULL		United		Ϋ́			
18178	Vision Airlines (V2)		V2	RBY	RUBY	United		Υ		
18239	Yellowtail	YE	YEL		United		Y			
18241	Royal Airways Royal Ir		KG	RAW	RAW	United		Υ		
18257	Executive AirShare			XSR		United		Ϋ́		
18529	T.J. Air	TJ	TJA	T.J. Ai	r	United		Ϋ́		
18930	Maryland Air Maryland		M1	M1F			United		Υ	
19016	Apache Air Apache		IWA	APACHE	United		Y	5 64 665	•	
19287	National Air Cargo		N8	NCR	OHILLEG	United		Υ		
19290	Eastern Atlantic Virtual	Airlin			13	EAV	EAVA	United	States	Υ
19350	Comfort Express Virtual					EVC		Express		Ś
tates	Y	ondi coi					201111011	- Z/P - CJ -	JIIIICU	Ĭ
19351	Comfort Express Virtual	Charter	s			CE0		United	States	Υ
19433	XAIR USA	XA	XAU	XAIR	United		Υ	onitica	Jeaces	
19619	Envoy Air	7.11	ENY	Envoy	United		Ý			
19674	Rainbow Air (RAI)	Rainhow	Air (RA		RN	RAB		United	States	Υ
19676			Air POL		RP0	Rainbow		United		Y
19678	Rainbow Air US Rainbow		RM	RNY	Rainbow		United		Y	'
19774	Spike Airlines Aero Spi		S0	SAL	Spike A		United		Ý	
19804	All America All Amer		A2	AL2	Spike F	United		Y	'	
	ken: 13.993 seconds, Feto			ALZ		onitted	Jeaces	'		
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