



ERP - BRAC Smart & bKash Collection



### Introduction

This is technical documentation about the API Design and Implementation for Smart Collection. The API will be designed based on standard RESTful service. Therefore, requests are made using HTTP and requests are used to retrieve information from sbiCloud and store new data to sbiCloud as well. The services will be private and IP bounded with token authentication policy. The data service is strictly specific on client requirement and are defined as followings.

Initially Integration will be done Considering Reference Branch Code and Reference Project Code. Within one month of ERP Live, other application owner will have to adapt the Branch and Project Code format followed by ERP.

## HTTP request & Response format

API Access	Private, IP bound. Service Consumer IP will be registered in	
Mode	sbiCloud system	
API Key	Secret Key for security policy	
Request Method	GET, POST	
Content Type application/json		
Encoding	UTF-8	
HTTP Status Will return standard HTTP status Code. E.g. 200 - OK on		
success		
HTTP response	TEXT/JSON {Code: Integer, message: String, data: Object	
	Array}	

# Http Response Example

**Example# 1:** Requester IP or token is not registered in system

HTTP status: 401 - Unauthorized

Example# 2: Validation message – BranchCode parameter is not provided

HTTP status: 200 - OK

{Code: 200, message: "Incorrect branch Code", data: null}

Example# 3: Returns single object

HTTP status: 200 – OK

{Code: 200, message: null, data: {"BranchCode": "0605", "BranchName": "Gulshan",

"BranchOpeningStatus": 1, "BranchOpenDate": "2017-07-23" }}

Example# 4: Returns multiple objects

HTTP status: 200 – OK

{Code: 200, message: null, data: [{"PIN": "00000001", "Pname": "Abdus Salam", "ProjectCode": "015", "Desig": 0},{"PIN": "00000002", "Pname": "Salma Begum", "ProjectCode": "015", "Desig": 1},{"PIN": "00000072", "Pname": "Shariful Islam",

BRAC IT "SERVICES CANDEL" "015", "Desig" : 2}]}

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## 2. Retrieve branch information

Retrieve single branch information by branch Code

URL: /scapir/BranchInfo?BranchCode=0605

**URL**: /scapir/BranchInfo?BranchCode=xxx&UpdatedAt=xxx

Method: GET

Response: {Code: 200, message: null, data: {"BranchCode": "0605", "BranchName"

: "Gulshan", "BranchOpeningStatus": 1, "BranchOpenDate": "2017-07-23", UpdatedAt:

"2017-11-22 19:30:45"}}

### **Request Parameter Fields**

Property Name	Value Type		Description	
BranchCode	String		Branch Code.	
			To pull data that a	are equal or greater than
	Date	(YYYY-MM-ddt	his date time	(not required as per meeting
<u>UpdatedAt</u>	HH:mm:ss)		decision)	

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Property Name	Value Type	Description
BranchCode	String	Branch Code.
BranchName	String	Branch Name
BranchOpeningStat		Branch opening status. 1-for Open and 0-for
us	Integer	Close
		Branch open Date (without time), if branch is
BranchOpenDate	Date (YYYY-MM-dd)	open else returns empty
	Date (YYYY-M	M-ddThe date time at when this data was created
UpdatedAt	HH:mm:ss)	or modified



## 2. Retrieve project list

Retrieve all project of a branch

URL: /scapir/ProjectList?BranchCode=0605

URL:/scapir/ProjectList?BranchCode=0605&UpdatedAt=xxx

URL:/scapir/ProjectList?BranchCode=0605&Status=1

URL:/scapir/ProjectList?BranchCode=0605&UpdatedAt=xxx&Sta

tus=1

Method: GET

Response: {Code: 200, message: null, data: [{"ProjectCode": "015", "ProjectName"

: "Dabi", "OrgCategory": "01", "Status" : 0, UpdatedAt: "2017-11-22 19:30:45"}, {"ProjectCode": "015", "ProjectName": "Dabi", "OrgCategory": "01", "Status": 0, UpdatedAt:

"2017-11-22 19:30:45"}]}

#### **Request Parameter Fields**

Property Name	Value Type	Description
BranchCode	String	Branch Code.
Status	Integer	1 – Active, 2 – Inactive
	Date (YYYY-MM-dd7	o pull data that are equal or greater than
UpdatedAt	HH:mm:ss)	this date time

Property Name	Value Type	Description
ProjectCode	String	Project Code.
ProjectName	String	Project Name
OrgCategory	Enum (MEMBER, GROUP)	Organization category
Status	Integer	Project status, 1 – Active, 2 – Inactive
	Date (YYYY-MM-dd <sup>-</sup>	The date time at when this data was created
UpdatedAt	HH:mm:ss)	or modified



# 3. Retrieve branch employee list

Retrieve all employee of a branch

**URL**: /scapir/BranchEmployeeList?BranchCode=0605 Retrieve all employee of a branch for a specific project

**URL**: /scapir/BranchEmployeeList?BranchCode=0605&UpdatedAt=xxx **URL**: /scapir/BranchEmployeeList?BranchCode=0605&ProjectCode=xxx

Method: GET

Response: {Code: 200, message: null, data: [{"PIN": "00000001", "Pname": "Abdus

 $Salam'', \quad \text{``ProjectCode''} \quad : \quad \text{``015''}, \quad \text{``Desig''} \quad : \quad 0, \quad UpdatedAt: \quad \text{``2017-11-22}$ 

19:30:45"},{"PIN": "00000002", "Pname": "Salma Begum", "ProjectCode": "015", "Desig": 1, UpdatedAt: "2017-11-22 19:30:45"},{"PIN": "00000072", "Pname":

"Shariful Islam", "ProjectCode" : "015", "Desig" : 2, UpdatedAt: "2017-11-22

19:30:45"}]}

### **Request Parameter Fields**

Property Name	Value Type		Description
BranchCode	String		Branch Code
ProjectCode	String		Project Code
	Date (	(YYYY-MM-ddT	o pull data that are equal or greater than
UpdatedAt	HH:mm:ss)		this date time

Property Name	Value Type		Description
PIN	String		Active employee Id
Pname	String		Name
ProjectCode	String		Associated project Code
			Designation e.g – Programme Organizer,
Desig	String		Area Branch Manager, Branch Manager
	Date	(YYYY-MM-ddT	he date time at when this data was created
UpdatedAt	HH:mm:ss)		or modified



