

# museum für naturkunde berlin



# Stable URIs for specimens in (mass) digitization approaches and workflows

museum für  
naturkunde  
berlin

# CETAF ISTC

- aims for implementing a consistent identifier system in CETAF institutions
- based on http-URIs
- create endpoints for querying lists / catalogues of all URIs
- More details: <http://cetaf.org/cetaf-stable-identifiers>

# CETAF stable identifiers for specimens

A PRODUCT OF THE CETAF INFORMATION SCIENCE AND TECHNOLOGY COMMITTEE (CETAF-ISTC)

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GET object

<http://herbarium.bgbm.org/object/B100457427>

See webpage

<http://herbarium.bgbm.org/data/page/B100457427>



PHYSICAL COLLECTION OBJECTS

GET object

<http://herbarium.bgbm.org/object/B100457427>

See RDF metadata

<http://herbarium.bgbm.org/data/rdf/B100457427>



GET webpage

<http://herbarium.bgbm.org/data/page/B100457427>

OK

<http://herbarium.bgbm.org/data/page/B100457427>



WEB PAGES



METADATA

GET RDF metadata

<http://herbarium.bgbm.org/data/rdf/B100457427>

OK

<http://herbarium.bgbm.org/data/rdf/B100457427>



# Workflows and use cases

# Entering URIs in daily work?



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# Quick Response (QR)



[http://coll.mfn-berlin.de/u/ZMB\\_Phasm\\_D038](http://coll.mfn-berlin.de/u/ZMB_Phasm_D038) or

[http://coll.mfn-berlin.de/u/ZMB\\_MAM\\_091613](http://coll.mfn-berlin.de/u/ZMB_MAM_091613) or ....

