



TechRules
Financial Solutions

API LIBRARY

CONNECT, CHANGE
AND ADAPT

Discover the new Wealth
Management API market to
create a unique experience
according your business needs

www.techrules.com

APIs FOR DISRUPTIVE TECHNOLOGY

What is TechRules API Library?

TechRules API Library is a complete high standard API Wealth Management Marketplace, coming out of our more than 25 years of experience in digital wealth management solutions. Our market place has a complete list of independent and specific features available,

The APIs avoids complex integration process in old legacy systems or in-house developments and is developed on a simple plug-and-play model together with a complete toolkit and framework.

The protocol in which the APIs are built allow sharing information between different programming languages. Their flexibility and disruption are key factors for the digital transformation that the financial industry is embracing to achieve a promptly time to market, transparency and simplicity.

Global vision for the industry:
Open and connect with
customers without compromising
safety.

Why do you need TechRules API Library?

The API revolution is fast becoming a priority in the financial services industry. It allows the financial firms to adopt innovations in technology in a better and simpler way enabling change and increasing competitiveness with the "new players" in the market.

With TechRules API Library have access to a complete range of wealth management tools to make it easy for advisors and end users. Plan and analyze, generate investment proposals, create and rebalance portfolios. Our marketplace offers financial entities tools to specific task automating a specific workflow for the complete advisory process. Create and scale to a innovative global platform that connects and support investors from current legacy.



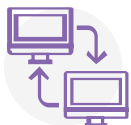
The new wave of digital transformations comes from a monolithic application towards a combination of several features according to specific business needs.

TARGET MARKET

- 01 System developers (integrators)
- 02 Digital banks
- 03 Online brokers
- 04 Independent advisors

- 05 Robo-Advisors
- 06 New players: FinTechs and Startups

FEATURES



SIMPLE INTEGRATION

Easy integration with in-house or third-party solutions



SCALABILITY

Try specific solution or boost current systems



IN-DEPTH FEATURES

Trasnform old legacy system into advanced digital solutions with cloud-based APIs



SHORT TIME-TO-MARKET

Be more competitive and adapt to the new trends



REGULATORY COMPLIANCE

Legal compliance made simple with specific APIs



USE CASES

Ready for desktop and mobile

API LIBRARY - FLEXIBILITY, ACCESSIBILITY, EFFICIENCY, SCALABILITY

Includes a wide variety of features, able to transform your current system into a tailor-made advisory service

APIs: PORTFOLIO ANALYTICS

All you need to track your portfolios taking into account absolute and relative risk, performance and valuations

APIs: MODEL PORTFOLIOS

Get an independent investment portfolio strategy with a deep understanding of asset allocation and categorisation

APIs: ADVICE

Financial planning objectives for medium and long term investments

APIs: CALCULATION

Key volatility and risk calculations ready to be used for taking the best investment decision process

APIs: DATA FEED

Manage and access full and large-scale cleaned database for Data analytics used in all the wealth management

