Overview on Web Services Integration Options for NetSuite

Gabriel - 2020-10-11 - [Comments (0)](#) - [General](#)

REST Web Services and Other Integration Options

To decide the best integration option for your purposes, consider the following comparisons.

The following table compares the characteristics of REST web services with those of SOAP web services and RESTlets.

Attribute	REST Web Services	SOAP Web Services	RESTlets
Supported Operations	get, search, add, update, delete	get, search, add, update, delete	get, search, add, update
Authentication Supported?	Yes (token-based authentication, OAuth 2.0)	Yes (user credentials; token-based authentication) **Important** User credentials are not recommended as an authentication method for SOAP web services. If you are currently using this method, you should transition to use Token-based Authentication instead.	Yes (user credentials; token-based authentication, OAuth 2.0) **Important** User credentials are not recommended as an authentication method for RESTlets. If you are currently using this method, you should transition to use either Token-based Authentication or OAuth 2.0 instead.
Passing of Login Details	in OAuth authorization header	in body (SOAP)	in authorization header
Passing of Parameters	all parameters on URL	all parameters in body (SOAP)	GET parameters on URL
Supported Content Types	JSON, Swagger	text/xml (explicit)	JSON, text/xml (explicit)
Environment	lightweight, no coding and script deployment needed on the server side, suitable for mobile devices	heavy programming and deployment environment (C#, Java) no coding and script deployment needed on the server side	lightweight, suitable for mobile devices, bundleable
Functionality	• Metadata catalog. See [Working with Resource Metadata](#) • CRUD. See [Working with Records](#). • [Record Filtering and Query](#)	• CRUD • Search	All functionality available through SuiteScript: • CRUD • Search • Query **Note** SuiteScript does not provide metadata.
Standards	Similar to the REST APIs of other Oracle products	SOAP protocol	No standards
Required User Knowledge	REST programmer API level knowledge	SOAP programmer API level knowledge	JavaScript programmer SuiteScript level knowledge

Attribute	REST Web Services	SOAP Web Services	RESTlets
Performance	Using REST API, fewer calls may be required to accomplish a business flow. Therefore the overall performance may be better than SOAP and CSV.	SOAP web services require more calls to accomplish a business flow than the REST API.	RESTlets arethe fastest integration channel. All actions required for a business flow can be executed within a single call.

Cloudmaven Recommendation

In general, Cloudmaven recommends RESTlet Web Services for one simple reason: It's the fastest integration channel. Since Web Services in general are slow and the SuiteScript record.save() method presently a principal bottleneck for high volume transaction management (approx. 3000 records per hour on Tier 3 Shared Servers), the relevance is even higher.

Notes

 The limits for concurrent requests are unified for SOAP and REST web services and for RESTlets. For information about account concurrency, see [Web Services and RESTlet Concurrency Governance](#).

For a comparison of RESTlets with other integration options, see [RESTlets vs. Other NetSuite Integration Options](#).