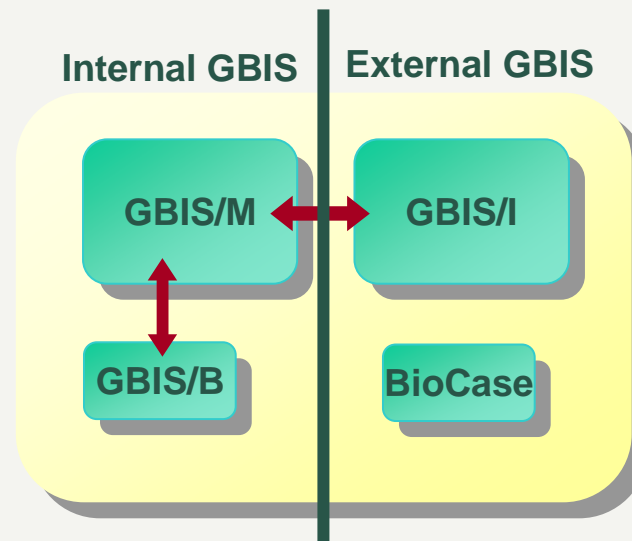


# Acquisition and Management of C&E Data within the Genebank Information System (GBIS) *IPK Gatersleben*



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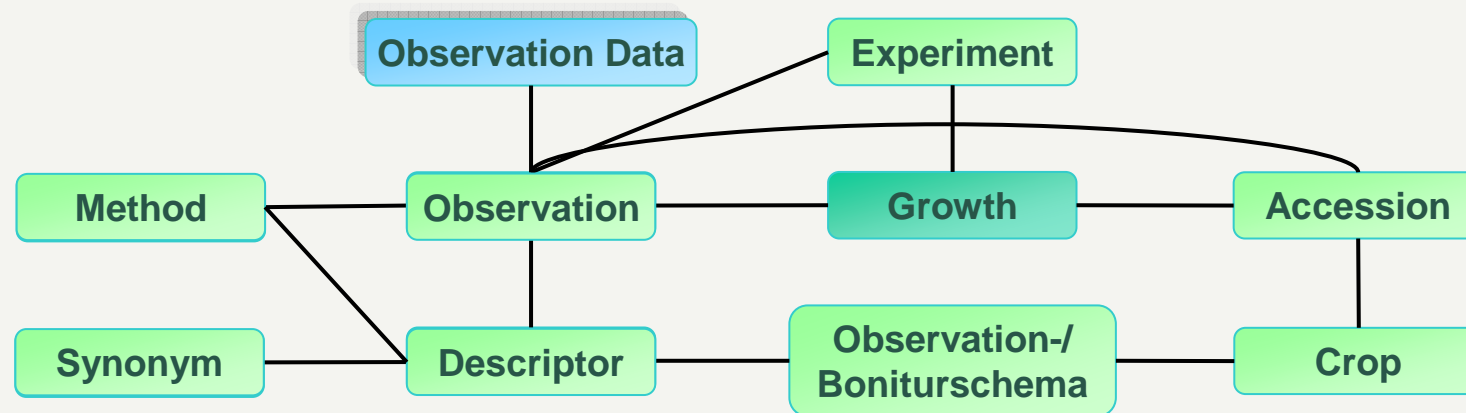
- |                          |   |
|--------------------------|---|
| <b>GBIS / Management</b> | – Rich Client for internal genebank management  |
| <b>GBIS / Bonitur</b>    | – Java application for acquisition of C&E data using Pocket-PCs as mobile data collection devices |
| <b>GBIS / Internet</b>   | – JSF-based internet application for external information retrieval and seed orders               |
| BioCase - Interface      | – Formats: gcp-passport, ABCD, MCPD   |


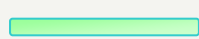
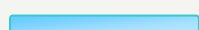
## Current Efforts on C&E Data

- Support for electronic data acquisition of observations (GBIS/B)
  - ✓ Done
- Import of Excel files with “legacy” observation data
  - Planned (2009)
- Reports (tables, diagrams) on observation data (GBIS/M, GBIS/I)
  - In progress (2009 for GBIS/M, not yet scheduled for GBIS/I)
- Querying for accessions using C&E data (GBIS/M, GBIS/I)
  - Planned (2009 for GBIS/M, 2010 for GBIS/I)
- Import of (external) secondary evaluation data
  - Planned (2009 onwards)

