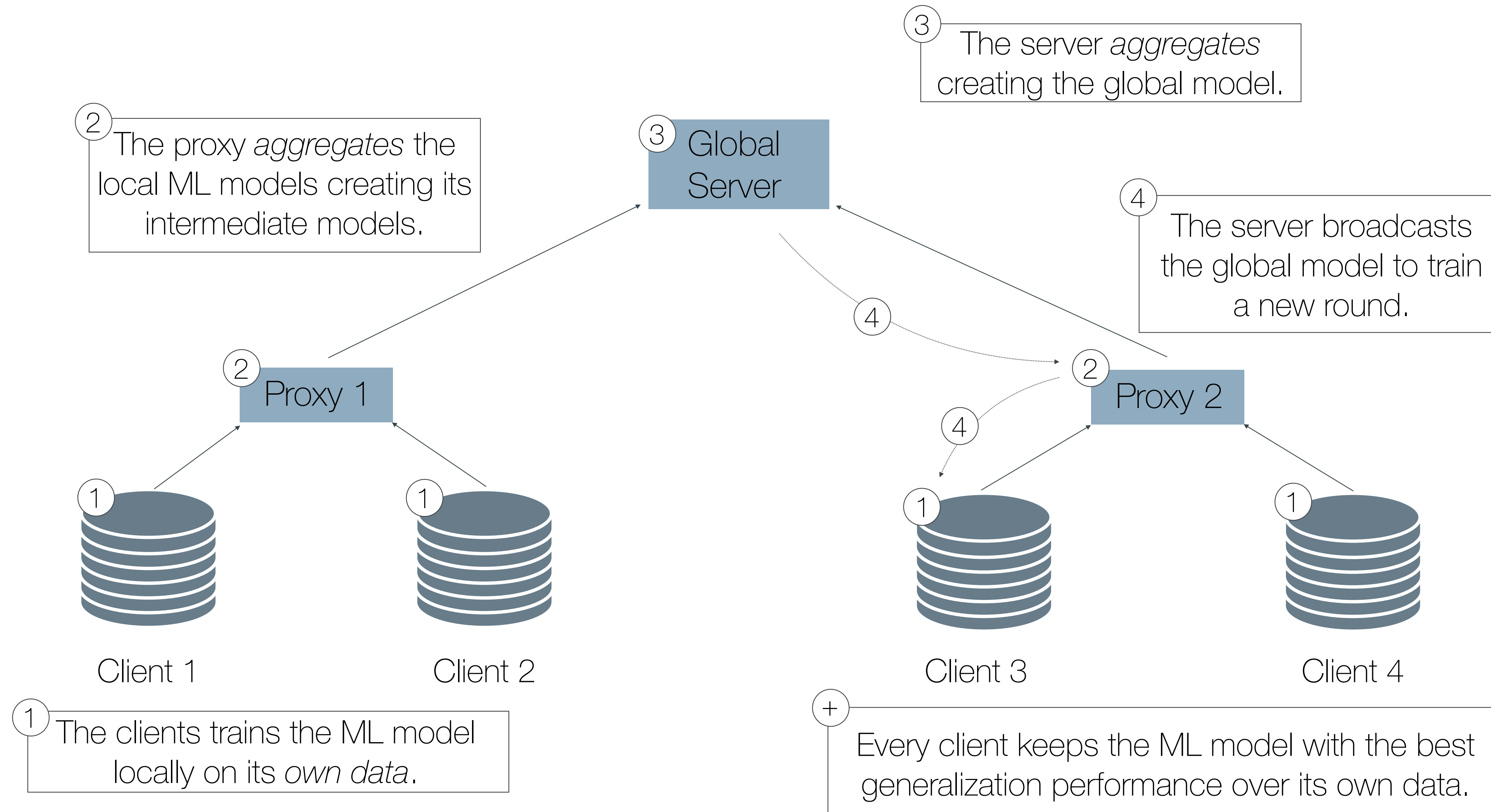


Privacy, explanations, and fairness in Federated Learning

