Enhancing Collaboration by Providing a Shared Environment in wEMBOSS

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ABSTRACT

wEMBOSS, a web interface for EMBOSS suite of programs, is a powerful tool developed to serve the needs of molecular biology user community. It started as a coordinated effort from *Martin Sarachu* of the Argentinean EMBnet Node and *Marc Colet* from the Belgian EMBnet node.

Collaboration is a process where two or more people work together to achieve a common goal. Collaboration is especially important to researchers in obtaining better results. wEMBOSS being a platform for research, the idea of introducing a collaborative environment into wEMBOSS seems worth considering. The current project deals with implementing a shared environment in wEMBOSS by introducing the concept of groups and sharing. This kind of a shared environment not only helps with better but also faster results. The project's administrator interface helps manage data efficiently. Another important point to be discussed about wEMBOSS is the authentication system. wEMBOSS uses the basic HTTP authentication where in, it is mandatory for the users of wEMBOSS to be known by the server where wEMBOSS resides. Any outside user cannot use wEMBOSS. It does not sound sensible and secure to provide access to any random user to the server where wEMBOSS resides. In order to solve this problem, the current project uses a different authentication system. The Shibboleth system is integrated with wEMBOSS which provides access to users from federated organizations formed based upon trust. Users are provided access to wEMBOSS after authenticating and authorizing themselves.