



Banshee: Implementation of Computer-aided Workout Planning at HSNS

Klaus Hammermüller and **Manfred Zeilinger**

Institute of Software Technology
Vienna University of Technology
Vienna, Austria, Europe
klaus@ifs.tuwien.ac.at
<http://www.ifs.tuwien.ac.at/asgaard>

Army Sport Science Service
Army Sport Center
Breitenseerstr. 116, A-1150
Vienna, Austria, Europe



Overview

- **Motivation**

- Impact of Planning in Practical Use
- Limitations of Conventional Software

- **The *Banshee* Implementation of the *Asgaard* Project**

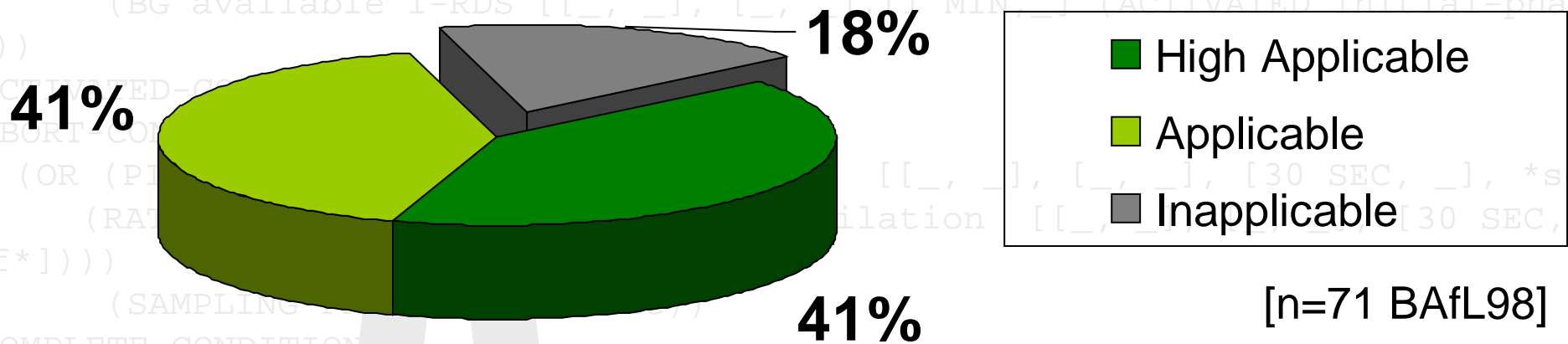
- Aims and Solution Approach
- Architecture and Roadmap
- Distributed Components
- Re-useability and Push Approach

- **Conclusion**

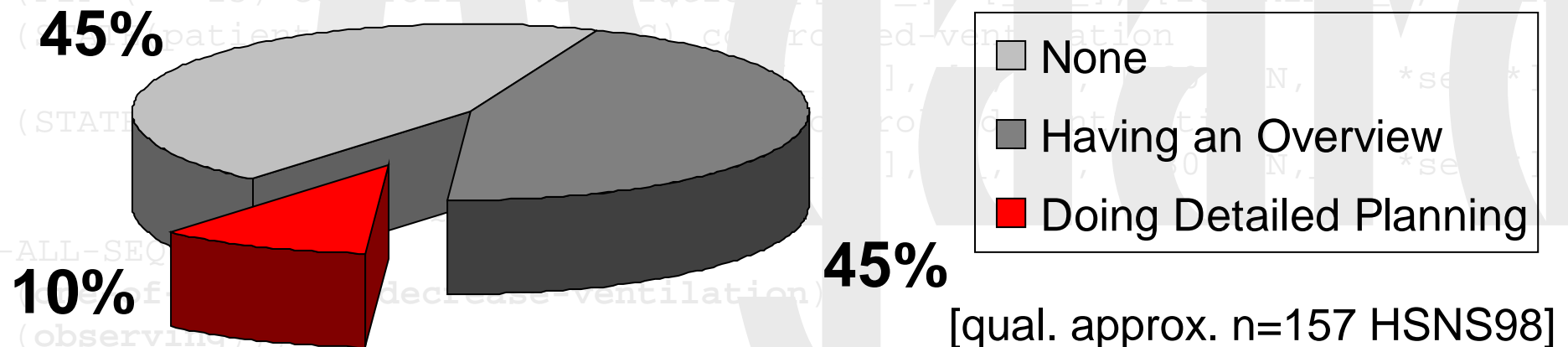


Impact of Planning in Practical Use (1)

