

A man with a beard and glasses, wearing a light blue button-down shirt and blue jeans, is sitting at a desk and working on a silver laptop. He is looking down at the screen. The background is a blurred office environment with large windows and other people working. The image is overlaid with a semi-transparent blue geometric shape that contains the text.

xignite[®]

Getting Started Guide

Our API Catalog

<https://www.xignite.com/products/>

This view gives you instant access to all the available services.

You can filter APIs by asset class, frequency, data types and region

The screenshot displays the Xignite Market Data API Catalog interface. At the top, there are navigation links for Products, Clients, Company, and Contact Us. Below the navigation is a blue header with the Xignite logo and the title "Market Data API Catalog".

The main content area is divided into several sections:

- Filter the catalog...:** A sidebar on the left contains several filter categories:
 - Data Coverage:** Includes Stock Price Data, ETF & Mutual Funds, Foreign Exchange, Futures & Options, Indices & Commodities, Fixed Income & Rates, Fundamentals, Master & Reference, Earnings & News.
 - Frequency:** Includes Real-time Data, Intraday Data, End of Day & Historical.
 - Data Types:** Includes Quotes, Valuation, Fundamentals, News, Master, Events, Ticks, Metadata.
 - Region:** Includes NORTH AMERICA, EUROPE, ASIA/PACIFIC, LATAM.
 - Advanced APIs:** Includes Streaming Quotes, Stock Alerts, Excel Quotes Add-in, Type Ahead Search.
- API List:** A grid of API cards, each with a title, description, and an "API List" link. The visible APIs include:
 - XigniteGlobalQuotes:** Global Delayed Stock Quotes API. Provides delayed stock quotes for global equities.
 - XigniteGlobalHistorical:** End of Day and Historical Stock Quotes API. Provides historical stock quotes and closing prices for global equities.
 - XigniteGlobalCurrencies:** Real-time & Historical Currency Exchange Rates API. Provides real-time and historical quotes for currency exchange rates (FX).
 - XigniteGlobalMaster:** Security Master for Global Equities, Bonds & Derivatives. Provides security master data for instruments based on global exchanges.
 - XigniteSuperQuotes:** The Smart API. Provides super quotes, accessible to Kryptobit.
 - XigniteFacetEstimates:** Global Earnings Estimates & Recommendations API. Provides factual global equity analyst estimates and recommendations.
 - XigniteGlobalRealTime:** Global Real-time Stock Quotes API. Provides real-time stock quotes for global equities.
 - XigniteGlobalFundamentals:** Global Fund Fundamental Data API. Provides fundamental data for global funds.
 - XigniteGlobalRealTime:** Global Real-time Stock Quotes API. Provides real-time stock quotes for global equities.
 - XigniteBATSRRealTime:** S&P 500 Exchange Real-time Stock Quotes from API. Provides CBOE real-time stock quotes for U.S. equities.
 - XigniteGlobalMetas:** Real-time & Historical API Meta Price Quotes API. Provides real-time price meta and open prices.

Click here to go to the APIs and test form

API List and Documentation

<https://www.xignite.com/product/mutual-fund-NAVs>

The name of the web service

Drill down to the API list

Review the data coverage

XigniteNAVs

U.S. Mutual Funds Net Asset Value (NAV) API

This API offers Net Asset Value (NAV) data for U.S. mutual funds. NAV data is updated on a daily end-of-day basis. Use XigniteNAVs to get accurate daily mutual fund prices and mutual fund values for pricing of investment portfolios and for research and analysis of mutual fund performance.

