

derivAPI *for* **DUMMIES**

A Beginner's Guide



Application Programming Interface

API stands for “Application Programming Interface”.

It’s like a bridge or translator that helps two different programs communicate and work together.

Here are some easy examples:

Imagine Deriv is like a car manufacturer. Imagine Deriv is like a car manufacturer. We create the engines and core mechanical components that make the car run - these are like our core trading services.

You, as a developer, are like a car designer. While we provide the reliable engine and internal mechanics, you can design how the car looks and feels - creating unique interfaces and experiences for different users.

Some developers might create a sleek, minimalist trading interface, while others might build a feature-rich platform with detailed analytics. With the Deriv API, you can create trading applications that match your users’ needs.

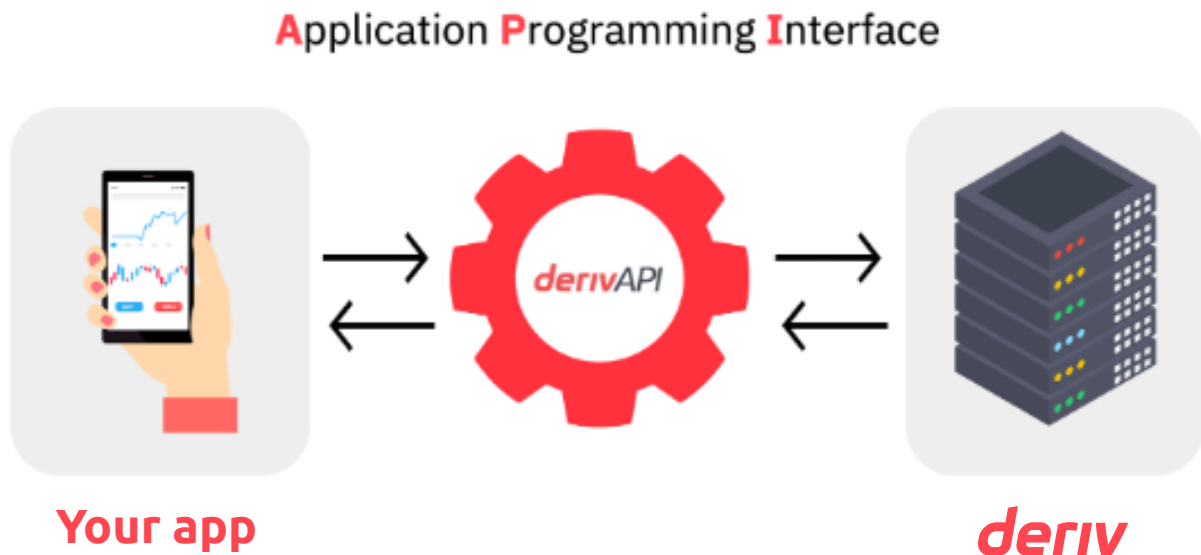


Now, think of a remote control

When you use a remote control (API) to operate your TV (system), you press buttons to send specific commands. The remote control translates your button presses into signals that the TV understands. Similarly, the API translates your requests into instructions that our trading system can process and respond to.

The Deriv API is a tool provided by Deriv that allows people to build their trading applications using the Deriv platform.

Users can create their custom trading environments, leveraging Deriv's system, and earn commissions (Markups) on the trades customers make within their applications.



Although using the API at an advanced level requires programming knowledge, here's a basic breakdown of how it works:

- **Connection:** First, you connect your application (a program or tool) to Deriv using the API.
- **Sending requests:** You send "instructions" through the API to perform actions like checking the price of an asset or placing a buy/sell order.
- **Receiving responses:** Deriv receives your instructions, processes them, and sends back a response. Your application interprets this response and displays the results to you.

It's important to note that Deriv does not provide a programmer. You'll need to work with a trusted developer on your own or handle the development yourself if you have programming expertise. However, Deriv provides everything you need within the API to create platforms, whether manual or automated, allowing you to trade using our infrastructure.

