



Loan Against Securities

**Scope**

**1. Origination, Eligibility & Documentation**

Eligible Securities: Shares, mutual funds, bonds, fixed deposits, insurance policies—must be

listed/liquid and held by the borrower in their demat/folio/financial account.

**Eligibility:**

• Age: Most banks require 21–70 years.

• Credit Score: CIBIL/credit scores above specific thresholds (e.g., 701+).

• Valid PAN, Aadhaar, proof of address/ownership.

**Documentation:**

• KYC documents: PAN, Aadhaar, address proof.

• Proof of securities ownership (demat statement).

• Income and account statements as required.

**Digital Mandate**: Increasingly facilitated via online depository platforms (NSDL/CDSL),

allowing digital pledging and lien marking for speedy processing.

**2. Application & Approval**

Application Channels: Online forms, mobile apps, or bank branches.

**Presanction Checks:**

• Security type, market value, and liquidity verification.

• Lender sets a LoantoValue (LTV) ratio (typically 50% for shares, up to 80% for debt

securities, subject to regulatory ceilings]

• Credit Assessment: Financial capability, history, and regulatory compliance are

checked.

• Mandate Execution: Borrower authorizes the lender with a digital/paper

pledge/lien.

**3. Loan Disbursement**

• Creation of Overdraft/Term Facility: An account is set up (often as an overdraft)

with a sanctioned limit based on LTV

• Disbursal: Borrower can withdraw up to the sanctioned limit; funds credited within

24–48 hours after lien confirmation.

• Disclosure: Full loan terms, limits, interest, and charges are communicated and

acknowledged.

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**4. Servicing & Account Management**

Interest Calculation: Interest is usually charged only on the drawn amount; calculated daily,

settled monthly.

**Repayment Options**:

• EMI, bullet payments, or interest only (principal adjusted at closure or offset against

collateral).

• No penalties for prepayment for most lenders.

**Collateral Monitoring:**

• Lenders revalue securities daily due to market volatility.

• Borrowers retain ownership and earn any Linked dividends/interest/accruals from

pledged assets.

• Digital Access: Track withdrawals, repayments, pledged collateral, and outstanding

amounts via dashboards or statements.

**5. Risk Monitoring & Margin Management**

• LTV Monitoring: Maintained daily. Market dip may trigger LTV breach.

• Margin Calls: If LTV is exceeded, borrower must repay or pledge more securities.

Failure to act can result in partial/total sale of securities.

• Timelines for action depend on the percentage above allowed LTV and

regulator/lender policy (from 1–60 days).

• Automated Alerts: Borrowers get timely notifications via SMS/email so they can act

promptly.

**6. Collections & Delinquency Management**

• Missed Payments: Automated reminders (email, SMS). Failure to act escalates to

collections.

• Penalties: Overdue interest is charged over the base interest (e.g., 2% over

prescribed rate).

• Regulatory Classification: Defaulting accounts move through special mention (SMA)

to NPA status in line with RBI norms.

• Asset Liquidation: Unaddressed margin calls allow lenders to sell pledged securities

to recover dues; borrower loses corresponding investments and faces possible

credit score impact.

**7. Recovery & Closure**

• Partial/Full Release of Securities:

• Partial: Requests via digital platforms, released within stipulated timelines (24

hours or as per policy).

• Full/Foreclosure: After full repayment, securities are released, and a NoDues

certificate issued.

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• Settlement & Closure: Borrower notified, account closed, companies and

depositories updated.

**8. Compliance & Regulatory Reporting**

• SEBI/RBI Norms:

• Maintain and monitor LTV limits (capped at 50% for shares—RBI; up to 95% for

certain instruments—SEBI, subject to lender’s policy).

• Securities must be liquid/marketable; unlisted or illiquid assets generally not

allowed.

• Maintain mandatory reporting related to margin breaches, collateral revaluation,

and NPA.

• Loan Purpose: Strict usage—cannot be used for market speculation or prohibited

activities per RBI and SEBI rules

**9. Portfolio & Risk Management**

• Stress Testing: Periodic scenario analysis for collateral risk.

