

CFRG Research Group Status

IETF 114 Philadelphia

Chairs:

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Administrative

- This session is being recorded
- Minute taker in HedgeDoc
- Jabber comment relay

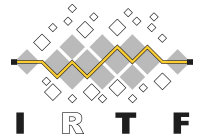
Participant guide: <https://www.ietf.org/how/meetings/technology/meetecho-guide-participant/>

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Bluesheets are automatically generated based on IETF Datatracker information

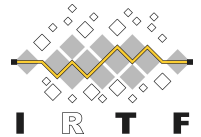
Minutes: <https://notes.ietf.org/notes-ietf-114-cfrg>

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- See [RFC 7154](#) (Code of Conduct) and [RFC 7776](#) (Anti-Harassment Procedures), which also apply to IRTF

Goals of the IRTF



- The Internet Research Task Force (IRTF) focuses on longer term research issues related to the Internet while the parallel organisation, the IETF, focuses on shorter term issues of engineering and standards making
- **The IRTF conducts research; it is not a standards development organisation**
- While the IRTF can publish informational or experimental documents in the RFC series, its primary goal is to promote development of research collaboration and teamwork in exploring research issues related to Internet protocols, applications, architecture, and technology
- See “An IRTF Primer for IETF Participants” – [RFC 7418](#)

CFRG Research Group

Online Agenda and Slides at:

<https://datatracker.ietf.org/meeting/114/session/cfrg>

Data tracker: <https://datatracker.ietf.org/rg/cfrg/documents>

Agenda

<https://datatracker.ietf.org/meeting/114/session/cfrg>

Chairs: Stanislav Smyshlyaev, Nick Sullivan and Alexey Melnikov

10:00 - Chairs' update.

10:10 - Tobias Looker, "The BBS Signature Scheme" (15+5 mins)
<https://identity.foundation/bbs-signature/draft-bbs-signatures.html>

10:30 - Deirdre Connolly, "Two-Round Threshold Schnorr Signatures with FROST" (10+5 mins)

10:45 - Chris Wood, "Key Blinding for Signature Schemes" (10+5 mins)

11:00 - Frederic Jacobs, "RSA Blind Signatures" (10+5 mins)

11:15 - Bjoern Haase, "CPace" (5+5 mins)

11:25 - Sofia Celi, "Post-Quantum NIST Process" (10+5 mins)

11:40 - Bas Westerbaan, "Kyber" (5+5 mins)
<https://github.com/bwesterb/draft-schwabe-cfrg-kyber>

11:50 - AOB

RG Document Status

Document Status (1 of 2)

- New RFC (since March)
 - None
- In RFC Editor's queue
 - draft-irtf-cfrg-spake2-26 (**MISSREF**, Hash-to-curve): SPAKE2, a PAKE
- In IESG review
 - draft-irtf-cfrg-hash-to-curve-16 (**updated**): Hashing to Elliptic Curves
- In IRSG review
 - None
- Waiting for IRTF Chair
 - draft-irtf-cfrg-vrf-13 (updated, **awaiting IRSG review**): Verifiable Random Functions (VRFs)
- Active CFRG drafts
 - draft-irtf-cfrg-kangarootwelve-07 (**waiting for chairs to review second RGLC outcome**): KangarooTwelve eXtendable Output Function
 - draft-irtf-cfrg-voprf-11 (**updated**): Oblivious Pseudorandom Functions (OPRFs) using Prime-Order Groups
 - draft-irtf-cfrg-ristretto255-decaf448-03 (**in RGLC. Alexey to close**): The ristretto255 and decaf448 Groups
 - draft-irtf-cfrg-aead-limits-05: (**updated**): Usage Limits on AEAD Algorithms
 - draft-irtf-cfrg-opaque-09 (**updated**): The OPAQUE Asymmetric PAKE Protocol
 - draft-irtf-cfrg-cpace-05: CPace, a balanced composable PAKE
 - draft-irtf-cfrg-frost-07 (**updated**): FROST: Flexible Round-Optimized Schnorr Threshold Signatures
 - draft-irtf-cfrg-rsa-blind-signatures-03: RSA Blind Signatures
 - draft-fluhrer-lms-more-param-sets-07 (**updated**): Additional Parameter sets for LMS Hash-Based Signatures
 - draft-irtf-cfrg-bls-signature-05 (**updated**): BLS Signature Scheme

Document Status (2 of 2)

- Documents in adoption call
 - draft-mattsson-cfrg-det-sigs-with-noise-04 (**Alexey to close the call. Seeking advice from IRTF Chair on expired IPR issue**): Deterministic ECDSA and EdDSA Signatures with Additional Randomness
 - draft-denis-aegis-aead-05 (**not enough responses, but more came lately**): The AEGIS family of authenticated encryption algorithms
- Expired
 - draft-irtf-cfrg-pairing-friendly-curves-10 (co-editor added, being worked on): Pairing-Friendly Curves
 - draft-irtf-cfrg-cipher-catalog-01: Ciphers in Use in the Internet
 - draft-irtf-cfrg-webcrypto-algorithms-00: Security Guidelines for Cryptographic Algorithms in the W3C Web Cryptography AP
 - draft-irtf-cfrg-augpake-09: Augmented Password-Authenticated Key Exchange (AugPAKE)
 - draft-hoffman-rfc6090bis-02: Fundamental Elliptic Curve Cryptography Algorithms
 - draft-irtf-cfrg-xchacha-03: XChaCha: eXtended-nonce ChaCha and AEAD_XChaCha20_Poly1305
 - draft-hoffman-c2pq-07: The Transition from Classical to Post-Quantum Cryptography

AOB