INVENIO + OBELIX

David Zerulla

- What is Obelix?
- How does it work?
- How to use it?
- What is in the future?

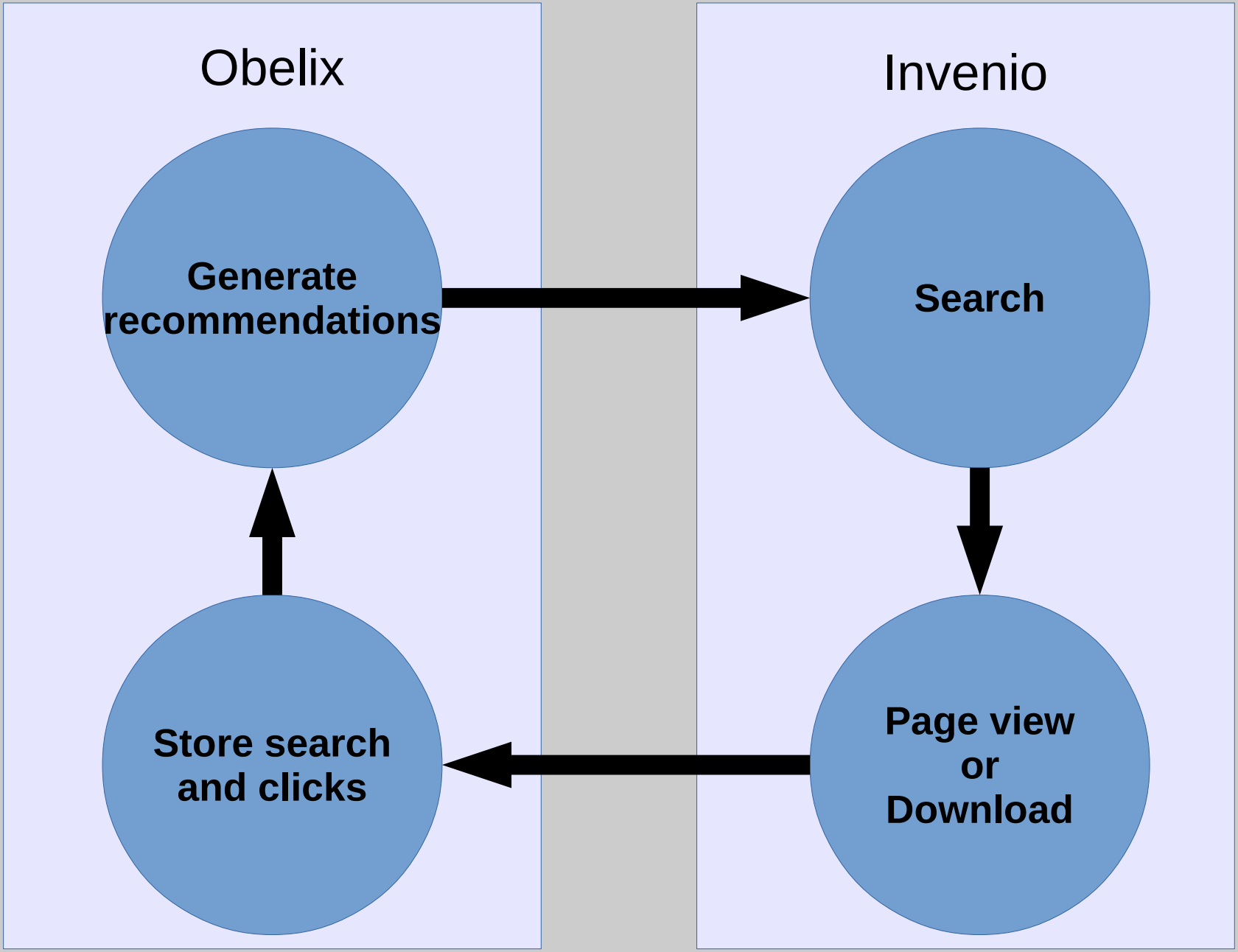
What is Obelix?

a personalized recommendation engine.