APIs: INVESTMENT TOOL

Set of data features to get an immediate visual outlook of the investments

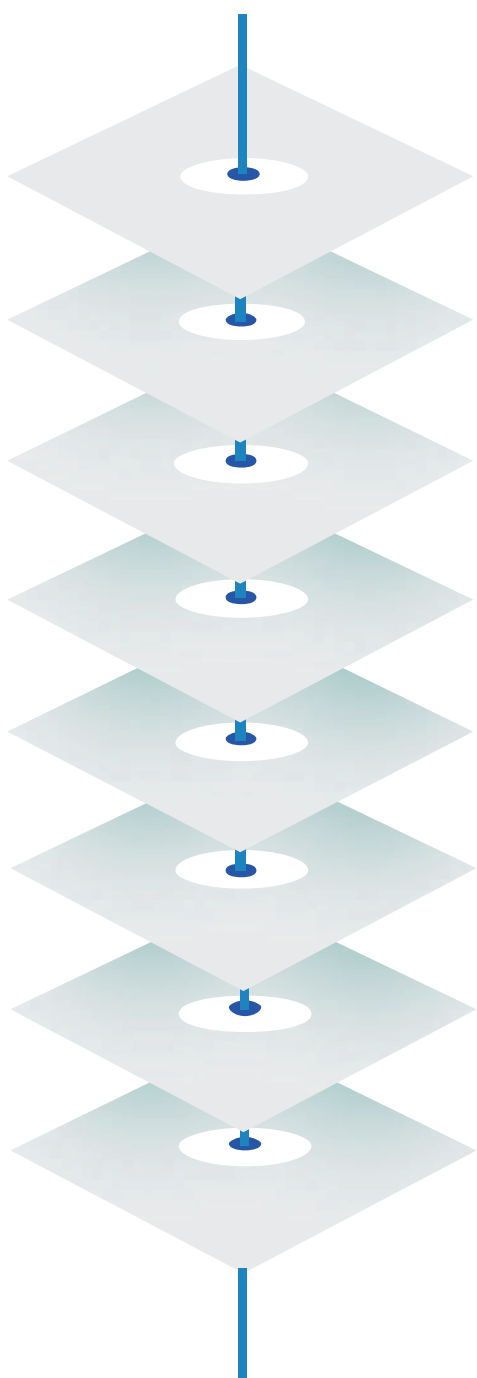


PORTFOLIO ANALYSIS API LIBRARY

What is TechRules API Library?

Portfolio analysis tools to help portfolio managers to measure performance, risk, allocation and characteristics for multiple portfolios and asset classes, making the best decision.

Understand composition and risk, view metrics, including weights, valuation measures and other ratios for your portfolio and benchmarks and evaluate relative performance



More than 100 indicators

Deep dive analytics

Tailored-made reporting

Compliance alerts

Expert consultancy service and support available

Scale your offering

Documents held within a sandbox

Hybrid cloud-based solution

THE API IN A NUTSHELL

Risk calculations

- Volatility
- VaR (1M, 1Y, 95%, 99%, etc)
- Sharpe Ratios
- Max. DrawDown
- Relative: Alpha, Berta, R2, etc

Composition

- Asset Class
- Currency
- Asset Type
- Sector Distributions

Performance

- Profit & Loss, Unrealized PL
- TWR, MWR, Dietz, etc
- Daily, 1 Month, Year To Date, 1 Year, etc
- Annualised Performance
- Performance Contribution

Advanced functionalities

- Optimiser
- Forecasting Simulation: Montecarlo, Bootstraping
- Automatic Portfolio Diagnosis

HOW IT WORKS API LIBRARY

EXAMPLE

With basic portfolio positions data, get a full portfolio analysis.

API REQUEST

/api/portfolio/get_portfoliodata

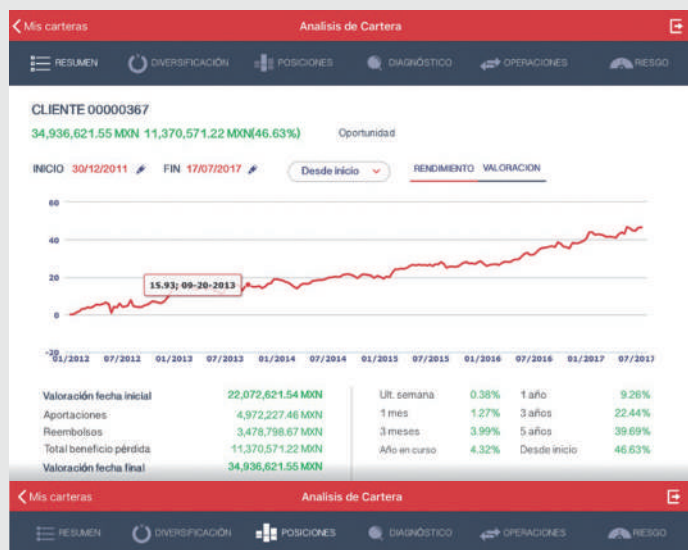
REQUEST

```
{
  "Portfolio": {
    "Currency": "EUR",
    "ValuationDate": "2018-05-27",
    "Name": "House for Robert",
    "Positions": [
      {
        "Position": {
          "ProductCode": "EUR21841008310.TR",
          "AssetCcy": "EUR",
          "NumShares": "84",
          "PriceDate": "2018-05-25",
          "Price": "233.78",
          "Key": "TR44344EUR21841008310.TR#0",
          "Valuation": "19637.52",
          "ValuationCcy": "EUR",
          "CostValue": "19835.76",
          "ExchangeRate": "1"
        }
      }
    ]
  }
}
```

