

What are the Types of Nodes in the Avail Network?

Introduction

While Avail diverges from conventional blockchain frameworks to concentrate on modular solutions tailored for data availability, it continues to utilize a diverse array of node types. These nodes differ in their functions, storage needs, and levels of engagement within the network.

Node Types Comparison

Note: Infrastructure providers can host all types of Avail nodes.

Node Type	Storage Requirement	Network Role	Special Features	Use Case	Typically Hosted By
Light Clients	Low	Interaction Minimal	Quick Queries	End users in low-resource environments	Full Nodes
Moderate Core	Moderate	Network Access	Transaction Verification, Data Retrieval	Regular network participants, those involved in verification	Validator Nodes
Moderate Core	Moderate	Block Production	Network Security, Governance	Trusted entities, elected participants, staked node providers	RPC Nodes
Moderate Gateway	Moderate	API Exposure	Development, Remote Access	Developers, entities requiring remote network access	

Overview of Node Types

Light Clients

Light clients allow users to interact with the blockchain without downloading the entire transaction history. They rely on a trusted set of nodes for the data needed to engage with the network.

Full Nodes

Full nodes maintain the blockchain's current state but do not store its entire history. Optimized for quick access to current data, they are ideal for tasks like transaction verification.

Validator Nodes

Validator nodes are specialized full nodes that participate in block production and network governance. They are staked to ensure network security and integrity.

RPC Nodes

RPC nodes expose an API for remote interactions, serving as a gateway for developers and external clients to engage with the Avail network.

Next Steps

Now that you have a comprehensive understanding of the various node types within the Avail network, it's recommended to take your first step by setting up a Light Client. Before you begin, make sure to review the [System Requirements guide](#). Once you're ready, you can proceed to the [Light Client Deployment guide](#) to get started.

Light Clients provide an accessible entry point to the Avail network, enabling quick interactions without storing the full blockchain. Ideal for newcomers, they play an integral role in maintaining a robust data availability layer.

[Operate a Node Hosted Deployments](#)