



## Samba-AD, going up the ladder

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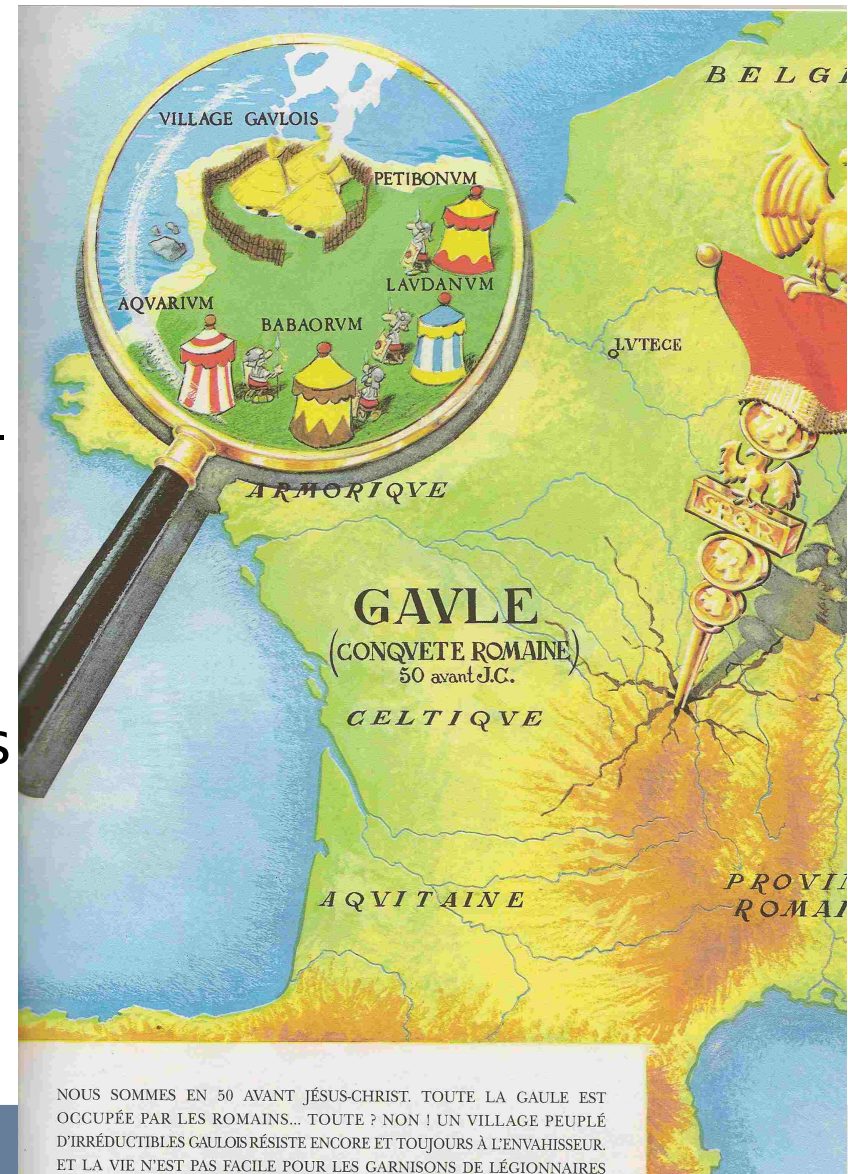
## New challenges, new opportunities

- *Denis & Vincent Cardon*



# Tranquil IT (somehow fictionalized)

- ➡ « The year is 2018 AD, and a Gaulish village in the west of France is still holding out against the invader. Thanks to the Samba team magic potion, the little group of dauntless Gauls succeeds - among other things - in proudly deploying Samba-AD in every corner of the empire!
- ➡ Their only fear is that the sky may fall on their heads (and that the Beer kegs will dry out). »





