

Using Force.com Integration APIs to Connect Your Applications

TOURING THE FORCE.COM INTEGRATION APIS



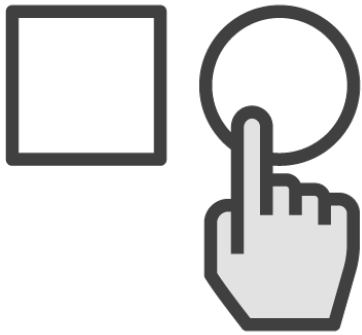
Richard Seroter

VICE PRESIDENT OF PRODUCT, CENTURYLINK

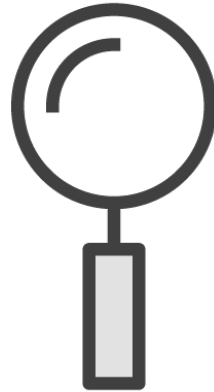
@rseroter www.seroter.com



Goals for the Course



Learn differences
between APIs



Uncover new
interaction patterns



Get deep hands on
experience with APIs



Prerequisites







Coding experience

Familiarity with JavaScript

Working knowledge of Salesforce.com



Overview



About Salesforce momentum

Quick hands-on example

Review of integration patterns

Recap of each integration API

Our sample app and configuration

Summary



Salesforce Momentum

2.3

million developers



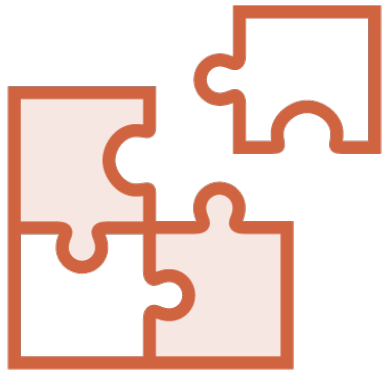
3.5 billion daily transactions

137

worldwide user groups

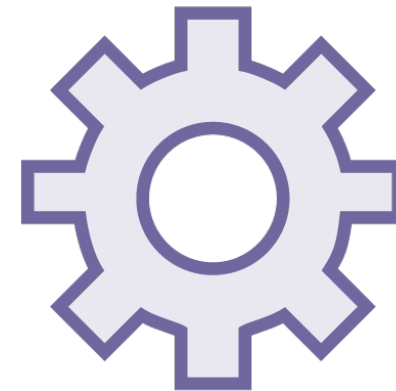


Why Use Force.com APIs?



Connect Stuff

Build systems that span applications,
cloud and on-premises



Automate Stuff

Reduce manual effort and establish
consistent operations



Demo



Create Salesforce account

View Standard Object, records

Launch Postman for API tests

Authenticate ourselves via the API

Call the SOAP API



Force.com Integration Patterns

RPC – Request and Reply

RPC – Fire and Forget

Batch Data Sync

Remote Call In



RPC – Request and Reply



Synchronous call to remote system

Initiated by event or batch

Consider response and state management

Require idempotency and duplicate check

Careful security

RPC – Fire and Forget



Asynchronous call to remote system

Initiated by user or system event

Guaranteed delivery needed?