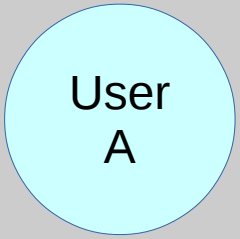
- Analyzes the user behavior and recommends related records.

- In-depended of Invenio, developed in Java.
- Its using Neo4j (a graph database).
- Binding to Invenio with the Obelix-Client.
- Development started by Fredrik Carlsen.

How does it work?



How does it work?



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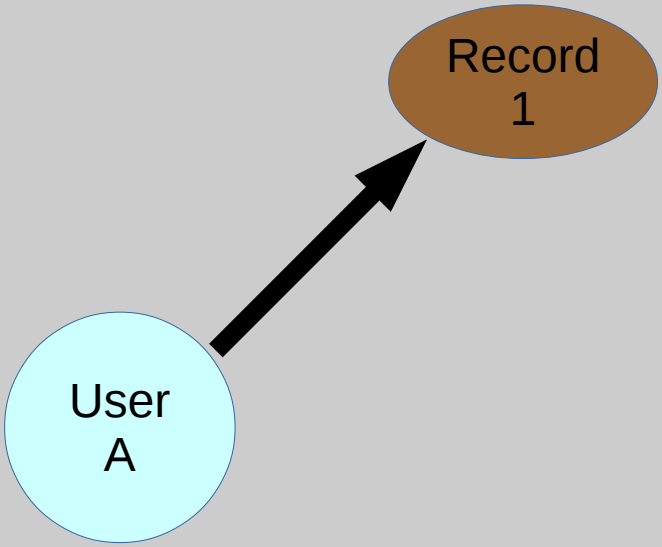

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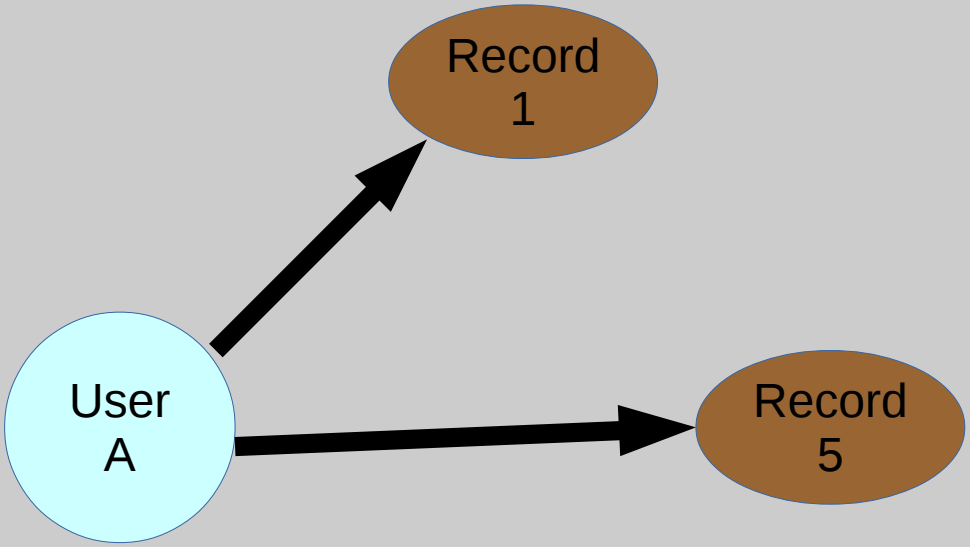