# Tranquil IT (in real life)

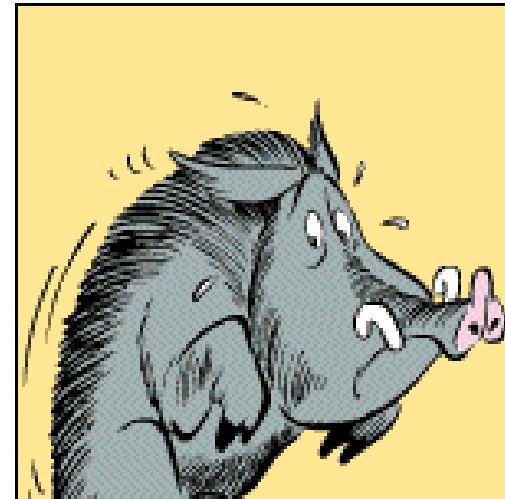
- ➔ Since 2002 in Nantes, France
- ➔ Samba-AD expertise
  - started Samba-NT4 in 2003
  - started Samba-AD in early 2012
- ➔ Editor of WAPT for software deployment
- ➔ Outsourcing





# Samba-AD in the good ol'time, circa 2012 AC

- ➔ Samba 4.0.0 alpha18
- ➔ It just works(tm)
- ➔ Simple domain, no bells and whistles
- ➔ many many bugs
  - learn how to step in the minefield
  - beware not to change Administrator password !





# Beware of replication issues!

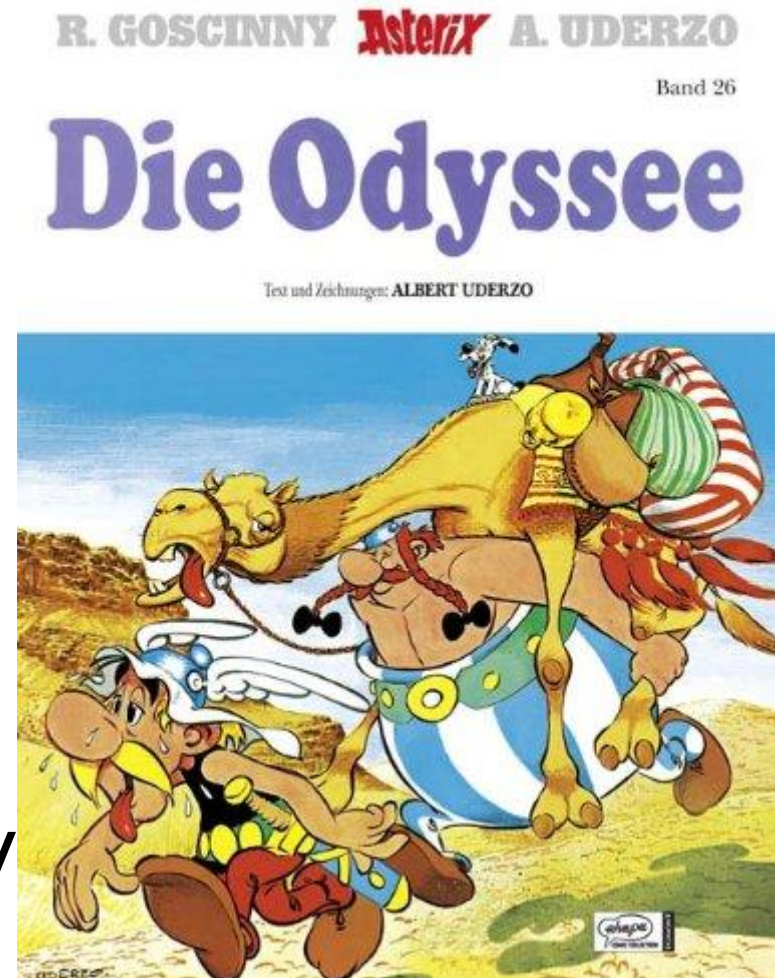






# BCEAO, circa 2015

- ➔ Central bank in Dakar
- ➔ Samba 4.3.0
- ➔ need for Douglas' new KCC
- ➔ a 4 week Odyssey
- ➔ 24 sites, 8 countries, 2000 users
- ➔ VPN 2mbps / 500ms latency
- ➔ Replication hell !





