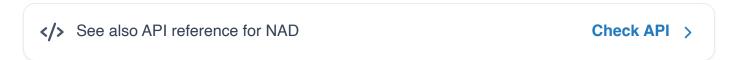


Registration



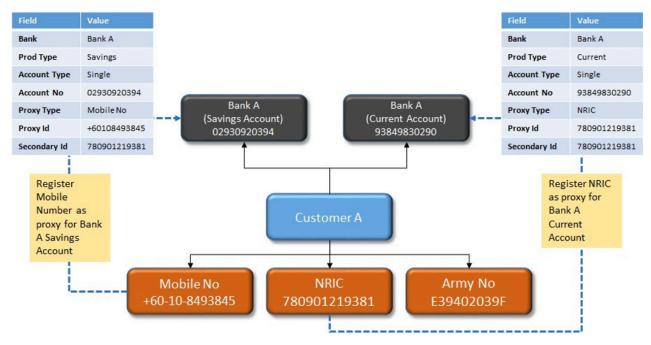
When registering a proxy, Participant will need to provide the Customer's Secondary Id. The Secondary Id will be used to identify the proxies that have been registered for the Customer. Secondary Ids that will be used depends on the type of account as well as individuals

Type of Customer	Secondary ID Allowed
Individual	 For Malaysian: NRIC Army Number Police Number For Foreigner: Passport Number
Corporate or Sole Proprietary	Business Registration Number (BRN)
NGO	Business Registration Number (BRN)
Government	Business Registration Number (BRN)

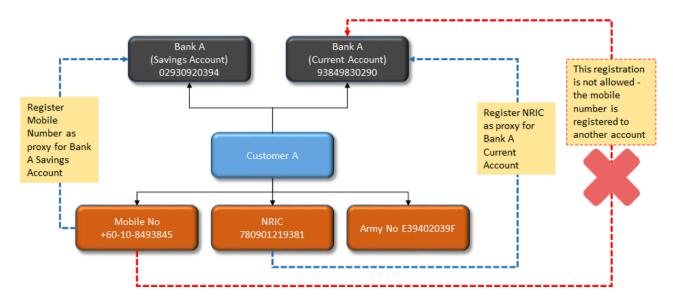
Sample Scenarios

Example 1

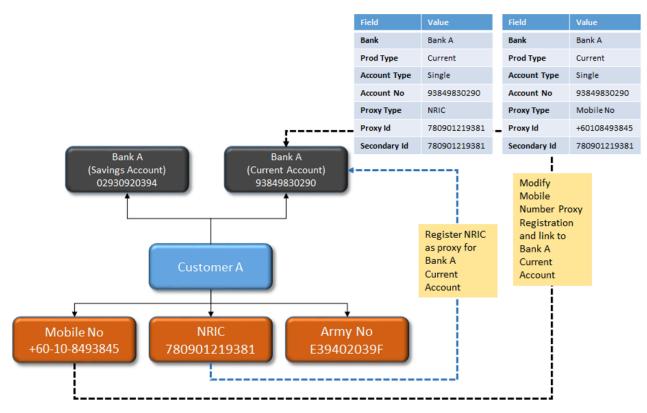
Customer A has registered two different proxies to his two accounts in Bank A



He wants to register his mobile number as proxy to his Current Account as well, but he is unable to register because it is currently registered to his Savings account

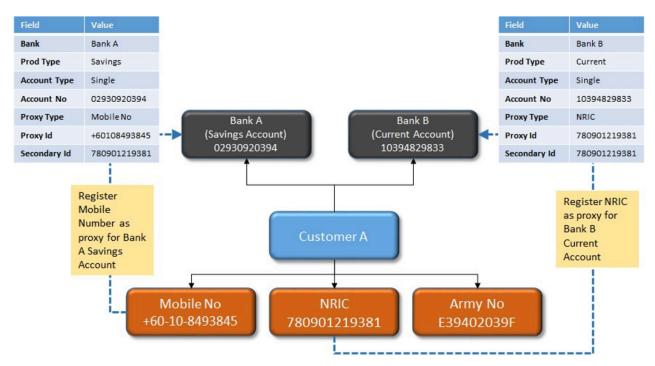


Customer A must modify his registration for his Mobile Number proxy and change the Account from his Savings Account to his Current Account