# Main Object Types for Observation Data

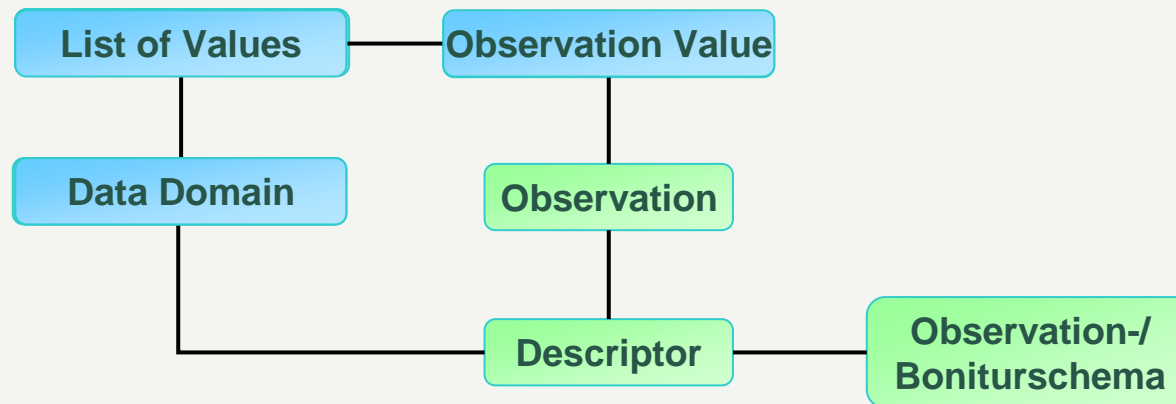
- Observations on “growths” (growth: set of plants of one accession grown together)
- Experiment: observation data on a set of growths
- Crop-specific schemas of descriptors (Boniturschema)
  - Multiple schemas for one crop for different purposes
- Observation data



-  Data for physical Genebank objects
-  Abstract objects
-  Observation/C&E data

## Main Object Types for Observation Data (2)

- Observation data
  - Different scale and data types, such as
    - text
    - number
    - date
    - list of values
      - coded as numbers (1 – 9)
  - Multiple observation values for one observation, e.g. 50% red, 50% white



- GBIS/B: Java application, Java Swing for GUI
  - Development and tests on PC
  - Deployment on Pocket PCs as jar file
- Definition of experiments, descriptor schemas etc. in GBIS/M
- Synchronisation GBIS/M – GBIS/B
  - CSV-files using Microsoft ActiveSync
  - Mapping of GBIS/B-IDs to GBIS/M-IDs
  - Handling of multiple exports
    - Prevent export of same growth to more than one Pocket PC
    - Rearrangement of a set of growths



- Selection of imported experiment
- ID of growth
  - Barcode scanning
  - Manual entry
- Selection of descriptors
- Combo boxes for list of values
- Handling of multiple values
- Comments on observations and values
- Display of
  - existing observed values of growth
  - “historical” values of accession



<b>GRA 2992</b>	1433491
Helictotrichon pratense	FRA
Pflanzenhöhe (cm)	
<input type="text" value="58"/>	<input type="text" value="100"/> % #
<input type="button" value="Bem"/> <input type="button" value="Erw"/> <input type="button" value="Loe"/> <input checked="" type="checkbox"/> Ändern	
58	
Lebensform	
<input type="text" value="2"/> mehrjährig	<input type="text" value="100"/> % #
<input type="button" value="Bem"/> <input type="button" value="Erw"/> <input type="button" value="Loe"/> <input checked="" type="checkbox"/> Ändern	
<input type="button" value=" &lt; "/> <input type="button" value="Weiter"/> <input type="button" value="Scannen"/> <input type="button" value="Abbruch"/> <input type="button" value=" &gt; "/>	

- Import of Excel files with “legacy” observation data
  - Planned (2009)
- Reports (tables, diagrams) on observation data (GBIS/M)
  - In progress (2009)
- Querying for accessions using C&E data (GBIS/M, GBIS/I)
  - Planned (2009 for GBIS/M, 2010 for GBIS/I)
- Import of (external) secondary evaluation data
  - Planned (2009 onwards)
- Interface for data exchange
  - Not yet scheduled