A survey of system configuration tools

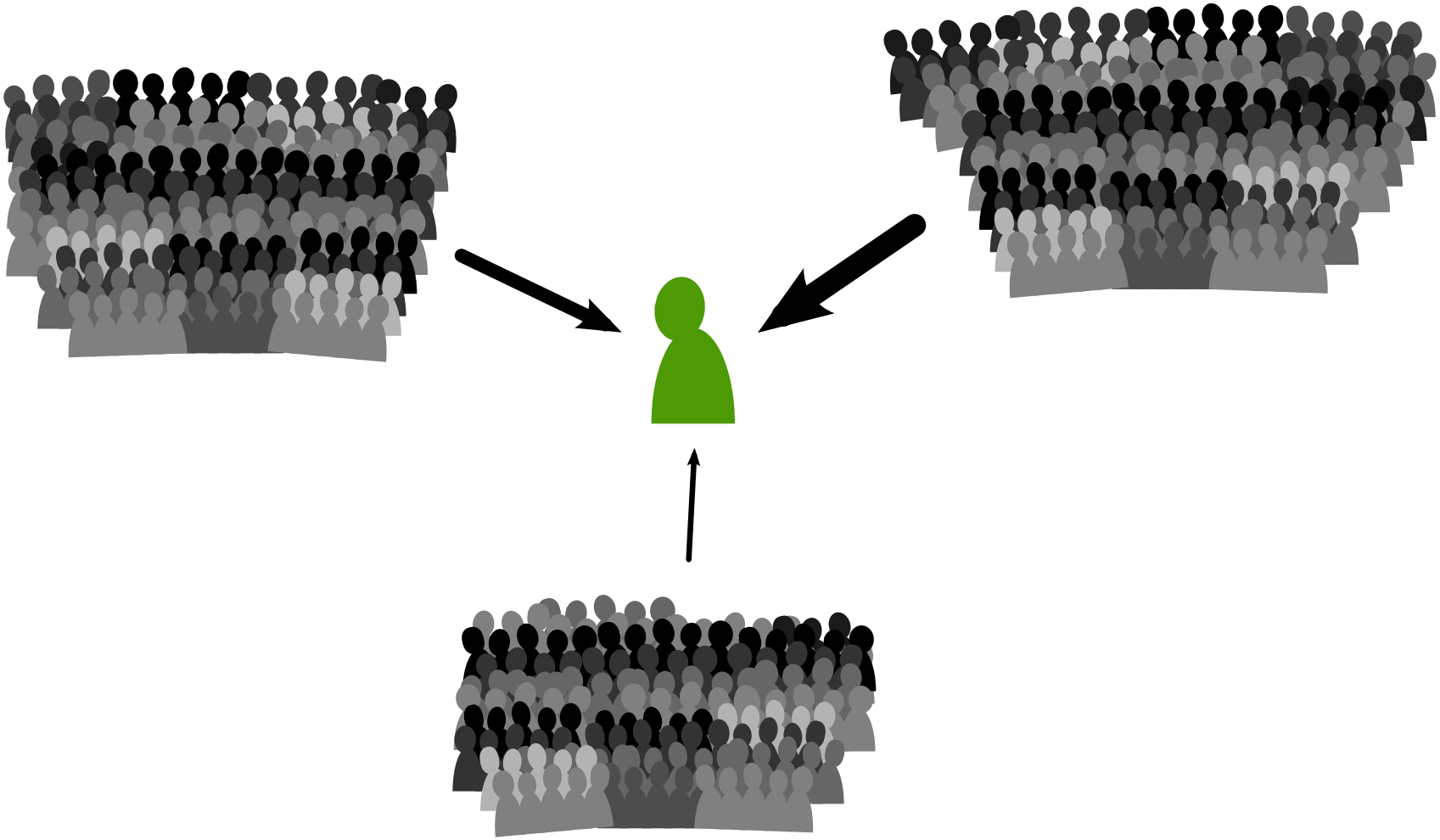
Thomas Delaet Bart Vanbrabant Wouter Joosen