# Beware of replication issues!





# 2015 - First time at SambaXP



- ➔ Getting to know each other
- ➔ Best place to learn how Samba works
- ➔ Best place to learn how the Samba team works
- ➔ How to build a successfull collaboration ?





# Ministry of culture, circa 2016 AC

- ➔ 8000 desktops
- ➔ 168 sites done (2 sites left)
- ➔ Samba deployment industrialisation
- ➔ even for the candy vending machine !....
- ➔ Quite a few replication problems





# 2017 - Drôme regional administration

- ➔ Samba 4.6
- ➔ 5000 users, 50 sites
- ➔ replication hell !
- ➔ preventing domain total meltdown





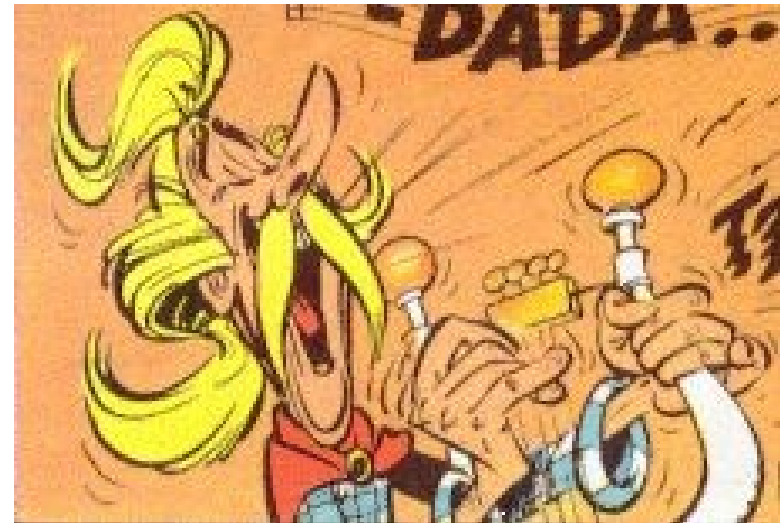
# Beware of replication issues!





# 2017 - Drôme regional administration

- ➔ Domain cleanup
- ➔ Samba upgrade
- ➔ Samba deployment industrialisation
- ➔ All fine since then...







# Replication not biting anymore !



everything properly replicated !



# Need to push Samba further

- ➔ French administration heavily invested in Samba NT4
  - Migration to Samba-AD is the natural path
- ➔ But security landscape has evolved
  - Samba-AD has to provide all the necessary security and scalability
- ➔ Meeting in Paris next week for a second round of Samba-AD funding



# CVE-2018-1057

- ➔ Samba 4.6 / 4.7
- ➔ critical security flaw
- ➔ dozens of domain 300 DC to update on Tuesday morning...
- ➔ Mission impossible
- ➔ Need to improve security disclosure process





# Musée des arts décoratifs, circa 2018

- Samba 4.7.7
- business as usual
- Samba with  
« panache »
- no replication  
issues !









# What is next ?



# Improving Security disclosure

- ➔ have a minimum number of **work days** between announcement and disclosure
- ➔ have some kind of rough criticality level
- ➔ tell which part of Samba is impacted
  - AD / Fileserver / Printserver



# Improving Samba software to be ON PAR

- ➔ scalability (LMDB, etc.)
- ➔ Kerberos FAST
- ➔ Kerberos Claims
- ➔ Silos
- ➔ Protected user groups
- ➔ Full auditing
- ➔ performance improvements





# Improving Samba-AD software to be BETTER

- ➔ replication partner restriction
- ➔ password hashes encryption on DC
- ➔ no NTLM mode in Samba
- ➔ better GPO import / export tool
- ➔ Trigger competition and evolution!