Key Features

- Historical mutual fund values (NAV) data going back to 1994
- Mutual fund identification by Symbol, CR, CUSIP, ISIN, or ticker (where available)
- Mutual fund NAV data for one or more mutual funds per request
- Dividend-adjusted or unadjusted mutual fund values (NAV)
- Daily, historical fund series in period (weeks, months, years) mutual fund NAV data
- Dividend history by mutual fund

Key Benefits

- Easy-to-use API to obtain end of day and historical mutual fund values (NAV) data
- Access institutional quality, curated data from a trusted source
- Use a single easy-to-use API to obtain comprehensive mutual fund prices
- Easily embed mutual fund (NAV) in your applications—including spreadsheets, websites, mobile apps and other corporate applications
- Dramatically reduce time to market for apps that need mutual fund prices
- Eliminate the pain and complexity of legacy mutual fund tools by using cloud API

Data Coverage: A-A-Glance

- Asset Classes: U.S. Open End and Closed End Mutual Funds, Money Market Funds, Unit Investment Trusts (UITs) and Annuitals
- Exchanges Covered: As reported to the NASDAQ OMX Mutual Fund Quotation Service (MFQS)

Key Data Points

- Fund: Name, CR, Symbol, ISIN, Volume, market, industry, average
- Mutual Fund Data: NAV, previous NAV, change, percent change, seven day yield, previous seven day yield
- Periods: Day, week, month, quarter, year

Data Coverage

For U.S. Mutual Fund Prices Data, below is a summary of the NASDAQ OMX exchange assessments for the NASDAQ Mutual Fund Dissemination Service (MFDS) data set. For up to date information and further details, please refer to the NASDAQ website.

Date	Timing (Casters Time)	Exchange Agreement	Exchange Fees
NASDAQ MFDS Real Time	Before midnight	Yes	External distribution - Yes Internal distribution - Yes (as of January 2017)
NASDAQ MFDS Delayed	After midnight	Yes	Yes (as of January 2017)
NASDAQ MFDS End of Day	24 hours delayed	No	No

The API Page

<https://www.xignite.com/product/mutual-fund-NAV#/DeveloperResources/request/GetNAV>

The name of the API

The description for the API

The test form for the API. Enter your parameters here

Click on this button to view the results. This will consume your hits!

XigniteNAVs

Data Coverage | API List and Documentation

APIs

- Lists
 - ListNewSymbols
 - ListSymbols
- Current NAVs
 - GetNAV**
 - GetNAVs
- Historical NAVs
 - GetHistoricalNAVs
 - GetHistoricalNAVsTrailing
- Dividends
 - GetAllCashDividendHistory
 - GetCashDividendHistory
 - GetDividendHistory

API Test Form [Contact Us](#)

This is a new version of XigniteFunds. If you implemented this service prior to September 25, 2014, please refer to the previous version's documentation.

GetNAV

Returns the latest closing NAV for a fund.

Request | Usage | Code | Get Help

IdentifierType: Symbol
Identifier: RYTRX
Encrypt Token:

Result Format: **Grid** | XML | JSON | CSV

Customize Request

URL: https://navs.xignite.com/v2/xNAVs.json/GetNAV?IdentifierType=Symbol&Identifier=RYTRX&_token=AEF3309B4A794084B1D2961B34534D39 [Copy](#)

[View Results](#)

Outcome	Message	Identity	Delay	Date	Time	UTCOffset	NAV	PreviousNAV	Change	PercentChange	SevenDayYield	Previ
Success	Request	0.0765182	12/29/2017			-5	13.58	13.65	-0.07	-0.513	0	

Pick the **output** format of your choice

The color coded **URL** for your parameters. **Click** on it to open a new tab and pull up the results

Full **Output Documentation** is available at the bottom

API Endpoints

<https://www.xignite.com/product/mutual-fund-NAVs#/DeveloperResources/>

Find the APIs
you need easily

“Lists” APIs are listed first.
Then the main APIs come
next. Less frequently used
APIs are listed last.

APIs are organized by **group**
of related APIs. For instance
APIs that list items will be
grouped together, or chart
APIs will be grouped as well.

The screenshot displays the XigniteNAVs API documentation interface. At the top, there's a navigation bar with 'Data Coverage' and 'API List and Documentation' tabs. A blue banner below the navigation bar contains a message: 'This is a new version of XigniteFunds. If you implemented this service prior to September 25, 2014, please refer to the previous version's documentation.' Below this is a 'Contact Us' button.

The main content area is titled 'API Test Form' and includes a description: 'Our API Test Form below lets you craft and customize your REST requests and see the response instantly. We also provide sample code specific to each API. You can view output descriptions in the section below.' Below the description is the 'ListNewSymbols' API endpoint, which 'Returns a list of mutual funds added between two dates.'