So, the Deriv API can be used for:

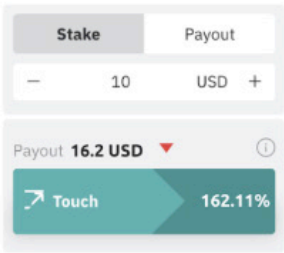
- 1. Automation of Trades:** If you find yourself repeating the same trades over and over, you can use the API to automate these processes, saving you from manual repetition.
- 2. Customization:** The API allows you to build tailored tools that meet your exact needs, enabling you to connect Deriv with other services you use.
- 3. Access to Real-Time Data:** With the API, you can get up-to-date information about markets, your accounts, and your trades, helping you make better-informed decisions.
- 4. To generate markup commissions with the API:** If a client trades directly on Deriv, no markup will be applied, and you won't earn a commission. However, if you create a platform or website offering manual and automated trading options and traders execute their trades on your platform, you're entitled to generate up to 3% on each contract.

API Commissions

0 to 3% markup commission



NO MARKUP



WITH MARKUP

STAKE = 10 USD

PAYOUT = 18.5 USD

% Markup = 2%

CALCULATION
 $18.5 \times 2\% = 0.37 \text{ USD}$

NEW STAKE (HIDDEN) = 10 - 0.37 = 9.63 USD

NEW PAYOUT = 16.2 USD

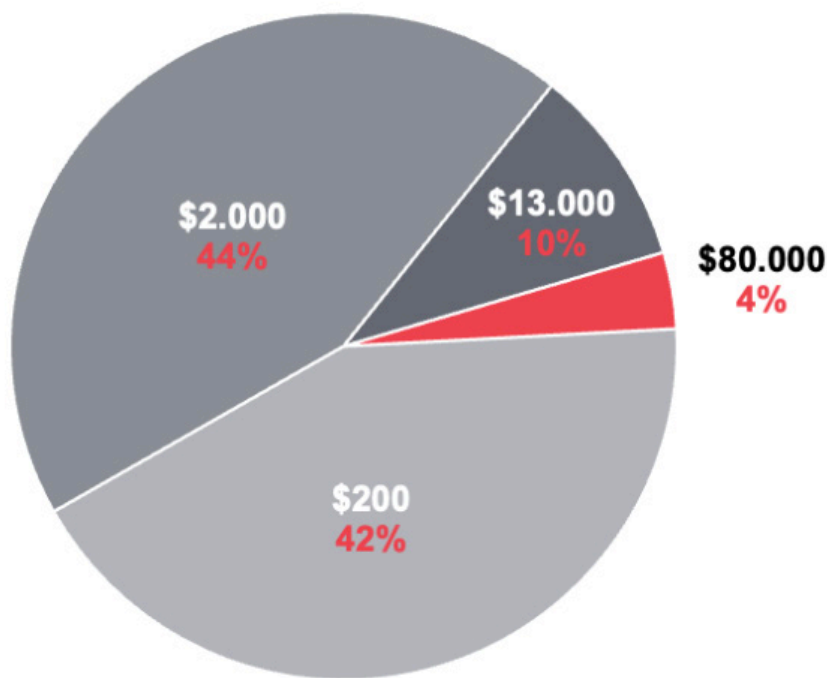
*Multipliers trades currently don't generate markup commissions

Imagine a trader placing a stake of \$10 in a trading contract. If they win, they receive a payout of \$18.50. Now, if you set a 2% commission (markup), you, as the affiliate, would make \$0.37 from that contract (2% of the trader's \$18.50 payout).

From another perspective, the actual amount the trader invests changes. Their new stake, after subtracting your commission, would be \$10 minus \$0.37, which equals \$9.63. With this adjusted stake, the payout the trader would receive if they win would be \$16.20 instead of \$18.50.

It's important to understand that while the markup potentially generates a commission for you, it also impacts the trader's experience and reduces their potential profits. However, traders choose to use your app because you provide them with additional value: personalized support, automated bots with specific strategies that execute trades automatically to save time and minimize human errors, high-quality charts, and trading education that adds more value to their experience.

