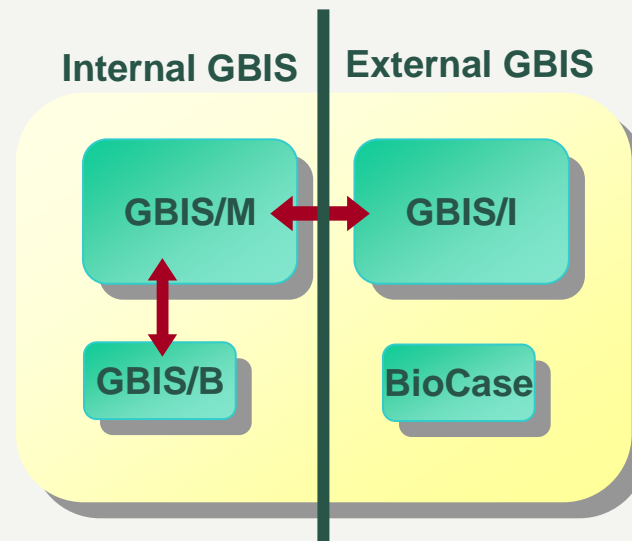


Acquisition and Management of C&E Data within the Genebank Information System (GBIS) *IPK Gatersleben*



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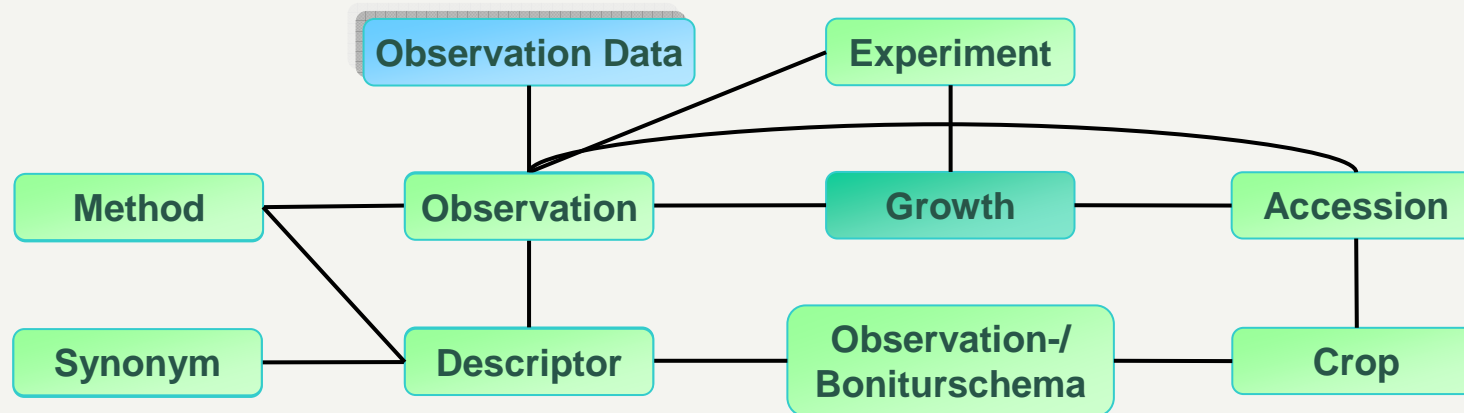
- | | |
|----------------------------|---|
| GBIS / Management | – Rich Client for internal genebank management |
| GBIS / Bonitur | – Java application for acquisition of C&E data using Pocket-PCs as mobile data collection devices |
| GBIS / Internet | – JSF-based internet application for external information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


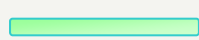
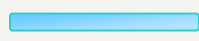
Current Efforts on C&E Data

- 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

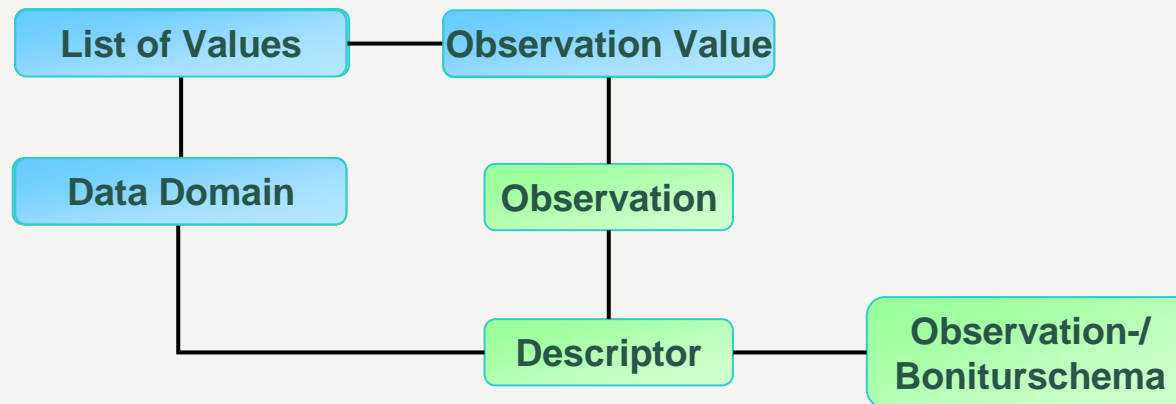
- Observations on “growths” (growth: set of plants of one accession grown together)
- Experiment: observation data on a set of growths
- Crop-specific schemas of descriptors (Boniturschema)
 - Multiple schemas for one crop for different purposes
- Observation data



-  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



GRA 2992	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=" <"/>	<input type="button" value=" Weiter"/> <input type="button" value=" Scannen"/> <input type="button" value=" Abbruch"/> <input type="button" value=" >"/>

- 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