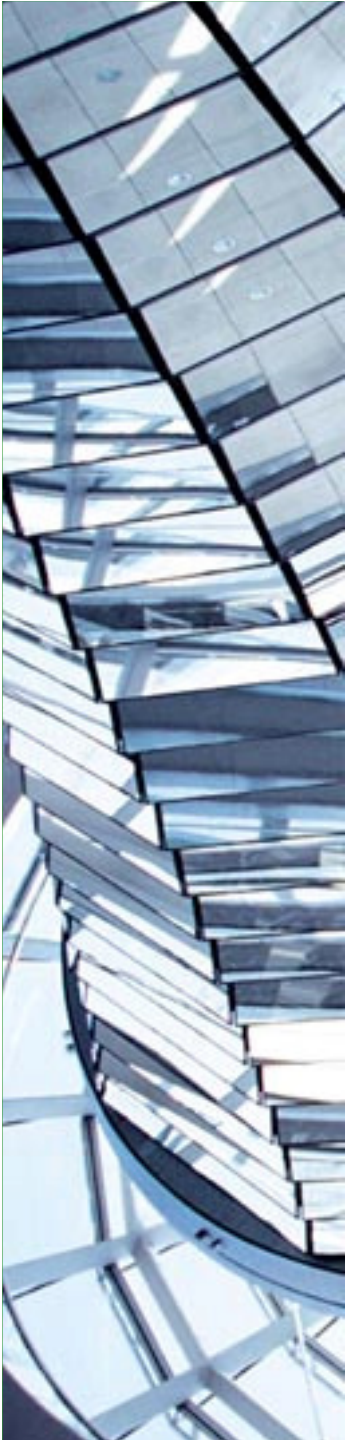


The background of the slide is composed of two vertical panels of architectural photography. The left panel shows a close-up, low-angle view of a modern building's interior, featuring a complex, curved structure with a grid of dark lines and light-colored panels, possibly a staircase or a large atrium. The right panel shows a similar view from a different angle, highlighting the smooth, curved surfaces and the play of light and shadow. A thin, dark horizontal line runs across the top of the slide, just below the top edge of the images.

1. Introduction

Reference Architectures and Patterns

Darmstadt University of Applied Sciences
Prof. Dr. Bernhard Humm



Agenda

→ Organisation

Reference Architectures and Patterns

Lectures

Lab

Get to know each other

- What is your background?
- Which programming languages are you proficient in?
- What is your programming expertise?
- Have you programmed in Java?

Organisational Issues

■ Lectures:

- Weekly on Monday, 14:15 – 15:45 in D19/07
- Download slides from my homepage
www.fbi.h-da.de/~b.humm

■ Labs:

- Fortnightly on Monday, 10:15 – 12:30 in D19/07, starting Oct. 20th
- Download assignments from my home page
- Assignments will be performed on your own notebook computers. You need WLAN access
- Assignments will be performed individually or in pairs (teams of 2 students)
- It is necessary to finish assignments at home
- Tutoring during lab sessions by Bernhard Humm

