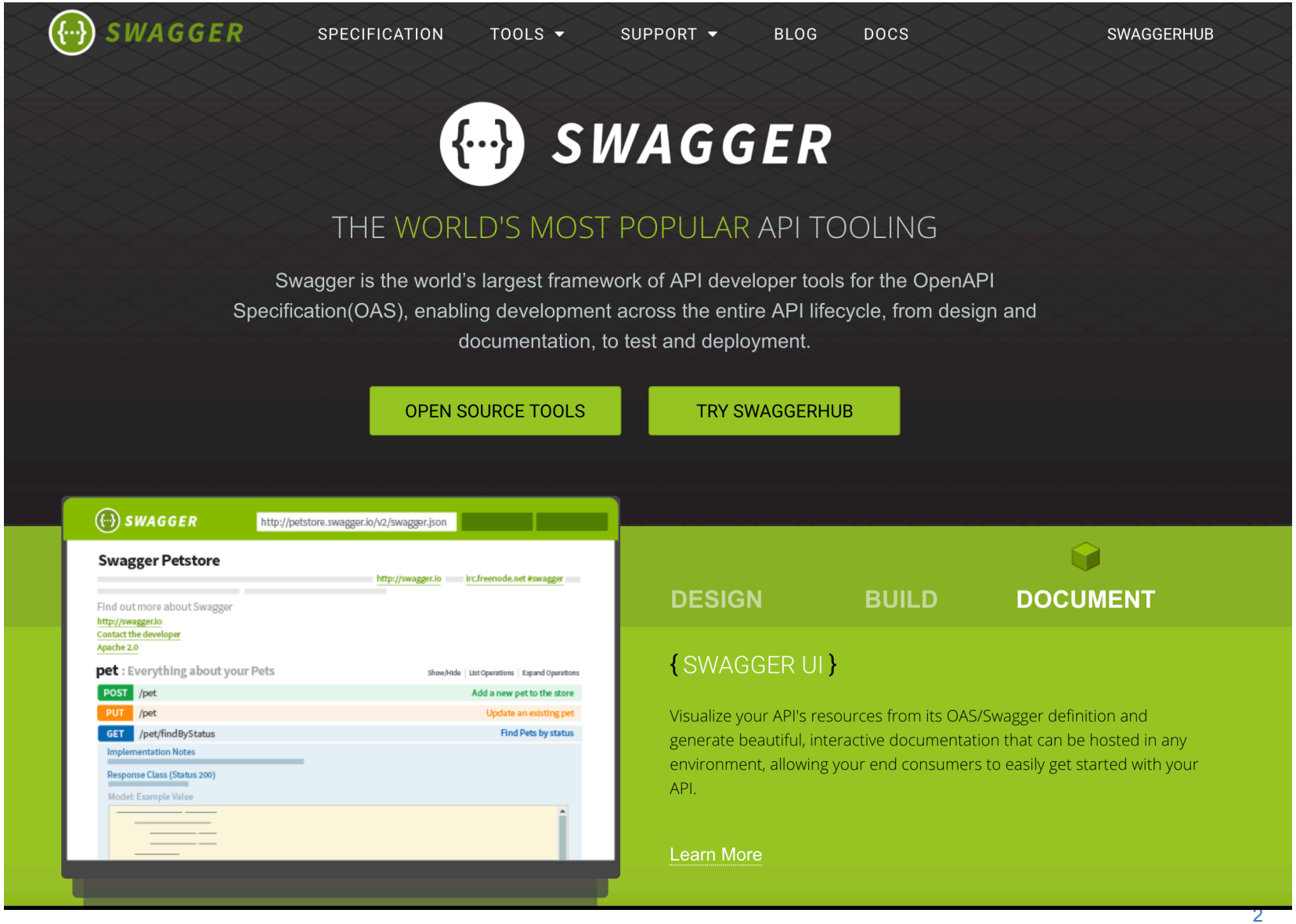
Swagger & API Patterns

Hybrid Integration Enablement

October 2017

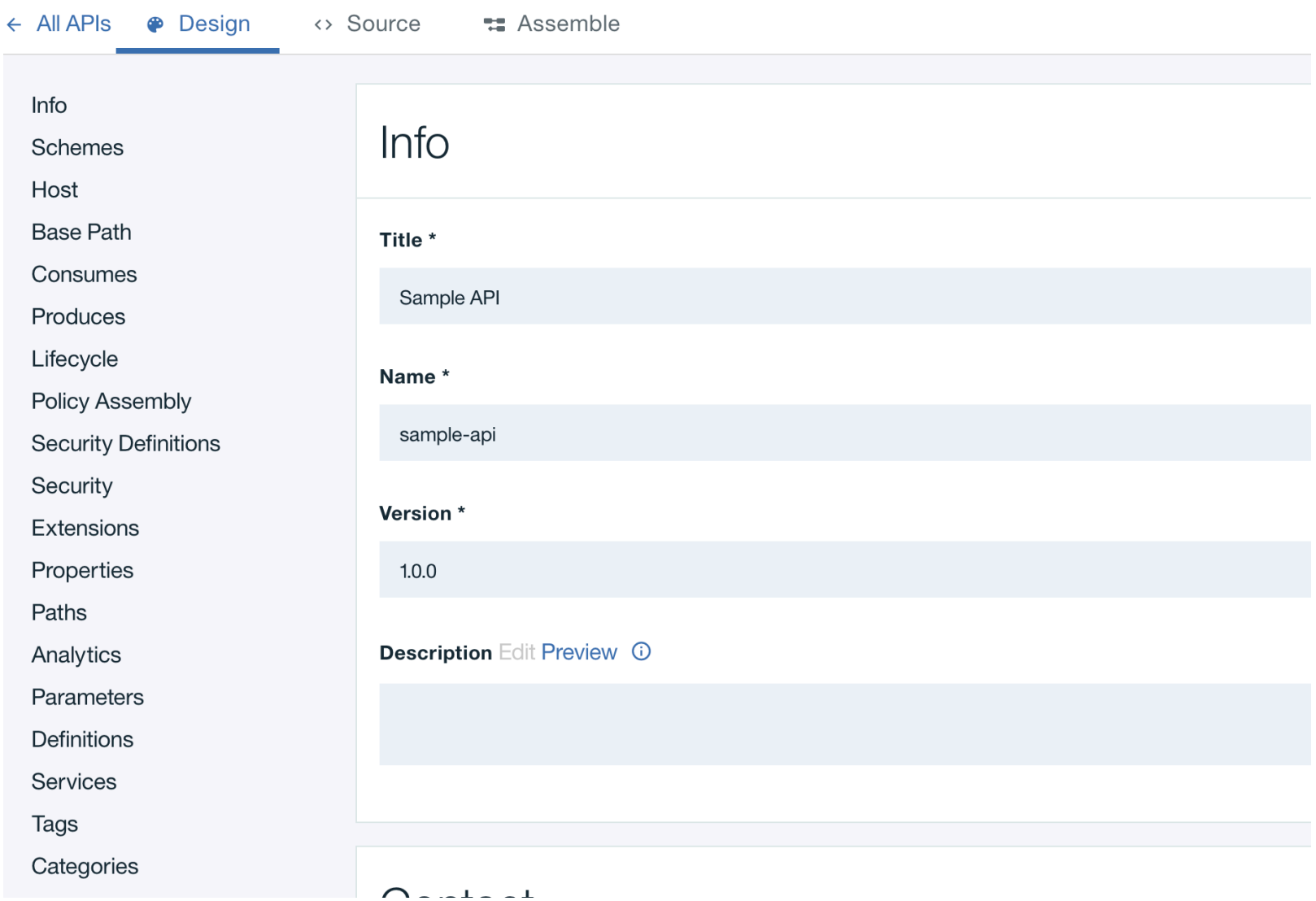
What is Swagger?

- https://swagger.io/
  - Open API Specification to define RESTful APIs
  - Aims to understand the capabilities of service without access to source code.
  - Provides consumers to understand remote service with implementation logic
- 2 Design Approaches exist
  - **Top Down**, define API before writing code
  - **Bottom Up**, document code after it's written to document.



