

FATE Development Committee Meeting

2022/5/12

Agenda

- FATE / KubeFATE 1.9 Update
- Create new repo: FATE-Builder
- Create new repo: Federated Lifecycle Manager
- Trustworthy FML research
- Feature discussion & update
 - HW acceleration (Clustar)
 - Training management portal (BOC Fintech)
 - Semi-supervised learning (EB China Tech)
 - Suggestions on Fateflow and Spark (docker compose) (UnionPay)
- Technical articles for community

FATE 1.9.0

- Completed:
 - Support interconnection between eggroll , spark, standalone backend
 - Added api data storage type
 - Add the api reader component to get the specified feature data
- Extra PRs:
 - Semi-Supervised Learning: <https://github.com/FederatedAI/FATE/pull/3972>
 - FeatureTransform Component: <https://github.com/FederatedAI/FATE/pull/3948>
 - FedGCN: <https://github.com/FederatedAI/FATE/pull/3918>
- <https://github.com/orgs/FederatedAI/projects/9>
- <https://github.com/orgs/FederatedAI/projects/10/views/1>

FATE-Builder

A release packing tool for FATE

What is FATE-Builder?

- FATE has many release packages, such as Standalone, AllinOne, AnsibleFATE, etc. Before FATE 1.8, these packages were built manually. It requires the maintainer to use multiple scripts to build each package.
- On FATE 1.8, all release packages were built automatically by FATE-Builder with just one command. And it is CI friendly, it can be integrated into GitHub CI for automatic releasing.

Why use a separate repository?

- FATE-Builder includes some templates for generating packages, e.g. AnsibleFATE. Normal users does not need these templates.
- FATE-Builder does not require a specific FATE version. Currently, it supports FATE 1.7+ and has been fully tested on FATE 1.8.
- FATE-Builder does not use any script from FATE repository. It can clone, pull, build FATE and all submodules (eggroll, fateflow and fateboard), so it can run independently.

<https://github.com/FederatedAI/FATE-Community/issues/46>

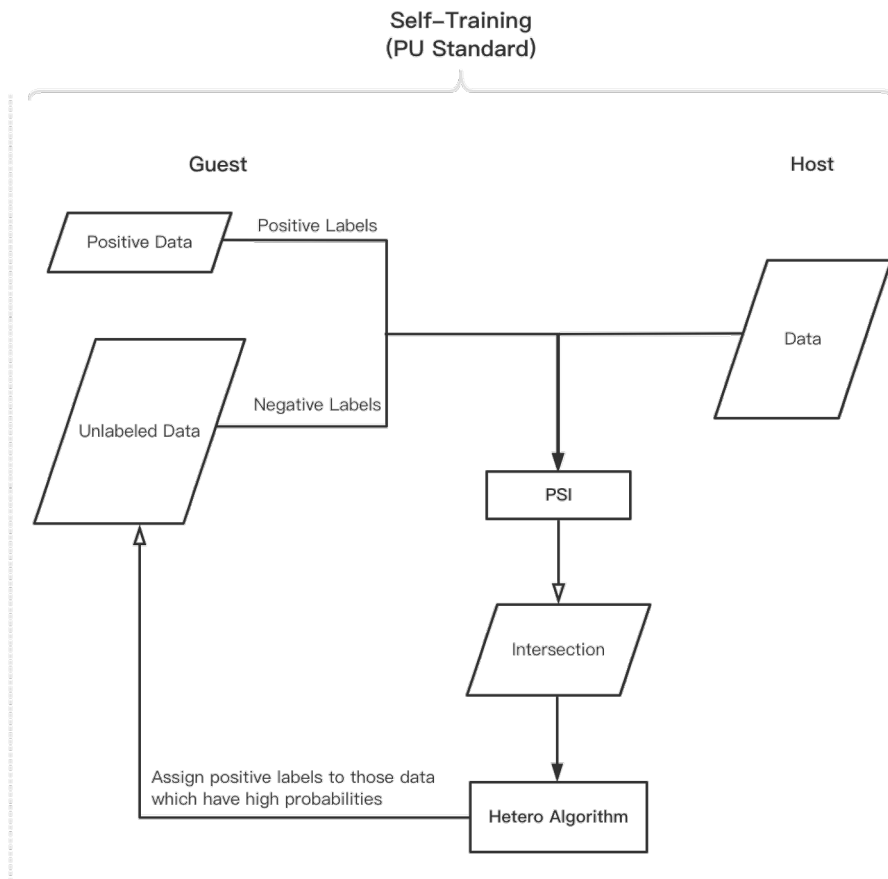
New Repo for Federated Lifecycle Manager

