

[Click to verify](#)



An avenue for the evolution of DeFiLight-speed swaps. Next-level liquidity. Friction-less yield.FromBalance: (Wallet not connected)ToBalance: (Wallet not connected)Raydium trade API is the fastest and easiest way to interact with Raydium liquidity. It allows you to swap for any asset with 2 requests and a signature.Output token mint addressEither inputAmount or outputAmount depending on the swap mode. You need to account for decimals (x10^n) eg. To swap 1 tokenA, where tokenA has 6 decimals, you need to input 1 * 10^6 or 1,000,000.Slippage tolerance in base points (0.01%)Use 'V0' for versioned transaction, and 'LEGACY' for legacy transaction.Need to be true to accept SOL as inputToken.Need to set to true to unwrap wSol received as outputToken.computeUnitPriceMicroLampportsYou can type it in manually or use Raydium priority fee API to set an automatic amount with 'String(data.data.default.h)'. The 'h' here stands for high priority. 'vh' for very high and 'm' for medium are also accepted value.account always needs to be passed if inputToken SOLcomputed by the API, no modification needed.You can follow the demo implementation in sdk v2 demo.\$ yarn add @raydium-io/raydium-sdk-v2import { Transaction, VersionedTransaction, sendAndConfirmTransaction } from '@solana/web3.js'import { NATIVE_MINT } from '@solana/spl-token'import axios from 'axios'import { connection, owner, fetchTokenAccountData } from './config'import { API_URLS } from '@raydium-io/raydium-sdk-v2Set up your RPC connection and wallet in a config.ts file following this template.You can paste in a burner private key for testing purposes but it's not recommended for production.export const owner: Keypair = Keypair.fromSecretKey(bs58.decode(''))export const connection = new Connection(') //Get quote () & and define the swap type.const { data: swapResponse } = await axios.get(` \${ API_URLS.SWAP_HOST }/compute/swap-base-in?inputMint=\${inputMint}&outputMint=\${outputMint}&amount=\${amount}&slippageBps=\${ slippage * 100}&txVersion=\${txVersion} `) // Use the URL xxx/swap-base-in or xxx/swap-base-out to define the swap type. 'BaseOut' swaps will get you a quote for the ExactOut amount of token received. In this mode, slippage is inputted to the base token.Serialize () const { data: swapTransactions } = await axios.post(` \${API_URLS.SWAP_HOST}/transaction/swap-base-in`, { computeUnitPriceMicroLamports: String(data.data.default.h), swapResponse, txVersion, wallet: owner.publicKey.toBase58(), wrapSol: isInputSol, unwrapSol: isOutputSol, true means output mint receive sol, false means output mint received wSol inputAccount: isInputSol ? undefined : inputTokenAcc?.toBase58(), outputAccount: isOutputSol ? undefined : outputTokenAcc?.toBase58(), }) const allTxBuf = swapTransactions.data.map(tx => Buffer.from(tx.transaction, 'base64')) const allTransactions = allTxBuf.map(txBuf => isV0Tx ? VersionedTransaction.deserialize(txBuf) : Transaction.from(txBuf)) console.log(' total \$ (allTransactions.length) transactions ', swapTransactions) let idx = 0 if (!isV0Tx) { for (const tx of allTransactions) { console.log(` \${++idx} transaction sending... `) const transaction = tx as Transaction transaction.sign(owner) const txId = await sendAndConfirmTransaction(connection, transaction, [owner], { skipPreflight: true }) console.log(` \${++idx} transaction confirmed. txId: \${txId} `) } } else { for (const tx of allTransactions) { idx++ const transaction = tx as VersionedTransaction transaction.sign([owner]) const txId = await connection.sendTransaction(tx as VersionedTransaction, { skipPreflight: true }) const { lastValidBlockHeight, blockhash } = await connection.getLatestBlockhash({ commitment: 'finalized' }) console.log(` \${idx} transaction sending... txId: \${txId} `) await connection.confirmTransaction({ blockhash, lastValidBlockHeight, signature: txId }, 'confirmed') console.log(` \${idx} transaction confirmed `) You'll need to get historical data if you'd like to optimize your priority using Raydium API. // get statistical transaction fee from API/** * vh: very high * h: high * m: medium */ const { data } = await axios.get(` \${API_URLS.BASE_HOST} \${API_URLS.PRIORITY_FEE} `) Then, set computeUnitPriceMicroLamports to one of the default tier. }>(` \${API_URLS.SWAP_HOST}/transaction/swap-base-in`, { computeUnitPriceMicroLamports: String(data.data.default.h) // or custom lamport number.If you are looking for a more integrated solution check Raydium SDK here: help troubleshooting for errors? feel free to ask questions to our dev community on Discord.Last updated 4 months agoAn on-chain AMM powering the evolution of DeFiRaydium is an automated market maker (AMM) built on the Solana blockchain which enables lightning-fast