

NEXT GENERATION INTERNET

Pilot TALER

Taxable Anonymous Libre Electronic Reserves

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NGI Taler Work Packages

- ▶ WP1: Project Management
- ▶ WP2: Finance
- ▶ WP3: Verticals toward Commercialization
- ▶ WP4: Open Calls & Grants Management
- ▶ **WP5: Innovation**
- ▶ WP6: Outreach & Dissemination

Work Package 5: Innovation

Three main areas:

- ▶ Software Implementation (“GNU Taler packages”)
 - ▶ Broader availability, enhanced functionality+features, UX, usability, accessibility
- ▶ Asset tokenization
- ▶ Post-Quantum Cryptography

Partners:

- ▶ **Taler Systems SA (lead)**
- ▶ **TU Eindhoven**
- ▶ VisualVest
- ▶ Bern University of Applied Sciences
- ▶ Eseniors
- ▶ Code Blau GmbH

WP5: Tasks

- ▶ **T5.1: Ubiquitous availability (M1-M36)**
- ▶ **T5.2: Easy deployment and run-time monitoring (M12-M18)**
- ▶ T5.3: Third-party driven enhancements and innovation (M9-M36)
- ▶ **T5.4: Improved auditor (M15-M36)**
- ▶ T5.5: Asset tokenization pilot (M18-M36)
- ▶ **T5.6: Innovate Taler protocol with a post-quantum lens (M1-M36)**
- ▶ T5.7: Formalization and security proofs (M12-M36)

WP5: Deliverables

- ▶ **D5.1 – GNU Taler releases - mid-term version (M18)**
- ▶ D5.2 – GNU Taler releases - final version (M36)
- ▶ D5.3 – Assessment of quantum impact on GNU Taler protocol suite - initial (M12)
- ▶ **D5.4 – Quantum impact on GNU Taler protocol suite - post-quantum replacements and security proofs version (M36)**
- ▶ D5.5 – Implementation of PQC replacements (M36)

WP5: Results so far (I)

Taler Software Packages (T5.1, D5.1):

- ▶ Three releases since start of NGI Taler
- ▶ Release frequency increased to (roughly) one per month
- ▶ Improved project management and QA
- ▶ Wallet iOS App now available on App Store
- ▶ Preview of ARM (and more) architecture packages available for Debian/Ubuntu

Auditor Improvements (T5.4):

- ▶ First student projects on real-time auditor concluded

WP5: Results so far (II)

(Regional Currency) Deployment (T5.1, D5.1, T5.3):

- ▶ CHF deployment at BFH
 - ▶ Quote from student: *"It was faster to use than TWINT"*
- ▶ Automated/guided deployment now available!
- ▶ Deployment with Netzbond Basel in progress
- ▶ Deployment with LUGCamp (in Germany) in May
 - ▶ Used a GLS bank account!
 - ▶ 70+ participants, 500+ transactions
 - ▶ SEPA Instant
- ▶ GLS50 showcase
- ▶ More planned!

WP5: Results so far (III)

PQC (D5.3-D5.5):

- ▶ First discussions about PQC concerns/replacements
- ▶ TU/e hired Jonathan Levin as a PhD student
- ▶ Almost finished: Inventory and cataloging replacement options

Others:

- ▶ Cashless-to-Ecash project at BFH (T5.3, WP2)
- ▶ DONAU: Donation receipts (implemented server-side, wallet support pending)
- ▶ Subscriptions (implemented server-side)
- ▶ Received/discussed/scoped first 3rd party enhancements requests (T5.3)
- ▶ Ongoing translations effort (D5.1)
 - ▶ For user-facing components, Spanish and German translation close to complete

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