Angel Christian Pimentel Noriega
Mauricio Riva Palacio Orozco
Alex Gerardo Fernandez Aguilar
Martin Felipe Espinal Cruces

> ⚠ Las siguientes consultas fueron realizadas y probadas por el equipo y por lo tanto asegura-
> mos el integro funcionamiento de las mismas

1. Las rutas y líneas en las cuales se pueda transbordar

Comando 1

```sql
SELECT id_linea FROM pertenece_linea
    GROUP BY id_linea
    HAVING COUNT(*)>1
UNION ALL
SELECT id_ruta FROM pertenece_ruta
    GROUP BY id_ruta
    HAVING COUNT(*)>1;
```

Resultado 1

Data Output   Explain   Messages   Notifications

	id_usuario [PK] integer	username character varying	contraseña character varying	email character varying	nombre character varying	apellido_paterno character varying	apellido_materno character varying
1	1	fbrouncker0	lyePxL8	fbrouncker0@noaa.gov	Frankie	Benkin	Brouncker
2	2	masprey1	QeehR1b	masprey1@slideshare…	Maddie	Brahan	Asprey
3	3	cbussen2	4CeyTcFOG9Ls	cbussen2@cbslocal.co…	Carolus	McKeggie	Bussen
4	5	ividgeon4	KIFlgX	ividgeon4@unesco.org	Immanuel	Craker	Vidgeon
5	6	jtwelve5	HFBU8B7mpQT	jtwelve5@google.co.uk	Jasmin	Akehurst	Twelve
6	9	tmcalinden8	72kiqiEG	tmcalinden8@scientifi…	Tam	Wingeat	McAlinden
7	10	drudgerd9	RiHMh6NF3	drudgerd9@un.org	Dallon	Dowdell	Rudgerd

2. usuarios que pagan su transporte con PayPal y tienen el mismo apellido paterno.

Comando 2

```sql
SELECT * FROM usuario natural join (SELECT id_usuario FROM paypal
INTERSECT
SELECT id_usuario FROM usuario) as ffo;
```

RESULTADO 2

Data Output   Explain   Messages   Notifications

	id_usuario [PK] integer	username character varying	contraseña character varying	email character varying	nombre character varying	apellido_paterno character varying	apellido_materno character varying
1	1	fbrouncker0	lyePxL8	fbrouncker0@noaa.gov	Frankie	Benkin	Brouncker
2	2	masprey1	QeehR1b	masprey1@slideshare....	Maddie	Brahan	Asprey
3	3	cbussen2	4CeyTcFOG9Ls	cbussen2@cbslocal.co...	Carolus	McKeggie	Bussen
4	5	ividgeon4	KIFlgX	ividgeon4@unesco.org	Immanuel	Craker	Vidgeon
5	6	jtwelve5	HFBU8B7mpQT	jtwelve5@google.co.uk	Jasmin	Akehurst	Twelve
6	9	tmcalinden8	72kiqiEG	tmcalinden8@scientifi...	Tam	Wingeat	McAlinden
7	10	drudgerd9	RiHMh6NF3	drudgerd9@un.org	Dallon	Dowdell	Rudgerd

3. OPERADORES CUYA LICENCIA DE CONDUCIR ESTÉ EXPIRADA

COMANDO 3

```
SELECT * FROM usuario natural join (
(SELECT id_operador FROM operador)
 INTERSECT
(SELECT id_operador FROM licencia
 WHERE licencia.fecha_expedicion < to_date('2020-09-20', 'YYYY-MM-DD')))
 as foo
```