The 'ListNewSymbols' section features a 'Request' tab with a form for configuring the API call. The form includes fields for 'StartDate' (12/23/2017) and 'EndDate' (12/29/2017), an 'Encrypt Token' checkbox, and a 'Result Format' dropdown menu with options for 'Grid', 'XML', 'JSON', and 'CSV'. A 'Customize Request' button is located below the form.

At the bottom, the 'URL' section shows the generated API endpoint: `https://navs.xignite.com/v2/xNAVs.json/ListNewSymbols?StartDate=12/23/2017&EndDate=12/29/2017&_token=AEF3309B4A794084B1D2961B34534D39`, with a 'Copy' icon to its right.

On the left side of the screenshot, a sidebar lists various API categories: 'APIs', 'Lists' (with 'ListNewSymbols' and 'ListSymbols' sub-items), 'Current NAVs' (with 'GetNAV' and 'GetNAVs'), 'Historical NAVs' (with 'GetHistoricalNAVs' and 'GetHistoricalNAVsTrailing'), and 'Dividends' (with 'GetAllCashDividendHistory', 'GetCashDividendHistory', and 'GetDividendHistory').

Choose Your Output Format

<https://www.xignite.com/product/mutual-fund-NAV#/DeveloperResources/request/GetNAV>

All our APIs support **XML**, **JSON** or **CSV** formats.

You can choose to view the output in a **Grid** format, in **XML**, **JSON** or **CSV**. Just pick the tab you want and click "View Results"

The output of the call is displayed in the **format** you choose.

The screenshot shows the XigniteNAVs API Test Form interface. The page title is "XigniteNAVs" and it has tabs for "Data Coverage" and "API List and Documentation". A sidebar on the left lists various APIs under categories: Lists, Current NAVs, Historical NAVs, and Dividends. The "GetNAV" API is selected. The main content area shows the "API Test Form" for "GetNAV", which returns the latest closing NAV for a fund. The form includes fields for "IdentifierType" (set to "Symbol") and "Identifier" (set to "RYTRX"). There is an "Encrypt Token" checkbox and a "Result Format" selector with options for Grid, XML, JSON, and CSV. A "Customize Request" button is present. Below the form, the URL is displayed: `https://navs.xignite.com/v2/xNAVs.json/GetNAV?IdentifierType=Symbol&Identifier=RYTRX&_token=AEF3309B4A794084B1D2961B34534D39`. A "View Results" button is located below the URL. At the bottom, a table displays the response data.

Outcome	Message	Identity	Delay	Date	Time	UTCOffset	NAV	PreviousNAV	Change	PercentChange	SevenDayYield	Previ
Success		Request	0.0765182	12/29/2017		-5	13.58	13.65	-0.07	-0.513	0	

Standard Output Values

They Are Always There

Outcome

- This field describes the outcome of the method. Possible values are: Success, SystemError, RequestError and RegistrationError.

Message

- A short message describing the error if the Outcome field contains a RequestError or RegistrationError.

Identity

- This field describes how the call was authenticated. Possible values are: IP, Cookie, Header and Request.

Delay

- This field reports the time it took for the server to complete a request, in a decimal format measured in seconds (Example: 0.0016). This does not take into account any latency experienced by the caller.

Access Documentation

<https://www.xignite.com/product/mutual-fund-NAV#/DeveloperResources/request/GetNAV>

All our documentation is **online** or available for download on the web site. If you don't see it, most likely we do not have it!

Scroll down for the **output documentation**.

