



Architecture Diagrams

Web3 Decentralized Applications on AWS



Web3 Decentralized Applications on AWS: Architecture Diagrams

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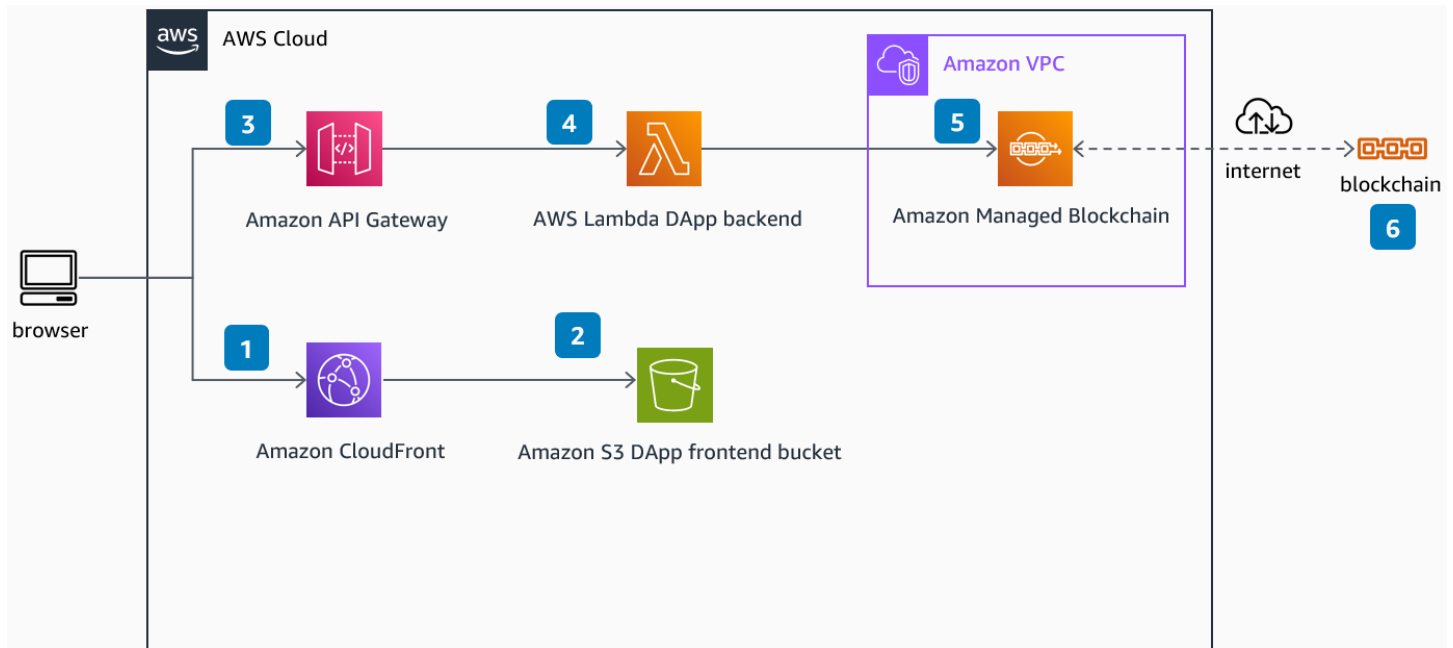
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Web3 Decentralized Applications on AWS

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Use this architecture as a reference for developing static hosted web applications that communicate with a blockchain network through an Amazon Managed Blockchain node.

Web3 Decentralized Applications on AWS Diagram



1. The browser makes a requests to the **Amazon CloudFront** domain, routed to the closest distribution for the Decentralized Application (DApp).
2. The DApp is cached at the edge in **CloudFront**. The DApp files are distributed to the edge by a **CloudFront** distribution that makes a request to an **Amazon Simple Storage Service** (Amazon S3) bucket, where the DApp files are statically hosted.

The **Amazon S3** bucket is secured by blocking all traffic except for a configured origin Access Identity of the CloudFront Distribution. Refer to [Restricting access to an Amazon S3 origin](#).

3. The DApp makes requests to the **Amazon API Gateway** from the browser.
4. All requests to the **API Gateway** are sent to the **AWS Lambda** DApp Backend. It reads the path and method requests and binds them into a Web3.js request with a sigv4 signed Http Request Provider.
5. **Amazon Managed Blockchain** Ethereum Node receives and processes Web3 requests.

6. Ethereum requests and transactions are propagated to and received from the decentralized Ethereum Blockchain Mainnet.

Further reading

For additional information, refer to

- [AWS Architecture Icons](#)
- [AWS Architecture Center](#)
- [AWS Well-Architected](#)

Contributors

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Diagram history

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