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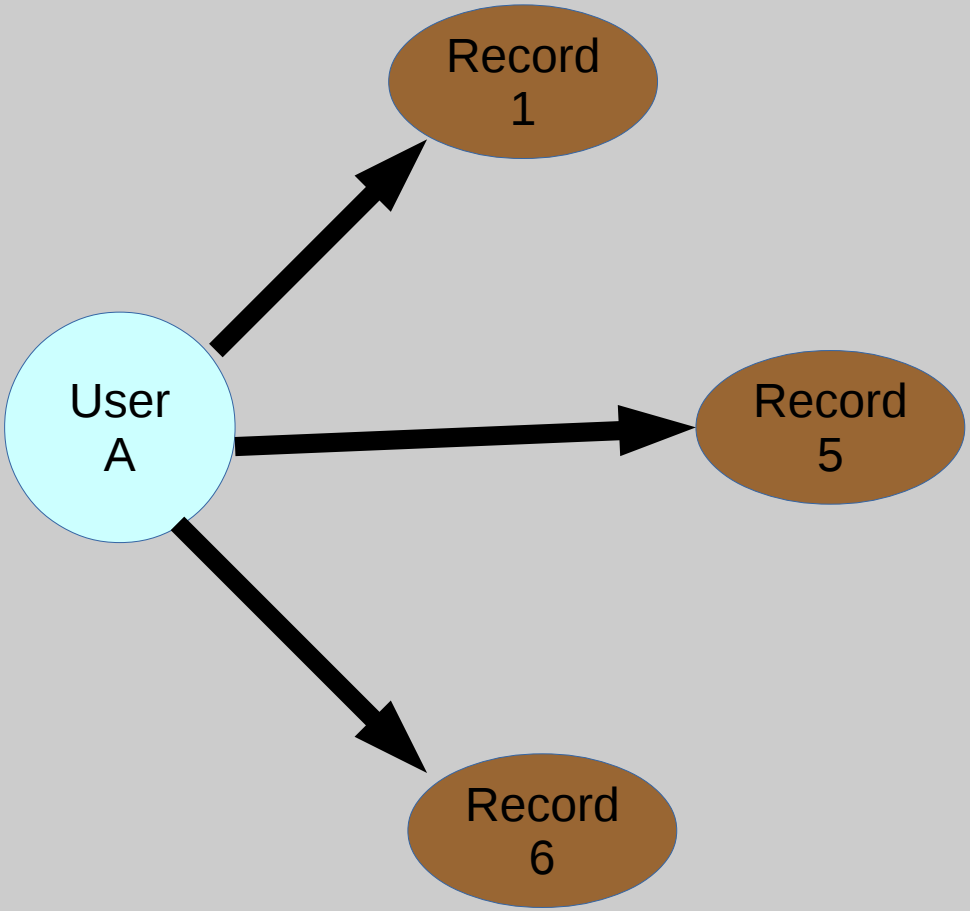