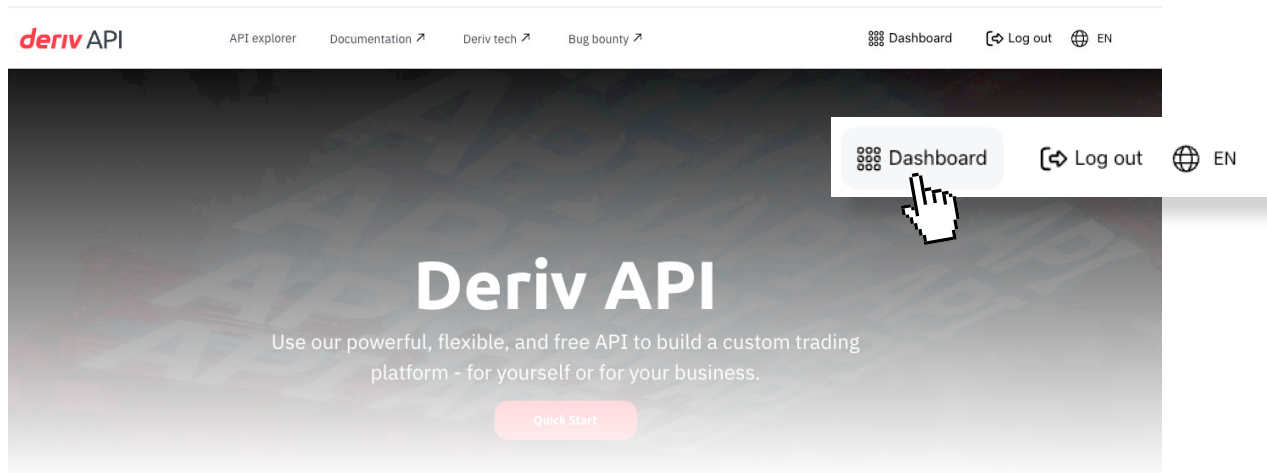
Potential markup commissions:



Statistically, you can achieve significant markup potential by using our API, as many affiliates already have. For example, 44% of affiliates made at least \$2,000 per month, while some top performers (4%) even surpass \$80,000 monthly.

If you're building your own application that will interact with Deriv, the first thing you need to do is register your application:

- Log in to your Deriv account.
- Go to the Apps Dashboard.



- Look for the section called App Dashboard in the dashboard.
- Give your application a name. In the "Name" field, enter something that clearly identifies your app. For example:
- If your app is a bot, you could name it "MyTradingBot."
- Or something related to its purpose, like "MarketAnalyzer."
- Click on Register Now.

App Dashboard

Start using Deriv API to bring custom integrations and powerful automation to your apps.

MyTradingBot

Register now

- Only alphanumeric characters with spaces and underscores are allowed.
- The name can contain up to 48 characters.
- The name cannot contain "Binary", "Deriv", or similar words.

☐ By registering your application, you acknowledge that you've read and accepted the Deriv API [terms and conditions](#)



Application registered successfully!

Ready to take the next step?

Optimise your app's capabilities by:

- Creating an API token to use with your application.
- Adding OAuth authentication in your app.
- Selecting the scopes of OAuth authorisation for your app.

Note: You can make these changes later through the dashboard.

Configure now

Maybe later

Add the Markup percentage

If you plan to charge users a markup percentage for the trades they make using your app, enter it here. You can set a markup of up to 3%; in this example, we'll use 2%.

App's name

Enter the name of the application you want to register:

MyTradingBot

- Only alphanumeric characters with spaces and underscores are allowed.
- The name can contain up to 48 characters.
- The name cannot contain "Binary", "Deriv", or similar words.

Markup

Add a markup to the price of each trade to help you earn a commission. Enter your markup percentage below. Learn more about markup calculations in our detailed [documentation](#).

i Markup is only available for real accounts and trading applications.

— 2 +

OAuth settings

Log in to your app using your Deriv account without an API token. With OAuth, third-party applications can securely authorise access without requiring password sharing, enhancing both security and user control.

- i** • Use OAuth if your application requires other users to sign in.
- Redirect URL is mandatory to enable OAuth on your app.

Fill in the OAuth Details

This step allows users to log in to your app using their Deriv accounts. You'll need to set up a couple of URLs to manage this process:

Redirect URL: This is where users will land after logging in with their Deriv credentials. For example, if your app's domain is `https://example.com`, you could use a link such as `https://example.com/login` or `https://example.com/auth`.

Verification URL (if needed): This is used to verify the user's email address. If you don't provide one, Deriv will just use the same Redirect URL for verification. Using the same domain example, write something like `https://example.com/verify`.

OAuth settings

Log in to your app using your Deriv account without an API token. With OAuth, third-party applications can securely authorise access without requiring password sharing, enhancing both security and user control.

- Use OAuth if your application requires other users to sign in.
- Redirect URL is mandatory to enable OAuth on your app.

URL Configuration

To set up OAuth for your app, specify the URL where users should be redirected after authorisation.

