DexMev — Whitepaper (Node-Powered MEV Infrastructure on Solana)

DexMev

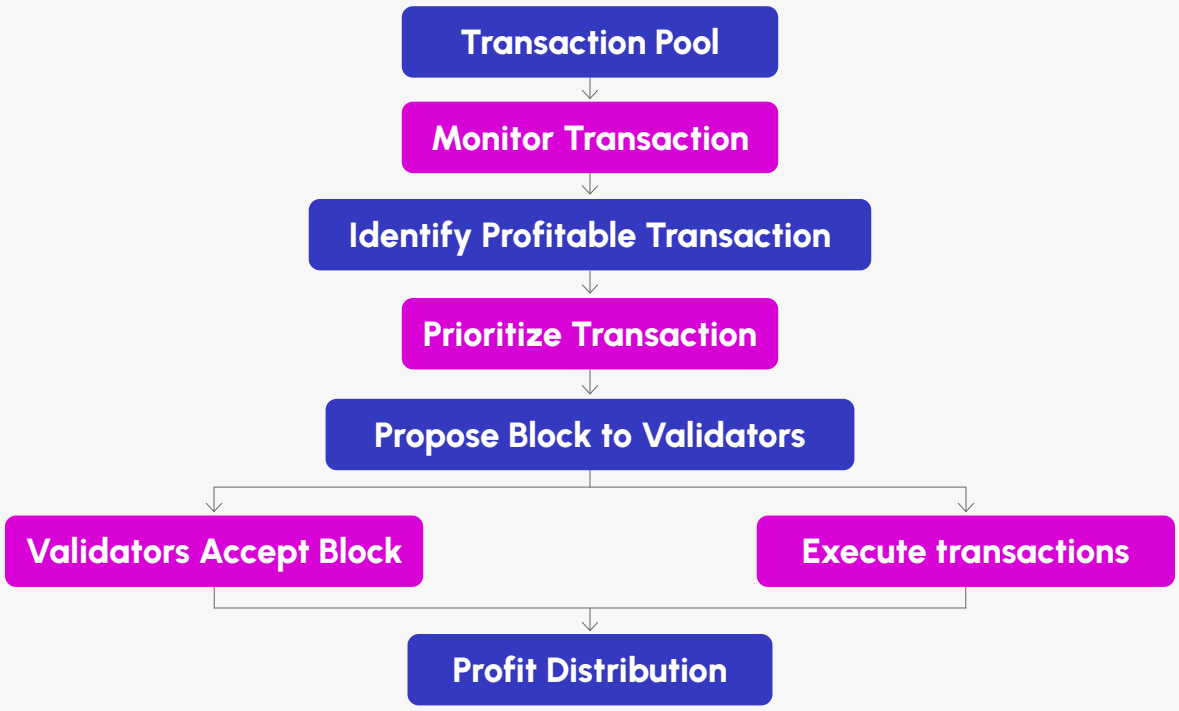
DexMev

Introduction:
What Is DexMev?

DexMev is a permissionless, MEV-driven trading protocol and node infrastructure provider, designed to maximize real on-chain profit extraction in the Solana ecosystem. Unlike traditional DeFi bots, DexMev combines proprietary strategy frameworks with validator-grade RPC infrastructure to offer automated MEV operations for both novice and advanced users.

At its core, DexMev uses Solana's high-throughput design to facilitate real-time arbitrage, frontrunning/backrunning, and sandwiching, while abstracting the complexity from end users. Whether you're using our Shared Bot or a fully Custom node-based setup, the platform gives access to capital-efficient trading at speed.

What Is MEV (Maximum Extractable Value)?



MEV is the value a validator (or bot operator) can extract by ordering, including, or excluding transactions in a block.

On Ethereum, MEV is already a multi-billion dollar industry, with over 625K ETH (~$1.2B) extracted since 2020. Solana, thanks to its millisecond block times and low fees, has become a frontier for high-frequency MEV — with new opportunities in arbitrage, sandwiching, and liquidation-based strategies.