Evaluation: The Use of Computer-aided Support



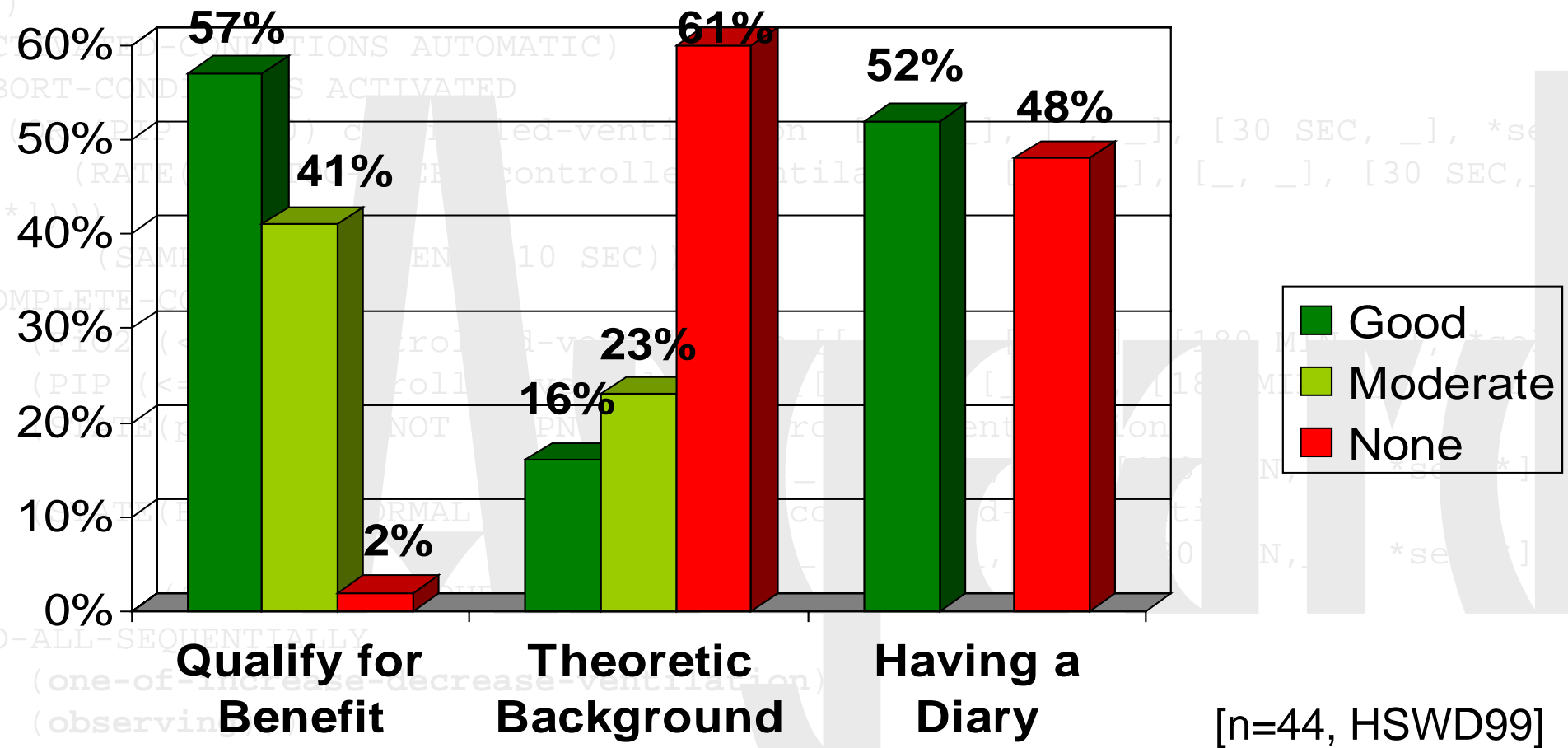
Planning Work Done by Austrian Trainers





Impact of Planning in Practical Use (2)