### 4. Retrieve VO list

Retrieve all VO of a branch for a specific project

URL: /scapir/VOList?BranchCode=0605&ProjectCode=015

Retrieve all VO that are assigned to a specific Programme Organizer of a branch

URL: /scapir/VOList?BranchCode=0605&ProjectCode=015&PIN=027

URL: /scapir/VOList?BranchCode=0605&ProjectCode=015&UpdatedAt=xxx

Method: GET

Response: {Code: 200, message: null, data: [{"OrgNo": "2010", "OrgName": "SABJI BAGAN", "OrgCategory": "01", "MemSexID": 1, "ColcOption": 2, "StartDate": "2017-07-07", "EndDate": "2017-07-31", "TargetDate": "2017-07-23", "NextTargetDate": "2017-08-27", UpdatedAt: "2017-11-22 19:30:45"}, {"OrgNo": "2038", "OrgName": "HEIR ROAD", "OrgCategory": "01", "MemSexID": 1,"ColcOption": 2, "StartDate": "2017-07-01", "EndDate": "2017-07-31", "TargetDate": "2017-07-16", "NextTargetDate": "2017-08-20", UpdatedAt: "2017-11-22 19:30:45"}, {"OrgNo": "2114", "OrgName": "PEYARABAG", "OrgCategory": "01", "MemSexID": 1,"ColcOption": 2, "StartDate": "2017-07-01", "EndDate": "2017-07-31", "TargetDate": "2017-07-05", "NextTargetDate": "2017-08-02", UpdatedAt: "2017-11-22 19:30:45"}]}

#### **Request Parameter Fields**

Property Name	Value Type	Description
BranchCode	String	Branch Code
ProjectCode	String	Project Code
PIN	String	PO PIN
	Date	(YYYY-MM-ddTo pull data that are equal or greater than
UpdatedAt	HH:mm:ss)	this date time

### **Response Fields**

Property Name	Value Type	Description
PIN	String	Active employee Id i.e. assigned PO PIN
ProjectCode	String	Associated project Code
OrgNo	String	VO Number (Unique and Sequential)
OrgName	String	VO Name
		Member Sex Id of the Organization. Value:
		1-Male,
		2-Female,
		0-Both.
		Female Organization means the organization
MemSexId	Integer	Consist of female members.
		Collection Options Value:
		1-Daily,
		2-Weekly,
		3-Monthly,
		4-Yearly,
		5-Fortnightly,
EST COST IMMITED	Integer	6-Quarterly ,

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		7-Half Yearly,	
		8-SingleRepayment	V
		Start date of the installment Collection period	
		As per business Consider date after last	
		Collection date to current target date.	
		As per business, consider date after last	
		collection date to current target date. Target	
		Date= End Date	
StartDate	Date (YYYY-MM-dd)	So 'End Date' is not required	
-		Last date of the installment Collection period	_
<u>EndDate</u>	Date (YYYY-MM-dd)	(not required as Target Date= End Date)	
		Collection date for the Organization i.e. next	
		Collection date.	
TargetDate	Date (YYYY-MM-dd)	Target Date= End Date	
		Next periods installment Collection date i.e.	
NextTargetDate	Date (YYYY-MM-dd)	next Collection date after target date	
	Date (YYYY-MM-dd7	he date time at when this data was created	
UpdatedAt	HH:mm:ss)	or modified	



### 5. Retrieve member list

Retrieve all member of a branch for specific organization and specific CO (optional) **URL**: /scapir/MemberList?BranchCode=xxx&OrgNo=xxxx&CONo=xxx

Retrieve all member of a branch for specific organization with specific status (Organization Status) and specific PO (optional)

**URL**: /scapir/MemberList?BranchCode=xxx&OrgNo=xxx&Status=n&CONo=xxx

Retrieve single member of a branch for specific organization and specific CO (optional) URL:/scapir/MemberList?BranchCode=xxx&OrgNo=xxx&CrgMemNo=xxx&CONo=xxx

Retrieve single member by wallet number **URL**: /scapir/MemberList?WalletNo=01911225588

Retrieve all member of a branch of a project having a specific CO **URL**: /scapir/MemberList?BranchCode=xxx&ProjectCode=xxx&PONo=xxx If require, member list can be filtered by 'Member Status'

URL: /scapir/MemberList?BranchCode=xxx&ProjectCode=xxx&UpdatedAt=xxx

URL: / scapir/MemberList?BranchCode=0152&CONo=00067330

Method: GET

```
Response: {Code: 200, message: null, data: [{"OrgNo": "2010","OrgMemNo":
"1220","OrgName"
                          "SABJI
                                     BAGAN","OrgRef" :
                                                               "","ProjectCode"
"0124", "BranchCode" : "065", "MemberName" : "Jubaier Rahman", "MemSexId"
"1","SavBalan": "1200","SavPayable": "200","CalcIntrAmt": "200","TargetAmtSav":
"200","ReceAmt"
                       "200","ApplicationDate" : "2017-01-01","AssignedPO"
"1212","CloseReason"
                                   "","ClosingDate"
                           :
"Jubaier", "IsTransferredMember": "", "Lname": "Rahman", "LastPOassignedDate":
                                      "Mname" : "", "MemberStatus"
"2017-01-01","LoanCycleNo" : "1",
"MembershipDate" : "2017-01-01", "ReferenceNo" : "", "SurveyReportNo"
"ReferredBy": "", "Age": "20", "BkashWalletNo": "", "DateOfBirth": "1990-01-01",
"DrivingLicenseNo": "", "FatherName": "Rokon Uddin", "MaritalStatus": "Married",
"MotherName": "Jeba Islam", "NationalId": "", "Occupation": "Farmar", "PassportNo"
: "", "Salutation" : "", "SpouseName" : "Lima Akter", "ContactNo" : "01913882276",
"GuarantorAge": "", "GuarantorName": "", "GuarantorNationalId": "", "GuardianAge"
: "", "GuardianName" : "", "GuardianNationalId" : "", "AddressList" : [{"Address" : "",
"AddressTitle": "", "City": "", "ZipCode": "", UpdatedAt: "2017-11-22 19:30:45"}],
"NomineeList": [{"NomineeName": "","Relationship": "","SharePercent": "", UpdatedAt:
"2017-11-22 19:30:45"}], UpdatedAt: "2017-11-22 19:30:45"}]}
```