- The federation provisioning and management is missing.
- The deployment solutions are CLI-based.
- An easy-to-use GUI deployment solution is needed.
- A Federated Lifecycle Manager is easy to use for large-scale FATE cluster provisioning and management.
- To create a new repo for the Federated Lifecycle Manager (FedLCM) for the development of this feature.
- <https://github.com/FederatedAI/FATE-Community/issues/45>

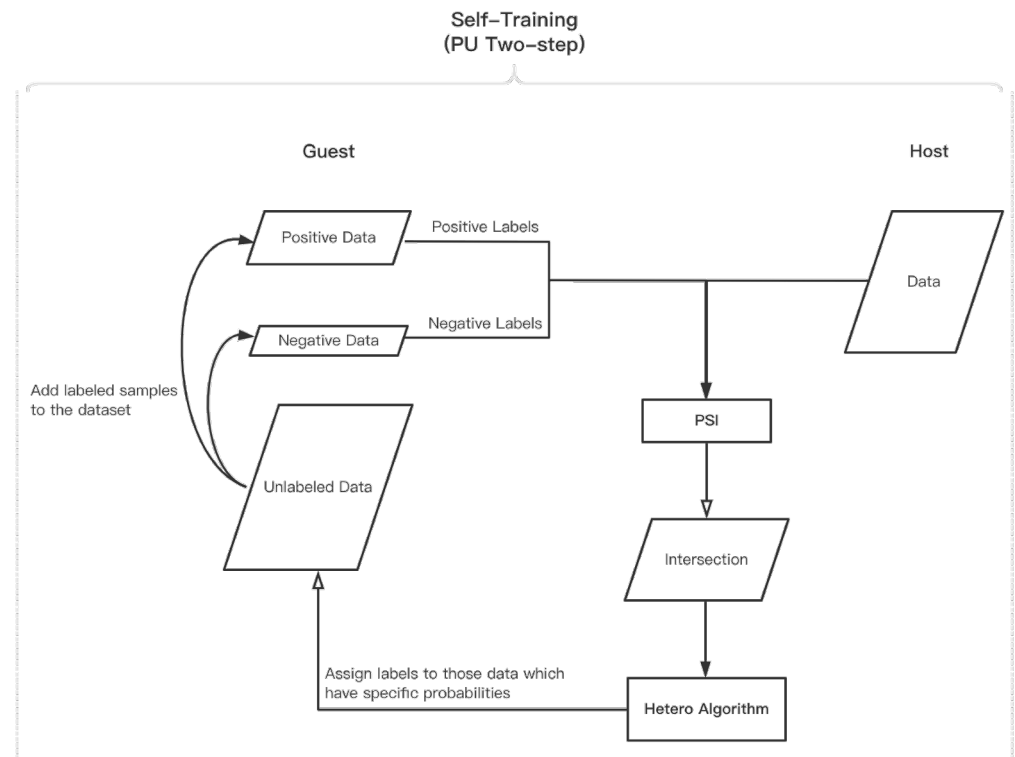
Trustworthy Federated Learning

- Research paper and related code to be published under FederatedAI/research repo.
- The repo is for testing purposes and should NOT be used for production.

Semi-Supervised Learning



<https://github.com/FederatedAI/FATE/issues/3930>



<https://github.com/FederatedAI/FATE/pull/3972>

Semi-Supervised Learning

