

The image features the Spotify logo centered on a vibrant green background. The background is decorated with several thick, curved, horizontal lines that create a sense of motion or a stylized 'S' shape. The Spotify logo itself is rendered in white with a thick green outline. The word 'Spotify' is in a bold, rounded, sans-serif font, with a small 'TM' trademark symbol to the upper right of the 'y'. Above the letter 'o' in 'Spotify', there is a small, stylized icon of a speaker or sound waves.

Spotify™

A silhouette of a woman in fishnet stockings, wearing white earbuds and holding a mobile device, set against a bright green background. A semi-transparent green box is overlaid on the left side of the image, containing text.

## Problemática

- Piratería
- Portabilidad de la Música

## Soluciones que da Spotify

- Contabilizar y hacer una ponderación que va a los artistas
- Expandir su aplicación a dispositivos móviles sincronizados con la versión de escritorio

A silhouette of a woman in fishnet stockings listening to music on a green background. She is wearing white earbuds and holding a white smartphone in her right hand. The background is a solid green color. The woman's silhouette is black, and her fishnet stockings are a lighter shade of green, matching the background. The overall composition is modern and minimalist.

## Descripción de la aplicación

- Nace en Europa, el año 2008
- Múltiples funciones
- Una red social.

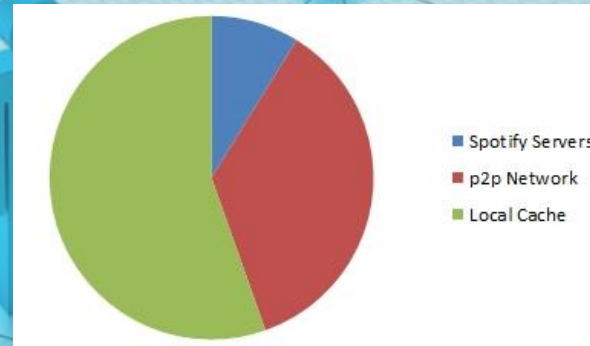
The background of the slide is a globe of the Earth, viewed from space. Overlaid on the globe is a complex network of glowing white and yellow lines that represent data connections or network paths. The lines are most dense over the continents and radiate outwards, creating a sense of global connectivity. The globe is set against a dark blue sky with a hint of a sunset or sunrise on the right side.

## Transmisión de datos

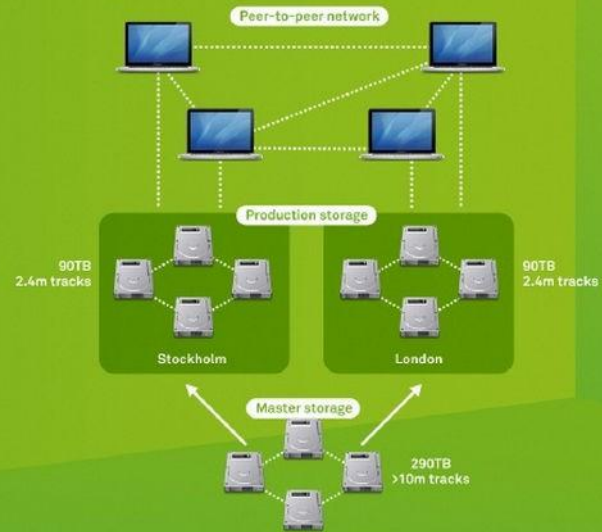
- ¿Por qué usar TCP?
  - Confiabilidad
  - Control de congestión
- Encabezados propios para búsqueda dentro de la canción.

