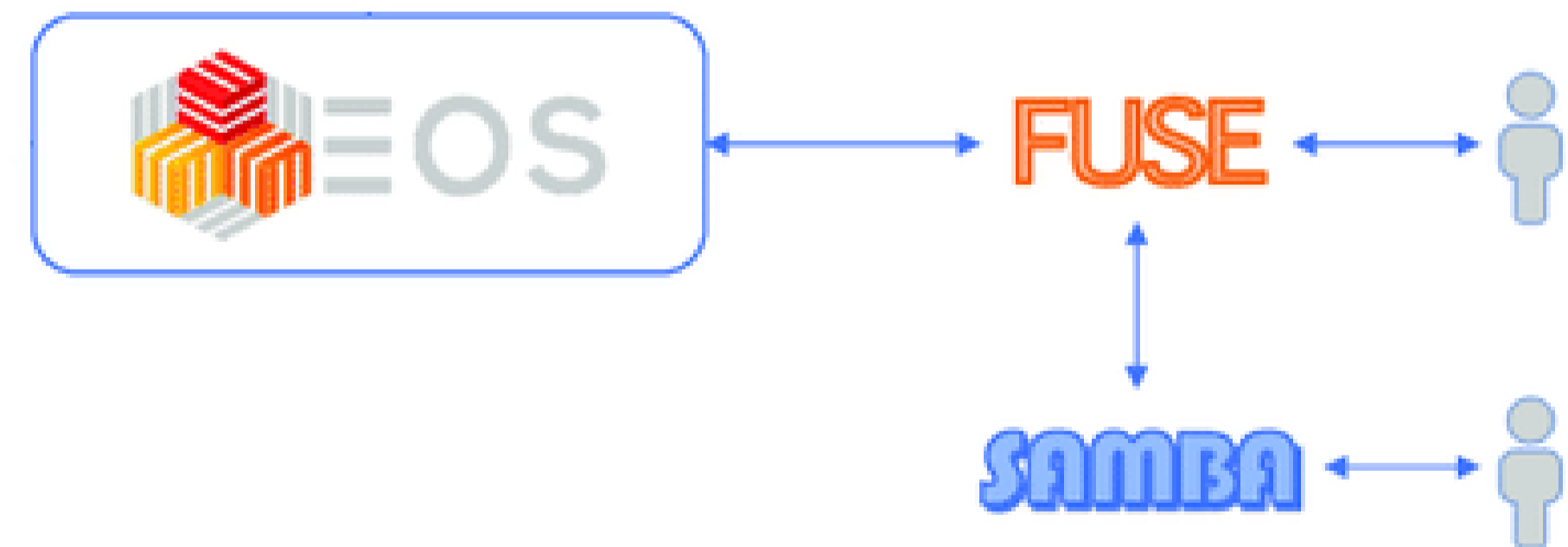# EOS Windows Native Client

Example:

EOS implementation for EU projects CareHD and vINCI

Gregor Molan, Ivan Arizanović, Branko Blagojević

EOS Citrine: Windows access

The current EOS version (Citrine v4.6.8) supports access to Windows clients using the Samba interoperability suite. As Samba is just an additional layer between EOS on Linux and Windows clients, it is an additional possibility for unexpected issues:

⊘ *Access and data transfer speed*

⊘ *Filename issues*

⊘ *Problems with ACLs*

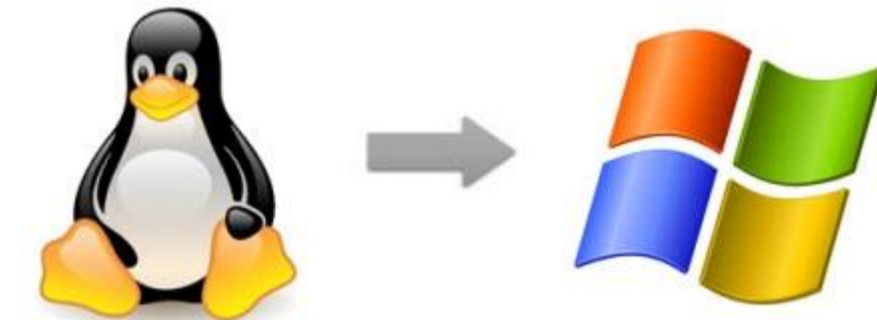⊘ *Problems with access/read/write file and directories*

EOS Windows Native Client (EOS Wnc)

- ⊘ Implementation of EOS Linux client for Windows
- ⊘ To improve EOS usability for Windows clients.

