



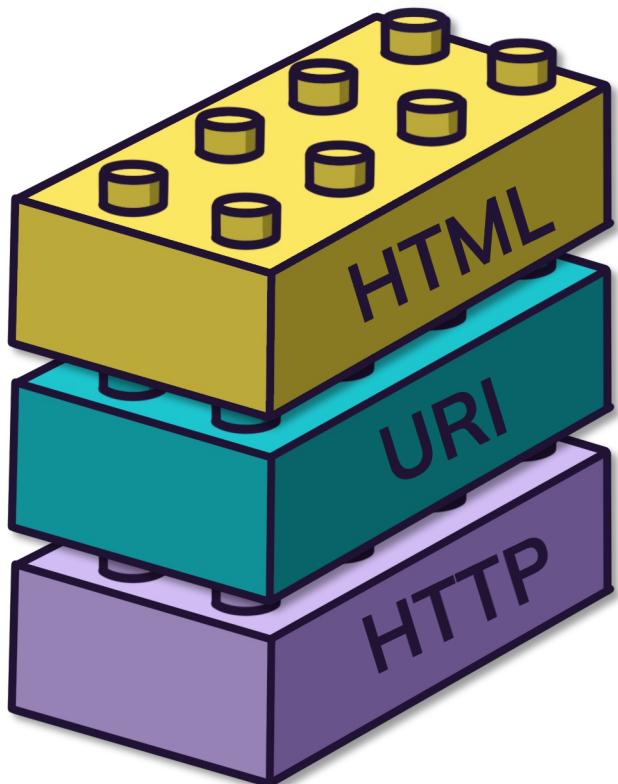
The Carpentries Incubator

Identifier and Web Locations

How to Identify and Retrieve Data on the World Wide Web

Fundamentals of Scientific Metadata: Why Context Matters

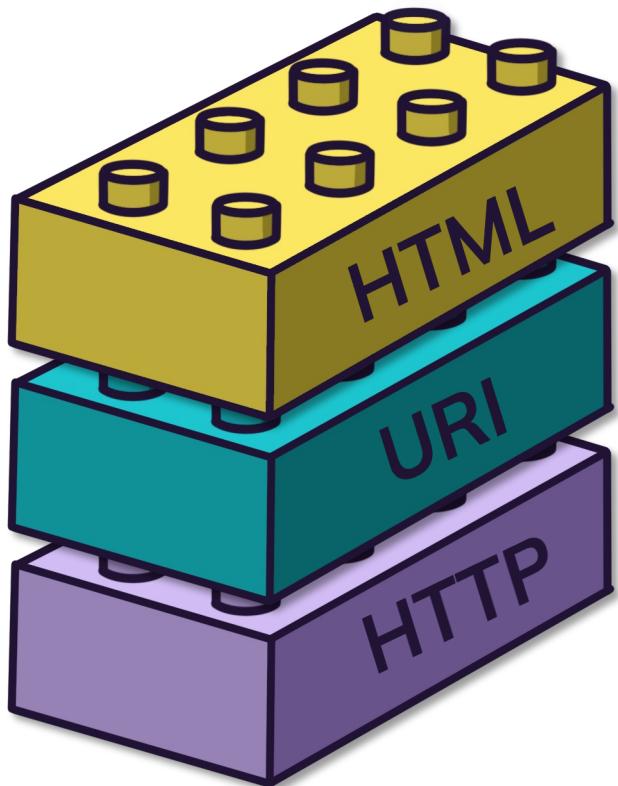
World Wide Web building blocks



HyperText Markup Language

Uniform Resource Identifiers

HyperText Transfer Protocol



HyperText Markup Language

Uniform Resource Identifiers

HyperText Transfer Protocol



Unique Identifier - Librarian





Unique Identifier - Librarian





Unique Identifier – Molecular Biology





Unique Identifier – Molecular Biology



Unique Identifier



- globally unique identification
- central, world or community wide registration
- dereferenceable, unambiguous



Identifier in your
research area



Web Identifier





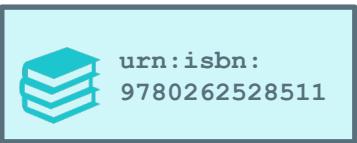
URN – URL – URI





URN – URL – URI

URN



URN

UNIFORM RESOURCE
NAME

- unique identifier
- series of characters
- **no** protocol





URN – URL – URI

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URL

UNIFORM RESOURCE
LOCATOR

- address
- series of characters
- comm. protocol



URN – URL – URI

URN

 urn:isbn:
9780262528511

URN

UNIFORM RESOURCE
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- unique identifier
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- **no** protocol

URL

UNIFORM RESOURCE
LOCATOR

- address
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- comm. protocol

URL

 [https://orcid.org/
0000-0003-3043-
5657](https://orcid.org/0000-0003-3043-5657)

