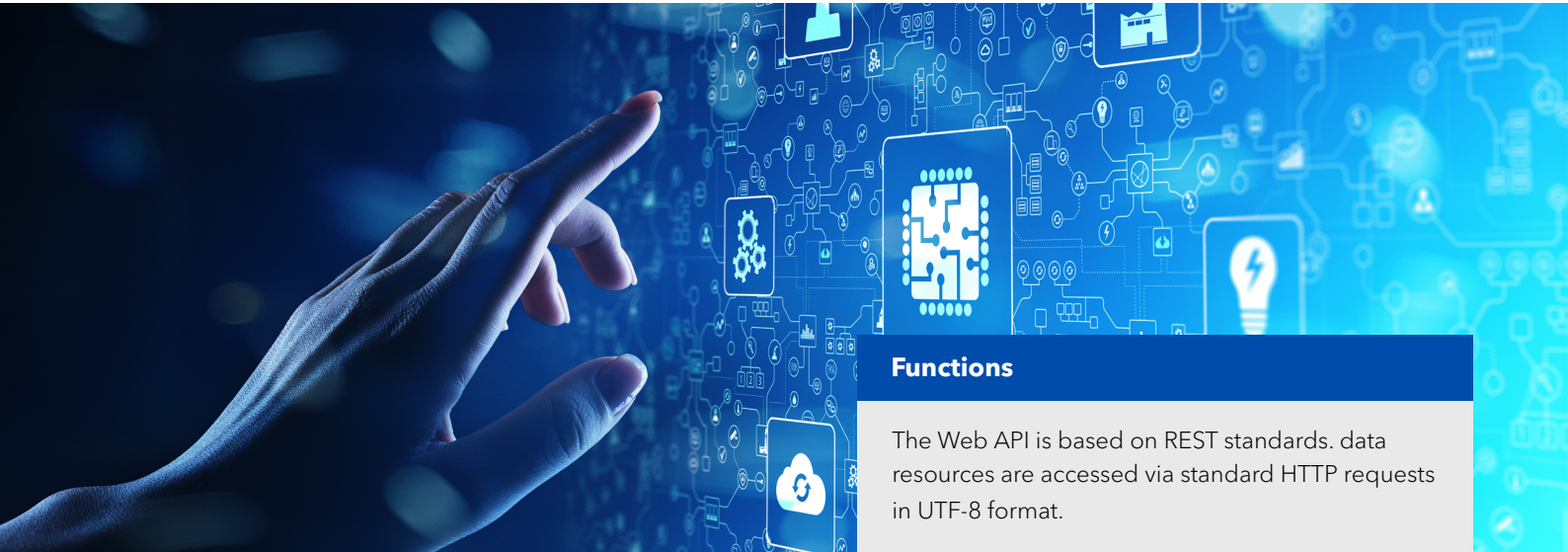# ALS Web API

right solutions.
right partner.

ALS offers industry-leading processes to access sample result data via a REST based Web API.

Customers are now able to programmatically "pull" sample result data, reports and result images from ALS in near realtime, as results are released from our global laboratory sites and made available in our Web Portal-Webtrieve™.

Key reasons why customers in all industry sectors are embracing ALS Web API

- Near real-time access to data.

- Direct integration with customer data management systems means improved efficiencies, reduction in labor associated with manual data entry and optimal data integrity.

- Improved ability to perform data analytics using 3rd party applications and generate customized information.

- Updated to provide you what you need—continuously improving or adding new features based on customer feedback and internal testing.

- Push functionality enables clients to perform sample data submission via Web API.

- Technical support from our global IT experts.

Results returned by the Web API contain all sample data available for a specific sample in JSON format which can be converted or uploaded as required.

Contact us
reliability@alsglobal.com

Functions

The Web API is based on REST standards. data resources are accessed via standard HTTP requests in UTF-8 format.

Sample result filters include:

- Sampling date range
- SIF Number
- Sample severity code-value or range
- Last updated range
- New sample data since last database refresh

Sample Submission via Web API

Print sample barcodes directly via the Web API/ Browser

Ability to view/download Sample PDFs and Filter Patch images from the Web API response.

Features

- SSL encryption determined by Webtrieve™ 9 user account-specific encryption key.

- Data availability within 10 minutes of Laboratory sample release, via Web Portal and Web API.

- GET/POST requests can be called every 5 minutes with up to 10,000 records (rows) per Web API call.

- Error Handling –If an error occurs, user are returned an error or status code that can be found within the Web API specification documentation.