- ⊘ Comtrade's research project
- ⊘ EOS openlab R&D Topic 1:
   Data-centre technologies and infrastructures

EOS Windows Native Client: Start point

Main goals in porting EOS Wnc:

1. Study of the architecture of existing EOS Linux Client
2. Identify potential risks and incompatibilities with Windows philosophy
3. Resume of available Windows disk-based storage systems
4. Setup the Windows development environment with native Windows libraries
5. Porting of EOS Linux Client with Microsoft Visual Studio IDE
6. Identify functionalities from Linux that are not possible to simply port
7. Rewrite identified functionalities using Microsoft Visual Studio
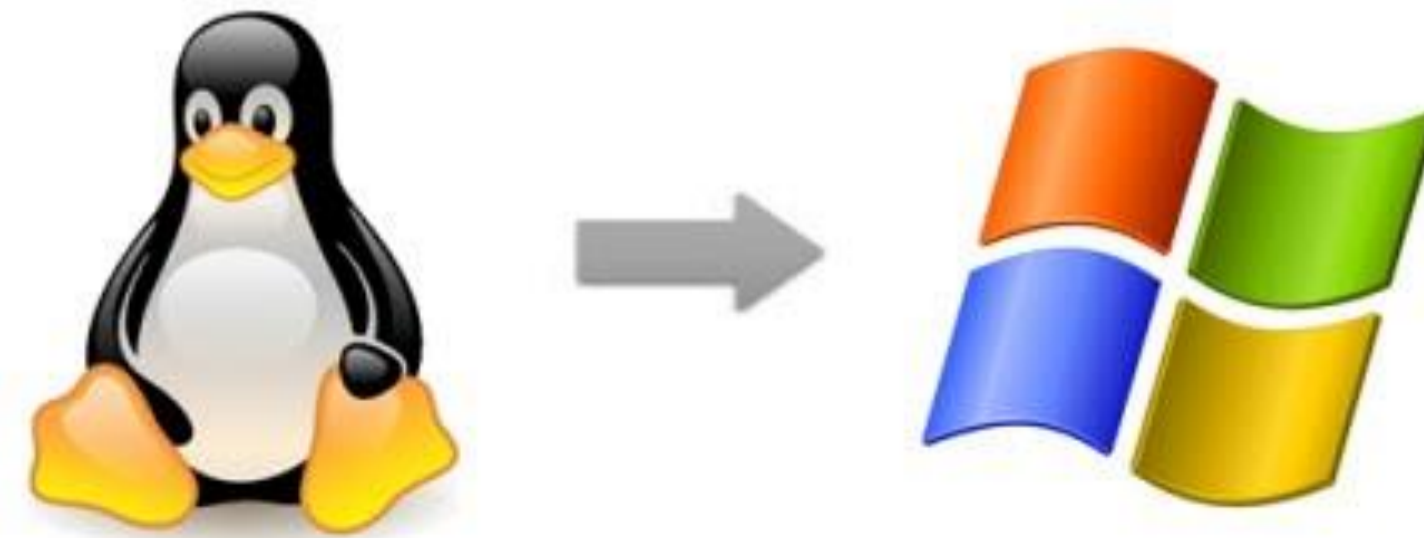
EOS Windows Native Client: Porting stages

1. Prototype: basic functionalities

⊗ Access to Windows filesystem

⊗ Read/write Windows filesystem

⊗ Expected in March 2020

2. Upgrade of the prototype

⊗ Add user roles and permissions

⊗ Adjust Windows and Linux ACL policy

⊗ Check and finalize security model

⊗ Check and finalize file authentication process

⊗ Improve performance

⊗ Improve Windows code (possible refactoring)

⊗ Expected in September 2020

EOS Windows Native Client

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