`https://example.com/login`

If your app includes verification logic, enter the email verification URL below (e.g. for account opening, verification, and password reset):

`https://example.com/verify`

If provided, the verification URL will be appended with a token and sent to the user's email. Otherwise, the redirect URL with the token will be used.

So, what is OAuth?

OAuth (Open Authorization) is a system that allows an application to use a user's resources on a server without needing the user's passwords. With OAuth, users can access third-party applications using their Deriv accounts without sharing passwords or API tokens, making the process both safer and easier.



Define the Authorization scope

Select the permissions your application will need. For example:

- If your app only needs to view data, choose “Read”.
- If your application also needs to execute trading operations, choose “Trade”.

Scopes of authorisation

Select the scope for your app:

- ☒ **Read:** You'll have full access to your clients' information.
- ☒ **Trade:** You'll be able to buy and sell contracts on your clients' behalf.
- ☐ **Trading information:** You'll be able to view your clients' trading information, including their account balance.
- ☐ **Payments:** You'll be able to perform deposits and withdrawals on your clients' behalf.
- ☐ **Admin:** Full account access, including the access to manage security tokens.

⚠ Grant admin access only when it's essential for your app's workflow.

Cancel

Update application

- **Read:** You will have full access to your clients' information.
- **Trade:** You will be able to buy and sell contracts on behalf of your clients.
- **Trading information:** You will be able to view your clients' trade information, including their account balance.
- **Payments:** You will be able to process deposits and withdrawals on behalf of your clients (only for Payment Agent applications).
- **Admin:** Full account access, including the ability to manage security tokens (only if essential).
- **Click on “Update Application”:** Once you've completed all the steps, press the update application button. Your application will now be registered! It will appear under the “Application Manager” tab.

Create an API Token

An API Token is essential for Deriv to know that your application is authorized to interact with your account. Here's how you can generate one:

- Go to the Dashboard.
- Log in to your Deriv account.
- Navigate to the API tokens section.
- Click on Create new Token.

App Dashboard

Start using Deriv API to bring custom integrations and powerful automation to your apps.

Applications

API tokens

Application manager

[Register new application](#)

Here's where you can see your app's details. Edit your app settings to suit your needs or delete them permanently.



App's name	App ID	OAuth scopes	OAuth redirect URL	Actions
MyTradingBot	56634			

Define the Access Level (Scopes)

Before creating the token, you need to decide what your application will be allowed to do with it. Deriv offers several access levels, known as “Scopes”:

- **Read:** Allows viewing market data and account details, but does not allow trading operations.
- **Trade:** Grants full access to trade, manage funds, and handle sensitive data.
- **Payments:** Allows withdrawals to payment agents and transfers between accounts.
- **Trading Information:** Provides access to read trade history.
- **Admin:** Allows opening accounts, managing settings, and even overseeing token usage.

Note: Choose only the permissions your application truly needs. If you’re just going to read information, select “Read”. Avoid using “Trade” or more advanced permissions unless you’re absolutely sure.

Enter a Name for the Token:
Give the token a descriptive name so you’ll remember why you created it later. Example: TokenForMyTradingApp.

And then click on Create Token.

Create new token

Select your account type:

Account type

Select scopes based on the access you need:

- ☒ **Read**
This scope will allow third-party apps to view your account activity, settings, limits, balance sheets, trade purchase history, and more.
- ☒ **Trade**
This scope will allow third-party apps to buy and sell contracts for you, renew your expired purchases, and top up your demo accounts.
- ☐ **Payments**
This scope will allow third-party apps to withdraw to payment agents and make inter-account transfers for you.
- ☐ **Trading information**
This scope will allow third-party apps to view your trading history.
- ☐ **Admin**
This scope will allow third-party apps to open accounts for you, manage your settings and token usage, and more.
Do not share tokens with the admin scope with unauthorised parties.