 [https://arabidops
is.org/servlets/T
airObject?id=1360
48&type=locus](https://arabidopsis.org/servlets/TairObject?id=136048&type=locus)



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URI

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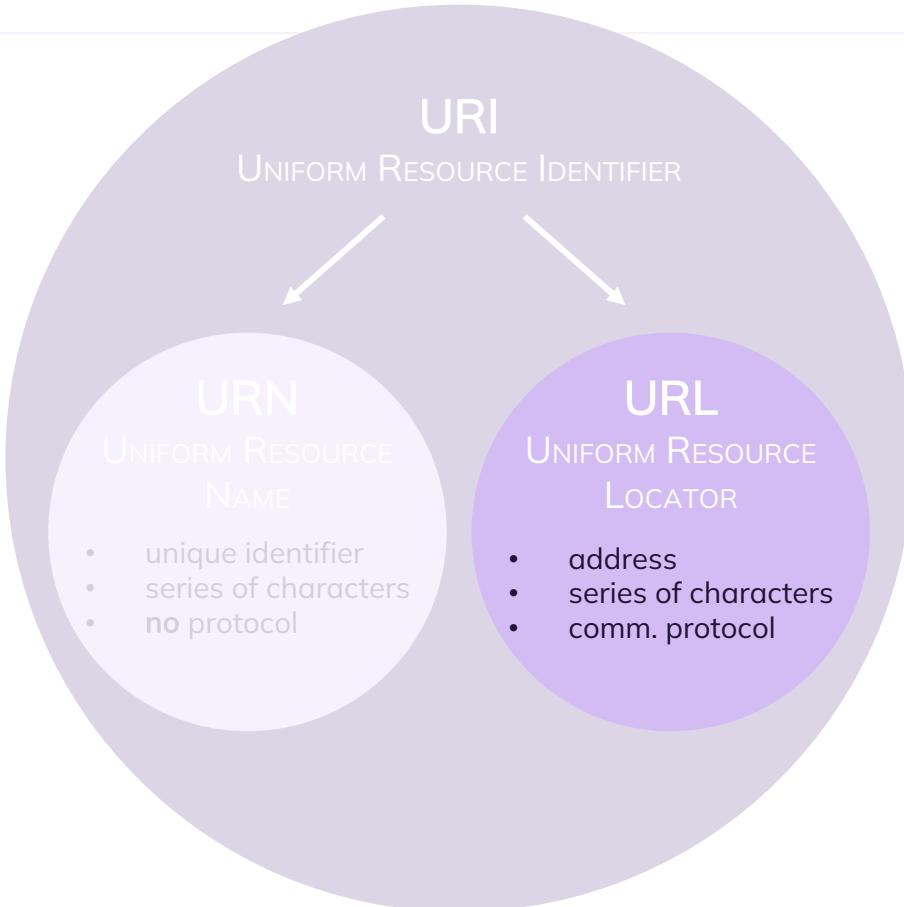
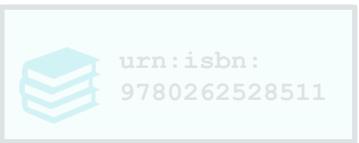
URL





