The IATI Unified Platform
A microservices future begins

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Welcome!

Please make sure your Zoom display name includes your full name and organisation.

Ask questions via the chatbox.

Live interpretation is available in (ENG), (FR), (ESP).
Agenda

- IATI Unified Platform
- API Gateway
- Public Validator API
- Validator V2
- Future Vision & Plans
IATI Unified Platform - What it is

Live as of 13 September, 2021!
- A platform for core IATI software to move from a disparate set of siloed applications, to an integrated microservices architecture

Efficient
- IATI documents are sync’d from the Registry by a single centralised process
- Separate services process in a pipeline, decoupled and concurrent, and each configurable to run with any number of parallel process
- Other services provide utility interfaces, for example Validate

Consistent
- Same documents/metadata are used by all dependent applications

Stable and Resilient
- A framework for all future IATI Technical Team developed products
- An API platform for other IATI applications
IATI Unified Platform - What it will be

Coming soon to the platform:
- Datastore API
- Dashboard and Publisher Statistics

Also in the pipeline
- Front end rebuild to a common architecture
Architecture

A Python application handles the download, modification, and deletion of UATI data as instructed by the Registry, and then manages the pipeline of validation and subsequent load into the various data stores.

Eventually, the Registry API will be backed by the API Gateway, which is provided by the external vendor.

Unified Platform Web Clients (to include Validator and Database Services)

IATI Registry

External IATI API Consumers

API Gateway

Microservices Application implemented REST APIs for consumption via the Azure API Management instance and consume others through the Gateway. These APIs are either external (for public consumption) or internal. They are implemented in JavaScript and Node/Express/Azure Functions.

Validator Services

Validator

Soil Indexer

Database Services

PostgreSQL server

Solid lines represent write privileges.

IATI Unified Platform infrastructure is below the dotted line, acts communicating with it from the web above.
“Part of” and “Powered by”

“Part of”
- Validator API
- Validator V2
- Datastore (future)

“Powered by”
- Publisher tools using Validator API
- Future Datastore API uses
Welcome to the IATI API Gateway!

Your source for information and access to the International Aid Transparency Initiative’s public APIs.

Sign Up  Explore APIs

IATi is a global initiative to improve the transparency of development and humanitarian resources and their results to address poverty and crises.
API Gateway

Eventual home for all supported IATI Public APIs
- Industry standard API documentation
- Built-in API testing tool

Current
- Public Validator API

Future
- Datastore API
- Registry
API Gateway

Live Demo Video - VCE Apr 2021

https://youtu.be/B8kaLZxQP_U?t=1043
API Gateway

Stats
- Approx. 1000 User API requests
- Global Use (21 Countries)
Public Validator API

Why
● Improve data quality
● Ideally Validate then Publish
● Allow technically adept publishers to Validate programmatically

Features
● Simple, fast, synchronous API
● Ad-hoc Validation
  ○ Send IATI XML in body of POST request
  ○ Receive JSON Validation report
● Retrieve Existing Validation Reports
  ○ Send identifier of published document in GET request
  ○ Receive JSON Validation report
Public Validator API

Ad Hoc Validate - POST /validate

VCE I Presentation:
- [Video Link](https://example.com)  
  - Starts @23min

IATI Validator

API definition  Changelog

IATI's public validation API. Provides routes related to the validation of IATI XML.

Validate

This route allows the user to POST an IATI document to the Validator in the body of the request, and receive a JSON validation report in the response.

GitHub Repository

Error ID Information

Request

**POST** https://api.iatistandard.org/validator/validate[?group][&details]
Public Validator API

Existing Report - GET /report
- Provide id, url, or hash
Live Demo - GET Existing Report

Document
- https://iatiregistry.org/dataset/afdb-algeria

Validator API
# Demo - GET Existing Report

## Algeria

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>License</td>
<td>Creative Commons Attribution</td>
</tr>
<tr>
<td>File Type</td>
<td>Activity</td>
</tr>
<tr>
<td>Language</td>
<td>-</td>
</tr>
<tr>
<td>Recipient Country</td>
<td>Algeria</td>
</tr>
<tr>
<td>Publisher Type</td>
<td>Primary source</td>
</tr>
<tr>
<td>Publisher Organisation Type</td>
<td>Multilateral</td>
</tr>
<tr>
<td>Publisher Identifier</td>
<td>46002</td>
</tr>
<tr>
<td>Publisher Country</td>
<td>(No country assigned)</td>
</tr>
</tbody>
</table>

### Additional Info

- **Contact email**
  - iatidata@afdb.org
- **Publisher**
  - African Development Bank
- **Followers**
  - 0

### Links

- [Metadata](#)
- [JSON](#)
- [Social](#)
  - [Twitter](#)
  - [Facebook](#)