Types of MEV on Solana include:

MEV Strategy Types

Frontrunning
Insert your transaction before a large order to profit from upcoming price movement.

Sandwich Attacks
Surround a target transaction to buy before and sell after, exploiting the price delta.

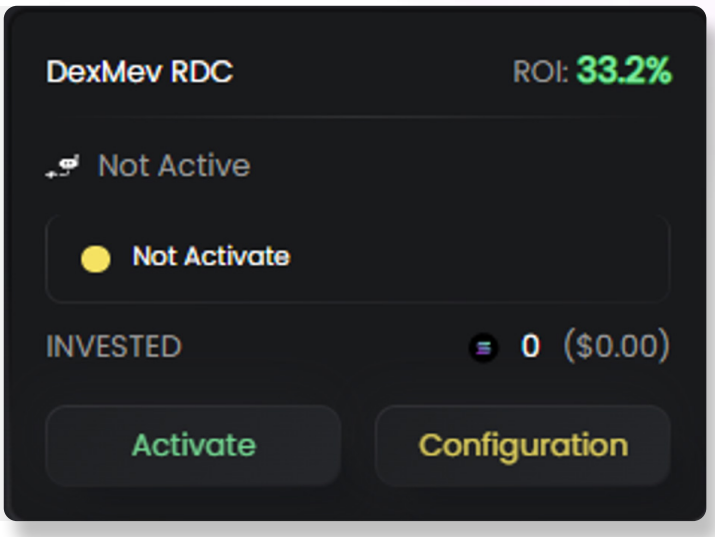
Backrunning
Place a trade right after a large transaction to benefit from market movement.

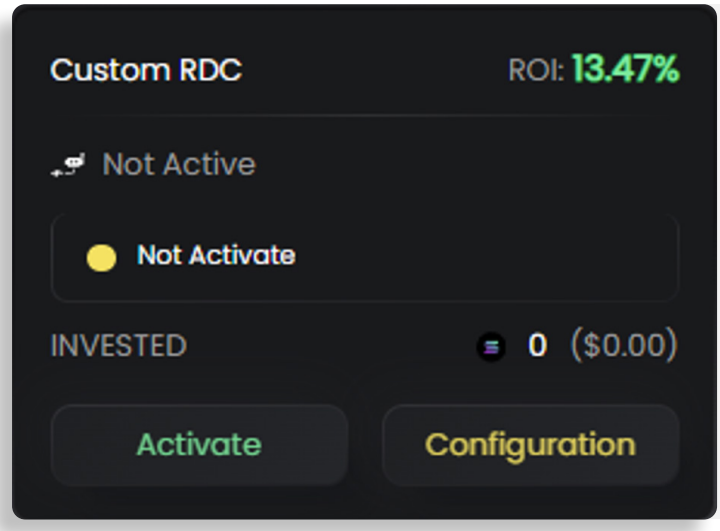
DexMev leverages these via automated, gas-optimized smart contracts and RPC-synced logic.

How DexMev Works (Architecture & Epochs)

Shared Bot Mode

- Users deposit SOL into a smart-contract-controlled wallet.
- Epochs last 48 hours. All trading occurs during epochs only.
- Bot executes pre-optimized strategies, using pooled capital for capital efficiency.
- At the end of an epoch, revenue is distributed and 10% platform fee is taken from profits.

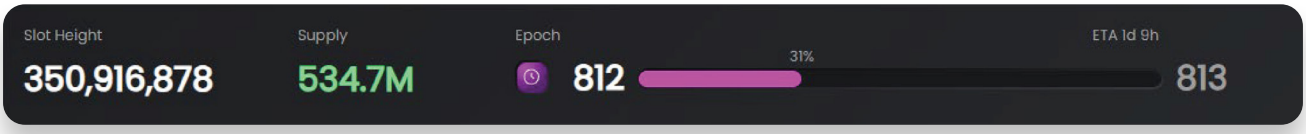




Custom Bot Mode

- Requires private RPC with access to Yellowstone gRPC node.
- Full control over strategy parameters, token targeting, leverage, execution frequency.
- Suitable for users with technical background or high capital.