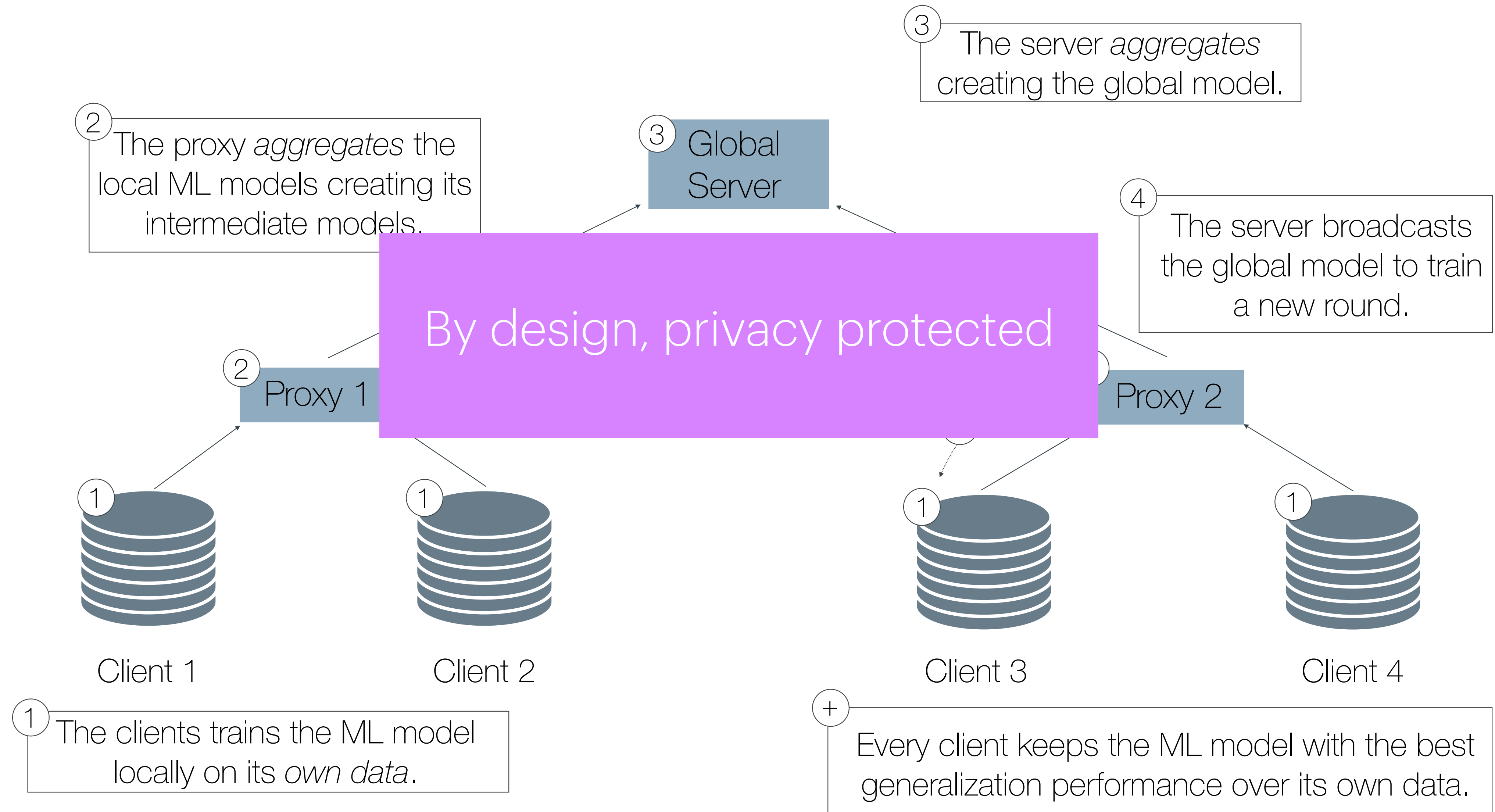
Federated Learning



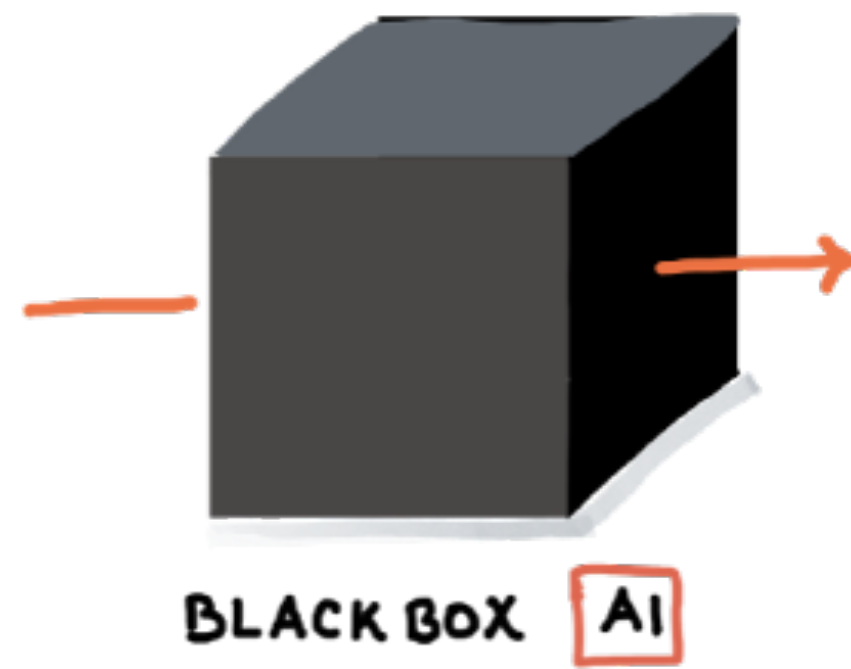
