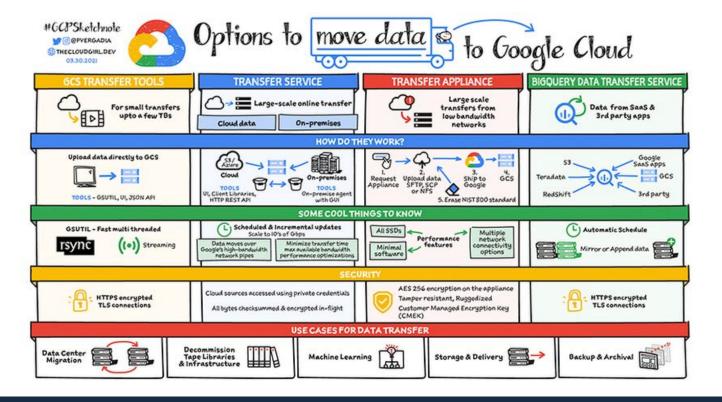


# Curso Data Engineer: Creando un pipeline de datos

#### GCP Ingest

#### Ingest





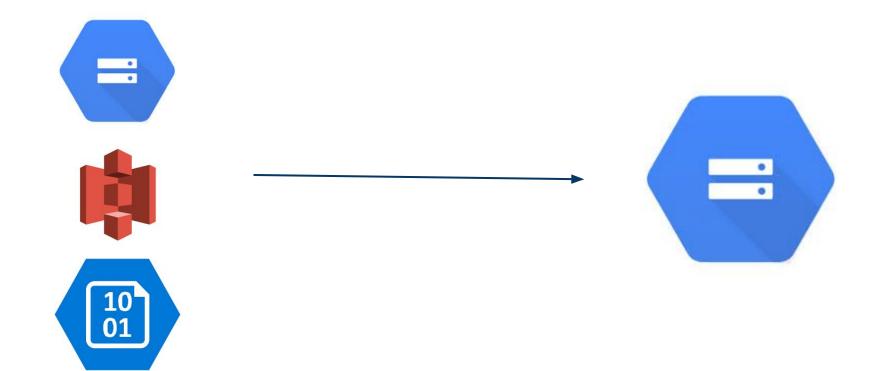
### gsutil



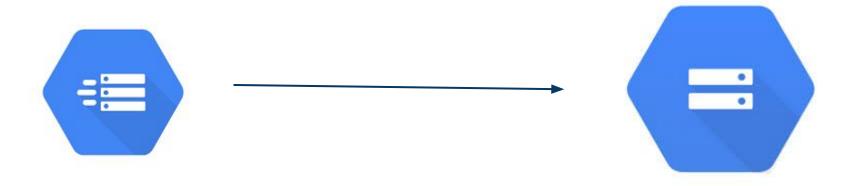




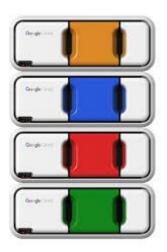
#### transfer service - data transfer



## transfer appliance



## transfer appliance

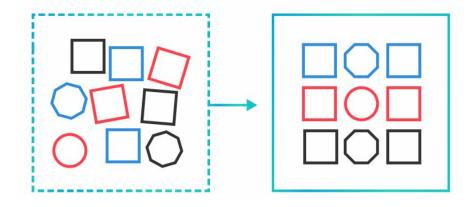




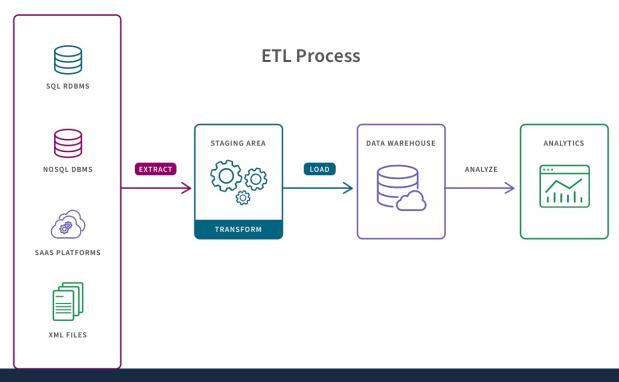




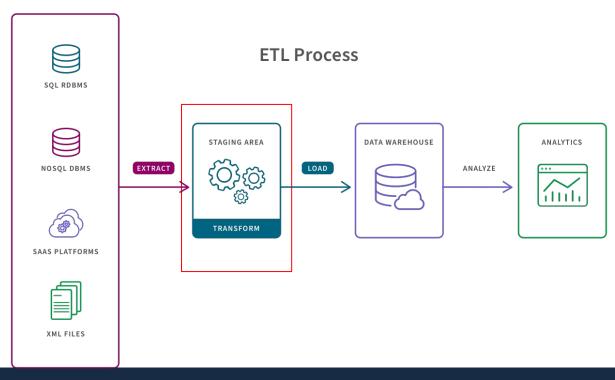
Es el proceso de convertir, limpiar y estructurar datos en un formato utilizable que se pueda analizar para respaldar los procesos de toma de decisiones.