Epoch Mechanics



- Trading is only active during epochs.
- Deposits made during an epoch are queued as pending and activated in the next epoch.
- This ensures optimal capital allocation and prevents mid-cycle interruptions.
- Once an epoch starts, deposits cannot be changed.

Why Epochs? They allow synchronized bot operation, batc h optimization, and equalized opportunity for users.

RPC Infrastructure and Node Access

Latency Metrics

Tier	Avg Latency (ms)	Packet Loss	Throughput (req/sec)
Shared Node	35–65	<0.1%	~50 (burst)
Dedicated Node	4–10	<0.01%	~500+

GRPC Support

01 Compatible with Jito and Yellowstone

02 Streaming slot leader, fork, and mempool data

03 Custom indexer endpoints available for enterprise

DexMev Node Stack

Custom-built Solana RPC node stack optimized for low-latency

Real-time mempool scanning

Integrated strategy engine + priority fee logic

Users in Shared mode benefit from our pooled infrastructure. Custom mode users may connect their own Yellowstone or other premium RPC nodes to maximize performance.

DexMev

Economics & Capital Considerations

We recommend a **minimum deposit of 0.5 SOL,** though real effectiveness begins at **10–20 SOL** and scales up. Our team internally operates with 200–300 SOL per strategy instance.

Why a minimum? Low deposits + poor understanding of flashloan settings = losses on fees.

Flashloans: Currently available in beta, but **we do not recommend using them** without technical knowledge. Most losses have been attributed to failed flashloan logic and failed arbitrage calls. Flashloans may be removed from Shared bots or moved into advanced-only mode.

Security, Transparency & Risks

Fees

Profits are calculated after fees. Bot UI shows gross and net returns.

Bot Risks

MEV is high-reward, but also high-risk. Bad configs = losses

Non-custodial

Funds are controlled via programmatic wallets, not by DexMev.

Transparency

All epoch reports are published post-cycle with TX blocks, PnL, strategies used.

Known risks include:

Regulatory Risk

MEV strategies may face legal scrutiny depending on jurisdiction.

Frontier Risk

MEV markets are inherently volatile and competitive.

Smart Contract Risk

As with any DeFi app, contracts may be exposed to vulnerabilities.

Business Model

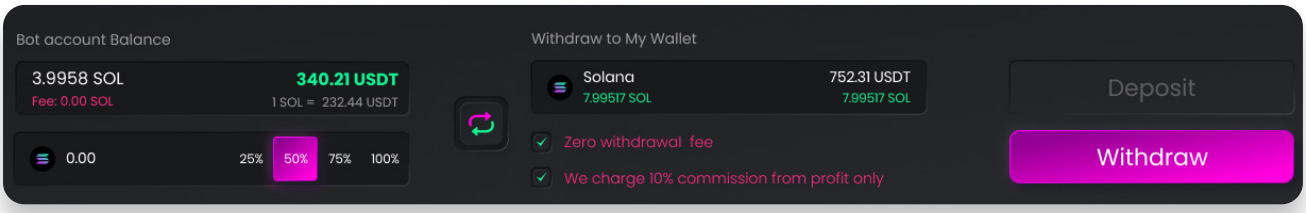
DexMEV is designed to be a sustainable, scalable platform that democratizes access to MEV (Maximal Extractable Value) strategies. Our business model is built on transparency, fair revenue sharing, and long-term ecosystem alignment.