Knowledge of Austrian Top-athletes

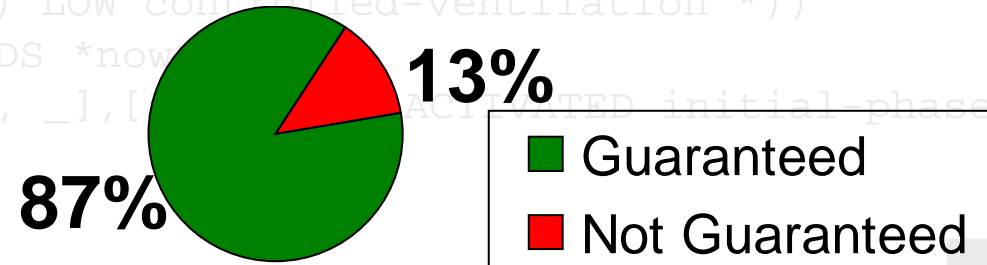




Technical Limitations of Available Software

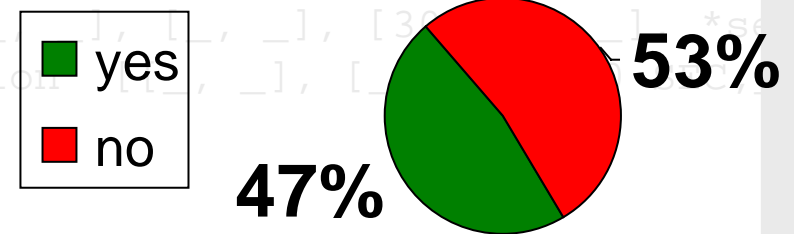
- **Reliability:**

Is data-integrity ensured, are there no data-losses?



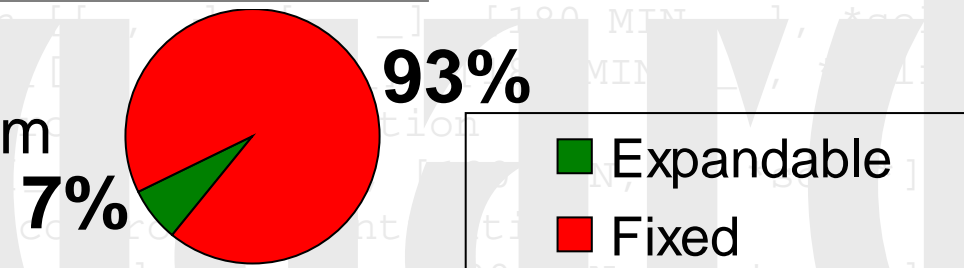
- **Scalability:**

May the system grow without losing reliability?



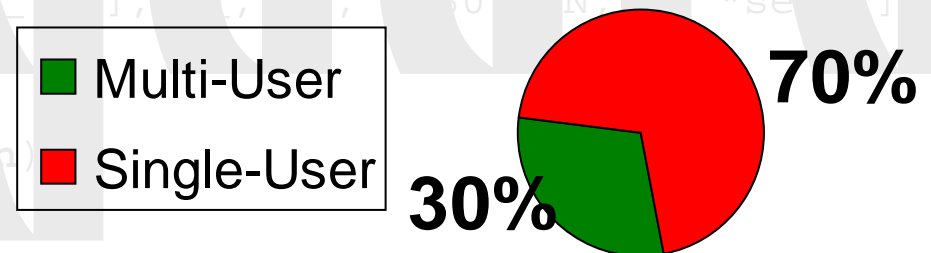
- **Structure:**

Can the content of the system be adapted to your needs?



- **Groupware:**

Can members of a group share and re-use their work?



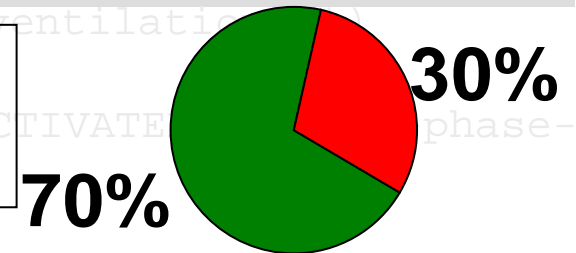


Limitations to the Use of Available Software

- **Computer Skills:**

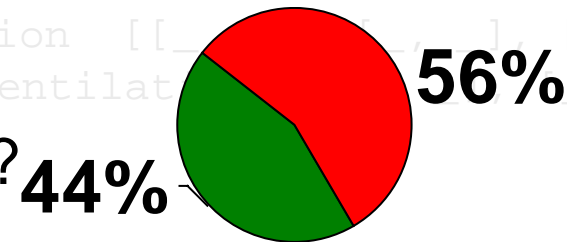
Is the software easy to use?

■ Easy to Use
■ Expert Work



- **Time Consumption:**

Does use the software take extra time for planning work?