- Swagger – ALS has built a new online Web API documentation and testing site using Swagger, which is an Open Source API documentation tool.
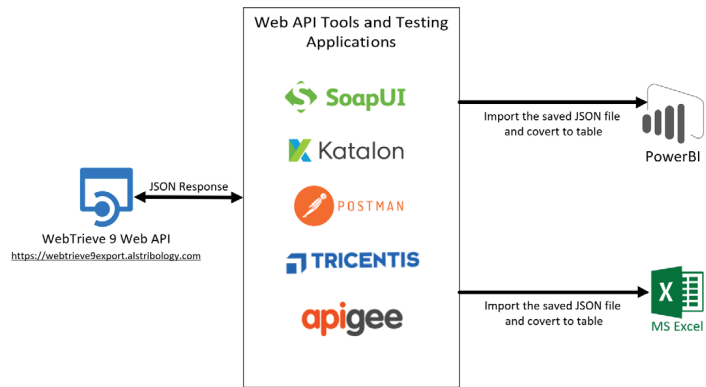
This allows users to test the key Web API features without developing custom code:
https://api.alstribology.com/swagger/ui/index
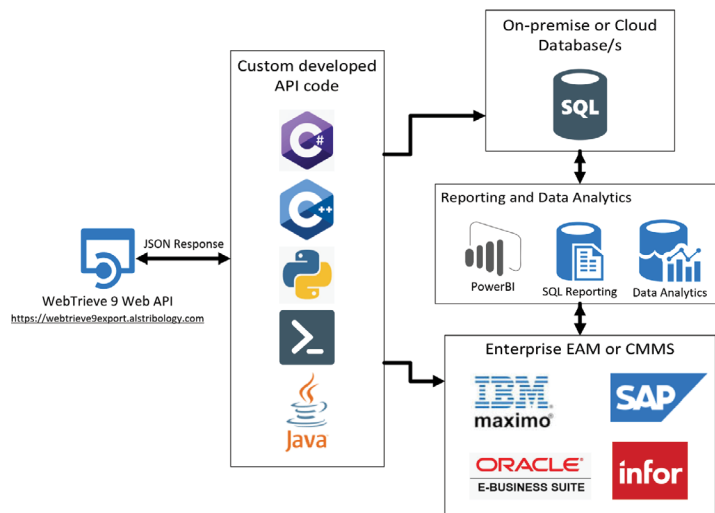
alsglobal.com

ALS Web API Use Cases

Most use cases of Web API will fall into three categories:

Web API Tools and Testing Applications

SoapUI · Katalon · POSTMAN · TRICENTIS · apigee

JSON Response

WebTrieve 9 Web API
https://webtrieve9export.alstribology.com

Import the saved JSON file and covert to table → PowerBI

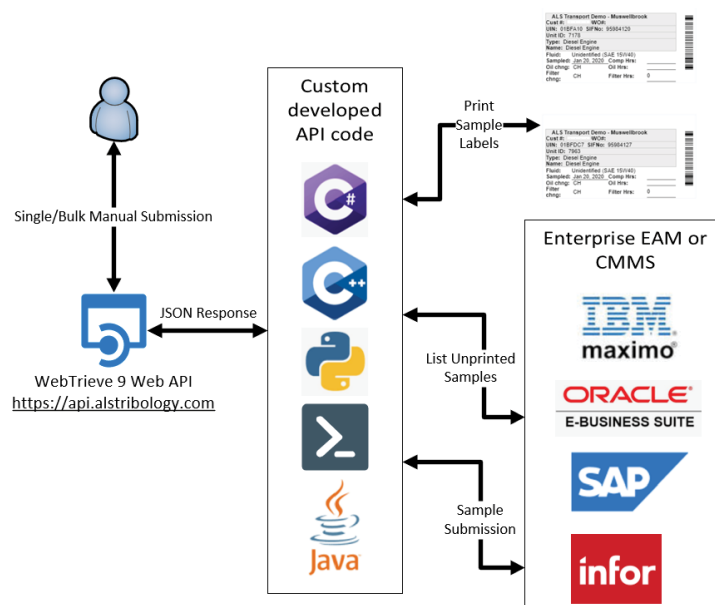Import the saved JSON file and covert to table → MS Excel

Ad-hoc sample reporting

Users download a specific range of samples and convert to Excel, Power BI, or other application for manual sample reporting.

Custom developed API code

C# · C++ · Python · PowerShell · Java

JSON Response

WebTrieve 9 Web API
https://webtrieve9export.alstribology.com

On-premise or Cloud Database/s — SQL

Reporting and Data Analytics — PowerBI · SQL Reporting · Data Analytics

Enterprise EAM or CMMS — IBM maximo · SAP · ORACLE E-BUSINESS SUITE · infor

Automated and Scheduled Data loading

Sample data is downloaded on a regular schedule to be transferred into a customer database.

A customer database provides historical sample reporting and/or data correlation with other Enterprise Asset Management systems (EAM), Computerized Maintenance Management Systems (CMMS) or other.

Single/Bulk Manual Submission

Custom developed API code

C# · C++ · Python · PowerShell · Java

JSON Response

WebTrieve 9 Web API
https://api.alstribology.com

Print Sample Labels

List Unprinted Samples

Sample Submission

Enterprise EAM or CMMS — IBM maximo · ORACLE E-BUSINESS SUITE · SAP · infor

Automated Sample Submission

In this example, customers integrate with existing EAM or CMMS systems or manually submit samples using the Web API. Once the sample is submitted, users can list the outstanding/unprinted samples and also request preformatted Sample Labels via the Web API.