Persistent Operating Systems
Hauptseminar WS 2008/09

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  Consulting time: Wed, 13:00–13:45h

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What is it all About?

- Insights on interesting problems
- Literacy on system architecture
- Practice presenting scientific papers
- Practice discussing scientific papers
- Practice writing technical reports

Focus

This seminar is all about (orthogonal) persistence.
Our Expectations

- You have high motivation for the topic
  - Preparation may include looking for support literature
- You will attend each talk
- You will participate in discussions
Formalia

- One paper each
  - ≈ 10 pages
- Presentation of the paper
  - 30–35 min.
- Evaluation report on the paper
  - Read and include related work if required
Talk preparation time: \( \geq 4 \) weeks
- Prepare a vivid talk
- Incite lively discussion
- Hand in slides a week before your talk

First talks: in 5 weeks (2008-12-01)

Technical reports / summary
- Till the end of the term (2009-02-13)
## Intended Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>27.10</td>
<td>Introduction</td>
</tr>
<tr>
<td>03.11</td>
<td>—</td>
</tr>
<tr>
<td>10.11</td>
<td>—</td>
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<tr>
<td>17.11</td>
<td>—</td>
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<tr>
<td>24.11</td>
<td>—</td>
</tr>
<tr>
<td>01.12</td>
<td>1./2. talk</td>
</tr>
<tr>
<td>08.12</td>
<td>3./4. talk</td>
</tr>
<tr>
<td>15.12</td>
<td>5./6. talk</td>
</tr>
<tr>
<td>22.12</td>
<td>Christmas</td>
</tr>
<tr>
<td>29.12</td>
<td>Christmas</td>
</tr>
<tr>
<td>05.01</td>
<td>Christmas</td>
</tr>
<tr>
<td>12.01</td>
<td>7./8. talk</td>
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<tr>
<td>19.01</td>
<td>9./10. talk</td>
</tr>
<tr>
<td>26.01</td>
<td>11./12. talk</td>
</tr>
<tr>
<td>02.02</td>
<td>—</td>
</tr>
<tr>
<td>09.02</td>
<td>—</td>
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</tbody>
</table>
How to Prepare for a Seminar Talk?

- Prepare in time
- Study deeply
  - Consult related work if required
- Explain your topic thoroughly and *didactically*
- Restrict your talk to required aspects
  - Rely on previous talks’ contents
General Approach to Giving the Talk

1. Understand the paper
2. Adapt it for presentation
3. Make slides
4. Perform dry runs
Understand the Paper

- Understand the key points
  - What are the problems?
  - What are the proposed solutions?
- Take your audience into account
- Consult additional literature
  - If required for the presented paper
Adapt the Paper

- Outline your talk in the beginning
- Summarize your paper in the end
- Give the *hows* and *whys* in between

The Audience ...

- will forget most of the talk
- should still get your message
Adapt the Paper

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Restructure the Paper

- Only present the key points
  - What is the new functionality good for?
  - Why is it better now?
  - How has it been improved?

- Do not go into detail
  - Details are confusing
  - Motivate to read the paper instead
Common Pitfalls

- Do not present the paper from top to bottom
  - Paper is for the archives
  - Presentation is live
- Do not make presentation time proportional to your learning time for a given topic
  - Stress key points in the talk
  - Skip over hairy details

Warning

Do not even think about breaking these rules ...
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Warning
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Own Opinion

- You will present someone else’s work
- Get an opinion on your own
  - Do you agree?
  - Do you miss anything?
- Express your opinion in the talk
  - Mark it as such!
Preparing the Slides

- Use electronic slides
- We can provide a laptop if required
  - Check up front for compatibility
- Show us your slides before the talk
  - Prevents common mistakes
  - Helps to have an interesting talk
- Arrive early for the presentation
  - Make sure the setup is working
Slide Contents

- Do give slide numbers
  - Eases discussion afterwards
  - Helps audience to follow
- Use a large font size (> 20pt Arial)
- Do not clutter your slides
  - Only show important text
- Use keywords rather than sentences
  - Sentences distract audience from talk

Warning

Do not use these slides as a template!
These are for reference purposes, yours are to support a live talk!
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Slide Contents (2)

- Only one topic per slide
  - Leave slide half-empty
- More than one slide per topic is fine
Visual Contents

- Make slides visually appealing
- Colors for emphasis are fine
  - Restrict use
  - Avoid certain colors
    - red on blue
    - pink and red
- Be consistent
  - Same color for same purpose
  - Same font for same purpose
  - Same layout for same purpose
Pictures and Figures
Avoid long lists
Pictures and Figures

- Avoid long lists
- Use pictures
Avoid long lists

Use pictures
  - Make audience curious and awake
Pictures and Figures

- Avoid long lists
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  - Make audience curious and awake
  - Good for structures
- Use animations (but scarcely!)
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Avoid long lists
Use pictures
  - Make audience curious and awake
  - Good for structures
Use animations (but scarcely!)
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Do not animate each and every item, please ...
### Example Figure (really bad)

<table>
<thead>
<tr>
<th>time [%]</th>
<th>alertness [%]</th>
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</thead>
<tbody>
<tr>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>10</td>
<td>50</td>
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<tr>
<td>20</td>
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<tr>
<td>90</td>
<td>20</td>
</tr>
<tr>
<td>100</td>
<td>95</td>
</tr>
</tbody>
</table>
Example Figure (bad)
Audience Alertness

alertness [%]

time [%]

0 10 20 30 40 50 60 70 80 90 100
Dry Run

- Perform a couple of dry runs
- Make sure you time them
  - About 2–3 minutes per slide
  - About 10–15 slides (< 20!)
  - Better cut it short than going over time
- Ask friends to be the audience
  - May find that all/most slides need modifications
Memorizing

- Do not memorize the talk
- Do memorize the introduction
  - You are nervous at first
  - Allows for a smooth start
- Complicated parts are hard to explain
  - Improvising is difficult
  - Know *how* you want to convey them
Attitude

- Be excited about the subject
- Something will go wrong
  - Don’t panic
  - Audience is forgiving
  - Enjoy yourself
Pointers and Pauses

- Use a pointing device
  - Avoid hiding the slides while pointing
- Let the slides sink in
  - Do not remove them too quickly
  - Do not start talking too early
- Take pauses during complicated parts
Interaction with the Audience

- Keep eye contact
- Encourage questions
  - Express the audience’s interest
  - Help to follow your talk
- ‘I don’t know’ is perfectly fine
  - Knowing is better still
Presenting Numbers

- Explain the experiments
  - What is the setup?
  - What is its purpose?
- Present only a selection of the measurements
  - Too many numbers are hard to digest
  - Prefer graphs and pictures
- Explain the numbers
  - Do they serve their purpose?
  - How?
- Draw conclusions from the experiments
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One Final Word

- Do *not* go over time
  - Puts you and your work in bad light
  - Be prepared to cut down your talk by several slides