01 Revenue Streams

a) Performance Fees

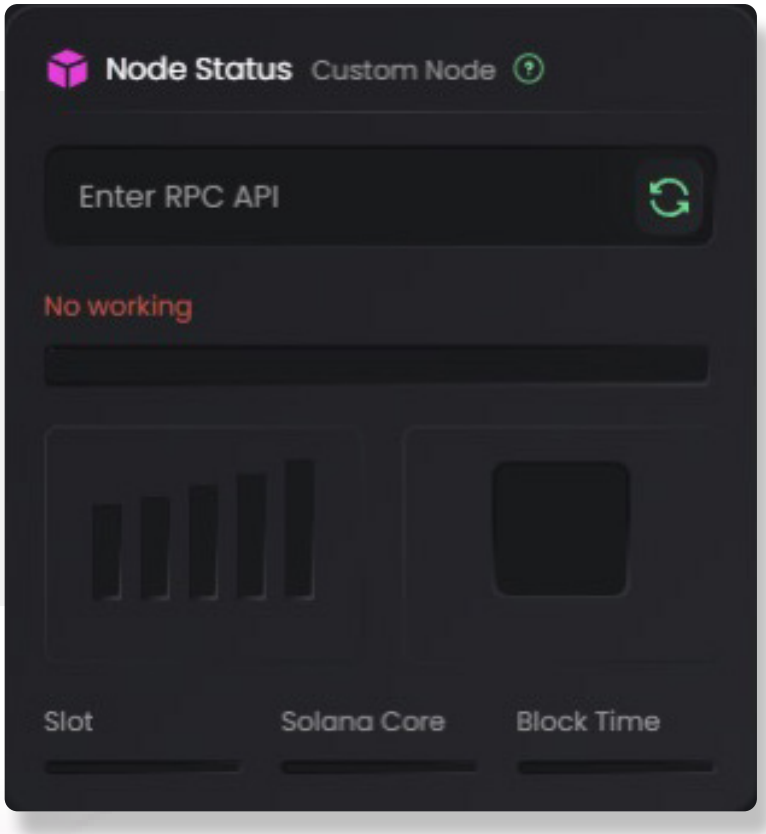
A percentage of profits generated by the MEV strategies (e.g., sandwich protection, DEX arbitrage, liquidations) is taken as a performance fee. This only applies when users are in profit, ensuring strong user alignment.

Example 10% of pnl profits from successful MEV trades executed through DexMEV algorithms.



b) gRPC Node Leasing for Custom Bots

DexMEV operates high-performance shared and private gRPC nodes on Solana. These nodes are leased to third parties — such as algo-trading teams, custom MEV bot operators, and research groups — who require fast, low-latency access to the network.



This service provides:

01

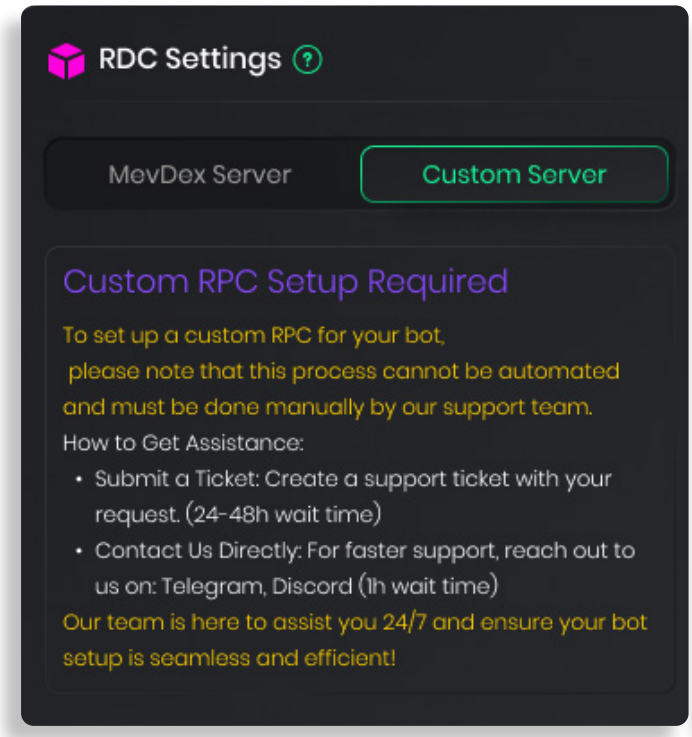
Priority transaction routing Enhanced privacy

