

P2P semantics

VS

Integration (i.e.,
classical) semantics

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$Student = Enrolled \wedge PaysOnTime$

1

2

Student

Enrolled

PaysOnTime



$RegularStudent = Enrolled \wedge PaysOnTime$

Person $\subseteq \forall \text{name.String}$

1

2

Person

name

String



NamedObject = $\forall \text{name.String}$

- P2P semantics in other fields proved to
 - lower the data/query/mapping complexity (if mappings are complex)
 - have a distributed local inference procedure (modularisable)
- Integration semantics is not modularisable, but can express simple mappings for free
- No published results on P2P semantics with even the smallest DL (e.g., \mathcal{FL}^-)
- Extensive testing will be needed to prove the practical feasibility