• Portfolio Limits: Caps by sector, asset type, and rating to avoid risk concentration.

• Dynamic Policies: LTVs and eligibility continually revised to match

market/regulatory changes.

**API Documentation**

**1. Authentication API**

Endpoint: POST /api/v1/auth/token

Description: Authenticates client using OAuth2 and provides an access token.

Required Fields:

• - client\_id: Client application ID

• - client\_secret: Client secret key

• - scope: Access scope (e.g., read:securities write:pledge)

• - grant\_type: Must be "client\_credentials"

Returns: Bearer token with expiration info.

**1. 1 Authentication & Security**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Endpoint | Method | Parameters | Success Response (200) | Use Case |
| **/auth/login** | POST | { "username":  "fi\_user", "password": "\*\*\*\*\*\*",  "institution\_id":  "NBFC\_123" } | { "token": "eyJhb...",  "expiry": 3600, "roles": ["loan\_officer"] } | User  authentication |

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| --- | --- | --- | --- | --- |
| **/auth/refresh** | POST | { "refresh\_token": "def502..." } | { "token": "eyJhb...new" } | Session  renewal |
| **/auth/audit** | GET | date\_from=2025-07-01 | [ { "user": "fi\_user", "action":  "pledge\_initiated", "time": "2025-07-04T10:22Z" } ] | Compliance audit |

**2. Customer Onboarding & KYC**

**2.1 Identity Verification**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Endpoint** | **Method** | **Parameters** | **Success Response** | **Integration** |
| **/kyc/aadhaar** | POST | { "aadhaar\_no": "2345\*\*\*\*7890", "consent": true } | { "name": "Rajesh Kumar", "dob": "1985-11-23",  "status": "VERIFIED" } | UIDAI e-KYC |
| **/kyc/pan** | POST | { "pan":  "ABCPK1234D" } | { "name\_match": 98.7, "status": "VALID" } | NSDL PAN |
| **/kyc/video** | POST | file: video.mp4 | { "liveness\_score": 92.3, "face\_match": 95.1 } | Video KYC AI |

**2.2 Document Management**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Endpoint** | **Method** | **Parameters** | **Success Response** | **Feature** |
| **/docs/upload** | POST | file: cheque.jpg, type: CANCELLED\_CHEQUE | { "doc\_id": "DOC\_789", "ocr\_data": { "acc\_no": "XXX7890", "ifsc":  "HDFC000123" } } | OCR  Processing |
| **/docs/esign** | POST | { "doc\_id": "DOC\_789", "aadhaar":  "2345\*\*\*\*7890" } | { "signature\_id":  "SIGN\_XYZ", "nsdl\_ref": "eSign1234" } | NSDL e-Sign |

**3. Loan Origination Engine**

**3.1 Credit Decisioning**

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| --- | --- | --- | --- | --- |
| Endpoint | Method | Parameters | Success Response | Data  Source |
| **/credit/bureau** | POST | { "pan":  "ABCPK1234D", "consent": true } | { "cibil\_score": 781, "active\_loans": 2,  "dti\_ratio": 28.3 } | CIBIL API |
| **/credit/decision** | POST | { "loan\_amount": 500000,  "collateral\_value": 750000 } | { "decision": "APPROVED", "risk\_rating": "B+",  "recommended\_ltv": 65 } | AI  Scoring Engine |

**3.2 Application Workflow**

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| --- | --- | --- | --- | --- |
| Endpoint | Method | Parameters | Success Response | Business Rule |

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| --- | --- | --- | --- | --- |
| **/application/create** | POST | { "product": "LAS", "customer\_id":  "CUST\_123" } | { "app\_id":  "APP\_2025XY7Z", "workflow\_stage": "KYC\_PENDING" } | New  Application |
| **/workflow/next** | POST | { "app\_id":  "APP\_2025XY7Z", "action":  "KYC\_COMPLETE" } | { "next\_stage": "PLEDGE\_INIT", "tasks": [ | State  Machine Transition |

**4. Collateral & Pledge Management**   
***4.1.1 Fetch Equity Holdings API***   
Endpoint: GET /api/v1/securities/equity   
Description: Fetches equity holdings based on PAN and optional Demat details.

