



OATS: Open source assistive technology - a way forward

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Project Summary

This poster describes the plans for OATS (Open-source Assistive Technology Software), the development of **the first open-source software repository and forge dedicated to Assistive Technology (AT)**. Web-based, OATS will provide a 'one-stop shop' for end users, clinicians and open-source developers to meet, exchange notes, promote new ideas, develop new software and download reliable open-source AT software. Initially, the OATS Project is a one-year pilot project finishing in March 2006. If successful, its exit strategy will be for it to become a self-supporting, ongoing web-based service for end users, AT professionals, and open-source developers.



The Repository

Via its repository or library the project will make existing OATS more accessible by:

- Listing software in a central web-based database
- Offering simple and easy methods to find appropriate software
- Standardising the downloading and installation of software
- Providing a level of quality assurance to guide potential end users



The Forge

Via its forge or 'dating agency' the project will also encourage the development of innovative OATS by:

- Attracting volunteer software developers
- Developing new AT software based on specific user needs
- Providing a dynamic discussion forum for users and open-source developers



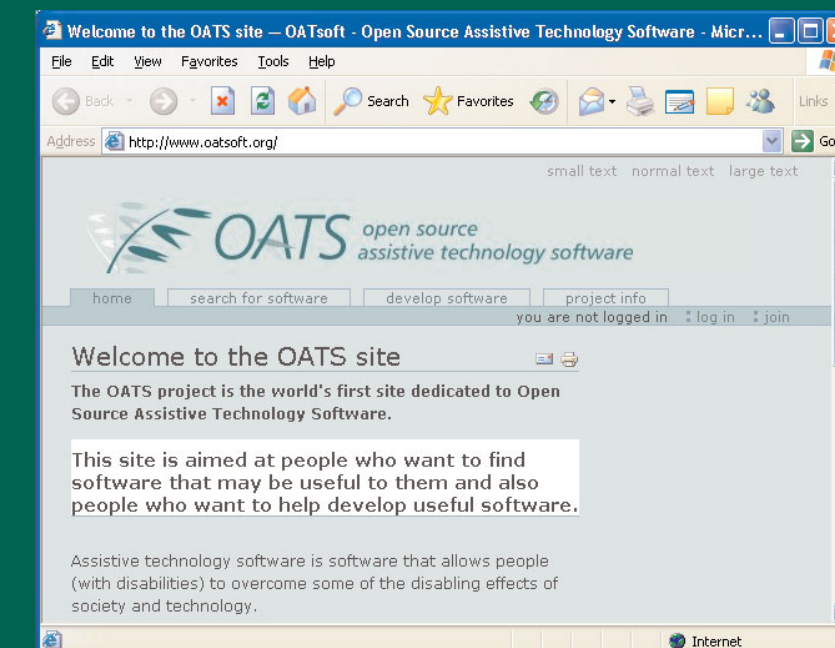
Other Benefits

OATS will embrace copyright-free material such as symbol libraries, or software resources such as grid sets. The repository will also allow users of AT to find software that, although not open-source, is nevertheless free.

- Any software license where the end software is available to a user at no cost will be included
- More emphasis will be given to software that is on its way to being open-sourced

The OATsoft website

The deliverable of this project is a website. This website, www.oatsoft.org, will be unique even among open source websites, since it aims to allow end users, developers and professionals in the AT field to interact in the same place.



End Users & AT Professionals

Using an accessible web interface, users will be able to find software in a variety of simple ways. From logging on to downloading software will take less than five clicks. Users will not only be able to download existing software, but also register a need or request for AT software development.

AT Developers

Developers will have a dedicated area for project development featuring an integrated code versioning system, bug and feature tracking, forums, documentation and publishing tools. In addition, developers will receive direct feedback from end users and 'power end user' testers (end users experienced in testing pre-release software).

Professionals and Clinicians

Professionals and clinicians will sit between the two groups and contribute on both sides, both suggesting development ideas, feeding back information and providing software to clients.

How does the OATS website work?

OATS is based on PLONE, an open-source CMS. Plone meets a number of accessibility standards and other criteria including that defined by the World Wide Web Consortium (W3C - www.w3.org).

www.oatsoft.org

Project Context

Globally, the Assistive Technology (AT) software field is small and specialised. As we all know, AT development remains an underfunded field with its key players often working in relative isolation. Software is becoming an increasingly powerful and effective tool within the field. However the restrictions of the field are holding back development. Open-source software offers a new way of driving forward the Assistive Technology field. The ethos of OATS, as with all open-source activities, is to make its source code freely available to end users and

developers, who then have the right to modify and redistribute the software. The project has been established to evaluate what demand and interest there might be for open-source software within the AT field and whether this would ultimately warrant the establishment of an ongoing, self-supporting web service. If successful, the OATS 'Repository and Forge' will offer the AT field an innovative, inexpensive opportunity to create, share, and above all disseminate good, well-maintained products that have high AT end user value. Importantly, it will also offer the opportunity for end users to drive the development of software in a direction that provides truly user-centred software.

Why OATS?

Open-sourcing offers great potential for AT software users. However, currently there are a number of barriers that stop its wider use within the AT community. It is generally difficult to find on the Internet and, until the OATS Project, there have been no specific websites dedicated to developing or downloading AT software.

Open-source software can also be unfriendly to install, often obliging the user to download many different packages before it can be set up and used. Often it is still 'under-development', poorly documented or technically demanding,

something that the end user finds frustrating and irritating. To see just how complicated this can be for the lay enquirer, one need only visit sourceforge.net - finding OATS products here is like experiencing death by a thousand cuts!

The OATS Project's repository will strip away all the technical complexity and provide via its database and search engine an efficient and intuitive way to access good quality OATS. By removing these barriers to open-source AT software, users will not only have a single point of contact for obtaining open-source software but volunteer developers will also discover a forum where they can develop ideas and write software that meets the real needs of specific end users.