trades, permissionless pool creation, and new features for earning yield. Raydium has been driving liquidity ecosystem-wide since 2021, it is the first and most distributed AMM on Solana. Raydium offers a few key advantages:Faster and cheaper: Raydium leverages the efficiency of the Solana blockchain to achieve transactions magnitudes faster than Ethereum and gas fees which are a fraction of the cost.Permissionless pool creation: Any user or project can create a concentrated liquidity pool (CLMM) or constant product pool (CPMM) for any asset. Ecosystem Rewards: Any user or project can add token incentives to any pair or pool, boosting yield for liquidity providers. What can I do on Raydium?Trade and swap: Raydium's swap feature allows any two tokens to be exchanged quickly within liquidity pools. Create a Pool: Create a pool for any asset in just a few clicks. Once live, your pool will be tradeable through Raydium's routing program and accessible across the Solana ecosystem. Provide liquidity: Help projects bootstrap liquidity in their Raydium and earn trading fees for each swap going through your pool.Liquidity pool types:Concentrated liquidity: Pool type that allows for asymmetric liquidity distribution. Pool creators and LPs can provide liquidity in their preferred price range, granting them more granularity in designing their liquidity strategy. This pool type allows for more depth around the current price, it usually is preferred for less volatile assets or more advanced users.Constant product pools: Pools following the distribution K = XY. Extremely versatile and straightforward to deploy, this has been the primary pool type used for token launches and price discovery since 2021. Raydium has two programs for CP pools:Constant product market maker (CPMM): Raydium's latest iteration of constant product pools. CPMM pools are anchor-compatible, support token 22, and have multiple fee configs.AMMv4: Raydium legacy constant-product pools. AMMv4 is battle tested and the most distributed program on Solana. Often referred to as the hybrid AMM, this contract previously shared idle liquidity to a Central limit order book (Serum, then OpenBook). Today all pools function as a traditional AMM.Permissionless farms: All Raydium pools allow projects and individuals to incentivize liquidity provision with rewards. You can learn about farm creation in the dedicated pool creation guide.Burn & Earn: A proprietary liquidity locker that allows projects to renounce access over their liquidity while maintaining the right to claim pool trading fees. The burn & earn program is available for both CLMM and CPMM pools.Routing Engine: Raydium smart routing contract that enables fast, cheap swaps through Raydium pools. The routing engine is accessible directly on Raydium.io, the trade API, and Raydium SDK. Power your project with RaydiumRaydium has a host of features that can supercharge your project. And the best part is they are all permissionless! Users and projects can utilize the Raydium product suite for almost anything. Need help leveraging Raydium contracts, join #ask-devs on Discord to get assistance from fellow builders and contributors. Want to get in touch for any other reasons? Please fill out this contact form.Last updated 4 months agoRaydium is an automated market maker (AMM) platform built on Solana where users can swap, trade and provide liquidity on digital assets. However, unlike other AMM platforms, Raydium's AMM provides on-chain liquidity to OpenBook's central limit order book, meaning that Raydium users and liquidity pools have access to the order flow and liquidity of the entire OpenBook ecosystem, and vice versa. Raydium's Best Price Swaps feature demonstrates whether swapping within a liquidity pool or through the OpenBook order book will provide the best price for users. Not only can you trade and swap on Raydium, but there are a number of ways you can earn additional tokens while farming liquidity pools and staking. Raydium's AcceleRaytor sets out to drive the growth of the Solana Ecosystem, serving as a launchpad for innovative projects to raise capital and drive initial liquidity. Learn how to participate in an AcceleRaytor IDO here.Solana stands out in DeFi with lightning-fast speeds of up to 65,000 transactions per second, 400ms block times, and less than \$0.01 average transaction fees. Raydium believes in the Solana vision and that it will power the future of De-Fi. Read more here. What is an AMM and how is it different from a traditional exchange?There are two major types of exchanges that allow users to trade cryptocurrencies: traditional exchanges and automated market maker (AMM) exchanges. Traditional exchanges use an order book to match users looking to buy tokens with users looking to