These 4 fields (**Outcome, Message, Identity, Delay**) are standard on all outputs

Success			0	6/9/2017		-4	20.68	20.51	0.17	0.829	0	0	0
Success			0	6/9/2017		-4	11.08	11.09	-0.01	-0.09	0	0	0
Success			0	6/8/2017		-4	14.5	14.51	-0.01	-0.069	0	0	0

Name	Description	Always Present
▼ ArrayOfGlobalNAV	Returns an array of GlobalNAV objects.	True
▼ GlobalNAV	Each instance represents a fund NAV.	True
Outcome	The outcome of the call. Possible values are: Success, SystemError, RequestError and RegistrationError.	True
Message	A short message describing the error if the Outcome field contains RequestError, RegistrationError, or SystemError. An informational message is sometimes provided when Outcome is Success.	True
Identity	A description of how the call was authenticated. Possible values are: IP, Cookie, Header and Request.	True
Delay	Reports the time it took for the server to complete a request, in a decimal format measured in seconds (Example: 0.0016). This does not take into account any network latency experienced by the caller.	True
▼ Fund	Each instance represents a fund.	False
Outcome	The outcome of the call. Possible values are: Success, SystemError, RequestError and RegistrationError.	True
Message	A short message describing the error if the Outcome field contains RequestError, RegistrationError, or SystemError. An informational message is sometimes provided when Outcome is Success.	True
Identity	A description of how the call was authenticated. Possible values are: IP, Cookie, Header and Request.	True
Delay	Reports the time it took for the server to complete a request, in a decimal format measured in seconds (Example: 0.0016). This does not take into account any network latency experienced by the caller.	True

Customize Your API Calls

<https://www.xignite.com/product/mutual-fund-NAV#/DeveloperResources/request/GetNAV>

You can **customize the output** of each API by picking the fields you want to retrieve. This **simplifies coding and speeds your calls** by limiting network traffic.

Just click **Customize Request** and click the fields you want returned. You can unselect all the fields first and pick those you want.

GetNAV
Returns the latest closing NAV for a fund.

Request Usage Code Get Help

IdentifierType Symbol
Identifier RYTRX
Encrypt Token

Result Format:
Grid XML JSON CSV

Customize Request

Field	Description	Selected
UTCOffset	This property can be used to convert the (local) DateTime to UTC. • Formula: DateTime - UTCOffset = DateTime UTC • Example: DateTime=2015-01-15 15:00:00 and UTCOffset=-5 results in DateTime UTC=2015-01-15 20:00:00	<input type="checkbox"/>
NAV	The latest Net Asset Value for the fund.	<input checked="" type="checkbox"/>
PreviousNAV	The Net Asset Value for the fund as of the prior trading date.	<input type="checkbox"/>
Change	The difference between the NAV and PreviousNAV values.	<input type="checkbox"/>
PercentChange	The percentage difference between the NAV and PreviousNAV values.	<input type="checkbox"/>
SevenDayYield	The subsidized seven day yield on an annualized basis. This field is only supported for Money Market mutual funds.	<input type="checkbox"/>
PreviousSevenDayYield	The subsidized seven day yield on an annualized basis for the prior trading date. This field is only supported for Money Market mutual funds.	<input type="checkbox"/>
PremiumDiscount	This field is reserved for future use.	<input type="checkbox"/>
Currency	The currency of the NAV value.	<input type="checkbox"/>

URL
https://navs.xignite.com/v2/xNAV/s.json/GetNAV?IdentifierType=Symbol&Identifier=RYTRX&_fields=Fund.Symbol,NAV&_token=38C16B4FA382A57000B8BD4BC0700AF4B2B606CFAFFFBDAE0BF4341B72C684DCBEC56B92308FD2B472316ABBD0803EB89CED17CA&_token_usage=58582

View Results

NAV	Fund_Symbol
14.01	RYTRX

Note that this capability is only available for **REST** calls.

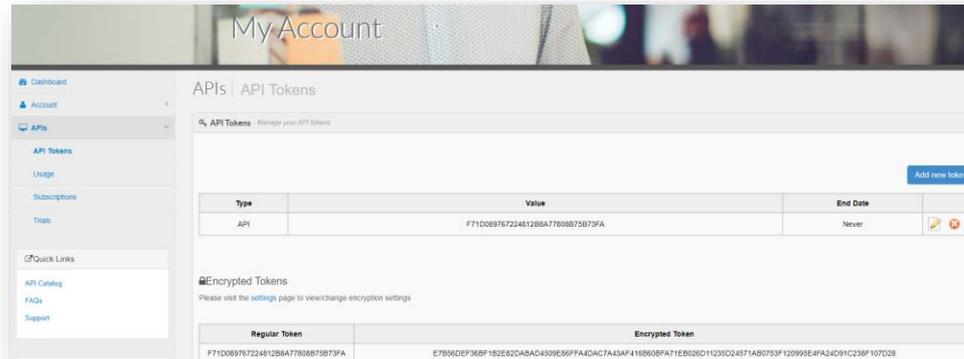
The system then automatically creates a **_fields** request parameter that lists the fields you picked.