## **Request Parameter Fields**

Property Name	Value Type		Description
BranchCode	String		Branch Code.
OrgNo	String		Organization number
Status	Integer		2 = Active, 3 = Inactive, 4 = Closed
OrgMemNo	String		Member Code ( Unique and Sequential)
WalletNo	String		
CONo	String		Associated PO PIN
ProjectCode	String		
	Date	(YYYY-MM-ddT	o pull data that are equal or greater than
UpdatedAt	HH:mm:ss)		this date time

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Property Name	Value Type	Description
OrgNo	String	VO Number
OrgMemNo	String	Member number
OrgName	String	VO name
OrgRef	String	VO reference number
OrgStatus	Int	1= Active, 2=Inactive, 3= Closed
ProjectCode	String	Project Code
BranchCode	String	Branch Code
MemberName	String	Member name
		Member Sex Id. Value: 1-Male, 2-Female,
MemSexId	Integer	0-Other
		Present general savings balance i.e.
SavBalan	Decimal	Compulsory savings balance.
		Savings interest payable i.e. calculated
SavPayable	Decimal	interest without provision.
		Calculated interest not yet credited i.e.
CalcIntrAmt	Decimal	provision interest before credit
		Savings target amount i.e. savings
TargetAmtSav	Decimal	installment amount
		Savings Collected in the current period.
		Current period will be based on Collection
ReceAmt_	<u>Decimal</u>	frequency.
ApplicationDate	Date (YYYY-MM-dd)	Date of member admission
AssignedPO	String	Assigned PO PIN for the respective VO
CloseReason	String	member closed reason
ClosingDate	Date (YYYY-MM-dd)	Member closed date from branch
Salutation	String	Mr., Mrs. Etc.
Fname	String	Member first name
Mname	character varying	Member middle name
Lname	character varying	Member last name
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		Is this member joined in group through
Is Transferred Membe		transfer
r	Integer	1 = Yes, 2 = No
Last POassigned Date	Date (YYYY-MM-dd)	On which date PO assigned to the VO
LoanCycleNo	Bigint	Present Loan Cycle Number (1 <sup>st</sup> /2 <sup>nd</sup> /3 <sup>rd</sup> )
		1 = Active, 2 = Inactive, 3=Expired, 4 =
Member Status	String	Dead, 6=Drop out
Membership Date	Date (YYYY-MM-dd)	Membership date
ReferenceNo	String	Member reference no.
SurveyReportNo	String	Survey report no.
ReferredBy	String	Member referenced by
Age	Integer	Member age
BkashWalletNo	String	bKash wallet no.
DateOfBirth	Date (YYYY-MM-dd)	Member date of birth
DrivingLicenseNo	String	Driving license no
FatherName	String	Member father name
Marital Status	String	Married, Single etc.
MotherName	String	Member mother name
NationalId	String	National ID No
Occupation	String	Farmer, Rickshaw Puller etc
PassportNo	String	Member passport no.
SpouseName	String	Member spouse name
ContactNo	String	Member Contact no.
Address	String	Member full address
		Member address type e.g. Present
AddressTitle	String	Address, Permanent address
City	String	Member city name
ZipCode	String	ZipCode
NomineeName	String	Nominee name
		Relationship name with member e.g.
Relationship	String	Father, Mother etc
SharePercent	Integer	Share percent of nominee
GuarantorAge	integer	Guarantor age
GuarantorName	String	Guarantor name
Guarantor National Id	String	Guarantor national ID
Guardian Age	integer	Guardian age
Guardian Name	String	Guardian name
Guardian National Id	String	Guardian national ID
	Date (YYYY-MM-do	
UpdatedAt	HH:mm:ss)	created or modified



## 6. Retrieve Collection information

Retrieve Collection Information will facilitate user to receive all active Loan Information. When user will call by a specific 'UpdatedAt' time, all API will return updated Information in between 'UpdatedAt' time and call time. So, API wise Project, VO, Member, Loan and Savings information will be provided.

Retrieve all **active loan** of a branch of an organization and with specific Programme Officer (PO)- this is optional, here newly disbursed will be given as well. But until the new loan will not exceed Grace Period, Target will be shown zero. After completing Grace period, Target of newly disbursed loan will be available.

URL: /scapir/CollectionInfo?BranchCode=xxxx&OrgNo=xxx&CONo=xxx

Retrieve single loan of a branch of specific project and with specific PO (optional) **URL**:

/scapir/CollectionInfo?BranchCode=0605&ProjectCode=xxx&LoanNo=57064&CONo=xxx Retrieve single loan of a branch of specific organization of specific member of specific product and with specific PO (optional)

#### URL:

/scapir/CollectionInfo?BranchCode=xxx&ProjectCode=xxx&OrgNo=xxx&OrgMemNo=xxx&ProductSymbol=xxx&CONo=xxx

Retrieve all loan of a branch of a project having specific PO

<u>URL:/scapir/CollectionInfo?BranchCode=xxx&ProjectCode=xxx&CONo=xxx</u>

<u>URL:/</u>scapir/CollectionInfo?BranchCode=xxx&ProjectCode=xxx&OrgNo=xxx&UpdatedAt =xxx