Federated Learning



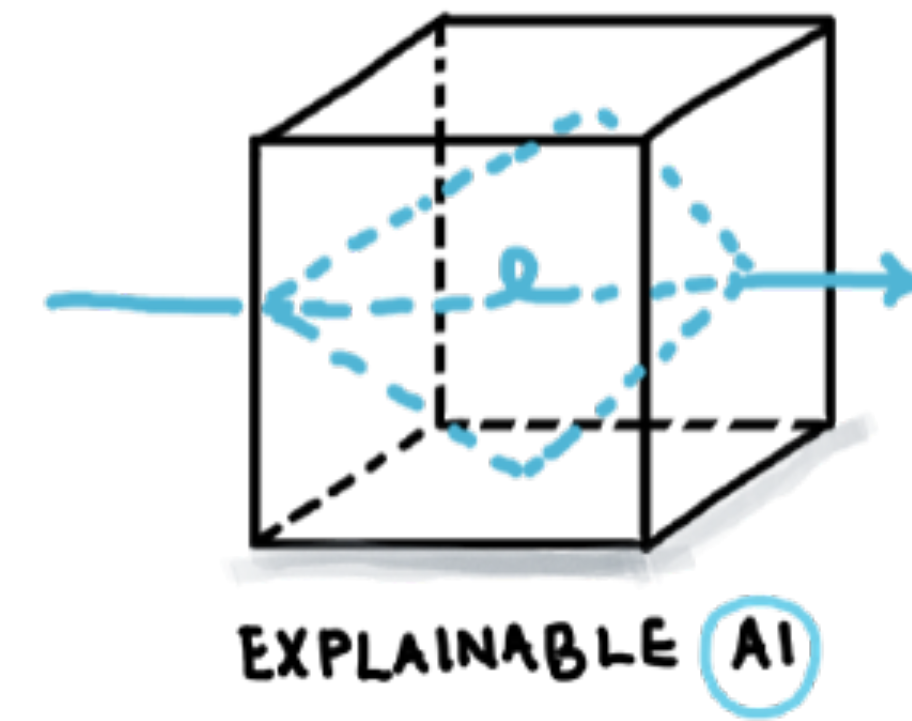
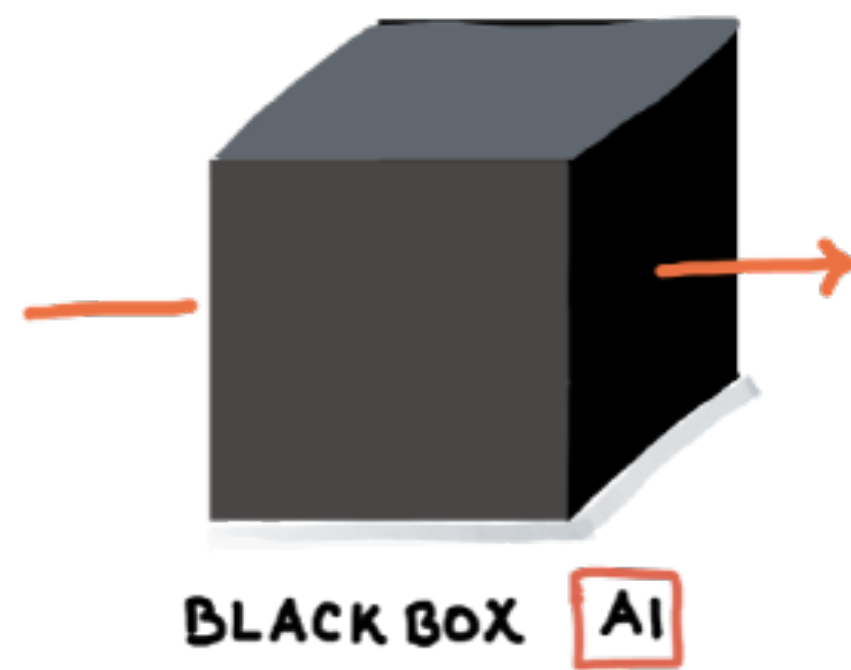
HOLDA paper