When you click **View Result**, you can see that the output only includes your choices.

Authenticate Your API Calls

▼ We authenticate your requests using a token

- You can maintain your tokens within the [My Account](#) section of our website.
- Tokens are a randomly generated alphanumeric value. We no longer support creation of user specified tokens or IP address authentication for security reasons.
- Our web test form automatically inserts an encrypted token with automatic expiration for enhanced security. Only if your agreement includes calling our APIs directly from your end devices (users) do you need to implement encrypted tokens.
- You can have as many tokens as you want.



The screenshot shows the 'My Account' section of the Xignite website, specifically the 'API Tokens' management page. The page title is 'APIs | API Tokens'. Below the title, there is a search bar and an 'Add new token' button. A table displays the current API tokens. Below this table, there is a section for 'Encrypted Tokens' with a note to visit the settings page for encryption settings. At the bottom, a comparison table shows the 'Regular Token' and the corresponding 'Encrypted Token'.

Type	Value	End Date	
API	F71D08976722481288A77808875873FA	Never	 

Encrypted Tokens
Please visit the [settings](#) page to view/change encryption settings.

Regular Token	Encrypted Token
F71D08976722481288A77808875873FA	E78160E9F368F182E52D48AD459E6FFA4DAC7A43AF418B008FA71EB026D1123X024571AB0753F120990E4FA24D91C236F107D28

3 Ways to Authenticate Requests

REST

- **_token** request parameter in your URL
- See the **Code** tab in the test form

SOAP

- **Username** value in **Header** Object
- Different based on language
- See the **Code** tab in test forms

Cookie

- Created when you log in
- Used when using web site or browser
- This is why you can play around the API when logged in

Technical Resources

<https://www.xignite.com/product/mutual-fund-NAVs#/DeveloperResources/request/GetNAV>

The **Code Tab** provides you with many useful technical resources!

If you use SOAP, your SOAP toolkit will ask you the address of the **WSDL** for the service.

The screenshot shows the 'GetNAV' developer resource page. At the top, there are tabs for 'Request', 'Usage', 'Code', and 'Get Help'. The 'Code' tab is selected. Below the tabs, there are three main sections: 'Authentication', 'WSDL', and 'Sample Code'. The 'Authentication' section contains text about API authentication and a bullet point about the '_Token' parameter. The 'WSDL' section contains a link to the WSDL file. The 'Sample Code' section contains a list of programming languages with expandable arrows. Arrows from callout boxes point to the 'Authentication' section, the 'C# (CSharp)' language option, and the 'WSDL' section.

GetNAV
Returns the latest closing NAV for a fund.

Request Usage Code Get Help

Authentication

In order to authenticate calls to our APIs, you must pass the token either:

- As the **_Token** parameter in the query string of a REST request

You can manage your API Tokens from your account page.

WSDL

If you are using SOAP, you can access the WSDL (Web Service Definition Language) file for the service using the link below: <http://navs.xignite.com/v2/xNAV.sasmx?wsdl>

Sample Code

- ASPX/ASP NET
- C# (CSharp)
- Java/Axis
- Perl/SoapLite
- PHP 5
- PHP/NuSoap
- Ruby
- VB NET

Authentication is critical. This section explains how to do it.

We provide customized **sample code** in many languages. Just cut and paste it in your code editor!

Sample Code

<https://www.xignite.com/product/mutual-fund-NAV#/DeveloperResources/request/GetNAV>

Simply click on a section to see the **sample code** for that language.

You must do some **error handling!** You could get no data back if a connectivity issue is experienced. We recommend you implement retries as well.

