



**Corporate Digital Banking  
Goods and Services Tax (GST)  
for  
BSNeBiz and Mobile BSNeBiz**

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**Performance Testing Report**

***(PENRIL/BSN-PERF-TEST/BSNeBiz/00) – [(P2)-033]***

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## Chapter 1 - Introduction

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### 1. Background

Bank implements the Goods and Service Tax (GST) for BSN's Corporate Digital Banking (BSNeBiz) system, which is customer able to view GST charges on transactions which are linked to his/her CDB profile. However, the bank requested Penril to perform a performance report at BSNeBiz Transfer & Payment for Own Account Transfer, BSNeBiz Transfer & Payment for Third Party, BSNeBiz Transfer & Payment for Interbank, BSNeBiz JomPay, BSNeBiz Bulk Payment File Upload, BSNeBiz Bulk Payment for New Data Entry, BSNeBiz Bulk Payment for Edit Data Entry, BSNeBiz Authorization Verifier, BSNeBiz Authorization Approver and Mobile BSNeBiz Transfer & Payment.

### 2. Purpose

Bank need to ensure that by implementing BSNeBiz Transfer & Payment for Own Account Transfer, BSNeBiz Transfer & Payment for Third Party, BSNeBiz Transfer & Payment for Interbank, BSNeBiz JomPay, BSNeBiz Bulk Payment File Upload, BSNeBiz Bulk Payment for New Data Entry, BSNeBiz Bulk Payment for Edit Data Entry, BSNeBiz Authorization Verifier, BSNeBiz Authorization Approver, Mobile BSNeBiz Transfer & Payment and integrating IB to this new system will not cause major performance degradation.

Thus, this document describes the Performance Test Result after IB integration to BSNeBiz Transfer & Payment for Own Account Transfer, BSNeBiz Transfer & Payment for Third Party, BSNeBiz Transfer & Payment for Interbank, BSNeBiz JomPay, BSNeBiz Bulk Payment File Upload, BSNeBiz Bulk Payment for New Data Entry, BSNeBiz Bulk Payment for Edit Data Entry, BSNeBiz Authorization Verifier, BSNeBiz Authorization Approver and Mobile BSNeBiz Transfer & Payment in the UAT environment.

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## Chapter 2 – Content

### 1. Execution Strategy

#### 1.1 Type of testing: Load Testing

A load test is a planned test to perform a specified number of requests to a system in order to test the query to DB under specific levels of simultaneous requests. A load test ensures that CDB is capable of handling an expected volume of traffic, and therefore is sometimes referred to as volume testing.

The goal of this load test is to prove that with new integration to BSNeBiz Transfer & Payment for Own Account Transfer, BSNeBiz Transfer & Payment for Third Party, BSNeBiz Transfer & Payment for Interbank, BSNeBiz JomPay, BSNeBiz Bulk Payment File Upload, BSNeBiz Bulk Payment for New Data Entry, BSNeBiz Bulk Payment for Edit Data Entry, BSNeBiz Authorization Verifier, BSNeBiz Authorization Approver and Mobile BSNeBiz Transfer & Payment, it can handle the expected volume with minimal to acceptable performance degradation. In this test scenario, we simulated the maximum number of requests with the goal of less than 1% of errors.

#### 1.2 Methods of Testing

Penril conducted load testing to the selected menu mentioned in Chapter 1 - 2 Purpose - Module to Test. The test scenarios will be New Application, because this is considered one of modules that perform heavy query to database and highest number of touch points BSNeBiz. Below is the list of detailed test modules in BSNeBiz:

System	Function	Module	Test Case
BSNeBiz	Transfer & Payment (Own Account Transfer)	BSNeBiz Login Page – Step 1 (commonLogin.action)	[TS-OT-GST-STEP1]
		BSNeBiz Login Page – Step 2 (ibPortalLoginUsername.action)	[TS-OT-GST-STEP2]
		BSNeBiz Home Page – Step 3 (ibPortalLogin.action)	[TS-OT-GST-STEP3]
		BSNeBiz Transfer & Payment Page – Step 4 (ibTransferInit)	[TS-OT-GST-STEP4]
		Transfer & Payment Details Page – Step 5 (ibTransferForward.action)	[TS-OT-GST-STEP5]
		Own Account Transfer Page – Step 6 (ibOwnTransferForward.action)	[TS-OT-GST-STEP6]
		Own Account Transfer Confirmation Page – Step 7 (ibTransferConfirm.action)	[TS-OT-GST-STEP7] 14/0
		Own Account Transfer Result Page – Step 8 (ibTransferResults.action)	[TS-OT-GST-STEP8]
		Own Account Transfer Download Receipt PDF – Step 9 (ibTransferReceiptPdfDownload.action)	[TS-OT-GST-STEP9]
	Transfer & Payment (Third Party Transfer)	BSNeBiz Login Page – Step 1 (commonLogin.action)	[TS-TP-GST-STEP1]
		BSNeBiz Login Page – Step 2 (ibPortalLoginUsername.action)	[TS-TP-GST-STEP2]

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		BSNeBiz Home Page – Step 3 (ibPortalLogin.action)	[TS-TP-GST-STEP3]
		BSNeBiz Transfer & Payment Page – Step 4 (ibTransferInit)	[TS-TP-GST-STEP4]
		Transfer & Payment Details Page – Step 5 (ibTransferForward.action)	[TS-TP-GST-STEP5]
		Third Party Transfer Confirmation Page – Step 6 (ibThirdPartyTransferConfirm.action)	[TS-TP-GST-STEP6]
		Third Party Transfer Result Page – Step 7 (ibThirdPartyTransferResults.action)	[TS-TP-GST-STEP7]
		Third Party Transfer Download Receipt PDF – Step 8 (ibThirdPartyTransferReceiptPdfDownload.action)	[TS-TP-GST-STEP8]
	Transfer & Payment (Interbank Transfer)	BSNeBiz Login Page – Step 1 (commonLogin.action)	[TS-IB-GST-STEP1]
		BSNeBiz Login Page – Step 2 (ibPortalLoginUsername.action)	[TS-IB-GST-STEP2]
		BSNeBiz Home Page – Step 3 (ibPortalLogin.action)	[TS-IB-GST-STEP3]
		BSNeBiz Transfer & Payment Page – Step 4 (ibTransferInit)	[TS-IB-GST-STEP4]
		Transfer & Payment Details Page – Step 5 (ibTransferForward.action)	[TS-IB-GST-STEP5]
		Interbank Transfer Page – Step 6 (ibInterbankTransferForward.action)	[TS-IB-GST-STEP6]
		Interbank Transfer Confirmation Page – Step 7 (ibInterbankTransferConfirm.action)	[TS-IB-GST-STEP7]
		Interbank Transfer Result Page – Step 8 (ibInterbankTransferResults.action)	[TS-IB-GST-STEP8]
		Interbank Transfer Download Receipt PDF – Step 9 (ibInterbankTransferReceiptPdfDownload.action)	[TS-IB-GST-STEP9]
		JomPay	BSNeBiz Login Page – Step 1 (ibPortalAccess)
	BSNeBiz Login Page – Step 2 (ibPortalLoginUsername.action)		[TS-JP-GST-STEP2]
	BSNeBiz Home Page – Step 3 (ibPortalLogin.action)		[TS-JP-GST-STEP3]
	JomPay Page – Step 4 (ibJomPayInit)		[TS-JP-GST-STEP4]
	JomPay Details Page – Step 5 (ibJomPayForward.action)		[TS-JP-GST-STEP5]
	JomPay Confirmation Page – Step 6 (ibJomPayConfirm.action)		[TS-JP-GST-STEP6]
	JomPay Results Page – Step 7 (ibJomPayResults.action)		[TS-JP-GST-STEP7]
	JomPay Download Receipt PDF – Step 8 (ibJomPayReceiptPdfDownload.action)		[TS-JP-GST-STEP8]
	Bulk Payment (File Upload)	BSNeBiz Login Page – Step 1 (commonLogin.action)	[TS-FU-GST-STEP1]
		BSNeBiz Login Page – Step 2 (ibPortalLoginUsername.action)	[TS-FU-GST-STEP2]

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		BSNeBiz Home Page – Step 3 (ibPortalLogin.action)	[TS-FU-GST-STEP3]
		File Upload Page – Step 4 (ibFileUploadDetails)	[TS-FU-GST-STEP4]
		File Upload Details Organization Code – Step 5 (ibFileUploadConfirmOrganizationCode.action)	[TS-FU-GST-STEP5]
		File Upload Details Upload File – Step 6 (ibFileUploadDetailsUploadFile.action)	[TS-FU-GST-STEP6]
		File Upload Confirmation Page – Step 7 (ibFileUploadConfirm.action)	[TS-FU-GST-STEP7]
		File Upload Result Page – Step 8 (ibFileUploadResults.action)	[TS-FU-GST-STEP8]
		File Upload Download Receipts PDF – Step 9 (ibFileUploadReceiptPdfDownload.action)	[TS-FU-GST-STEP9]
	Bulk Payment (Add New Data)	BSNeBiz Login Page – Step 1 (commonLogin.action)	[TS-DE-GST-STEP1]
		BSNeBiz Login Page – Step 2 (ibPortalLoginUsername.action)	[TS-DE-GST-STEP2]
		BSNeBiz Home Page – Step 3 (ibPortalLogin.action)	[TS-DE-GST-STEP3]
		Data Entry Page – Step 4 (ibDataEntryDetails)	[TS-DE-GST-STEP4]
		Data Entry Details Organization Code – Step 5 (ibDataEntryConfirmOrganizationCode.action)	[TS-DE-GST-STEP5]
		Data Entry Details File Format – Step 6 (ibDataEntryConfirmFileFormat.action)	[TS-DE-GST-STEP6]
		Data Entry Check Duplicates Number – Step 7 (ibDataEntryCheckDuplicate.action)	[TS-DE-GST-STEP7]
		Data Entry Save File – Step 8 (ibDataEntrySaveFile.action)	[TS-DE-GST-STEP8]
		Data Entry Confirmation Page – Step 9 (ibDataEntryConfirm.action)	[TS-DE-GST-STEP9]
		Data Entry Results Page – Step 10 (ibDataEntryResults.action)	[TS-DE-GST-STEP10]
		Data Entry Download Receipts PDF – Step 11 (ibDataEntryReceiptsPdfDownload.action)	[TS-DE-GST-STEP11]
	Bulk Payment (Edit Data Entry)	BSNeBiz Login Page – Step 1 (commonLogin.action)	[TS-ED-GST-STEP1]
		BSNeBiz Login Page – Step 2 (ibPortalLoginUsername.action)	[TS-ED-GST-STEP2]
		BSNeBiz Login Page – Step 3 (ibPortalLogin.action)	[TS-ED-GST-STEP3]
		Data Entry Page – Step 4 (ibDataEntryDetails)	[TS-ED-GST-STEP4]
		Edit Data Entry Page – Step 5 (ibEditData)	[TS-ED-GST-STEP5]
		Edit Data Organization Code – Step 6 (ibEditDataDetailsOrganizationCode.action)	[TS-ED-GST-STEP6]
		Edit Data File Format – Step 7 (ibEditDataDetailFileFormat.action)	[TS-ED-GST-STEP7]

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		Edit Data Upload File – Step 8 (ibEditDataDetailUploadFile.action)	[TS-ED-GST-STEP8]
		Edit Data Check Duplicate – Step 9 (ibEditDataConfirmCheckDuplicate.action)	[TS-ED-GST-STEP9]
		Edit Data Save File – Step 10 (ibEditDataConfirmSaveFile.action)	[TS-ED-GST-STEP10]
		Edit Data Confirmation Page – Step 11 (ibEditDataConfirmSubmit.action)	[TS-ED-GST-STEP11]
		Edit Data Result Page – Step 12 (ibEditDataResults.action)	[TS-ED-GST-STEP12]
		Edit Data Download Receipts PDF – Step 13 (ibEditDataReceiptPdfDownload.action)	[TS-ED-GST-STEP13]
	Authorization (Verifier)	BSNeBiz Login Portal – Step 1 (commonLogin.action)	[TS-AV-GST-STEP1]
		BSNeBiz Login Page – Step 2 (ibPortalLoginUsername.action)	[TS-AV-GST-STEP2]
		BSNeBiz Home Page – Step 3 (ibPortalLogin.action)	[TS-AV-GST-STEP3]
		Verification Page – Step 4 (ibAuthorization)	[TS-AV-GST-STEP4]
		Confirmation Page – Step 5 (ibMaker)	[TS-AV-GST-STEP5]
		Verifier Result Page – Step 6 (ibCheckerResults.action)	[TS-AV-GST-STEP6]
		Verifier Download Receipt PDF – Step 7 (ibVerifierReceiptPdfDownload.action)	[TS-AV-GST-STEP7]
	Authorization (Approver)	BSNeBiz Login Portal – Step 1 (commonLogin.action)	[TS-AA-GST-STEP1]
		BSNeBiz Login Page – Step 2 (ibPortalLoginUsername.action)	[TS-AA-GST-STEP2]
		BSNeBiz Home Page – Step 3 (ibPortalLogin.action)	[TS-AA-GST-STEP3]
		Approval Page – Step 4 (ibAuthorization)	[TS-AA-GST-STEP4]
		Confirmation Page – Step 5 (ibMaker)	[TS-AA-GST-STEP5]
		Approver Results Page – Step 6 (ibCheckerResults.action)	[TS-AA-GST-STEP6]
		Approver Download Receipt PDF – Step 7 (ibApproverReceiptPdfDownload.action)	[TS-AA-GST-STEP7]
	<b>Mobile BSNeBiz</b>	Transfer & Payment	Mobile BSNeBiz Login Page – Step 1 (Login_Generate)
Mobile BSNeBiz Home Page – Step 2 (Homepage_Generate)			[TS-MB-GST-STEP2]
Transfer & Payment Page – Step 3 (Transfer_Generate)			[TS-MB-GST-STEP3]
Transfer To Page – step 4 (TransferTo_Generate)			[TS-MB-GST-STEP4]
Transfer Details Page – Step 5 (TransferDetails_Generate)			[TS-MB-GST-STEP5]

## Performance Report: Goods and Services Tax (GST)

		Confirmation Page – Step 6 (Confirmation_Generate)	[TS-MB-GST-STEP6]
		Pending Result Page – Step 7 (Pending_Generate)	[TS-MB-GST-STEP7]
		Share PDF Receipt Page – Step 8 (PdfReceipt_Generate)	[TS-MB-GST-STEP8]

## Important Notes:

This performance test case does not reflect the actual performance in the production environment. Bank need to provide the ratio between staging vs. production environment.

### 1.3 Process of testing – Adding GST on BSNeBIZ Transfer & Payment

This test scenario simulates concurrent users adding GST on BSNeBiz Transfer & Payment service. This test case depends on below test case to be executed:

#### 1.3.1 [TS-OT-GST-STEP1] – BSNeBiz Login Page – Step 1 (commonLogin.action)

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- IB\_SERVICE\_INFO. IB\_SERVICE\_INFO contains some notes or announcements.

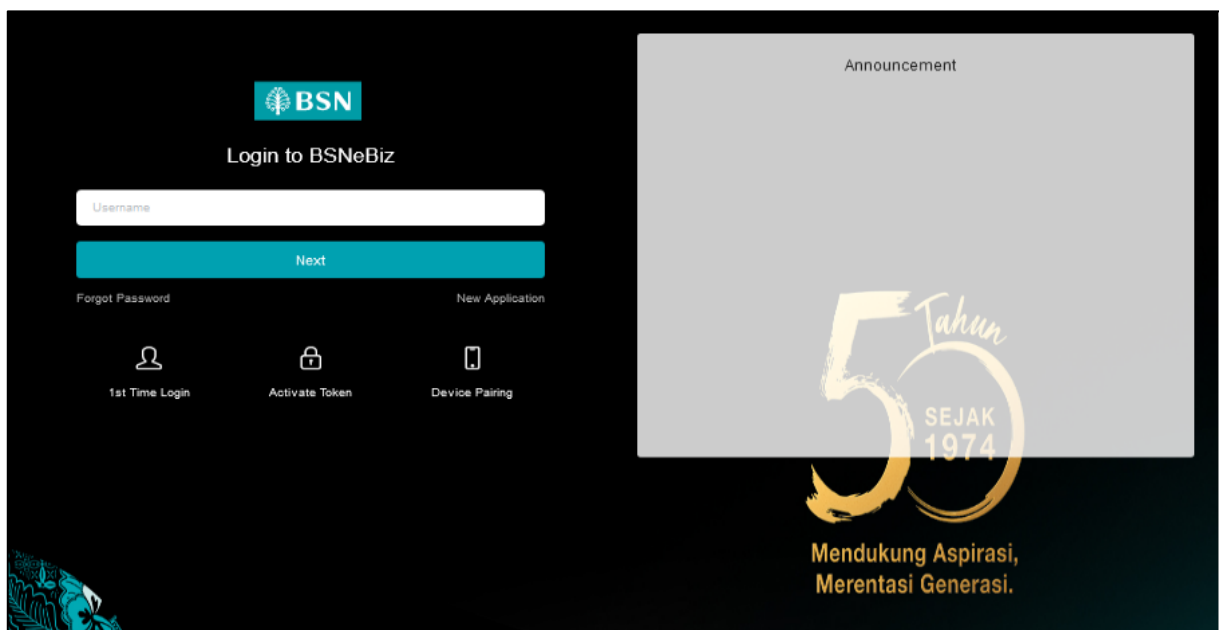


Figure 1: BSNeBiz Login page

#### 1.3.2 [TS-OT-GST-STEP2] – BSNeBiz Login Page – Step 2 (ibPortalLoginUsername.action)

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- Database. Database contains data for BSNeBiz Login Details.

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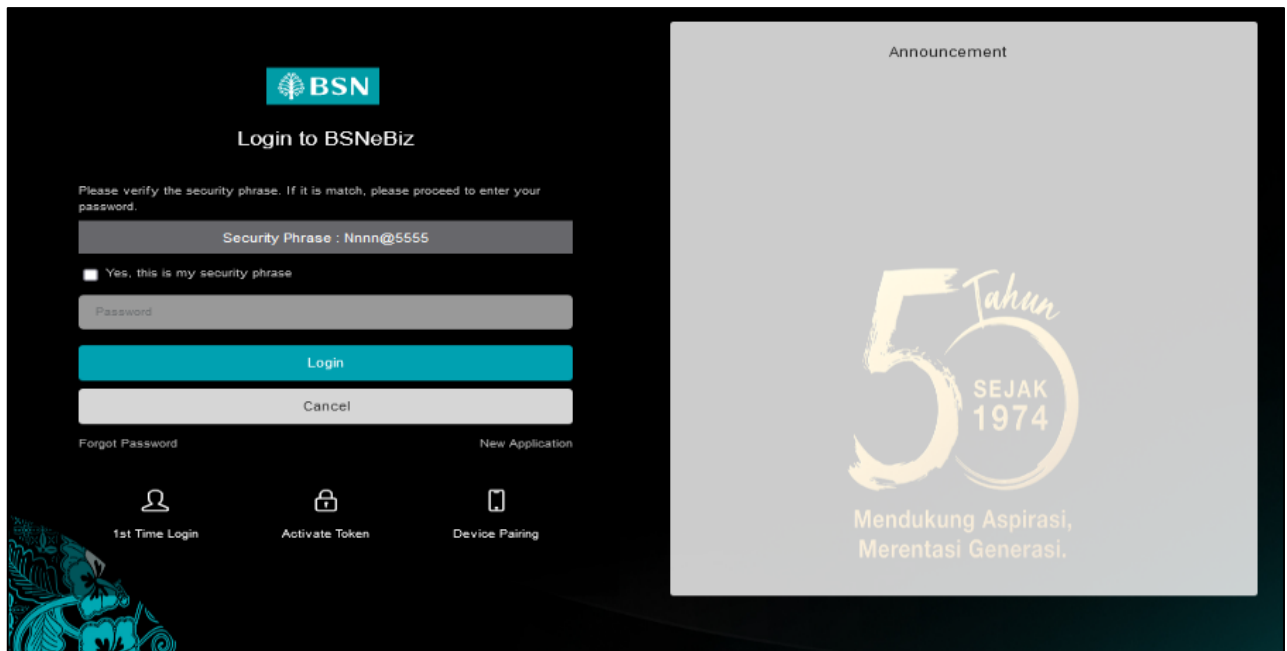


Figure 2 : BSNeBiz Login Page

1.3.3 [TS-OT-GST-STEP3] – BSNeBiz Home Page – Step 3 (ibPortalLogin.action)

In this stage, the CDB connects to BSNeBiz Home page:

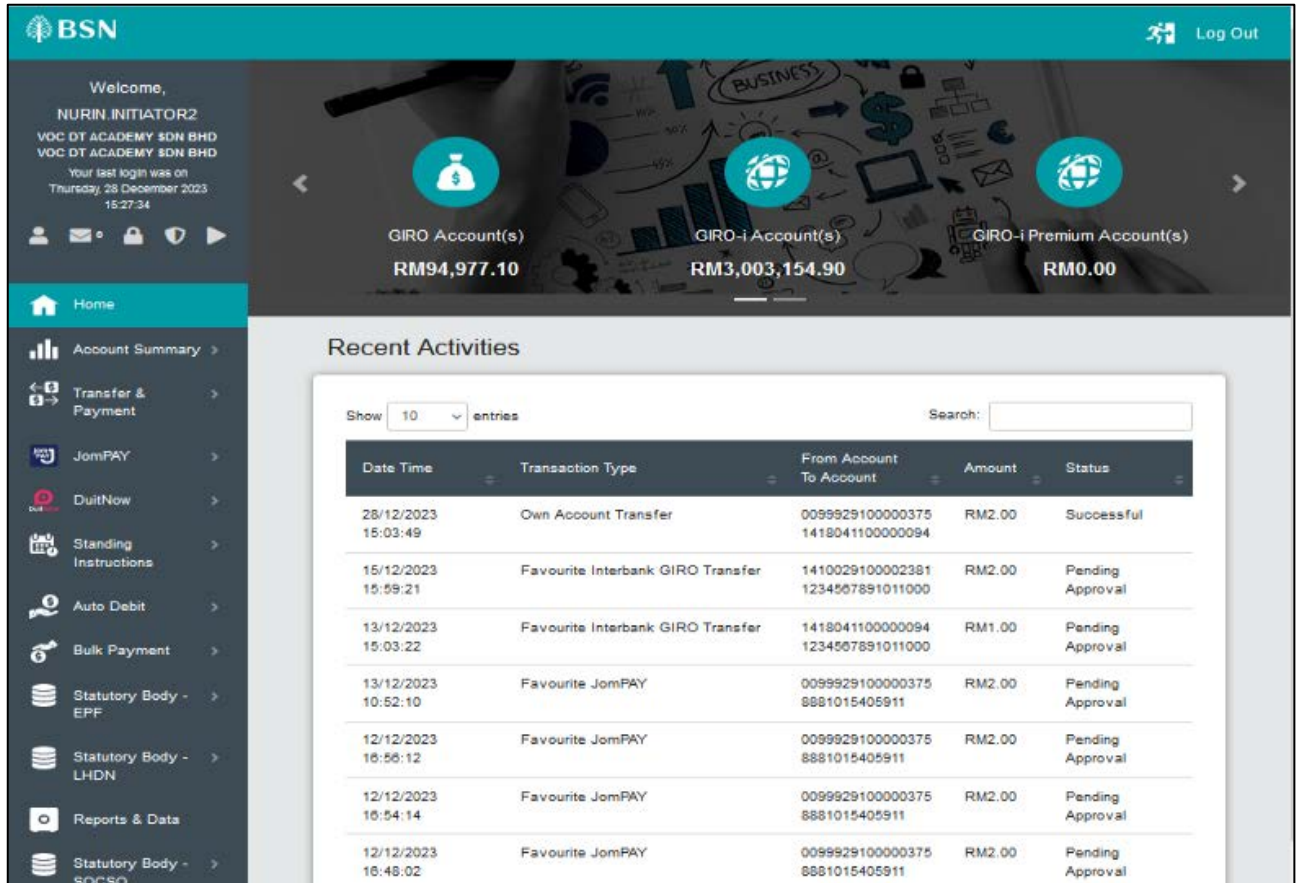


Figure 3: BSNeBiz Home page

### 1.3.4 [TS-OT-GST-STEP4] – Transfer & Payment Page – Step 4 (ibTransferInit)

In this stage, the CDB connects to Transfer & Payment page:

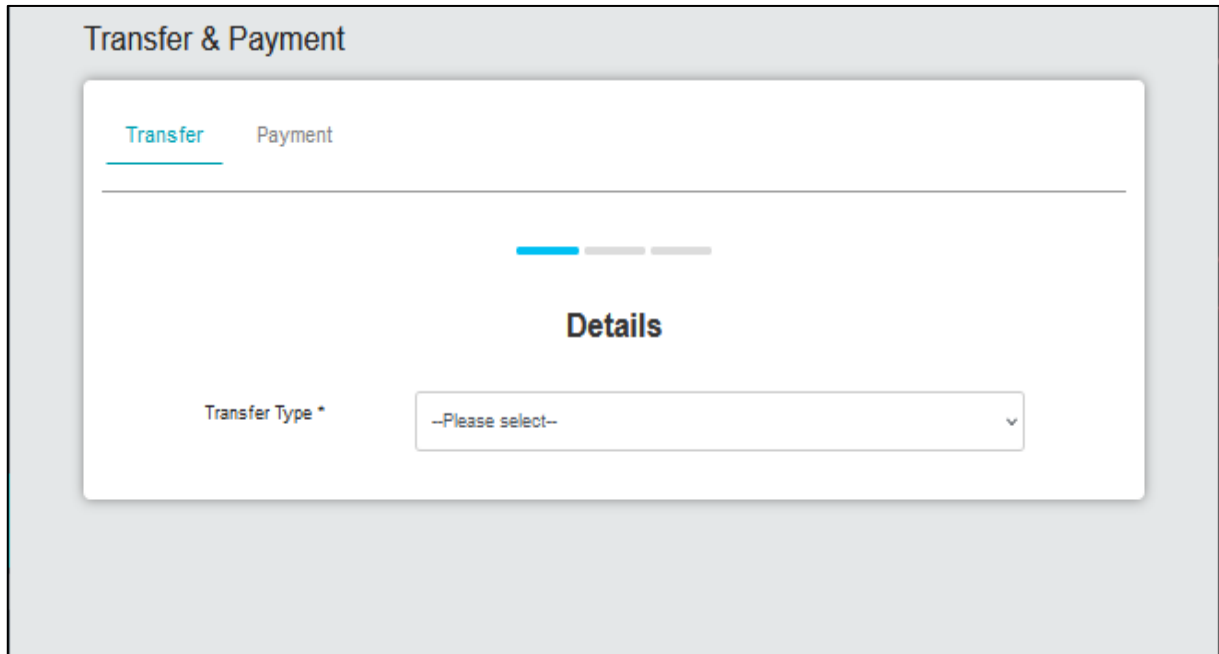


Figure 4: BSNeBiz Transfer & Payment page

### 1.3.5 [TS-OT-GST-STEP5] – Transfer & Payment Page – Step 5 (ibTransferForward.action)

In this stage, the CDB connects to Transfer & Payment Details page select Transfer Type:

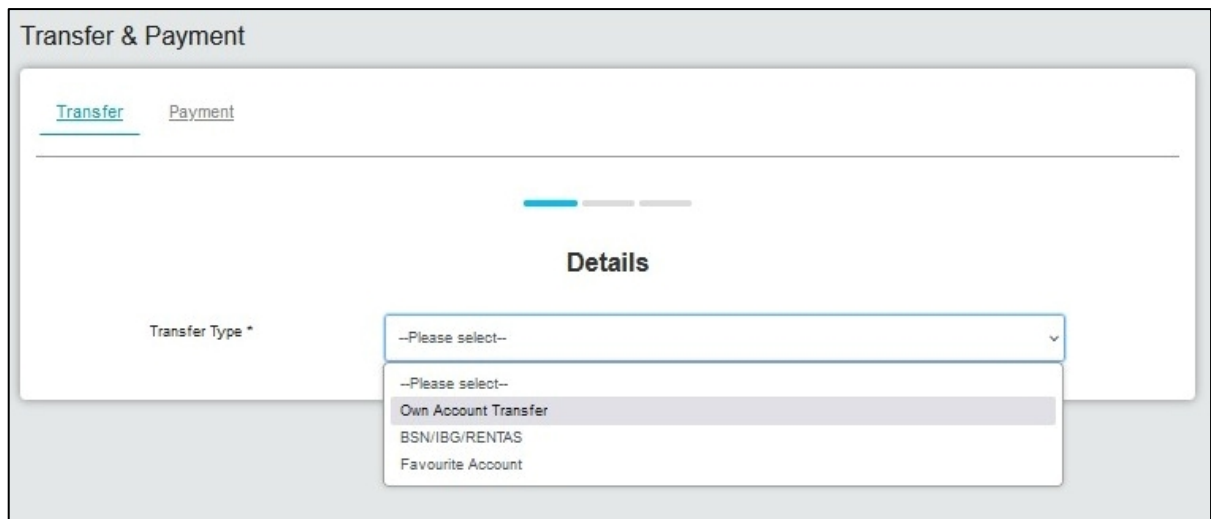
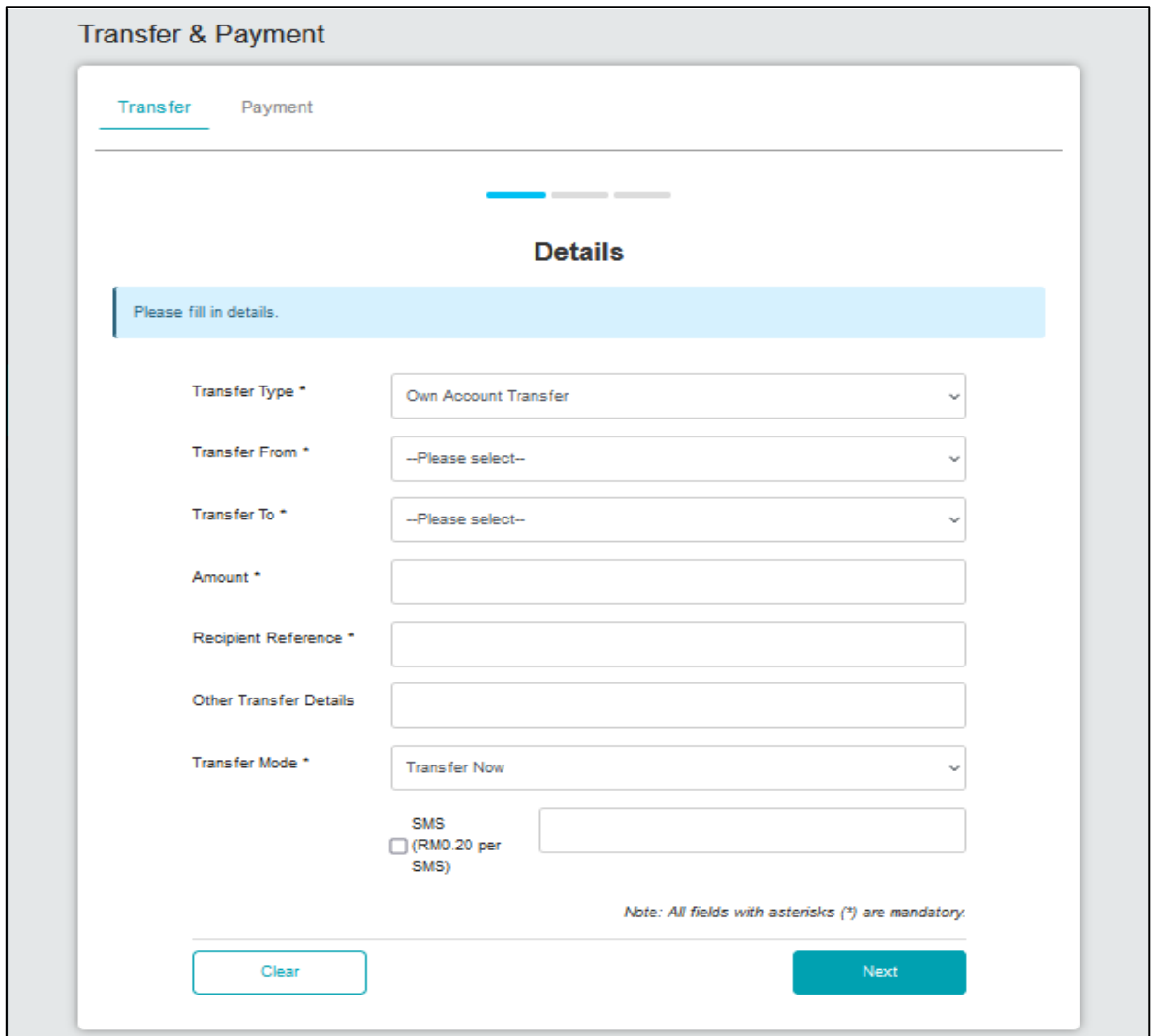


Figure 5: Transfer & Payment page



### 1.3.6 [TS-OT-GST-STEP6] – Own Account Transfer Page – Step 6 (ibOwnTransferForward.action)

In this stage, the CDB connects to Own Account Transfer Details page:



The screenshot shows a web form titled "Transfer & Payment" with two tabs: "Transfer" (selected) and "Payment". Below the tabs is a progress indicator with three steps, the second of which is active. The main heading is "Details". A light blue box contains the instruction "Please fill in details." The form fields are as follows:

- Transfer Type \***: Dropdown menu with "Own Account Transfer" selected.
- Transfer From \***: Dropdown menu with "--Please select--" selected.
- Transfer To \***: Dropdown menu with "--Please select--" selected.
- Amount \***: Text input field.
- Recipient Reference \***: Text input field.
- Other Transfer Details**: Text input field.
- Transfer Mode \***: Dropdown menu with "Transfer Now" selected.
- SMS**: A checkbox labeled "SMS (RM0.20 per SMS)" is unchecked, followed by a text input field.

A note at the bottom right states: "Note: All fields with asterisks (\*) are mandatory." At the bottom of the form are two buttons: "Clear" and "Next".

Figure 6 : Transfer type Own Account Transfer details page

### 1.3.7 [TS-OT-GST-STEP7] – Own Account Transfer Confirmation Page – Step 7 (ibTransferConfirm.action)

In this stage, the CDB connects to Own Account Transfer Confirmation page:

### Transfer & Payment

Transfer
Payment

---

Confirmation

Please check your information.

Organization Name	VOC DT ACADEMY SDN BHD VOC DT ACADEMY SDN BHD
Transfer Type	Own Account Transfer
Transfer From	0099929100000375
Transfer To	1418041100000094
Amount	RM2.00
Charges	RM0.80
GST Charges	RM0.03
Recipient Reference	TESTING
Other Transfer Details	
Transfer Mode	Transfer Now

Back
Confirm

Figure 7: Own Account Transfer Confirmation details page

### 1.3.8 [TS-OT-GST-STEP8] – Own Account Transfer Results Page – Step 8 (ibTransferResults.action)

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- **Database. Database** contains data for Own Account Transfer Result details.

Performance Report: Goods and Services Tax (GST)

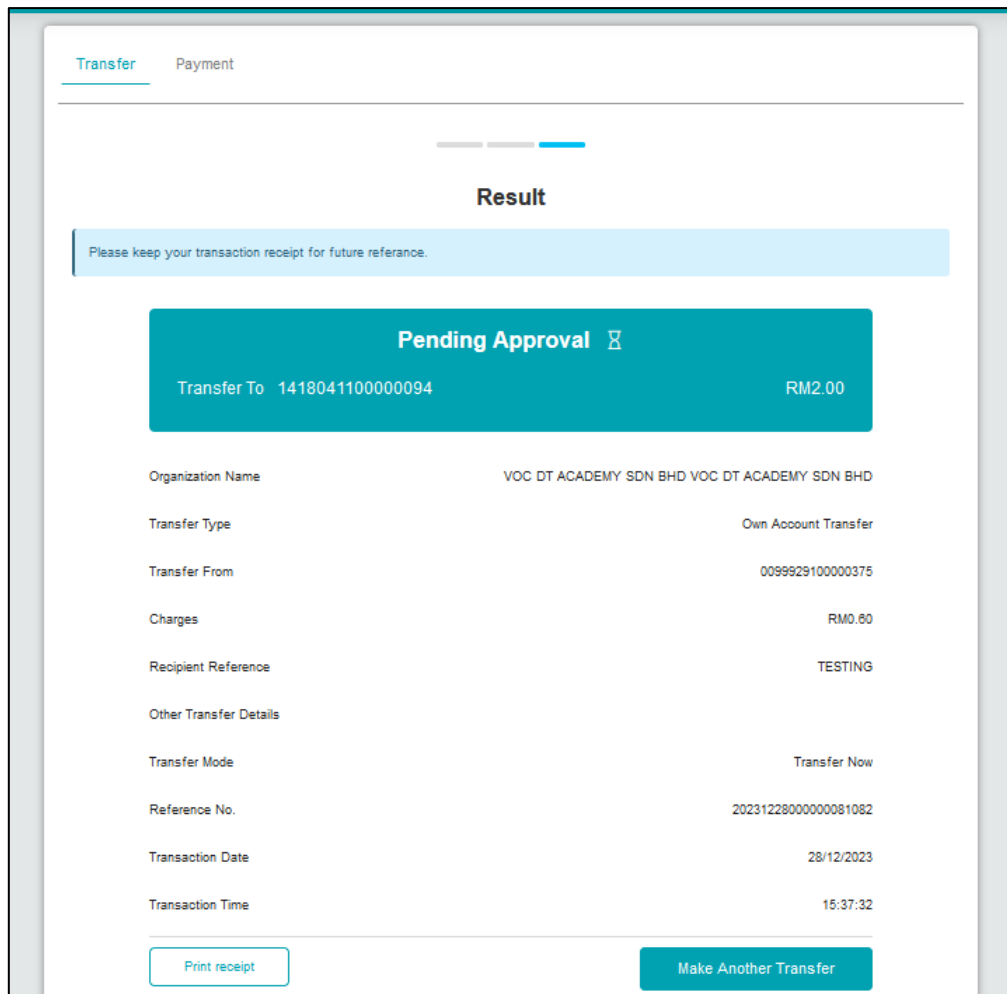


Figure 8: Own Account Transfer Result page

**1.3.9 [TS-OT-GST-STEP9] – Own Account Transfer Receipt Pdf Download Page – Step 9 (ibTransferReceiptPdfDownload.action)**


In this stage, the CDB connects to:

- a) DB

The DB fetches:

- BIB\_USER\_PRINT\_RECEIPT. BIB\_USER\_PRINT\_RECEIPT contains data for Own Account Transfer details.


Performance Report: Goods and Services Tax (GST)

Thursday, 28 Dec 2023 15:04:23

### Receipt

**Own Account Transfer**

<b>Status</b>	Pending Approval
<b>Organization Name</b>	VOC DT ACADEMY SDN BHD VOC DT ACADEMY SDN BHD
<b>Transfer From</b>	*****0375
<b>Transfer To</b>	*****0094
<b>Amount</b>	RM2.00
<b>Charges</b>	RM0.60
<b>Recipient Reference</b>	TESTING
<b>Other Transfer Details</b>	-
<b>Transfer Mode</b>	Transfer Now
<b>Reference No.</b>	0000081056
<b>Transaction Date</b>	28/12/2023
<b>Transaction Time</b>	15:03:49



**Disclaimer: This is computer generated receipt. No signature is required**

Figure 9 : Own Account Transfer receipt in pdf

#### 1.4 Process of testing – Adding GST on BSNeBiz Transfer & Payment Third Party

This test scenario simulates concurrent users adding GST on BSNeBiz Transfer & Payment Third Party service. This test case depends on below test case to be executed:

##### 1.4.1 [TS-TP-GST-STEP1] – BSNeBiz Login Page – Step 1 (commonLogin.action)

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- IB\_SERVICE\_INFO. IB\_SERVICE\_INFO contains some notes or announcements.

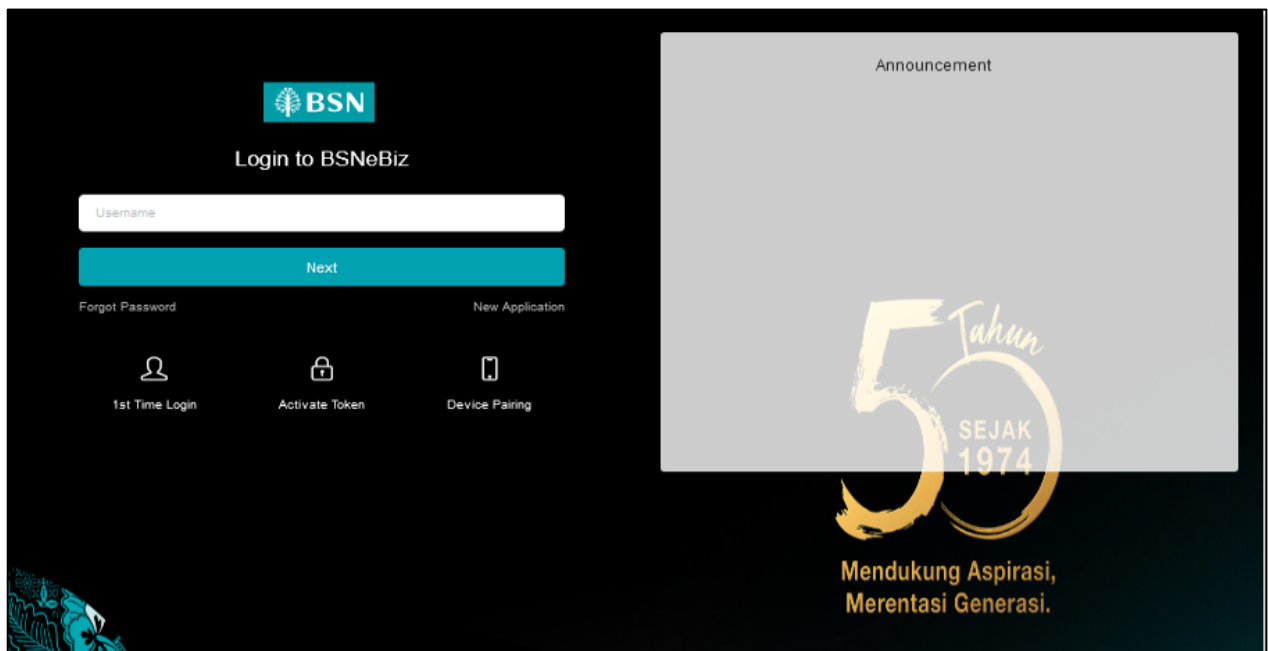


Figure 10: BSNeBiz Login page

##### 1.4.2 [TS-TP-GST-STEP2] – BSNeBiz Login Page – Step 2 (ibPortalLoginUsername.action)

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- Database. Database contains data for BSNeBiz Login Details.

Performance Report: Goods and Services Tax (GST)

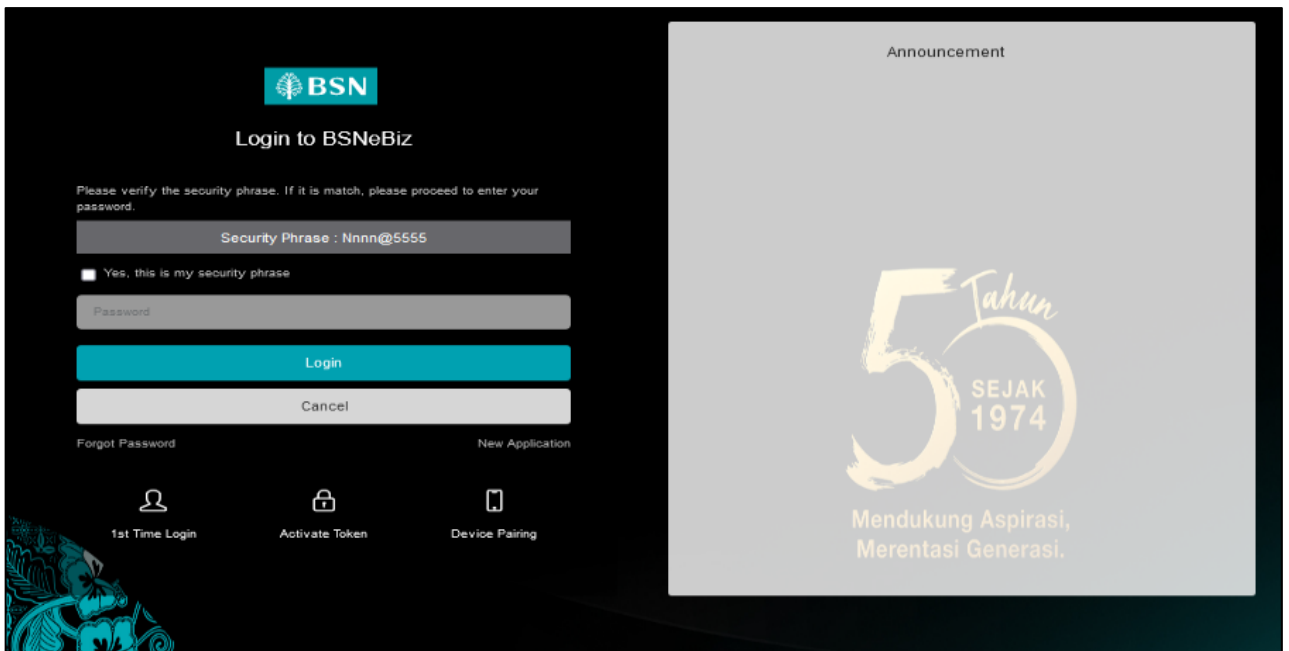


Figure 11 : BSNeBiz Login Page

1.4.3 [TS-TP-GST-STEP3] – BSNeBiz Home Page – Step 3 (ibPortalLogin.action)

In this stage, the CDB connects to BSNeBiz Home page:

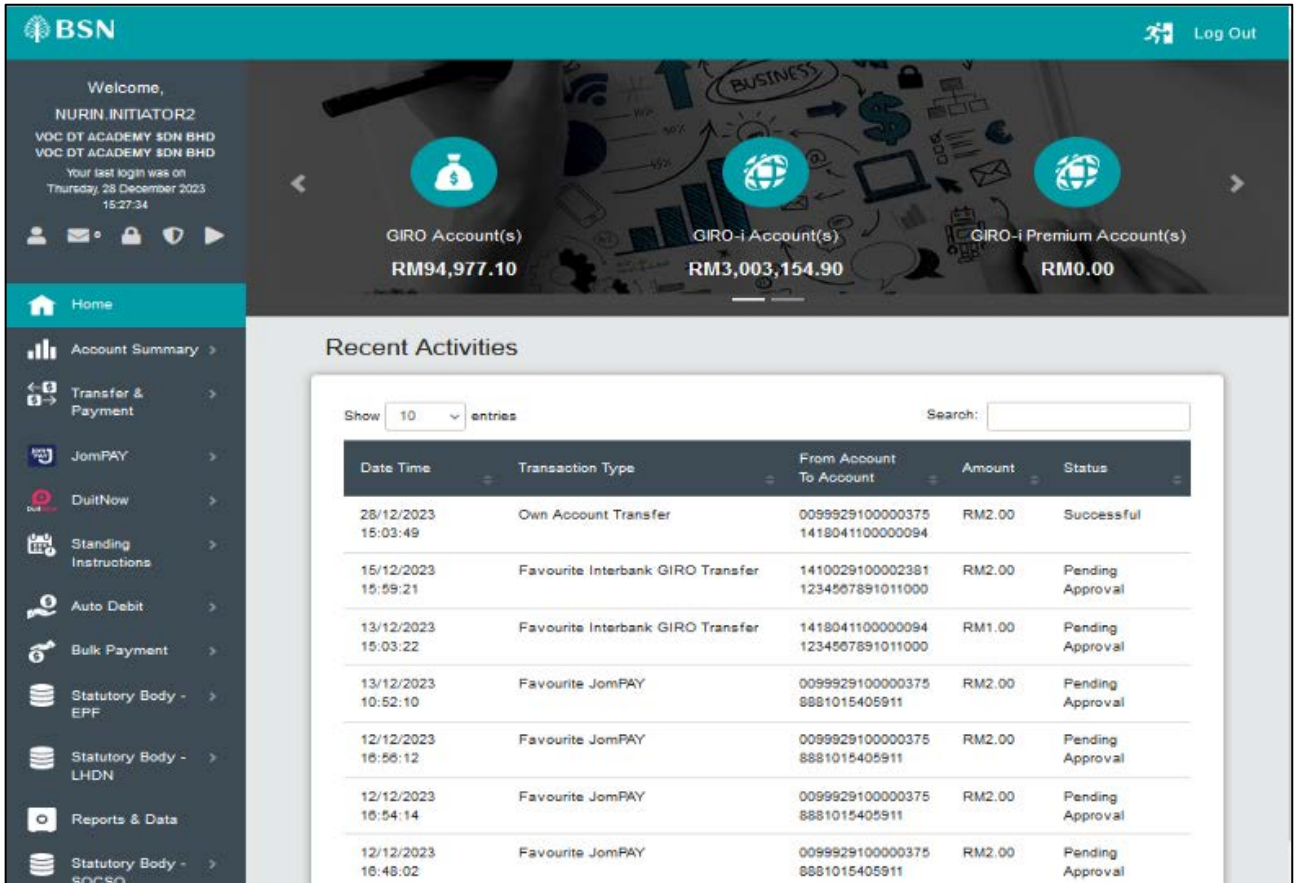
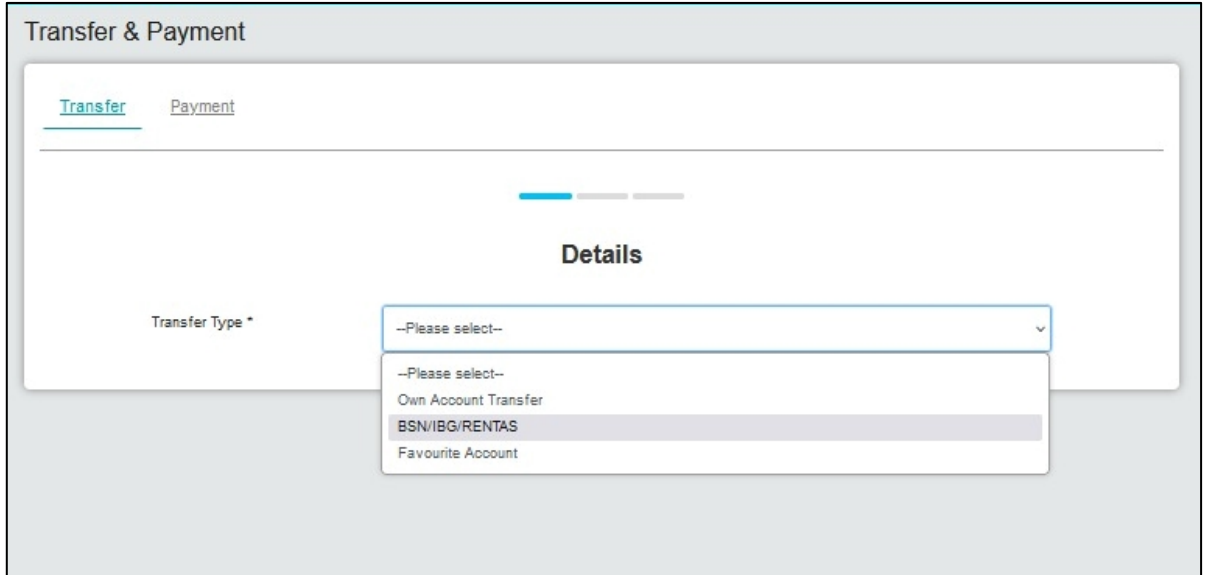