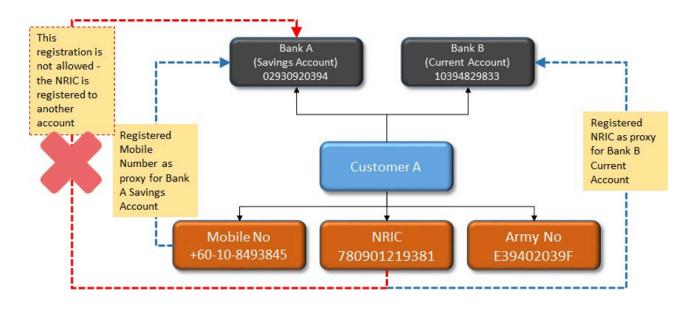


Example 2

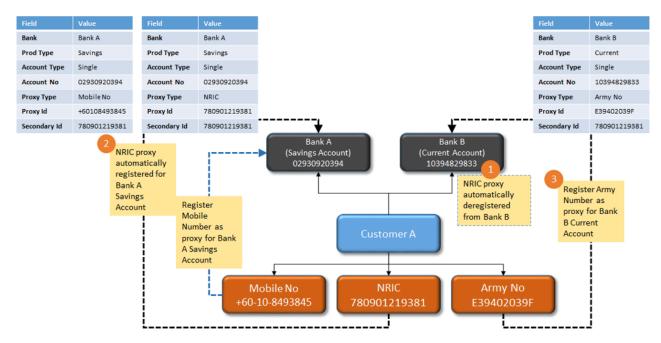
Customer A has accounts in both Bank A and Bank B. He registers his mobile number as proxy for his Bank A Account and his NRIC as proxy for his Bank B account



Since he has registered and linked his NRIC to his Bank B account, he cannot use the same NRIC number to register and link his Savings account in Bank A. He may, however, register and link his Army Number to his Savings account in Bank A



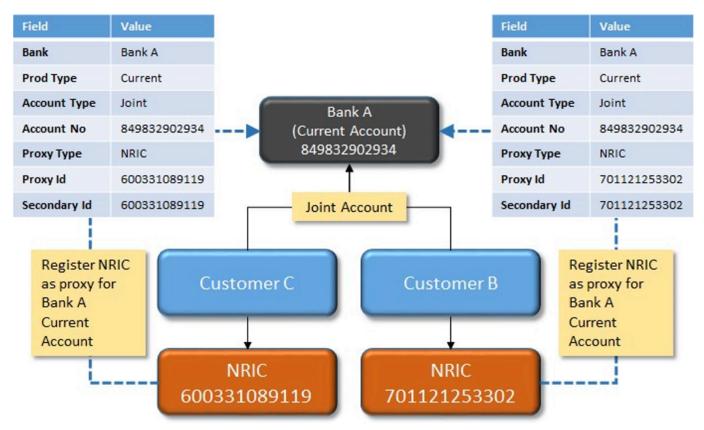
If Customer A wants to use his NRIC to link his Savings Account in Bank A, he will have to TRANSFER the NRIC proxy from Bank B in order to register to Bank A (Bank A will prompt a TRANSFER confirmation to Customer A for this scenario, and Customer A needs to confirm for the transfer to take effect)



Once Customer A confirms to transfer his NRIC proxy to link to his Savings Account in Bank A, his NRIC proxy registration in Bank B will be automatically deregistered, and his NRIC proxy will be automatically registered and link to his Savings Account in Bank A. So now, Customer A's Bank A Savings Account has two proxies registered - his Mobile number as well as his NRIC number. And he has also registered a new proxy using his Army Number to his Bank B Current Account