Consider response handling

Batch Data Synchronization



Import or export large amounts of data

Initial or ongoing load

Optimize refresh schedule

Consider post processing

Avoid contention

Remote Call-In



External system interacts with Salesforce

Consider source system characteristics

Choices based on data volume

Force.com's Integration-Related Services

REST API

SOAP API **Lightning Connect**

Data Loader **Bulk API** Platform Cache

External Objects **Streaming API**

Apex Callouts Outbound Messaging



In a Nutshell: SOAP API



**Enterprise-
friendly**



**Broad coverage
of UI
capabilities**



**Multiple WSDL
interfaces**



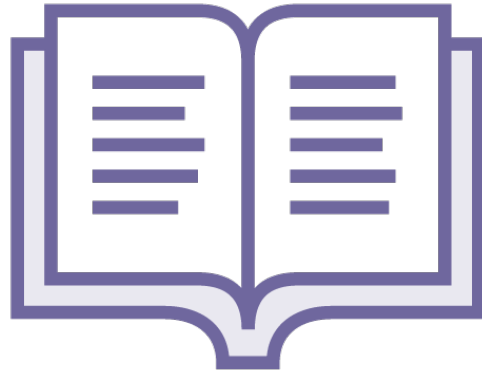
XML-based



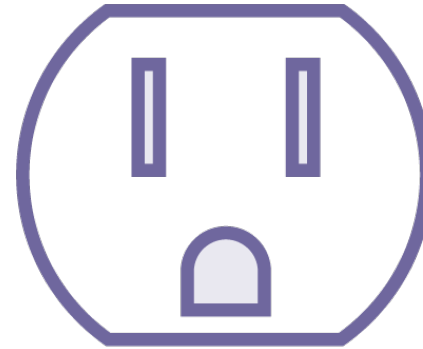
In a Nutshell: REST API



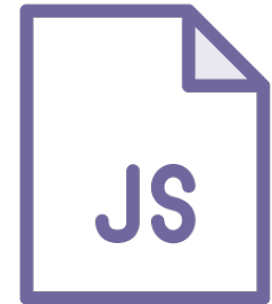
Mobile, web
friendly



Supports
composite
operations



Standard
interface



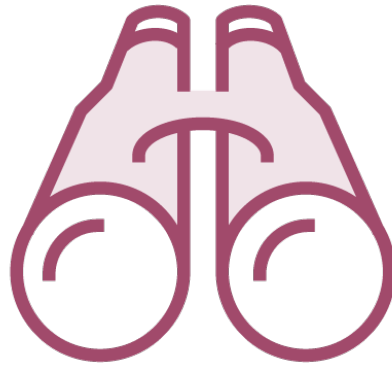
XML and JSON
support



In a Nutshell: Bulk API



Bulk loading of data



Issue bulk queries



**Asynchronous
processing**

In a Nutshell: Outbound Messaging



**Event-driven
messaging**



**Asynchronous, but
reliable delivery**



**Receiver is Internet-
accessible**

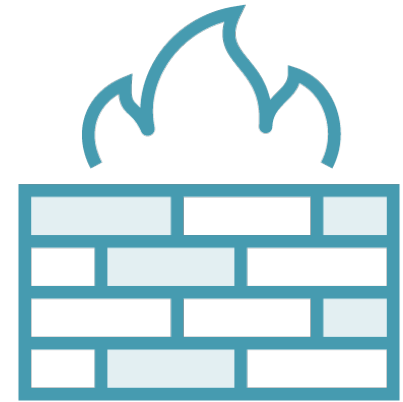
In a Nutshell: Streaming API



Event-driven
messaging



Asynchronous, but not
reliable delivery

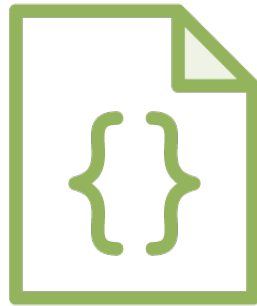


Receiver can be
behind the firewall

In a Nutshell: Apex Callouts



Can generate
code stubs



Can work with
raw HTTP,
payloads




Credential
management
available



Long-running
options exist



View voter info
Review donation
history
Monitor outreach
effort

Voter Trax				
				
<div>HomePrecinct DetailsVoter Map</div>				
Precinct	Name	Mailing Address	Party	
3rd District	Ben Wyatt	25210 SE 35th St, Issaquah, WA 98029	Independent	Details
3rd District	Ann Perkins	3726 257th Ave SE, Issaquah, WA 98029	Independent	Details
3rd District	Ron Swanson	4346 252nd Pl SE, Issaquah, WA 98029	Republican	Details



Demo



Create custom objects

- Voters
- Voter Donations
- Precincts

Load a record into each custom object

Confirm Node.js installed locally

Run sample site on your machine



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