

Data Feeds Architecture

[Basic request model](#)

Chainlink connects smart contracts with external data using its decentralized oracle network. Chainlink API requests are handled 1:1 by an oracle.

The [Basic Request Model](#) describes the onchain architecture of requesting data from a single oracle source.

To learn how to make a GET request using a single oracle, see [Make a GET Request](#).

[Decentralized data model](#)

For a more robust and trustworthy answer, you can aggregate data from many oracles. With onchain aggregation, data is aggregated from a decentralized network of independent oracle nodes. This architecture is applied to Chainlink Data Feeds, which can aggregate data such as asset price data.

The [Decentralized Data Model](#) describes how data is aggregated, and how consumer contracts can retrieve this data.

[Offchain reporting](#)

Offchain Reporting (OCR) is an improvement on the decentralization and scalability of Chainlink networks. With our Offchain Reporting aggregators, all nodes communicate using a peer to peer network. During the communication process, a lightweight consensus algorithm runs where each node reports its price observation and signs it. A single aggregate transaction is then transmitted, which saves a significant amount of gas.

To learn more about OCR and how it works, see the [Offchain Reporting](#) page.