DistriNet, Department of Computer Science
K.U.Leuven

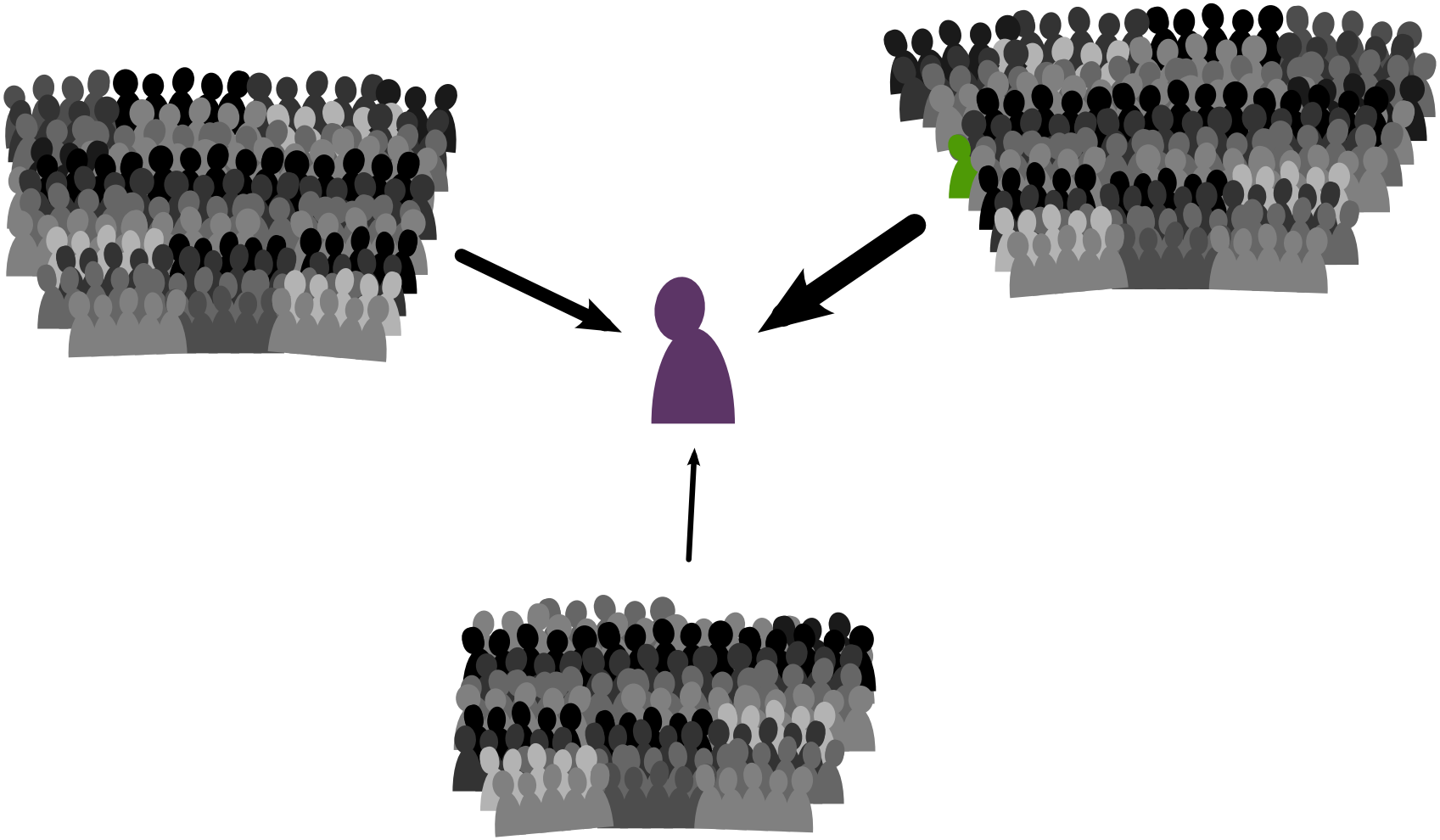
November 10th, 2010

The paradox of choice

The clash of system configuration tools



The clash of system configuration tools



A more peaceful world

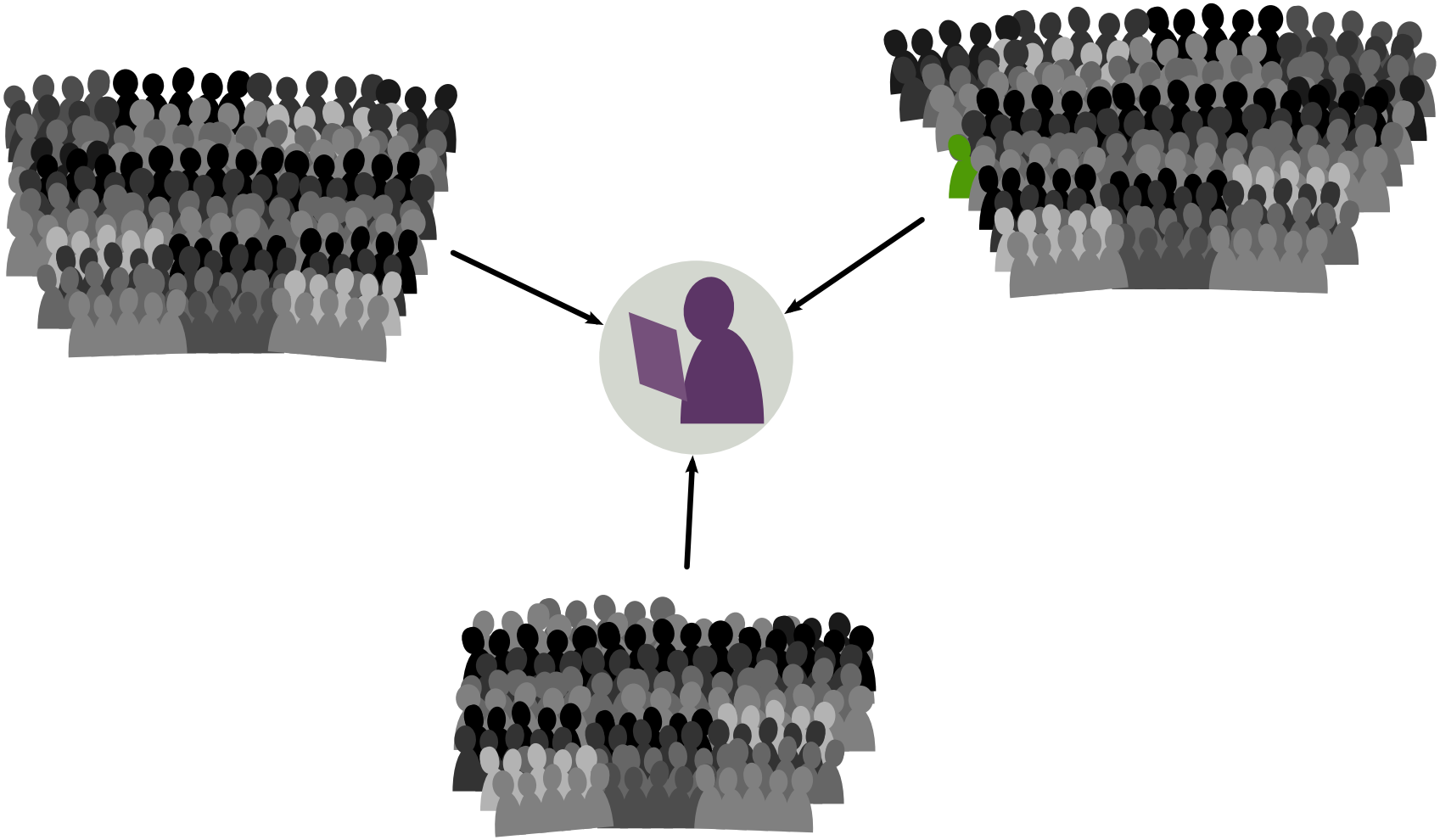


Table of contents

1. The comparison framework