Figure 12 : BSNeBiz Home page

### 1.4.4 [TS-TP-GST-STEP4] – Transfer & Payment Page – Step 4 (ibTransferInit)

In this stage, the CDB connects to Transfer & Payment page:

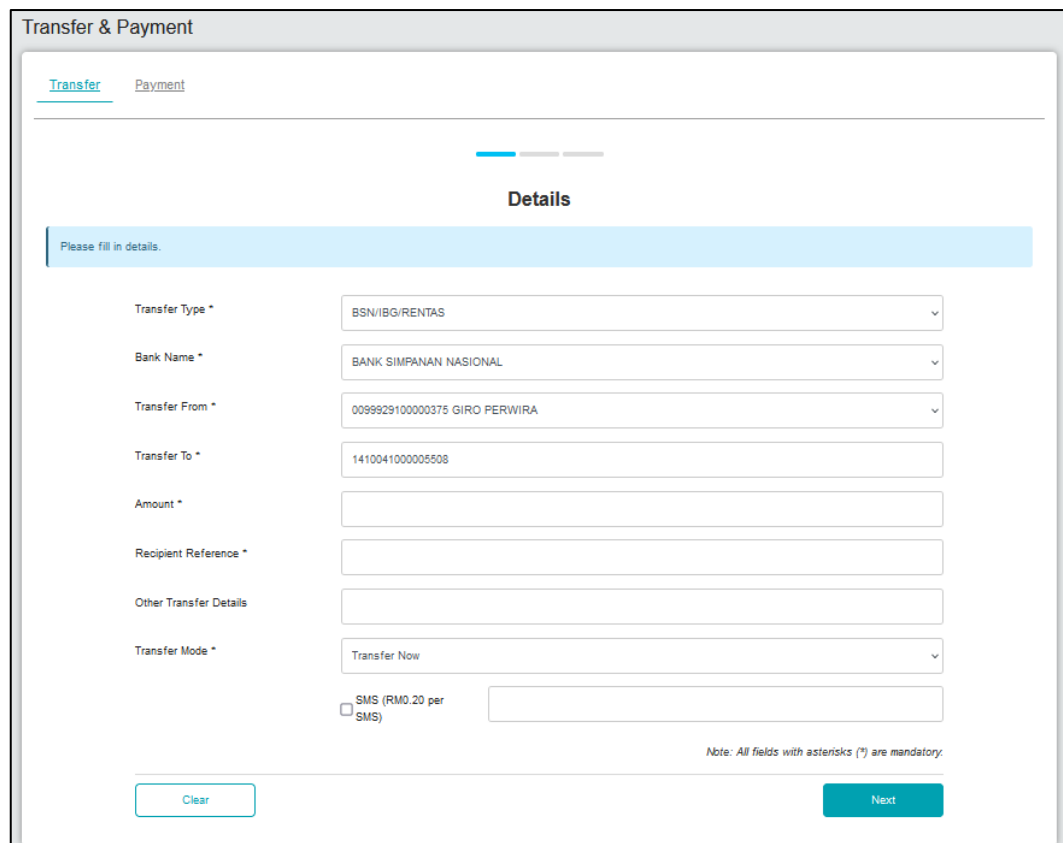


The screenshot shows the 'Transfer & Payment' page with the 'Transfer' tab selected. The 'Details' section is active, and the 'Transfer Type' dropdown menu is open, showing options: '--Please select--', 'Own Account Transfer', 'BSN/IBG/RENTAS' (highlighted), and 'Favourite Account'.

Figure 13 : BSNeBiz Transfer & Payment page

### 1.4.5 [TS-TP-GST-STEP5] – Transfer & Payment Page – Step 5 (ibTransferForward.action)

In this stage, the CDB connects to Transfer & Payment Details page select Transfer Type:



The screenshot shows the 'Transfer & Payment' page with the 'Transfer' tab selected. The 'Details' section is active, and a blue banner reads 'Please fill in details.' The form contains the following fields:

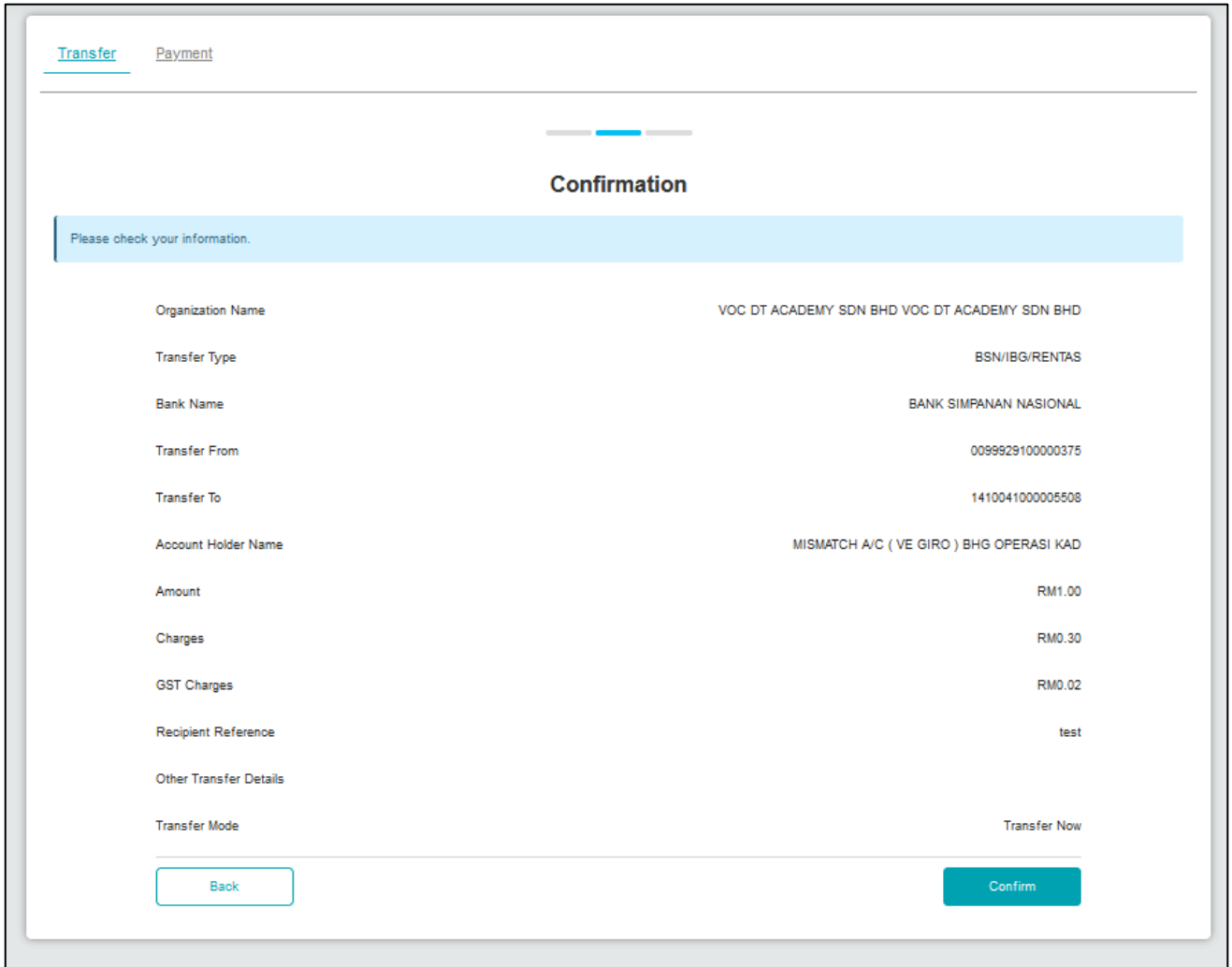
- Transfer Type \*: BSN/IBG/RENTAS
- Bank Name \*: BANK SIMPANAN NASIONAL
- Transfer From \*: 0099829100000375 GIRO PERWIRA
- Transfer To \*: 1410041000005508
- Amount \*
- Recipient Reference \*
- Other Transfer Details
- Transfer Mode \*: Transfer Now
- SMS (RM0.20 per SMS)

At the bottom, there is a 'Clear' button and a 'Next' button. A note at the bottom right states: 'Note: All fields with asterisks (\*) are mandatory.'

Figure 14: Transfer & Payment details page

### 1.4.6 [TS-TP-GST-STEP6] – Third Party Transfer Confirmation Page – Step 6 (ibThirdPartyTransferConfirm.action)

In this stage, the CDB connects to Third Party Transfer Confirmation page:



The screenshot shows a web interface for confirming a third-party transfer. At the top, there are tabs for 'Transfer' and 'Payment'. Below the tabs is a progress bar with three segments, the second of which is highlighted in blue. The main heading is 'Confirmation'. A light blue box contains the instruction 'Please check your information.' Below this, a table lists the transfer details:

Organization Name	VOC DT ACADEMY SDN BHD VOC DT ACADEMY SDN BHD
Transfer Type	BSN/IBG/RENTAS
Bank Name	BANK SIMPANAN NASIONAL
Transfer From	0099929100000375
Transfer To	1410041000005508
Account Holder Name	MISMATCH A/C ( VE GIRO ) BHG OPERASI KAD
Amount	RM1.00
Charges	RM0.30
GST Charges	RM0.02
Recipient Reference	test
Other Transfer Details	
Transfer Mode	Transfer Now

At the bottom of the form, there are two buttons: 'Back' and 'Confirm'.

Figure 15: Third Party Transfer Confirmation details page

### 1.4.7 [TS-TP-GST-STEP7] – Third Party Transfer Results Page – Step 7 (ibThirdPartyTransferResults.action)

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- **Database.** Database contains data for Third Party Transfer Result details.



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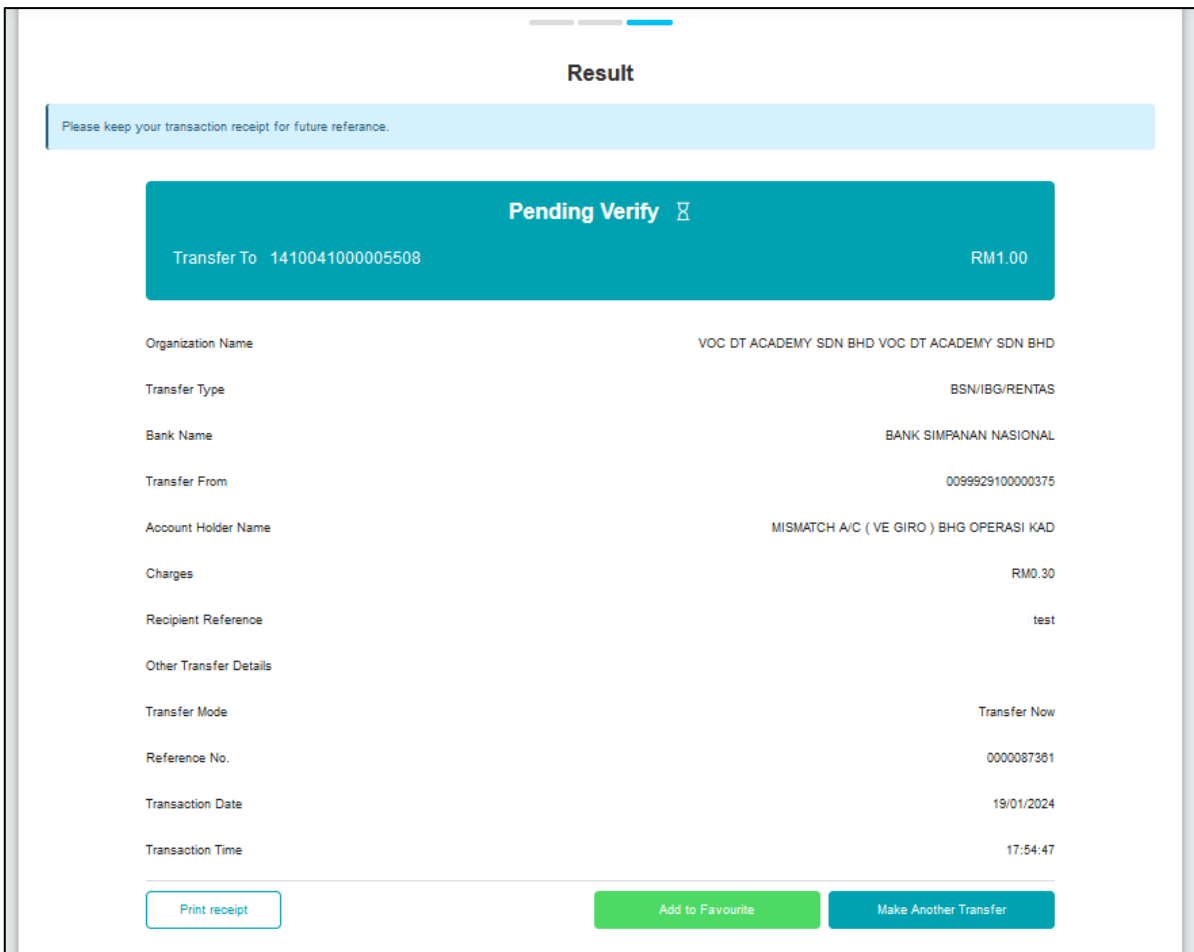


Figure 16: Third Party Transfer Result page

**1.4.8 [TS-TP-GST-STEP8] – Third Party Transfer Receipt Pdf Download Page – Step 8 (ibThirdPartyTransferReceiptPdfDownload.action)**


In this stage, the CDB connects to:

- a) DB

The DB fetches:

- BIB\_USER\_PRINT\_RECEIPT. BIB\_USER\_PRINT\_RECEIPT contains data for Third Party Transfer details.

Performance Report: Goods and Services Tax (GST)

Friday, 19 Jan 2024 17:55:56

### Receipt

**New 3rd Party Account Transfer**

<b>Status</b>	Pending Verify
<b>Organization Name</b>	VOC DT ACADEMY SDN BHD VOC DT ACADEMY SDN BHD
<b>Bank Name</b>	BANK SIMPANAN NASIONAL
<b>Transfer From</b>	*****0375
<b>Transfer To</b>	*****5508
<b>Account Holder Name</b>	MISMATCH A/C ( VE GIRO ) BHG OPERASI KAD
<b>Amount</b>	RM1.00
<b>Transfer Mode</b>	Transfer Now
<b>Charges</b>	RM0.30
<b>Recipient Reference</b>	test
<b>Other Transfer Details</b>	-
<b>Reference No.</b>	0000087361
<b>Transaction Date</b>	19/01/2024
<b>Transaction Time</b>	17:54:47



**Disclaimer: This is computer generated receipt. No signature is required**

Figure 17 : Third Pasty Transfer receipt in pdf

## 1.5 Process of testing – Adding GST on BSNeBiz Transfer & Payment Interbank

This test scenario simulates concurrent users adding GST on BSNeBiz Transfer & Payment Interbank service. This test case depends on below test case to be executed:

### 1.5.1 [TS-IB-GST-STEP1] – BSNeBiz Login Page – Step 1 (commonLogin.action)

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- IB\_SERVICE\_INFO. IB\_SERVICE\_INFO contains some notes or announcements.

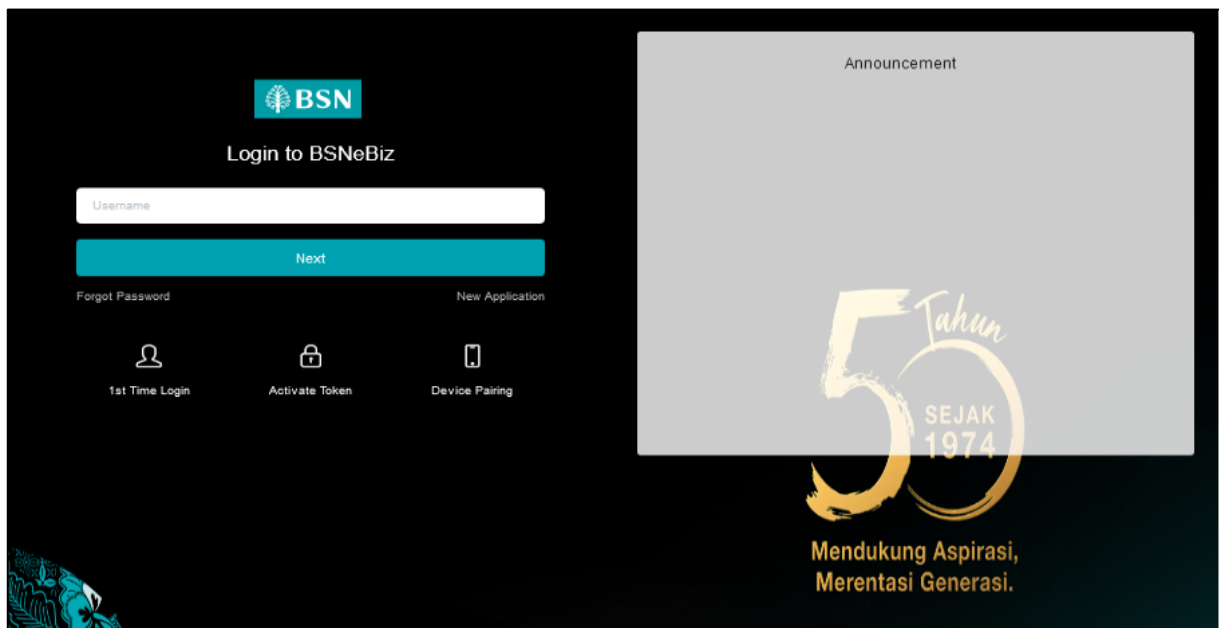


Figure 18 : BSNeBiz Login Page

### 1.5.2 [TS-IB-GST-STEP2] – BSNeBiz Login Page – Step 2 (ibPortalLoginUsername.action)

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- Database. Database contains data for BSNeBiz Login Details.

Performance Report: Goods and Services Tax (GST)

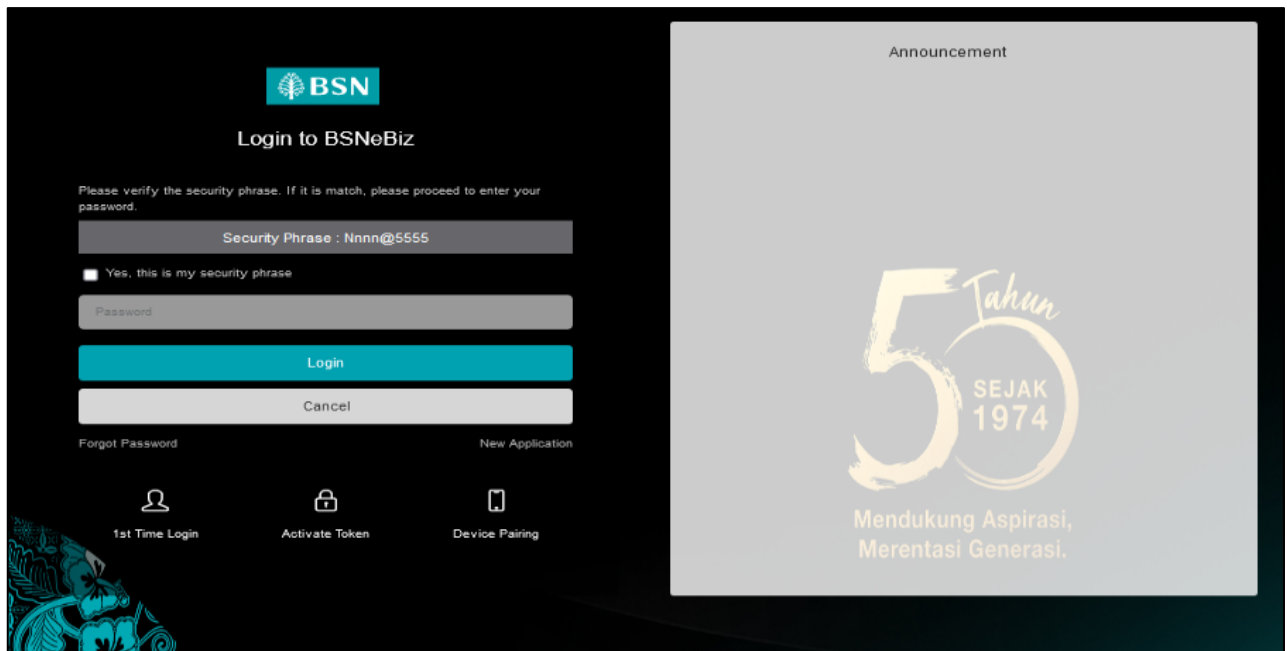


Figure 19 : BSNeBiz Login Page

**1.5.3 [TS-IB-GST-STEP3] – BSNeBiz Home Page – Step 3 (ibPortalLogin.action)**

In this stage, the CDB connects to BSNeBiz Home page:

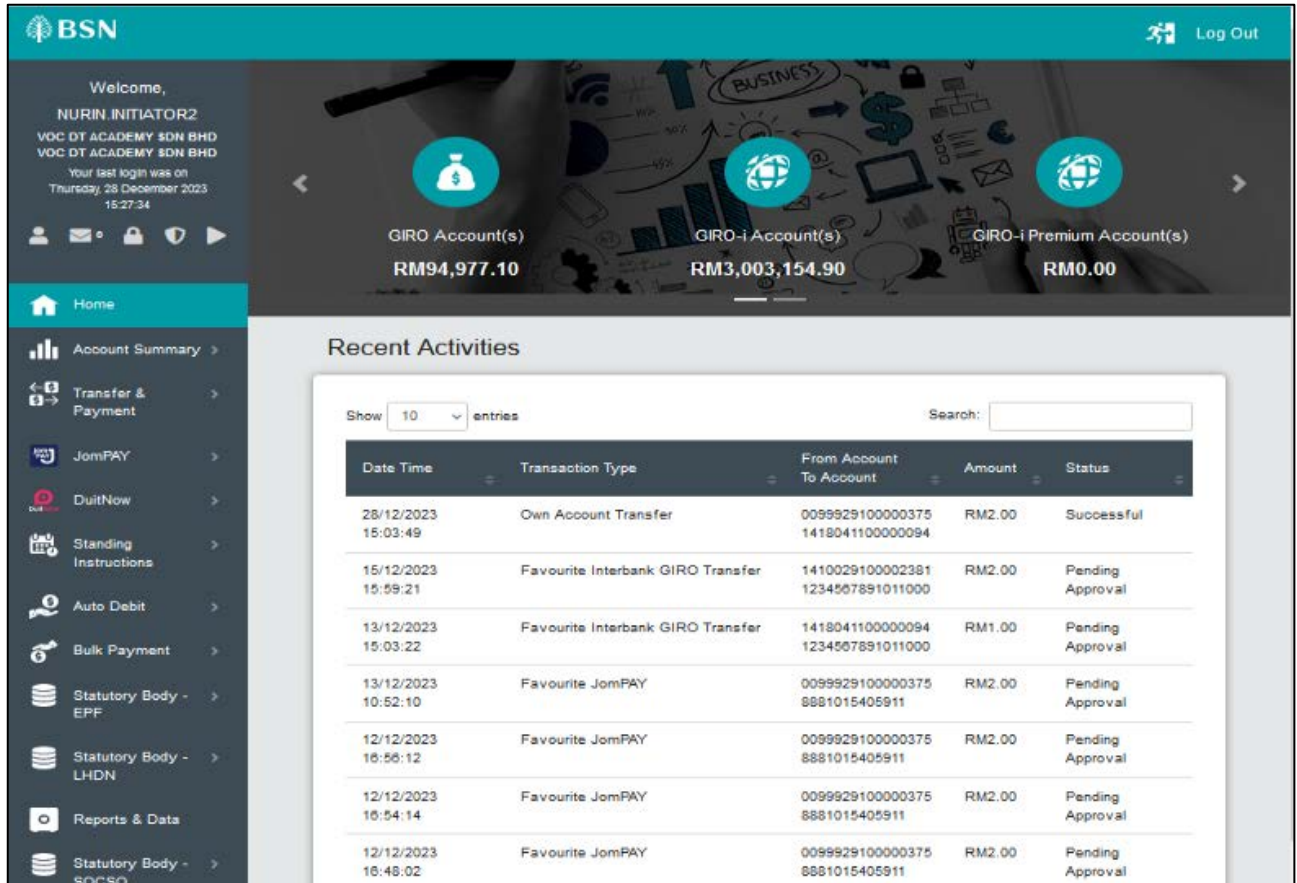


Figure 20 : BSNeBiz Home page

### 1.5.4 [TS-IB-GST-STEP4] – Transfer & Payment Page – Step 4 (ibTransferInit)

In this stage, the CDB connects to Transfer & Payment page:

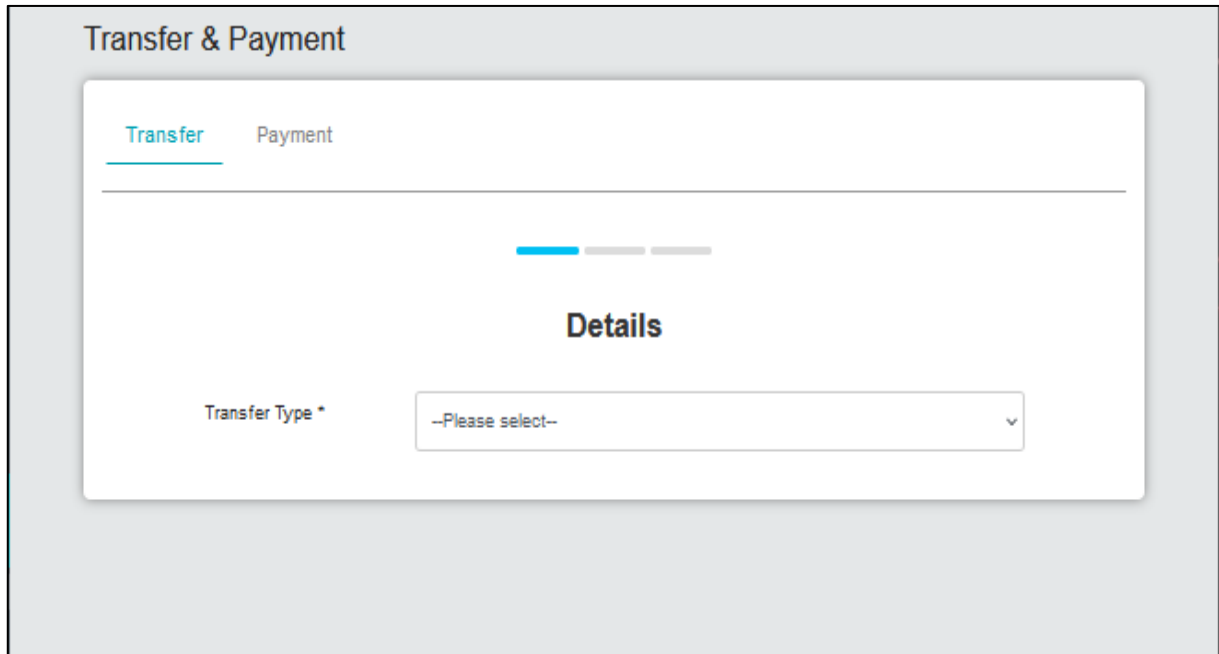


Figure 21 : BSNeBiz Transfer & Payment page

### 1.5.5 [TS-IB-GST-STEP5] – Transfer & Payment Page – Step 5 (ibTransferForward.action)

In this stage, the CDB connects to Transfer & Payment Details page select Transfer Type:

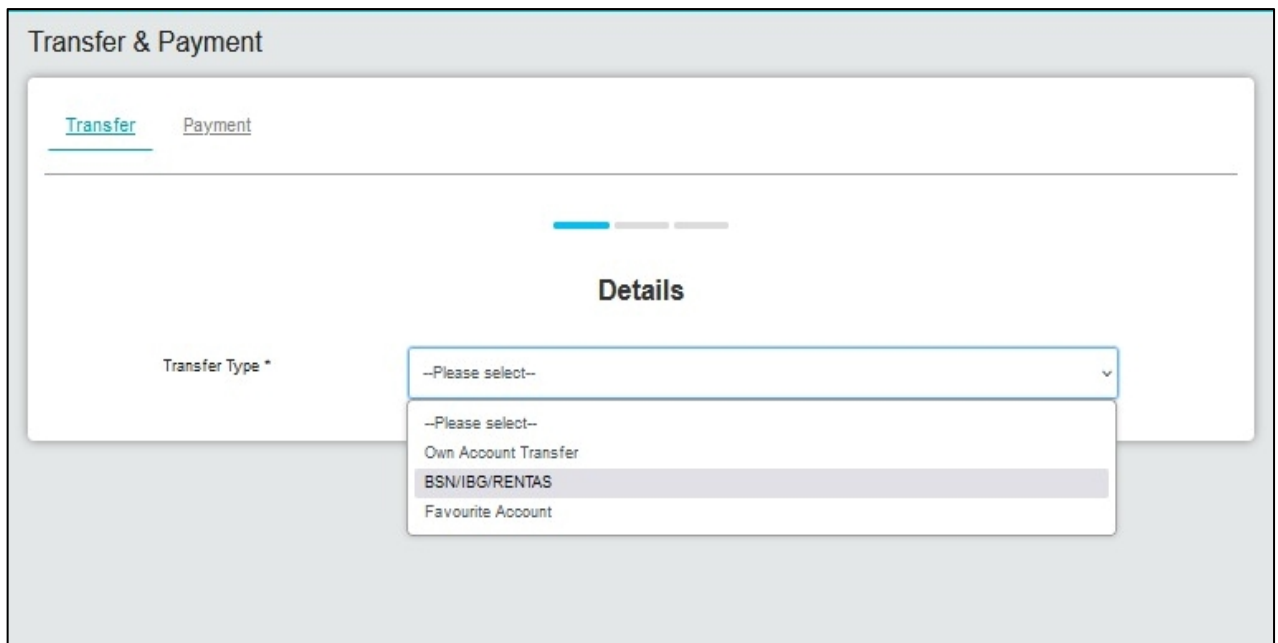


Figure 22: Transfer & Payment page

**1.5.6 [TS-IB-GST-STEP6] – Interbank Transfer Page – Step 6  
(ibInterbankTransferForward.action)**

In this stage, the CDB connects to Interbank Transfer Details page:

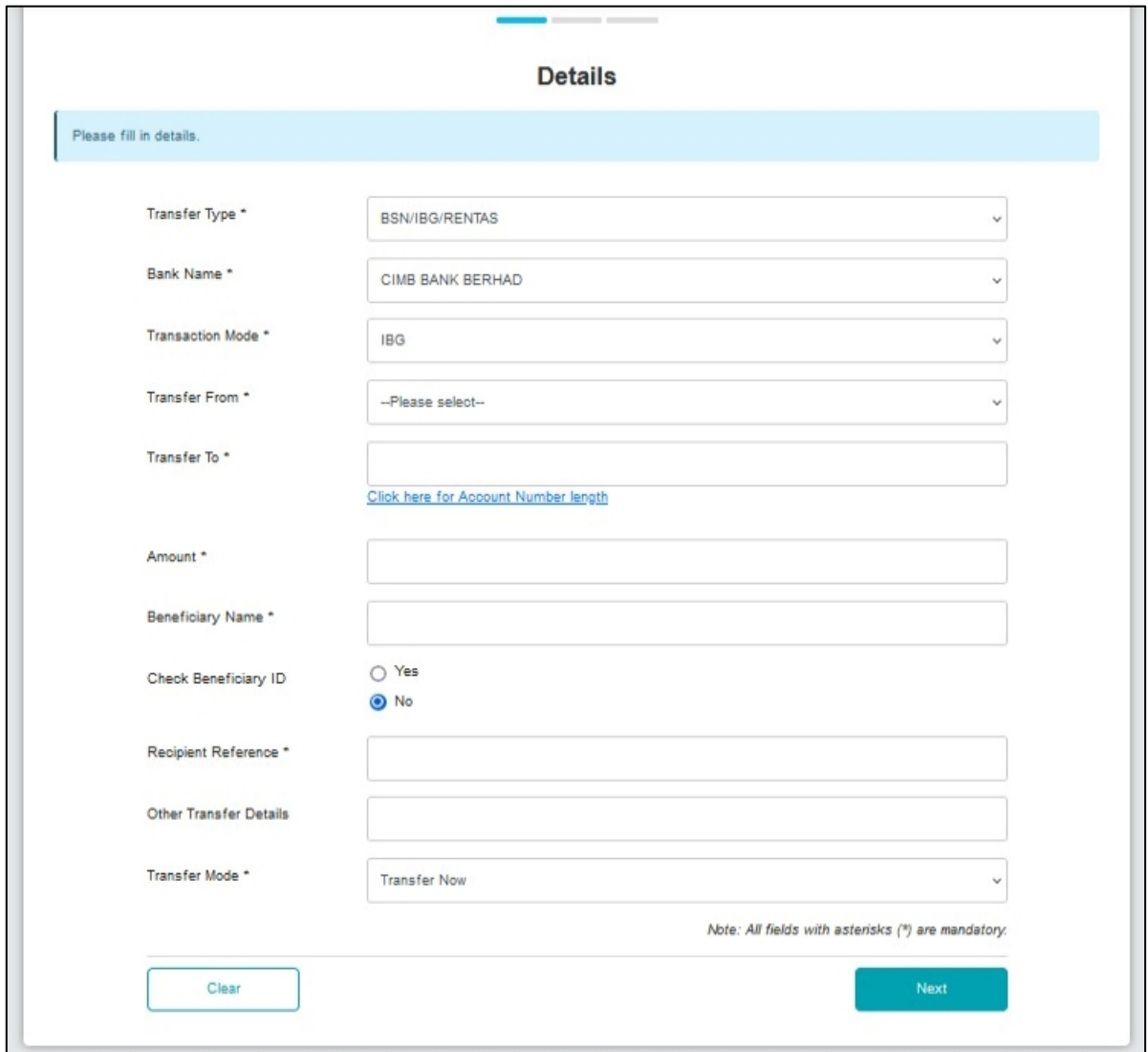


Figure 23 : Interbank Transfer details page

**1.5.7 [TS-IB-GST-STEP7] – Interbank Transfer Confirmation Page – Step 7  
(ibInterbankTransferConfirm.action)**

In this stage, the CDB connects to Interbank Transfer Confirmation page:

Performance Report: Goods and Services Tax (GST)

[Transfer](#)
[Payment](#)

---

Confirmation

Please check your information.

Organization Name	VOC DT ACADEMY SDN BHD VOC DT ACADEMY SDN BHD
Transfer Type	BSN/IBG/RENTAS
Bank Name	CIMB BANK BERHAD
Transaction Mode	IBG
Transfer From	0099929100000375
Transfer To	7629451833
Amount	RM1.00
Fees	RM0.20
GST Charges	RM0.01
Beneficiary Name	MIMI
Recipient Reference	TESTING
Other Transfer Details	
Transfer Mode	Transfer Now

Back

Confirm

Figure 24: Interbank Transfer Confirmation details page

**1.5.8 [TS-IB-GST-STEP8] – Interbank Transfer Results Page – Step 8  
(ibInterbankTransferResults.action)**

In this stage, the CDB connects to:

- a) DB

**The DB fetches:**

- **Database. Database** contains data for Interbank Transfer Result details.

Performance Report: Goods and Services Tax (GST)

### Result

Please keep your transaction receipt for future reference.

**Pending Approval** ⌛

Transfer To 7629451833 RM1.00

Organization Name	VOC DT ACADEMY SDN BHD VOC DT ACADEMY SDN BHD
Transfer Type	BSN/IBG/RENTAS
Bank Name	CIMB BANK BERHAD
Transaction Mode	IBG
Transfer From	0099929100000375
Fees	0.20
Beneficiary Name	MIMI
Recipient Reference	TESTING
Other Transfer Details	
Transfer Mode	Transfer Now
Reference No.	0000089309
Transaction Date	29/01/2024
Transaction Time	13:43:08

Print receipt

Add to Favourite

Make Another Transfer

Figure 25: Interbank Transfer Result page

**1.5.9 [TS-TP-GST-STEP9] – Interbank Transfer Receipt Pdf Download Page – Step 9 (ibInterbankTransferReceiptPdfDownload.action)**

**In this stage, the CDB connects to:**


- a) DB

**The DB fetches:**

- BIB\_USER\_PRINT\_RECEIPT. BIB\_USER\_PRINT\_RECEIPT contains data for Interbank Transfer details.



Performance Report: Goods and Services Tax (GST)




Monday, 29 Jan 2024 13:43:53

Receipt

**New Interbank Transfer**

<b>Status</b>	Pending Approval
<b>Organization Name</b>	VOC DT ACADEMY SDN BHD VOC DT ACADEMY SDN BHD
<b>Transfer From</b>	*****0375
<b>Transfer To</b>	7629451833
<b>Amount</b>	RM1.00
<b>Fees</b>	RM0.20
<b>Transaction Mode</b>	IBG
<b>Beneficiary Bank</b>	CIMB BANK BERHAD
<b>Beneficiary Name</b>	MIMI
<b>Recipient Reference</b>	TESTING
<b>Other Transfer Details</b>	-
<b>Beneficiary ID Type</b>	-
<b>Beneficiary ID</b>	-
<b>Transfer Mode</b>	Transfer Now
<b>Reference No.</b>	0000089309
<b>Transaction Date</b>	29/01/2024
<b>Transaction Time</b>	13:43:08



Disclaimer: This is computer generated receipt. No signature is required

Figure 26 : Interbank Transfer receipt in pdf

## 1.6 Process of testing – Adding GST on BSNeBIZ JomPay

This test scenario simulates concurrent users adding GST on BSNeBiz JomPay service. This test case depends on below test case to be executed:

### 1.6.1 [TS-JP-GST-STEP1] – BSNeBiz Login Page – Step 1 (commonLogin.action)

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- IB\_SERVICE\_INFO. IB\_SERVICE\_INFO contains some notes or announcements.

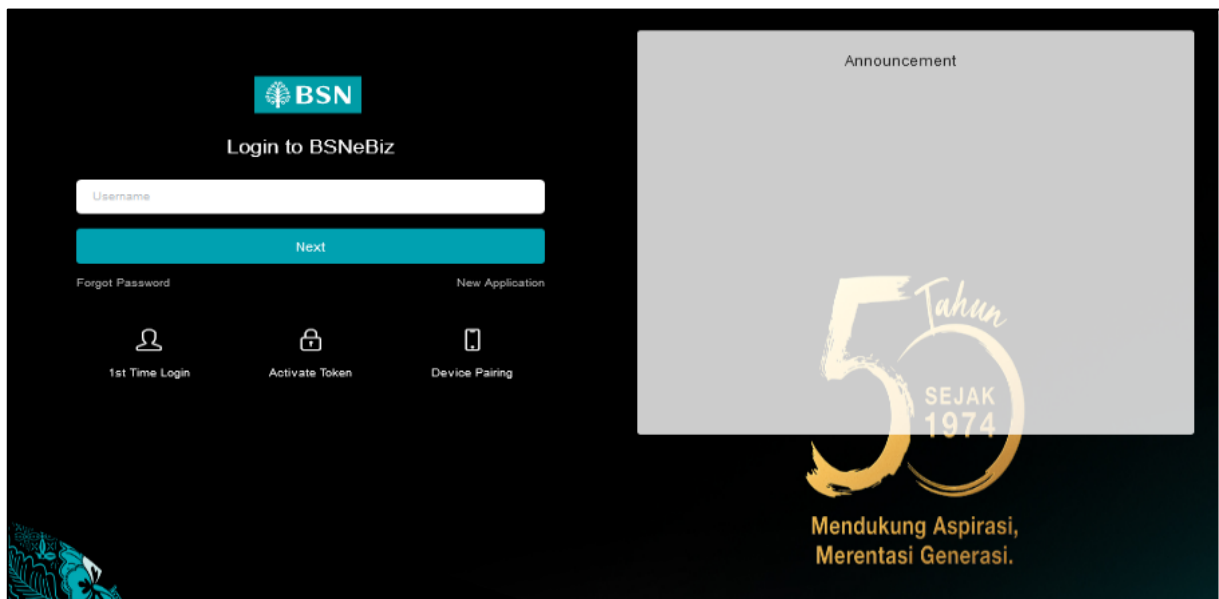


Figure 27 : BSNeBiz Login Page

### 1.6.2 [TS-JP-GST-STEP2] – BSNeBiz Login Page – Step 2 (ibPortalLoginUsername.action)

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- Database. Database contains data for BSNeBiz Login Details.

Performance Report: Goods and Services Tax (GST)

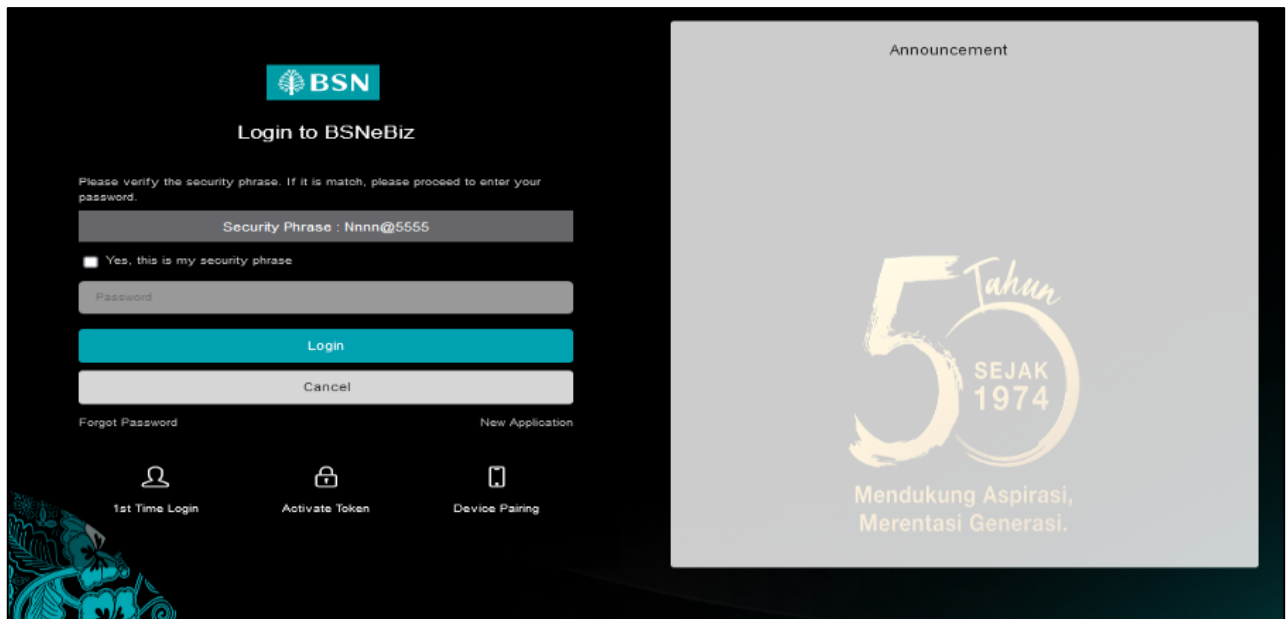


Figure 28 : BSNeBiz Login Page

1.6.3 [TS-JP-GST-STEP3] – BSNeBiz Home Page – Step 3 (ibPortalLogin.action)

In this stage, the CDB connects to BSNeBiz Home page:

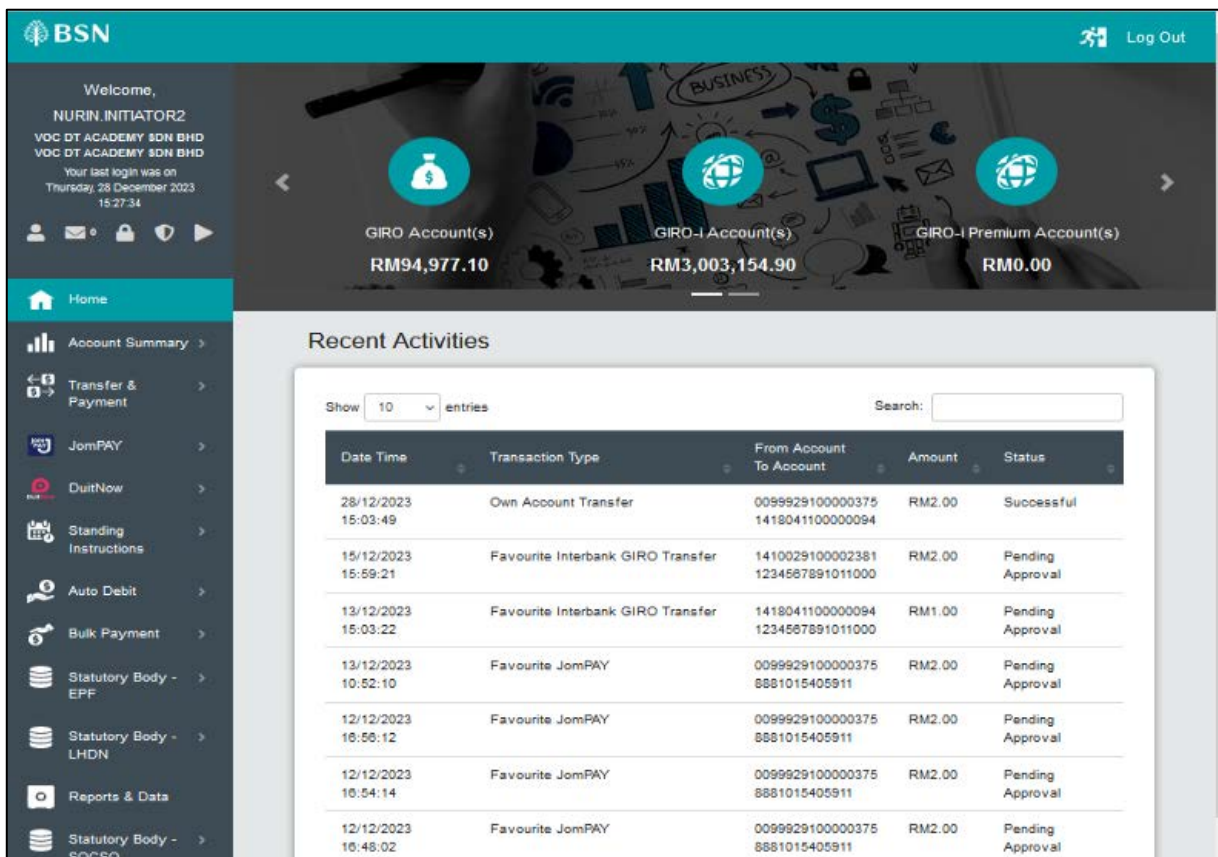


Figure 29: BSNeBiz Home page

### 1.6.4 [TS-JP-GST-STEP4] – JomPAY Details Page – Step 4 (ibJomPayinit)

In this stage, the CDB connects to JomPAY Details page:

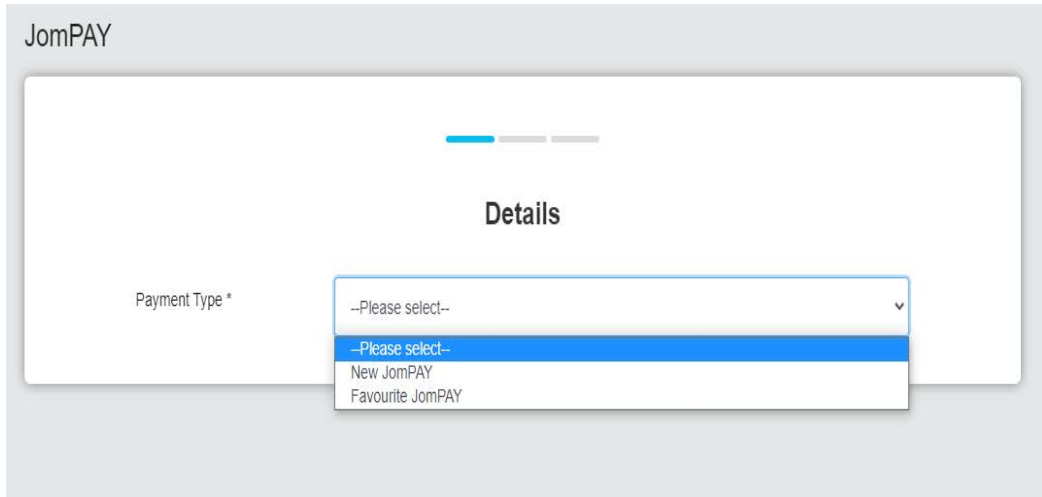


Figure 30: JomPAY details page

### 1.6.5 [TS-JP-GST-STEP5] – JomPAY Details Page – Step 5 (ibJomPayForward.action)

In this stage, the CDB connects to JomPAY Details page:

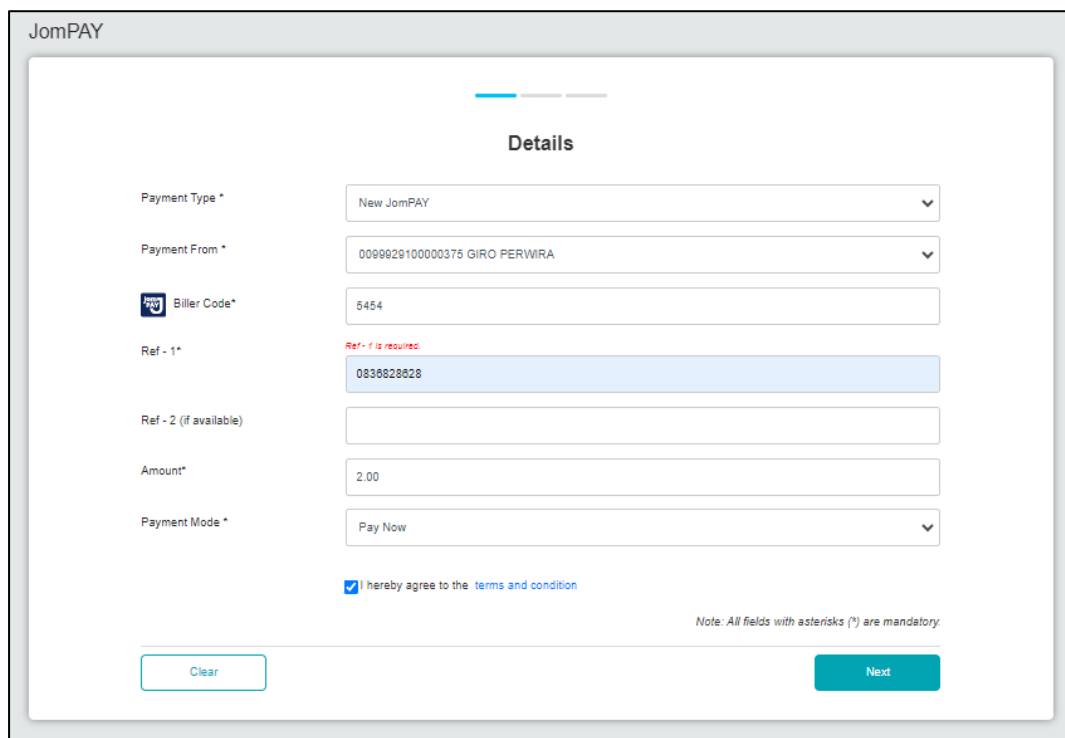
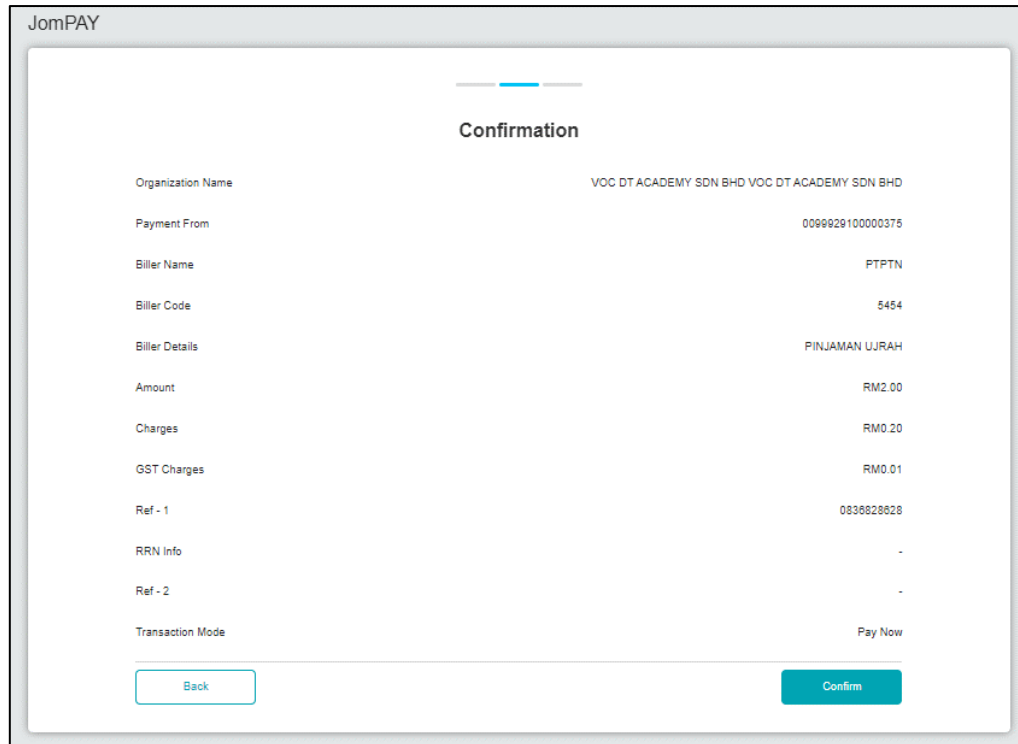


Figure 31 : JomPAY details page

### 1.6.6 [TS-JP-GST-STEP6] – JomPay Confirmation Page – Step 6 (ibJomPayConfirm.action)

In this stage, the CDB connects to JomPay Confirmation page:



The screenshot shows the JomPAY Confirmation page with the following details:

Field	Value
Organization Name	VOC DT ACADEMY SDN BHD VOC DT ACADEMY SDN BHD
Payment From	0099929100000375
Billor Name	PTPTN
Billor Code	5454
Billor Details	PINJAMAN UJRAH
Amount	RM2.00
Charges	RM0.20
GST Charges	RM0.01
Ref - 1	0838828828
RRN Info	-
Ref - 2	-
Transaction Mode	Pay Now

At the bottom of the page, there are two buttons: "Back" and "Confirm".

