

# OAuth 2.1

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draft -05

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# Changes Since draft -04

- TLS is mandatory for redirect URI except loopbacks (Thanks Roberto)
- Reorganized and consolidated TLS language (Thanks Roberto)
- Editorial clarifications based on feedback and PRs
  - Updated more references to new RFCs
  - Lots more! Thanks Justin and Vittorio!
- Moved more normative text from security considerations inline in the main document
- Updated refresh token guidance to match Security BCP
- Added section explicitly mentioning the removal of the Implicit flow

<https://github.com/aaronpk/oauth-v2-1/compare/draft-04...draft-05>

# Planned Changes for -06

- [#70](#) Finish incorporating feedback from Justin and Vittorio (Sections 8-13)
- [#64](#) Finish moving normative language from security considerations inline in the doc
- [#97](#) Expand the differences from OAuth 2.0 to include for which roles each change is a breaking change

Still more open issues to discuss, some of this will be best on the mailing list rather than synchronously here.

<https://github.com/aaronpk/oauth-v2-1/issues>

# Issues for Discussion

## #46 iss response parameter

The Security BCP recommends the use of the `iss` response parameter to defend against AS mixup attacks.

We previously discussed this in October 2021, the consensus was to revisit this topic once the `iss` draft is an RFC.

The draft was published as [RFC 9207](#) in March 2022. Time to revisit the discussion!

**Proposal: Incorporate RFC 9207. Note this only applies to clients that support multiple ASs in a particular deployment, so many clients will not need changes.**

## #101 Bearer tokens are required to expire

Currently OAuth 2.0 Bearer Tokens RFC 6750 requires (in the security considerations) that bearer tokens have a limited lifetime, prohibiting unlimited length bearer tokens.

To deal with token capture and replay, the following recommendations are made: **First, the lifetime of the token MUST be limited;** one means of achieving this is by putting a validity time field inside the protected part of the token. Note that using short-lived (one hour or less) tokens reduces the impact of them being leaked. **Second, confidentiality protection of the exchanges between the client and**

This doesn't match the reality of many deployments today.

Should we relax this to a SHOULD? Rephrase "lifetime" to encompass other criteria?

## #106 AS requirement to support 3 redirect URI methods

From the Native Apps BCP, incorporated into OAuth 2.1:

To fully support native apps, authorization servers **MUST** offer at least the three redirect URI options described in the following subsections to native apps. Native apps **MAY** use whichever redirect option suits their needs best, taking into account platform-specific implementation details.

- Private URI Scheme
- Claimed https URL
- Loopback Interface

**Should this remain a MUST or be relaxed to allow profiles like FAPI to prohibit private URI schemes?**

# Future Work

<https://github.com/aaronpk/oauth-v2-1/issues>