URN – URL – URI

URN



URL



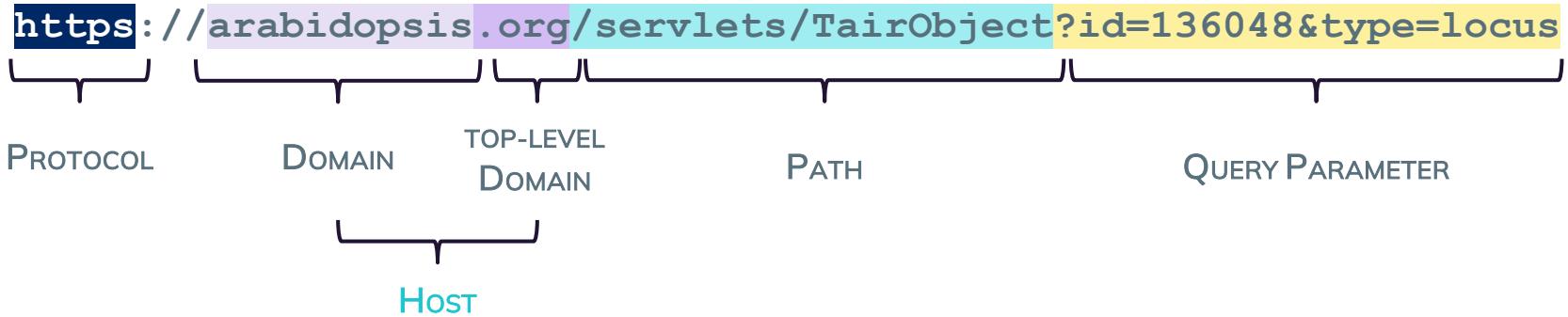


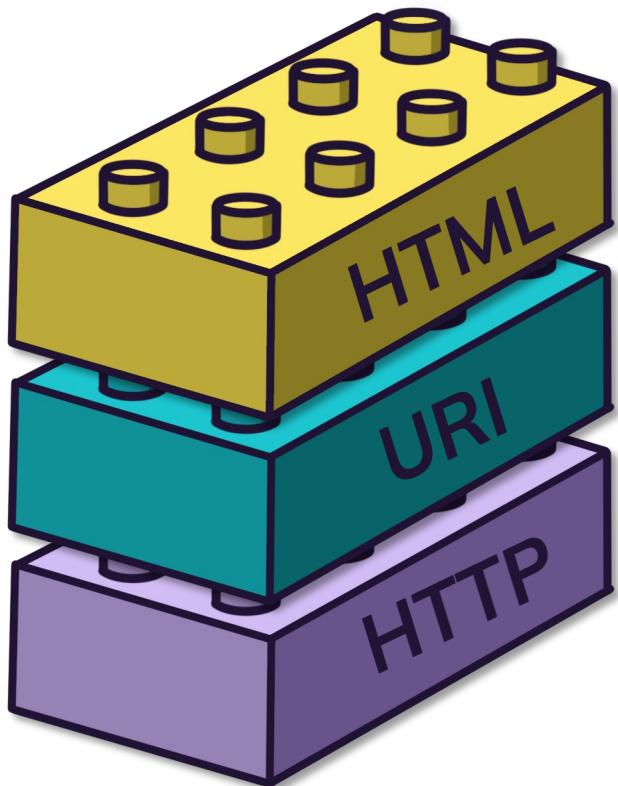
URL structure

`https://arabidopsis.org/servlets/TairObject?id=136048&type=locus`



URL structure





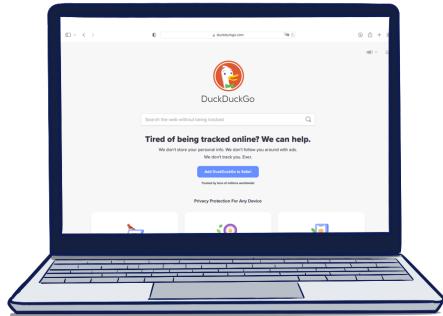
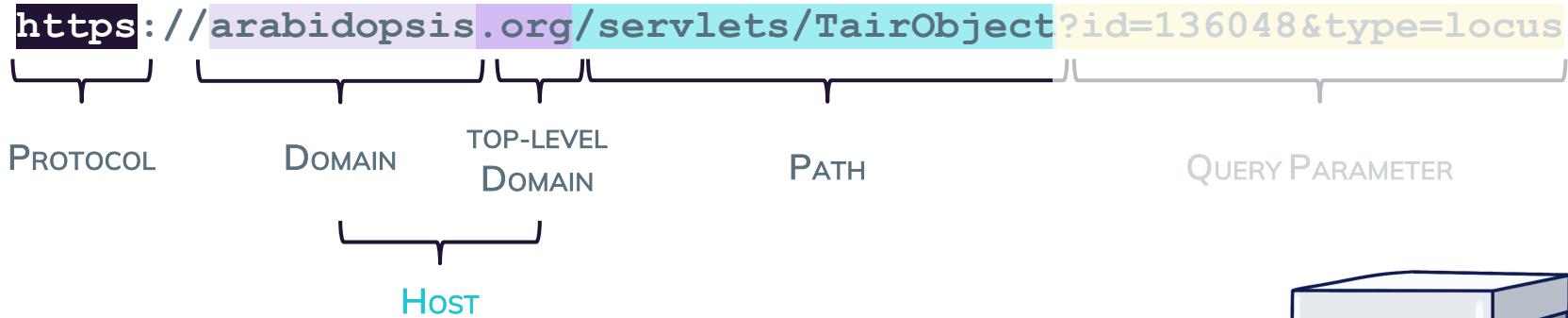
HyperText Markup Language