Method: GET

```
Response: {Code: 200, message: null, data: [{"ProjectCode": "015", "OrgNo":
"2519", "OrgMemNo": "000018", "LoanNo": 990,"LoanSlNo": 3, "ProductNo": "002",
"ProductSymbol":
                          "IntrFactorLoan"
                                             :
                                                 0.000411,"PrincipalAmt":
                                                                               15000,
"InstlAmtLoan": 1438, "DisbDate": "2011-05-31", "LnStatus": 5,"PrincipalDue": 353,
"InterestDue": 235, "TotalDue": 588, "TargetAmtLoan": 588, "TotalReld": 16741,
"Overdue": 588, "BufferIntrAmt": 0, "InstlPassed":
                                                          72, "OldInterestDue":
"ReceAmt":0, UpdatedAt: "2017-11-22 19:30:45"}, {"ProjectCode": "015", "OrgNo":
"2519", "OrgMemNo": "000004", "LoanNo": 14338,"LoanSlNo": 2, "ProductNo":
"138", "ProductSymbol": "DGN", "IntrFactorLoan": 0. 000685," PrincipalAmt": 50000,
"InstlAmtLoan":
                 4750, "DisbDate": "2016-12-15",
                                                       "LnStatus": 0,"PrincipalDue":
24811, "InterestDue": 0, "TotalDue": 24811, "TargetAmtLoan": 4750, "TotalReld":
30000, "Overdue": -6250, "BufferIntrAmt": 170, "InstlPassed": 5,"OldInterestDue": 0,
"ReceAmt": 5000, UpdatedAt: "2017-11-22 19:30:45"},
                                                          {"ProjectCode"
                                                                             : "015",
"OrgNo": "2519","OrgMemNo": "000006", "LoanNo": 15778, "LoanSlNo": 3,
                                         "DGN", "IntrFactorLoan" : 0. 000685,
"ProductNo": "138","ProductSymbol":
"PrincipalAmt": 50000, "InstlAmtLoan": 4750, "DisbDate": "2017-06-13", "LnStatus":
0, "PrincipalDue": 50000, "InterestDue": 0, "TotalDue": 50000, "TargetAmtLoan":
       "TotalReld"
                  : 0, "Overdue": 0, "BufferIntrAmt":274,
                                                                    "InstlPassed":
4750,
                                                                                    0,
```



"OldInterestDue": 0, "ReceAmt": 0, UpdatedAt: "2017-11-22 19:30:45"}, 
{"ProjectCode": "015", "OrgNo": "2519", "OrgMemNo": "000068", "LoanNo": 13812, 
"LoanSlNo": 9, "ProductNo": "139", "ProductSymbol": "DGG", "IntrFactorLoan": 0. 
000685, "PrincipalAmt": 25000, "InstlAmtLoan":2375, "DisbDate": "2016-10-10", 
"LnStatus": 0, "PrincipalDue": 7986, "InterestDue": 0, "TotalDue": 7986, 
"TargetAmtLoan": 2375, "TotalReld": 20000, "Overdue": -1000, "BufferIntrAmt": 55, 
"InstlPassed": 8, "OldInterestDue": 0, "ReceAmt": 0, UpdatedAt: "2017-11-22 
19:30:45"}]}

### **Request Parameter Fields**

Property Name	Value Type	Description
BranchCode	String	Branch Code
OrgNo	String	
ProjectCode	String	
LoanNo	String	
OrgMemNo	String	
ProductSymbol	Enum (DGN, DGD)	DGN = General Loan, DGD = Good Loan
PONo	String	Associated PO PIN
ProjectCode	String	
	Date (YYYY-MM-c	ddTo pull data that are equal or greater than
UpdatedAt	HH:mm:ss)	this date time

#### **Response Fields**

Note: Assumed result will contain loans closed within the current installment period with TotalDue = 0 and LnStatus unchanged.

### Updated

Property Name	Value Type	Description
ProjectCode	String	Project Code
OrgNo	String	Organization number/VO Number
OrgMemNo	String	Member number
LoanNo	BigInt	Loan number
LoanSINo	Integer	Loan serial number i.e. loan cycle
ProductNo	String	Product number
		Product Symbol e.g. GDN, GDG i.e. GDN =
ProductSymbol	Enum(GDN, GDG)	Normal Loan, GDG = Good Loan
		Multiplication factor for interest calculation,
		i.e. as per new change, System will consider
		Interest factor up to 6 decimal digit (follow
		core business logic: as per 'CR_2018-
IntrFactorLoan	Decimal	005_ERP-MF_Other Config_V 1.01′)
PrincipalAmt	Decimal	Disbursed amount
SERMICES THUMITED	Decimal ety, Gushan I, Dhaka 1212, Bangladesh	Installment amount



DisbDate	Date (YYYY-MM-dd)	Loan Disbursement date
		Loan classification state: 1- Current , 2-
		Closed, 3- Late1, 4- Late2, 5- NIBL1, 6-NIBL2,
LnStatus	Integer	7=Bad Loan, <del>8=Bad Debt</del>
		Current principal amount due, i.e. principal
PrincipalDue	Decimal	outstanding
		Current interest amount due, i.e. interest
InterestDue	Decimal	outstanding
TotalDue	Decimal	Total due i.e. total outstanding
		Collection target amount for the current
		period i.e. installment amount + overdue
		Target= Instalment Amount
		For last Collection,
		if OS< Target, show OS as Target
		if OS> Target, show Instalment Amount as
		Target
TargetAmtLoan	Decimal	
TotalReld	Decimal	Total realized amount
Overdue	Decimal	Overdue or advance(-) payment amount
		Interest Due From Last provisioned date
		(Target Date) to till now (Branch Opening
		date) mentioned as BufferIntrAmt
		I.e. additional interest amount after last
5 66 1 1 1		provision date = Total Interest Amount
BufferIntrAmt	Decimal	during sync – Interest OS
		Passed number of installment (number of
InstlPassed	Integer	Target Date passed)
OldInterestDue	Decimal	Due interest amount of current state
		Installment Collected in the current period.
Do oo Amst	Danimal	i.e. Collected Amount from Last target date to
ReceAmt	Decimal (VAVA) MANA	Next target Date
Lindatad^+	``	ddThe date time, at when this data was created
UpdatedAt	HH:mm:ss)	or modified



## 7. Store new Collection information

Store given Collections of a branch **URL**: /scapiw/StoreCollectionInfo

Method: POST

**Data**: {"BranchCode": xxx, "Transactions": [

{"TransactionId":1,"ProjectCode": "015", "OrgNo": "2519", "OrgMemNo": "000004",

"LoanNo" : 14338, "ColcAmt": 1000, "ColcDate": "2017-07-23", "ColcFor": "L",

"ColcMethod": 1}]}

Response: {Code: 200, message: null, data: [{"BufferId": 1, "PostStatus": 1}]}

**Request Parameter Fields** 

Property Name	Value Type	Description

#### Request Data Fields

Property Name	Value Type	Description
BranchCode	String	
ProjectCode	String	Project Code
OrgNo	String	VO Number
OrgMemNo	String	Member number
LoanNo	BigInt	Loan number. 0 for non-loan transactions
ColcAmt	Decimal	Collection amount
ColcDate	Date (YYYY-M HH:mm:ss)	Collection date, Collection date should be current business date (If transaction is waiting in buffer for correction/ modification, and correction is done on next day of bKash Collection, system IM-ddwill Consider the 'next business day' as Collection Date.)
ColcFor	Enum (L, S)	Type of transaction, L = Loan, S = Savings
ColcMethod	Integer	Collection method, 1 = Cash, 2 = bKash wallet
TransactionId	Integer	System will restrict duplicate data using this value (in case of receiving data second time against similar Transaction ID )

