



KnowARC

**ARC→gLite, gLite→ARC
interoperation**

**Christian Ulrik Sættrup
Péter Stefán**



- What is grid interoperation?
- KnowARC and interoperations
- Theoretic interoperation scenarios
- Possible scenarios for the different directions
- The current status of ARC→gLite
- Limitations
- Future plans
- Demo



- Fancy definition by OGF.
- Use the resources of **grid A** from **grid B** and vice versa, wherever possible use standard interfaces.
- It is an application-level issue.
- Can be achieved in many ways, but we prefer those ways which conforms to widely accepted standards, quasi-standards.

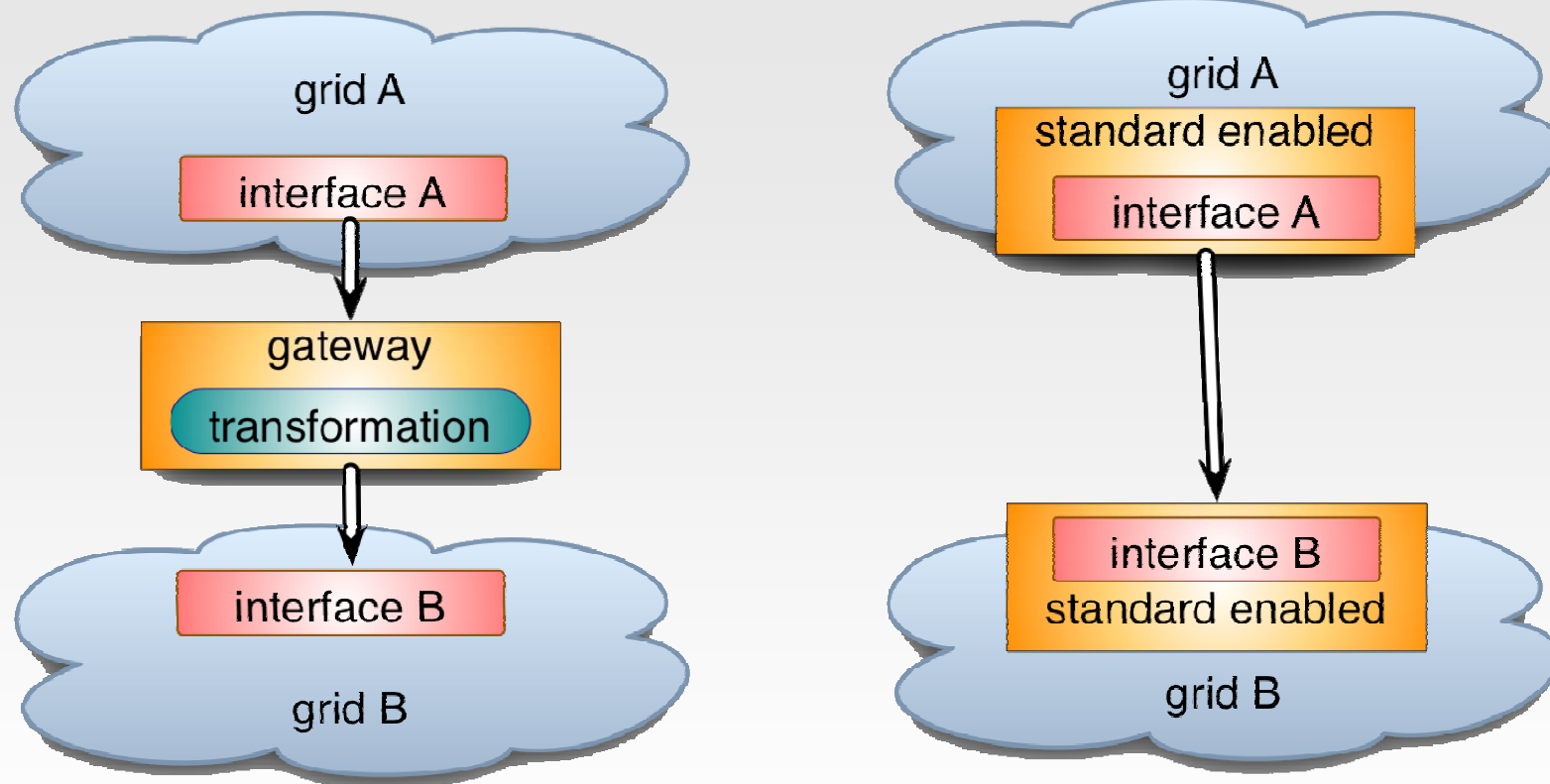


- ✦ KnowARC has a dedicated WP for dealing with interoperability and standardization (WP3):
 - ❖ standards conformance (OGF),
 - ❖ standards improvement (implementation feedback),
 - ❖ policies (mostly EU level),
 - ❖ surveying grid services,
 - ❖ ARC-EGEE interoperability.
- ✦ In the project ARC→gLite direction is addressed, the opposite is done in EGEE.