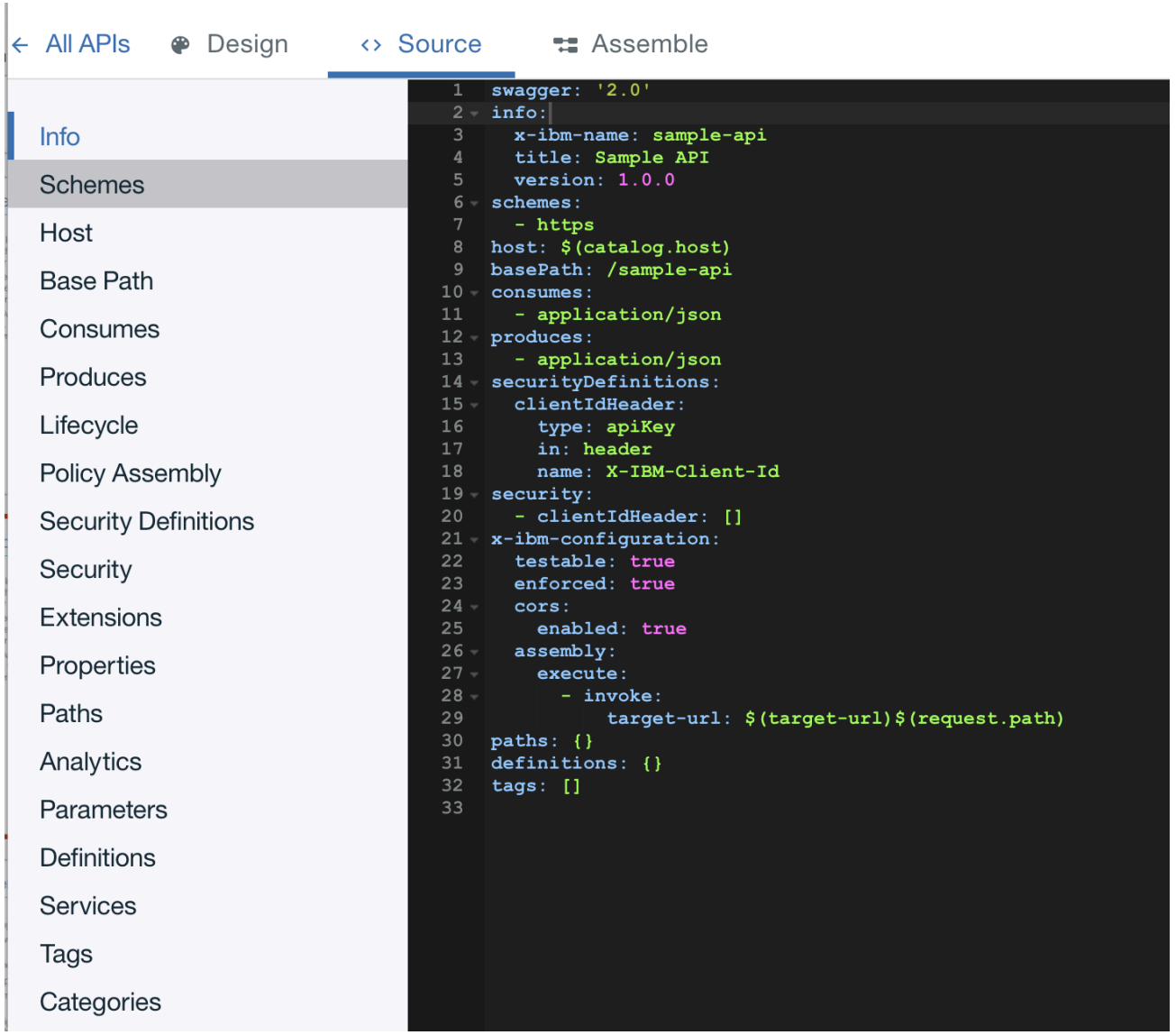
API Designer creates Swagger

- All these options in the left side menu aim to generate the Swagger Documentation for your API
- We have carefully broken down each part into different easy sections to make it user friendly
- IBM takes the default Swagger specification and add a few more fields to make it our own (work with the product).



API Designer allows Source Code Viewing

- All options in the Design tab generate code in the “Source” tab.
- It also writes to the filesystem as you do operations (same for the Assemble tab too).
- If you know the fields or data you want to edit, you can edit it here and the Design & Assembly will pick it up as well.



