

FEDAFIN E-RATING WEB API DOCUMENTATION

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January 2020

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Documentation e-Rating - Web API interface

Fedafin AG provides a standardized REST API interface within e-Rating.

Via this interface, issuer and issue ratings can be retrieved in CSV or JSON format.

All available data can be retrieved - or a reduced data set based on pre-configurable reports.

Additionally, rating reports (PDF) and counterparty limits (Excel) for issuer and issue ratings can be downloaded.

Technology

The interface uses OAuth2 as authorization procedure.

With this procedure, a token is returned after logging into API using e-mail / password, which is used for subsequent API accesses to retrieve data. It is recommended to fetch the token each time the queries are started (lifetime problem) to implement a stable API.

Support

Contact for questions regarding content

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Thomas Gut
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Contact person for technical questions (API implementation)

Next Economy Solutions AG
Herr Oliver Riske
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Data available

Issuer Ratings

| Value | Code in data export |
|--|----------------------|
| Issuer ID | emittent_id |
| Issuer name | name |
| Canton | kanton |
| Legal form | rechtsform |
| Designation | bezeichnung |
| Domicile | sitz |
| Issuer rating | rating_released |
| Stand-alone rating | rating_standalone |
| Principal | auftraggeber |
| Status | emittent_status |
| Published via online SBI list | sbi |
| Outlook | Outlook |
| Issuer participation | participating_status |
| Last review | last_update |
| Release date issuer rating | release_date |
| Previous rating | last_rating |
| SIX bond listed | six |
| Potential relevance for SBI Composite Rating | PossibleSBI |
| Effective part of SBI | EffectiveSBI |
| GKey | GKey |
| LEI | LEICODE |
| UID | UIDCODE |
| HR Code | HRCode |
| | |
| Report (retrieval with Issuer ID) | PDF-Export |
| Counterparty limits (only cities/municipalities and cantons) | EXCEL-Export |

Issue Ratings

| Value | Code in data export |
|--|----------------------------|
| Issue ID | id |
| Issuer ID | emittent_id |
| ISIN | isin |
| Coupon | coupon |
| Issuer name | issuer |
| Release date issue rating | issue_date |
| First call date | first_call_date_fcd |
| Maturity | maturity_date |
| Volume | volumen |
| Currency | currency |
| Country | domicile |
| Market | market |
| Seniority | seniority |
| Protection provider | protection_provider |
| Protection provider rating | provider_rating |
| Notching summary | notching_summary |
| Issuer participation | participating_status |
| Release date issuer rating | release_date_issuer_rating |
| Rating model | rating_model |
| Published via online SBI list | sbi |
| Straight | straight |
| Floating | floating |
| Convertible | convertible |
| Notching | Notching |
| Bond Type, Covenants, Exercise Price | bond_type |
| Issue rating | bond_rating |
| Bond ID | bondID |
| Issue name | emissionsname |
| Issue date | zinslaufbeginn |
| Protection provider ID | protection_provider_id |
| Status issue rating | emission_status |
| Principal | auftraggeber |
| Outlook | outlook |
| Last review | last_update |
| PDF available | showdoku |
| Potential relevance for SBI Composite Rating | PossibleSBI |

| | |
|---|-----------------|
| Effective part of SBI | EffectiveSBI |
| FIGI | FIGICode |
| Designation | bezeichnung |
| Issuer rating | emittent_rating |
| Previous issuer rating | last_rating |
| Status issuer rating | emittent_status |
| | |
| Report (retrieval with Issuer ID, Bond ID and protection provider ID) | PDF-Export |

API - Technical Documentation

A complete API test environment can be accessed in e-Rating under "API".

There, all API endpoints can be tested with one's own credentials.

The resulting data set (JSON / CSV / Pdf / Excel) as well as the API request code including payload is displayed in Javascript for illustration and implementation purposes.

<https://e-rating.fedafin.ch/portal/apidemo>

The screenshot shows the Fedafin API test environment interface. At the top, there is a browser address bar with the URL `e-rating.fedafin.ch/portal/apidemo`. Below the browser, the Fedafin logo and navigation menu are visible. The main content area is titled "Javascript" and contains a form for testing API endpoints. The form includes fields for "User" (filled with `oliver.riske@nextag.ch`) and "Password" (masked with dots). There are buttons for "Get Token" and "Reset Token". Below these, there are sections for "API Connect" and "Get Issuer Docs ID". The "API Connect" section has buttons for "JSON" and "CSV" and a "Report" button. The "Get Issuer Docs ID" section has input fields for `emittent_id` (filled with `de`) and buttons for "Pdf" and "Excel". The "Get Issue PDF" section has input fields for `emittent_id` (filled with `bondID`), `protection_provider_id` (filled with `de`), and buttons for "Pdf" and "Excel". Below the form, there are two large empty boxes labeled "Token" and "Result".