Generic interop models



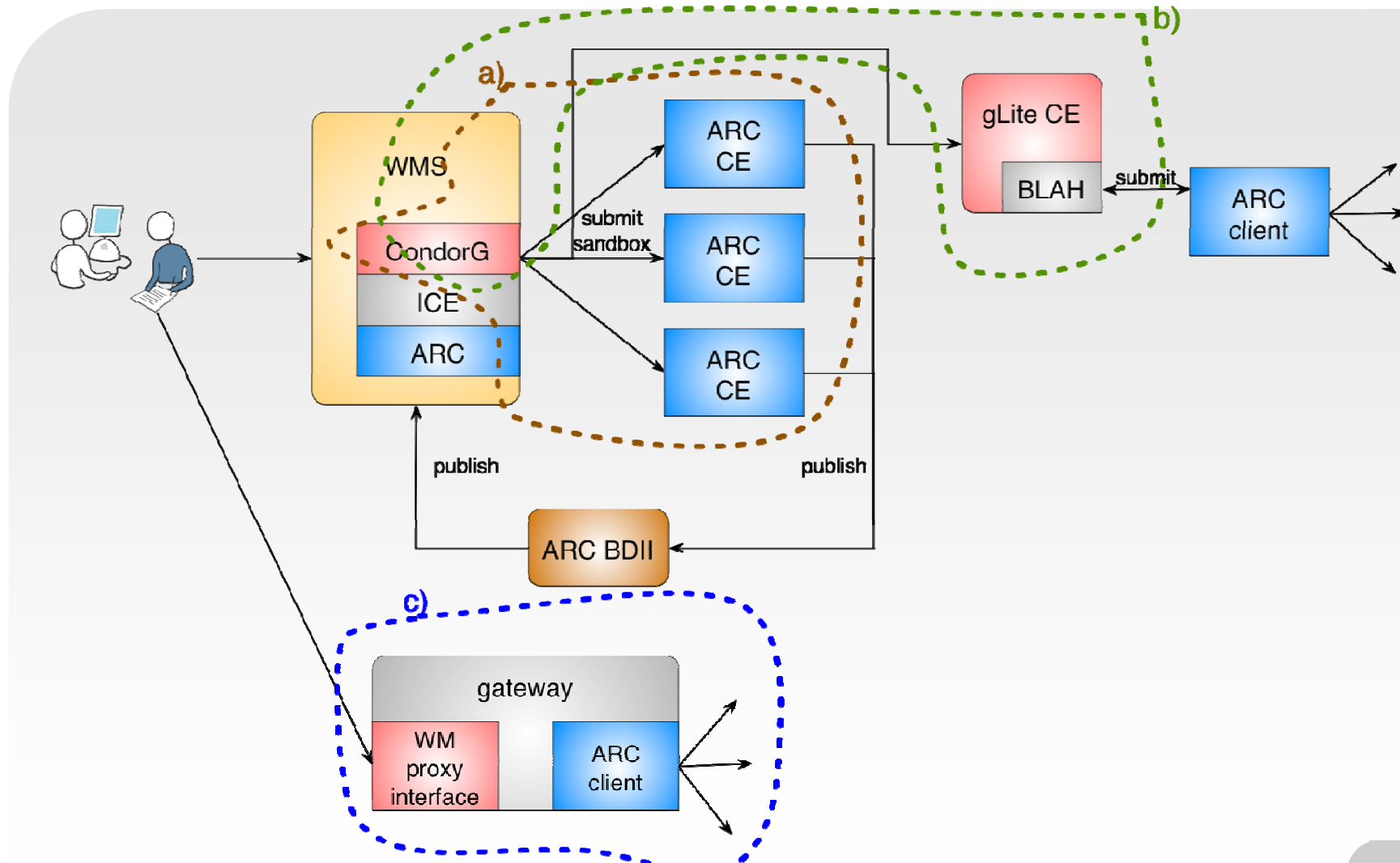
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Scenarios for gLite→ARC