2. The tools
3. Demo
4. Remaining challenges

Table of contents

1 The comparison framework

2 The tools

3 Demo

4 Remaining challenges

The comparison framework

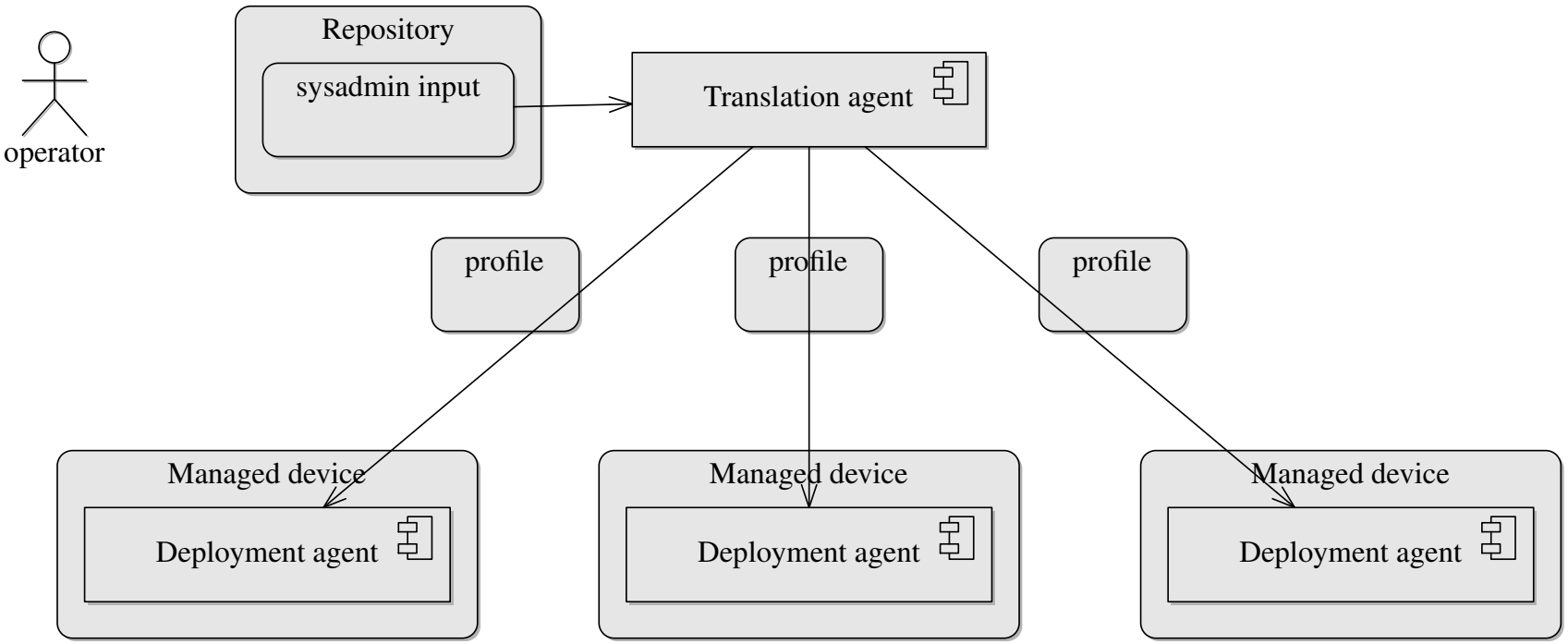


Table of contents

1 The comparison framework

2 The tools

3 Demo

4 Remaining challenges

The tools

Open-source

- Bcfg2
- Cfengine3 (commercial version)
- Opscode Chef
- Puppet
- LCFG
- Netomata Config Generator

Commercial

- BMC Bladelogic Server Automation Suite
- CA Network and Systems Management
- IBM Tivoli System Automation for Multiplatforms
- Microsoft Server Center Configuration Manager
- HP Server Automation System