Figure 32 : JomPay Confirmation Details page

### 1.6.7 [TS-JP-GST-STEP7] – JomPay Results Page – Step 7 (ibJomPayResults.action)

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- **Database. Database** contains data for JomPay Results details.

Performance Report: Goods and Services Tax (GST)

**Result**

**Pending Approval** ⏸

<b>Amount</b>	<b>RM2.00</b>
<b>Reason</b>	
Organization Name	VOC DT ACADEMY SDN BHD VOC DT ACADEMY SDN BHD
Payment From	0099629100000375
Billor Name	PTPTN
Billor Code	5454
Billor Details	PINJAMAN UJRAH
Ref - 1	0836828828
RRN Info	-
Ref - 2	-
Charges	RM0.20
Transaction Mode	Pay Now
Reference No.	0000082150
Transaction Date	09/01/2024
Transaction Time	16:54:10

Print receipt

Add to Favourite

Make Another Transfer

Figure 33 : JomPay Results page

**1.6.8 [TS-JP-GST-STEP8] – JomPay Download Receipt Page– Step 8 (ibJomPayReceiptPdfDownload.action)**


In this stage, the CDB connects to:

- a) DB

The DB fetches:

- BIB\_USER\_PRINT\_RECEIPT. BIB\_USER\_PRINT\_RECEIPT contains data for JomPay Payment details.


Performance Report: Goods and Services Tax (GST)

Tuesday, 9 Jan 2024 16:54:38

**Receipt**

**New JomPAY**

<b>Status</b>	Pending Approval
<b>Organization Name</b>	VOC DT ACADEMY SDN BHD VOC DT ACADEMY SDN BHD
<b>Payment From</b>	*****0375
<b>Billor Name</b>	PTPTN
<b>Billor Code</b>	5454
<b>Billor Details</b>	PINJAMAN UJRAH
<b>Amount</b>	RM2.00
<b>Charges</b>	RM0.20
<b>Ref - 1</b>	0836828628
<b>RRN Info</b>	-
<b>Ref - 2</b>	-
<b>JomPay Ref No</b>	5A2IGHM2
<b>Payment Mode</b>	Pay Now
<b>Reference No.</b>	0000082150
<b>Transaction Date</b>	09/01/2024
<b>Transaction Time</b>	16:53:58



Disclaimer: This is computer generated receipt. No signature is required

Figure 34 : JomPay receipt in pdf

## 1.7 Process of testing – Adding GST on BSNeBiz Bulk Payment - File Upload

This test scenario simulates concurrent users adding GST on BSNeBiz Bulk Payment – File Upload service. This test case depends on below test case to be executed:

### 1.7.1 [TS-FU-GST-STEP1] – BSNeBiz Login Page – Step 1 (commonLogin.action)

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- IB\_SERVICE\_INFO. IB\_SERVICE\_INFO contains some notes or announcements.

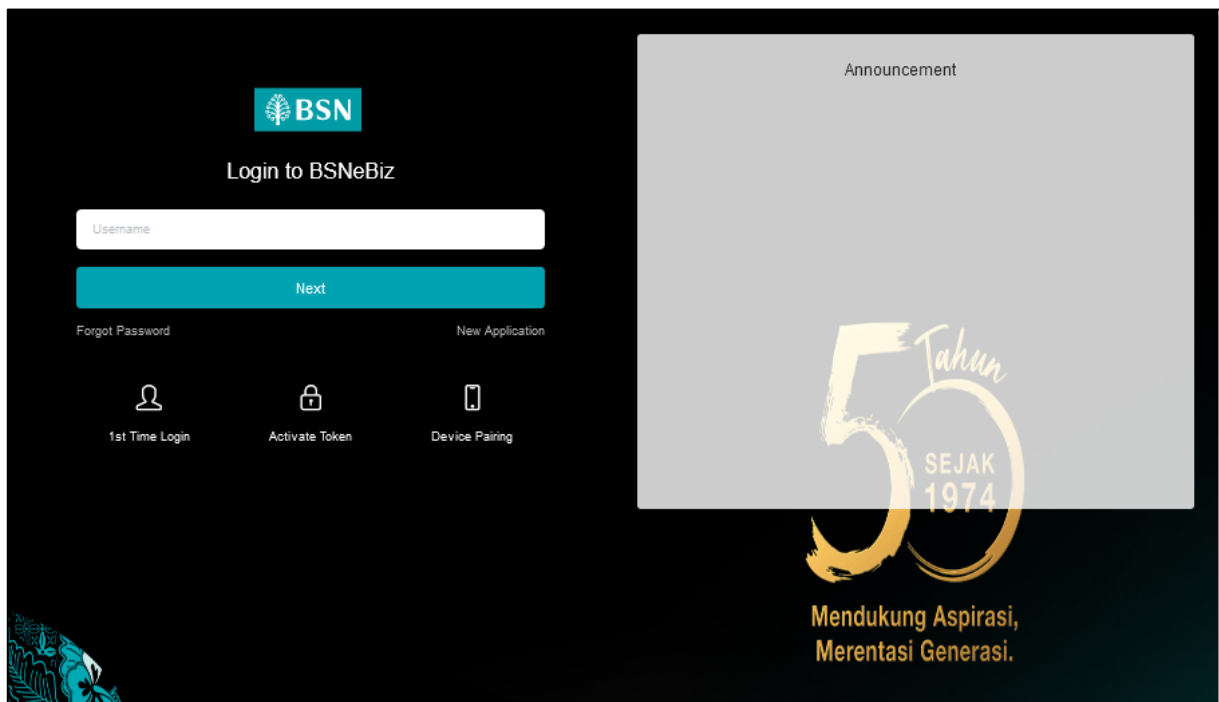


Figure 35: BSNeBiz Login page

### 1.7.2 [TS-FU-GST-STEP2] – BSNeBiz Login Page – Step 2 (ibPortalLoginUsername.action)

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- **Database. Database** contains data for BSNeBiz Login Details.



Performance Report: Goods and Services Tax (GST)

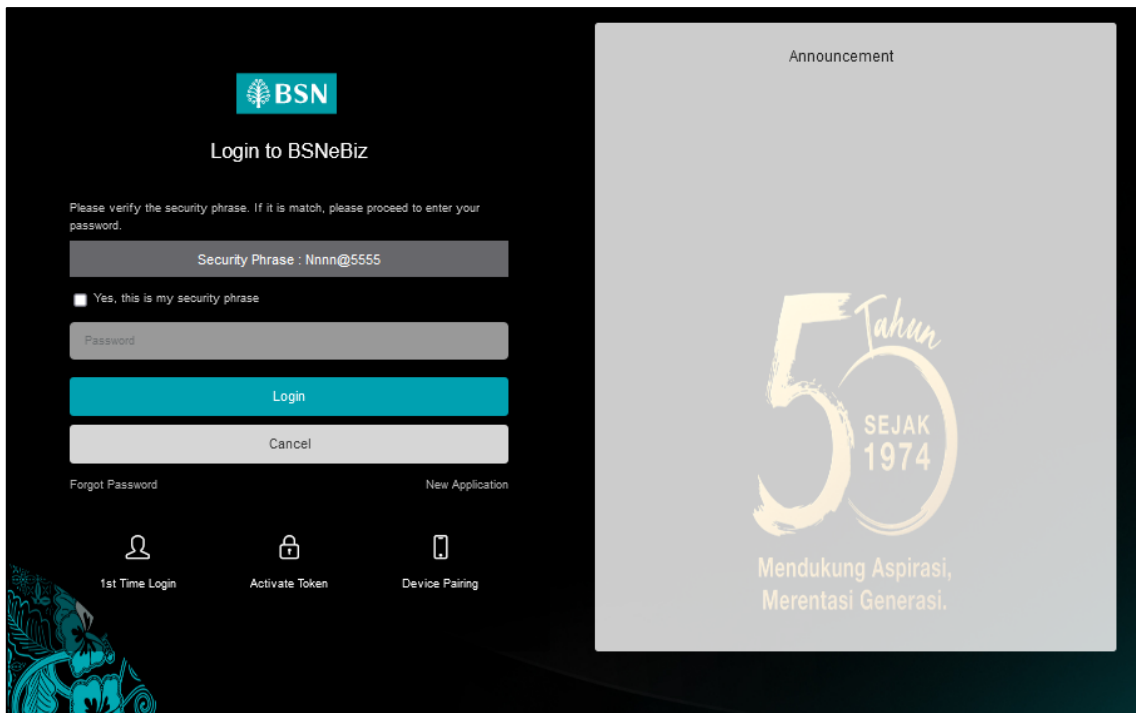


Figure 36 : BSNeBiz Login Page

1.7.3 [TS-FU-GST-STEP3] – BSNeBiz Home Page – Step 3 (ibPortalLogin.action)

In this stage, the CDB connects to BSNeBiz Home page:

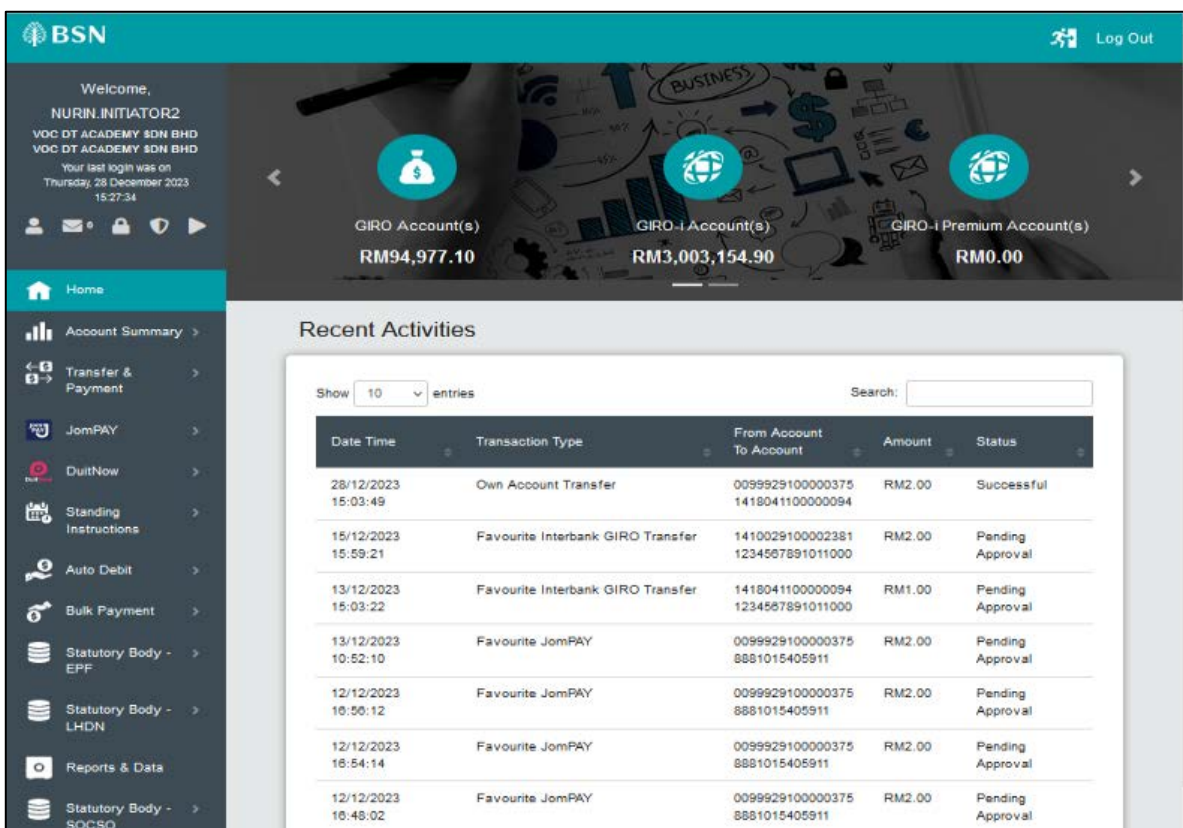
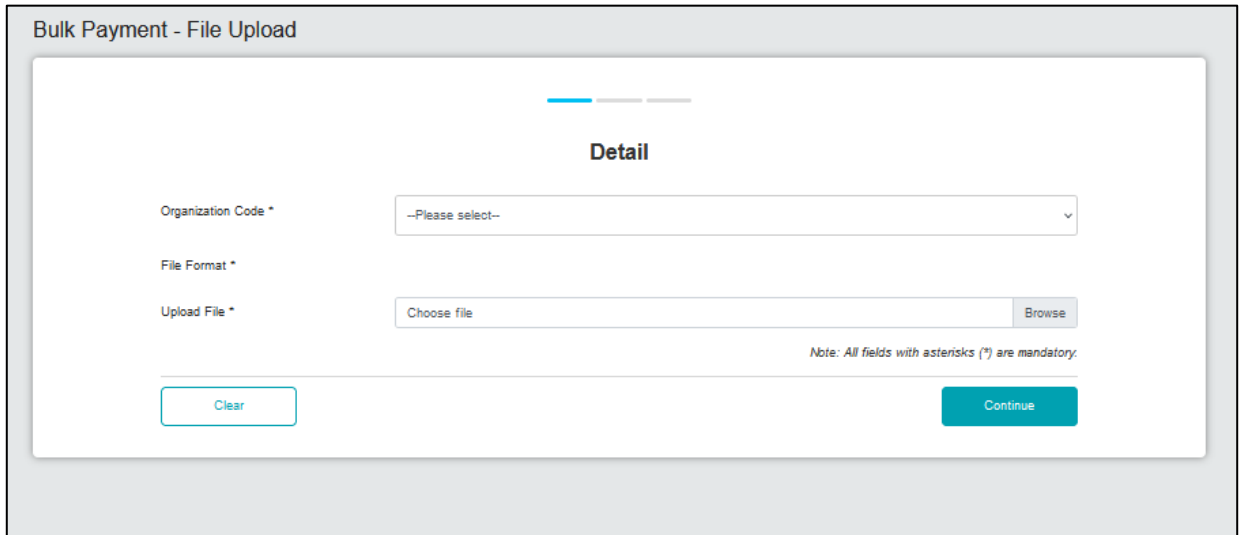


Figure 37: BSNeBiz Home page

### 1.7.4 [TS-FU-GST-STEP4] – File Upload Page – Step 4 (ibFileUploadDetails)

In this stage, the CDB connects to Bulk Payment – File Upload page:

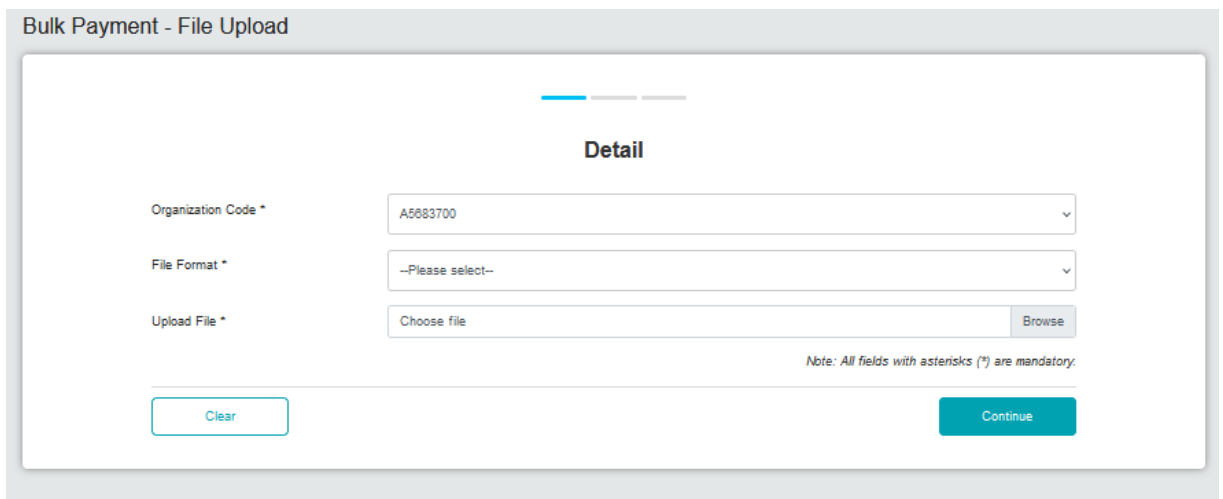


The screenshot shows a web form titled "Bulk Payment - File Upload" with a sub-header "Detail". It contains three mandatory fields: "Organization Code \*" with a dropdown menu showing "--Please select--", "File Format \*" with a dropdown menu showing "--Please select--", and "Upload File \*" with a "Choose file" button and a "Browse" button. A "Clear" button is on the left and a "Continue" button is on the right. A note at the bottom right states: "Note: All fields with asterisks (\*) are mandatory."

Figure 38 : Bulk Payment - File Upload page

### 1.7.5 [TS-FU-GST-STEP5] – File Upload Details Organization Code – Step 5 (ibFileUploadConfirmOrganizationCode.action)

In this stage, the CDB connects to Bulk Payment – Organization Code page:

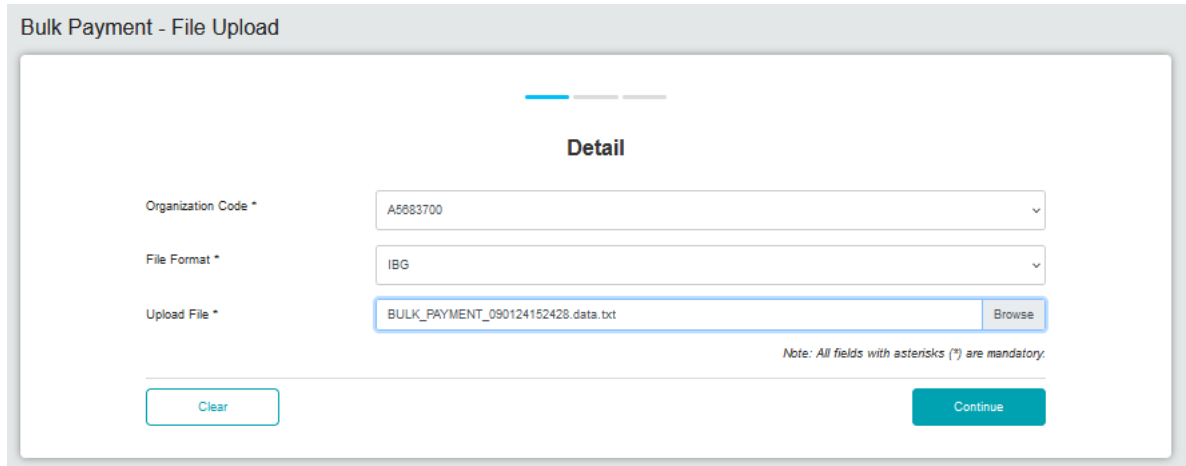


The screenshot shows the same "Bulk Payment - File Upload" form, but now the "Organization Code \*" dropdown menu is populated with the value "A5683700". The "File Format \*" dropdown menu remains at "--Please select--". The "Upload File \*" field and buttons are unchanged. The "Clear" and "Continue" buttons are still present, and the note "Note: All fields with asterisks (\*) are mandatory." is also visible.

Figure 39 : Bulk Payment - File Upload Details page select Organization Code

**1.7.6 [TS-FU-GST-STEP6] – File Upload Details Upload File Page – Step 6  
(ibFileUploadDetailsUploadFile.action)**

In this stage, the CDB connects to Bulk Payment – Upload File page:



**Bulk Payment - File Upload**

**Detail**

Organization Code \*

File Format \*

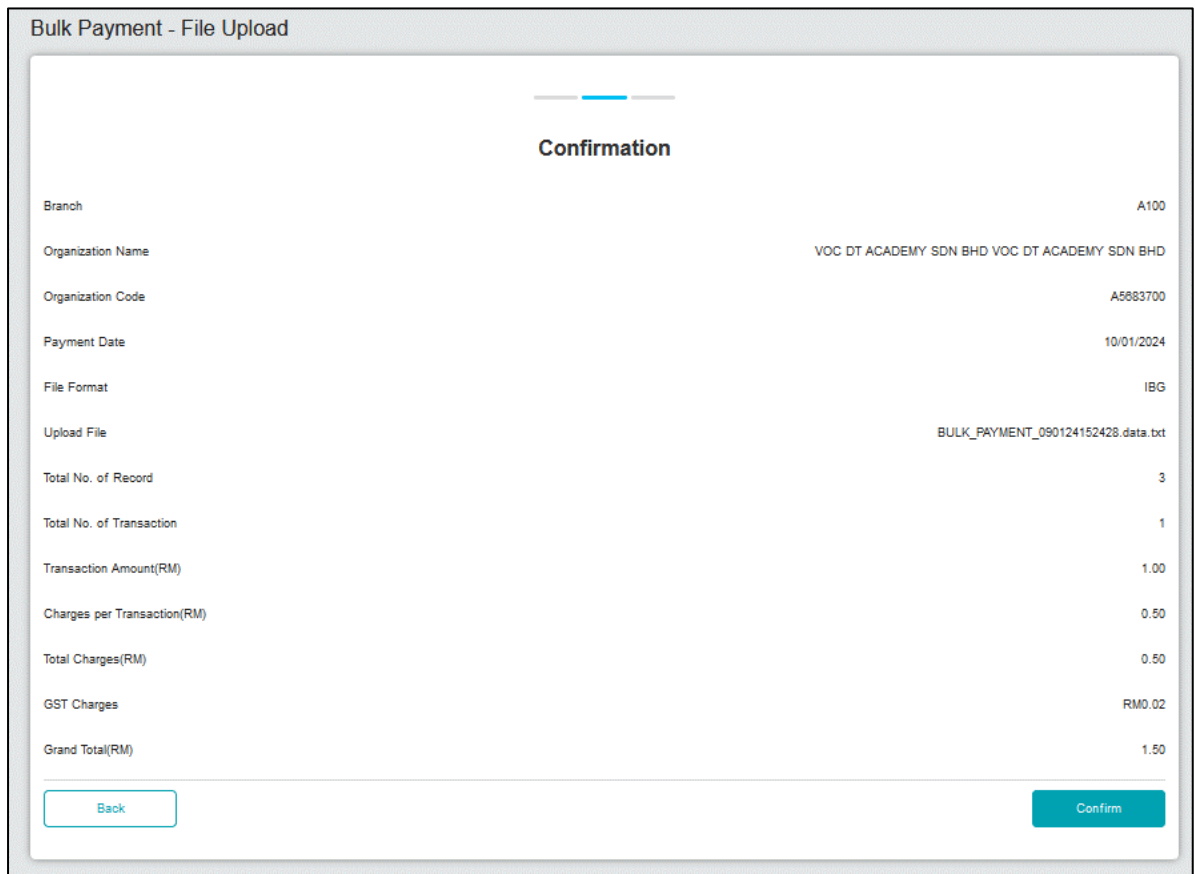
Upload File \*

Note: All fields with asterisks (\*) are mandatory.