Query Parameters:   
• - pan: PAN number of user   
 - dp\_id: Optional DP ID of Demat account •  
• - client\_id: Optional client ID   
Returns: List of equity holdings with details like ISIN, name, quantity, value, LTV, and pledge eligibility.

***4.1.2 Fetch Mutual Fund Holdings API***   
Endpoint: GET /api/v1/securities/mutual-funds   
Description: Fetches mutual fund holdings via PAN.

Query Parameters:   
• - pan: PAN number of user   
Returns: List of mutual fund holdings including scheme name, NAV, units, value, LTV, and pledge eligibility   
***4.1.3 Fetch Insurance Policy Details API***   
Endpoint: GET /api/v1/securities/insurance   
Description: Fetches insurance policy details including LIC policies.

Query Parameters:

|  |  |
| --- | --- |
| • • • | - pan: Optional PAN of the user  - policy\_number: Policy number to search - provider: Name of insurance provider |

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Returns: Insurance policy details such as insurer name, sum assured, surrender value,

maturity date, and pledge eligibility.

**4.1 Portfolio Integration**

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| --- | --- | --- | --- | --- |
| Endpoint | Method | Parameters | Success Response | Depository |
| **/portfolio/fetch** | POST | { "dp\_id":  "IN123456", "client\_id":  "CL789012" } | { "holdings": [ { "isin":  "INE002A01018", "qty": 150, "value": 412500 } ] } | CDSL EASI |
| **/portfolio/ltv** | POST | { "holdings": [...] } | { "eligible\_ltv": 980000,  "haircuts": { "EQUITY": 30, "DEBT": 15 } } | RBI Rule Engine |

**4.2 Pledge Automation**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Endpoint | Method | Parameters | Success Response | Compliance |
| **/pledge/initiate** | POST | { "app\_id":  "APP\_2025XY7Z", "isin":  "INE002A01018", "qty": 100 } | { "pledge\_id":  "PLD\_2025ABC",  "cdsl\_ref": "CDSL123", "otp\_required": true } | SEBI Pledge Rules |
| **/pledge/confirm** | POST | { "pledge\_id":  "PLD\_2025ABC", "otp": "7890" } | { "status":  "CONFIRMED",  "timestamp": "2025-07-04T11:30Z" } | OTP  Verification |

***4.2.1 Pledge Verified Webhook***

Triggered when a pledge is successfully verified.

Payload:

• - user\_id: Unique identifier of the user

• - pledge\_id: ID of the verified pledge

• - status: Status message

***4.2.3 LTV Breach Webhook***

Triggered when LTV breaches the predefined threshold.

Payload:

• - user\_id: Unique identifier of the user

• - ltv: Current LTV percentage

• - asset: Asset name for which LTV is breached

**5. Disbursal & Account Setup**

**5.1 Loan Activation**

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| --- | --- | --- | --- | --- |
| Endpoint | Method | Parameters | Success Response | Payment Rail |

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|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **/disbursal/prepare** | POST | { "app\_id":  "APP\_2025XY7Z", "account":  "XXX7890", "ifsc": "HDFC000123" } | { "disbursal\_id":  "DIS\_XYZ", "fees": [ { "type": "processing", "amount": 2500 } ] } | Sanction Memo |
| **/disbursal/execute** | POST | { "disbursal\_id": "DIS\_XYZ" } | { "utr":  "HDFC20250704123456", "amount": 500000 } | IMPS/NEFT |

**5.2 Customer Communication**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Endpoint** | **Method** | **Parameters** | **Success**  **Response** | **Channel** |
| **/comms/sms** | POST | { "phone": "9198\*\*\*\*21",  "template":  "DISBURSAL\_SUCCESS", "params": { "amount": 500000 } } | { "msg\_id": "MSG\_789", "status":  "QUEUED" } | SMS  Gateway |
| **/comms/email** | POST | { "email": "user@gmail.com", "template": "LOAN\_SUMMARY" } | { "msg\_id": "MSG\_790" } | Email  Service |

