Integrate with SOAP web services and REST APIs

SOAP web services and REST APIs are simple with OutSystems. Developer teams can seamlessly consume and expose them without having to write code. Debugging, monitoring and troubleshooting are built-in. The visual editor generates artifacts such as methods and data structures, which developers can use in applications in a visual way.

Consuming web services and APIs

To consume a SOAP web service, developers simply provide the location of the WSDL (Web Services Description Language) file. The OutSystems IDE inspects the WSDL and generates everything needed to invoke the web service methods.

To consume a REST API, a developer needs to provide the service end-point URL, and an example of the service request and response in JSON. Most services include a JSON sample request and response in their documentation and it can be pasted into the OutSystems editor. OutSystems generates everything needed to invoke the REST service.

After OutSystems has generated the service methods and data structures, invoking the service is seamless. From a developer's perspective, there is no difference between invoking a system method, or a method exposed by an external service.
Exposing web services and APIs

With OutSystems, developers can expose any part of the application logic as a web service. This is all done in the visual editor. The service definition, such as methods and data structures, along with the service logic, are defined visually.

Web services are an integral part of developed applications. When a team deploys an application, all web services end-points are automatically created, and the service is ready to be used. There’s no need for extra configurations or deployments.

When exposing REST APIs, OutSystems automatically generates documentation and makes it available under the service end-point. This documentation can be completely customized.

Debugging, monitoring, and troubleshooting

Developers can debug a service integration in the visual editor. If developers are consuming a service, they can inspect the values sent to the server to see what the service returns. If developers are exposing a service, they can step into service implementation.
OutSystems automatically instruments all applications and integration. At runtime, errors, audits, and performance data are collected, making it possible to check if an integration has errors or a negative impact on application performance.

Learn more

These resources provide more information about SOAP web services and REST APIs in OutSystems:

- Consume a SOAP web service in 2 minutes
- Expose a SOAP web service in 2 minutes

Reference documentation is also available:

- Consume a SOAP web service
- Expose a SOAP web service
- Consume a REST API
- Expose a REST API