Figure 40 : Bulk Payment - Upload File page

**1.7.7 [TS-FU-GST-STEP7] – File Upload Confirmation Page – Step 7  
(ibFileUploadConfirm.action)**

In this stage, the CDB connects to Bulk Payment – Confirmation page:



**Bulk Payment - File Upload**

**Confirmation**

Branch	A100
Organization Name	VOC DT ACADEMY SDN BHD VOC DT ACADEMY SDN BHD
Organization Code	A5683700
Payment Date	10/01/2024
File Format	IBG
Upload File	BULK_PAYMENT_090124152428.data.txt
Total No. of Record	3
Total No. of Transaction	1
Transaction Amount(RM)	1.00
Charges per Transaction(RM)	0.50
Total Charges(RM)	0.50
GST Charges	RM0.02
Grand Total(RM)	1.50

Figure 41 : Bulk Payment - File Upload Confirmation page

### 1.7.8 [TS-FU-GST-STEP8] – File Upload Results Page – Step 8 (ibFileUploadResults.action)

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- **Database.** Database contains data for Bulk Payment – File Upload Results details.

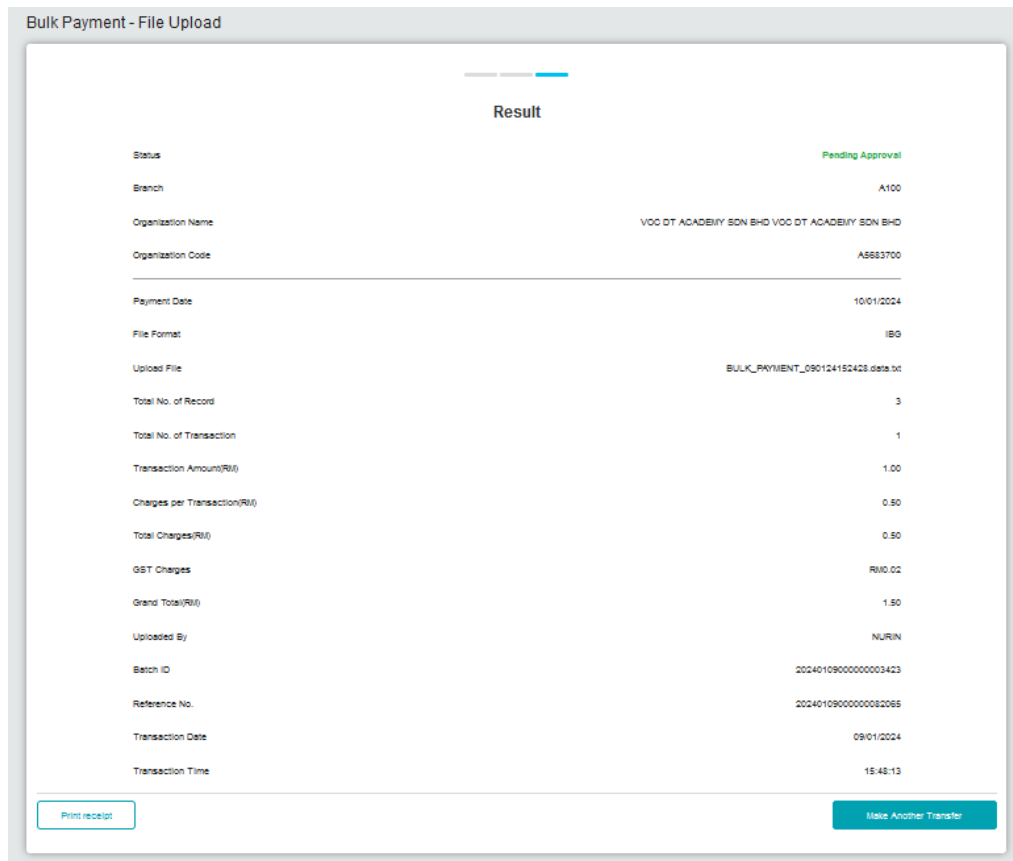


Figure 42 : Bulk Payment - File Upload Result page

### 1.7.9 [TS-FU-GST-STEP9] – File Upload Download Receipt PDF Page– Step 9 (ibFileUploadReceiptPdfDownload.action)


In this stage, the CDB connects to:

- a) DB

The DB fetches:

- **BIB\_USER\_PRINT\_RECEIPT.** BIB\_USER\_PRINT\_RECEIPT contains data for File Upload details.


Performance Report: Goods and Services Tax (GST)

Tuesday, 9 Jan 2024 15:49:09

**Receipt**

**Bulk Payment - File Upload, A5683700, Record:3, Posting:10/01/2024**

<b>Status</b>	Pending Approval
<b>Branch</b>	A100
<b>Organization Name</b>	VOC DT ACADEMY SDN BHD VOC DT ACADEMY SDN BHD
<b>Organization Code</b>	A5683700
<b>Payment Date</b>	10/01/2024
<b>File Format</b>	IBG
<b>Upload File</b>	BULK_PAYMENT_090124152428.data.txt
<b>Total No. of Record</b>	3
<b>Total No. of Transaction</b>	1
<b>Transaction Amount(RM)</b>	1.00
<b>Charges per Transaction(RM)</b>	0.50
<b>Total Charges(RM)</b>	0.50
<b>GST Charges(RM)</b>	0.0250
<b>Grand Total(RM)</b>	1.50
<b>Uploaded By</b>	NURIN
<b>Batch ID</b>	20240109000000003423
<b>Reference No.</b>	0000082065
<b>Transaction Date</b>	09/01/2024
<b>Transaction Time</b>	15:48:13



**Disclaimer: This is computer generated receipt. No signature is required**

Figure 43 : Bulk Payment - File Upload Pdf Receipts

## 1.8 Process of testing – Adding GST on BSNeBIZ Bulk Payment – Add New Data

This test scenario simulates concurrent users adding GST on BSNeBiz Bulk Payment – Add New Data service. This test case depends on below test case to be executed:

### 1.8.1 [TS-DE-GST-STEP1] – BSNeBiz Login Page – Step 1 (commonLogin.action)

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- IB\_SERVICE\_INFO. IB\_SERVICE\_INFO contains some notes or announcements.

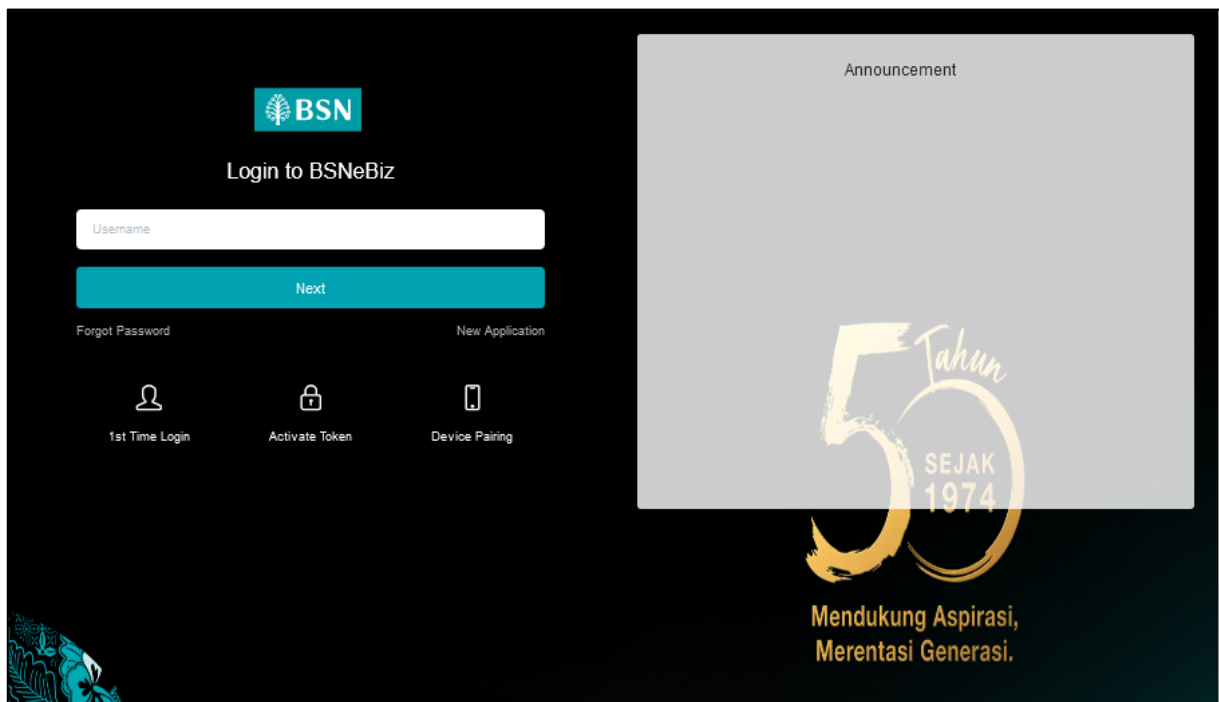


Figure 44 : BSNeBiz Login page

### 1.8.2 [TS-DE-GST-STEP2] – BSNeBiz Login Page – Step 2 (ibPortalLoginUsername.action)

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- **Database. Database** contains data for BSNeBiz Login Details.

Performance Report: Goods and Services Tax (GST)

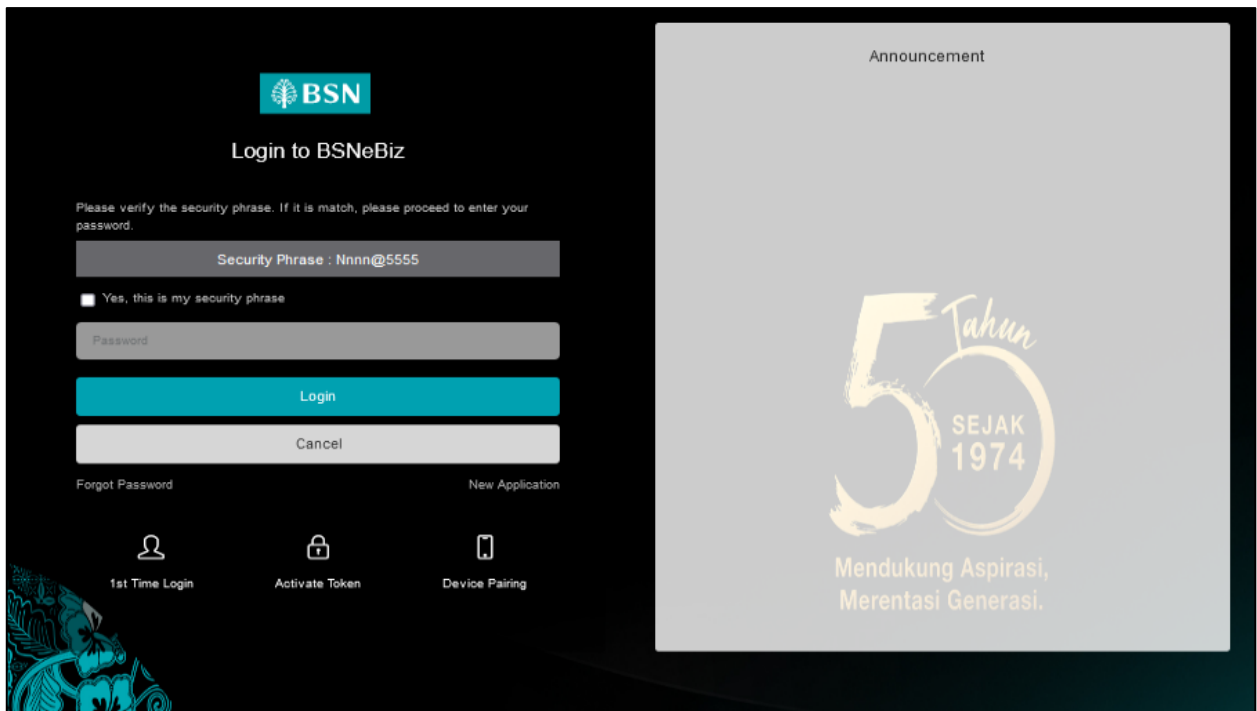


Figure 45 : BSNeBiz Login page

1.8.3 [TS-DE-GST-STEP3] – BSNeBiz Home Page – Step 3 (ibPortalLogin.action)

In this stage, the CDB connects to BSNeBiz Home page:

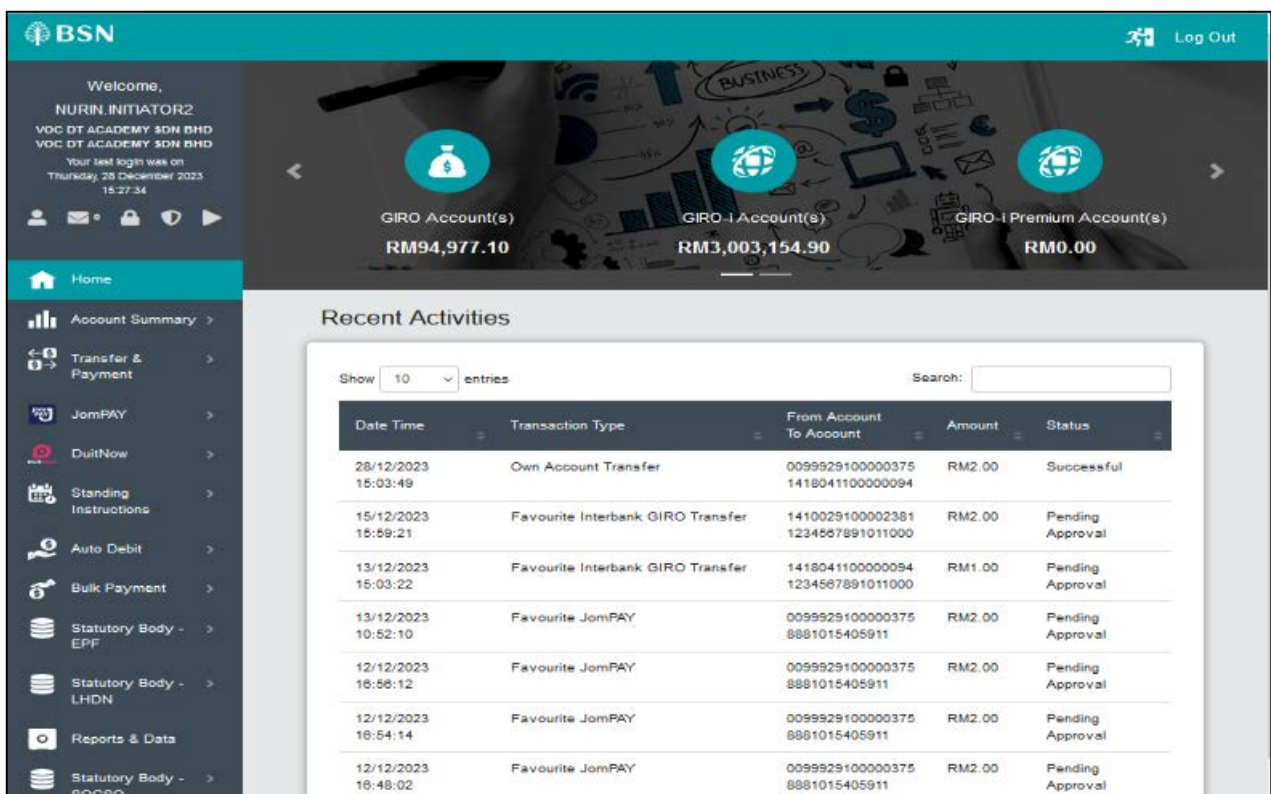
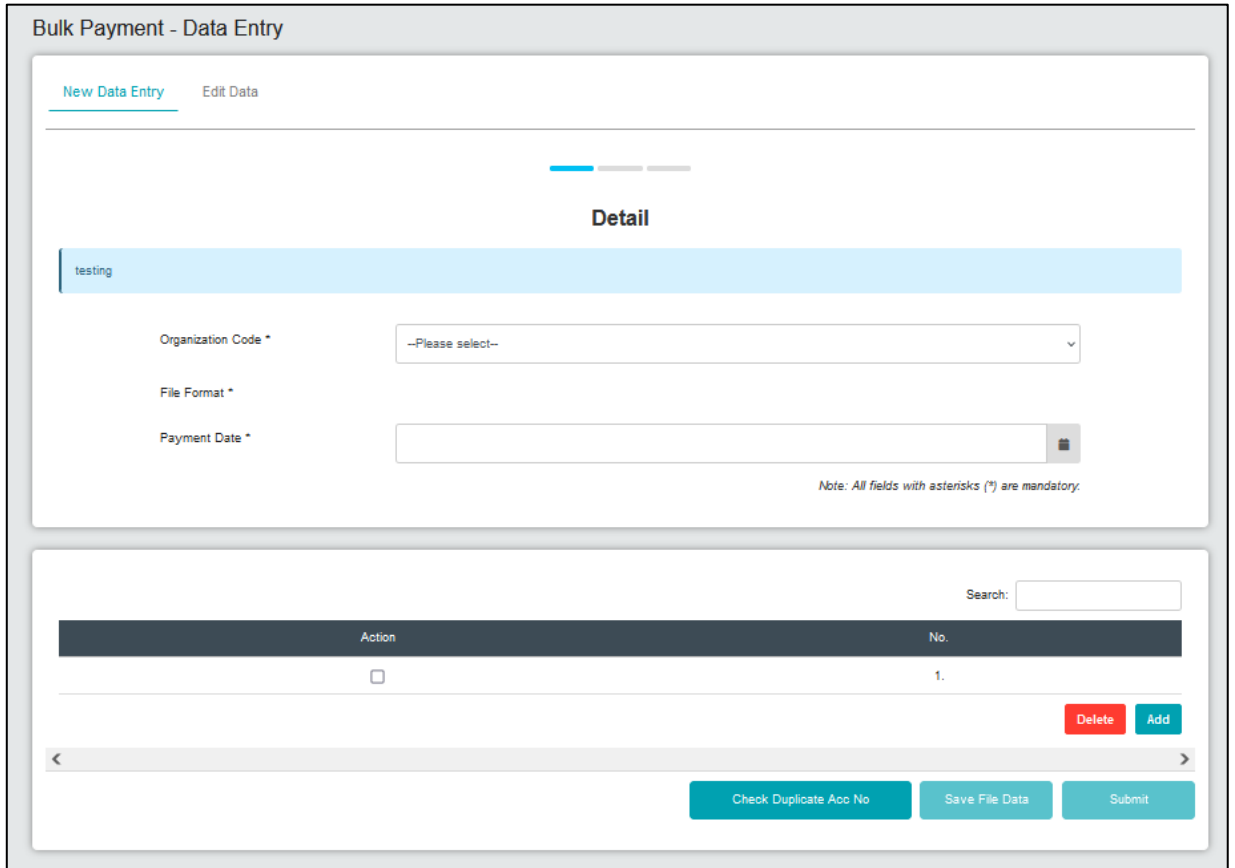


Figure 46: BSNeBiz Home page

### 1.8.4 [TS-DE-GST-STEP4] – Data Entry Page – Step 4 (ibDataEntryDetails)

In this stage, the CDB connects to Bulk Payment – Data Entry detail page:



Bulk Payment - Data Entry

New Data Entry Edit Data

Detail

testing

Organization Code \* --Please select--

File Format \*

Payment Date \*

Note: All fields with asterisks (\*) are mandatory.

Action	No.
<input type="checkbox"/>	1.

Search:

Delete Add

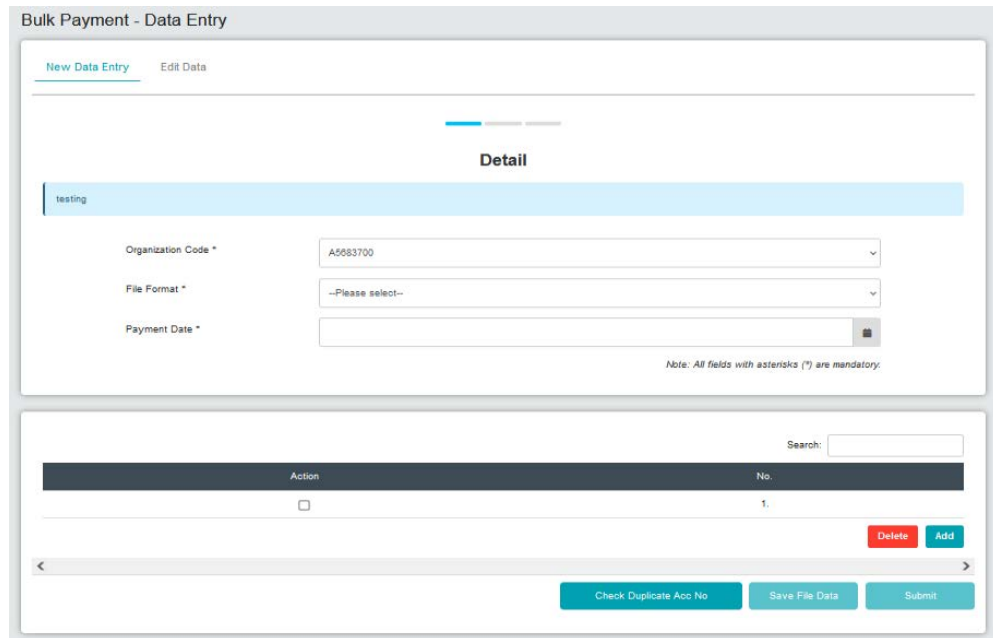
Check Duplicate Acc No Save File Data Submit

Figure 47 : Bulk Payment – Data Entry page



### 1.8.5 [TS-DE-GST-STEP5] – Data Entry Details Organization Code – Step 5 (ibDataEntryConfirmOrganizationCode.action)

In this stage, the CDB connects to Bulk Payment – Data Entry details page select Organization Code:

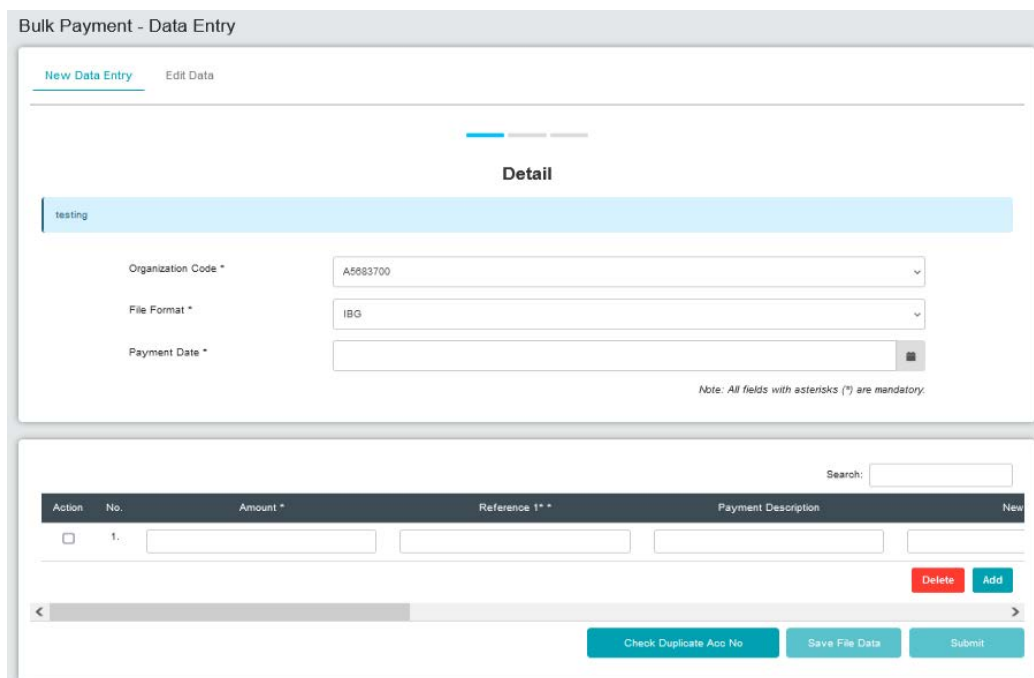


The screenshot shows the 'Bulk Payment - Data Entry' interface. At the top, there are tabs for 'New Data Entry' and 'Edit Data'. Below this is a progress indicator and a 'Detail' section. A light blue bar contains the text 'testing'. The form includes three fields: 'Organization Code \*' with a dropdown menu showing 'A5083700', 'File Format \*' with a dropdown menu showing '--Please select--', and 'Payment Date \*' with a date picker. A note at the bottom right states: 'Note: All fields with asterisks (\*) are mandatory.' Below the form is a table with columns 'Action' and 'No.'. The table contains one row with a checkbox and the number '1.'. To the right of the table are 'Delete' and 'Add' buttons. At the bottom of the interface are three buttons: 'Check Duplicate Acc No', 'Save File Data', and 'Submit'.