sell. On an AMM platform, instead of trading between buyers and sellers, users trade against a pool of tokens a liquidity pool. However, unlike other AMM platforms, Raydium's AMM provides on-chain liquidity to OpenBook's central limit order book, meaning that Raydium users and liquidity pools have access to the order flow and liquidity of the entire OpenBook ecosystem, and vice versa.Can I yield farm and stake on Raydium?Yes, learn more about yield farming and staking on Raydium. What is AcceleRaytor and how do I participate?AcceleRaytor is an initiative by Raydium to spearhead the growth of the Solana Ecosystem. It serves as a launchpad for the latest projects to raise capital and drive initial liquidity in a decentralized and interoperable manner while enabling both project and Raydium communities to participate in carefully curated and vetted token offerings. You can read more about how to participate in AcceleRaytor here. Follow us to stay up to date on new AcceleRaytor announcements and rules on Discord, Telegram, Twitter, or Medium. If you're interested in launching a project on AcceleRaytor, please fill out this form!What are Raydium Farms and how do I participate?Raydium farms are pools that allow liquidity providers to generate RAY tokens in addition to the trading fees contributed to the pool. Follow this link for complete instructions on how to participate.What are Raydium Fusion Pools and how do I participate?Fusion pools are liquidity pools that go beyond RAY-incentivized farming pools and allow liquidity providers to earn tokens from projects they support in addition to the trading fees contributed to the pool. Fusion pools enable projects to bootstrap liquidity for their token on Raydium and OpenBook. Some pools also offer Dual Yield, where users can earn RAY in addition to project tokens. Follow this link for complete instructions on how to participate.How can a token get listed on Raydium?Anyone can create a liquidity pool on Raydium for a token pair. Projects or users can leverage Raydium's AMM and drive liquidity by creating a Permissionless liquidity pool.Are tokens on Raydium wrapped?Some tokens on Raydium are wrapped. For example, BTC and ETH are wrapped using the Wormhole bridge. As the ecosystem expands more bridges will likely integrate with Solana. Other tokens on Raydium are SPL native tokens.It's highly suggested to research a bridge before bridging assets.What wallets can I use with Raydium?To connect to Raydium, you'll need an SPL wallet. Raydium a number of SPL wallets, including Ledger, Phantom, and Solflare. Raydium will continue to integrate new wallets as they are developed.Can I use Raydium on my phone?You can access Raydium from your mobile browser by connecting your wallet. The Raydium team is in the process of rolling out a more mobile-friendly version of the platform.Is RAY a governance token? Governance is a key component of Raydium's mission and a governance method is in development. How do I work with Raydium?Please complete this form to apply for a Fusion Pool or AcceleRaytor IDO. You can get support on Discord or Telegram. Join the global community!What does "Your SOL balance is low" mean?"SOL is required to pay network (gas) fees. Fees are very low on Solana and you may be able make a number of transactions with a low balance, however it is recommended to keep at least 0.05 SOL in your wallet for gas.What fees do I pay when I trade or swap tokens on Raydium?Swap fee: Every time a user swaps between a pool, a 0.25% fee is taken on the trade. 0.22% of that trade goes back to the LP pool as fees earned and 0.03% of that goes to buying back RAY.Network fee: A nominal amount of SOL is also required to pay Solana network fees on each trade. Most trades cost between 0.0001 0.001 SOL.How does the AMM work with the OpenBook Order Book?The key differentiator in Raydium's AMM is that liquidity on Raydium also creates a market on OpenBook that is tradeable on any OpenBook DEX GUI. Because Raydium's LPs take orders directly on the OpenBook central limit order book, anyone trading on OpenBook has access to that liquidity. This is different from almost every other AMM protocol where liquidity is siloed off from other trading platforms.Price impact is the difference between the current market price and the expected price for a trade. Price impact is primarily determined by the size of your trade relative to the amount of liquidity in the pool. As the number of tokens you buy from the pool increases, the price of the token increases as well. This unfavorable change in price is called price impact.If you are swapping in a pool with very low liquidity, you may receive a very poor price for your swap. If you see high price impact when swapping, try trading a smaller