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**International Aid Transparency Initiative**

**Virtual Community Exchange 2**

**#iatIVCE2**

**12 and 13 October 2021**
Demo - GET Existing Report

```json
# help:
"https://iatiregistry.org/api/3/action/help_show?name=package_show"
# success:
true

# result:
- `license_title`: "Creative Commons Attribution"
- `maintainer`: null
- `relationships_as_object`: []
- `private`: false
- `maintainer_email`: null
- `num_tags`: 0
- `id`: "1f380179-3d4d-4bb6-91f1-e0607baac0ae"
- `metadata_created`: "2013-06-28T13:05:50.570473"
- `metadata_modified`: "2021-08-20T23:06:45.894410"
- `author`: null
- `author_email`: "iatidata@afdb.org"
- `state`: "active"
- `version`: null
- `creator_user_id`: "34d484e6-d7e4-4a5a-899e-dcc313edc148"
- `type`: "dataset"
```
Demo - GET Existing Report

IATI Validator / Existing Report

GET /report

Authorization
Subscription key
Primary: exploratory

Parameters
id
1f380179-3d4d-4bb6-91f1-
url
value
hash
value

+ Add parameter
HTTP request

GET https://api.iatistandard.org/validator/report?id=1f3
  80179-3d4d-4bb6-91f1-e0607baac0ae HTTP/1.1

Accept: application/json
Cache-Control: no-cache
Ocp-Apim-Subscription-Key: [REDACTED]
04c
HTTP response

HTTP/1.1 200 OK

content-type: application/json; charset=utf-8
date: Thu, 30 Sep 2021 09:58:35 GMT
request-context: appId=cid-v1:bd643c4d-d766-4fad-a4c3-6a9ec8054b70
server: cloudflare

{
  "registry_hash": "aa638ee5923937f2434fdeee6672cbca4f6cad26",
  "registry_id": "1f380179-3d4d-4bb6-91f1-e0607baac0e",
  "document_url": "https://www.afdb.org/sites/default/files/iati/iati Algeriadata.xml",
  "valid": true,
  "report": {
    "valid": true,
    "errors": [{
      "title": "Algeria - Support to the organization of the African business and investment forum",
      "errors": [{
        "errors": [{
          "id": "4.4.1",
          "context": [{
            "text": "For <description> at line: 2, column: 575748"
          }],
          "message": "The description must contain narrative content."
        }],
        "severity": "error"
      }],
      "category": "information"
    }]
  }
}
The IATI Validator is an online tool for checking if data aligns with the rules and guidance of IATI Standard. It allows users to check and improve the quality of IATI data to ensure it is accessible and useful to anyone working with data on development and humanitarian resources and results.

For more information, see IATI Validator Q&A.
Validator V2

Improvements

- On Unified Platform
- Additional context information (e.g. line #) for errors
- Additional status column/colour coding to help prioritise reports to review

Basic activity information

The activity must have a planned start date or an actual start date.

- For `<iati-activity>` at line: 7, column: 2

6.11.1 (see guidance)
# Validator V2 - UI Enhancements

**Validation results**

Your personal workspace is [https://prod-validator.iatistandard.org/validate/ku6qrmwe5pq5fu1d3kr](https://prod-validator.iatistandard.org/validate/ku6qrmwe5pq5fu1d3kr)  

The file(s) with a validation report available are marked with a status. If the file is flagged with a **Critical**, **Error**, or **Warning** status it means that there are errors to fix. We recommend addressing the **Critical** errors first. The **Errors** should be addressed next. **Warnings** should be corrected when possible.

- **Success** - file is valid with no errors of any type, congratulations!
- **Warning** - data can be more valuable and warnings should be corrected when possible.
- **Error** - data is hard or impossible to use.
- **Critical** - data cannot be used by tools.

<table>
<thead>
<tr>
<th>File name</th>
<th>Uploaded</th>
<th>Validated</th>
<th>Validation Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>iati-org-no-errors.xml</td>
<td>2021-09-30 10:37 (GMT+1)</td>
<td>2021-09-30 10:37 (GMT+1)</td>
<td>Success</td>
</tr>
<tr>
<td>iati-act-no-errors.xml</td>
<td>2021-09-30 10:36 (GMT+1)</td>
<td>2021-09-30 10:36 (GMT+1)</td>
<td>Warning</td>
</tr>
<tr>
<td>iati-act-atLeastOne-error.xml</td>
<td>2021-09-30 10:36 (GMT+1)</td>
<td>2021-09-30 10:36 (GMT+1)</td>
<td>Error</td>
</tr>
<tr>
<td>iati-act-codelist-basic.xml</td>
<td>2021-09-30 10:36 (GMT+1)</td>
<td>2021-09-30 10:36 (GMT+1)</td>
<td>Error</td>
</tr>
<tr>
<td>iati-act-no-errors-old-version.xml</td>
<td>2021-09-30 10:35 (GMT+1)</td>
<td>2021-09-30 10:35 (GMT+1)</td>
<td>Critical</td>
</tr>
</tbody>
</table>
## Validator V2 - UI Enhancements

### Public data

**IATI files published in the IATI Registry**

The file(s) with a validation report available are marked with a status. If the file is flagged with a **Critical**, **Error**, or **Warning** status it means that there are errors to fix. We recommend addressing the **Critical** errors first. The **Errors** should be addressed next. **Warnings** should be corrected when possible.