RESPONSE

```
{
  "Code": "28FX26C500JHVAQ3T9TG==",
  "Contributions": 4005340,
  "Currency": "EUR",
  "EndDate": "2018-06-10",
  "Code": "28FX26C500JHVAQ3T9TG==",
  "Contributions": 4005340,
  "Currency": "EUR",
  "EndDate": "2018-06-10",
  "Id": "ykcsnjInXUURS3vrtb2CEg==",
  "InitialDate": "2016-02-09",
  "IsGrouped": false,
  "Name": "Cartera de fondos en otra entidad",
  "PerformanceBetweenDates": 0.050003514825271456,
  "PerformanceData": [
    {
      "Code": "28FX26C500JHVAQ3T9TG==",
      "Id": "ykcsnjInXUURS3vrtb2CEg==",
      "Code": "28FX26C500JHVAQ3T9TG==",
      "Id": "ykcsnjInXUURS3vrtb2CEg==",
      "Name": "Cartera de fondos en otra entidad",
      "PerformanceM": 0.004097776249186923,
      "PerformanceI": 0.001795011598960534,
      "PerformanceV": -0.024686009926899,
      "PerformanceM": -0.000626231899900331,
      "PerformanceV": null,
      "PerformanceDateTo": 0.050003514825271456,
      "PerformanceStart": 0.050003514825271456,
      "PerformanceYTD": -0.029347619573434205,
      "Type": "Portfolio"
    },
    {
      "Code": "X0XVPU5F4LFZISHPQID+4u==",
      "Id": "X0XVPU5F4LFZISHPQID+4u==",
      "Code": "VJSQESYNT2DK7JLXKAQ3G==",
      "Id": "VJSQESYNT2DK7JLXKAQ3G==",
      "Name": "SP 500 Index (SPX)",
      "PerformanceIndexes": [
        {
          "Code": "X0XVPU5F4LFZISHPQID+4u==",
          "Id": "X0XVPU5F4LFZISHPQID+4u==",
          "Code": "X0XVPU5F4LFZISHPQID+4u==",
          "Id": "X0XVPU5F4LFZISHPQID+4u=="
        }
      ]
    }
  ]
}
```

LAYOUT EXAMPLE



Mis carteras Analisis de Cartera

CLIENTE 00000367

34,936,621.55 MXN 11,370,571.22 MXN(46.63%) Oportunidad

INICIO 30/12/2011 FIN 17/07/2017 Desde inicio

Posición	Peso actual	Val./Títulos	Beneficio/ Pérdida	Último precio	Riesgo
LQD *	1.52%	530,497.21 MXN 250.00	-96,502.80 MXN (-15.39%)	2,121.99 MXN	14.13% Medio
ALFAD03 280223	2.72%	948,997.62 MXN 51.00	-24,370.30 MXN (-2.50%)	18,807.60 MXN	3.05% Muy Bajo
AEROMEX 00117	1.44%	502,071.30 MXN 5,000.00	2,071.30 MXN (0.41%)	100.41 MXN	0.02% Muy Bajo
ATLASCB 17	0.72%	250,000.00 MXN 2,500.00	161.75 MXN (0.32%)	100.22 MXN	2.57% Muy Bajo