■ Examination

- Oral examination at the end of the semester



Agenda

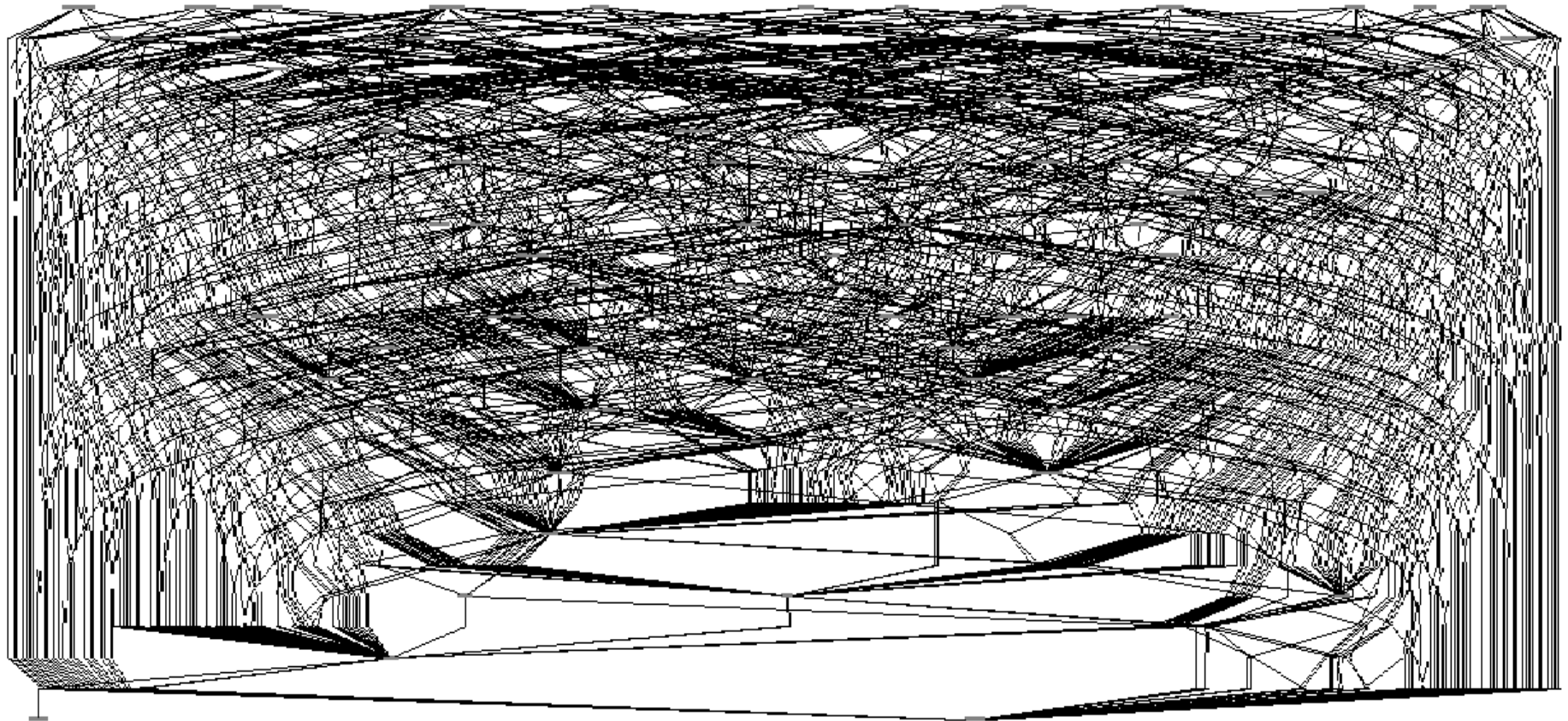
Organisation

→ **Reference Architectures and Patterns**

Lectures

Lab

Architecture or chaos?