Enter your token name
MyTradingBotToken

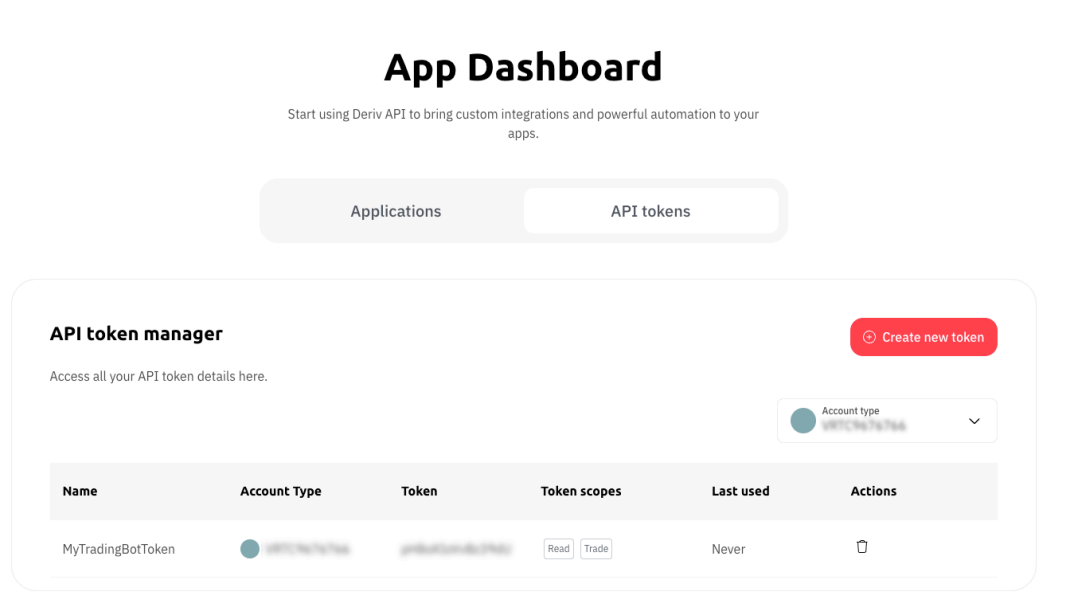
- Only alphanumeric characters with spaces and underscores are allowed.
- Only 2-32 characters are allowed
- No duplicate token names are allowed for the same account.
- No keywords "deriv" or "binary" or words that look similar, e.g. "_binary_" or "d3riv" are allowed.

Cancel Create token

Use Your Token: Once it's created, you'll see the token listed on the page.

Important! Copy the token and save it in a secure place, because registration is the only time Deriv will show it to you.

Use this token in your application to authorize requests to the Deriv API (for example, to check your balance, execute trades, etc.).



How to Use the Token

Once you generate your API Token, simply copy it and paste it into your application (or bot) wherever it asks for it. Don't worry about the technical details, your trusted app developer has already set everything up to use your token and securely connect your Deriv account.

Here's what happens behind the scenes:

- 1.** The API Token acts as a “bridge” connecting your Deriv account with the application.
- 2.** The application uses this token to perform specific actions, such as:
 - Reading your balance or account information.
 - Automatically executing trades or retrieving market data (depending on the permissions you selected when creating the token).
- 3.** If at any point you no longer want the application to have access to your Deriv account, you can revoke (cancel) the token from your account settings on Deriv.

In simple terms: The token works as a “key” that securely gives the application access to your Deriv account. Your developer already knows how to handle everything else once you provide them with this token.

How to View Your API Commission (Markup)

You can check how much you've earned in commissions from your clients' trades by following these steps:

1. Open this link: https://api.deriv.com/api-explorer#app_markup_statistics
2. In the dropdown menu, select the option **"Application: Markup Statistics"**.
3. Enter the date range you want to view using the **"date_from"** and **"date_to"** fields.
 - For example, if you want to check commissions for the entire month of January, set **"date_from"** to **"2023-01-01"** and **"date_to"** to **"2023-01-31"**.
4. If you want more specific details, you can include additional information such as:
 - **app_id** (your application ID).
 - **client_loginid** (the client's login ID)
5. Click on **"Send request"** to view your commission.

API Explorer

Application: Markup Statistics

Account type
VRTC9676766

Request JSON

```

{
  "app_markup_statistics": 1,
  "date_from": "2022-01-01 00:00:00",
  "date_to": "2022-01-31 23:59:59",
  "passthrough": {},
  "req_id": 4
}

```

Send request

Clear response

Application: Markup Statistics (request)

Retrieve statistics of `'app_markup'`. Auth Required: read

app_markup_statistics constant integer 1

Must be 1

date_from string

`"2022-01-01 00:00:00" - "2022-01-31 23:59:59"`

Start date (epoch or YYYY-MM-DD HH:MM:SS). Results are inclusive of this time.

date_to string

`"2022-01-01 00:00:00" - "2022-01-31 23:59:59"`

End date (epoch or YYYY-MM-DD HH:MM:SS). Results are inclusive of this time.