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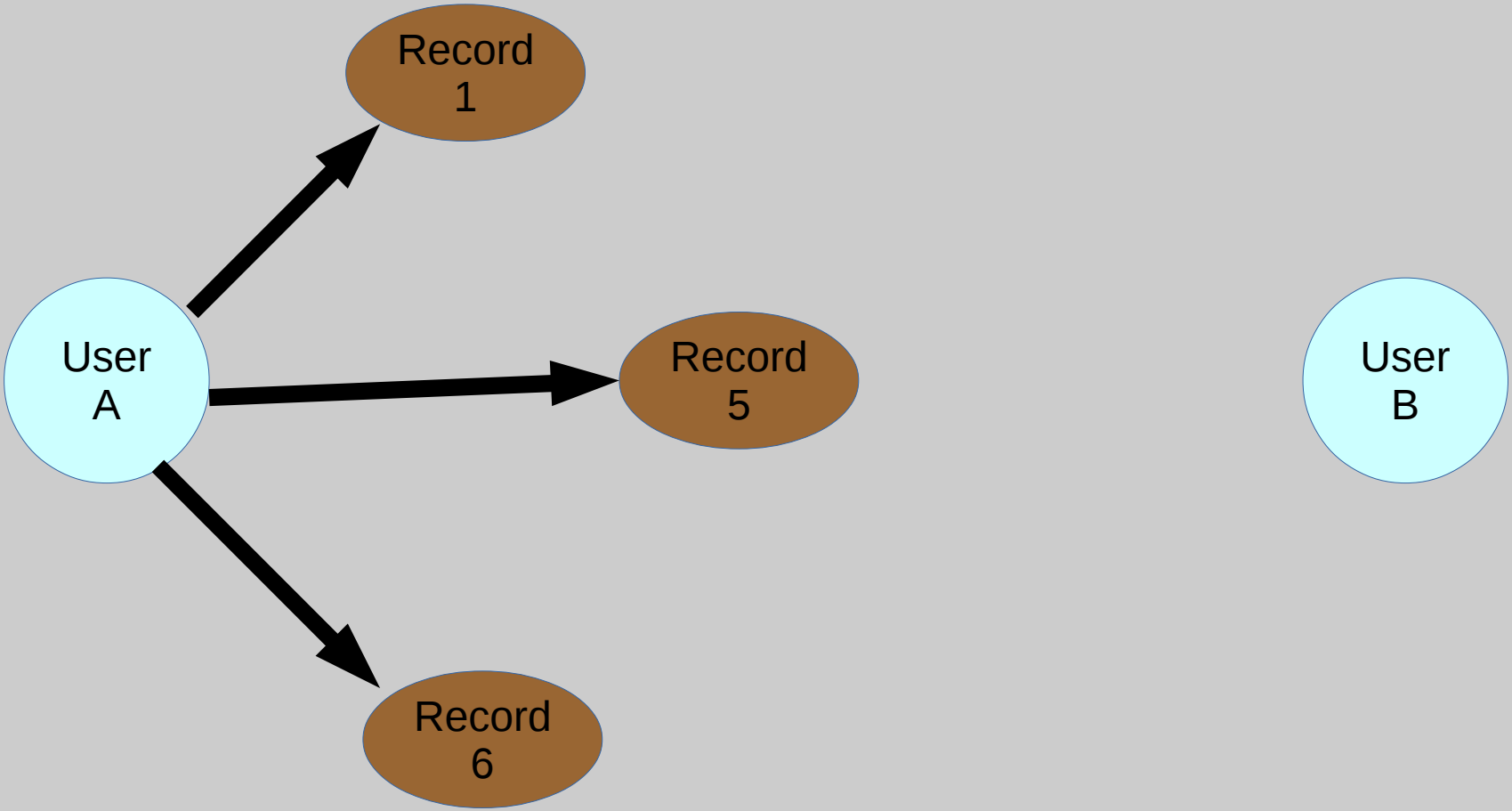