Figure 48 : Bulk Payment – Data Entry Details page select Organization Code

### 1.8.6 [TS-DE-GST-STEP6] – Data Entry Details File Format – Step 6 (ibDataEntryConfirmFileFormat.action)

In this stage, the CDB connects to Bulk Payment – Data Entry details page select File Format:

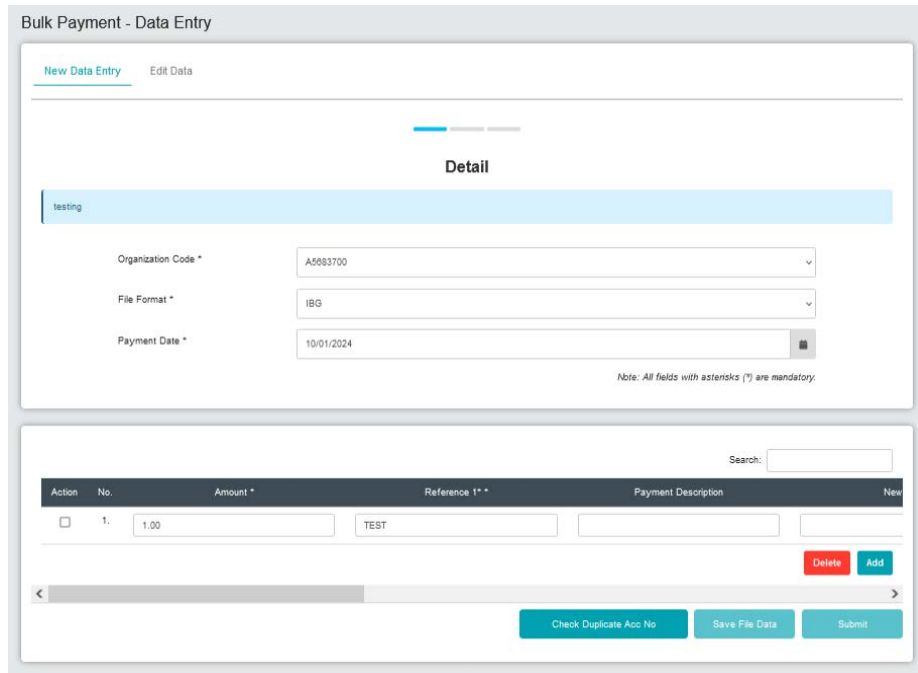


The screenshot shows the 'Bulk Payment - Data Entry' interface. At the top, there are tabs for 'New Data Entry' and 'Edit Data'. Below this is a progress indicator and a 'Detail' section. A light blue bar contains the text 'testing'. The form includes three fields: 'Organization Code \*' with a dropdown menu showing 'A5083700', 'File Format \*' with a dropdown menu showing 'IBG', and 'Payment Date \*' with a date picker. A note at the bottom right states: 'Note: All fields with asterisks (\*) are mandatory.' Below the form is a table with columns 'Action', 'No.', 'Amount \*', 'Reference 1 \*', 'Payment Description', and 'New'. The table contains one row with a checkbox, the number '1.', and empty input fields for 'Amount', 'Reference 1', and 'Payment Description'. To the right of the table are 'Delete' and 'Add' buttons. At the bottom of the interface are three buttons: 'Check Duplicate Acc No', 'Save File Data', and 'Submit'.

Figure 49 : Bulk Payment – Data Entry Details page select File Format

### 1.8.7 [TS-DE-GST-STEP7] – Data Entry Check Duplicate Number – Step 7 (ibDataEntryCheckDuplicate.action)

In this stage, the CDB connects to Bulk Payment – Data Entry details page:



**Bulk Payment - Data Entry**

[New Data Entry](#) [Edit Data](#)

**Detail**

testing

Organization Code \* A5683700

File Format \* IBG

Payment Date \* 10/01/2024

Note: All fields with asterisks (\*) are mandatory.

Action	No.	Amount *	Reference 1**	Payment Description	New
<input type="checkbox"/>	1.	1.00	TEST		

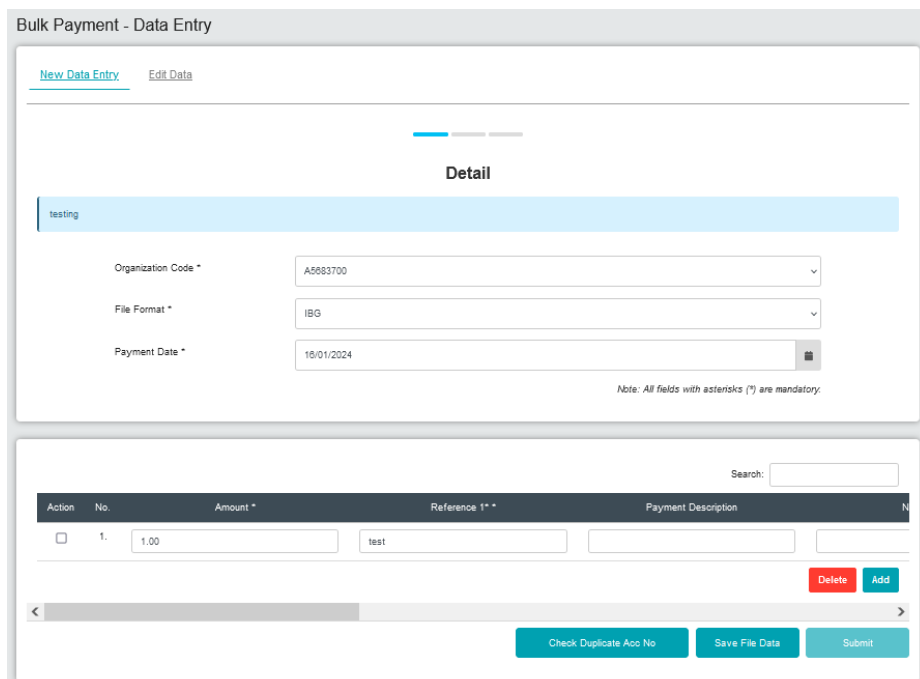
[Delete](#) [Add](#)

[Check Duplicate Acc No](#) [Save File Data](#) [Submit](#)

Figure 50 : Data Entry Check Duplicate Acc. No page

### 1.8.8 [TS-DE-GST-STEP8] – Data Entry Save File Page – Step 8 (ibDataEntrySaveFile.action)

In this stage, the CDB connects to Bulk Payment – Data Entry details page:



**Bulk Payment - Data Entry**

[New Data Entry](#) [Edit Data](#)

**Detail**

testing

Organization Code \* A5683700

File Format \* IBG

Payment Date \* 16/01/2024

Note: All fields with asterisks (\*) are mandatory.

Action	No.	Amount *	Reference 1**	Payment Description	New
<input type="checkbox"/>	1.	1.00	test		

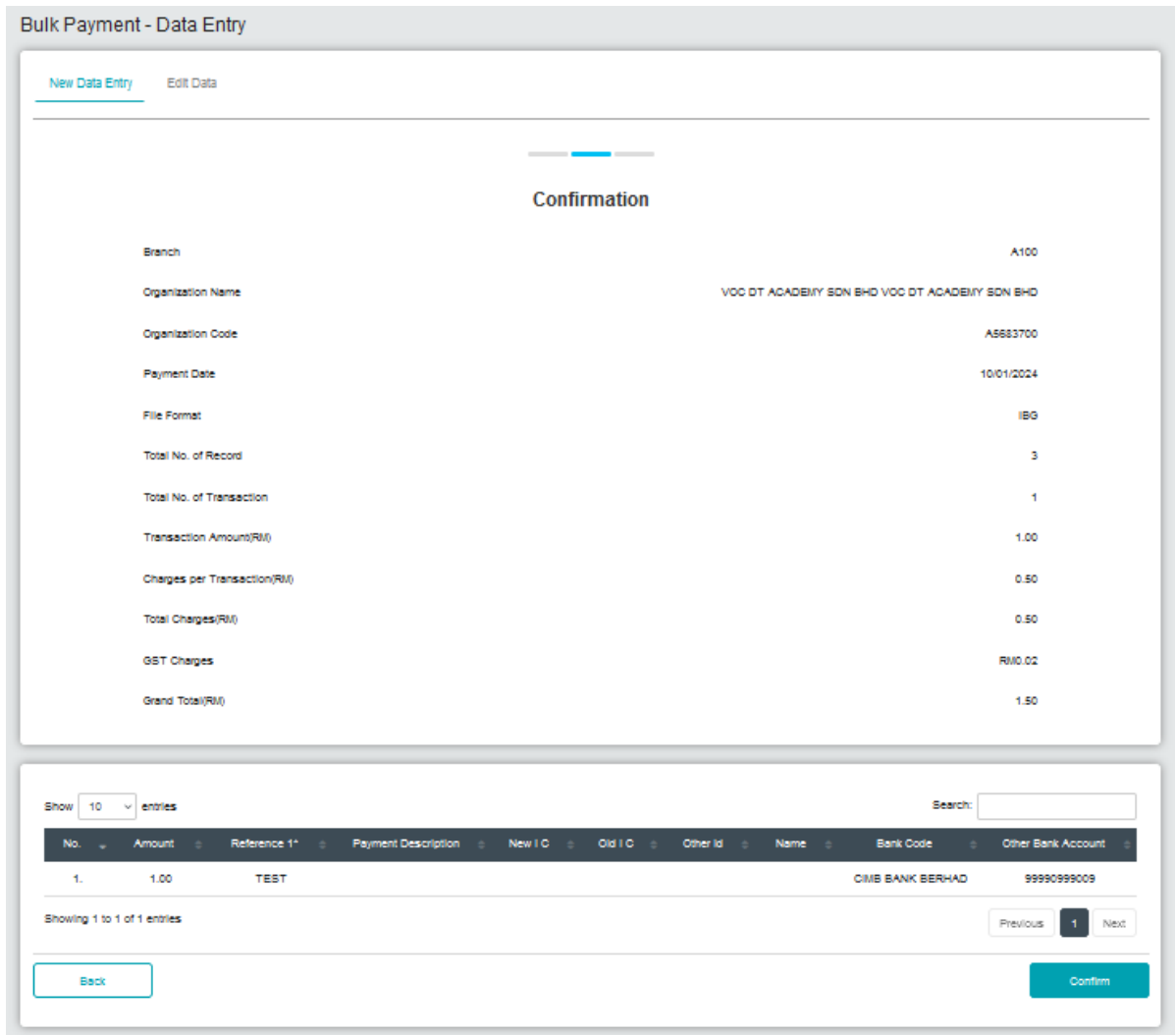
[Delete](#) [Add](#)

[Check Duplicate Acc No](#) [Save File Data](#) [Submit](#)

Figure 51 : Data Entry Save File page

### 1.8.9 [TS-DE-GST-STEP9] – Data Entry Confirmation Page – Step 9 (ibDataEntryConfirm.action)

In this stage, the CDB connects to Bulk Payment – Data Entry Confirmation page:



**Bulk Payment - Data Entry**

New Data Entry | Edit Data

**Confirmation**

Branch	A100
Organization Name	VOC DT ACADEMY SDN BHD VOC DT ACADEMY SDN BHD
Organization Code	A5883700
Payment Date	10/01/2024
File Format	IBG
Total No. of Record	3
Total No. of Transaction	1
Transaction Amount(RM)	1.00
Charges per Transaction(RM)	0.50
Total Charges(RM)	0.50
GST Charges	RM0.02
Grand Total(RM)	1.50

Show 10 entries | Search:

No.	Amount	Reference 1*	Payment Description	New I C	Old I C	Other Id	Name	Bank Code	Other Bank Account
1.	1.00	TEST					CIMB BANK BERHAD	99990999009	

Showing 1 to 1 of 1 entries | Previous | 1 | Next

[Back](#) [Confirm](#)

Figure 52 : Data Entry Confirmation page

### 1.8.10 [TS-DE-GST-STEP10] – Data Entry Result Page – Step 10 (ibDataEntryResults.action)

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- **Database.** Database contains data for Bulk Payment – Data Entry Result details.

Performance Report: Goods and Services Tax (GST)

### Result

Status	Pending Approval
Branch	A100
Organization Name	VOC DT ACADEMY SDN BHD VOC DT ACADEMY SDN BHD
Organization Code	A5683700
<hr/>	
Payment Date	10/01/2024
File Format	IBG
Total No. of Record	3
Total No. of Transaction	1
Transaction Amount(RM)	1.00
Charges per Transaction(RM)	0.50
Total Charges(RM)	0.50
GST Charges	RM0.02
Grand Total(RM)	1.50
Initiated By	NURIN
Batch ID	2024010900000003421
Reference No.	20240109000000081966
Transaction Date	09/01/2024
Transaction Time	14:57:46

Show  entries Search:

No.	Amount	Reference 1*	Payment Description	New I C	Old I C	Other Id	Name	Bank Code	Other Bank Account
1.	1.00	TEST						CIMB BANK BERHAD	99990999009

Showing 1 to 1 of 1 entries Previous  Next

Make Another Transfer

Figure 53 : Data Entry Result page

**1.8.11 [TS-FU-GST-STEP8] – File Upload Download Receipt PDF Page– Step 11 (ibDataEntryReceiptPdfDownload.action)**


In this stage, the CDB connects to:

- a) DB

The DB fetches:

- BIB\_USER\_PRINT\_RECEIPT. BIB\_USER\_PRINT\_RECEIPT contains data for Data Entry details.

Performance Report: Goods and Services Tax (GST)




Tuesday, 9 Jan 2024 14:58:40

Receipt

Bulk Payment - Data Entry, A5683700, Record:3, Posting:10/01/2024

<b>Status</b>	Pending Approval
<b>Branch</b>	A100
<b>Organization Name</b>	VOC DT ACADEMY SDN BHD VOC DT ACADEMY SDN BHD
<b>Organization Code</b>	A5683700
<b>Payment Date</b>	10/01/2024
<b>File Format</b>	IBG
<b>Total No. of Record</b>	3
<b>Total No. of Transaction</b>	1
<b>Transaction Amount(RM)</b>	1.00
<b>Charges per Transaction(RM)</b>	0.50
<b>Total Charges(RM)</b>	0.50
<b>GST Charges(RM)</b>	0.02
<b>Grand Total(RM)</b>	1.50
<b>Initiated By</b>	NURIN
<b>Batch ID</b>	20240109000000003421
<b>Reference No.</b>	0000081966
<b>Transaction Date</b>	09/01/2024
<b>Transaction Time</b>	14:57:46



Disclaimer: This is computer generated receipt. No signature is required

Figure 54 : Data Entry PDF Receipt

## Performance Report: Goods and Services Tax (GST)

### 1.9 Process of testing – Adding GST on BSNeBiz Bulk Payment – Edit Data Entry

This test scenario simulates concurrent users adding GST on BSNeBiz Bulk Payment – Edit Data Entry service. This test case depends on below test case to be executed:

#### 1.9.1 [TS-ED-GST-STEP1] – BSNeBiz Login Page – Step 1 (commonLogin.action)

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- IB\_SERVICE\_INFO. IB\_SERVICE\_INFO contains some notes or announcements.

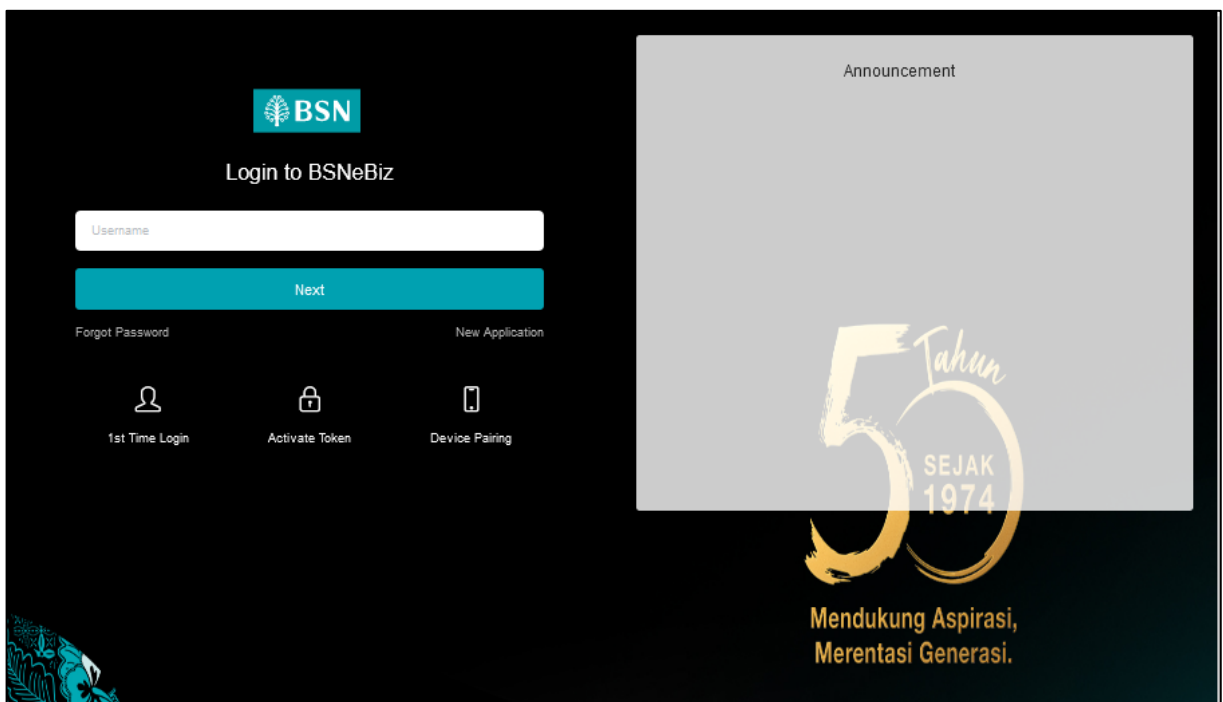


Figure 55 : BSNeBiz Login Page

#### 1.9.2 [TS-ED-GST-STEP2] – BSNeBiz Login Page – Step 2 (ibPortalLoginUsername.action)

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- Database. Database contains data for BSNeBiz Login Details.

Performance Report: Goods and Services Tax (GST)

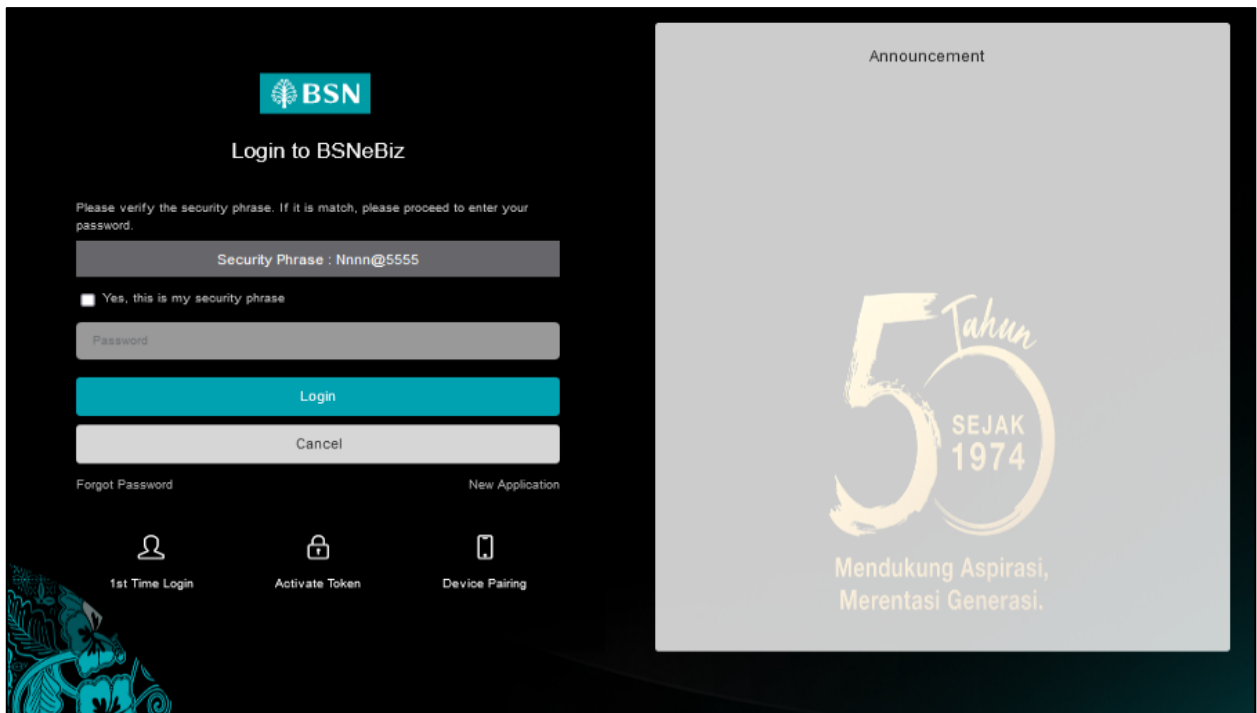


Figure 56 : BSNeBiz Login Page

1.9.3 [TS-ED-GST-STEP3] – BSNeBiz Home Page – Step 3 (ibPortalLogin.action)

In this stage, the CDB connects to BSNeBiz Home page:

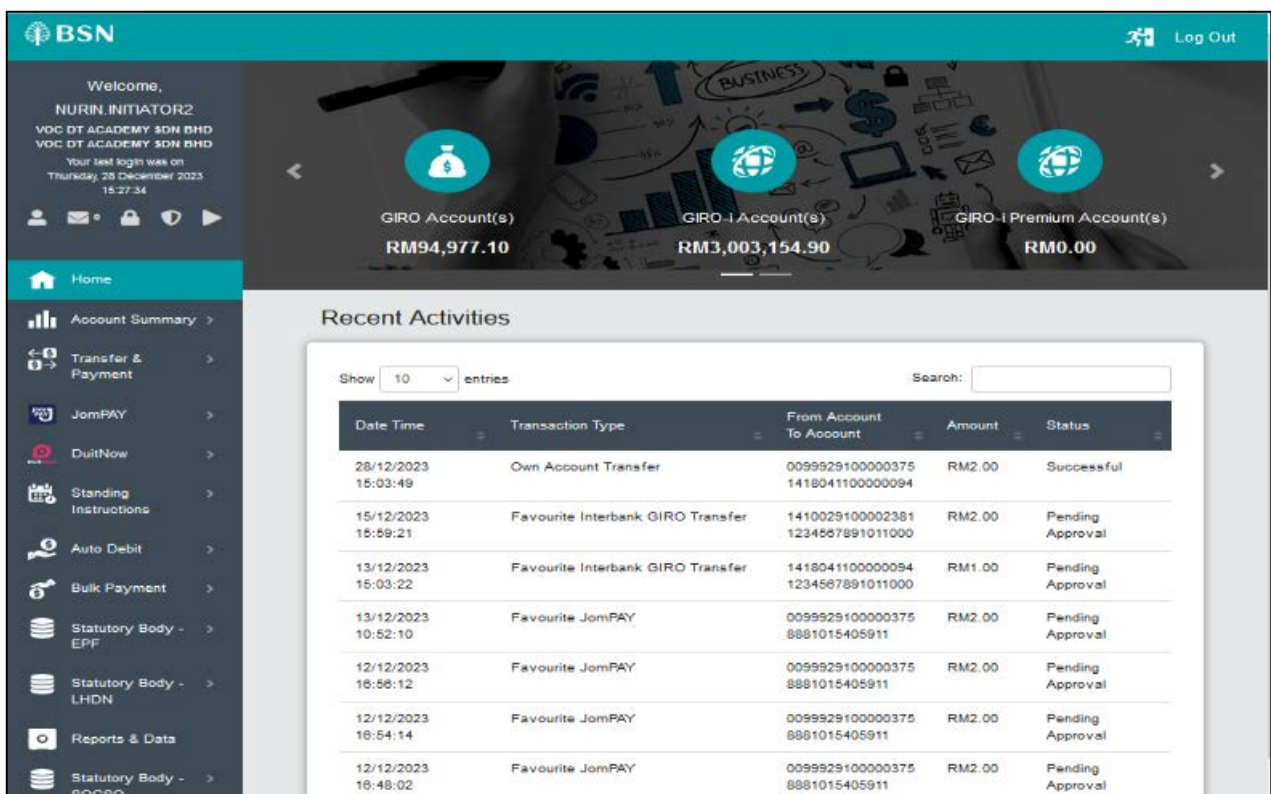
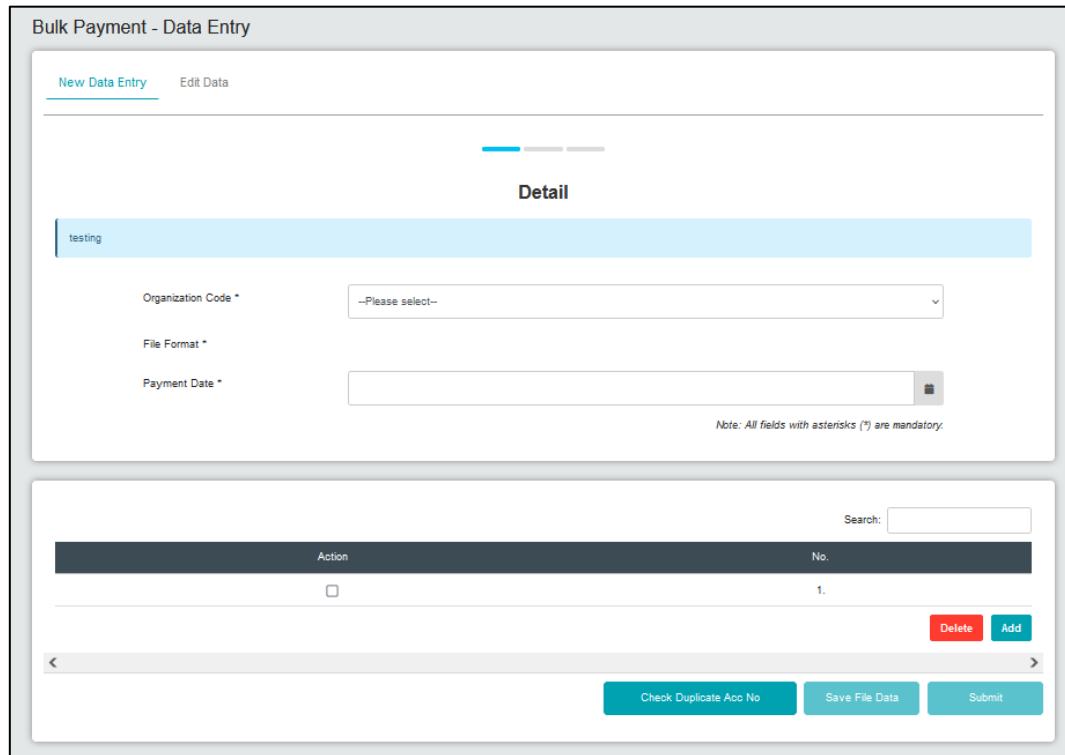


