

Sigasi™

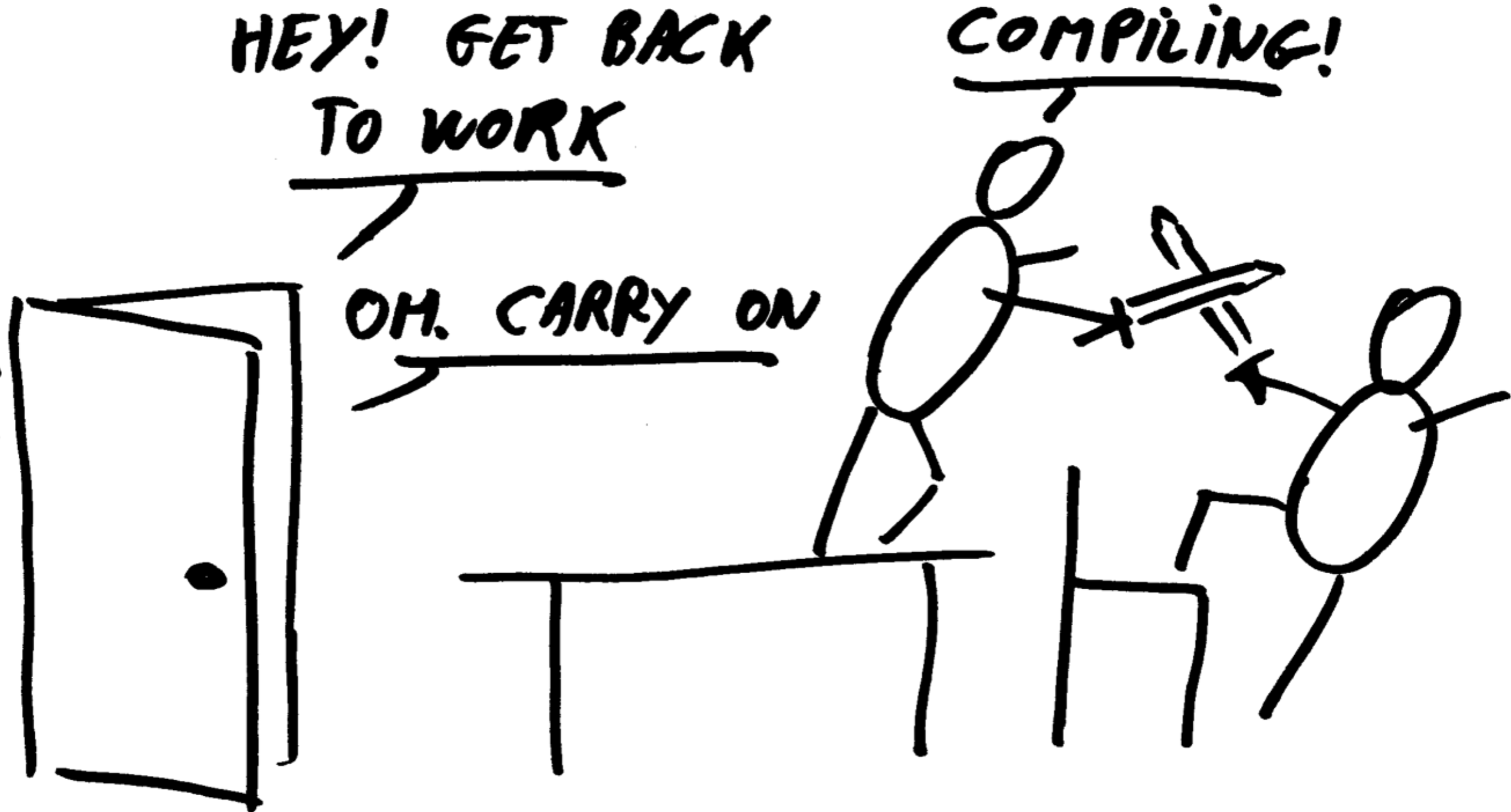


Toekomst van HDL ontwerp

Philippe Faes
Bits&Chips 2009 Hightech Systemen

updated version of this presentation at
<http://www.sigasi.com/hts2009>

HTTP://XKCD.COM/303



HDL = software?

