Zeno
Albisser

Livio
Marti

CoastGuard

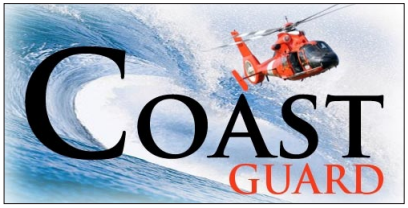
Web Single Sign-On for HSR

Graduate candidates	Zeno Albisser, Livio Marti
Examiner	Prof. Peter Sommerlad
Co-examiner	Marcel Huber, Telekurs Financial Ltd., Zürich
Subject area	Software
Project partner	HSR Informatikdienste, Felix Huber, Rapperswil-Jona SG

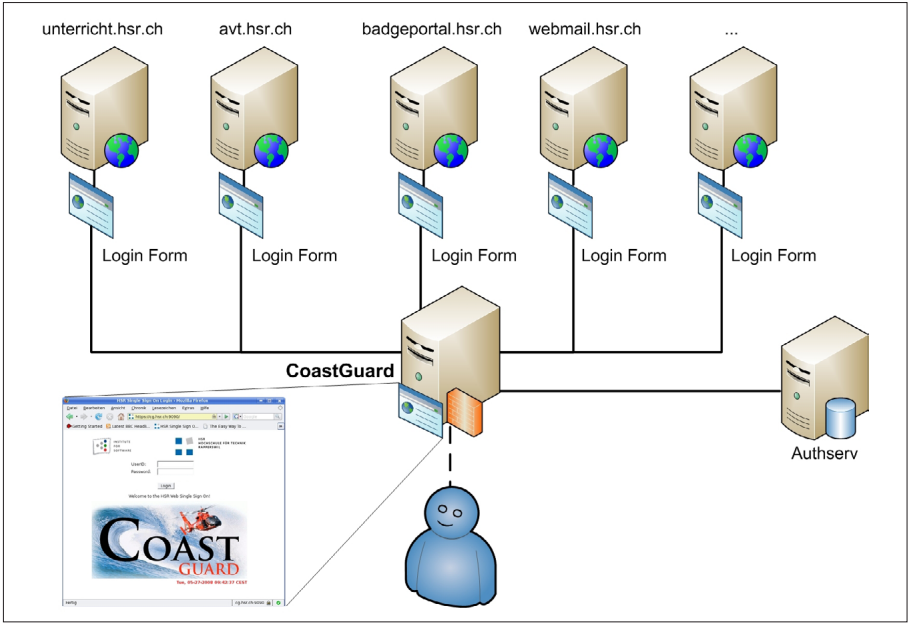
CoastGuard is a flexible and easily configurable web single sign-on solution based on Coast (C++ Open Application Server Toolkit). At HSR all web applications require a user to type the same username and password again for each application used. CoastGuard provides a single login session to be shared across several web applications. An existing web application needs no adaptation to be used as a CoastGuard back-end application, because CoastGuard automatically fills in the user credentials to the application´s login form.

In our previous term project we already ported Coast to current Linux systems. With CoastGuard we created a web single sign-on prototype for HSR based on Coast. HSR´s existing web service is used for user authentication.

After a successful login, CoastGuard usually acts as a server-side proxy between the client and the back-end application. It uses dynamically configurable mechanisms for modifying the content of requests and replies on the fly. Therefore it can also catch events such as expired sessions of back-end applications and can automatically re-



CoastGuard Logo



Architecture Draft

authenticate the user for the given application.

Two different operation modes are available and configurable per back-end application. Either all session data is kept on the CoastGuard server and a client only holds CoastGuard´s session cookie, or the complete session data is handed over to the client after a successful login.

A CoastGuard user experiences the comfort of only a single login. Logins to the back-end applications are handled automatically. The web application´s original login forms are no longer forwarded to the user. CoastGuard will be installed as a productive system at HSR in summer 2008.