Property Name		Description
BufferId	Long	ld from buffer data
PostStatus	Integer	1 = Success, 2 = Fail

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Posted Collections will be stored in application Buffer in order to allow data correction. UI will be provided to do the corrections and finally to flush the data. Following are the UI list

- 1. Brunch and Date wise buffered transactions list
- 2. Transactions view UI with Edit or Flush action
- 3. Transactions correction form
- 4. Remove option need to be Incorporated
- 5. For 'Transferred' member system will send a message



### 8. Retrieve transaction list

Retrieve all transaction of a branch within a specific date range **URL**:

/scapir/Transactions?BranchCode=xxxx&StartDate=d1&EndDate=d2&UpdatedAt=xxx

Retrieve all transaction of a branch of a specific organization within a specific date range **URI**:

scapir/Transactions? Branch Code = xxx&StartDate = d1&EndDate = d2&OrgNo = xxx&Updated At = xxx

Retrieve all transaction of a branch of a specific organization of specific member within a specific data range

<u>URL:/</u>scapir/Transactions?BranchCode=xxxx&OrgNo=xxxxx&OrgMemNo=xxxxxx&StartDate=d1&EndDate=d2&UpdatedAt=xxx

Retrieve all transaction of a branch of a specific project having specific PO within a specific data range

<u>URL:/</u>scapir/Transactions?BranchCode=0605&ProjectCode=xxx&StartDate=d1&EndDate=d2&UpdatedAt=xxx&CONo=xxx

#### URL:

 $\label{eq:control_scapir} $$ \frac{\scapir/Transactions?BranchCode=0605\&ProjectCode=xxx\&StartDate=d1\&EndDate=d2\&UpdatedAt=xx}{\underline{x}} $$$ 

URL:/scapir/Transactions?BranchCode=0605&ProjectCode=xxx&StartDate=d1&EndDate=d2

<u>URL:/</u>scapir/Transactions?BranchCode=0605&ProjectCode=xxx&StartDate=d1&EndDate=d2&CONo=xxx

Method: GET

**Response**: {Code: 200, message: null, data: [{"ProjectCode": "015", "OrgNo": "2519", "OrgMemNo": "000004", "LoanNo": 14338,"Tranamount": 1000, "ColcDate": "2017-07-23", "Transno": "LC00000179123", "ColcFor": "L", UpdatedAt: "2017-11-22 19:30:45"}, {"ProjectCode": "015", "OrgNo": "2519", "OrgMemNo": "000018", "LoanNo": 990, "Tranamount": 588, "ColcDate": "2017-07-23", Transno": "LC000000179506", "ColcFor": "L", UpdatedAt: "2017-11-22 19:30:45"}]}

#### **Request Parameter Fields**

Property Name	Value Type	Description
BranchCode	String	Branch Code
StartDate	Date (YYYY-MM-dd)	
EndDate	Date (YYYY-MM-dd)	
OrgNo	Long	
OrgMemNo	Long	



ProjectCode	String		
PONo	String	Associated PO PIN	
	Date (YYYY-MM-dd	To pull data that are equal or greater than	
UpdatedAt	HH:mm:ss)	this date time	

## **Response Fields**

Property Name	Value Type	Description
ProjectCode	String	Project Code
OrgNo	Long	VO Number
OrgMemNo	Long	Member number
LoanNo	Long	Loan number. 0 for non-loan transactions (e.g. Compulsory Savings Transaction)
Tranamount	Decimal	Collection amount (Loan / Savings)
	Date (YYYY-MM-dd	
ColcDate	HH:mm:ss)	Transaction date
TrxType	String	Transaction Type
TransNo	String	Transaction number
ColcFor	Enum (L, S)	Type of transaction, L – Loan, S- Savings
	Date (YYYY-MM-dd1	he date time at when this data was created
UpdatedAt	HH:mm:ss)	or modified

#### TransID List as per current practice:

Loan Account Transaction:	Savings Account Transaction:
Disbursement = 1,	deposit =1,
Provision = 2,	withdrawal = 2,
Collection = 3,	adjustment = 3,
Refinance = 4,	interest deposit = 4,
Reschedule = 5,	info change = 5,
Settlement = 6,	principal withdrawal = 6,
Savings Adjustment = 7,	interest withdrawal = 7,
Guardian Adjustment = 8,	smart Collection = 8,
Partial Write off = 9,	Collection from loan = 9,
Dead Write Off = 10,	transferred = 10,
Status Change = 11,	received = 11
NIBL2 Status Change = 12,	mobile money= 13
Smart Collection = 13,	
Interest Write off = 14,	
Full write off = 15	
Transferred = 16	



# 9. Retrieve good loan customer list

Retrieve all good loan customer of a branch of specific year and month URL:

/scapir/GoodLoans?BranchCode=xxx?Month=n&Year=n

URL: /scapir/GoodLoans?BranchCode=xxx?Month=n&Year=n&UpdatedAt=xxx

Method: GET

Response: {Code: 200, message: null, data: [{"OrgNo": "2519", "OrgMemNo":

"000004", "MaxAmt": 75000, "Taken": 0, UpdatedAt: "2017-11-22 19:30:45"}, {"OrgNo" : "2519", "OrgMemNo" : "000006", "MaxAmt": 50000, "Taken": 0,

UpdatedAt: "2017-11-22 19:30:45"}, {"OrgNo": "2528","OrgMemNo": "000135",

"MaxAmt": 25000, "Taken": 1, UpdatedAt: "2017-11-22 19:30:45"}]}

## **Request Parameter Fields**

Property Name	Value Type	Description
BranchCode	String	Branch Code
Month	Integer	1=January, 2=February, 12=December
Year	Integer	
	Date (YYYY-MM-dd7	o pull data that are equal or greater than
UpdatedAt	HH:mm:ss)	this date time