Source: Erich Gamma, "100 OO Frameworks, Pitfalls and Lessons Learned", 1997

Prof. Dr. Bernhard Humm, Darmstadt University of Applied Sciences, 08.08.2008



Building architecture: defense



Source: www.musoft.org

Prof. Dr. Bernhard Humm, Darmstadt University of Applied Sciences, 08.08.2008

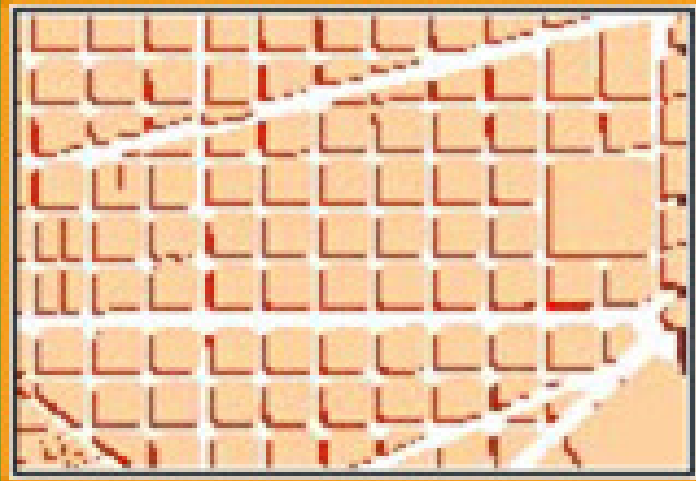
Building architecture: to impress



Source: www.musoft.org