- **Benefits:**

- Major statistics **93%**: get feedback immediately
- Knowledge-support **13%**: “learning system”
- Push-system **0%**: system triggers information delivery
- Critique and decision support **0%**: help to plan

[pieces of software=15 IfS-TU99]



Problems to be solved

- **Software Will only be Used, if**
 - It is easy to use
 - Doesn't consume extra time
- **Software Will only be Useful, if**
 - It is a learning system
 - Pushes information to the user
 - Supports the planning work itself
- **Maximum Effort is Achieved, if**
 - All involved people participate in the system
 - Existing work and knowledge can be reused



Aims of the **Banshee** Implementation

- **Target Groups**

We focus on a support of low level-amateurs, young athletes and instructors of the basic Army training

- **Features (additional to the last page)**

- Interfaces for knowledge-acquisition
- Automatic creation of individual workout-packages
- Support of multi-sports, multi-groups and multi-users
- Group- and sport oriented statistics

- **Science**

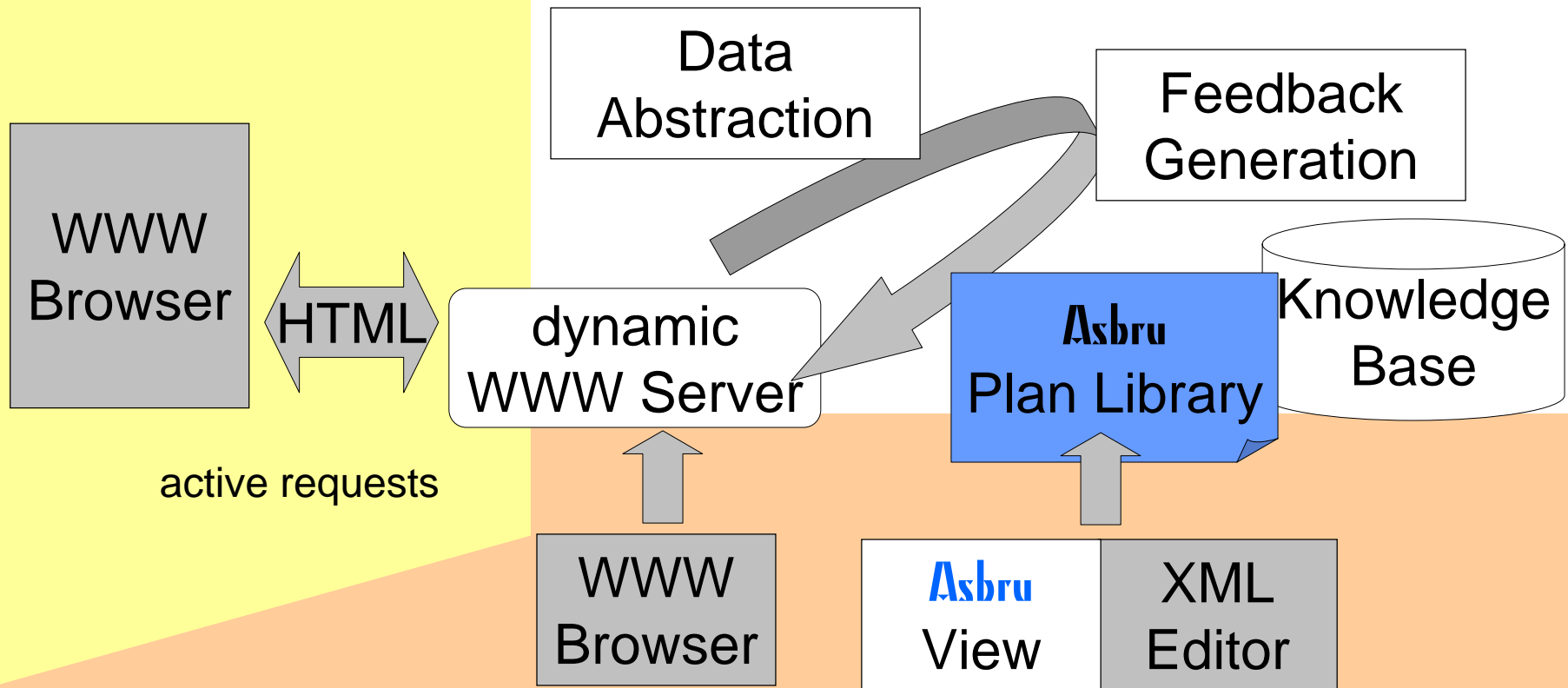
Creating of an evaluation environment for planning-methods