Uniform Resource Identifiers

HyperText Transfer Protocol



HTTP request



HTTP Request

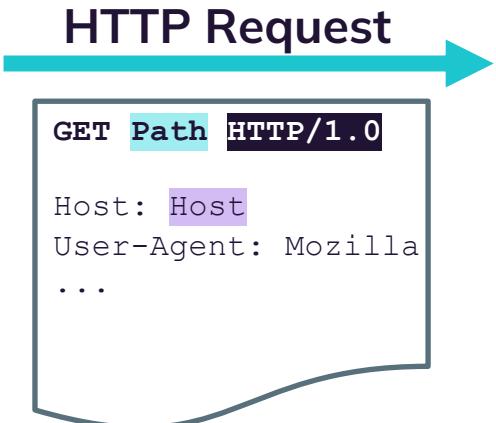
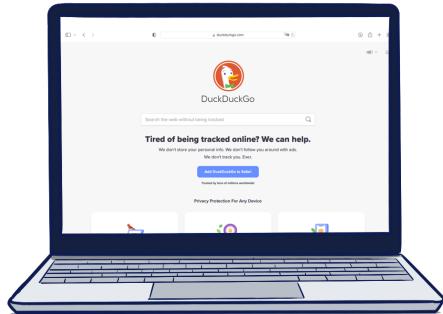
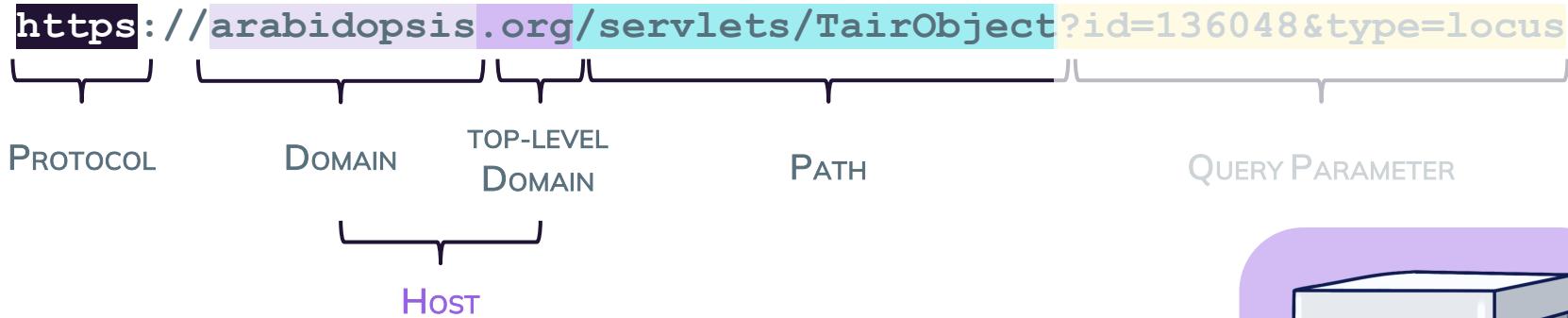
GET Path HTTP/1.0

Host: Host
User-Agent: Mozilla
...

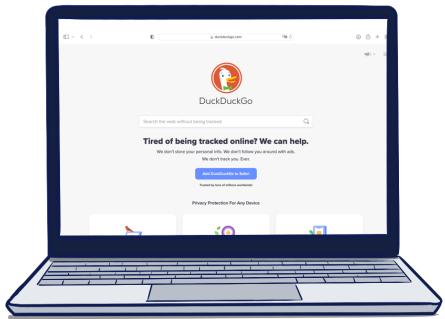




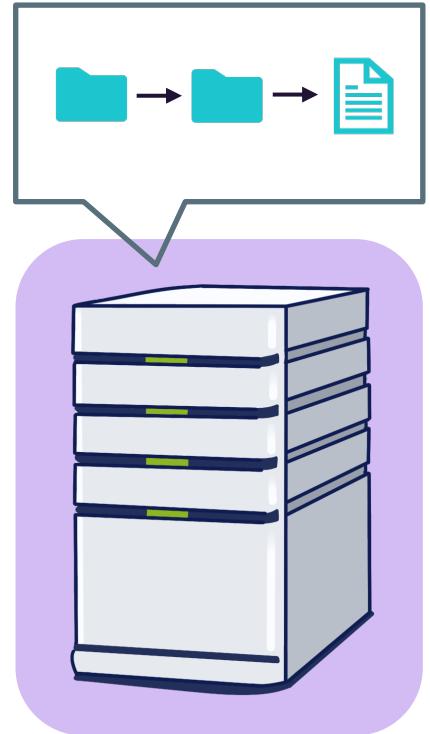
HTTP request



HTTP request

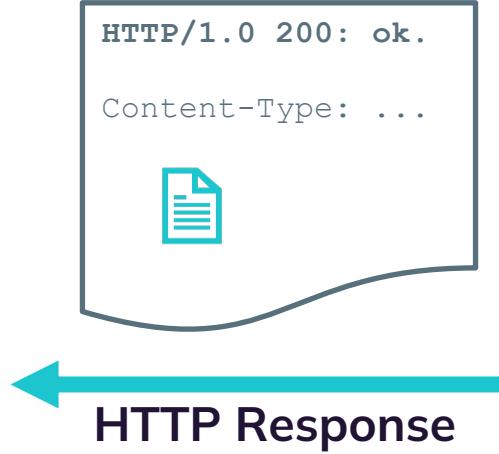
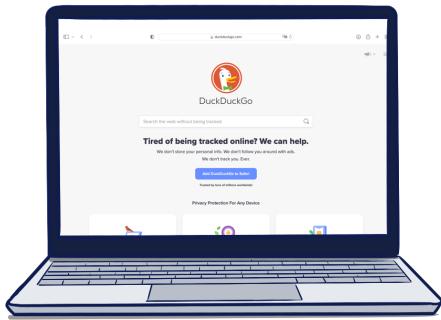


