

# Common Authentication Technology Next Generation (kitten)

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# Overview

- Preliminaries (5 min)
  - Introduction
  - Blue Sheets
  - Scribe, Jabber
  - Remote participants
  - Agenda bashing
- WG document status (20 min)
- Kerberos PAD (10 min)
- Deprecating old Kerberos encryption types (10 min)
- Extra round trips in Kerberos (10 min)
- GSS-only Kerberos encytypes (10 min)
- PKCROSS (10 min)
- GSS generic naming attributes (10 min)
- Open Mic (5 min?)

# WG Document Status

Approved by the IESG:

- draft-ietf-kitten-cammac
  - But, we recalled it. Security Considerations needs updating
- draft-ietf-kitten-gss-loop
  - Waiting for the RFC Editor

# WG Document Status

## Post-WGLC:

- draft-ietf-kitten-sasl-oauth
- draft-ietf-kitten-rfc4402bis
- draft-ietf-kitten-rfc6112bis
- draft-ietf-kitten-rfc5653bis

# draft-ietf-kitten-sasl-oauth

- A set of SASL Mechanisms for OAuth
- Shepherd review found an old minor issue relating to 'scope' handling (see email).
- WGLC was otherwise successful, so this should be moving forward soon. (The shepherd writeup covers most of the 4.5-year history of the document; apologies to the relevant AD.)

# draft-ietf-kitten-rfc4402bis

- A GSS PRF for Kerberos
- Part of the group of three “bis” documents’ WGLC
- No major issues
- Some minor editorial changes needed
- Needs someone to put out a new revision. Shawn?

# draft-ietf-kitten-rfc6112bis

- Anonymity Support for Kerberos
- Part of the group of three “bis” documents’ WGLC
- Some edits needed
- A new WGLC may be needed depending on the nature of the edits.
- Need a volunteer to make edits -- Sam? Someone else?



# draft-ietf-kitten-rfc5653bis

- Java GSS bindings update
- Part of the group of three “bis” documents’ WGLC
- The addition to GSSException performs the stated purpose and fills a need for that specific case (output token alongside error return)
- Issues raised with stream-based methods
  - With an output stream, an error token could be sent without API changes (probably none currently do)
  - Did the original authors of RFC 2853 properly understand the (non-)framing of GSS tokens?
  - Streams can be used correctly, but is it too complicated to realistically expect consumers to do so?
  - Proposal to mark as deprecated; further discussion needed

# WG Document Status

WGLC queue:

- draft-ietf-kitten-aes-cts-hmac-sha2
- draft-ietf-kitten-pkinit-freshness (needs new revision)
- draft-ietf-kitten-gssapi-extensions-iana

# WG Document Status

Documents not yet ready for WGLC:

- draft-ietf-kitten-sasl-saml-ec
- draft-ietf-kitten-iakerb
- draft-ietf-kitten-krb-auth-indicator
- draft-josefsson-kitten-gs2bis
- draft-ietf-kitten-channel-bound-flag
- draft-ietf-krb-wg-pkinit-alg-agility
- draft-ietf-kitten-kerberos-iana-registries

# draft-ietf-kitten-sasl-saml-ec

- Scott has been very busy, so progress is slow
- A new version was posted in December
- Has anyone read it?

# draft-ietf-kitten-iakerb

- Ben posted an update in October covering comments made in the previous WGLC
- Who has read it?
- Need a couple people to read and comment
- More edits may or may not be needed
- Will go into WGLC queue after some review is received

# draft-ietf-kitten-krb-auth-indicator

- Authentication Indicator for Kerberos (string representing how the initial authentication was performed)
- First WG version back in February
- Who has read it? (Only 4 pages!)
- Do we want examples?
- May still need more updates

# draft-josefsson-kitten-gs2bis

- GS2bis is needed to update the GS2 spec to allow mechanisms which do not provide channel binding and/or mutual authentication
- There are old comments in the archives which were not addressed.
- Someone needs to go through and find them all
- Alexey volunteered to make updates to address those comments.
- Do we still want to move this forward?

# draft-ietf-kitten-channel-bound-flag

- Implementations of GSS channel bindings don't match the spec with respect to criticality of supplied bindings
- There is currently no way to incrementally upgrade an application protocol from no bindings to using them, without a flag day
- Has been expired for a while; is there still interest?
- Only relatively minor edits should be needed; any volunteers?



# draft-ietf-krb-wg-pkinit-alg-agility

- Update PKINIT to remove structures tied to particular algorithms in favor of negotiation
- Expired in 2012
- Future-proofing that will be needed eventually
- Bill volunteered to be editor, but we dropped the ball on what changes were needed

# draft-ietf-kitten-kerberos-iana-registries

- Tom has enlisted some help in verifying registries
- Seems a bit stalled?
- We promised to do this years ago...

# Non-WG Document Status

Non-WG documents for consideration and old WG documents whose revival may be under consideration:

- draft-ietf-krb-wg-pad
- draft-kaduk-kitten-des-des-des-die-die-die
- draft-williams-kitten-krb5-extra-rt
- [GSS-only Kerberos encyptes; no draft yet]
- draft-williams-kitten-krb5-pkcross
- draft-williams-kitten-generic-naming-attributes
- draft-mccallum-kitten-krb-service-discovery
- draft-williams-kitten-impersonation-naming-attr

# Non-WG Document Status

[presentations]

# draft-mccallum-kitten-krb-service-discovery

- SRV records don't scale well to new transport types and new services to discover (MS-KKDCP, proxies)
- Instead, make a single URI query and get back all types at once; another DNS query may be needed to resolve a hostname from the returned URI
- Converting clients to check the new record and realms to provide it will take time to transition
- How much interest in this work?

draft-williams-kitten-impersonation-naming-attr

- Naming extensions for S4U attributes
- Are we interested?

# Open Mic

- Any comments/questions?