Property Name	Value Type	Description
OrgNo	String	VO Number
OrgMemNo	String	Member number
MaxAmt	Decimal	Maximum amount
Taken	Integer	Taken or not taken, 0 – Not taken, 1 – taken
		The date time at when this data was created
	Date (YYYY-MM-do	dor modified
UpdatedAt	HH:mm:ss)	Incorporate Month & Year of Good Loan
Month	Integer	1=January, 2=February, 12=December
Year	Integer	



# 10. Retrieve special savings information

Retrieve all special savings information of a branch of specific policy **URL**: /scapir/SPSInfo?BranchCode=xxx&PolicyId=xxx

Retrieve all special savings information of a branch of specific wallet with specific status **URL**: /scapir/SPSInfo?BranchCode=0605&ProjectCode=xxx&WalletNo=567&Status=1

Retrieve all special savings information of a branch of specific organization with specific status

URL: /scapir/SPSInfo?BranchCode=0605&ProjectCode=xxx&Status=1&OrgNo=144

Retrieve all special savings information of a branch of specific organization of specific member with specific status

 $\underline{\textbf{URL}:}/scapir/SPSInfo?BranchCode=0605\&ProjectCode=xxx\&OrgNo=xxxxx\&OrgMemNo=xxxxxx\&Status=n$ 

URL: /scapir/SPSInfo?BranchCode=0605&ProjectCode=xxx&UpdatedAt=xxx

Method: GET

Response: {Code: 200, message: null, data: [{"ProjectCode": "060", "OrgNo": "OrgMemNo": "000754", "MemberName": "SHAHABUDDIN", "PIN": "00000042", "WalletNo": "01873724024", "PolicyId": "T05060000046", "NoOfInstls": 36, "InstlAmount": 300, "OpenDate": "2014-08-31", "MaturityDate": "2017-09-09", 6300, "CurrInstlNo": 34, "DueAmount": 600,"PenaltyAmount": "LastPayDate": "2017-09-09", "Status": 1, "WalletProcfeesPercent": 1, "FromDate": UpdatedAt: "ToDate": "2017-05-31", "2017-11-22 "2017-05-01", {"ProjectCode": "015", "OrgNo": "2014","OrgMemNo": "000278", "MemberName": "NARGIS/SABAD", "PIN": "00000080", "WalletNo":"01725011833", "T06015001116", "NoOfInstls": 60, "InstlAmount": 1000, "OpenDate": "2016-04-27", "MaturityDate": "2021-05-15", "Balance": 10000, "CurrInstlNo": 15,"DueAmount": 0, "PenaltyAmount": "LastPayDate": "2021-05-15", 0, "Status": 0,"WalletProcfeesPercent": 1, "memberCommissionAmount:1, "FromDate": "2017-07-01", "ToDate": "2017-07-31", UpdatedAt: "2017-11-22 19:30:45"}]}



## **Request Parameter Fields**

Property Name	Value Type		Description
BranchCode	String		Branch Code.
PolicyId	Long		Savings account ID
WalletNo	String		bKash wallet No.
Status	Integer		1=Active, 2=Inactive, 3=Closed
OrgNo	Long		
OrgMemNo	Long		
	Date	(YYYY-MM-ddT	o pull data that are equal or greater than
UpdatedAt	HH:mm:ss)		this date time

Property Name	Value Type	Description
ProjectCode	String	Project Code



OrgNo	String	VO Number
OrgMemNo	String	Member number
MemberName	String	Member name
PIN	String	PIN of PO
WalletNo	String	bKash Wallet number (member wallet no. )
PolicyId	Long	Savings account ID
NoOfInstls	Integer	Total number of installment
InstlAmount	Decimal	Installment amount
OpenDate	Date (YYYY-MM-dd)	Date of policy opening
MaturityDate	Date (YYYY-MM-dd)	Date of maturity
Balance	Decimal	Current policy balance
CurrInstlNo	Integer	Current installment number
DueAmount	Decimal	Due amount upto current installment
PenaltyAmount	Decimal	Penalty amount
LastPayDate	Date (YYYY-MM-dd)	Last paid date
		Policy status:
		0 – regular,
		1 – Late ,
Status	Integer	2 – Matured
Wallet Procfees Perc		Wallet transaction processing fee in percent:
ent	Decimal	Client Commission percentage
memberCommission		
Amount	Decimal	Member bkash commission amount
		First date of the month from when installment
FromDate	Date (YYYY-MM-dd)	was missed.
ToDate	Date (YYYY-MM-dd)	Last date of the month of current installment
	Date (YYYY-MM-do	The date time at when this data was created
UpdatedAt	HH:mm:ss)	or modified



# 11. Store new special savings Collection

Store given special savings Collection of a branch **URL**: /scapiw/StoreSPSCollection

Method: POST

**Data**: {"BranchCode": xxxx, "Transactions" : [{"PolicyId": "T05060000046", "FromDate" : "2017-05-01", "ToDate" : "2017-07-31", "ColcAmt": 909, "PenaltyAmount": 0,

"WalletProcfeesPercent":1, "memberCommissionAmount": 1, "ColcMethod":

2}]}

Response: {Code: 200, message: null, data: [{"PostStatus": 1}]}

## **Request Parameter Fields**

Property Name	Value Type	Description

#### Request Data Fields

Property Name	Value Type	Description
PolicyId	Long	Special Savings account ID
FromDate	Date (YYYY-MM-dd)	Start date of installment
ToDate	Date (YYYY-MM-dd)	End date of installment
		Transaction amount. I.e. ColcAmt = savings Collection amount + penalty amount + client
ColcAmt	Decimal	Commission amount
PenaltyAmount	Decimal	Member penalty amount
WalletProcfeesPerce		
nt	Integer	Member bkash commission
memberCommission		
Amount	Decimal	Member bkash commission amount
ColcMethod	Integer	Collection method, 1 – Cash, 2 – bKash

respense meras		
Property Name		Description
		1 = Success, 2 = Invalid policy, 3 = Insufficient amount (Validate: ColcAmt = savings Collection amount + penalty amount + client Commission amount)
PostStatus	Integer	PostStatus=3; When Received amount< (savings Collection amount + penalty amount + client Commission amount) less



Note: Correction / edition is not applicable for Special Savings, it will be posted directly without buffering.