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GET Path HTTP/1.0  
Host: Host  
User-Agent: Mozilla  
...
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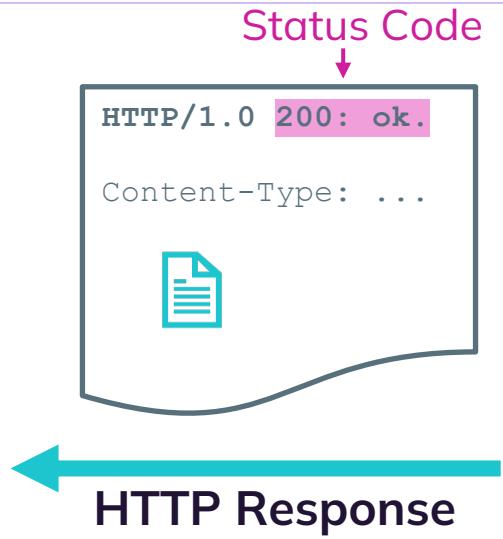
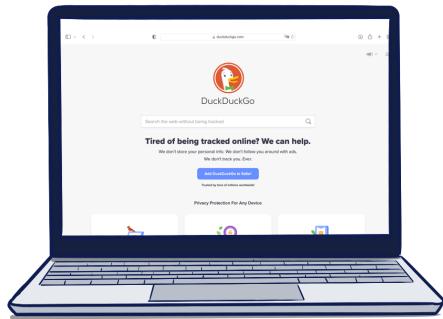