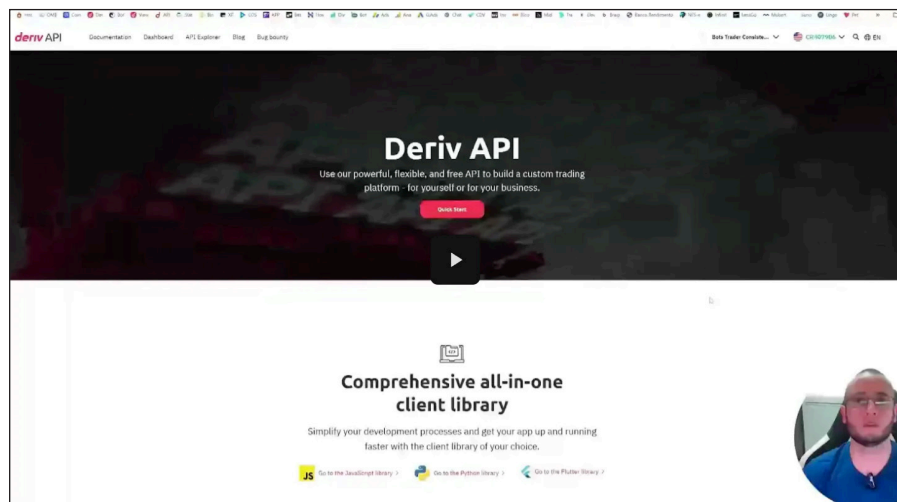
loginid string `"1A-2x-3x(0-9)+"`

[Optional] The login id of the user. Mandatory when multiple tokens were provided during authorize.

passthrough object

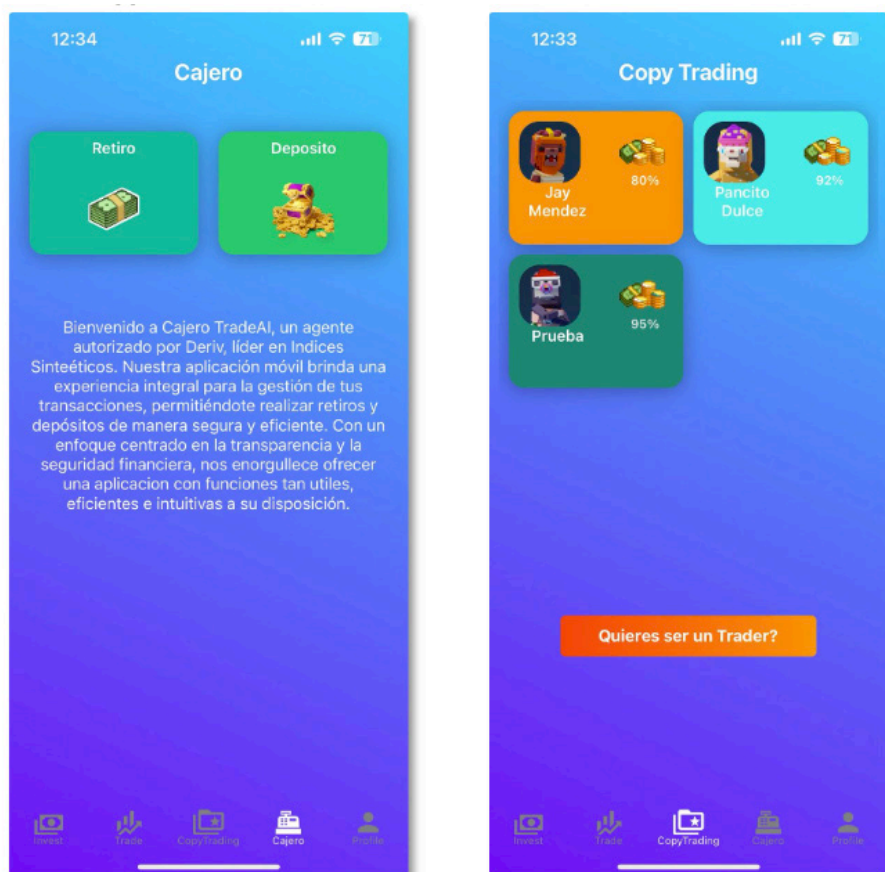
[Optional] Used to pass data through the websocket, which may be retrieved via the `'echo_req'` output field.

