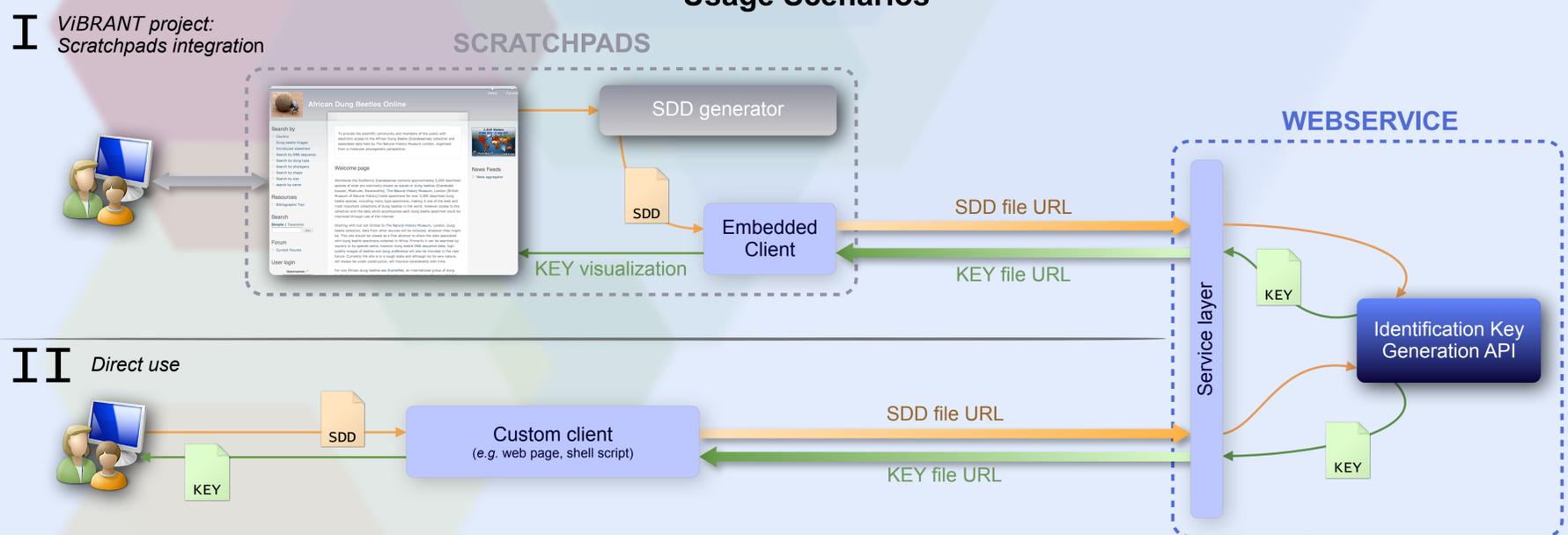


A new open source identification key generation WebService

Summary: Identification keys are widely used by scientists to identify taxa. This new identification key generation WebService will be able to generate single-access keys on demand, for single users or research institutions. It will receive user input data (using the standard SDD format), accept several parameters for the key generation (impacting the key topology and representation), and will support several output formats. Furthermore, key generation automation will be possible thanks to the WebService architecture.

As a part of the ViBRANT project, this WebService will be integrated in the Scratchpads biodiversity networking tool, with an embedded client component (usage scenario I). It will also be possible for anyone to develop his own client component in order to call the WebService directly (usage scenario II). The whole WebService and its source code will be freely available, thus allowing large institutions to deploy the WebService on their own network and adapt it to their specific needs.

Usage Scenarios



Project architecture



The project is developed with the Java/J2EE programming platform, and supports both WebService communication protocols (SOAP and REST). Thus it can be deployed on any java application server (e.g. Apache Tomcat), and easily queried by WebService clients.

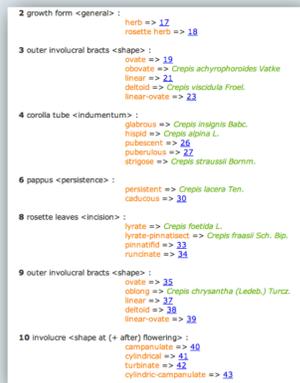
Furthermore, the modular architecture of the project allows developers to re-use the source code (partially or in its entirety) to adapt the project to their specific needs (e.g. integrating the key generation API in a standalone software).

Ongoing developments

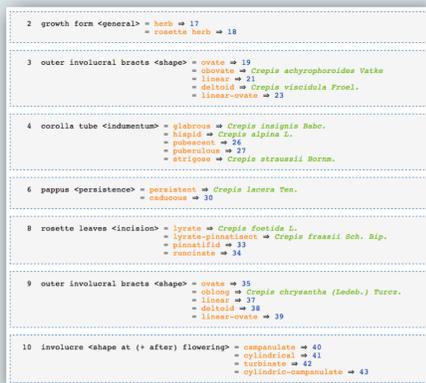
HTML file, hierarchical representation



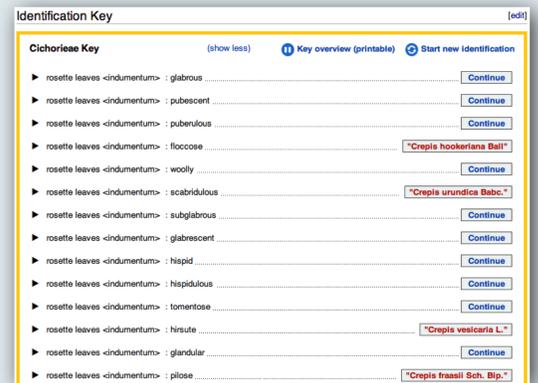
HTML file, flat representation



Wiki file, flat representation



Wiki file, interactive flat representation (<http://species-id.net>)



The screenshots above illustrate the variety of possible identification key outputs. They were produced with a prototype of the WebService (www.identificationkey.fr). A more advanced prototype will be released next December for the ViBRANT project (<http://vibrant.eu>).