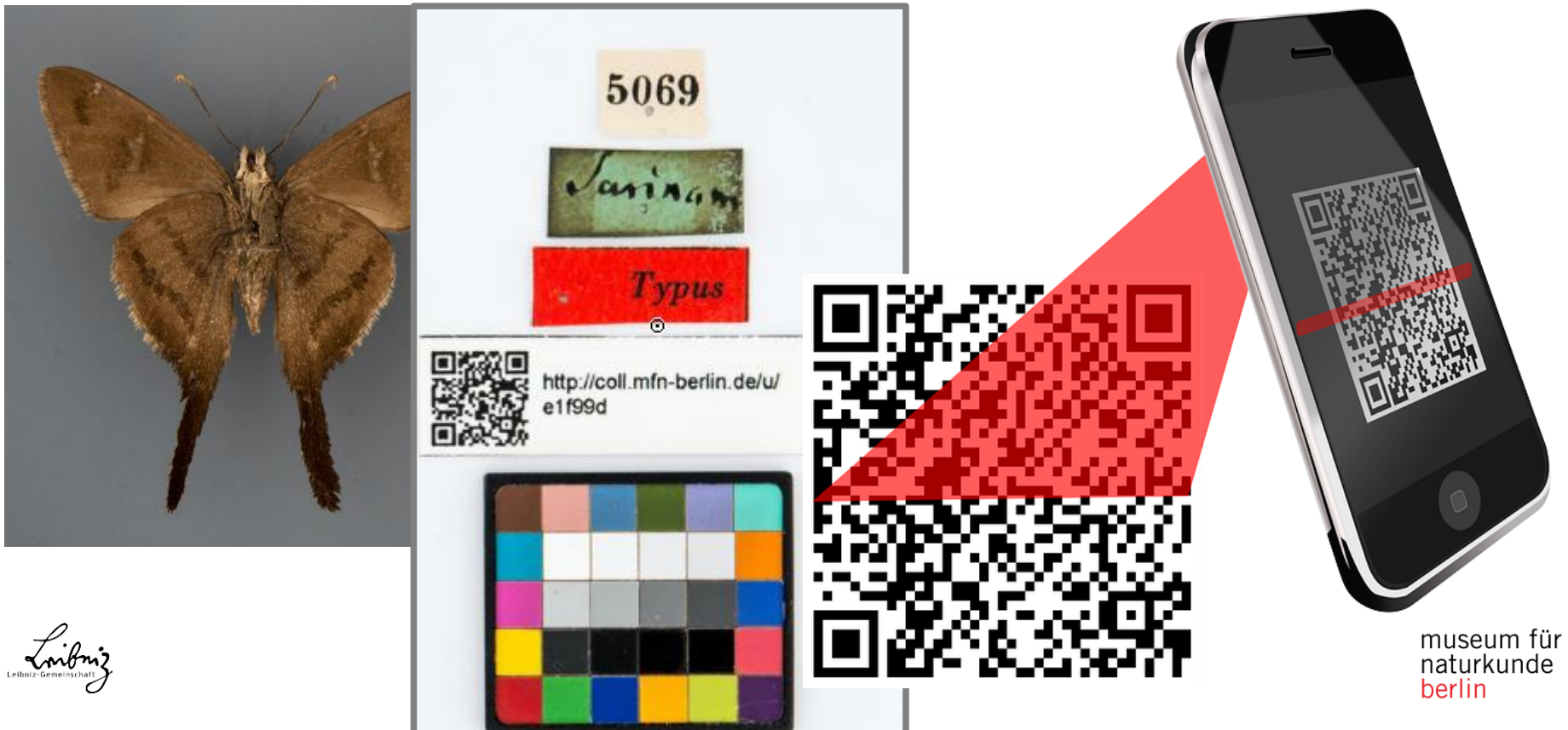


# Quick Response (QR)

- QR codes => binary information
- Machine readable
  - easy to include in digitization workflows
  - save time / avoid typos in IDs etc.

# Quick Response (QR)

- Binary „interface“ between physical object and digital representation



# Use cases for mass digitization

## Level 1 Containers



## Level 2 Species



## Level 3 Specimen

*i.e. Type specimens*



# (1) Collection management

- Collections change almost every day

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  - Track changes in your database just by scanning QR codes