amount or swapping in a pool with higher liquidity. Why did my transaction fail?Insufficient SOL: SOL is required to pay network fees (gas), it's recommended to keep at least 0.05 SOL in your wallet to ensure smooth transactions.Slippage Tolerance: Transactions will fail if the price of the underlying pool moves past your Slippage Tolerance. Try increasing your slippage tolerance on the Swap page.Approving Transactions: If you see the Making Transaction notification in the lower left-hand corner of your screen, you will need to approve the transaction in your SPL wallet.Questions about Liquidity & PoolsWhat's the benefit of providing liquidity on Raydium?Liquidity providers earn transaction fees from swaps within the pool. Additionally, the Raydium AMM market makes on the OpenBook order book, with earnings from maker volume also returned to liquidity providers in the relevant pool.When you add liquidity to a pool you will receive Liquidity Provider tokens (LP tokens) which represent your proportional share of the pooled assets. For example, if a user deposited \$RAY and \$USDC into a pool, you would receive RAY-USDC LP tokens.Every time a user swaps within the pool between \$RAY and \$USDC, a 0.25% fee is taken. 0.22% of that trade goes back to the LP pool. 0.03% of that goes to RAY buybacks. Previously, if there were 100 LP tokens representing 1 00 USDC and 100 RAY, each token would be worth 1 USDC & 1 RAY.If one user trades 10 USDC for 10 RAY, and another traded 10 RAY for 10 USDC, then there would now be 100.022 USDC and 100.022 RAY.This means each LP token would be worth 1.00022 USDC and 1.00022 RAY now when it is now withdrawn.Additionally, if there is a farm or Fusion pool for the tokens you're LP-ing, you will be able to earn additional tokens.If you are unfamiliar with the concept of impermanent loss, reviewing this article for a basic understanding is highly recommended.Which curves do liquidity pools on Raydium use?Raydium currently uses the constant function K = Y*X. This equation has a special property that is stateless and given any two tokens, without any information about their relative prices or value, it can provide infinite liquidity to traders. Raydium utilizes this equation and prices orders on the OpenBook order book according to the Fibonacci sequence to provide up to 20 orders at a variety of prices with spreads as small as 25bps between them, which is optimized for Solana. What does Permissionless Pool mean?Permissionless pools allow anyone to create a liquidity pool on Raydium. Once a pool is created it can then immediately be traded on the Raydium swap interface. The pool AMM will also place orders on the OpenBook order book, allowing liquidity to be traded on the Raydium Trading page, or any other OpenBook DEX GUI. Read this detailed explanation for more details. How do I earn yield from liquidity provider fees on Raydium?Every time a user swaps within a Raydium liquidity pool, a 0.25% fee is taken on the trade. 0.22% of that trade goes back to the LP pool. 0.03% of that goes to RAY buybacks. Fees deposited into the LP pool increase the number of tokens that you get back when you withdraw liquidity. Therefore you don't need to "harvest" your earnings at any point.Additionally, the Raydium AMM market makes on the OpenBook order book, with earnings from maker volume also returned to liquidity providers in the relevant pool.Liquidity Provider (LP) tokens represent a proportional share of a liquidity pool. For instance, if you contribute to the SOL-RAY pool, you will receive SOL-RAY liquidity pool tokens (LP tokens). If you have deposited liquidity, you can see these tokens in your wallet.Can I withdraw my liquidity anytime?Yes, you can redeem liquidity tokens for a proportional share of the pool at any time.How are projected earnings and APY calculated?APY from fees is calculated by total fees collected by the pool in the last 24 hours and extrapolating that to a 365 day year then dividing by the total liquidity in the pool. Swapping tokens on Raydium is similar to other platforms, just faster and cheaper. How to Swap/Navigate to Swap using the navigation menu at the top of the app, then connect your wallet.Next, select from the drop-down the tokens you want to swap or paste the token mint address. For this example, we'll be swapping From SOL To RAY. 3. Enter the amount of tokens you want to swap or receive. Finally, click Swap! 4. Shortly after the transaction is confirmed you should be able to see your new balance, although this can sometimes take a few seconds to refresh. You have now done your first swap on Raydium. Now let's get swapping!Pay close attention to Price Impact and remember to check 'Minimum Received' when executing large swaps or when swapping in a