Table of contents

1 The comparison framework

2 The tools

3 Demo

4 Remaining challenges

Demo

`http://distrinet.cs.kuleuven.be/software/sysconfigtools`

- In depth-evaluations of tools
- Overview table
- Wizard

Table of contents

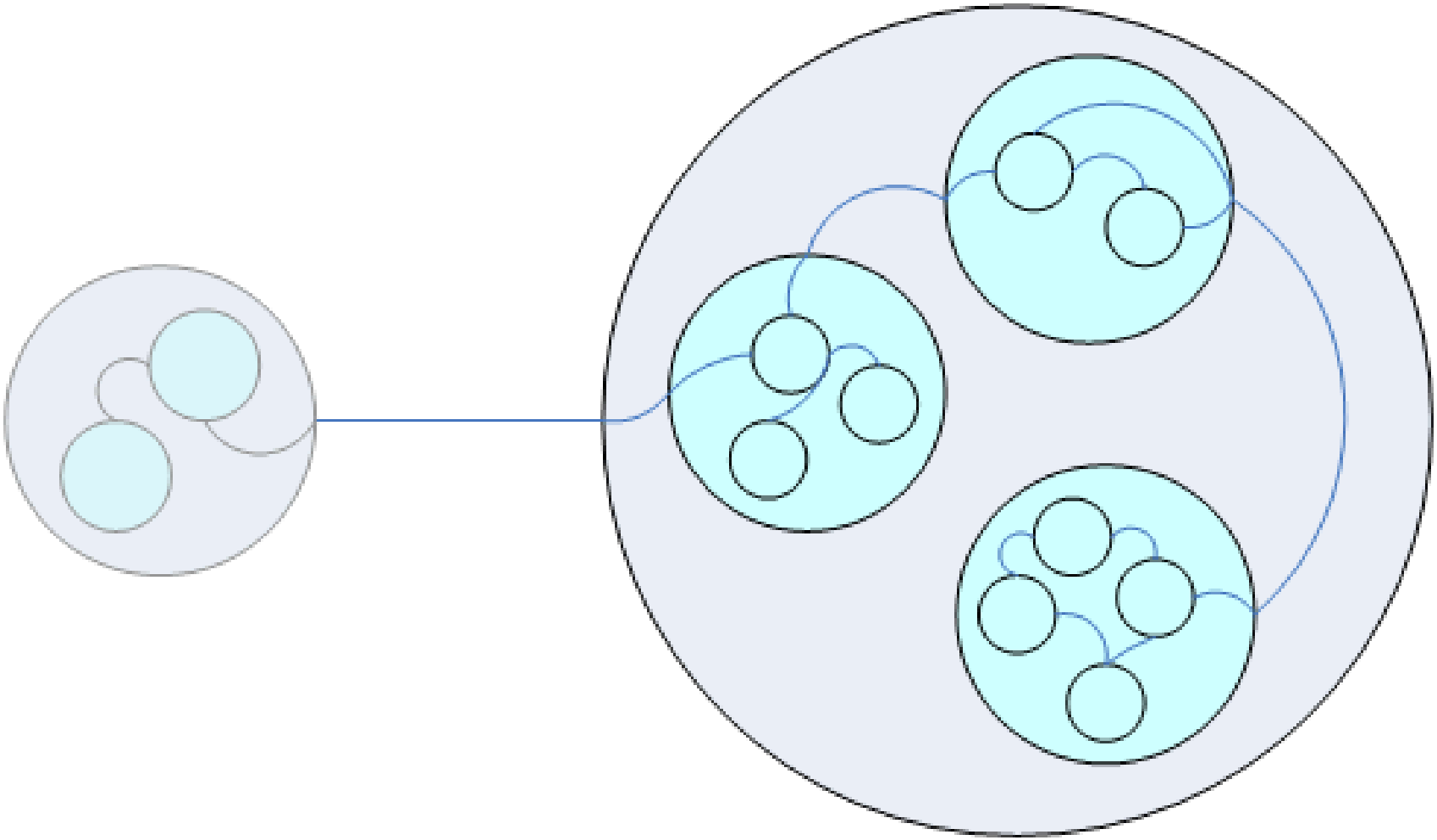
1 The comparison framework

2 The tools

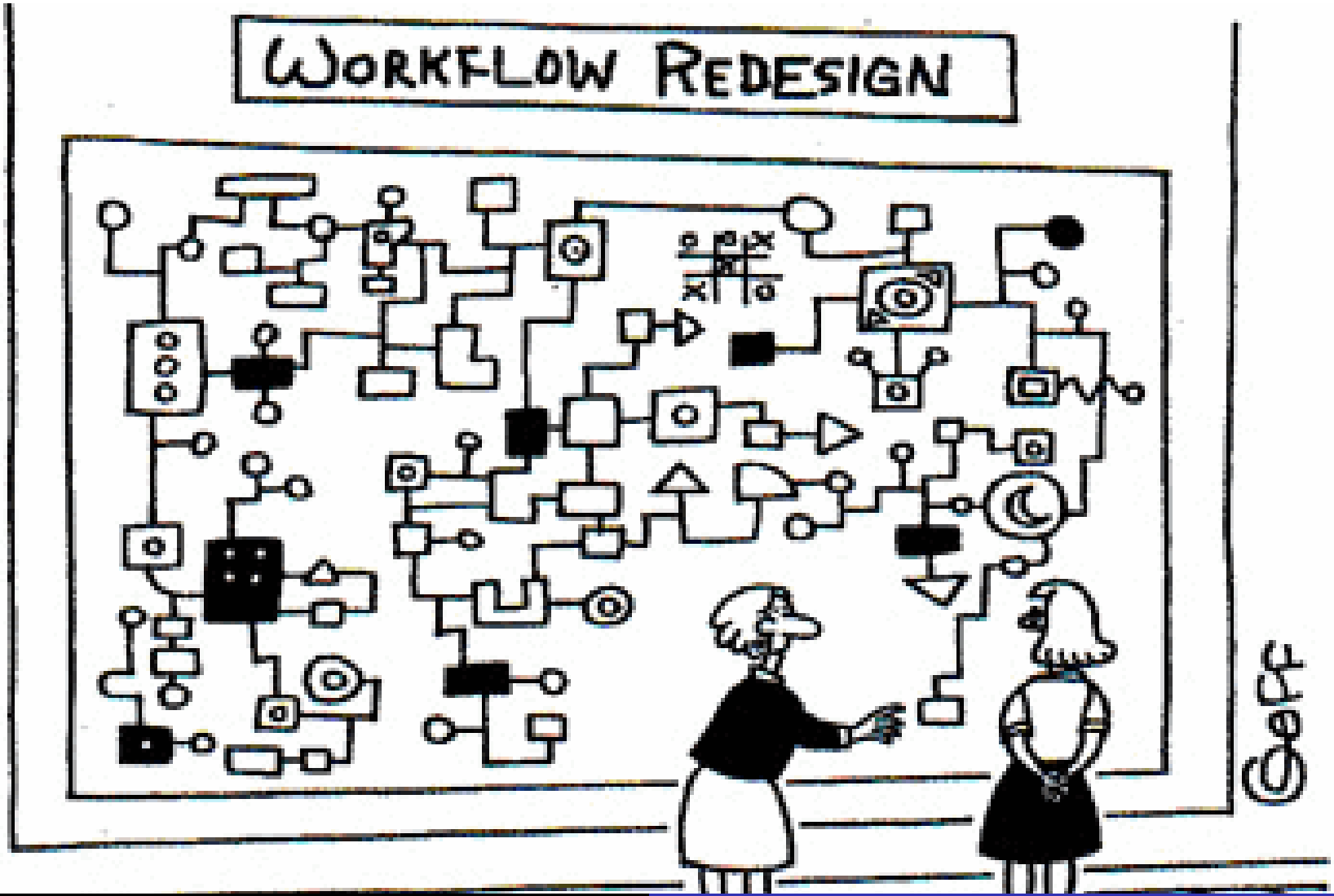
3 Demo

4 Remaining challenges