Example 3

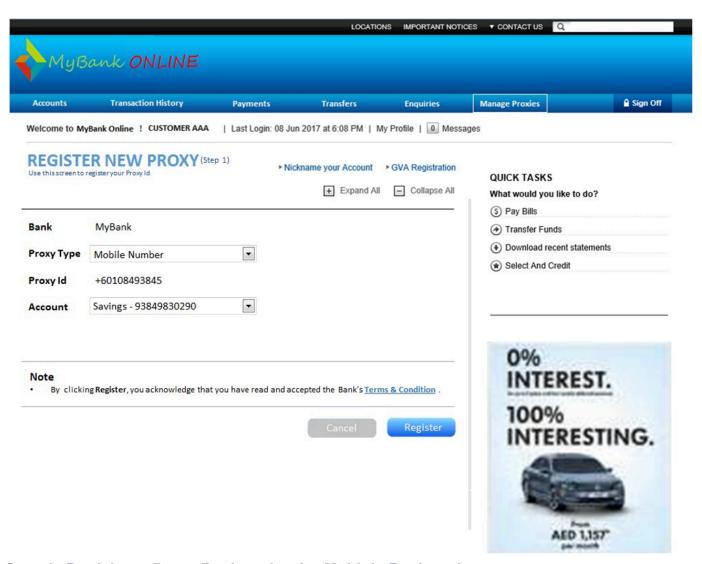
For joint accounts, each individual can register their own sets of proxies as long as these proxies are unique and is not currently registered to any other accounts



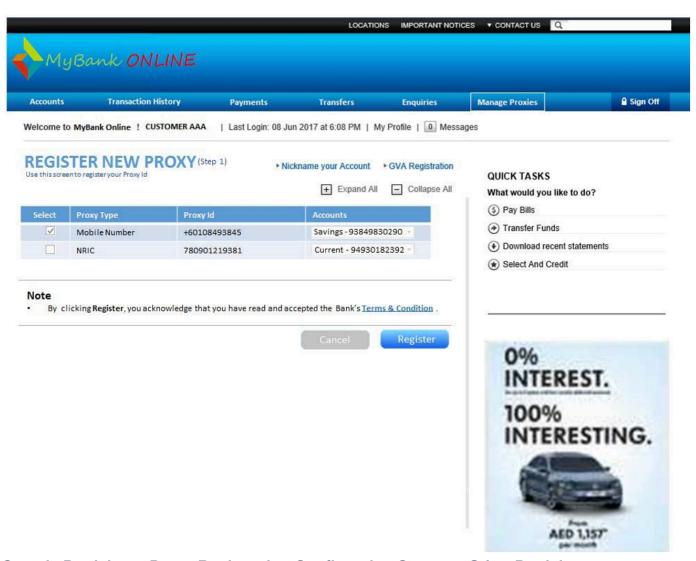
Proxies can be personal or business identification numbers, telephone numbers, or even social media profiles. The NAD Registration and Deregistration service is made available to the customers through the Participant's touchpoints

Sample Use Cases

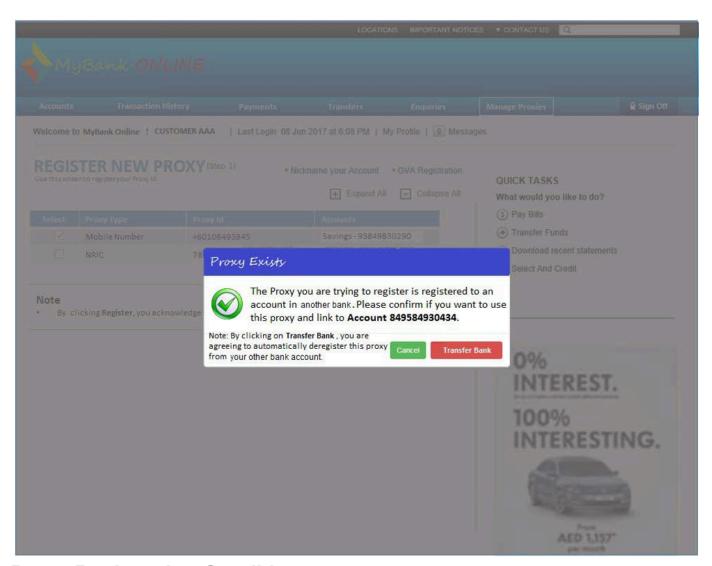
Sample Participant Proxy Registration 1 – Single Registration