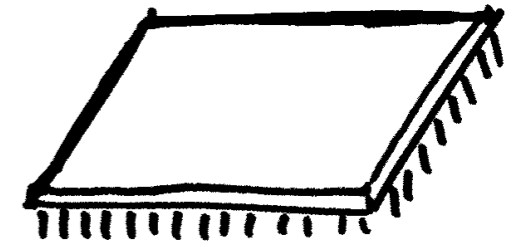
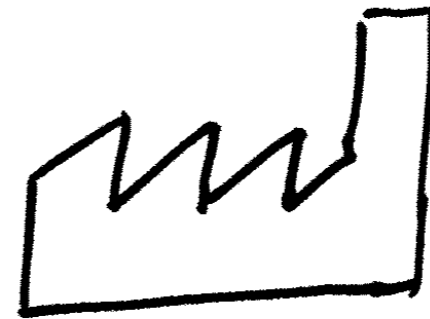
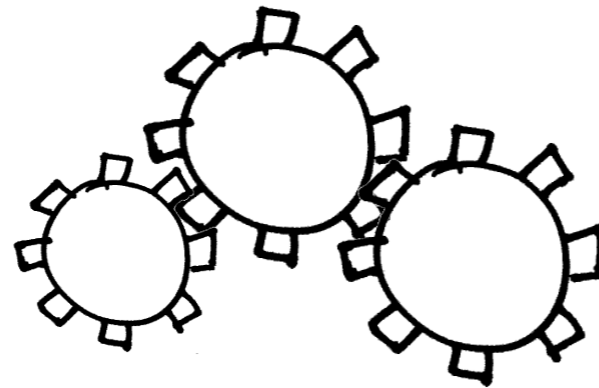
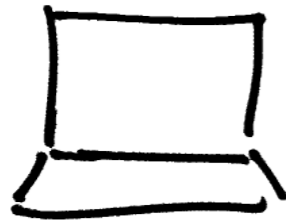
software

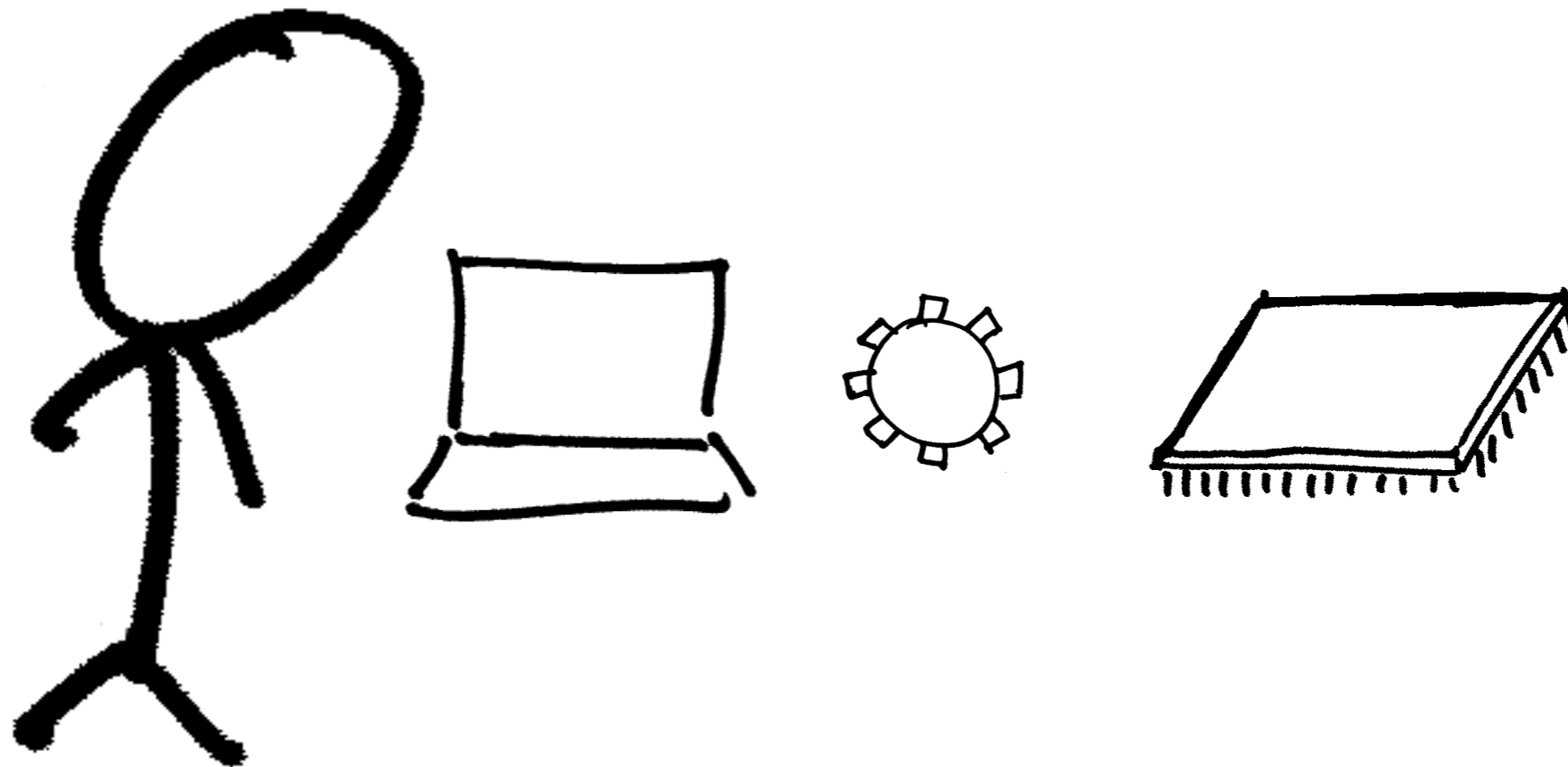
- tekst ingeven
- compileren
- flash
- chip doet iets