RESULTADO 3

Data Output   Explain   Messages   Notifications

	id_usuario [PK] integer	username character varying	contraseña character varying	email character varying	nombre character varying	apellido_paterno character varying	apellido_materno character varying	id_operador integer
1	1	fbrouncker0	lyePxL8	fbrouncker0@noaa.gov	Frankie	Benkin	Brouncker	116
2	1	fbrouncker0	lyePxL8	fbrouncker0@noaa.gov	Frankie	Benkin	Brouncker	184
3	1	fbrouncker0	lyePxL8	fbrouncker0@noaa.gov	Frankie	Benkin	Brouncker	87
4	1	fbrouncker0	lyePxL8	fbrouncker0@noaa.gov	Frankie	Benkin	Brouncker	273
5	1	fbrouncker0	lyePxL8	fbrouncker0@noaa.gov	Frankie	Benkin	Brouncker	51
6	1	fbrouncker0	lyePxL8	fbrouncker0@noaa.gov	Frankie	Benkin	Brouncker	272
7	1	fbrouncker0	lyePxL8	fbrouncker0@noaa.gov	Frankie	Benkin	Brouncker	70

4. OPERADORES CON SOBREPESO QUE MANEJAN ALGÚN SISTEMA DE TRASPORTE

COMANDO 4

```
(SELECT * FROM usuario natural join (
SELECT id_usuario FROM operador natural join(
SELECT id_operador FROM operador
INTERSECT
SELECT id_operador FROM examen_medico
 WHERE CAST (examen_medico.peso AS INTEGER) > 100)
 as foo) as foo2)
```

RESULTADO 4

Data Output   Explain   Messages   Notifications

	id_usuario [PK] integer	username character varying	contraseña character varying	email character varying	nombre character varying	apellido_paterno character varying	apellido_materno character varying
1	2	masprey1	QeehR1b	masprey1@slideshare…	Maddie	Brahan	Asprey
2	3	cbussen2	4CeyTcFOG9Ls	cbussen2@cbslocal.co…	Carolus	McKeggie	Bussen
3	4	bgoodrum3	n14zhUI	bgoodrum3@usa.gov	Bibbye	Wing	Goodrum
4	6	jtwelve5	HFBU8B7mpQT	jtwelve5@google.co.uk	Jasmin	Akehurst	Twelve
5	7	dcheales6	2FnjCVh	dcheales6@ezinearticl…	Dore	Dawnay	Cheales
6	8	wmcbean7	KcwJevdU9QJG	wmcbean7@topsy.com	Westley	Drable	McBean
7	9	tmcalinden8	72kiqIEG	tmcalinden8@scientifi…	Tam	Wingeat	McAlinden

5. LOS TAXIS QUE VAN A ESTAR EN DESUSO PORQUE TIENEN MÁS DE 5 AÑOS EN OPERACIÓN.

COMANDO 5

```
SELECT * FROM taxi
WHERE
taxi.fecha_inicio < to_date('2020-09-20', 'YYYY-MM-DD')
```

RESULTADO 5

Data Output   Explain   Messages   Notifications

	id_vehiculo [PK] integer	id_sitio integer	fecha_inicio date	capacidad_pasajeros integer	tipo_combustible character varying
1	1	431	2019-06-25	4	Magna
2	2	978	2017-04-01	4	Magna
3	3	307	2012-06-03	4	Magna
4	4	959	2013-07-19	4	Premium
5	5	514	2016-07-05	4	Premium
6	6	952	2016-08-07	4	Magna
7	7	601	2016-07-29	4	Magna

6. Todos los taxis que pertenecen al sitio Stephen

Comando 6

```
SELECT * FROM taxi NATURAL JOIN
(SELECT id_sitio FROM sitio
WHERE sitio.nombre = 'Stephen') as foo
```

Resultado 6

Data Output   Explain   Messages   Notifications

	id_sitio integer		id_vehiculo [PK] integer		fecha_inicio date		capacidad_pasajeros integer		tipo_combustible character varying	
1	944		208		2013-11-02		4		Magna	
2	944		250		2017-01-27		4		Magna	
3	944		300		2010-12-31		4		Magna	
4	2		396		2014-12-28		4		Magna	

7. Lineas y rutas que tienen una estacion en comun

Comando 7

```
SELECT nombre FROM linea NATURAL JOIN (
 SELECT id_linea FROM pertenece_linea NATURAL JOIN(
 SELECT id_estacion FROM pertenece_linea
 INTERSECT
 SELECT id_estacion FROM pertenece_ruta
 ) as foo
) as foo
UNION
SELECT nombre FROM ruta NATURAL JOIN (
 SELECT id_ruta FROM pertenece_ruta NATURAL JOIN(
 SELECT id_estacion FROM pertenece_linea
 INTERSECT
 SELECT id_estacion FROM pertenece_ruta
 ) as foo1
) as foo2
```