Sample Participant Proxy Registration 2 – Multiple Registration



Sample Participant Proxy Registration Confirmation Screen – Other Participant



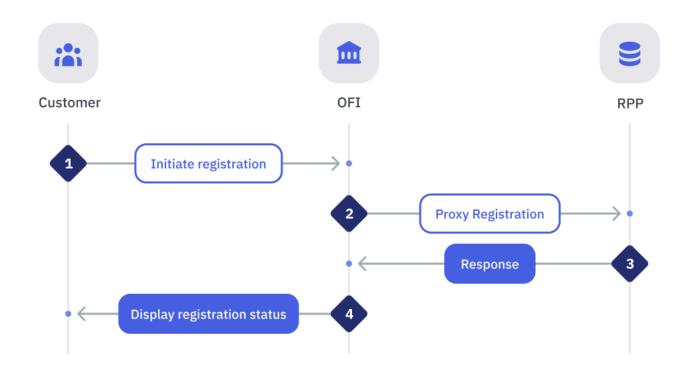
Proxy Registration Conditions

Proxy Exists	Exists in the same Participant	Same Accoun t	Same Secondary Id	Proxy Status	Action By RPP	Action by Participant
No	-	-	-	-	Register Proxy	Display Registration Accepted
Yes	Yes	-	-	INACTIVE	Register Proxy	Display Registration Accepted
Yes	Yes	-	-	SUSPENDED	Reject – Duplicate exists in Participant	Display generic error message
Yes	Yes	Yes	Yes	ACTIVE	Reject – Duplicate exists in Participant	Display message – Proxy already registered
Yes	Yes	No	Yes	ACTIVE	Reject – Duplicate exists in Participant	Confirm with Customer to relink Proxy to the new Account (MODIFY PROXY)

Proxy Exists	Exists in the same Participant	Same Accoun t	Same Secondary Id	Proxy Status	Action By RPP	Action by Participant
Yes	Yes	No	No	ACTIVE	Reject – Duplicate exists in Participant	Display Duplicate error message and investigate
Yes	No	-	-	INACTIVE	Scenario is not applicable	-
Yes	No	-	-	SUSPENDEd	Scenario is not applicable	-
Yes	No	No	Yes	ACTIVE	Reject – Duplicate exists in another Participant	Since Secondary Id is the same as Participant's Secondary Id, Participant can confirm with Customer to relink Proxy to the new

Proxy Exists	Exists in the same Participant	Same Accoun t	Same Secondary Id	Proxy Status	Action By RPP	Action by Participant
						account of the current Participant (TRANSFER BANK)
Yes	No	No	No	ACTIVE	Reject – Duplicate exists in another Participant	Since Secondary Id is different from the Participant's Secondary Id, Participant will display Duplicate error message and investigate

Successful End-to-End Proxy Registration Flow



Step	Sender	Receiver	Processes
1	Customer	OFI	Customers logs into Online Banking or Mobile Banking app and initiates a Proxy Registration
2	OFI	RPP	 OFI performs the following: Retrieve Customer's profile e.g. NRIC, Army Number, Passport Number, Mobile Number or Business Registration Number depending on what the customer has used as identification during onboarding, and the accounts that can be linked to the proxy Allow Customer to select which proxy to register and link to which account Authorize and validate the Proxy Registration request

Step	Sender	Receiver	Processes
			 Any other validations If all validations are successful: Send Proxy Registration message request Notes: If multiple proxies are allowed to be submitted by the Customer at one time, OFI will have to send the registration request one at a time to RPP OFI will need to send the Secondary Id for every registration request. This is used to identify the proxy registered by the Customer within RPP across multiple Participants
3	RPP	OFI	 Message Validations Business Validations Proxy Validations If any of the validations are not successful: Send a NEGATIVE/REJECT response If all validations are successful: Register the proxy and account into NAD Set the status to Active Send Proxy Registration message response
4	OFI	Customer	OFI performs the following:

Step	Sender	Receiver	Processes
			Message Validations
			Business Validations
			If all validations are successful:
			If SUCCESSFUL response is received:
			 Display a successful message to the Customer
			If UNSUCCESSFUL response is received:
			 Display an error message to the Customer
			Duplicate proxy handling (if any)
			 Notes: In the event the proxy is already registered with another Participant (duplicate scenario), Participant shall allow Customer to confirm whether to transfer the proxy to the new account with the OFI (display confirmation message with the name of the other Participant) Participant should ensure the Secondary Id of the duplicate proxy is the same as the Secondary Id of the Participant's customer before confirming with the Customer whether to transfer the proxy to the Participant's account. If Customer confirms on it, then OFI will send a request to TRANSFER BANK to RPP