Defining System APIs

- System APIs work with Systems of Record or SORs
- These are the most common types of services, since they exist everywhere on a heterogeneous network.
- Great to get direct access to the data

Companies already have web services, which can be exposed as APIs

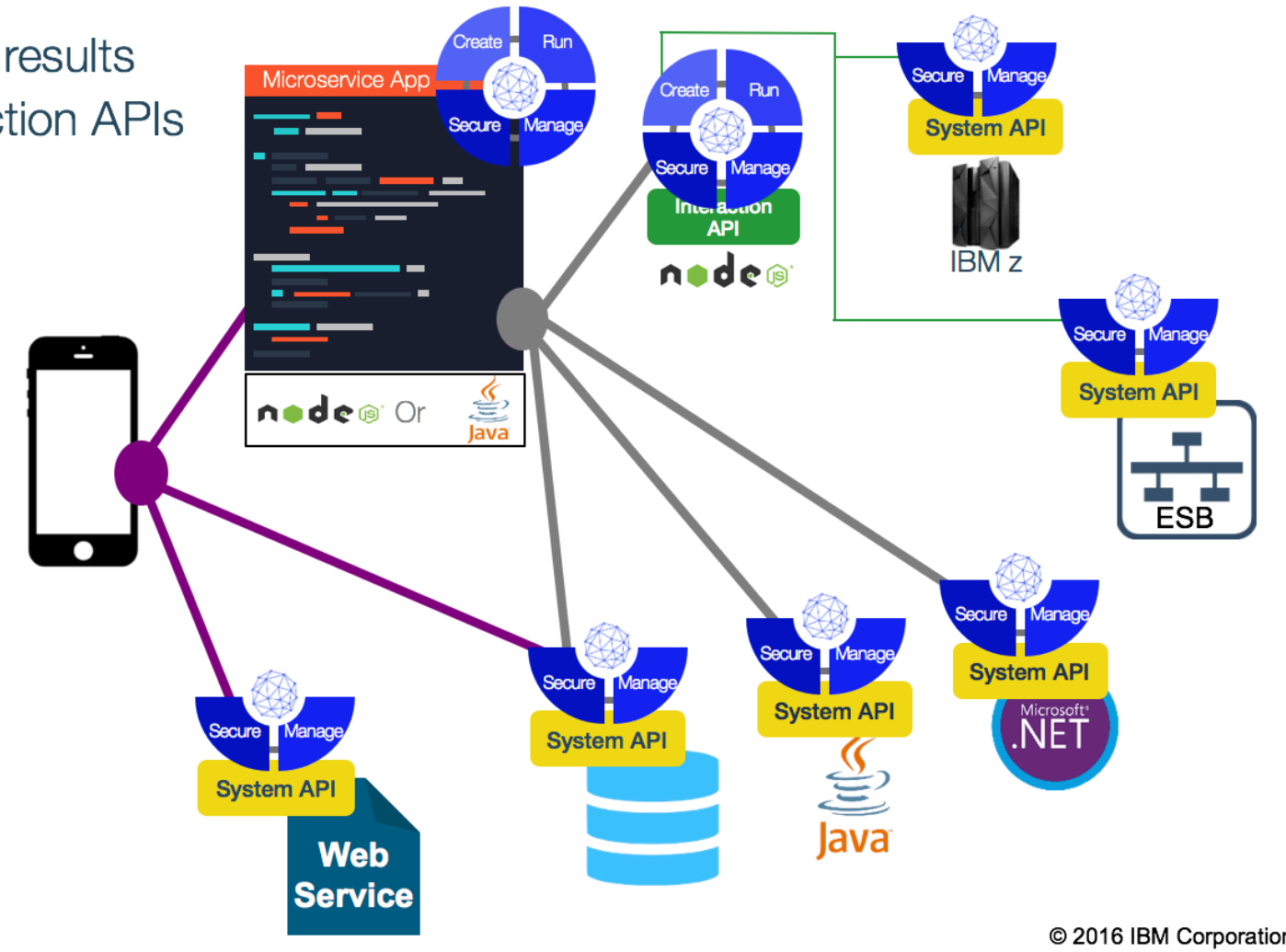
Software vendors are adding API support to existing products to pass through data from a system of record unchanged; aka System APIs

Defining Explaining Interaction APIs

Interaction APIs must be Created & Run

Existing & System APIs are invoked & their results manipulated to create new reusable Interaction APIs

- These orchestrations can be done via the Assembler in the API Designer or Cloud API Manager (DRAFTS).
- The true power of APIs creation can be created using this pattern.



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Welcome to the API Ecosystem

- Let's work on the next sessions to see how these two patterns exist with our most common ways to enter API management

Swagger & API Patterns Questions

- Open Conversation / Questions?

Up Next: REST API Proxy