HDL (hardware)

- tekst ingeven
- synthese
- upload
- chip doet iets

- tekst-gebaseerd ontwerp
 - code review
 - revisiecontrole
 - style guides
 - formele methodes
- ... en nu: IDE's





geïntegreerde ontwerpomgeving (IDE)

- mens staat centraal
- centraal punt van controle
- directe feedback
- krachtigere bewerkingen

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cockpit & head-up display



build & deploy

Project metrics

revisiecontrole

roadmap

compiler

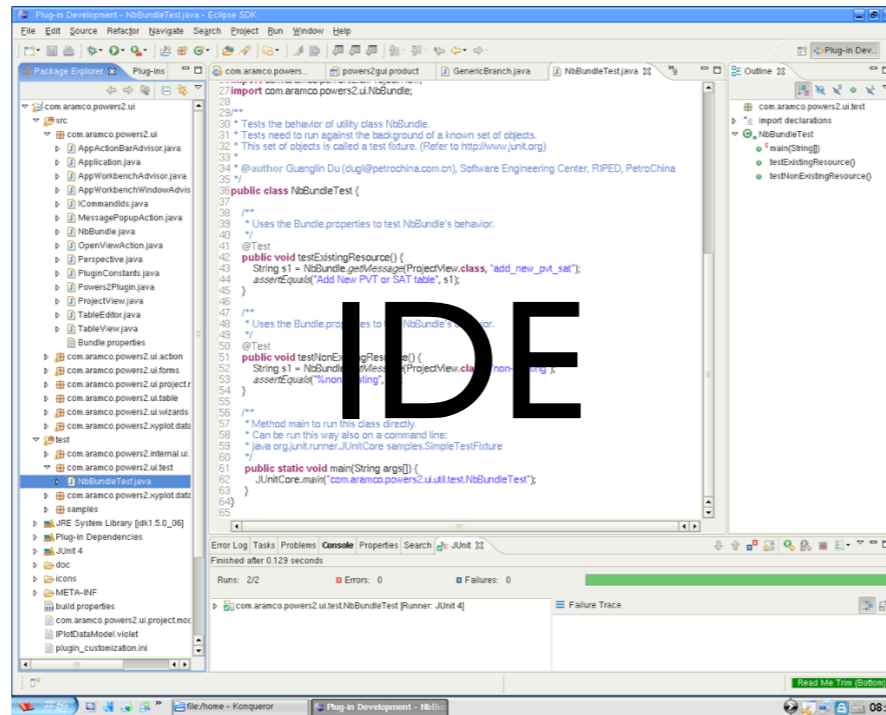
style-checker

debugger

probleemopvolging

editor

team communicatie



Sigasi[™] geheime saus voor de HUD

- directe feedback
- supersnelle parser/analyser
- output van andere tools
- IDE *denkt* mee

- directe feedback
- quickfix
- navigate
- hover
- refactor

```
singal a: bit;
```

```
signal a: bit;
```

```
signal a: bit;
```

```
type bit is ('0', '1');
```



IDE helpt bij shotgun surgery

- kleine veranderingen
- vele files
- makkelijk fouten te maken
- bv: groter adresbereik

HDL-ontwerper van de toekomst



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