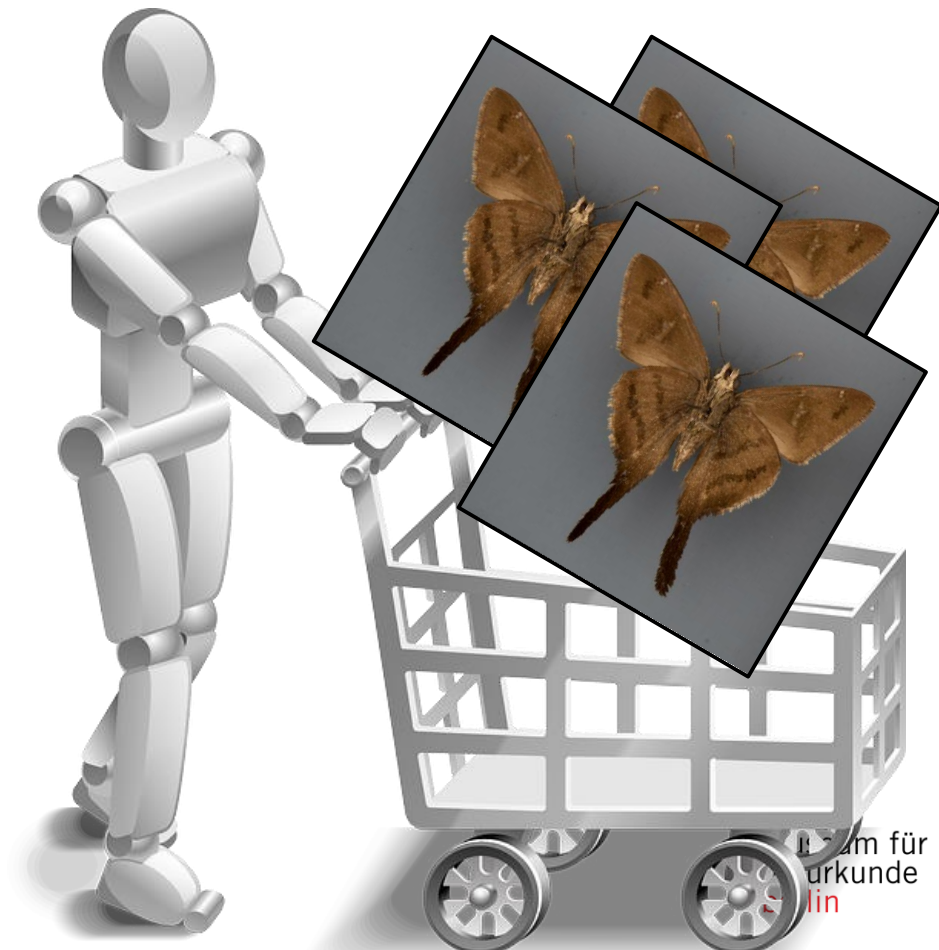
# (1) Collection management

- Collections change almost every day
  - Track changes in your database just by scanning QR codes
  - URI redirects to edit form in the intranet



# (1) Collection management

- Shopping carts for collection objects for batch workflows



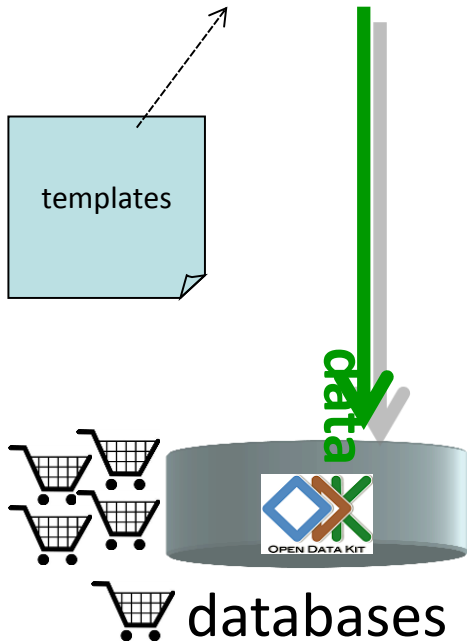
# Generic tool for forms

- Using customized forms in the free mobile application *ODK Collect*
- ([www.opendatakit.org](http://www.opendatakit.org))



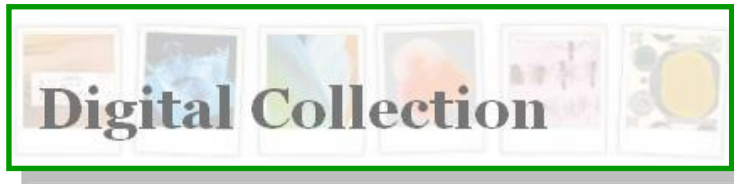
- Trying to enhance
  - data capture
  - connection between physical objects and digital representations in workflows