Explainable AI



Explainable AI



Our objective

1. Global, post-hoc explanations for Federated Learning

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2. Explanations in the form of rules

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2. Explanations in the form of rules
3. Privacy protected

Our objective

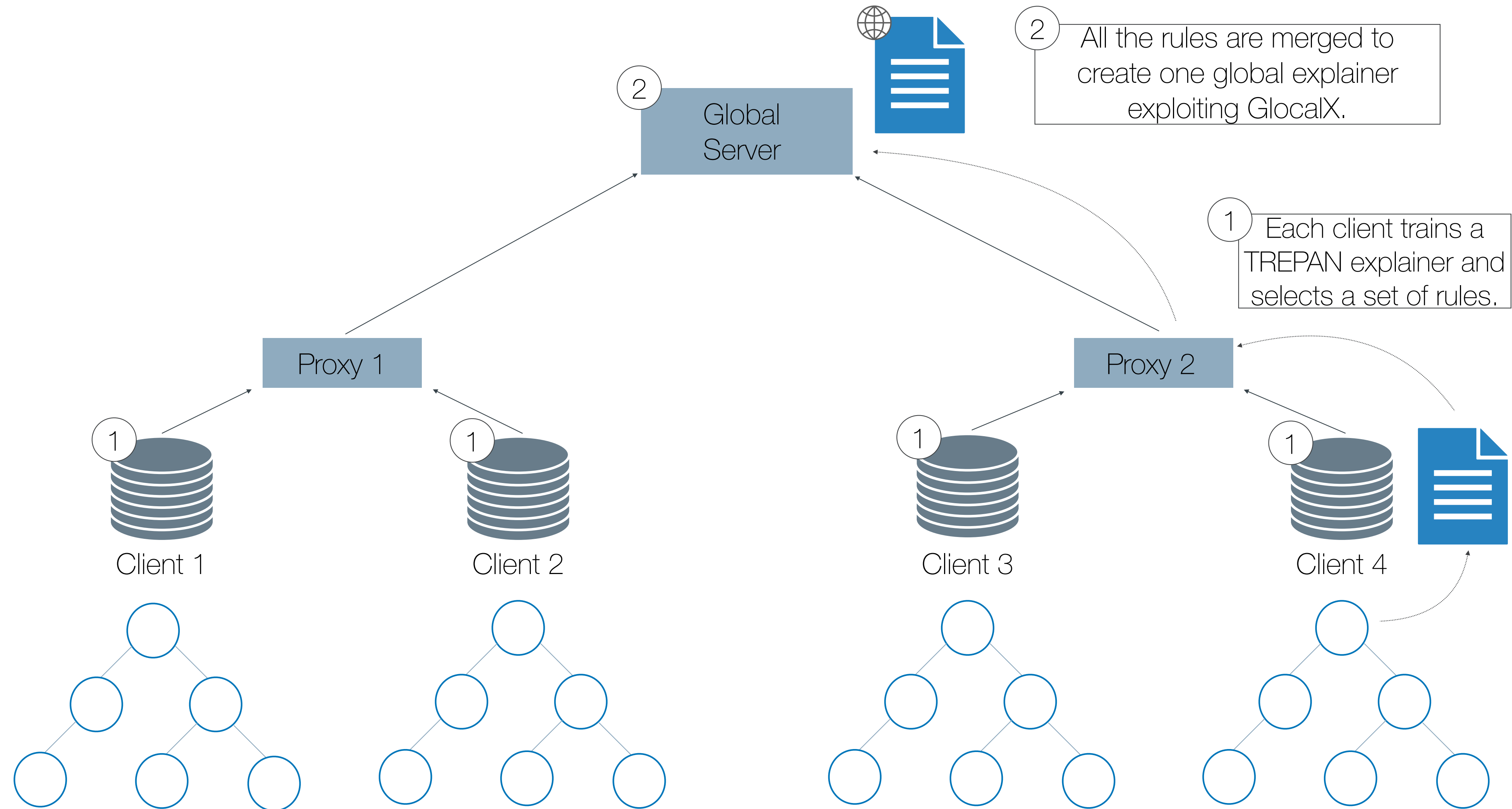
1. Global, post-hoc explanations for Federated Learning
2. Explanations in the form of rules
3. Privacy protected