Login

URL: <https://e-rating.fedafin.ch/api/login>

Type: POST

Input: email, password

```
var data = {  
  email: 'oliver.riske@nextag.ch',  
  password: 'PASSWORD'  
};  
axios.post('https://e-rating.fedafin.ch/api/login', {data})  
  .then(function (response) {  
    var token = [response.data['success']]['token'];  
    alert(token);  
  }).catch(function (error) {  
    alert(error + " -> " + error.response.data.error);  
  }  
)
```

Response: Request Token

```
var token = [response.data['success']]['token']
```


Issuer Ratings (All Data)

URL: <https://e-rating.fedafin.ch/api/getdata>

Type: POST

Input: format ("json"/"csv"), dataset ("emittent")

```
var token = this.Token;
axios.defaults.headers.common = {
  'X-Requested-With': 'XMLHttpRequest',
  'Authorization': 'Bearer ' + token,
};
var format = 'json';
var dataset = 'emittent';
var data = {
  format: format,
  dataset: dataset,
};
axios.post('https://e-rating.fedafin.ch/api/getdata', {data})
  .then(function (response) {
    var content = response.data;
    if (format == 'json') {
      self.Data = JSON.stringify(content['data'], null, "\t");
    } else {
      self.Data = content;
    }
  }).catch(function (error) {
    alert(error + " -> " + error.response.data.error);
  });
```

Response: CSV or JSON Stream

```
[
  {
    "emittent": "123456789",
    "name": "Bank",
    "kanton": "ZH",
    "rechtsform": "AG",
    "bezeichnung": "Bank für den Kanton",
    "sitz": "",
    "rating": "1",
    "rating_": "1",
    "auftrag": "123456789",
    "emittent": "123456789",
    "sbi": "",
    "outlook": "",
    "particip": "123456789",
    "last_up": "2018-01-01 10:00:00"
  }
]
```

Issue Ratings (All Data)

URL: <https://e-rating.fedafin.ch/api/getdata>

Type: POST

Input: format ("json"/"csv"), dataset ("emissionsrating")

```
var token = this.Token;
axios.defaults.headers.common = {
  'X-Requested-With': 'XMLHttpRequest',
  'Authorization': 'Bearer ' + token,
};
var format = 'json';
var dataset = 'emissionsrating';
var data = {
  format: format,
  dataset: dataset,
};
axios.post('https://e-rating.fedafin.ch/api/getdata', {data})
  .then(function (response) {
    var content = response.data;
    if (format == 'json') {
      self.Data = JSON.stringify(content['data'], null, "t");
    } else {
      self.Data = content;
    }
  })
  .catch(function (error) {
    alert(error + " -> " + error.response.data.error);
  });
```

Response: CSV or JSON Stream

```
[
  {
    "id": "1234",
    "status": "active",
    "email": "john.doe@example.com",
    "is_admin": true,
    "company": "Acme Corp",
    "issued": "2023-01-01 10:00:00",
    "issued_at": "2023-01-01 10:00:00",
    "first_name": "John",
    "last_name": "Doe",
    "middle_name": "Michael",
    "volume": "1000000",
    "currency": "USD",
    "domain": "example.com",
    "market": "US",
    "server": "us-east-1.amazonaws.com",
    "region": "us-east-1"
  }
]
```










Issuer and/or Issue Ratings on the Basis of a Report

Within the account, individual reports can be defined in the Reports section, in which the quantity and sequence of attributes for issuer and issue ratings can be specified.

<https://e-rating.fedafin.ch/account/reporting>

REPORT CONFIGURATION

[Create](#) [Clear filter](#)

| Designation ^ | Selection ^ | Areas ^ | Columns ^ | Format ^ |
|---------------|--|---|--------------|---|
| | | | | |
| Report | All subscribed issuers and corresponding issues from the following areas | LRG - Cantons, LRG - Cities & Municipalities, LRG - Other, Private - All Industries | Alle Spalten | csv    |
| Report | All subscribed issuers | | Issuer ID | csv    |
| Test | All subscribed issuers and corresponding issues | | Alle Spalten | csv    |

Create

ID

105

* Designation

Report

* Selection

All subscribed issuers

* Columns

All Columns Column Selection

* Column Selection

Issuer ID

* Fileformat

CSV JSON

[Save](#) [Cancel](#)

These reports can be retrieved and used at any time manually or via the REST API using the Report ID.