Prof. Dr. Bernhard Humm, Darmstadt University of Applied Sciences, 08.08.2008

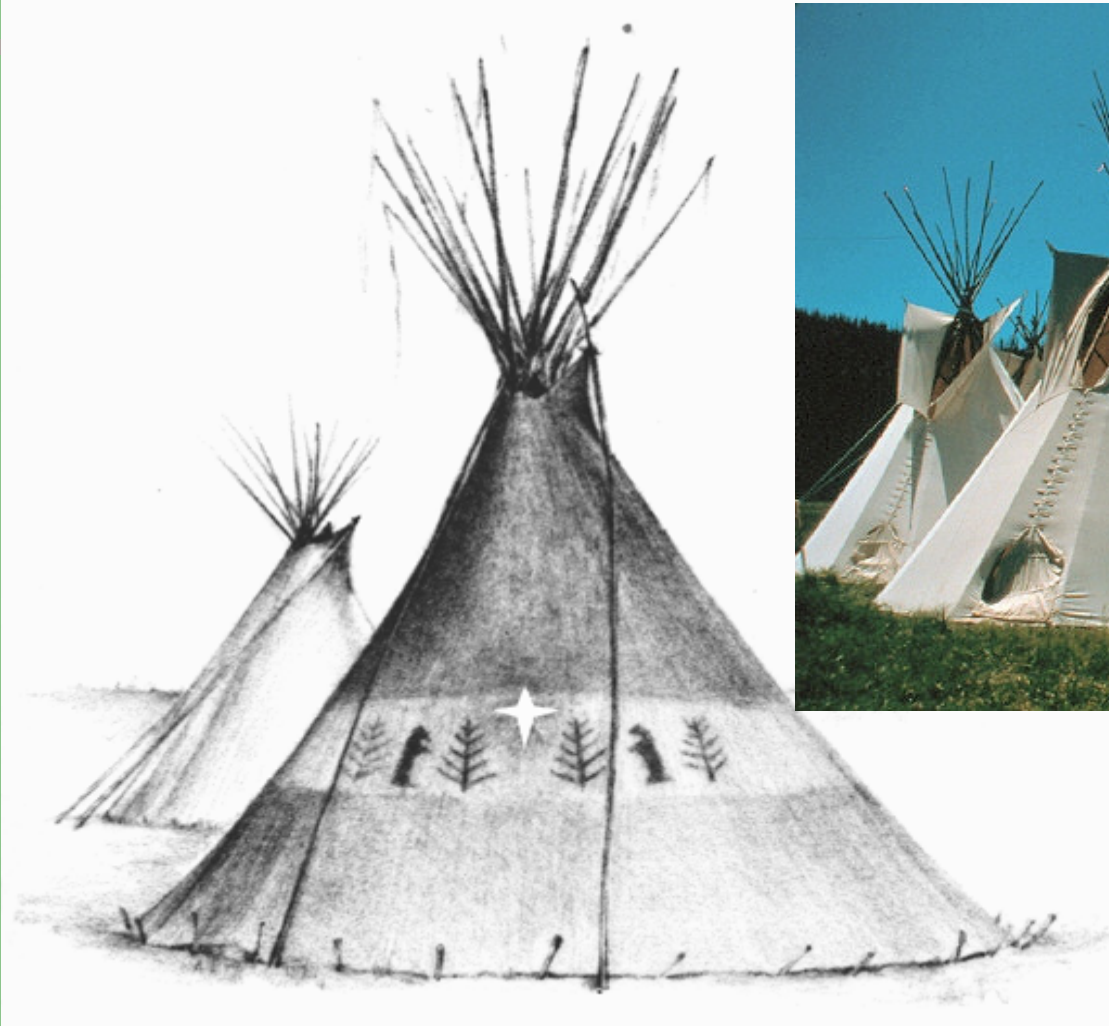
Building architecture: traffic flow



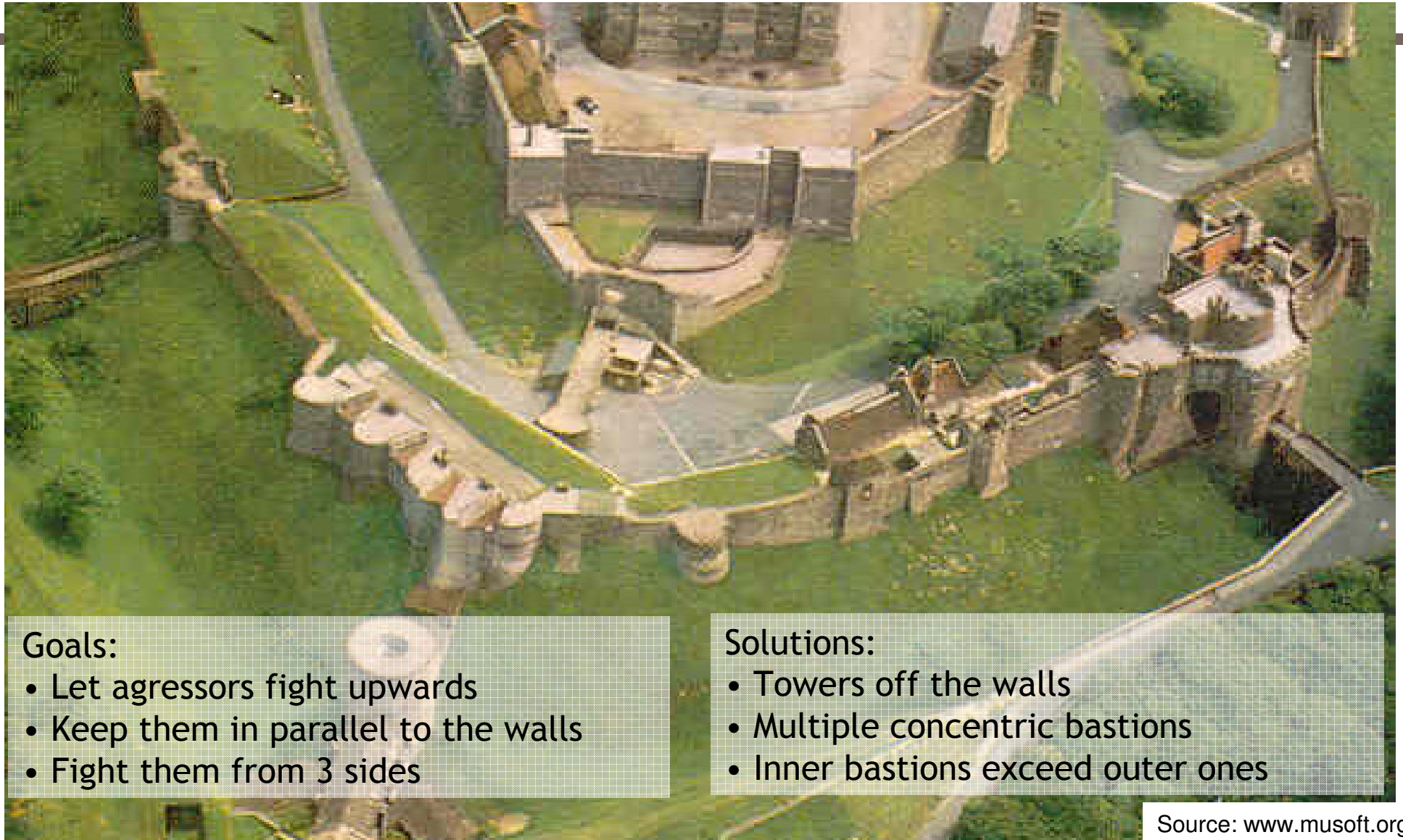
Source: www.musoft.org

Prof. Dr. Bernhard Humm, Darmstadt University of Applied Sciences, 08.08.2008

Building architecture: mobility



Patterns in building architecture



Goals:

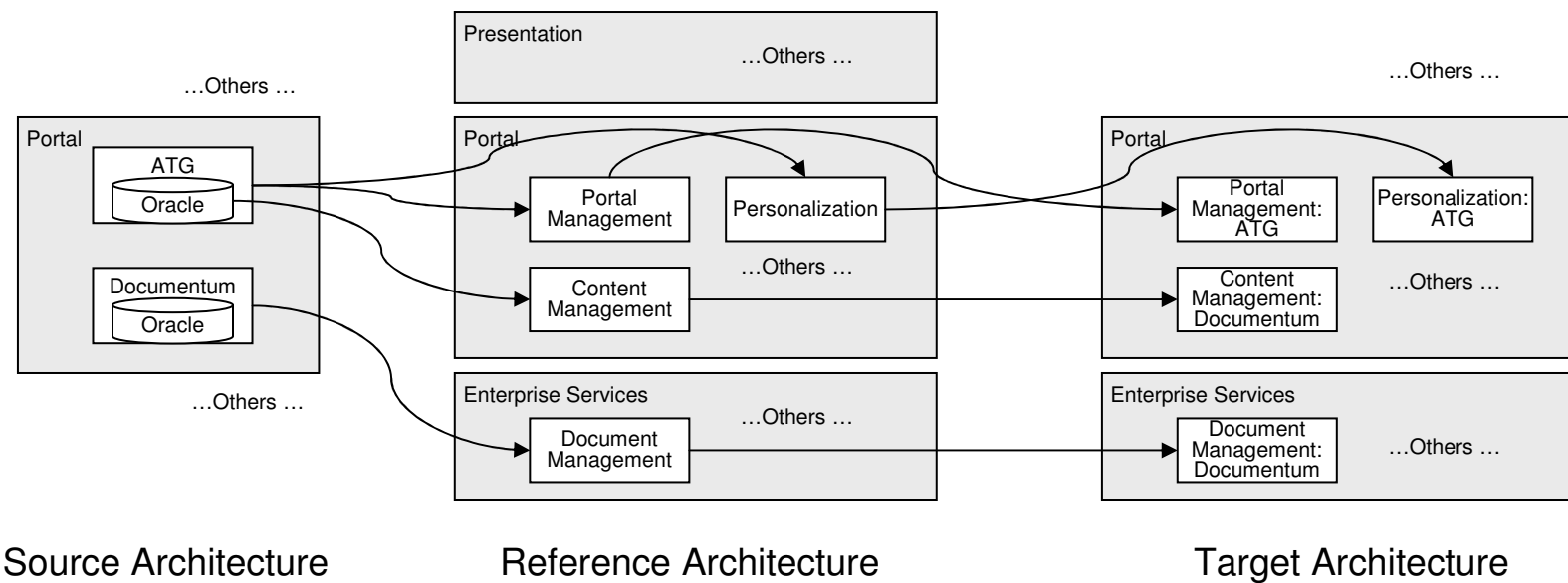
- Let aggressors fight upwards
- Keep them in parallel to the walls
- Fight them from 3 sides

Solutions:

- Towers off the walls
- Multiple concentric bastions
- Inner bastions exceed outer ones

Source: www.musoft.org

Example for the use of reference architectures





Agenda

Organisation

Reference Architectures and Patterns

→ **Lectures**

Lab

Overview of the course



Introduction

A reference architecture for business information systems

Application kernel facade

Persistence and transaction

Authorization

Client architecture

Other reference architectures: SOA, BI, systems integration, ...