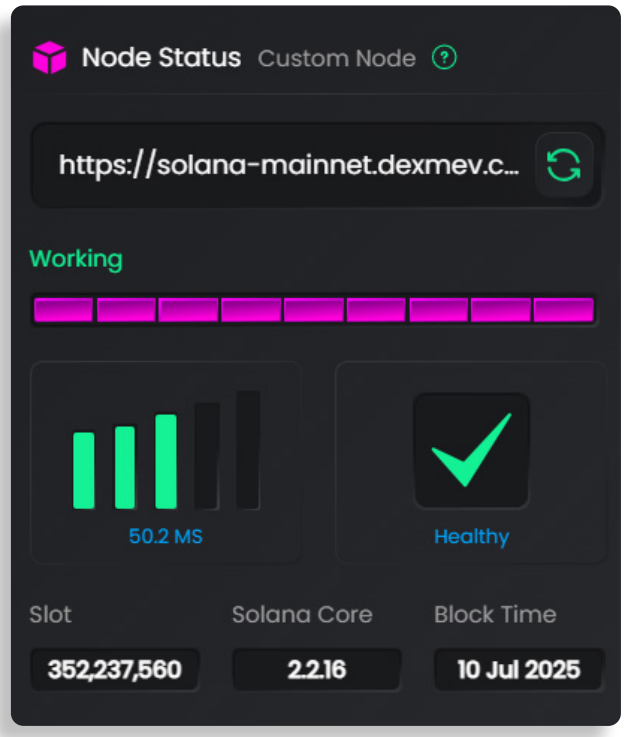
02

Minimal latency for blockspace-sensitive operations

03

Revenue is generated through recurring node rental agreements or usage-based billing (depending on bandwidth and exclusivity level).





c) Token Utility (Planned)

The native token will serve multiple purposes:

01

Access to advanced strategies Fee discounts

02

Governance and voting

03

Staking for reward share from validator pool

Revenue Sharing

We believe in a shared upside model where rewards are distributed fairly across the ecosystem:

Task Title:

Design a Revenue Flow Graphic for DexMEV Ecosystem

Content to Include:

Title: "Revenue Sharing Model in DexMEV Ecosystem"

Flow Start:

MEV Revenue (Total Value)

Distribution (in descending order or side branches):

Role	Label on Graphic	Notes
End User	*"Main MEV Profit Receiver"*	Show as the final receiver
Node Operator	*"gRPC Node Infrastructure Share"*	
Validator	*"Validator Execution Cut"*	
DexMEV Platform	*"Performance & Platform Fee"*	
Token Holders	*"Future Staking Rewards (TBD)"*	Optional element / grayed

ROADMAP

Phase 00

Infrastructure setup (gRPC nodes, validator integration)

Strategy simulation sandbox

Security audit prep

Phase 01

Launch of internal MEV strategies

Beta Lunch

Mobile UI

Feedback from early access

Community expansion

Phase 02

token launch

App on ios (TestFlight)

Referral system for users

DexMev gRPC node rentals

Onboard institutional validators (white-label offering)

Phase 03

Full Power

Alpha Product Launch

Plug-and-play strategy templates

"One-click bot" deployment for mobile users

SDK & API access for strategy devs

Custom strategy builder UI (no-code logic flow)

Weekly stats/leaderboards (top MEV users/bots)

Phase 04

Dynamic priority fees engine

MEV Hook API

Pre-confirmation simulation cluster

B2B licensing of infrastructure (custom bots or dashboards)

DexMev

Community & Governance

DexMev is committed to transparency and community-driven development. Join our channels to participate in discussions, governance proposals, and early product tests:

Discord | Telegram | X.com | Instagram