Examples of successful applications



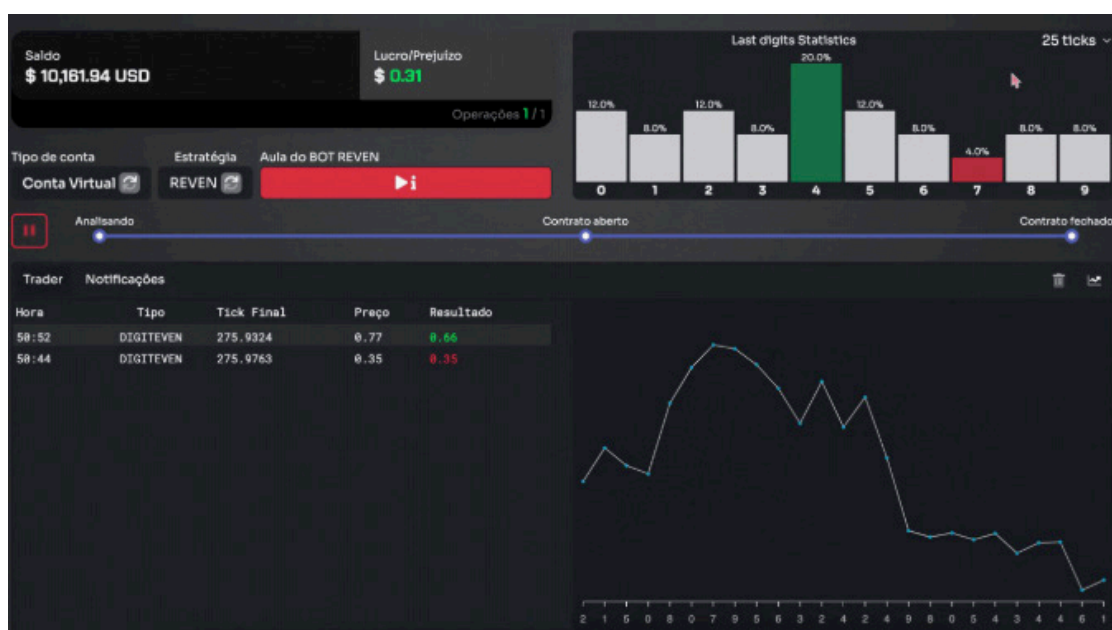
TradeAI App

TradeAI is a mobile solution using Deriv API. Users can perform fast withdrawals and deposits, ensuring efficient control of their transactions. Additionally, it offers a copy trading feature, enabling users to mimic the trading strategies of successful traders. Its success lies in its intuitive design, focus on user security, and integration of practical tools like copy trading and transparent transaction options, empowering users to manage their finances and trading strategies effortlessly.



free.sistemapletsch.com

This app is an automated trading bot using Deriv's API, powered by Deriv, built to follow a specific strategy provided by the affiliate/developer. It analyzes real-time market data using the Deriv API to predict and place trades. It's successful because it simplifies complex trading decisions, runs with high accuracy using a tested strategy, and offers users a safe way to practice on a virtual account before trading live, making it beginner-friendly and reliable.



tradder.ai

tradder.ai app's success lies in its user-friendly layout, advanced analytics, and integration with Deriv's API, which makes it an excellent solution for both beginners and experienced traders looking for automation and insight.



maiscambio.com

maiscambio.com is a user-friendly currency exchange platform that enables customers to purchase various digital and electronic currencies. Users can select their desired currency (e.g., Neteller, Bitcoin, PayPal, Skrill, etc.), input how much they want to receive, and instantly view the amount payable. Its success comes from its simple, intuitive interface, a wide variety of supported payment options, and its focus on catering to users seeking fast and reliable digital currency exchanges.


choose your currency

Purchase:

How much do you want to receive?

Amount payable:

MAKE PURCHASE



Do You Have Questions or Doubts?

If you have any questions about the API or encounter technical issues, contact us at: api-support@deriv.com

You can also join our developer community on

 **Telegram**

In the group, you can share ideas, learn about coding, and more.

We're here to help!

Reach out to us, and we'll work with you to improve your bot or application.

The logo for Deriv, featuring the word "deriv" in a bold, italicized, white sans-serif font, centered on a solid black background.

deriv

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