**6. Loan Management System (LMS)**

**6.1 Repayment Processing**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Endpoint | Method | Parameters | Success  Response | Feature |
| **/repayment/schedule** | GET | loan\_id=LN2025XY7Z | { "emi": 48230, "schedule": [ {  "due\_date":  "2025-08-05",  "principal":  39210,  "interest": 9020 } ] } | Amortization |
| **/repayment/auto-debit** | POST | { "loan\_id":  "LN2025XY7Z",  "mandate\_id":  "NPCIM2025ABC" } | { "next\_debit": "2025-08-05", "status":  "ACTIVE" } | NPCI  AutoPay |

**6.2 Account Operations**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Endpoint | Method | Parameters | Success Response | Operation |
| **/loan/partial-prepay** | POST | { "loan\_id":  "LN2025XY7Z",  "amount": 100000 } | { "new\_emi": 38584, "savings": "₹96,460 interest" } | Prepayment |
| **/loan/topup** | POST | { "loan\_id":  "LN2025XY7Z",  "additional\_amt": 200000 } | { "new\_limit": 700000, "new\_pledge\_req":  "PLD\_NEW1" } | Limit  Increase |

**7. Risk & Compliance**

**7.1 Collateral Monitoring**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Endpoint | Method | Parameters | Success Response | Trigger |

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|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **/risk/margin-check** | POST | { "loan\_id":  "LN2025XY7Z" } | { "current\_ltv": 72.3, "margin\_shortfall": 0, "status": "SAFE" } | Daily  Batch |
| **/alerts/margin-call** | POST | { "loan\_id":  "LN2025XY7Z",  "breach\_level": 85 } | { "sms\_sent": true, "email\_sent": true } | LTV  Breach |

**7.2 Regulatory Reporting**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Endpoint | Method | Parameters | Success Response | Agency |
| **/report/cersai** | POST | { "loan\_id":  "LN2025XY7Z" } | { "cersai\_ref":  "CERSAI2025MH123", "filing\_time": "0.8s" } | CERSAI API |
| **/report/rbi** | POST | { "month": "2025-07" } | { "report\_id":  "RBI\_MASTER\_202507" |  |

**8. Error Handling Standard**

{   
 "error\_id": "ERR20250704-78B2",   
 "code": "COLLATERAL\_SHORTFALL",   
 "message": "Security value dropped 15% - margin shortfall ₹85,000", "action": "INITIATE\_MARGIN\_CALL",   
 "doc\_link": "https://docs.domain.com/errors/collateral-shortfall" }

|  |  |  |
| --- | --- | --- |
| **HTTP Code** | **Error Code** | **Scenario** |
| **400** | INSUFFICIENT\_COLLATERAL | Pledge qty > available holdings |
| **403** | KYC\_EXPIRED | CKYC data > 3 years old |
| **429** | RATE\_LIMIT | API throttling by depository |
| **503** | CDSL\_DOWNTIME | Depository maintenance window |

**External API Table :**

|  |  |
| --- | --- |
| CDSL | <https://www.cdslindia.com/DP/APIs.html> |
| NSDL | <https://nsdl.co.in/API-BP/api_brief.html> |
| CIBIL | <https://www.cibil.com/developer-api> |
| KFINTECH | <https://docs.finsire.com/docs/3-fetch-mutual-funds> <https://docs.finsire.com/docs/loan-against-mutualfunds-1> |
| CAMS | <https://docs.finsire.com/docs/cams-mutual-funds> |
| UpStox | <https://upstox.com/developer/api> |
| Kites (Zerodha) | <https://kite.trade/docs/connect/v3/websocket/> |
| LIC | <https://inspay.in/service/lic-premium-payment-api> |

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| Digit | <https://www.fintegrationfs.com/fintechapis/digit-insurance-api> |
| Websoftex | <https://websoftexpay.com/websoftex-loan-api.aspx> |
| Setu | <https://setu.co/use-cases/insurance/> |

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