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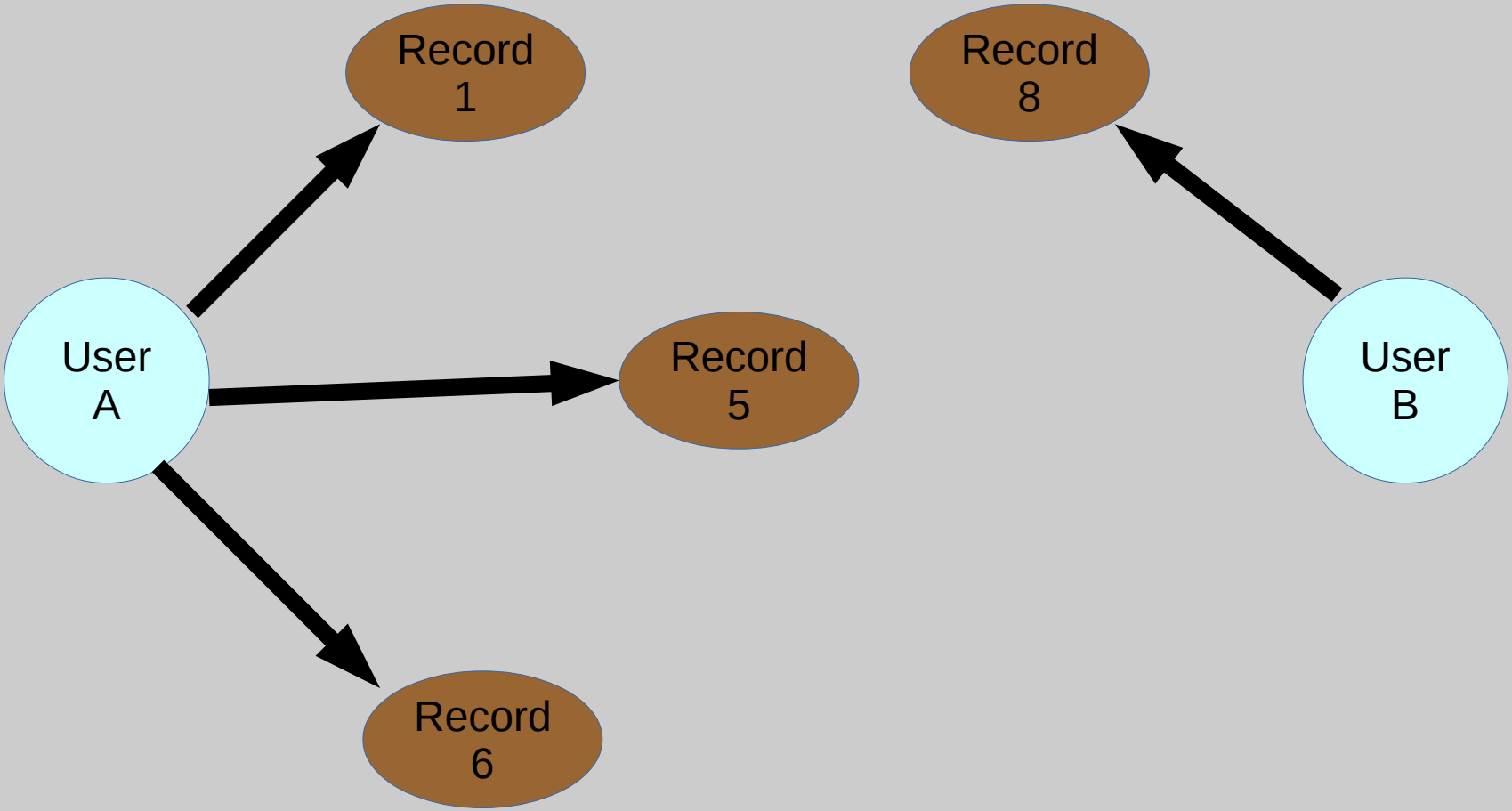