For Loan Term Monthly Savings, if Savings scheme starts from January, follow below cases:

Case 1: Missed instalment from Feb 15 to May 15

From Date: Feb 15; To Date: March 15: System will accept the payment for these 2 months along with penalty amount where missed instalment is for 4 months.

(In case of bKash Collection 'Commission Amount' is also applicable)

Case 2: Missed instalment from Feb 15 to June 15

From Date: Feb 15; To Date: July 15: System will not accept the payment as per business rule of Loan Term Monthly Savings

### 12. Retrieve closed loan information

Retrieve all closed loan of a branch of specific organization

URL:

/scapir/ClosedLoanInfo?BranchCode=0605&ProjectCode=xxx&StartDate=d1&EndDate=d2&CONo=xxx

Retrieve member specific all closed loan of a branch of specific organization **URL**: /scapir/ClosedLoanInfo?BranchCode=0605&ProjectCode=xxx&StartDate=d1&EndDate=d2&OrgNo=144&OrgMemNo=234

Retrieve all closed loan of a branch of specific project and PO **URL**: /scapir/ClosedLoanInfo?BranchCode=0605&ProjectCode=xxx&CONo=xxx

Retrieve all closed loan of a branch within a specific date range

URL:

/scapir/ClosedLoanInfo?BranchCode=0605&ProjectCode=xxx&StartDate=d1&EndDate=d2

Retrieve all closed loan of a branch of specific organization of specific member within specific date range

URL:

/s capir/Closed Loan Info? Branch Code=0605 & Project Code=xxx & Start Date=d1 & End Date=d2 & Updated At=xxx

Retrieve all closed loan of a branch of specific project and PO within specific date range **URL**:

/scapi/ClosedLoanInfo?BranchCode=xxx&ProjectCode=xxx&CONo=xxx&StartDate=d1&EndDate=d2

URL: / scapi / Closed Loan Info? Branch Code = xxx & Project Code = xxx & Updated At = xxx

Method: GET

BRAC IT BERDRESE: MGGBe: 200, message: null, data: [{"ProjectCode": "015", "OrgNo": House 115/ความ เลือนกระบาท เล้าที่ เล้าที่ เล้าที่ เล้าที่ เล้าที่ เล้าที่ เล

1950, "DisbDate": "2015-01-10", "LnStatus": 1, "TotalReld": 115000, "InstlPassed":

ISO 27001 CERTIFIED



12, "LoanTragetAmount": 1500, "WriteOffAmount": 2000}, {"ProjectCode":"015", "OrgNo": "2203", "OrgMemNo": "000397", "LoanNo": 356280, "LoanSlNo": 4,"ProductNo": "141", "ProductSymbol": "GDG", "IntrRate": 26, "PrincipalAmt":



50000,"InstlAmt": 1200, "DisbDate": "2015-06-19", "LnStatus": 1,

"TotalReld": 55000, "InstlPassed":13, "LoanTragetAmount": 2200, "WriteOffAmount":

0, UpdatedAt: "2017-11-22 19:30:45"}]}

## **Request Parameter Fields**

	1	
Property Name	Value Type	Description
BranchCode	String	Branch Code.
OrgNo	Long	
OrgMemNo	Long	
ProjectCode	String	
PONo	String	Assigned PO PIN
StartDate	Date (YYYY-MM-dd)	
EndDate	Date (YYYY-MM-dd)	
	Date (YYYY-MM-d	dTo pull data that are equal or greater than
UpdatedAt	HH:mm:ss)	this date time

response i relas		
Property Name	Value Type	Description
ProjectCode	String	Project Code
OrgNo	Long	Organization number/VO Number
OrgMemNo	Long	Member number
LoanNo	Long	Loan number
LoanSlNo	Integer	Loan serial number
ProductNo	Long	Product number
ProductSymbol	ENUM(GDN, GDG)	Product Symbol e.g. GDN = Normal Loan, GDG = Good Loan
IntrRate	decimal	Interest rate in percent
PrincipalAmt	Decimal	Principal amount
InstlAmt	decimal	Last installment amount
DisbDate	Date (YYYY-MM-dd)	Disbursement date
LnStatus	integer	Loan classification state - 1=Current, 2=Closed, 3=Lat1, 4=Lat2, 5=NIBL, 6=Bad, 7=Bad Loan, 8=Bad Debt
TotalReld	Decimal	Total realized amount
InstlPassed	Integer	Passed number of installment.
LoanTragetAmount	Decimal	Last target amount before loan closing
WriteOffAmount	decimal	Total written off amount(if any)
UpdatedAt	Date (YYYY-MM-ddT HH:mm:ss)	he date time at when this data was created or modified



# 13. Retrieve wallet information

Retrieve wallet information

**URL:** /scapi/ WalletInfo?WalletNo=xxx

URL: /scapi/ WalletInfo?WalletNo-xxx&UpdatedAt-xxx

Method: GET

Response: {Code: 200, message: null, data: {"PrimaryKey":"12345674", "BranchCode":"0642", "MemberName":"Md. Bashar", "OrgNo":"2018", "OrgMemNo":"195", "RefererPIN":"154211", "RefererName":"Khabir

Uddin", "RefererMobile":"01816439951", UpdatedAt: "2017 11 22 19:30:45"}}

#### **Request Parameter Fields**

Property Name	<del>Value Type</del>	<del>Description</del>
<del>WalletNo</del>	String-	<del>Wallet No.</del>
	Date (YYYY-MM-dd <sup>-</sup>	o pull data that are equal or greater than
<del>UpdatedAt</del>	HH:mm:ss)	this date time

#### **Response Fields**

Property Name	<del>Value Type</del>	<del>Description</del>
PrimaryKey -	String	Member ID
BranchCode -	String	
<del>OrgNo</del>	String	
OrgMemNo-	String	
MemberName -	String	Member name
RefererPIN-	String	Reference PIN
RefererName -	String	Reference name
RefererMobile	String	Reference mobile
	Date (YYYY-MM-ddT	he date time at when this data was created
<del>UpdatedAt</del>	HH:mm:ss)	or modified