RESULTADO 7

	nombre 🔒 character varying
1	Overhold
2	Keylex
3	Quo Lux
4	Cookley
5	Prodder
6	Tresom
7	Voyatouch

8. TODOS LOS OPERADORES QUE MANEJAN LOS DOMINGOS

COMANDO 8

```
SELECT * FROM operador NATURAL JOIN
  (SELECT id_operador FROM manejar
    WHERE dia = 'Domingo') as foo
```

RESULTADO 8

Data Output Explain Messages Notifications

	id_operador [PK] integer	id_usuario integer	fecha_nacimiento date	genero character varying	estudios character varying	direccion character varying	fecha_ultimo_examen date
1	58	58	1994-12-19	Male	Senior Financial Analyst	08 Namekagon Hill	2020-07-05
2	124	124	1952-03-12	Female	Environmental Specialist	9178 Mifflin Trail	2020-06-30
3	2	2	1984-07-24	Female	Product Engineer	4637 Roth Crossing	2020-04-14
4	204	204	2020-02-09	Female	Operator	8 Havey Terrace	2020-04-11
5	185	185	2003-05-05	Female	Sales Representative	77 Glacier Hill Plaza	2020-08-15
6	84	84	1981-01-24	Female	Recruiting Manager	8635 Hollow Ridge Ave…	2020-08-01
7	240	240	1985-01-14	Male	Systems Administrator I	7444 Porter Terrace	2020-05-21

9. Trolebús con mas de 2 reparaciones

COMANDO 9

```
SELECT * FROM trolebus NATURAL JOIN (
 SELECT id_vehiculo FROM reparar
 GROUP BY id_vehiculo HAVING COUNT(*)>2
) as foo
```

RESULTADO 9

Data Output   Explain   Messages   Notifications

	id_vehiculo [PK] integer	id_ruta integer	fecha_inicio date	capacidad_pasajeros integer	tipo_combustible character varying
1	6	760	2017-03-06	50	Electricidad
2	61	403	2012-11-18	50	Electricidad
3	64	612	2014-10-21	50	Electricidad
4	73	922	2012-05-21	50	Electricidad
5	88	910	2017-11-19	50	Electricidad
6	94	467	2018-12-06	50	Electricidad
7	95	989	2014-11-10	50	Electricidad

10. Todos los usuarios que son también son conductores

COMANDO 10

```
SELECT * FROM usuario NATURAL JOIN (
SELECT id_usuario FROM operador) as foo
```

RESULTADO 10

Data Output   Explain   Messages   Notifications

	id_usuario [PK] integer	username character varying	contraseña character varying	email character varying	nombre character varying	apellido_paterno character varying	apellido_materno character varying
1	1	fbrouncker0	IyePxL8	fbrouncker0@noaa.gov	Frankie	Benkin	Brouncker
2	2	masprey1	QeehR1b	masprey1@slideshare....	Maddie	Brahan	Asprey
3	3	cbussen2	4CeyTcFOG9Ls	cbussen2@cbslocal.co...	Carolus	McKeggie	Bussen
4	4	bgoodrum3	n14zhUl	bgoodrum3@usa.gov	Bibbye	Wing	Goodrum
5	5	ividgeon4	KIFlgX	ividgeon4@unesco.org	Immanuel	Craker	Vidgeon
6	6	jtwelve5	HFBU8B7mpQT	jtwelve5@google.co.uk	Jasmin	Akehurst	Twelve
7	7	dcheales6	2FnjCVh	dcheales6@ezinearticl...	Dore	Dawnay	Cheales

11. cuales son las rutas que comparten autobuses y rtp

Comando 11

```
SELECT nombre FROM ruta NATURAL JOIN(
 SELECT id_ruta FROM rtp
 INTERSECT
 SELECT id_ruta FROM autobus
) as foo
```