Sample Code

Because they use open standards, Xignite's APIs are easily accessible from any development environment without requiring any software installation. There are many flexible ways to integrate our APIs in your apps. The sections below provide sample code in popular programming languages you can easily copy, paste, and re-use.

ASPX/ASP.NET

C# (CSharp)

This code could be used in any type of application (Windows, console, ...). Here, **RemoteGlobalMetals** is the web reference to the web service. Note that the default name for a web reference is generally "com.xignite.www". You will need to **rename** your web reference to use to use this code.

```
RemoteGlobalMetals.XigniteGlobalMetals objGlobalMetalsService;
objGlobalMetalsService = new RemoteGlobalMetals.XigniteGlobalMetals();
// add authentication info
RemoteGlobalMetals.Header objHeader = new RemoteGlobalMetals.Header();
objHeader.Username = "YOUR_TOKEN";
objGlobalMetalsService.HeaderValue = objHeader;

RemoteGlobalMetals.MetalQuote[] objMetalQuote;
objMetalQuote = objGlobalMetalsService
    .GetRealTimeMetalQuote("XAU", "USD");

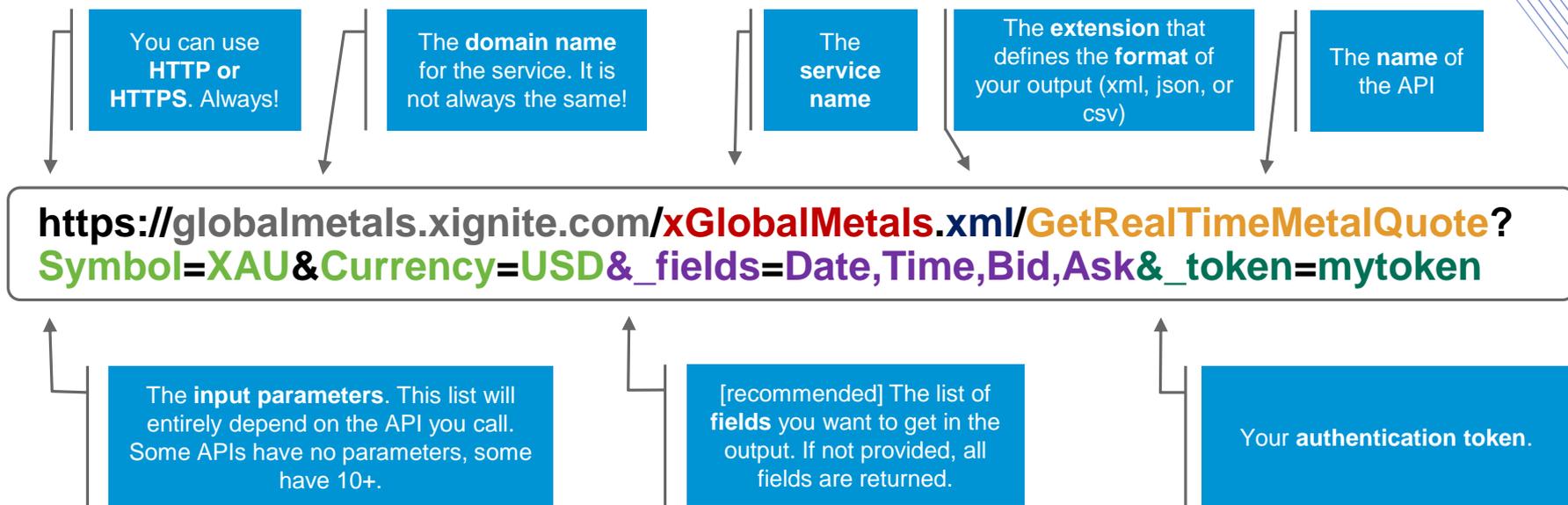
if (objMetalQuote == null)
{
    // add error processing here
    // this condition could be caused by an HTTP error (404,500...)
    Console.WriteLine("Service is unavailable at this time.");
}
else
{
    switch (objMetalQuote[0].Outcome)
    {
        case RemoteGlobalMetals.OutcomeTypes.Success:
            // add processing for displaying the results, e.g.
            // since the return class contains an array
            // we just display its first element
            // each instance and its values can be easily accessed
            // display the value for objMetalQuote.Source
            // other values could be consumed in the same manner
            Console.WriteLine(objMetalQuote.Source);
            break;
        default:
            // add processing for handling request problems, e.g.
            // you could pass back the info message received from the service
            Console.WriteLine(objMetalQuote[0].Message);
            break;
    }
}
```

This critical section shows you how to pass your **authentication token** in the code.

