

UmbrellaPlus
B. Abt, M. van Daalen, H.J. Weyer
February 2012

There is a strongly increasing need for identification of users of large facilities on a European scale. Examples are pan-European harmonization of proposal handling, remote user data access, and remote experiment access.

As answer to this request, the *Umbrella* system has been developed within the EuroFEL ESFRI project. It allows for unique identification of a user on the European scale but at the same time respects confidentiality of user information towards users and facilities. It is designed as a minimal system, relying as much as possible on the existing resources offered by the local user office systems at the facilities and providing additional functionalities only where needed. One of the main concepts is the hybrid data structure, i.e. the subdivision of an entry into a central, common part and a site-specific local part. As consequence of this concept, the *Umbrella* system automatically contains all the proposal-related functionalities from the underlying local systems (submission, review, beamtime scheduling, on-site administration).

Recently, however, use cases turn up with a need for the hybrid structure and communication concept, but without a need for the proposal-related elements of the original concept. Examples are systems for smaller university facilities without general user operation or with user operation without the fine-grained proposal structuring typical for the photon / neutron communities.

For these cases, the *UmbrellaPlus* system is proposed, where all proposal-related elements are removed and where the system is reduced to the basic communication part (authentication).

The main features of *UmbrellaPlus* and the differences to the basic *Umbrella* are:

- All proposal-handling elements are completely removed
- *UmbrellaPlus* focuses on user handling (matching of users) only.
- *UmbrellaPlus* is designed as a black box (VM image or device), which can be put into operation with minimal configuration effort.
- *UmbrellaPlus* can easily be combined with other user-management software (e.g. LDAP, ADS, generic RDBMS).
- There is minimal need for specific local expertise, e.g. software updates should be provided remotely via a controlled repository (deb-style).

Presently, *UmbrellaPlus* is in the design phase and the basic concept is discussed with prospective users. If there is sufficient interest, the next step will be to determine the resources required for developing a prototype. This should be straight forward, as all elements of the new system are known from the *Umbrella* prototype phase. In any case developments of *Umbrella* and *UmbrellaPlus* should be strongly harmonized.