low liquidity pool. Minimum Received is the least amount of tokens a user will receive on a trade. Price Impact is the difference between the market price and the estimated execution price based on the size of the trade. Slippage Tolerance is the maximum difference between a user's estimated price and execution price. You can access this parameter both by clicking on the slippage icon on the top right corner of the swap interface and from the settings panel. If you see the TimeOut error, it means that the transaction hasn't reached the chain. To improve your chances of landing a transaction, you can increase your priority fees on the top right corner of your screen. However, be careful not to overspend on priority fees, they are non-deterministic and do not guarantee bloc inclusion.Last updated 1 year agoSay Hello to RaydiumGetting StartedTradersLiquidity providersPOOL CREATIONProtocolMedia assetsupdatesLearn moreSwapping token trn Raydium tng t nh cc n n tng khc, ch nhanh hn v r rn. Cch SwapVo phn SWAP trn thanh menu, sau kt ni v ca bn.2. Tip theo, chn t danh sch th xung token bn mun swap. l vi v d ny, chng t s swap t USDt sang LINK3. Nhp s lng token bn mun swap. Cui cng bn SWAPLu. Khng gnh nh swap trn Ethereum s hy ton b n t hng ca bn nu gi di chuy n vt qu kh ngn trt gi ca bn trong qu trnh swap. RaydiumSwap s hin n t hng ca bn n mc "Gi t nh" v hy phn cn li.4. Bn s cn nhp vo nt 'APPROVE' trong v ca mnh xc nhn giao dch.5. Ngay sau khi giao dch c xc nhn, bn s c th thy s d mi ca mnh, mc d iu ny i khi c th mt vi gi im bi. By gi bn th hin c ln swap u tin ca mnh trn Raydium. By gi chng ta hy swappin thi no!Last updated 4 years agoThe UI V3 is out, get a taste of the future of RaydiumCharts: V3 now onboards charts for any tradable token pairs on Raydium. This feature is accessible from both mobile and desktop platforms and can be easily toggled off by clicking the icon located at the top right corner of the swap UI.Please note: The data available on the chart view represents historical prices from Birdeye and does not necessarily originate exclusively from Raydium pool data.Finding tokens: The new swap GUI now integrates Jupiter tokens lists (strict or all) on top of the Raydium list. You can adjust your token list settings by clicking on a ticker and selecting "view token list".To prevent users from swapping for an incorrect token, Raydium prompts users to paste the contract address of tokens not included in any of the token lists. You can find this address directly on the project documentation, Raydium pool list, or any explorer.Exact out: Raydium V3 introduces a new bi-directional routing engine. Raydium's Swap UI now allows you to input the exact amount of quote token you wish to receive from a swap. When using Exact Out the slippage is applied to the base token amount.For example, you can specify the exact amount you'd like to swap for, with only the amount of base token paid susceptible to deviation from the quote based on your slippage tolerance.Raydium V3 introduces a new portfolio page, displaying user positions. This page serves as the main interface for users to manage their positions (such as adding/withdrawing liquidity, collecting yield, etc.). However, users can create pools and positions from the pool list. This new page also offers quick access for pool and farm creators to edit their incentive campaigns.The Liquidity Pools page now consolidates all Raydium liquidity under one roof. You can easily access CLMM, Standard (AMM pools), or ALL pools on the same interface. Additionally, this new page also comes with a card view which can be toggled by clicking the settings button next to the search bar.All user settings and customization, which were previously scattered across different windows, are now reunited in the top right corner of your screen.You'll notice two additions to the user's customizations: Language package: Experience Raydium in your language!You can now choose your preferred language from the settings panel. The list of supported languages is expected to expand with community support.Please note: All of the translations are provided by community members, and may contain errors. Raydium is not liable for translation mistakes. Spotting inconsistencies in the translation, or your language is missing? Feel free to contribute by making a pull request to the following files: //GITHUB LINK LANGUAGE PACKAGE (coming later)Color theme: Raydium V3 brings light to DeFi.You can now choose between the original Raydium Dark theme or the brand-new Light theme. Raydium V3 has been optimized for mobile users ensuring a smoother experience on the different wallet apps. Last updated 8 months ago

Car hauling business plan pdf. Car hauling business plan. Car hauling business plan template.