Agenda

Organisation

Reference Architectures and Patterns

Lectures

→ **Lab**

Application domain: library application



Bibliothek der Hochschule Darmstadt - Search Short List - Microsoft Internet Explorer

Adresse <http://pica1.lhb.tu-darmstadt.de/DB=FBDA/SET=1/TTL=1/CMD?ACT=SRCHA&IKT=6015&SRT=YOP&TRM=siedersleben>

Hochschule Darmstadt - Bibliothek

suchen (und) Suche über alles (ALL) sortiert nach Erscheinungsjahr

siedersleben suchen

Kurzliste Titeldaten Suchgeschichte

Recherche

Katalogauswahl

Benutzerdaten

Hilfe

Home

Ende

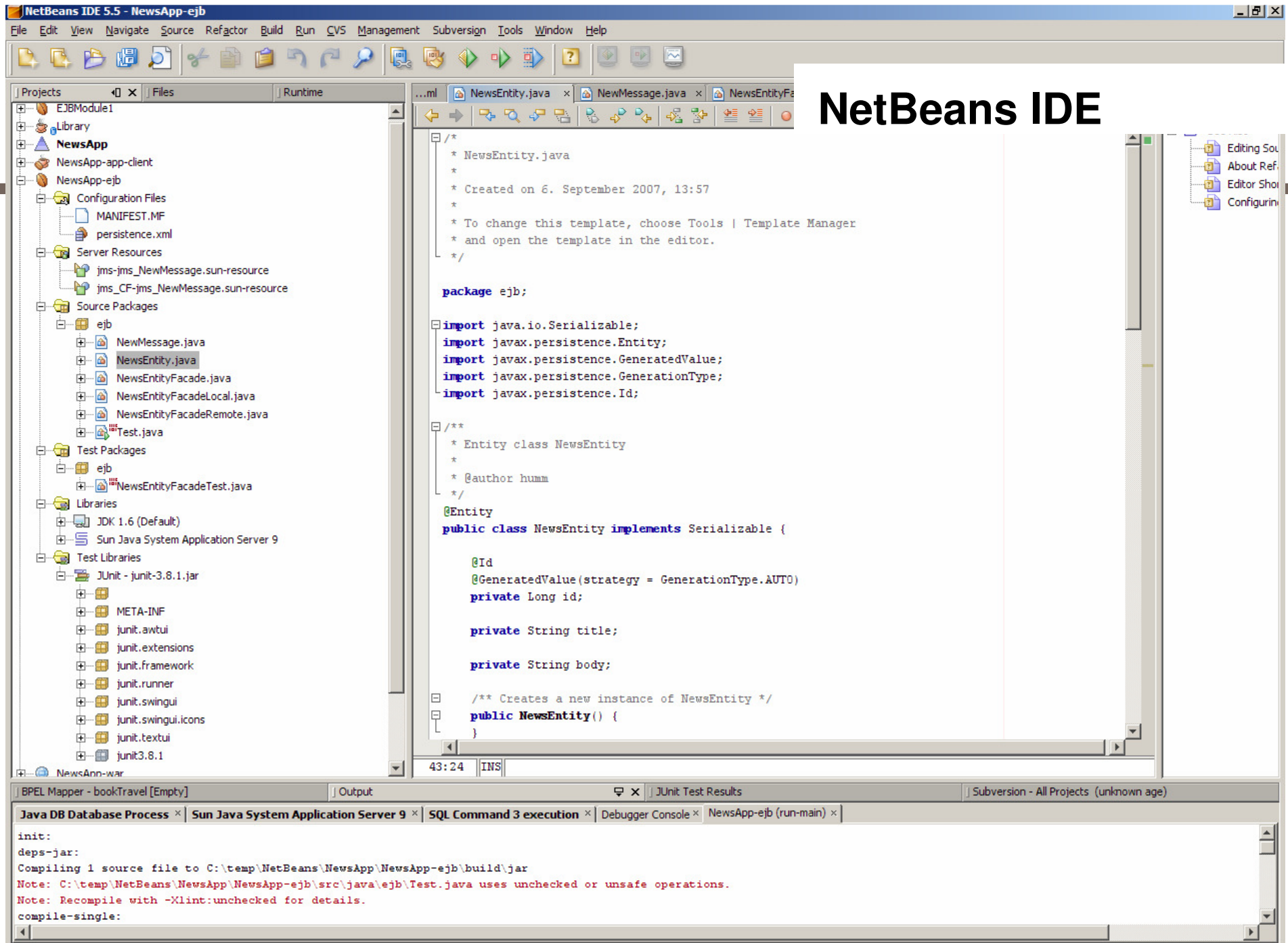
Ihre Eingabe war:
suchen (und) (Suche über alles (ALL)) siedersleben
 Es sind 2 Treffer.
 Dies sind die Treffer 1 - 2.