Resultado 11

Data Output	Explain	Messages	Notifications

	nombre 🔒 character varying
1	Asoka
2	Subin
3	Trippledex
4	Temp
5	Y-find
6	Bamity
7	Flexidy

12. todos los taxis que comenzaron a circular desde enero 2020

Comando 12

```
SELECT * FROM taxi
WHERE taxi.fecha_inicio >= to_date('2020-01-01', 'YYYY-MM-DD')
```

Resultado 12

Data Output	Explain	Messages	Notifications

	id_vehiculo [PK] integer	id_sitio integer	fecha_inicio date	capacidad_pasajeros integer	tipo_combustible character varying
1	12	700	2020-03-28	4	Magna
2	19	473	2020-07-25	4	Premium
3	37	519	2020-05-05	4	Premium
4	39	775	2020-08-28	4	Premium
5	53	793	2020-01-03	4	Magna
6	57	931	2020-04-13	4	Premium
7	78	280	2020-06-16	4	Magna

13. LineTodos lo usuarios que hayan pagado con tarjeta y con paypal

Comando 13

```
SELECT * FROM usuario NATURAL JOIN(
 SELECT id_usuario FROM paypal
) as foo
```

Resultado 13

Data Output   Explain   Messages   Notifications

	id_usuario [PK] integer	username character varying	contraseña character varying	email character varying	nombre character varying	apellido_paterno character varying	apellido_materno character varying
1	919	rrickerdpi	tPmLeQ5	rrickerdpi@de.vu	Ricky	Whaymand	Rickerd
2	843	nmorkhamne	3PadZh7FFZ	nmorkhamne@mapqu...	Northrup	Leven	Morkham
3	705	mbasilottajk	pvFmkC	mbasilottajk@washing...	Martie	Spelsbury	Basilotta
4	454	emainsoncl	E2V15Ea34FmH	emainsoncl@usatoday...	Elonore	Caseley	Mainson
5	839	kbachelarna	UV9klyG	kbachelarna@google.de	Kaila	Hoovart	Bachelar
6	779	njellicolm	VfKqla1s	njellicolm@apache.org	Nixie	Mulvey	Jellico

14. Todos los talleres que su especialidad sea la tecnica hidraulica

Comando 14

```
SELECT * FROM taller NATURAL JOIN(
 SELECT id_taller FROM especialidad
 WHERE especialidad.especialidad = 'Hidraulico'
) as foo
```

Resultado 14

Data Output   Explain   Messages   Notifications

	id_taller [PK] integer	direccion character varying
1	8	54841 Memorial Trail
2	35	739 Portage Terrace
3	54	043 Main Lane
4	84	120 Mendota Road
5	102	7 Melrose Place
6	134	9180 Hagan Alley
7	287	07413 Troy Parkway

15. Todos los operadores que tienen una licencia tipo D

Comando 15

```
SELECT * FROM operador NATURAL JOIN(
 SELECT id_operador FROM licencia WHERE tipo = 'D'
) as foo
```

Resultado 15

Data Output   Explain   Messages   Notifications

	id_operador [PK] integer	id_usuario integer	fecha_nacimiento date	genero character varying	estudios character varying	direccion character varying	fecha_ultimo_examen date
1	113	113	1966-01-27	Female	Analyst Programmer	87 Village Pass	2020-06-26
2	70	70	1988-08-25	Female	Help Desk Operator	0565 Sunnyside Place	2020-07-27
3	269	269	1971-04-26	Female	Media Manager II	75622 Dovetail Trail	2020-03-14
4	162	162	1985-01-17	Female	Biostatistician II	28481 3rd Avenue	2020-04-29
5	180	180	2005-07-14	Male	Account Representativ…	93581 Mandrake Hill	2020-05-20
6	25	25	2018-04-05	Male	Senior Developer	3108 Katie Pass	2020-05-11
7	37	37	1975-01-30	Female	Physical Therapy Assis…	118 Arrowood Crossing	2020-08-08