The server does not possess any training data, hence it cannot generate any explanations

GLOR-FLEX



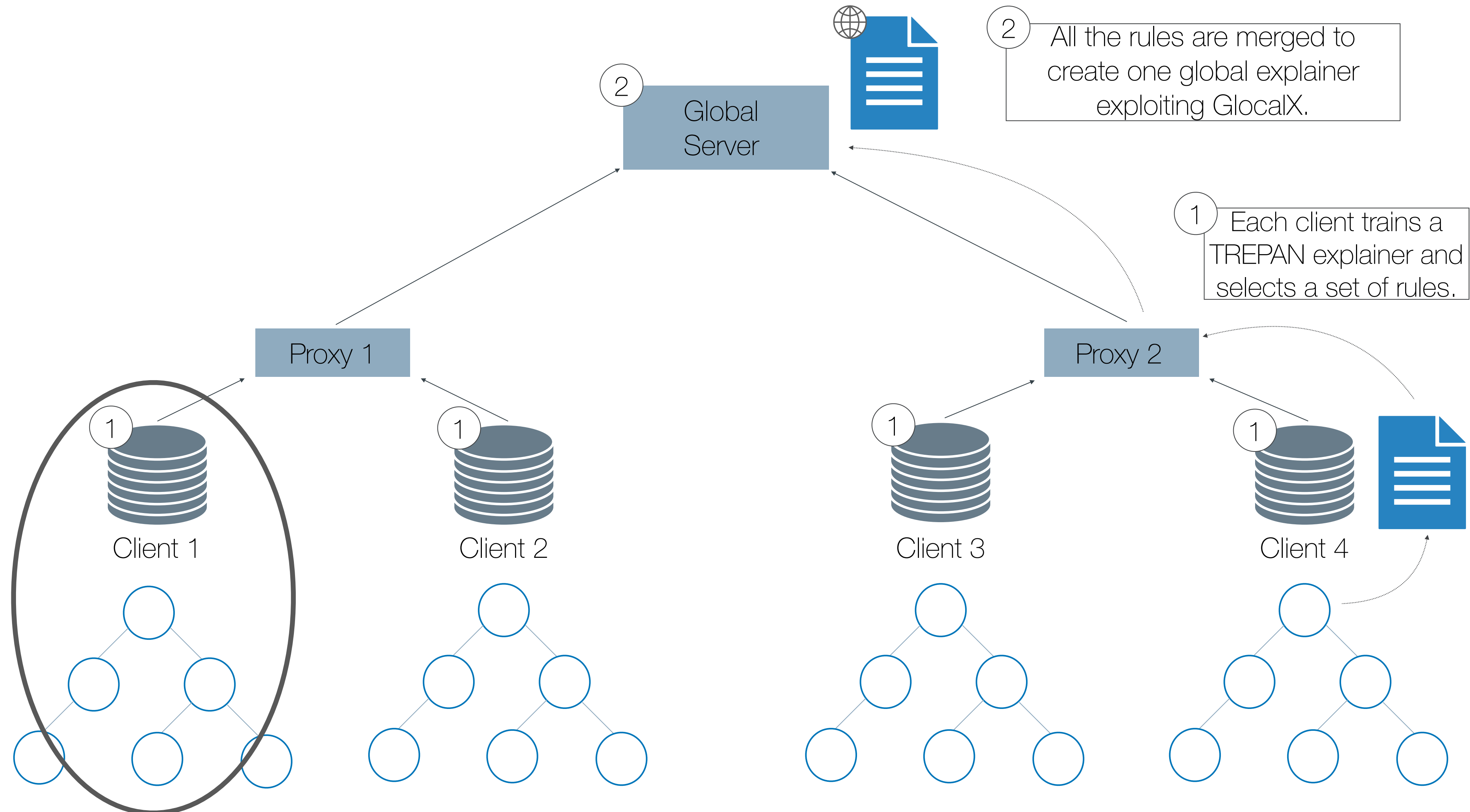
Our paper



GLOR-FLEX



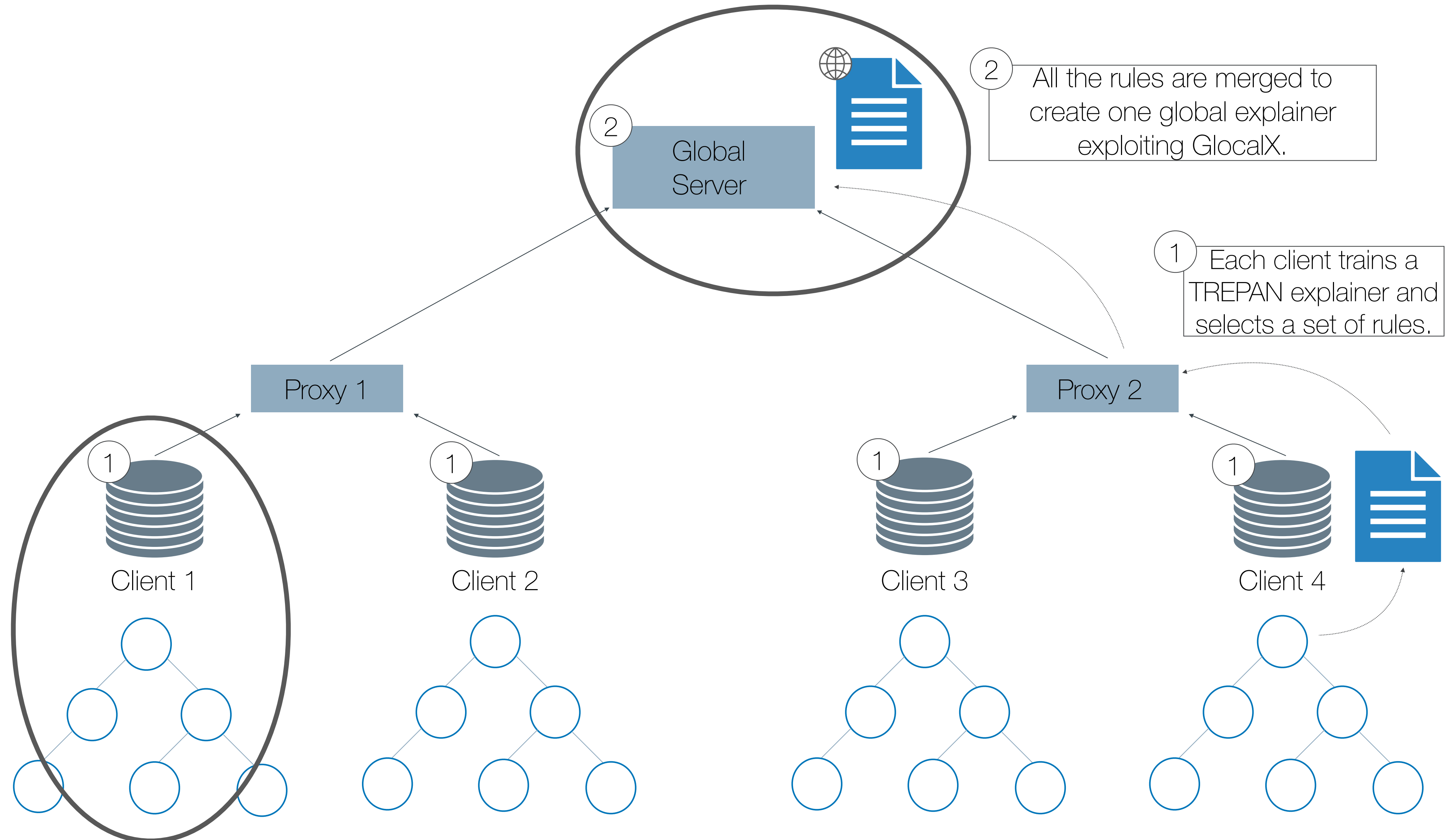