## Examples:

- changes in location
- loans
- cataloging
- demands for digital data











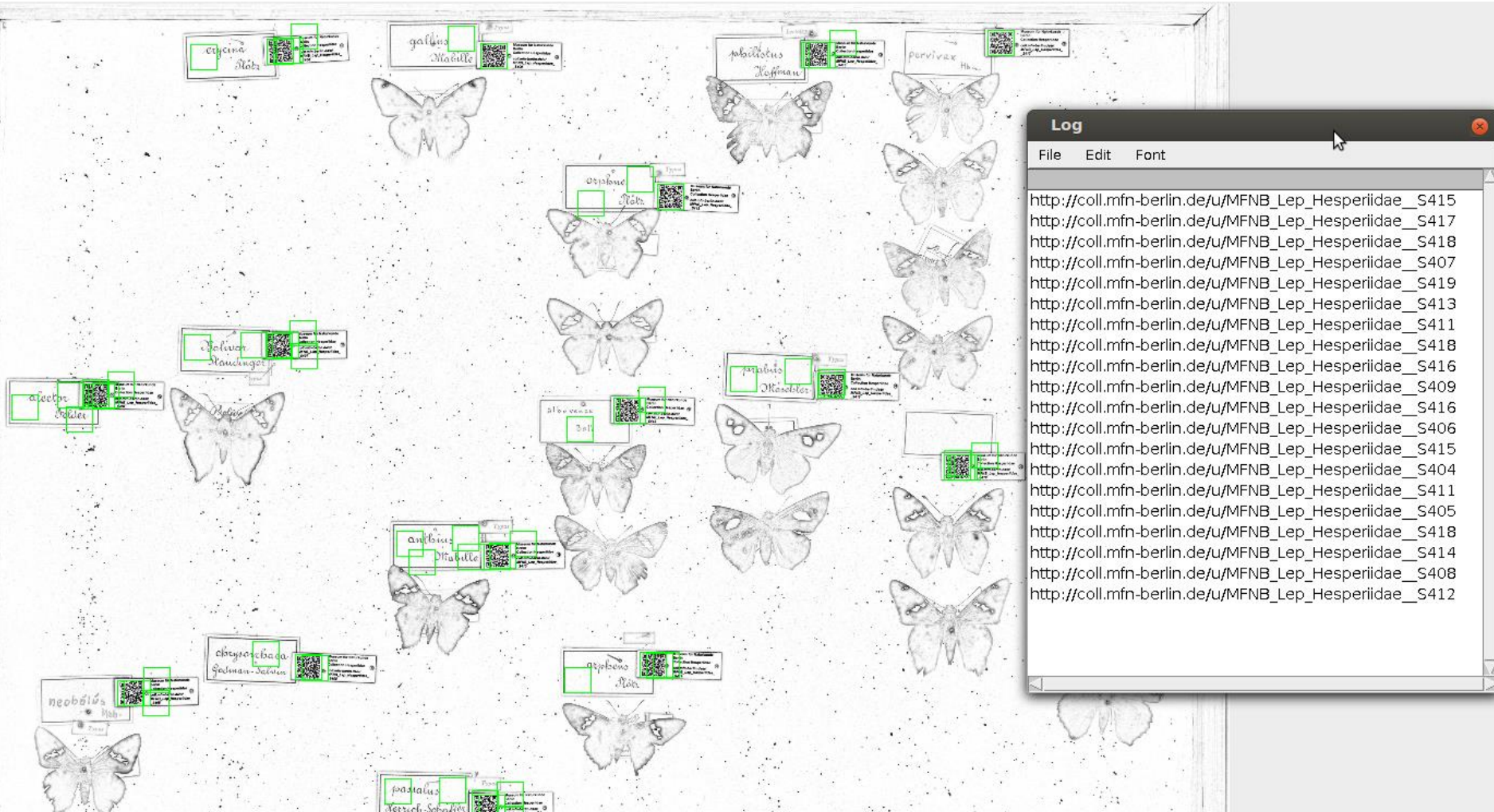
# (3) Image analyses



# (3) Image analyses



# (3) Image analyses



*Detection of multiple QR codes in digital assets of natural history collections*  
Glöckler et al. (in prep.)



# (3) Image analyses



i.e. for validation, segmentatation etc.

# Summary

- web-based systems (even if not public)
- URIs:
  - easy & intuitive
  - resolvable
- low efforts, but many benefits for mass digitization & management workflows

**Thanks for your attention!**

**What are your use cases?  
Please describe them here:**

[http://cetafdigitization.biowikifarm.net/cdig/Use cases for  
stable URIs in collection workflows](http://cetafdigitization.biowikifarm.net/cdig/Use_cases_for_stable_URIs_in_collection_workflows)