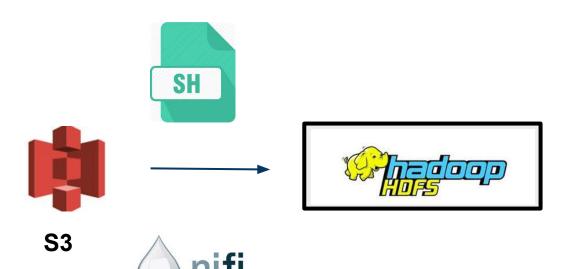


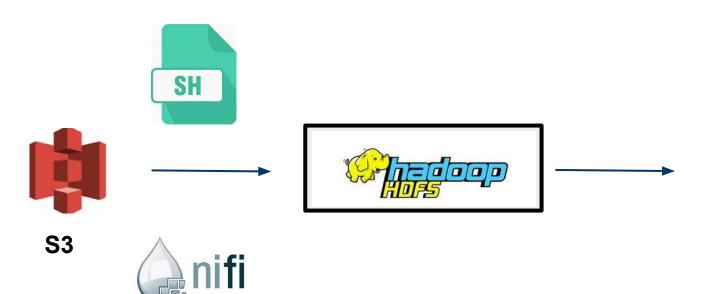


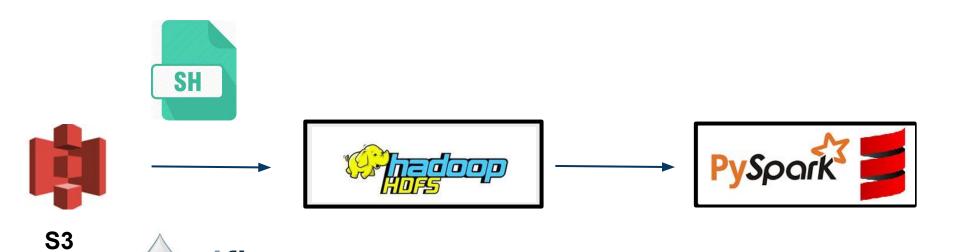


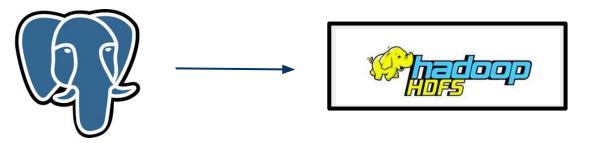




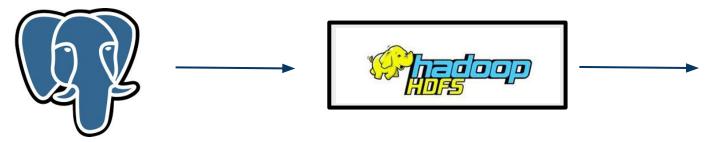












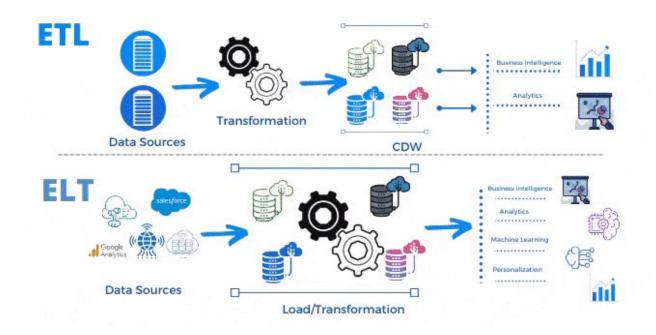






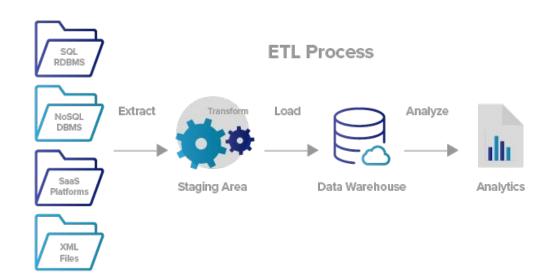
#### ETL VS ELT





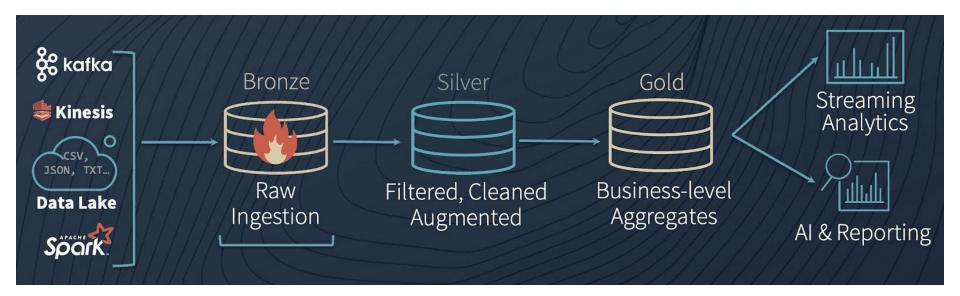
#### **ETL**





#### ELT

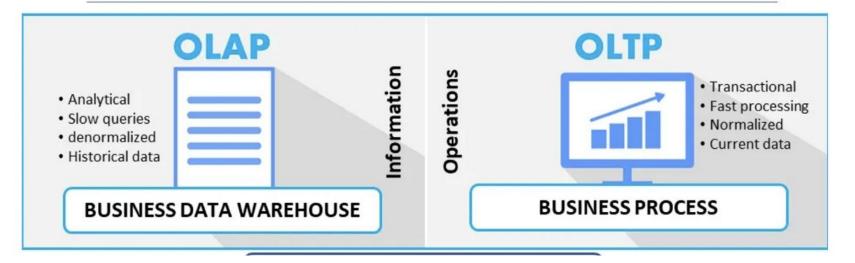




#### Online Analytical Processing Vs Online Transaction Processing



# OLAP Vs OLTP



#### On line Analytical Processing Vs On line Transaction Processing



Students						Courses	
id	student_name					id	course_name
1	Juan García					1	SQL
2	José Perez					2	Python
3	Alberto Quiroga					3	R
						4	Java
			Students				
