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## Clickhouse

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-  [On-demand Courses -](#)
- Clickhouse architecture
- How is Clickhouse fast?
- Data type (Engines)
- Indexes
- Functions
- Partitioning and Sharding
- Clustering
- How do you create a Clickhouse cluster
  - zookeeper 3 nodes
  - Clickhouse on 3 nodes to form a cluster
- Prepare and load sample data -  [GitHub - ClickHouse/ClickBench: ClickBench: a Benchmark For Analytical Database](#)
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- Integration Pg to CH, S3 to CH (understand file format JSON, Parquet and Avro), ETL/ELT tools example is Airbyte
- Monitoring clickhouse
  - top queries
  - execution plan
  - Tools -  [GitHub - PostHog/HouseWatch: Open source tool for monitoring and managing ClickHouse clusters](#)
- How to deploy Clickhouse on Kubernetes (Altinity Clickhouse operator)
- Use cases
  - Observability
  - Fraud Detection
  - Analytics
- Comparison of Clickhouse vs Druid vs DuckDB

## PostgreSQL

- data structures
- Tuning
  - Book: The art of tuning PostgreSQL
-  [GitHub - microsoft/OrcasNinjaTeam: GitHub repo for assets created by the Orcas Ninja Team](#)