DWB software in 15 steps
DiversityCollection

- SQL-database and rich client for the management of collection and observation data
- To document data about:
  - Collection events
  - Collection objects/observations
  - Experiments and analyses
  - Object transfer/exchange
  - Preparation and storage of specimens
  - Multimedia files
- Labels can be printed.
- Distribution maps can be created.

Tanja Weibulat
Areas of the DWB Clients

- **Query conditions**: Details to the specimen/observation like collection event, collection date, identifications, type status, collector, transactions, ...

- **Query results**: Details to the storage of the specimen, the material category (herbarium sheet, DNA sample), the different parts, ...

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...and according to the information which is selected in one of the two areas on the left, the details to the chosen line are visible in here.
DiversityCollection – ImportWizard
DiversityDescriptions

- SQL-database and rich client for the management of descriptive data
- To describe
  - traits with values of individual organisms and summarized data for taxa
  - characters of any research items (entities/objects)
- Descriptions are characterized by a triple structure, e.g. 'item-descriptor-value'
### DiversityDescriptions – ImportWizard

**Import descriptor data**

**Descriptor**
- `statistical_measurement_score` check box
- `usually_exclusive` check box
- `state_collection_model` check box
- `measurement_unit` check box
- `measurement_unit_precede` check box
- `min_plausible_value` check box
- `max_plausible_value` check box
- `wording_before` check box
- `wording_after` check box
- `data_entry_note` check box
- `values_are_integer` check box
- `sequencs_type` check box
- `symbol_length` check box
- `enable_ambiguity_symbols` check box

**Descriptor**

<table>
<thead>
<tr>
<th>Descriptor ID</th>
<th>Descriptor label</th>
<th>Descriptor subclass</th>
<th>Categorical state ID</th>
<th>Categorical state label</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>01 Which country are you from?</td>
<td>T</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>02 How old are you?</td>
<td>C</td>
<td>&lt;=20</td>
<td>21-25</td>
</tr>
<tr>
<td>4</td>
<td>03 What is your employment role?</td>
<td>C</td>
<td>Government</td>
<td>Business</td>
</tr>
<tr>
<td>5</td>
<td>04 Which of the following are you?</td>
<td>C</td>
<td>Data User</td>
<td>Data Provider</td>
</tr>
<tr>
<td>6</td>
<td>05 Which discipline community do you belong to?</td>
<td>C</td>
<td>Physical sciences</td>
<td>Chemical sciences</td>
</tr>
<tr>
<td>7</td>
<td>06.01 Which attributes do you think are important?</td>
<td>C</td>
<td>Very Important</td>
<td>Intermediate</td>
</tr>
<tr>
<td>8</td>
<td>06.02 Which attributes do you think are important?</td>
<td>C</td>
<td>Very Important</td>
<td>Intermediate</td>
</tr>
<tr>
<td>9</td>
<td>06.03 Which attributes do you think are important?</td>
<td>C</td>
<td>Very Important</td>
<td>Intermediate</td>
</tr>
<tr>
<td>10</td>
<td>06.04 Which attributes do you think are important?</td>
<td>C</td>
<td>Very Important</td>
<td>Intermediate</td>
</tr>
<tr>
<td>11</td>
<td>06.05 Which attributes do you think are important?</td>
<td>C</td>
<td>Very Important</td>
<td>Intermediate</td>
</tr>
<tr>
<td>12</td>
<td>06.06 Which attributes do you think are important?</td>
<td>C</td>
<td>Very Important</td>
<td>Intermediate</td>
</tr>
</tbody>
</table>
Diversity GIS Editor

- Tool to create, visualize, edit and store samples within a geographical environment (geoobjects)

- Stand-alone application or integrated component as part of other DWB applications, e.g. DiversityCollection or DiversitySamplingPlots

- Historical maps without coordinates can be georeferenced.

- Microsoft SQL Geometry Objects (points, lines and areas) may be displayed and edited with a background map.
DiversitySamplingPlots

- SQL-database and rich client for the management of sampling plots
- Designed to document the geographical position of geoobjects and the geometry of the plots as well of georeferenced objects on the plots
- Management of the hierarchical relation between plots and subplots
DiversityProjects

- SQL-database and rich client for the management of research projects and data sets defined and used by components of the Diversity Workbench
- Designed to document basic information about the projects/data packages/data sets/research objects, their relations and hierarchy, settings, data assets like documents and resources
- All metadata on data set level are processed here, e.g. data set owner, licenses
Ontologies

- **DiversityAgents** is the component for the management of persons and organisations.
- **DiversityReferences** is the component for the management of literature references and literature resources.
- **DiversityScientificTerms** is the component for the management of scientific ontologies, vocabularies, terminologies and terms.
- **DiversityGazetteers** is the component for the management of geographic thesauri like the GettyThesaurus.
DiversityTaxonNames

- SQL-database and rich client for the management of taxonomic names and related information
- Designed to document taxonomic names with nomenclature, accepted names, synonyms, classification, typification and common names
- It is appropriate to create taxon reference lists, checklists with geographical or nature conservation categories as well as with other parameters
DiversityMobile

- Smartphone App for scientists
- Monitoring ecological and biodiversity data offline in the field
- Monitoring data (offline) in natural history collections
- Taxon lists, vocabularies and topographic maps are provided
- Recording multimedia data
- Option to create individual analysis
DiversityImageInspector

- Scans a bulk of images for included barcodes and configurable EXIF metadata (e.g. GPS coordinates, author, date and time)
- The results are shown in a table, which may be saved as a TAB separated text file
- The text file might be used for Wizard guided import in DiversityCollection
- There is a function to rename the input image files by adding a prefix to the file name
DWB Links

http://diversityworkbench.net

http://diversityworkbench.net/Portal/Technical_documentation_at_a_glance

http://diversityworkbench.net/Portal/DWB_environments_alternatives

http://diversityworkbench.net/Portal/DWB_network

http://diversityworkbench.net/Portal/DWB_network_and_installations:_Real_life_examples

http://diversityworkbench.net/Portal/How_to_create_a_personal_local_DWB_environment

http://diversityworkbench.net/Portal/Recommendations_for_developers

http://www.diversitymobile.net

http://www.diversitymobile.net/wiki/DTN_Taxon_Lists_Services