URL: https://e-rating.fedafin.ch/api/getdata

Type: POST

Input: format ("json"/"csv"), reportId)

```
var token = this.Token;
axios.defaults.headers.common = {
  'X-Requested-With': 'XMLHttpRequest',
  'Authorization': 'Bearer ' + token,
};
var format='report';
var reportId=105;
var data = {
  format: format,
  reportId: reportId,
};
axios.post('https://e-rating.fedafin.ch/api/getdata', {data})
  .then(function (response) {
    var content = response.data;
    if (content.format == 'json') {
      self.Data = JSON.stringify(content.report.data, null, "\t");
    } else {
      self.Data = content.report.data;
    }
  }).catch(function (error) {
    alert(error + " -> " + error.response.data error);
  });
```

Response: CSV or JSON Stream

```
{
  "000000000001": {
    "ID_Emitter": 1,
    "Emittent": "Postgep. von A/Ben"
  },
  "000000000002": {
    "ID_Emitter": 1,
    "Emittent": "Waldhaus von A/Ben"
  },
  "000000000003": {
    "ID_Emitter": 1,
    "Emittent": "Waldhaus"
  },
  "000000000004": {
    "ID_Emitter": 4
```

Rating Reports (PDF) of Issuers

URL: <https://e-rating.fedafin.ch/api/getpdf>

Type: POST

Input: id (emittent_id), locale (de/en)

```
axios.defaults.headers.common = {
  'X-Requested-With': 'XMLHttpRequest',
  'Authorization': 'Bearer ' + token,
};
var data = {
  id: 1711,
  locale: de
};
axios.post('https://e-rating.fedafin.ch/api/js/getpdf', {data,dataType:'json'})
.then(function (response) {    var $a = $('<a>');
  var filename = response.data.filename;
  var content = response.data.content;
  var uri = response.data.uri;
  $a.attr('href',uri + content);
  $('body').append($a);
  $a.attr('download',filename);
  $a[0].click();
  $a.remove();
}).catch(function (error) {    alert(error + " -> " +
error.response.data.error);
});
);
```

Response: PDF Stream / Download

Rating Reports (PDF) of Issues

URL: <https://e-rating.fedafin.ch/api/getpdf>

Type: POST

Input: id (emittent_id), bondID (if existing), protection_provider_id (if existing), locale (de/en)

```
axios.defaults.headers.common = {
  'X-Requested-With': 'XMLHttpRequest',
  'Authorization': 'Bearer ' + token,
};
var data = {
  id: 1711,
  bondID: 1714,
  protection_provider_id: 2498,
  locale: de
};
axios.post("https://e-rating.fedafin.ch/api/js/getpdf", {data,dataType:'json'})
.then(function (response) {  var $a = $('<a>');
  var filename = response.data.filename;
  var content = response.data.content;
  var uri = response.data.uri;
  $a.attr('href',uri + content);
  $('body').append($a);
  $a.attr('download',filename);
  $a[0].click();
  $a.remove();
}).catch(function (error) {  alert(error + " -> " +
error.response.data.error);
});
);
```

Response: PDF Stream / Download

```
var filename = response.data.filename;
```

```
var content = response.data.content;
```

Counterparty limits (Excel) of Issuers

URL: https://e-rating.fedafin.ch/api/getexcel

Type: POST

Input: id (emittent_id)

```
axios.defaults.headers.common = {  
  'X-Requested-With': 'XMLHttpRequest',  
  'Authorization': 'Bearer ' + token,  
};  
var data = {id: 1711};  
axios.post("https://e-rating.fedafin.ch/api/js/getexcel", {data: data, dataType: 'json'})  
  .then(function (response) {    var $a = $('<a>');  
    var filename = response.data.filename;  
    var content = response.data.content;  
    var uri = response.data.uri;  
    $a.attr('href', uri + content);  
    $('body').append($a);  
    $a.attr('download', filename);  
    $a[0].click();  
    $a.remove();  
  }).catch(function (error) {    alert(error + " --> " +  
error response.data error);  
  });  
);
```

Response: PDF Stream / Download

```
var filename = response.data.filename;
```

```
var content = response.data.content;
```