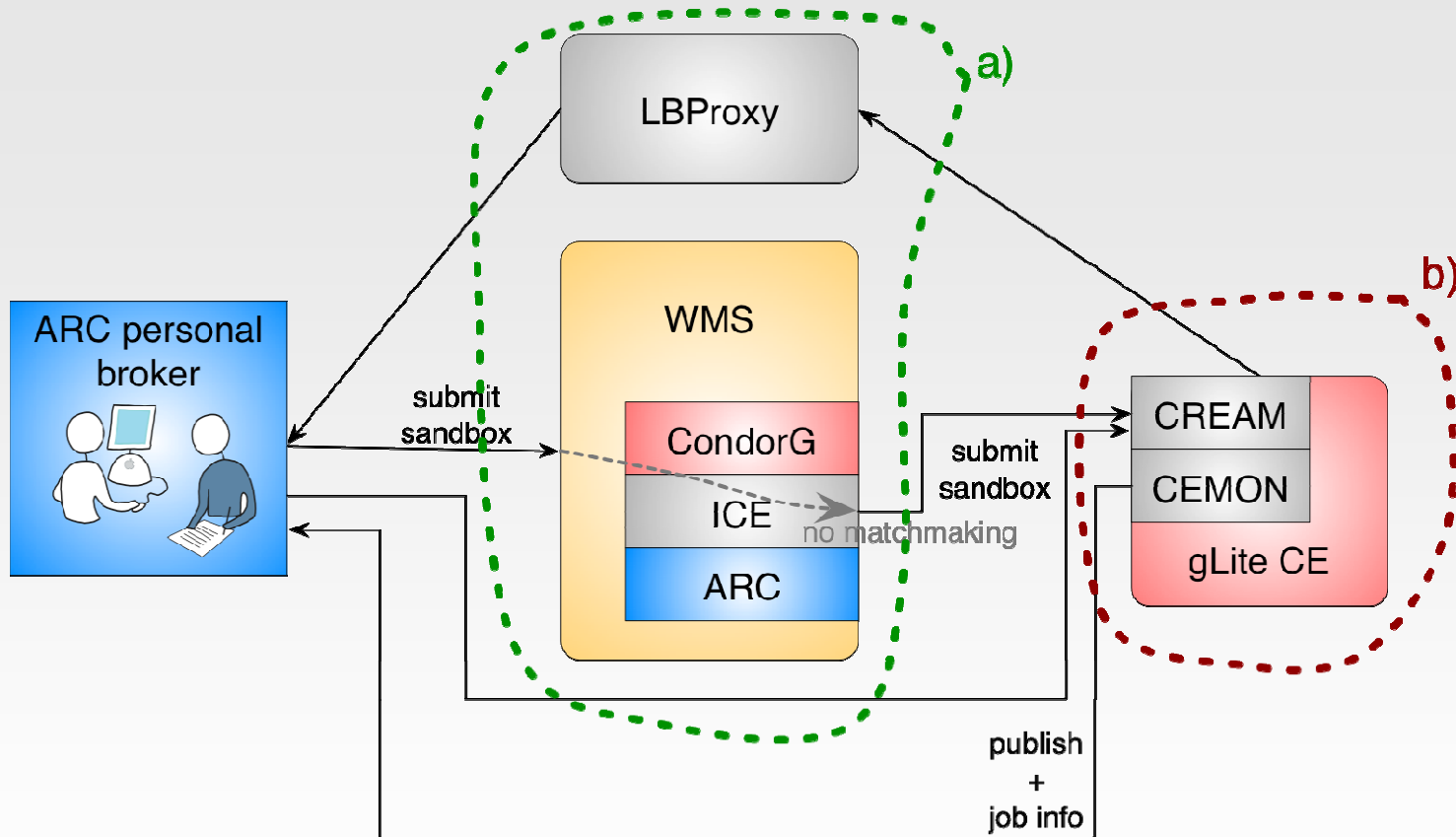
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Scenarios for ARC→gLite



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- ✦ Decisions:
 - ❖ use WS enabled interfaces;
 - ❖ use stable interfaces;
 - ❖ keep the client side as lightweight as possible including little amount of dependencies.
- ✦ Basic WS libraries exist.
- ✦ Initial command line interfaces (ngwmdel, ngwmsub, ngwmget, hopefully demoed).
- ✦ Job submission works with limitations.



- Generalised translator and framework is being developed.
- It will support
 - ❖ xRSL,
 - ❖ RSL,
 - ❖ JDL,
 - ❖ JSDL.
- Basic xRSL→JDL is already functional.
- The translator will only require standard ARC libraries.



- ✦ Limited job description transformation capabilities. There are invalid and tricky translations need special care (renaming input files, output files).
- ✦ There is no RTE translation. This could be a good common effort to achieve standardized RTE paths.
- ✦ No job status extraction is possible.
- ✦ No information system integration yet.



- Overcome current limitations (LBProxy workaround, CREAM submission, more sophisticated translator).
- Standardization efforts (RTE):
 - ❖ along with other projects, like EGEE,
 - ❖ providing implementation feedback to achieve standards improvement.
- Integration to ARClib - roadmap until April 2008.

Thank you



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Demo + Thanks + Questions

www.knowarc.eu