1. [Moderne Softwarearchitektur : umsichtig planen, robust bauen mit Quasar](#)
 / Siedersleben, Johannes . - 1. Aufl., korr. Nachdr. - Heidelberg : dpunkt, 2006
2. [Softwaretechnik : Praxiswissen für Software-Ingenieure](#)
 / Siedersleben, Johannes . - 2., überarb. und aktualisierte Aufl. - München [u.a.] : Hanser, 2003

[Download](#)

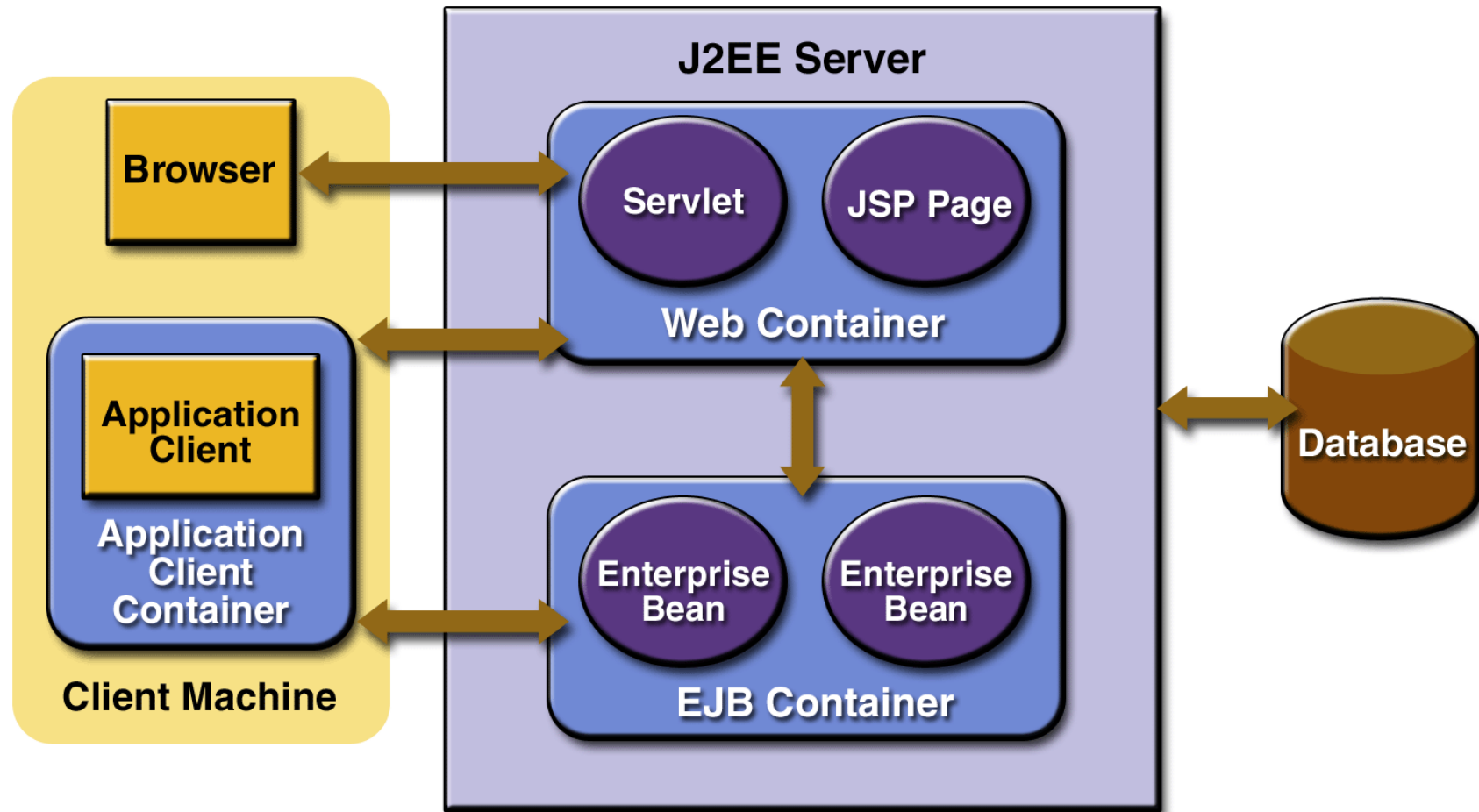
Begriff	Typ	Anzahl
siedersleben	Suche über alles (ALL)	2