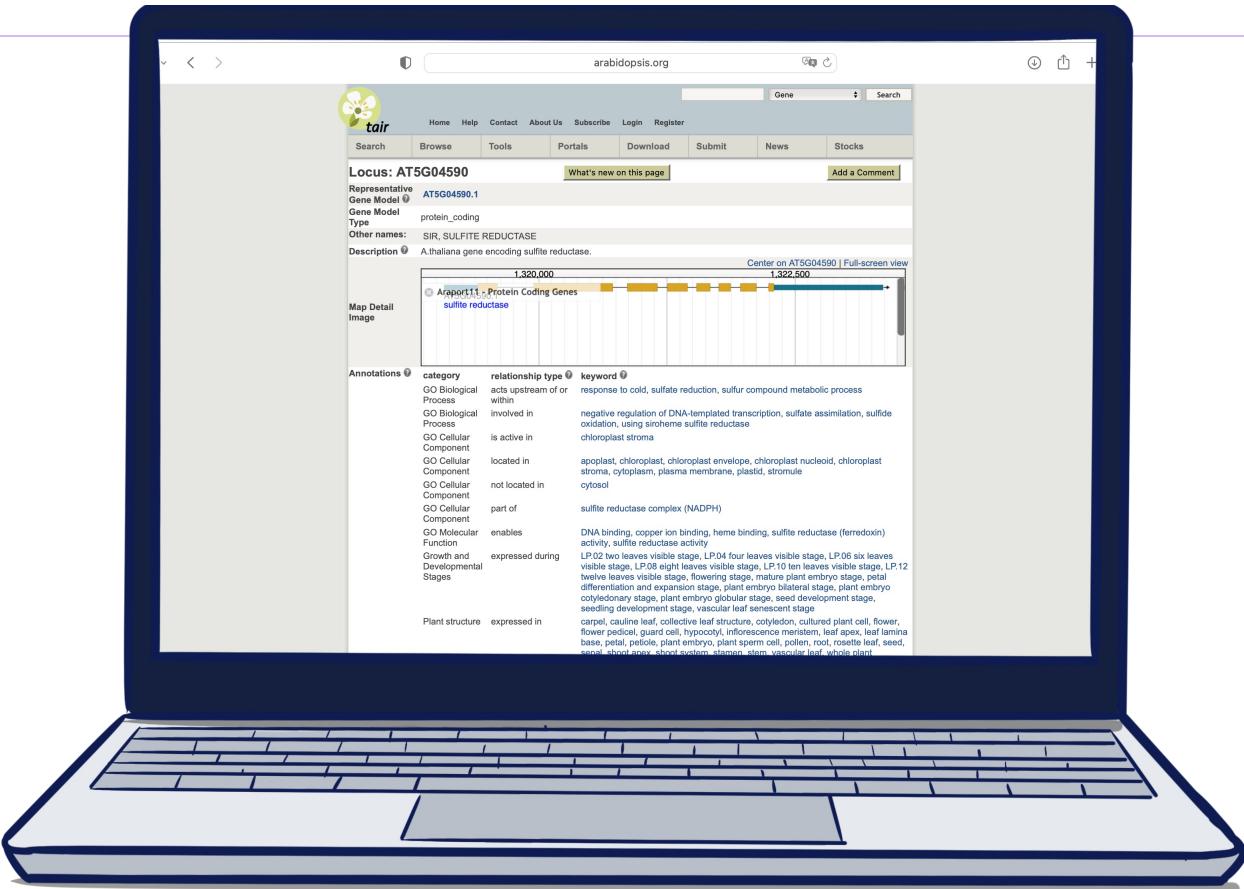
HTTP response

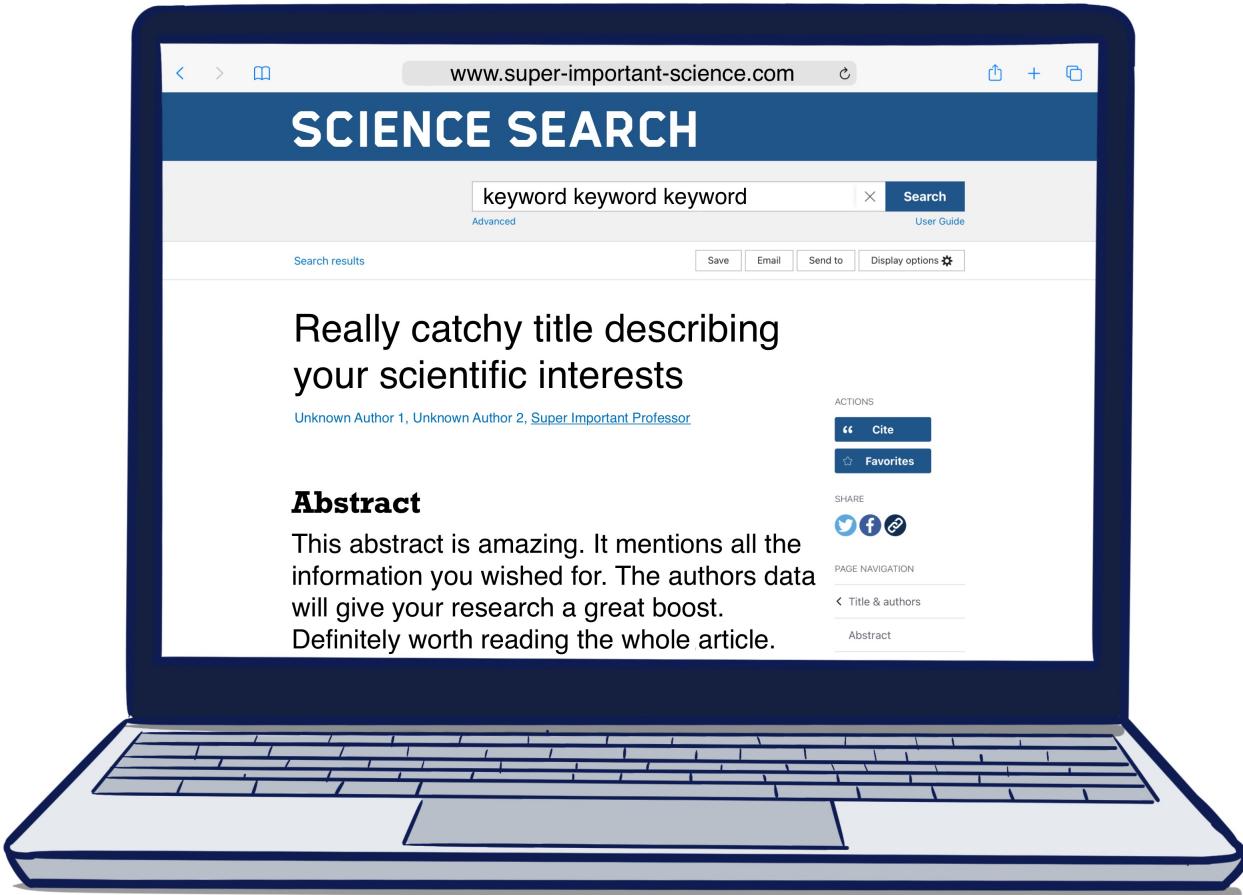


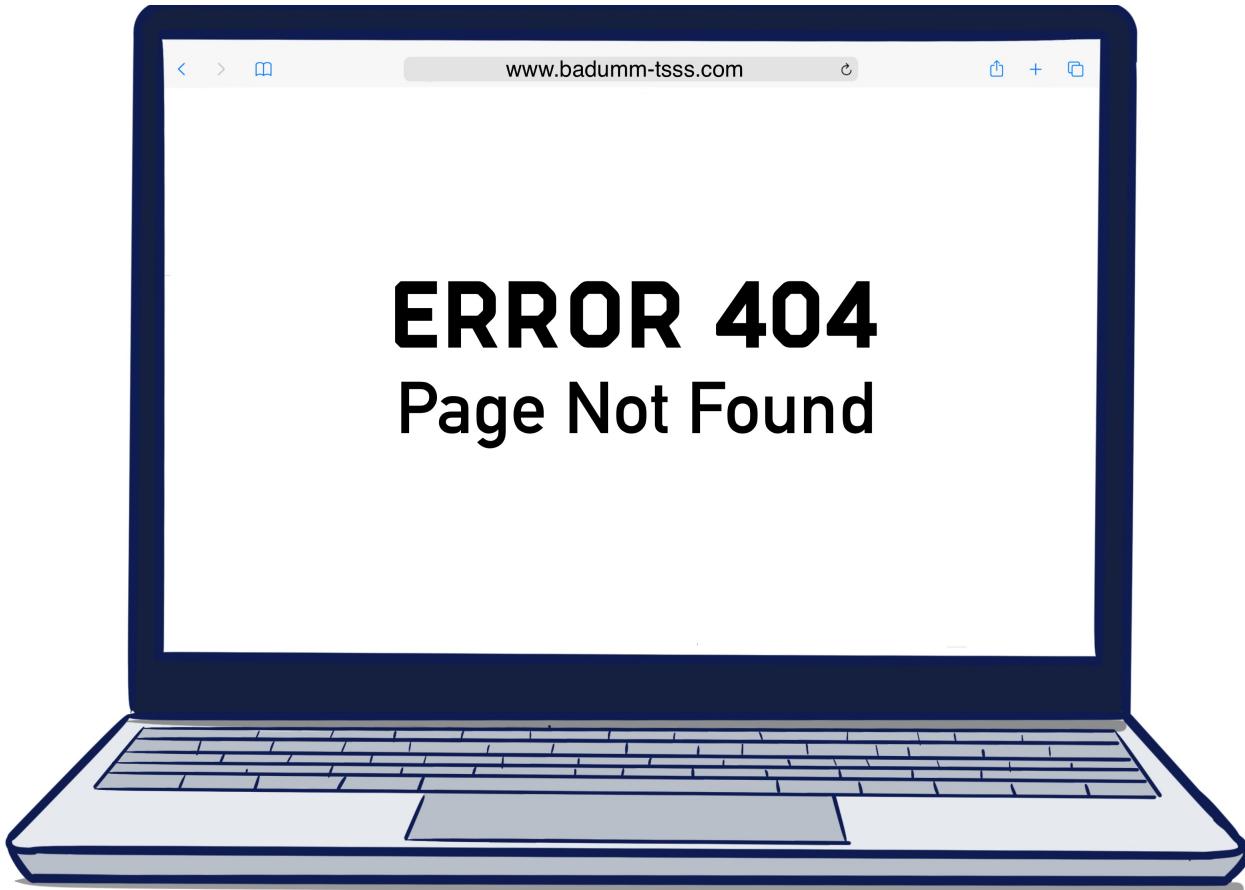


HTTP response







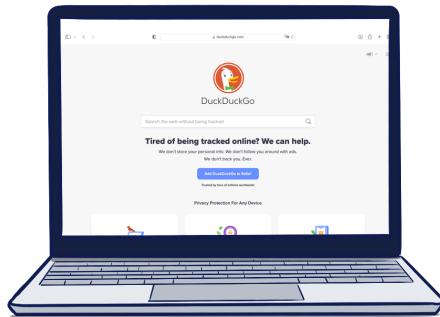




HTTP request

`https://arabidopsis.org/servlets/TairObject?id=136048&type=locus`

PROTOCOL HOST PATH QUERY PARAMETER



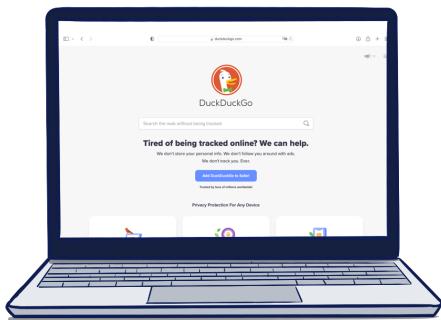
HTTP Request

GET Path HTTP/1.0

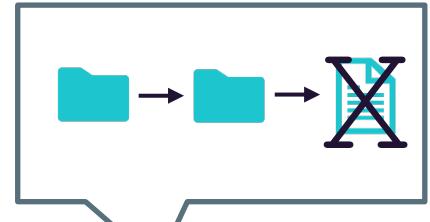
Host: Host
User-Agent: Mozilla
...