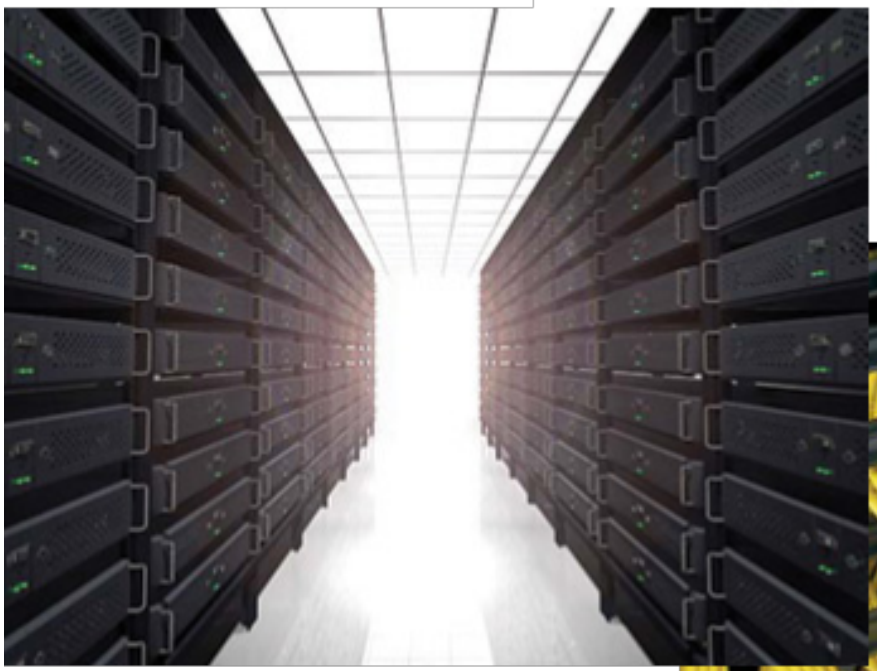
Better abstractions



Adapt to the target audience's processes

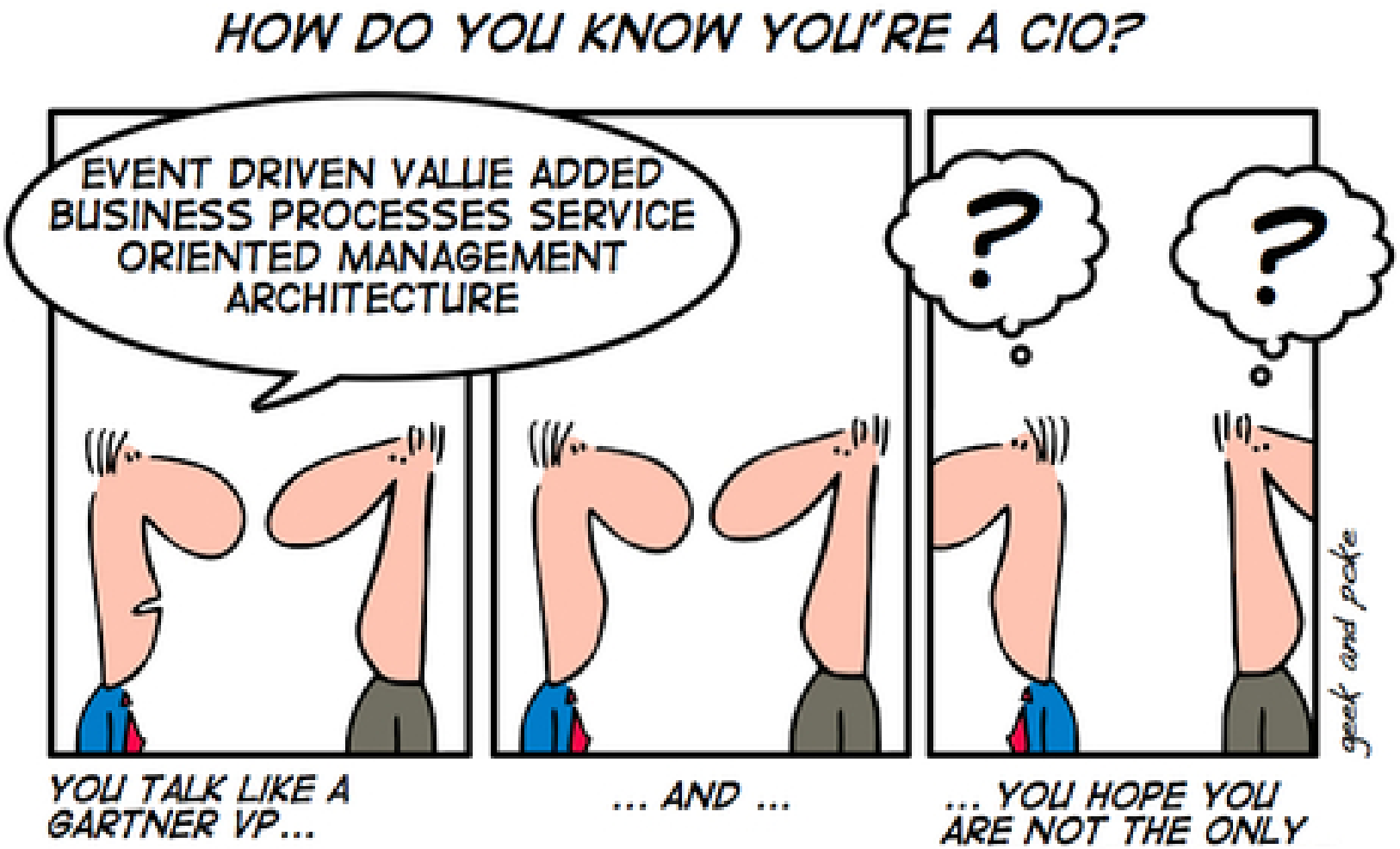


Support true integrated management

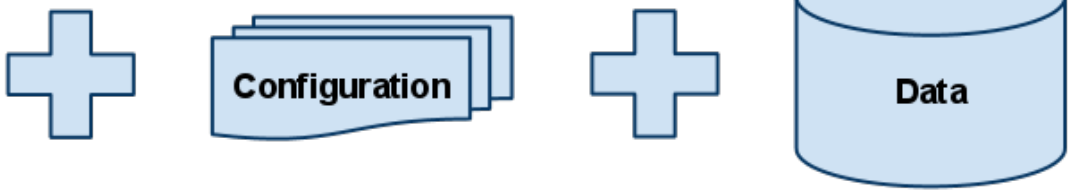


Become more declarative

Take the CIO's agenda into account



Know that a system is software + configuration + data



Conclusion

- No silver bullet
- Make more informed decisions in less time
- Add tools and comments!

Questions?

http://distrinet.cs.kuleuven.be/software/sysconfigtools

Sources

http://www.channel4.com/food/images/mb/Channel4/4Food/features/2009/may/20/store_psychology/store_psychology_ahero.jpg
http://www.ralfw.de/weblog/images/syssoft/syssoft03.gif
http://www.agilepoint.com/01/MyImages/complex-process.gif
http://www.indecomaz.com/images/Data_Cabling_Phoenix.jpg
http://www.freeiconsdownload.com/site-images/Large/HardwareDevicesIcons.jpg
http://kester.typepad.com/signs/servers.jpg
http://www.flickr.com/photos/alita-tenshi/4724915089/sizes/o/in/photostream/
http://geekandpoke.typepad.com/geekandpoke/images/2008/05/15/cio.jpg
http://www.wqsolutions.co.uk/images/Integrated-Management-Systems.jpg