You need to assess the value of the **Outcome** field to know if you got the right data back.

We always provide details in the **Message** field. You can display that field back to the user.

Deconstructing The URL



Assessing Outcome Values

4 Possible Outcomes



Success

- All is well. Proceed with your logic.



RequestError

- There was something wrong with your request. Data could not be found.
- Check out the value of the Message field for details.



RegistrationError

- We could not authenticate your request because of a bad token or expired subscription.
- Check out the value of the Message field for details.



SystemError

- We messed up. Something went wrong on our side (does not happen often).
- Retry and contact support@xignite.com if it persists.

Using REST

<https://www.xignite.com/product/mutual-fund-NAV#/DeveloperResources/request/GetNAV>

If you use REST, you will want to know what a request and output look like. You can access this section by scrolling down in the **Code Tab**.

This shows you the format of a REST call. Although you want to fully construct the URL with your parameters and authentication token.

Sample Requests

All Xignite APIs support multiple, easy-to-use, open standard protocols. You can place requests against the API using a simple REST request using POST or GET or you can place a request using SOAP. The sections below show how properly formed requests and corresponding outputs look like for each protocol.

- ▶ SOAP Request for GetRealTimeMetalQuote
- ▶ **REST GET Request for GetRealTimeMetalQuote**

Request

```
GET http://globalmetals.xignite.com/xGlobalMetals.asmx/GetRealTimeMetalQuote?
Symbol=string&Currency=string HTTP/1.1
Host: globalmetals.xignite.com
```

Response

```
HTTP/1.1 200 OK
Content-Type: text/xml; charset=utf-8
Content-Length: length

<?xml version="1.0" encoding="utf-8"?>
<MetalQuote xmlns="http://www.xignite.com/services/">
  <Common>
    <Outcome>Success or SystemError or RequestError or RegistrationError
    </Outcome>
    <Message>string</Message>
    <Identity>string</Identity>
    <Delay>double</Delay>
  </Common>
  <Name>string</Name>
  <Symbol>string</Symbol>
  <Unit>string</Unit>
  <QuoteType>string</QuoteType>
  <Currency>string</Currency>
  <Date>string</Date>
  <Time>string</Time>
  <Bid>double</Bid>
  <Mid>double</Mid>
  <Ask>double</Ask>
  <Spread>double</Spread>
  <Source>string</Source>
</MetalQuote>
```

- ▶ REST POST Request for GetRealTimeMetalQuote

You can see the inputs and outputs of SOAP calls as well.

And here is a sample XML output so that you know how to parse it.

Valid values for enumerations are always listed.

HTTP ERROR TYPES

- ▼ Note that since most Xignite APIs support both REST and SOAP, some of the error handling might be a bit different than what you expect from a REST call. Please make sure to program your application accordingly.
- ▼ Xignite APIs will return an HTTP status of 200 under all normal operating conditions.
- ▼ See the table below for a description of the differences in behavior:

Error Type	Typical Rest Status Code	Xignite Response
Bad Request	400	HTTP 200 Status Outcome = RequestError Message = Description of the error
Internal Server Error	500	HTTP 200 Status Outcome = SystemError Message = Description of the error Note that receiving a 500 error is still possible in the case of an unhandled exception.
Not Authorized	401	HTTP 200 Status Outcome = RegistrationError Message = Description of the error

Managing Your Account

<https://www.xignite.com/myaccount>

- Access via the above link or by clicking your e-mail address at the top right from the Xignite homepage.
- Manage most account related functions including administering authentication tokens, making password changes, viewing subscription and utilization information, and adding a credit card for billing.

