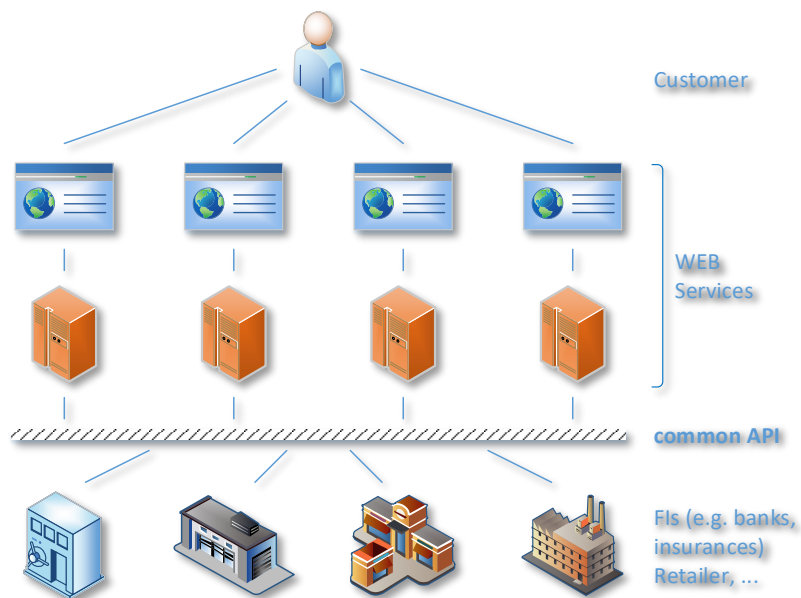


SFTI - working group 'Common API'

Loans API

Overview and Introduction



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This API specification for automatically usable multi-company-capable banking and insurance APIs (hereinafter: Common API) was developed on behalf of *Swiss Fintech Innovations* (SFTI) for the Swiss banking and insurance industry.

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Change Log

Version	Date	Author/s	Comments
0.01	14.11.2018	Albert Koch (Avaloq); Daniel Steingruber (SIX); Dejan Juric (SIX); Jürgen Petry (SFTI); Markus Emmenegger (Avaloq); Ronny Fuchs (Finstar);	Document creation
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0.9	04.09.2019	SFTI working group	Review
1.0	30.09.2019	SFTI	Publication

About SFTI

Swiss Fintech Innovations (SFTI) is an independent association of Swiss financial institutions committed to drive collaboration and digital innovations in the financial services industry. For more information about *Swiss FinTech Innovations*, please refer to <http://www.sfti.ch>.

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1. Outline

This document covers all basic information with respect to the APIs serving the banking business area *Loans*.

The business area *Loans* is very complex, so the total *Loans API* will be very large. Therefore, and to keep things simple and manageable, the API for each business domain related to the *Loans* business area is described in a separate documentation.

The purpose of the present document is to provide an overview of the individual business domains and the associated API specifications that make up the *Loans API*.

1.1 Methodology

The API development follows the procedure that was applied for the development of the *Access to Account API* and the *Payment API*. Through a number of workshops, conference calls, and group work the *OpenAPI* specification files were developed from a prioritized list of business- and use cases.

1.2 Scope of the Loans API

From list of business domains below, *mortgages* (item 12) and *corporate loans* (item 8) were identified as the most important loan types for the time being, i.e. for the 1st release of the *Loans API*.

1.3 Data Dictionary

This document also provides an overview of the data objects used in the *Loans API*. This representation can serve as a foundation for a future data directory, which in turn will be valid for the entire *Common API* specification.