- **Success** - file is valid with no errors of any type, congratulations!
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- **Critical** - data cannot be used by tools.

<table>
<thead>
<tr>
<th>File name</th>
<th>Identified in Registry</th>
<th>Validated</th>
<th>Validation Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>89.xml</td>
<td>2021-10-08 03:27 (GMT+1)</td>
<td>2021-10-08 03:42 (GMT+1)</td>
<td>Error</td>
</tr>
<tr>
<td>998a.xml</td>
<td>2021-10-08 03:27 (GMT+1)</td>
<td>2021-10-08 04:05 (GMT+1)</td>
<td>Error</td>
</tr>
<tr>
<td>AM.xml</td>
<td>2021-10-08 03:27 (GMT+1)</td>
<td>2021-10-08 03:50 (GMT+1)</td>
<td>Error</td>
</tr>
<tr>
<td>BD.xml</td>
<td>2021-10-08 03:27 (GMT+1)</td>
<td>2021-10-08 04:08 (GMT+1)</td>
<td>Error</td>
</tr>
<tr>
<td>CN.xml</td>
<td>2021-10-08 03:27 (GMT+1)</td>
<td>2021-10-08 03:42 (GMT+1)</td>
<td>Error</td>
</tr>
<tr>
<td>ID.xml</td>
<td>2021-10-08 03:27 (GMT+1)</td>
<td>2021-10-08 03:35 (GMT+1)</td>
<td>Error</td>
</tr>
<tr>
<td>IN.xml</td>
<td>2021-10-08 03:27 (GMT+1)</td>
<td>2021-10-08 04:01 (GMT+1)</td>
<td>Error</td>
</tr>
<tr>
<td>SY.xml</td>
<td>2021-10-08 03:27 (GMT+1)</td>
<td>2021-10-08 02:47 (GMT+1)</td>
<td>Error</td>
</tr>
<tr>
<td>ZM.xml</td>
<td>2021-10-08 03:27 (GMT+1)</td>
<td>2021-10-08 03:36 (GMT+1)</td>
<td>Error</td>
</tr>
<tr>
<td>998d.xml</td>
<td>2021-10-08 03:27 (GMT+1)</td>
<td>2021-10-08 04:00 (GMT+1)</td>
<td>Error</td>
</tr>
<tr>
<td>1031.xml</td>
<td>2021-10-08 03:27 (GMT+1)</td>
<td>2021-10-08 03:49 (GMT+1)</td>
<td>Success</td>
</tr>
<tr>
<td>1032.xml</td>
<td>2021-10-08 03:27 (GMT+1)</td>
<td>2021-10-08 03:42 (GMT+1)</td>
<td>Success</td>
</tr>
<tr>
<td>189.xml</td>
<td>2021-10-08 03:27 (GMT+1)</td>
<td>2021-10-08 03:38 (GMT+1)</td>
<td>Success</td>
</tr>
<tr>
<td>289.xml</td>
<td>2021-10-08 03:27 (GMT+1)</td>
<td>2021-10-08 03:35 (GMT+1)</td>
<td>Success</td>
</tr>
<tr>
<td>298.xml</td>
<td>2021-10-08 03:27 (GMT+1)</td>
<td>2021-10-08 03:58 (GMT+1)</td>
<td>Success</td>
</tr>
<tr>
<td>489.xml</td>
<td>2021-10-08 03:27 (GMT+1)</td>
<td>2021-10-08 03:55 (GMT+1)</td>
<td>Success</td>
</tr>
</tbody>
</table>
Validator V2

Feedback Welcome

- support@iatistandard.org
- GitHub - https://github.com/IATI
  - Web - https://github.com/IATI/IATI-Validator-Web
  - Services - https://github.com/IATI/validator-services
  - API - https://github.com/IATI/js-validator-api

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Web v2.0.6 | Services v2.0.3 | API v2.0.7
The Immediate Future

Datastore API

Publisher Stats and Dashboard on the Unified Platform

Technical Climate Impact

- Measure the climate impact of our services
- Make those services more efficient
- Reduce the climate impact of our services
Discussion & Q&A
More Resources

IATI Developer Blog
● https://iati.github.io

Support
● support@iatistandard.org