		Date	id_student	id_courses	mark		
		11/01/2022	1	1	7		
		10/25/2022	1	2	6		
		10/28/2022	2	4	6		
		10/03/2022	3	3	5		

#### ETL



- 1. Con Sqoop hago un export en archivos parquet/text/avro, etc.
- 2. Ingesto esos archivos en HDFS (hdfs dfs -put origen destino)
- 3. Transformo esos archivos con pyspark/scala/sql
- 4. Cargo esos datos en el Data Warehouse (Hive)

# **OLAP**

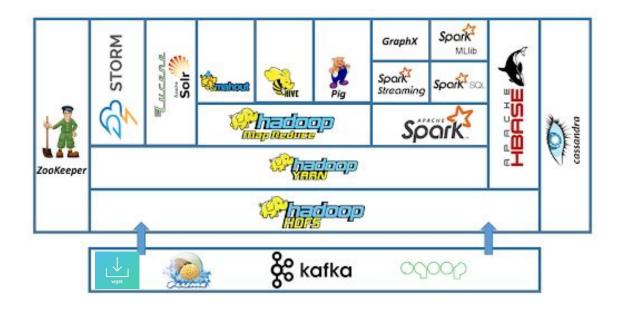


Marks Marks							
Date	student	courses	mark	assist			
11/01/2022	Juan García	SQL	7	100			
10/25/2022	Juan García	Python	6	93			
10/28/2022	José Perez	Java	6	95			
10/03/2022	Alberto Quiroga	R	5	80			

#### Ejercicio

#### Ecosistema Hadoop





#### **Ejercicios**



- Transform
  - Transformaciones en Pyspark (SQL)
  - o Transformaciones en Scala