NetBeans IDE

Java Enterprise Edition / Enterprise Java Beans 3.0



Subversion configuration management

subversion.tigris.org - Microsoft Internet Explorer

Adresse <http://subversion.tigris.org/>

Google subversion

COLLABNET Enterprise Edition Login Register

Tigris.org: Open Source Software Engineering Tools

My pages Projects Community

Projects > subversion

Project tools

- Project home
- Downloads
- FAQ
- License
- Membership
- Announcements
- Mailing lists
- Mailing list etiquette
- Development
- Roadmap
- Issue tracker
- Task List
- Subversion Book
- Documents & files
- Version control
- Links
- Testimonials
- Commercial support
- Security

Search


This project Go

Advanced search

POWERED BY COLLABNET

The Tigris.org site will be offline for 30 minutes starting 2006-01-30 at 04:30am PST.

If you were [registered](#) and [logged in](#), you could join this project.



The goal of the Subversion project is to build a **version control system** that is a compelling replacement for CVS in the open source community. The software is released under an [Apache/BSD-style](#) open source license.

Latest Release

Subversion 1.3.0 is [now available](#). Please see the [release notes](#) for what's new in the 1.3 series.

Got Questions?

The [Subversion Book](#) and [FAQ](#) can usually answer most questions. You can also ask on the users@subversion.tigris.org mailing list, or in IRC at [#svn](irc://irc.freenode.net). (Note that the mailing lists are [moderated](#), so there may be a delay before your post shows up.)

Subversion's Features

- Most current CVS features.**
Subversion is meant to be a better CVS, so it has most of CVS's features. Generally, Subversion's interface to a particular feature is similar to CVS's, except where there's a compelling reason to do otherwise.
- Directories, renames, and file meta-data are versioned.**
Lack of these features is one of the most common complaints against CVS. Subversion

<http://subversion.tigris.org/>

Literature

- Material on my home page www.fbi.h-da.de/~b.humm

- Installation guide
- Specification (overview)
- Detail specification (JavaDoc)
- Assignments

- Books and Articles:

- Guido Krüger: *Handbuch der Java Programmierung*: <http://www.javabuch.de/download.html>
- NetBeans JEE tutorials: <http://www.netbeans.org/kb/trails/java-ee.html>
- Johannes Siedersleben: *Moderne Softwarearchitektur*. dpunkt-Verlag 2004
- Johannes Siederlseben et. al: *Quasar: Die sd&m Standardarchitektur* (download from my home page)
- Martin Haft, Bernhard Humm, Johannes Siedersleben: *The Architect's Dilemma – Will Reference Architectures Help?* (download from my home page)