## Funcionamiento hasta finales del 2013

- Arquitectura Híbrida
- Uso de estructura de cliente-servidor sólo para smartphones



## Distributing music



Spotify



# Captura en netstat

```
kurt@kgehrkue:~$ netstat -putona |grep spotify
```

(No todos los procesos pueden ser identificados, no hay información de propiedad del proceso no se mostrarán, necesita ser superusuario para verlos todos.)

tcp	0	0	0.0.0.0:57621	0.0.0.0:*	ESCUCHAR	4131/spotify	apagado (0.00/0/0)
tcp	0	0	127.0.0.1:4381	0.0.0.0:*	ESCUCHAR	4131/spotify	apagado (0.00/0/0)
tcp	0	0	127.0.0.1:8099	0.0.0.0:*	ESCUCHAR	4131/spotify	apagado (0.00/0/0)
tcp	0	0	127.0.0.1:4371	0.0.0.0:*	ESCUCHAR	4131/spotify	apagado (0.00/0/0)
tcp	0	0	192.168.1.168:45414	173.194.42.205:443	ESTABLECIDO	4131/spotify	mantener vivo (14,48/0/0)
tcp	0	0	192.168.1.168:51928	194.68.29.5:4070	ESTABLECIDO	4131/spotify	apagado (0.00/0/0)
tcp	0	0	192.168.1.168:50850	54.230.57.241:443	ESTABLECIDO	4131/spotify	mantener vivo (16,91/0/0)
tcp	0	0	192.168.1.168:50849	54.230.57.241:443	ESTABLECIDO	4131/spotify	mantener vivo (16,91/0/0)
tcp	0	0	192.168.1.168:50360	54.230.58.37:443	ESTABLECIDO	4131/spotify	mantener vivo (16,52/0/0)
tcp	0	0	192.168.1.168:50848	54.230.57.241:443	ESTABLECIDO	4131/spotify	mantener vivo (16,91/0/0)
tcp	0	0	192.168.1.168:50364	54.230.58.37:443	ESTABLECIDO	4131/spotify	mantener vivo (16,52/0/0)
tcp	0	0	192.168.1.168:49240	173.194.42.218:443	ESTABLECIDO	4131/spotify	mantener vivo (14,09/0/0)
tcp	0	0	192.168.1.168:50847	54.230.57.241:443	ESTABLECIDO	4131/spotify	mantener vivo (16,91/0/0)
tcp	0	0	192.168.1.168:45415	173.194.42.205:443	ESTABLECIDO	4131/spotify	mantener vivo (16,52/0/0)
tcp	0	0	192.168.1.168:50362	54.230.58.37:443	ESTABLECIDO	4131/spotify	mantener vivo (16,52/0/0)
tcp	0	0	192.168.1.168:50852	54.230.57.241:443	ESTABLECIDO	4131/spotify	mantener vivo (17,16/0/0)
tcp	0	0	192.168.1.168:41522	54.232.123.241:443	ESTABLECIDO	4131/spotify	mantener vivo (13,71/0/0)
tcp	0	0	192.168.1.168:41519	54.232.123.241:443	ESTABLECIDO	4131/spotify	mantener vivo (13,45/0/0)
tcp	0	0	192.168.1.168:50363	54.230.58.37:443	ESTABLECIDO	4131/spotify	mantener vivo (16,52/0/0)
tcp	0	0	192.168.1.168:41523	54.232.123.241:443	ESTABLECIDO	4131/spotify	mantener vivo (13,71/0/0)
tcp	0	0	192.168.1.168:50361	54.230.58.37:443	ESTABLECIDO	4131/spotify	mantener vivo (16,52/0/0)
tcp	0	0	192.168.1.168:50365	54.230.58.37:443	ESTABLECIDO	4131/spotify	mantener vivo (16,52/0/0)
tcp	0	0	192.168.1.168:52881	190.98.143.126:80	ESTABLECIDO	4131/spotify	apagado (0.00/0/0)
tcp	0	0	192.168.1.168:50851	54.230.57.241:443	ESTABLECIDO	4131/spotify	mantener vivo (16,91/0/0)
udp	0	0	0.0.0.0:57621	0.0.0.0:*		4131/spotify	apagado (0.00/0/0)

```
kurt@kgehrkue:~$
```





## **Cambio de arquitectura**

- Abandono de la arquitectura híbrida.
- Aumento en la cantidad de servidores.
- Beneficios del cambio.

A hand is shown holding a glowing smartphone. The phone and the hand are surrounded by various digital icons, including a magnifying glass with a plus sign, a speech bubble, a music note, a laptop with an envelope, a person icon, a play button, and a document. The background is dark blue with light blue rays of light.

**Demostración**