Mis carteras Analisis de Cartera

CLIENTE 00000367

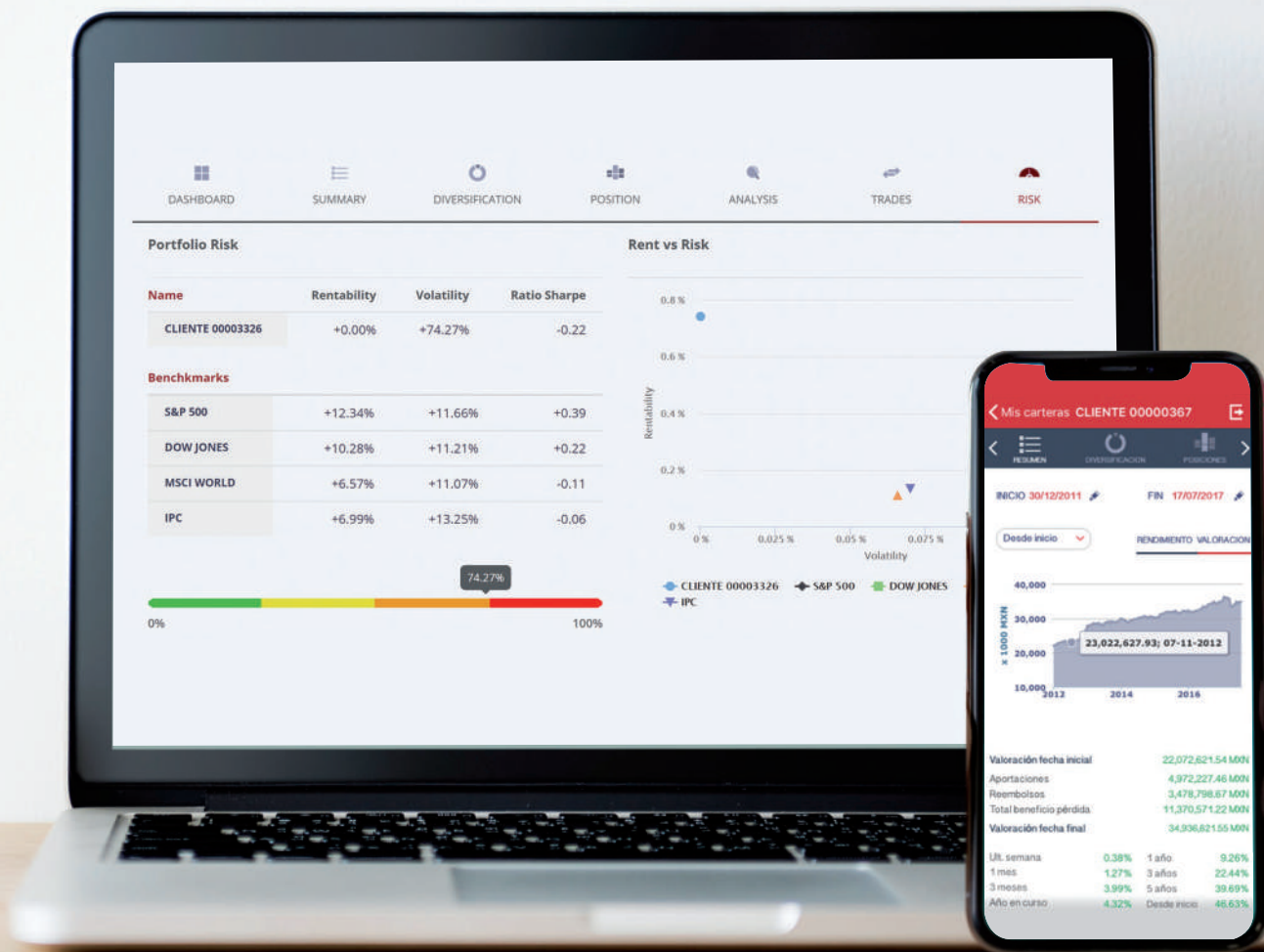
34,936,621.55 MXN 11,370,571.22 MXN(46.63%) Oportunidad

INICIO 30/12/2011 FIN 17/07/2017 Desde inicio

RIESGO DE LA CARTERA		RIESGO DE POSICIONES	
Nombre	Rentabilidad	Volatilidad	Ratio Sharpe
CLIENTE 00000367	9.26%	5.17%	-0.18
S&P 500	13.76%	7.79%	0.84
DOW JONES	16.81%	8.14%	1.18

Comentario de riesgo

Rendimiento vs. riesgo



TechRules

Financial Solutions

**READY TO JOIN THE
API-REVOLUTION?
TALK TO AN API EXPERT**

Contact us
marketing@techrules.com



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