Swagger is a specification for documenting REST API. It specifies the format (URL, method, and representation) to describe REST web services. It provides also tools to generate the documentation from application code. What does this mean? As an application developer, you write web services using your favorite framework, Swagger scans your code and exposes the documentation on some URL. Any client can consume this URL (which comes as XML or JSON documents) and learn how to use your REST web services: which HTTP methods to call on which URL, which input documents to send, which status code to expect, etc. Most web applications support RESTful APIs, but — unlike SOAP APIs — REST APIs rely on HTTP methods and lack a Web Services Description Language (WSDL) equivalent to define request and response structures between consumers and providers. Without an adequate contract service, many REST API providers use Microsoft Word documents or wiki pages to document API usage. Those formats can make collaboration and document version control difficult, especially for applications that have many APIs or resources, or when APIs are under iterative development. Those types of documents are also harder to integrate into an automated testing application. The open source Swagger framework helps remedy these issues for API consumers and developers. The framework provides the OpenAPI Specification (formerly known as the Swagger specification) for creating RESTful API documentation formatted in JSON or YAML, a human-friendly superset of JSON. Swagger documents can be processed by various programming languages and can be checked into source control for version management during the software development cycle. But Swagger has shortcomings of its own. When we used the framework to document our own APIs, we found gaps between our documentation needs and Swagger's basic capabilities.