



## General improvements

- Architecture and API changes

The XS2A Server and XS2A Mock have been redesigned to better support future customizations and features. The version number of the XS2A Server and Mock have changed to version 3.x.x. This version is independent of the API version.

Overall, the following improvements were made to both systems:

- Improved logging
- Update of 3rd party library dependencies
- API first approach for more consistency and better support for API generators (TPP and Bank), as well as better documentation directly from the API itself
- All request/response examples previously documented in the separate documentation, are now available in the OpenAPI files
- Support for automatic SCA method selection from XS2A server if only one SCA method is available (configurable)
- Improved support for challenge data (chipTAN, image based OTPs)
- The OpenAPI files were migrated from Swagger v2 to OpenAPI v3
- The operations-parameter.md contains a migration guide for deployments of in-house customers (configuration names only)
- Postman Collections for Berlin Group API can be downloaded from <https://docs.finapi.io/?product=xs2a>
- Postman Collections for Bank Backend API are available (if requested)

Changes for XS2A Server:

- Bugfix in the Berlin Group API, because a structure did not correspond to the current version. The old endpoints are still available as deprecated endpoints for compatibility reasons
- Configuration option to communicate with backend API v1 or v2 for compatibility reasons

Changes for XS2A Mock / Bank Backend API:

- New API for Banks (v2) which includes better structured endpoints, clear response objects and error messages. The API data has been changed only slightly to allow easy and fast migration. The changes should make the code on the Bank side much easier, and they can be generated with the help of the OpenAPI file. Every endpoint gets now the TPP-ID, TPP-Name, PSU-ID and PSU-IP-Address (if exists) as a header
- Added new decoupled endpoints to XS2A Server (v2) for better handling
- Developer migration guide including a path mapping from v1 to v2 for Banks is available

- Improved Swagger definition for error message:

- Updated Dependencies (Spring, Feign, MariaDB Client...)
- Removed wrong `links` element from error message objects (issues with code generators)
- Updated Postman Collection with additional endpoints

- Bank error messages to TPP:

- XS2A Server now exposes bank error messages to the TPP
- An error message can optionally be sent by the bank as a simple string in the error response in the Bank Backend API v1. For Bank Backend v2, a full object with the error must be passed.