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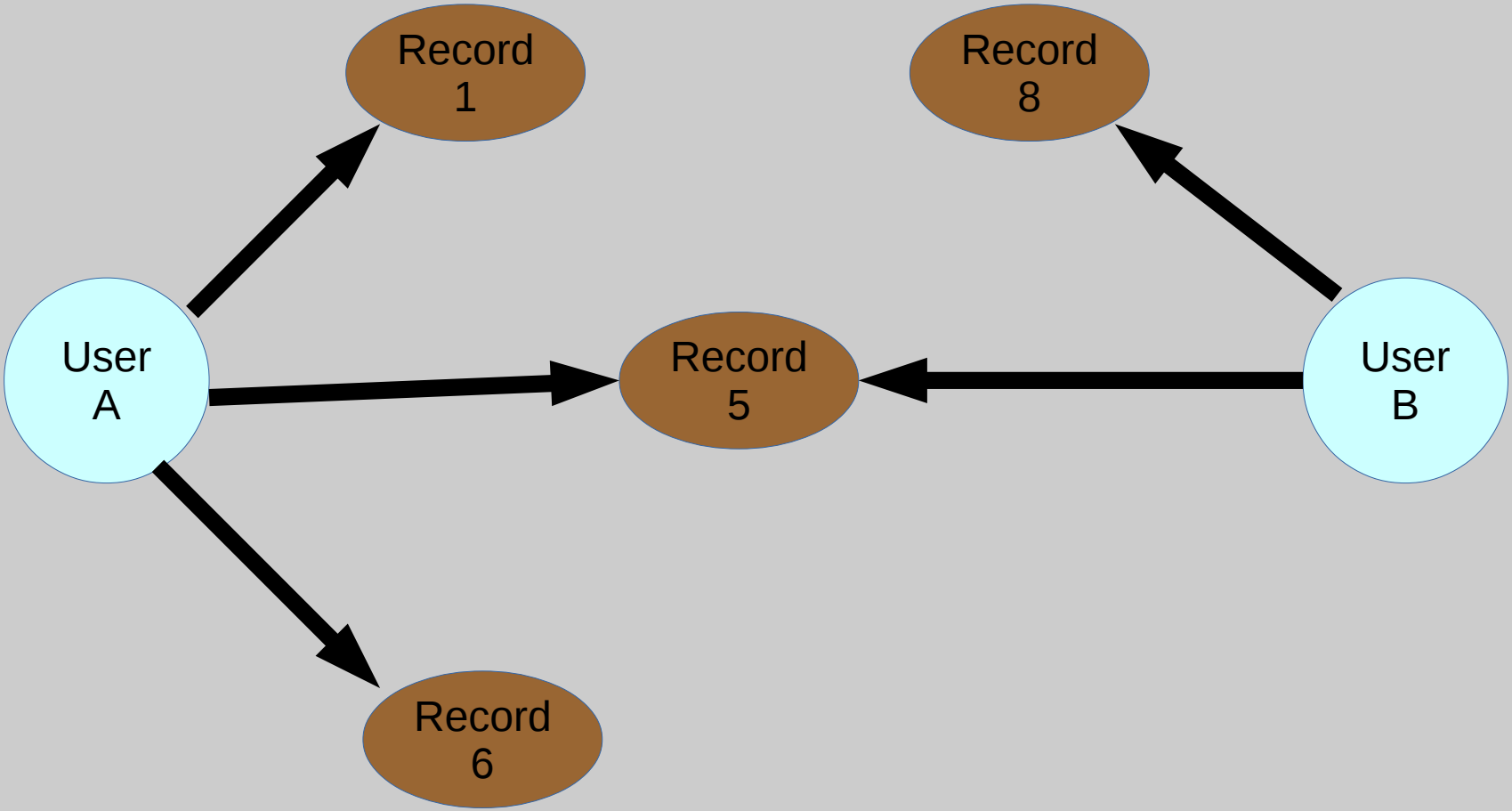

