

FediTest Project













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Status

Protocol-independent interoperability test framework

Good

- For distributed, heterogeneous systems
- Using complex protocols (like in the Fediverse)
- Test suite for the ActivityPub-based Fediverse

"Node Drivers" for common Fediverse applications

2-node systems tests: good 3-node systems tests: started Protocol tests: mixed

Mastodon: good WordPress+plugins: bugs + SaaS/Manual Node: good

~10 KLOC

^{*}Can also be used for non-Fediverse protocol(s)

Problem: setup of distributed state

- Example test: "If Alice follows Bob, does she receive his new posts?"
 - Provided that ...
 - @alice@a.example GETs @bob@b.example's WebFinger file
 - @alice@a.example GETs @bob@b.example's Actor file
 - @alice@a.example signs and POSTs a "follow" to @bob@b.example's inbox
 - @bob@b.example GETs @alice@a.example's WebFinger file
 - @bob@b.example GETs @alice@a.example's Actor file
 - @bob@b.example validates @alice@a.example's signature on the "follow"
 - @bob@b.example accepts the "follow"
 - @bob@b.example signs and POSTs an "accept" to @a@a.example's inbox
 - @alice@a.example validates @bob@b.example's signature on the "accept"
 - Now this action ...
 - @bob@b.example "creates" a "note"
 - Leads to this desired result to be verified:
 - @alice@a.example's inbox receives the "create note", correctly signed by @bob@b.example's key
- Problem:
 - Many steps to get a.example and b.example into the state where the actual test can be performed