Data Analytics as a Service (DaaS)

June, 2024

PerpetualBlock

Part 1: PerpetualBlock DaaS Offering
30 minutes

1. Innoplexus DaaS 101
2. Data Entities and Assets
3. Syntax and Grammar
4. Functionalities
5. API Status codes
6. Usage and Configurations

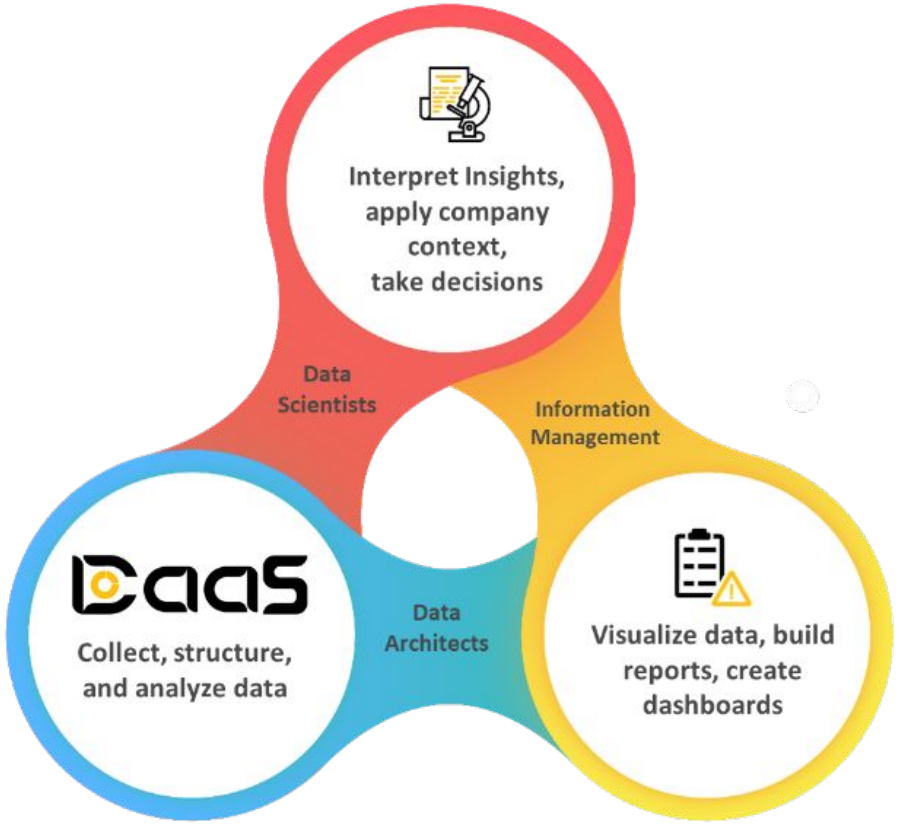
Part 2: Hands on workflow
30 minutes

1. Data Exploration workflow
2. Relationship workflow
3. Evidence workflow
4. Queries

Part 1: DaaS 101
Answering the “What”

PerpetualBlock DaaS 101

- PerpetualBlock DaaS is a collection of Web APIs encompassing services to expose Innoplexus proprietary Life Science data lake as set of web APIs, which can be “consumed on demand basis” over an HTTP(s) network.
- PerpetualBlock DaaS provides access to immediate consumable data for organizations’ business users, and enables non-IT user to produce business critical insight
- DaaS simplifies the key challenges of enterprise data management as
  a. How to acquire data
  b. How to design IT systems around data
  c. Where to host data
  d. Which analytical engine to use to handle data



ENTITIES

DISEASE

- Common name
- Disease ID
- Therapeutic area
- External source IDs

PROTEIN

- Common name
- Protein ID
- UNIPROT ID

PATHWAY

- Common name
- Pathway ID
- Biological name
- Pathway source/s

ASSET CLASSES

PUBLICATION

- Unique ID
- Title
- Abstract
- Journal & ISSN
- Authors
- Source link

CLINICAL TRIALS

- Trial ID and Source
- Trial status & Phase
- Trial Indications
- Trial Interventions
- Eligibility criteria
- Trial dates
- Trial results
- Associated mentions

CONGRESS

- Congress Name
- Congress Abstract
- Congress country
- Authors
- Source

*Schema for Entity and Asset classes can be viewed using Help API

FUNCTION	OPERATORS AND SYNTAX
SEARCH	Boolean (AND, NOT), By “KEY”,
FETCH	By ID, By FILTERS/ By QUERY
FILTER	By CLAUSE, <Key>, <Operator> <Value> (EQ, NE, GTE, GT, LT, LTE)
SORT	By RELEVANCE By COUNT, By ASC/ DESC
AGGREGATE	Group By TERM/ HISTOGRAM, METRICS (Min/Max/Avg/ Count)

*Refer to Syntax and Grammar Documentation for more details on additional operators

GENERIC FUNCTIONS - ASSET CLASS

SEARCH | INDEX | AGGREGATE

ENTITIES

- Disease
- Protein
- Pathway
- Author
- Gene
- Drug
- Company

ASSET CLASS

- Publications
- Clinical trials
- Congress
- Patents
- Guidelines
- Social media
- News
- Thesis

SPECIFIC FUNCTIONS

ONTOLOGY | RELATION | EVIDENCE

ANALYSE API

- Disease
- Protein
- Pathway
- Drug
- Gene
- 15 more entities

ENTITY - TO - ENTITY

- Disease to Protein
- Protein to Pathway
- Pathway to Disease
- Disease to Drug
- Drug to Protein
- Drug to Pathway

*Text in Blue refers to permissions set

Status code	Response
200*	Response OK. Data or Documents provided in the response
400	Syntax/semantic error etc, wrong query parameters, typo errors
401	Unauthorized request (wrong or expired API Key)
404	Resource Not Found
503	Service unavailable
504	Gateway timeout error

*As per the contract, successful hit will be counted only for 200 OK response

- **1000 Hits - 1st August 2019 to 31st August 2019**
- **500 Hits per months - 1st September 2091 to 31st December 2019**
- **500 Hits - Max limit any Asset/Entity/Functional API**

Asset / Entity Class or End point	Max size	Max Page
Publication	100	100
Clinical trial	100	100
Congress	100	100
Disease / Condition	NA	NA
Pathway	NA	NA
Proteins	NA	NA
“Analyse” feature	NA	NA
“Relations” feature	1000	NA

Part 2:
Hands on workflow

Node coverage: Rare Disease

Rare Disease:

> 10 K Unique Rare disease

Proteins/ Targets:

> 18 K Unique Targets

Rare DIsease Pathways:

> 1500 Unique Pathways

Relations coverage: Rare Disease

Disease to Pathway:

> 30 K Relations

Pathway to Protein:

> 70 K Relations

Protein to Disease:

> 300 K Relations

Rare Disease	Proteins/ Targets	Pathways
1. Brucellosis	1. Complement factor properdin	1. Adaptive immune system pathway
2. Complement deficiency	2. Phosphatidylinositol N-Acetylglucosaminyltransferase Subunit A (PIGA)	2. PI3k cascade
3. Hypochondroplasia		3. Complement system pathway
4. 4 hppd deficiency		
5. Complement Factor H Deficiency		
6. Anti-Neutrophil Antibody (ANCA) Associated Vasculitis		
7. Cryoglobulinemia		
8. Hereditary angioedema		

Thank You