2. Business Domains

In contrast to e.g. payments, API standards for loans do not exist yet. Therefore, the approach for the loans API is based on the respective BIAN¹ artefacts. There, the following loan related objects are described:

1. Collateral Administration, Collateral Allocation Mngmt.
2. Collateral Administration, Collateral Asset Admin.
3. Collateral Administration, Collections
4. Loans & Deposits, Leasing
5. Loans & Deposits, Current Account
6. Loans & Deposits, Corporate Current Account
7. Loans & Deposits, Consumer Loan
- 8. Loans & Deposits, Corporate Loan**
9. Loans & Deposits, Corporate Deposits
10. Loans & Deposits, Corporate Lease
11. Loans & Deposits, Merchandising Loan
- 12. Loans & Deposits, Mortgage**
13. Loans & Deposits, Fiduciary Agreement
14. Loans & Deposits, Deposit Account²
15. Loans & Deposits, Savings Account
16. Trade Banking, Letter of Credit
17. Trade Banking, Bank Guarantee³
18. Trade Banking, Trade Finance
19. Trade Banking, Credit Mngmt.
20. Trade Banking, Credit Facility
21. Trade Banking, Project Finance
22. Trade Banking, Limit & Exposure Mngmt.
23. Trade Banking, Syndicated Loan
24. Trade Banking, Cash Mngmt. & Account
25. Trade Banking, Services
26. Trade Banking, Direct Debit Mandate
27. Trade Banking, Direct Debit
28. Trade Banking, Cheque Lock Box
29. Trade Banking, Factoring

¹ Overview: <https://www.bian.org/deliverables/the-bian-service-landscape-timeline>, latest Release of *The BIAN Service Landscape* (V7.0, Published on November 13, 2018): http://bian.org/wp-content/uploads/2018/11/BIAN_Service_LandscapeV7_0.pdf.

² Explanation in German: *Sicherheit für Kreditgeschäfte*

³ Explanation in German: z.B. *Mietzinsgarantie für Privatkunden: Bankgarantie für Vermieter*

3. Data Objects

3.1 Common Data Objects

The following table holds any data object that is used in more than one location of the Loans API.

Name	Current Type	Constraints/Pattern
Currency	String, pattern:'[A-Z]{3}'	
Amount	<ul style="list-style-type: none">• currency:Currency• content:String, pattern:'-?\d{1,14}(?:\.\d{1,3})?'	
AmountRange	<ul style="list-style-type: none">• minAmount:Amount• maxAmount:Amount	
Interest	<ul style="list-style-type: none">• currentRate:String• base:String	
Address	<ul style="list-style-type: none">• street:String• buildingNumber:String• city:String• postalCode:String• country:Country	
Country	String, pattern:'[A-Z]{2}'	
PropertyIdentifier	<ul style="list-style-type: none">• EGRID:String• EGID:String	
Date	String, format:date-time	
Links	<ul style="list-style-type: none">• self:String• first:String• previous:String• next:String• last:String	

3.2 Loans-specific Data Objects

Name	Current Type	Constraints/Pattern
PropertyObject	<ul style="list-style-type: none"> • propertyObjectId:String • name:String • address:Address 	
Mortgage	<ul style="list-style-type: none"> • mortgageId:String • product:Product • amountAtExpiry:Amount • amountToday:Amount • validFrom:Date • validTo:Date • interestRate:String • interestRateType:String • interestBasis:String • durationType:String • prolongable:Boolean 	
ExpiringMortgage	<ul style="list-style-type: none"> • mortgageId:String • product:Product • amountAtExpiry:Amount • amountToday:Amount • validFrom:Date • validTo:Date • interestRate:String • interestRateType:String • interestBasis:String • durationType:String • prolongable:Boolean • propertyObjects:[PropertyObject] • relatedMortgages:[Mortgage] 	
Offer	<ul style="list-style-type: none"> • offerId:String • totalAmount:Amount • validTo:Date • offerItems:[offerItem] • linkRef:String 	
OfferItem	<ul style="list-style-type: none"> • offerItemId:String • product:Product • conditions:[Condition] 	
Product	<ul style="list-style-type: none"> • productId:String • name:String • interestRateType:String • durationType:String • amountRange:AmountRange • increment:Integer 	

Name	Current Type	Constraints/Pattern
Condition	<ul style="list-style-type: none"> • conditionId:String • duration:String • maturityDate:Date • interest:Interest 	
Order	<ul style="list-style-type: none"> • offerId:String • conditionId:String • mortgageld:String • amount:Amount • offeredInterest:Interest • validateOnly:Boolean • status:String 	