Exception Conditions Rejected by RPP

Below are some of the conditions that the request may be rejected

No	Condition	Description	Action
1	Message Validation Error	An invalid message was sent to RPP. Some of the possible causes are: Unknown inbound message is received Message signature could not be verified Failed in message parsing Mandatory field validation has failed	RPP will not send the request to RFI. A REJECT response will be returned to OFI Notes: A copy of the request message in FULL will be returned in the REJECT response in <addtldata> field. This can be used by the sender to investigate the issue with the message</addtldata>
2	Proxy Validation Error	RPP performs the following business validations: Proxy Id is not blank Proxy Id does not exist Proxy is already registered to an account (same OFI or other Participant) with active status	A NEGATIVE response will be sent to the OFI

Timeout

Below are some of the conditions that a timeout could occur

No	Condition	Description	Action
1	RPP failed to receive any incoming request from OFI	Request was sent by OFI but RPP failed to receive the request	OFI will display timeout error message to the Customer
2	OFI failed to receive response from RPP	RPP has responded to the OFI but OFI failed to receive the response	OFI will display timeout error message to the Customer Notes: If the same request is being resubmitted, RPP will: • If the registration was successful in previous request, then RPP will return a negative response • If the registration was not successful in previous request, then RPP will proceed to register the request and return an accepted response

Message Schema

Below illustrates the message schema to be used for each transaction leg. For actual schema and message version, please refer to the API specifications instead

No	Condition	Scenario	Sender	Receiver	Message Schema Out: From Sender In: To Receiver
1	Proxy Registration Accepted		OFI	RPP	Out: prxy.001.001.01 In: prxy.001.001.01
			RPP	OFI	Out: prxy.002.001.01 In: prxy.002.001.01
2	Validation Failure 1 • Signature could reverified • Message parsing • Mandatory fields validation failed	Signature could not be	OFI	RPP	Out: prxy.001.001.01 In: prxy.001.001.01
		validation failed • Unknown inbound	RPP	OFI	Out: admi.002.001.01 In: admi.002.001.01
3	Message Validation Failure 2	Response from RPP: • Signature could not be verified	OFI	RPP	Out: prxy.001.001.01 In: prxy.001.001.01

No	Condition	Scenario	Sender	Receiver	Message Schema Out: From Sender In: To Receiver
			RPP	OFI	Out: prxy.002.001.01 In: prxy.002.001.01
4	Proxy Validation Failure 1	Proxy validation includes: Proxy has been registered and linked to another account (same	OFI	RPP	Out: prxy.001.001.01 In: prxy.001.001.01
	Participant) • Number of proxies linked to the account has been exceeded	Number of proxies linked to the account has been exceeded	RPP	OFI	Out: prxy.002.001.01 In: prxy.002.001.01
		RPP returns a negative response due to duplicate proxy	OFI	RPP	Out: prxy.001.001.01 In: prxy.001.001.01
			RPP	OFI	Out: prxy.002.001.01 In: prxy.002.001.01

No	Condition	Scenario	Sender	Receiver	Message Schema Out: From Sender In: To Receiver
5	Proxy Validation Failure 2 Proxy validation includes: Proxy has been registered and linked to another account (another Participant) Number of proxies linked to the account has been exceeded RPP returns a negative response due to duplicate proxy	Proxy has been registered and linked to another account	OFI	RPP	Out: prxy.001.001.01 In: prxy.001.001.01
		RPP	RFI	Out: prxy.002.001.01 In: prxy.002.001.01	
		response due to duplicate	***	RPP	Out: prxy.001.001.01 In: prxy.001.001.01
			RPP	OFI	Out: prxy.002.001.01 In: prxy.002.001.01
8	Timeout 1	RPP did not receive request	OFI	RPP	Out: prxy.001.001.01 In: NA

No	Condition	Scenario	Sender	Receiver	Message Schema Out: From Sender In: To Receiver
			RPP	OFI	Out: NA In: NA
9	Timeout 2	OFI did not receive request	OFI	RPP	Out: prxy.001.001.01 In: prxy.001.001.01
			RPP	OFI	Out: prxy.002.001.01 In: NA

See also

- Recommended validations
- How to transfer proxy to another Participant