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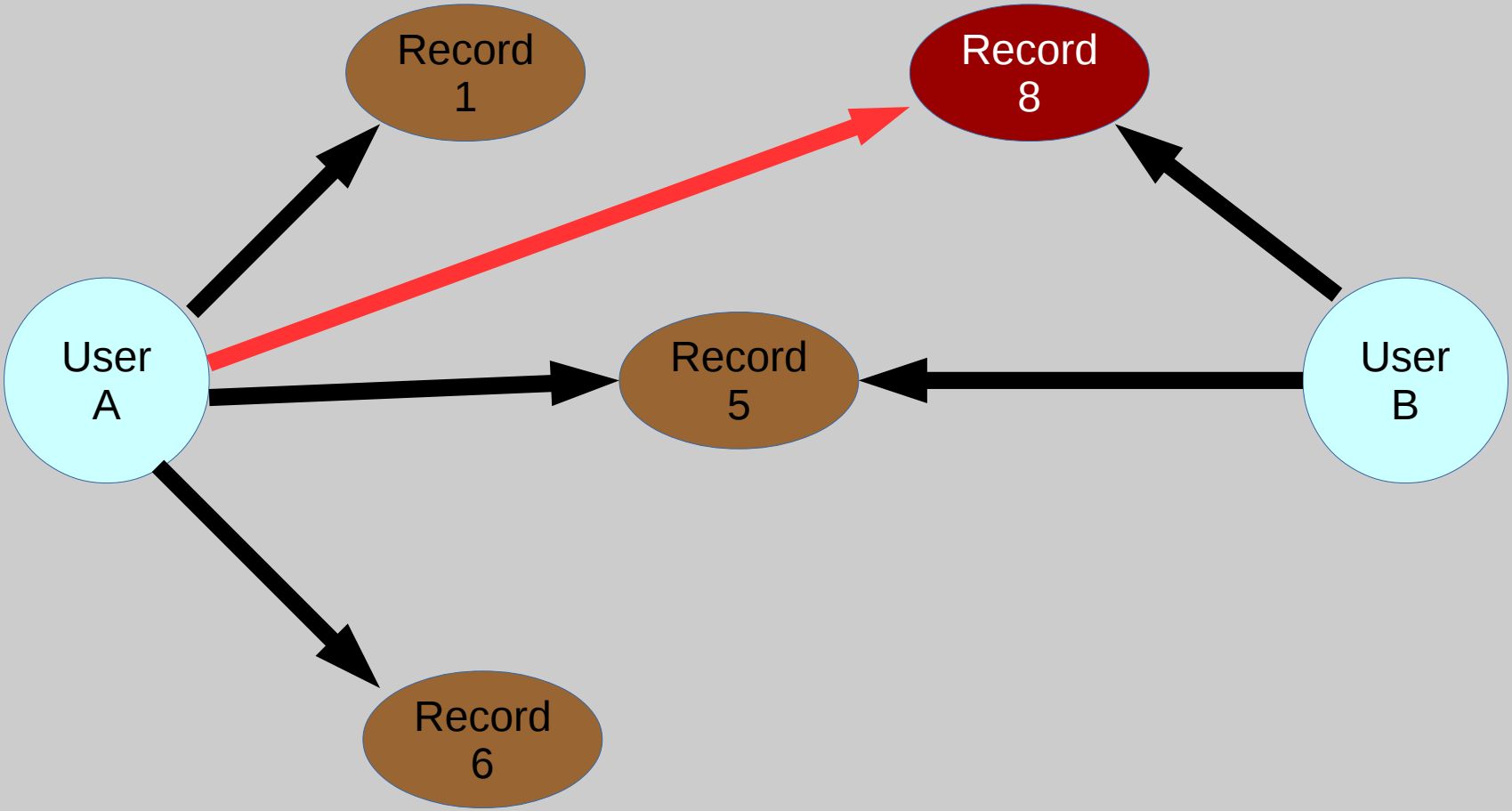

How to use it?

On the Invenio side:

- Invenio 1.x required
  - PR #3203 WebSearch: optional Obelix integration
- Obelix-Client - github.com/inveniosoftware/obelix

On the Obelix side:

- Obelix - github.com/inveniosoftware/obelix-client
- Redis
- Neo4j

What is in the future?

- Integration in Invenio 2
- Different approaches to generate the recommendations
- Recommendation box

Article

Report number	nucl-th/0607019 ; DAPNIA-2006-160
Title	**Study of the threshold behavior of the ηN scattering amplitude through the associated photoproduction of ϕ- and η-mesons**
Author(s)	Soyeur, M ; Lutz, M F M
Imprint	2006. - 8 p.
In:	*Int. J. Mod. Phys. A* 22 , 2-3 (2007) 333-340
In:	9th International Workshop on Meson Production, Properties and Interaction, Krakow, Poland, 9 - 13 Jun 2006, pp.333-340
Subject category	Nuclear Physics
Abstract	We suggest that the $\gamma p \to \phi\eta p$ reaction cross section, in the kinematics where the ηp invariant mass in the final state lies between the threshold value (m_p+m_η) and the N*(1535) resonance mass, is largely determined by the ηN scattering amplitude close to threshold. The initial photon energy is chosen in the range $4 < E_\gamma^{Lab} < 5$ GeV, in order to reach low (absolute) values of the squared 4-momentum transfer from the initial photon to the final ϕ-meson. In these conditions, we expect the t-channel π^0- and η-meson exchanges to drive the dynamics underlying the $\gamma p \to \phi\eta p$ process. We show that the η-exchange is the dominating contribution to the cross section while the π^0-exchange is negligible. The η-π^0 interference is of the order of $20 - 30$. The sign of this term is not known and alters significantly our results. Data on the $\gamma p \to \phi\eta p$ process would be therefore very useful to help unravelling the behavior of the ηp scattering amplitude close to threshold and assessing the possibility of producing η-nucleus bound states.

Corresponding record in: Inspire

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