# Improving Samba ecosystem to be on par with Microsoft

➔ Large corporation want

- a commercial interlocutor
- contractual engagements
- long-term garanty

➔ Samba team needs

- money to make Samba ever better

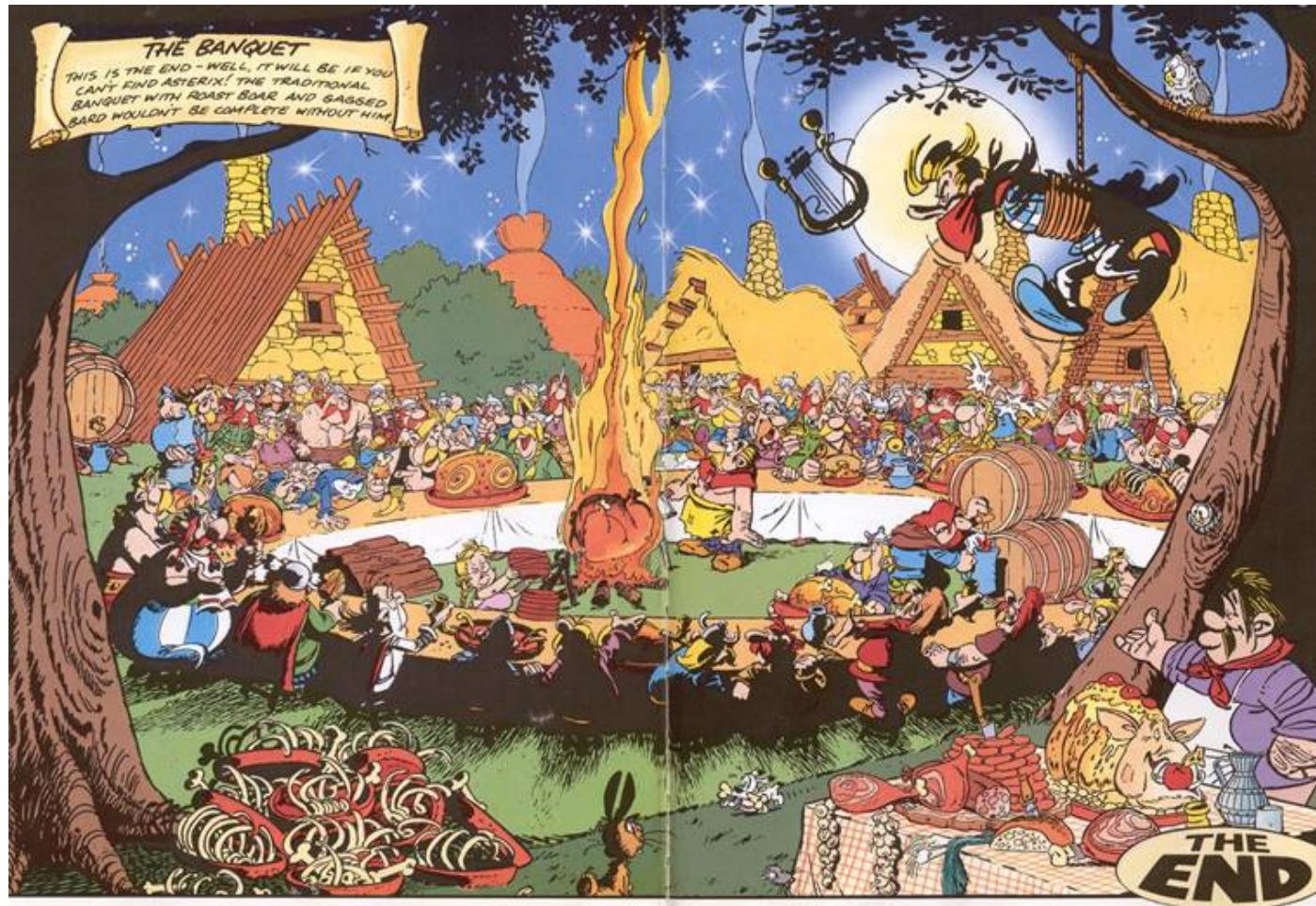


# Improving Samba ecosystem to be on par with Microsoft

- ➔ Smbd fileserver ecosystem mature
- ➔ Samba-AD ecosystem is maturing
  - chicken / egg problem
  - need to get Enterprise vendor on the bandwagon



# Questions ?



Souvenir of Orient Loundge, SambaXP, Göttingen 2018