

InfiniTe: Hypermedia-Supported Information Integration

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ABSTRACT

We are developing an information integration environment, InfiniTe, to assist software engineers in finding, managing, and evolving relationships between software artifacts. Our poster will focus on InfiniTe's integration with the Chimera open hypermedia system.

INTRODUCTION

A key challenge in software engineering is managing the numerous relationships in the artifacts created during software development; we refer to this task as *information integration*. Open hypermedia is well suited to supporting information integration. It provides links that are stored separately from the information they relate. This allows different sets of relationships over the same set of software artifacts. Open hypermedia also permits integration of hypermedia services directly into third-party tools [2, 3, 4] allowing software engineers to use their current tools while gaining the benefits of open hypermedia. This paper describes a poster presentation of the InfiniTe information integration environment and its integration with the Chimera open hypermedia system [1].

INFINITE

InfiniTe's conceptual architecture is depicted in Figure 1. The model consists of users, data sources, integrators, translators, contexts, a repository, and an open hypermedia layer. *Translators* are used to import and export information from the environment. *Integrators* work within the environment to assist users in finding, creating, and maintaining relationships. These relationships can be exported from InfiniTe and imported into the open hypermedia layer. These relationships can then be viewed in the artifact's original editing environment, as long as this environment is integrated with an open hypermedia system.

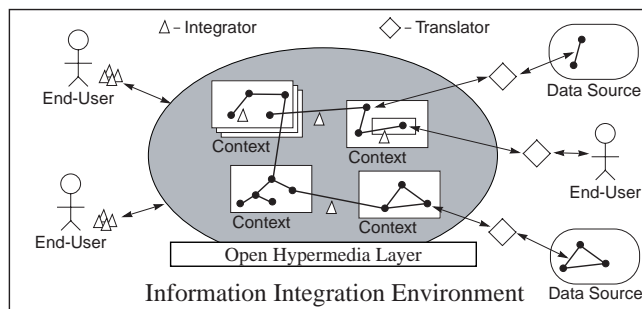


Figure 1: InfiniTe's Conceptual Architecture

INTEGRATION WITH CHIMERA

The poster will present an overview of InfiniTe along with details of its integration with Chimera. The InfiniTe environment can be used to extract keywords from text documents. This information can then be exported from InfiniTe as anchors and links which can be imported into the Chimera open hypermedia system. The original text documents can then be viewed with an integrated text viewer; the exported anchors and links are used to traverse between the original documents and a keyword index generated by InfiniTe. The Chimera XLink importer automates the process of importing this information into Chimera. This process can be adapted to other open hypermedia systems in a straightforward manner.

CONCLUSION

This paper has described a poster presentation of the integration between the InfiniTe information integration environment and the Chimera open hypermedia system. This poster topic is important because it shows how software engineers can perform information integration tasks without having to give up the software tools that they use on a daily basis.

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