Note: Removed as per communication from BRAC (Date: Nov 4, 2018; email Subject:

ERP Integration Updates: Smart Collection data consistency)



# 14. IsCollectionPending Method

Retrieve pending Collection information

URL: /scapir/IsCollectionPending?BranchCode=0605

**URL**: /scapir/lsCollectionPending?BranchCode=0605&CONo=xxx

Method: GET

Response: {Code: 200, message: null, data: {"HasPending":0}}

### **Request Parameter Fields**

Property Name	Value Type	Description
BranchCode	String	Branch Code
PO No	String	PO of that Branch

Property Name	Value Type	Description
HasPending	Integer	0= NO; 1= YES



## 15. Retrieve All Loan Target

Retrieve all loan targets of a branch within a specific date range **URL**: /scapir/Targets?BranchCode=0605&ProjectCode=xxx /scapir/Targets?BranchCode=0605&ProjectCode=xxx&OrgNo=xxx&OrgMemNo=xxx

/scapir/Targets?BranchCode=0605&ProjectCode=xxx&StartDate=d1 /scapir/Targets?BranchCode=0605&ProjectCode=xxx&EndDate=d1 /scapir/Targets?BranchCode=0605&ProjectCode=xxx&CONo=xxx /scapir/Targets?BranchCode=0605&ProjectCode=xxx&UpdatedAt=xxx

Method: GET

Response: {Code: 200, message: null, data: [{"ProjectCode": "015", "OrgNo": "2519", "OrgMemNo": "000004", "LoanNo": 14338," TargetAmount": 1000, "TargetDate": "2017-07-23", UpdatedAt: "2017-11-22 19:30:45"}, {"ProjectCode": "015", "OrgNo": "2519", "OrgMemNo": "000018", "LoanNo": 990, "TargetAmount": 588, "TargetDate": "2017-07-23", UpdatedAt: "2017-11-22 19:30:45"}]}

Request parameters: Property Name	Value Type	Description
BranchCode	String	Branch Code
StartDate	Date (YYYY- MM-dd)	Include records of TargetDate from StartDate to EndDate
EndDate	Date	Date (YYYY-MM-dd)
OrgNo	String	Optional
OrgMemNo	String	Optional
ProjectCode	String	
PONo	String	Associated PO PIN (Optional)
UpdatedAt	Date (YYYY- MM-dd HH:mm:ss)	To pull data that are equal or greater than this date time (Optional)
DisbDate	Date	Disbursement date of loan
LnStatus	Integer	Loan status at the time of TargetDate (For migrated data, it will depend on data availability)

#### **URLs**:

http://118.179.206.87:8083/scapi/Targets?BranchCode=0152&StartDate=2017-06-25&EndDate=2019-06-30&ProjectCode=015

http://118.179.206.87:8083/scapi/Targets?BranchCode=0152&StartDate=2017-06-25&EndDate=2019-06-30&ProjectCode=015&CONo=00067330

http://118.179.206.87:8083/scapi/Targets?BranchCode=0152&StartDate=2017-06-25&EndDate=2019-06-30&ProjectCode=015&OrgNo=150



http://118.179.206.87:8083/scapi/Targets?BranchCode=0152&StartDate=2017-06-25&EndDate=2019-06-30&ProjectCode=015&OrgMemNo=30050

http://118.179.206.87:8083/scapi/Targets?BranchCode=0152&StartDate=2017-06-25&EndDate=2019-06-30&ProjectCode=015&UpdatedAt= '1971-01-01 00:00:00'



# 16. Retrieve saving collection information

Retrieve all members' general savings information of a branch of a project having a specific PO. If there is no compulsory savings for a member, still a SavingsInfo record will be generated with zero TargetAmtSav, SavBalan, SavPayable and CalcIntrAmt.

#### **URL**:

/scapir/SavingsInfo?BranchCode=xxx&ProjectCode=xxx /scapir/SavingsInfo?BranchCode=xxx&ProjectCode=xxx&UpdatedAt=xxx /scapir/SavingsInfo?BranchCode=xxx&ProjectCode=xxx&CONo=xxx /scapir/SavingsInfo?BranchCode=xxx&ProjectCode=xxx&Status=xxx

Retrieve all members' general savings information of a branch for specific organization URL:/scapir/SavingsInfo?BranchCode=xxx&ProjectCode=xxx&OrgNo=xxxx&Status=x&UpdateAt =xxx

Retrieve single members' general savings information of a branch <a href="URL:/scapir/SavingsInfo?BranchCode=xxx&ProjectCode=xxx&OrgNo=xxx&OrgMemNo=xxx">URL: /scapir/SavingsInfo?BranchCode=xxx&ProjectCode=xxx&OrgNo=xxx&OrgMemNo=xxx</a>

Parameters Status (member status Active/Inactive) and UpdateAt are optional.

Method: GET

#### **Request Parameter Fields**

Property Name	Value Type Description	
BranchCode	String	Branch Code.
OrgNo	Long	Organization number
Status	Integer	2 = Active, 3 = Inactive, 4 =
		Closed
OrgMemNo	Long	
PONo	String	Associated PO PIN
ProjectCode	String	
UpdatedAt	Date (YYYY-MM-dd	To pull data that are equal
	HH:mm:ss)	or greater than this date
		time

Property Name	Value Type	Description
OrgNo	Long	Organization number/VO
		Number
OrgMemNo	Long	Member number



ProjectCode	String	Project Code
BranchCode	String	Branch Code
MemberName	String	Member name
SavBalan	Decimal	Present general savings
		balance i.e. Compulsory
		savings balance.
SavPayable	Decimal	Savings interest payable i.e.
		calculated interest without
		provision.
CalcIntrAmt	Decimal	Calculated interest not yet
		credited i.e. provision
		interest before credit
TargetAmtSav	Decimal	Savings target amount i.e.
		savings installment amount
ApplicationDate	Date (YYYY-MM-dd)	Date of member admission
NationalId	String	National Id Nol.
ContactNo	String	Contact phone number
WalletNo	String	bKash wallet number
AssignedPO	String	Credit/Principle officer PIN
UpdatedAt	Date (YYYY-MM-dd	The date time at when this
	HH:mm:ss)	data was created or modified