Our paper



GLOR-FLEX



Our paper

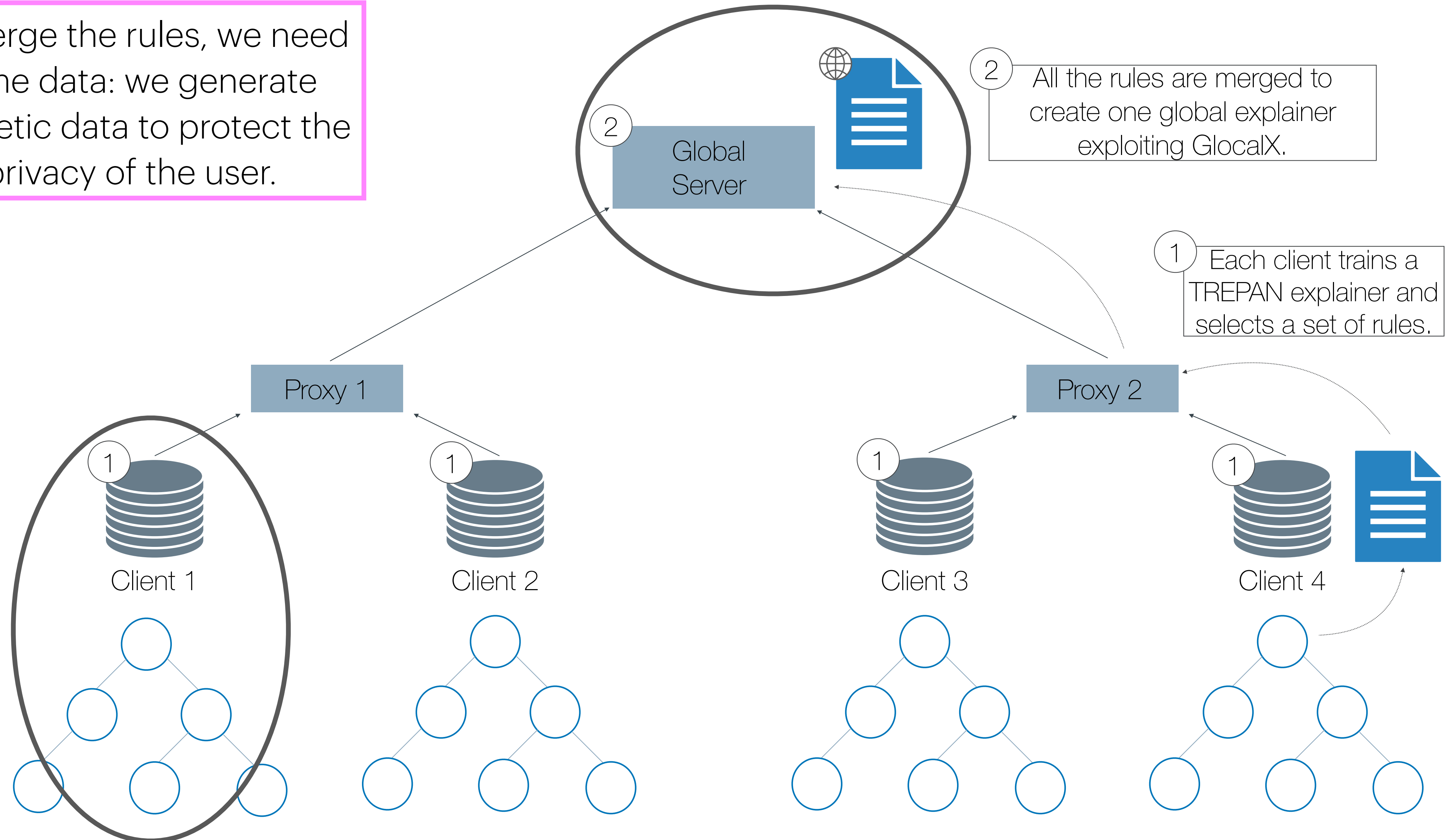


GLOR-FLEX



Our paper

To merge the rules, we need some data: we generate synthetic data to protect the privacy of the user.





Our paper

What's next?

1. What about local explanations?
2. Can we incorporate user preferences?
3. How to incorporate fairness in our privacy protected explanations?