Banshee Architecture

User - Interaction

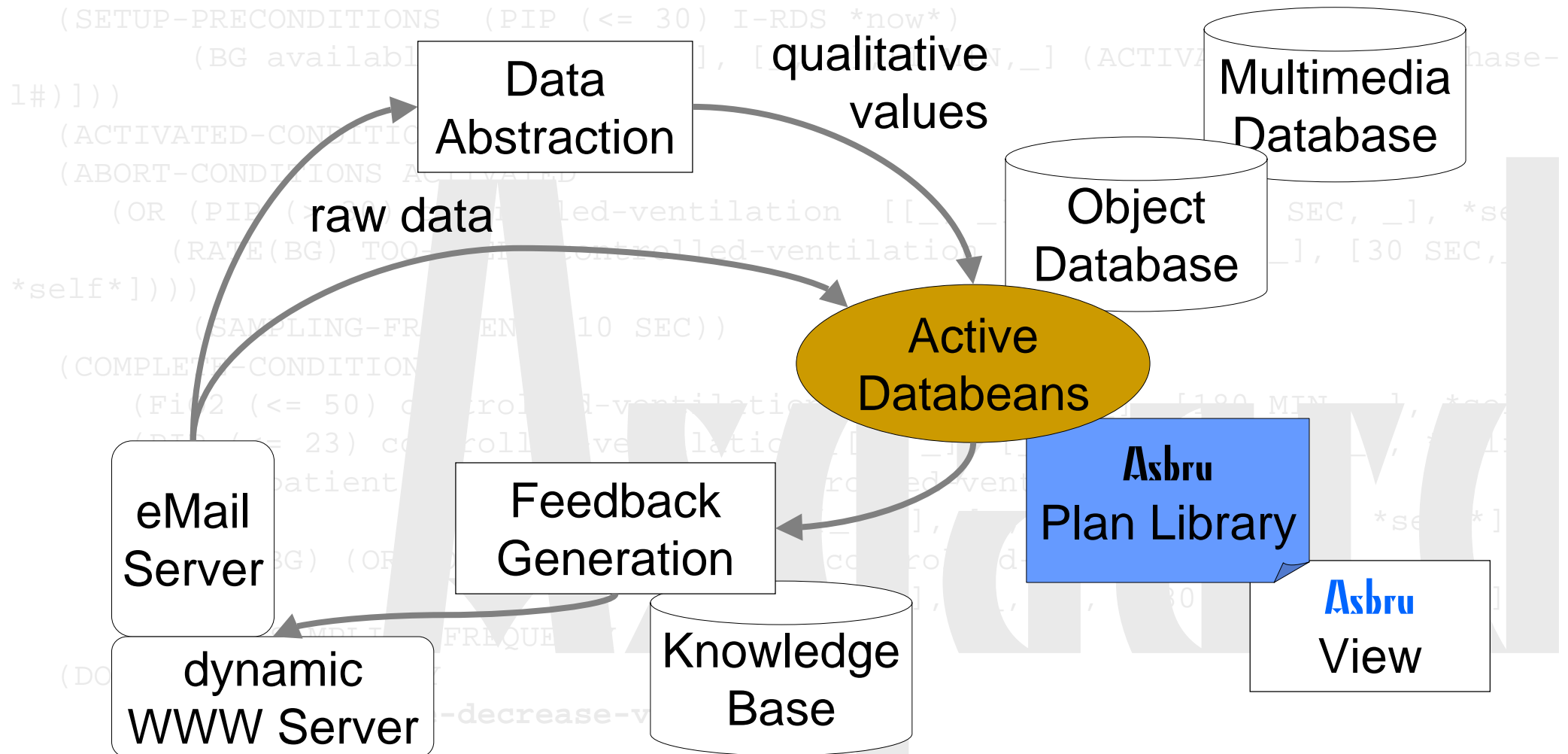
Asgaard - Framework



Expert - Knowledge Akquisition



The Asgaard Framework





The **Banshee** Roadmap

- **Running on a Test-Site**

- Data abstraction module

- Planvisualisation module **Asbru**View

- Form based diary and diagnostics via WWW including infrastructure for multiuser-support

- **Currently under construction**

- Setup of a knowledgebase to generate workout-packages

- Input of content for a larger number of sports

- Implementation of the feedback/push-mechanism



Conclusion

- **Building a “Learning System”**
- **More Efficiency through**
 - Direct access to relevant information
 - Reuse of existing plans and knowledge
 - Teamwork and communication
- **Problem-oriented Support of Planning**
- **Focusing the Individual Needs of the User**

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