ERROR 404: Not Found

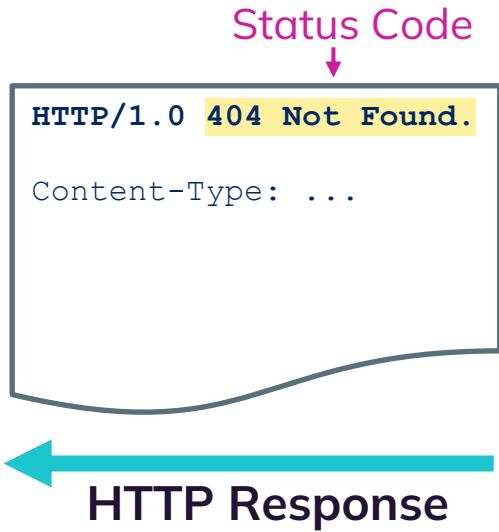


```
GET Path HTTP/1.0  
  
Host: Host  
User-Agent: Mozilla  
...
```





ERROR 404: Not Found



Error 404

Demonstration

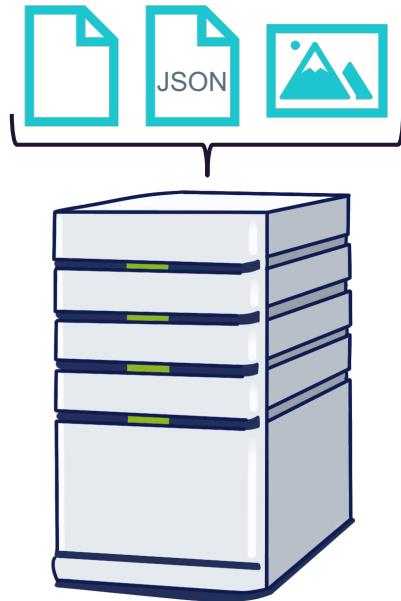






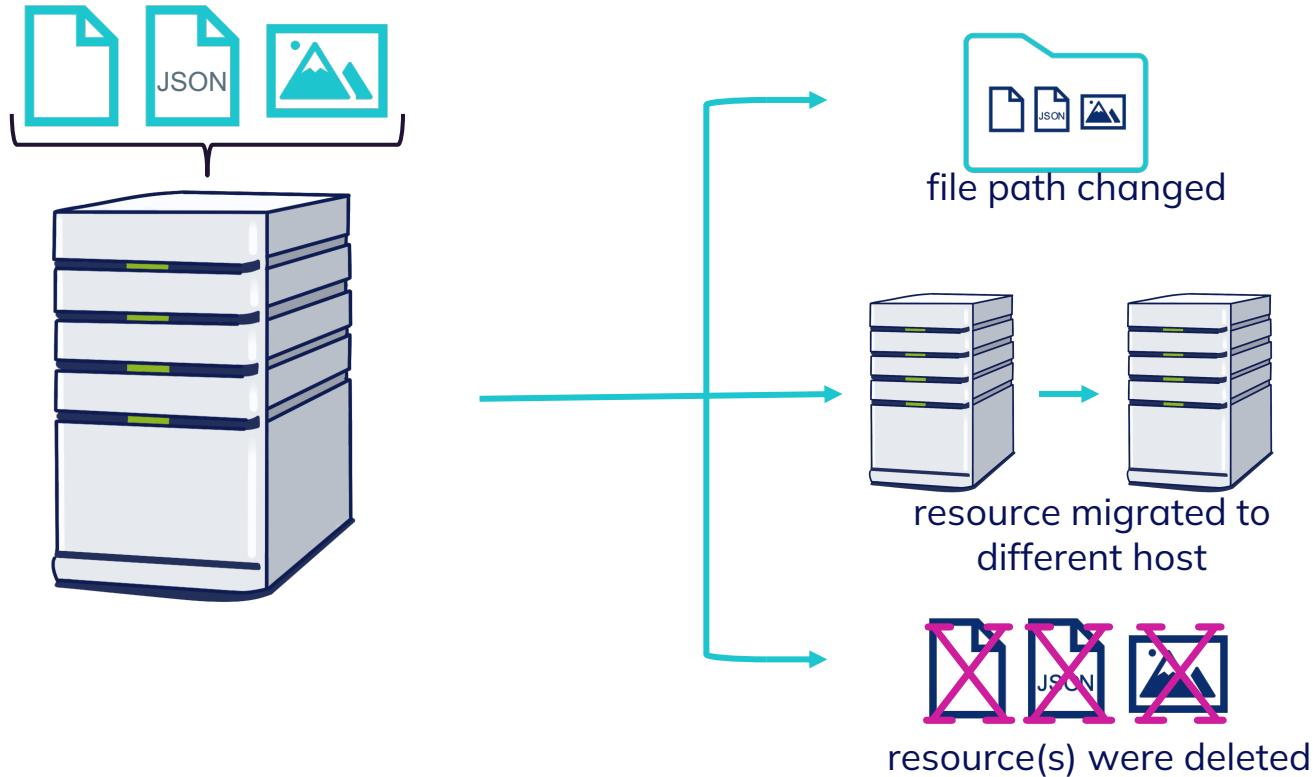


ERROR 404: Reasons for link rot





ERROR 404: Reasons for link rot



DISCLAIMER

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Why Context Matters**

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