Figure 57: BSNeBiz Home page

### 1.9.4 [TS-ED-GST-STEP4] – Data Entry Page – Step 4 (ibDataEntryDetails)

In this stage, the CDB connects to Bulk Payment – Data Entry detail page:

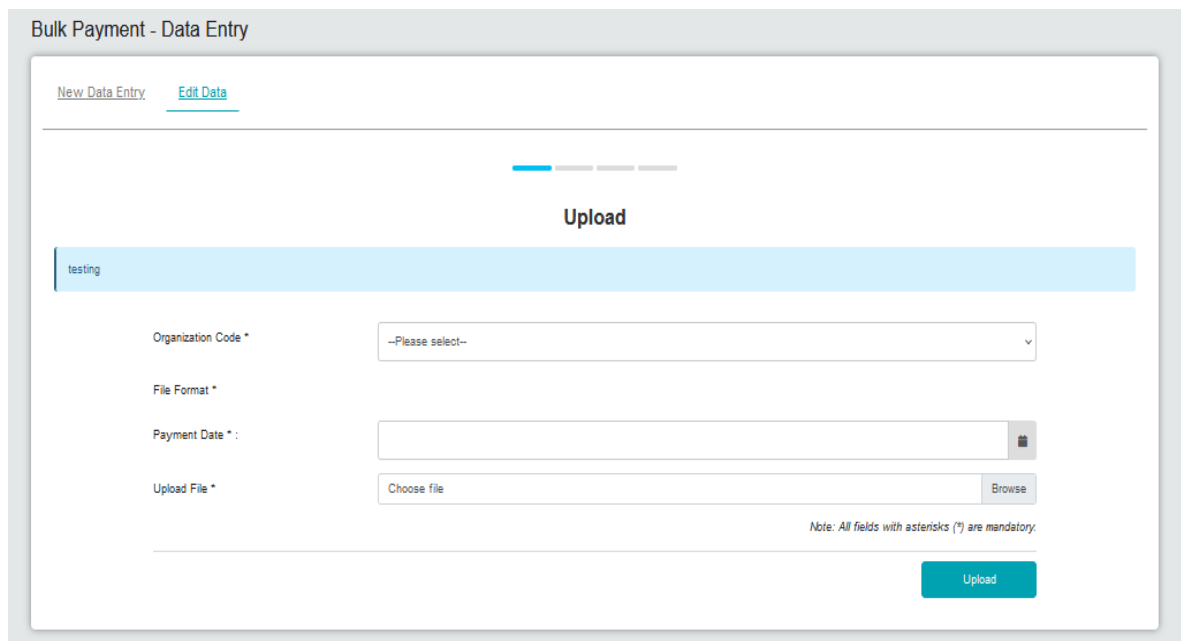


The screenshot shows the 'Bulk Payment - Data Entry' interface. At the top, there are two tabs: 'New Data Entry' (active) and 'Edit Data'. Below the tabs is a progress indicator with three steps, the second of which is highlighted. The main heading is 'Detail'. A light blue bar contains the text 'testing'. Below this, there are three form fields: 'Organization Code \*' with a dropdown menu showing '--Please select--', 'File Format \*' with a dropdown menu, and 'Payment Date \*' with a date picker. A note at the bottom right states: 'Note: All fields with asterisks (\*) are mandatory.' Below the form fields is a table with a search bar and a table header with columns 'Action' and 'No.'. The table contains one row with a checkbox in the 'Action' column and the number '1' in the 'No.' column. To the right of the table are 'Delete' and 'Add' buttons. At the bottom of the page are three buttons: 'Check Duplicate Acc No', 'Save File Data', and 'Submit'.

Figure 58 : Bulk Payment – Data Entry page

### 1.9.5 [TS-ED-GST-STEP5] – Edit Data Entry Page – Step 5 (ibEditData)

In this stage, the CDB connects to Bulk Payment – Edit Data page:



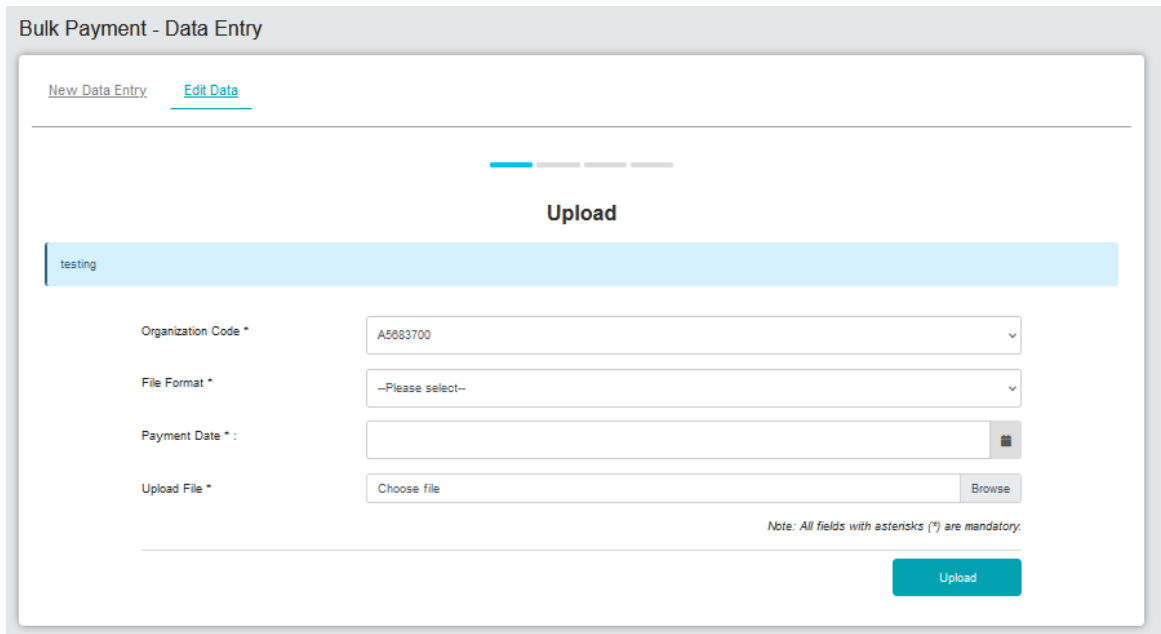
The screenshot shows the 'Bulk Payment - Data Entry' interface. At the top, there are two tabs: 'New Data Entry' and 'Edit Data' (active). Below the tabs is a progress indicator with three steps, the third of which is highlighted. The main heading is 'Upload'. A light blue bar contains the text 'testing'. Below this, there are four form fields: 'Organization Code \*' with a dropdown menu showing '--Please select--', 'File Format \*' with a dropdown menu, 'Payment Date \*' with a date picker, and 'Upload File \*' with a file upload button labeled 'Choose file' and a 'Browse' button. A note at the bottom right states: 'Note: All fields with asterisks (\*) are mandatory.' At the bottom of the page is an 'Upload' button.

Figure 59 : Bulk Payment – Edit Data page



**1.9.6 [TS-ED-GST-STEP6] – Edit Data Organization Code – Step 6  
(ibEditDataDetailOrganizationCode.action)**

In this stage, the CDB connects to Bulk Payment – Edit Data Upload page select Organization Code:

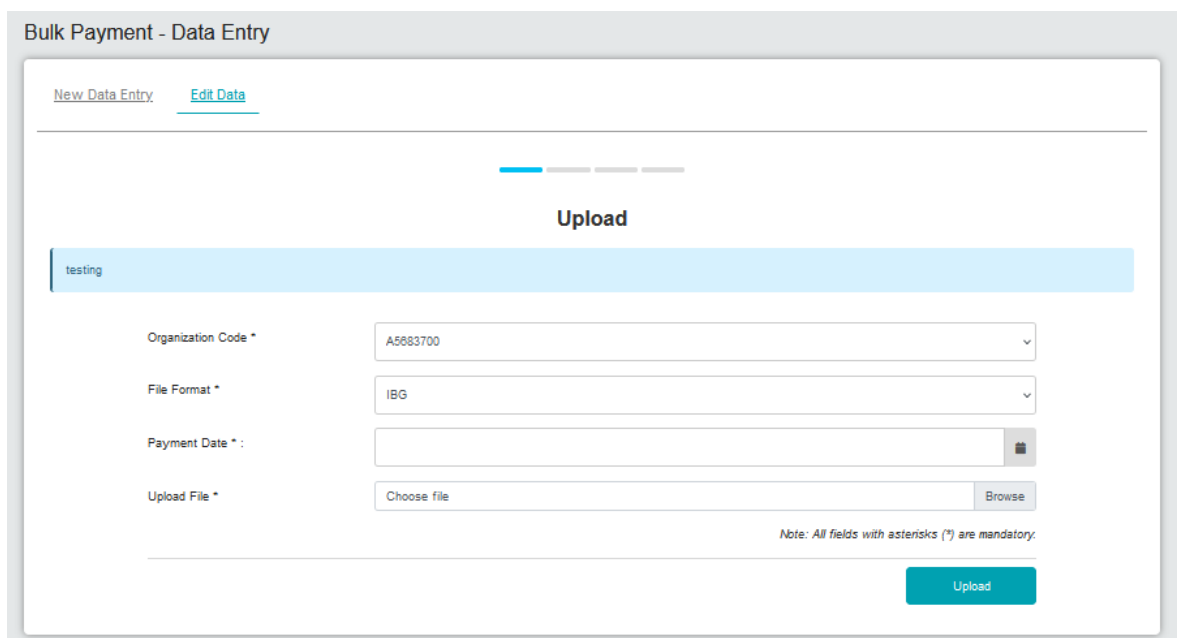


The screenshot shows the 'Bulk Payment - Data Entry' interface. At the top, there are two tabs: 'New Data Entry' and 'Edit Data'. Below the tabs is a progress indicator with four steps, the second of which is highlighted. The main heading is 'Upload'. A light blue bar contains the text 'testing'. Below this, there are four form fields: 'Organization Code \*' with a dropdown menu showing 'A5683700', 'File Format \*' with a dropdown menu showing '--Please select--', 'Payment Date \*' with a date picker, and 'Upload File \*' with a 'Choose file' button and a 'Browse' button. A note at the bottom right states 'Note: All fields with asterisks (\*) are mandatory.' An 'Upload' button is located at the bottom right of the form area.

Figure 60 : Bulk Payment – Edit Data Upload page select Organization Code

**1.9.7 [TS-ED-GST-STEP7] – Edit Data File Format – Step 7  
(ibEditDataDetailFileFormat.action)**

In this stage, the CDB connects to Bulk Payment – Edit Data Upload page select File Format:

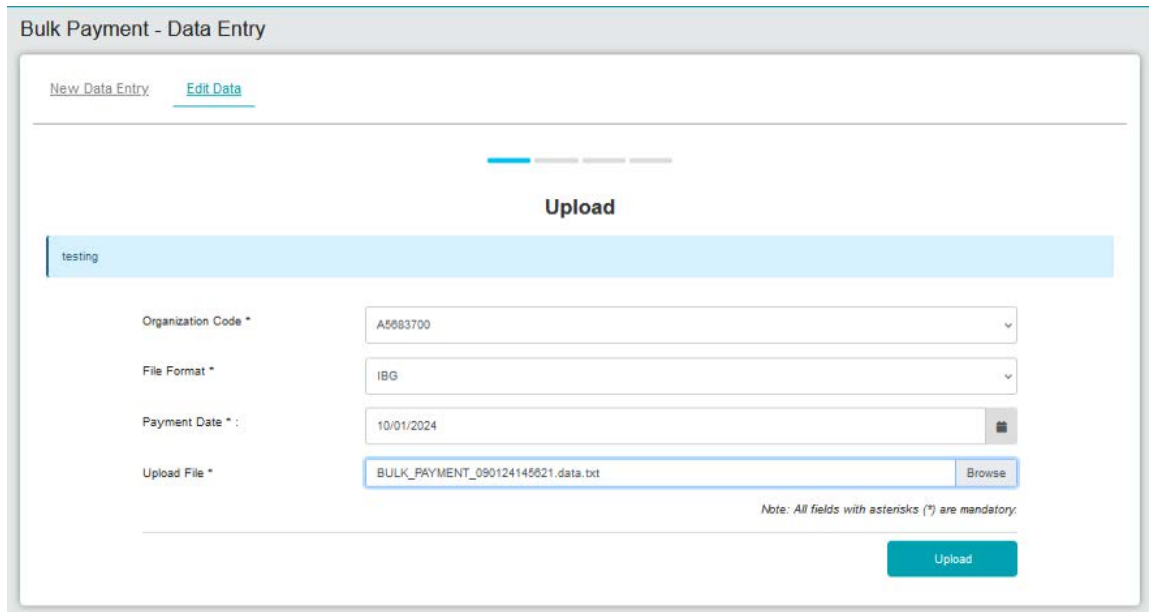


The screenshot shows the 'Bulk Payment - Data Entry' interface, similar to Figure 60. The 'File Format \*' dropdown menu now shows 'IBG' selected. All other elements, including the 'Organization Code \*' dropdown (A5683700), 'Payment Date \*' field, 'Upload File \*' field, and 'Upload' button, remain the same. The note 'Note: All fields with asterisks (\*) are mandatory.' is also present.

Figure 61 : Edit Data Upload page select File Format

**1.9.8 [TS-ED-GST-STEP8] – Edit Data Upload File – Step 8  
(ibEditDataDetailUploadFile.action)**

In this stage, the CDB connects to Bulk Payment – Edit Data Upload page Upload File:



The screenshot shows the 'Bulk Payment - Data Entry' interface. At the top, there are two tabs: 'New Data Entry' and 'Edit Data'. Below the tabs is a progress bar and the word 'Upload'. A search bar contains the text 'testing'. The form includes the following fields:

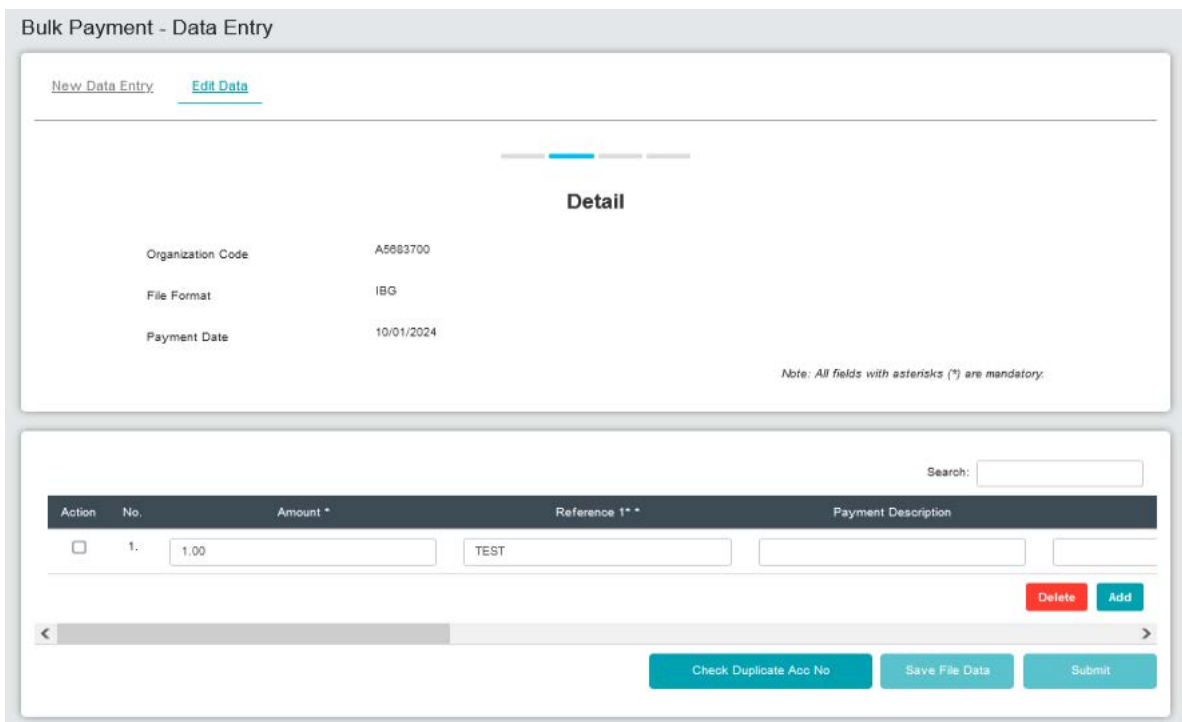
- Organization Code \*: A5683700
- File Format \*: IBG
- Payment Date \*: 10/01/2024
- Upload File \*: BULK\_PAYMENT\_090124145621.data.txt (with a 'Browse' button)

A note at the bottom right states: 'Note: All fields with asterisks (\*) are mandatory.' An 'Upload' button is located at the bottom right of the form.

Figure 62 : Bulk Payment - File Upload Pdf Receipts

**1.9.9 [TS-ED-GST-STEP9] – Edit Data Check Duplicate – Step 9  
(ibEditDataConfirmCheckDuplicate.action)**

In this stage, the CDB connects to Bulk Payment – Edit Data Detail page:



The screenshot shows the 'Bulk Payment - Data Entry' interface in the 'Detail' view. At the top, there are two tabs: 'New Data Entry' and 'Edit Data'. Below the tabs is a progress bar and the word 'Detail'. The form displays the following details:

- Organization Code: A5683700
- File Format: IBG
- Payment Date: 10/01/2024

A note at the bottom right states: 'Note: All fields with asterisks (\*) are mandatory.' Below the details is a search bar and a table with the following columns: Action, No., Amount \*, Reference 1\* \*, and Payment Description.

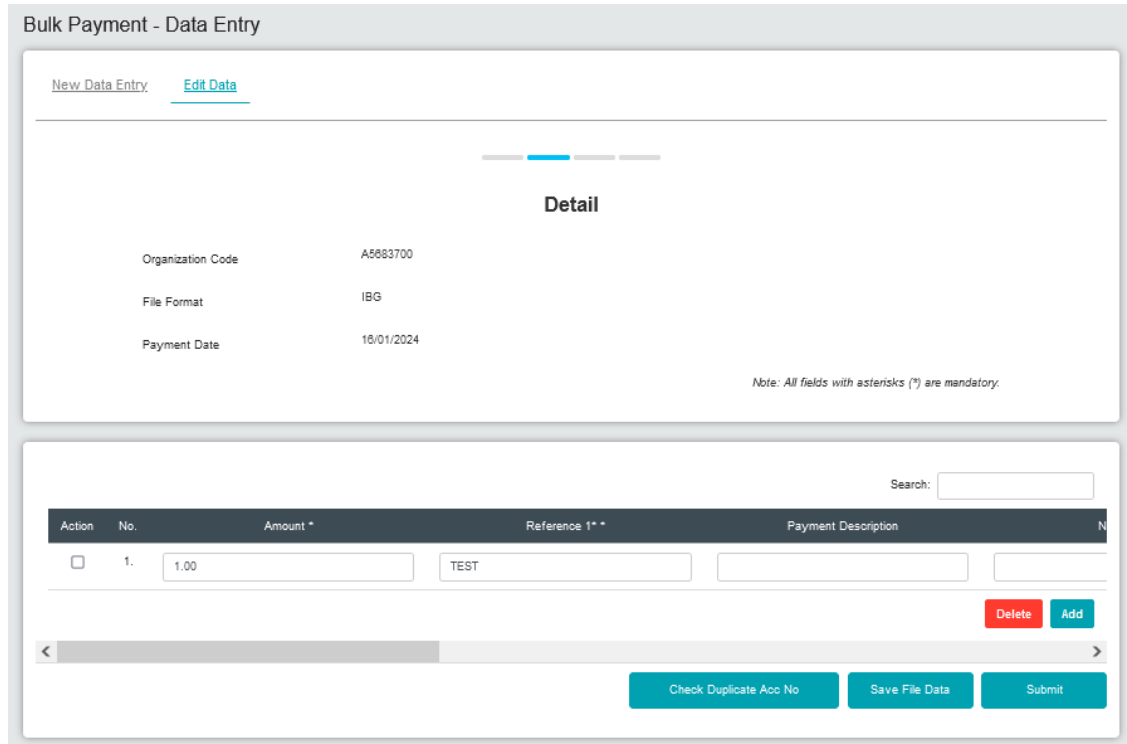
Action	No.	Amount *	Reference 1* *	Payment Description
<input type="checkbox"/>	1.	1.00	TEST	

Buttons for 'Delete' and 'Add' are located below the table. At the bottom of the page, there are three buttons: 'Check Duplicate Acc No', 'Save File Data', and 'Submit'.

Figure 63 : Edit Data - Details page Check Duplicate Acc No

**1.9.10 [TS-ED-GST-STEP10] – Edit Data Save File – Step 10  
(ibEditDataConfirmSaveFile.action)**

In this stage, the CDB connects to Bulk Payment – Edit Data Detail page:



**Bulk Payment - Data Entry**

[New Data Entry](#) | [Edit Data](#)

---

**Detail**

Organization Code	A5683700
File Format	IBG
Payment Date	16/01/2024

*Note: All fields with asterisks (\*) are mandatory.*

---

Search:

Action	No.	Amount *	Reference 1* *	Payment Description	N
<input type="checkbox"/>	1.	<input type="text" value="1.00"/>	<input type="text" value="TEST"/>	<input type="text"/>	<input type="text"/>

[Delete](#) [Add](#)

[Check Duplicate Acc No](#)
[Save File Data](#)
[Submit](#)

Figure 64 : Edit Data Details page Save File Data

**1.9.11 [TS-ED-GST-STEP11] – Edit Data Confirmation Page – Step 11  
(ibEditDataConfirmSubmit.action)**

In this stage, the CDB connects to Bulk Payment – Edit Data Confirmation page:

Performance Report: Goods and Services Tax (GST)

**Bulk Payment - Data Entry**

[New Data Entry](#)   [Edit Data](#)

---

**Confirmation**

Branch	A100
Organization Name	VOC DT ACADEMY SDN BHD VOC DT ACADEMY SDN BHD
Organization Code	A5683700
Payment Date	10/01/2024
File Format	IBG
Total No. of Record	3
Total No. of Transaction	1
Transaction Amount(RM)	1.00
Charges per Transaction(RM)	0.50
Total Charges(RM)	0.50
GST Charges	RM0.02
Grand Total(RM)	1.50

---

Show  entries Search:

No.	Amount	Reference 1*	Payment Description	New I C	Old I C	Other Id	Name	Bank Code	Other Bank Account
1.	1.00	TEST						CIMB BANK BERHAD	99990999009

Showing 1 to 1 of 1 entries

Figure 65 : Edit Data Confirmation Page

**1.9.12 [TS-ED-GST-STEP12] – Edit Data Results Page – Step 12 (ibEditDataResults.action)**

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- **Database.** Database contains data for Bulk Payment – Edit Data Result details.

Performance Report: Goods and Services Tax (GST)

**Result**

Status	Pending Approval
Branch	A100
Organization Name	VOC DT ACADEMY SDN BHD VOC DT ACADEMY SDN BHD
Organization Code	A5683700

---

Payment Date	10/01/2024
File Format	IBG
Total No. of Record	3
Total No. of Transaction	1
Transaction Amount(RM)	1.00
Charges per Transaction(RM)	0.50
Total Charges(RM)	0.50
GST Charges	RM0.02
Grand Total(RM)	1.50
Initiated By	NURIN
Batch ID	20240109000000003422
Reference No.	202401090000000082034
Transaction Date	09/01/2024
Transaction Time	15:25:04

Show  entries
Search:

No.	Amount	Reference 1*	Payment Description	New I C	Old I C	Other Id	Name	Bank Code	Other Bank Account
1.	1.00	TEST						CIMB BANK BERHAD	99990999009

Showing 1 to 1 of 1 entries

Previous
1
Next

[Print receipt](#)
[Make Another Transfer](#)

Figure 66 : Edit Data Results page

**1.9.13 [TS-FU-GST-STEP13] – Edit Data Download Receipt PDF Page– Step 13 (ibEditDataReceiptPdfDownload.action)**


In this stage, the CDB connects to:

- a) DB

The DB fetches:

- BIB\_USER\_PRINT\_RECEIPT. BIB\_USER\_PRINT\_RECEIPT contains data for Edit Data details.


Performance Report: Goods and Services Tax (GST)


Tuesday, 9 Jan 2024 15:25:57

### Receipt

**Bulk Payment - Data Entry, A5683700, Record:3, Posting:10/01/2024**

<b>Status</b>	Pending Approval
<b>Branch</b>	A100
<b>Organization Name</b>	VOC DT ACADEMY SDN BHD VOC DT ACADEMY SDN BHD
<b>Organization Code</b>	A5683700
<b>Payment Date</b>	10/01/2024
<b>File Format</b>	IBG
<b>Total No. of Record</b>	3
<b>Total No. of Transaction</b>	1
<b>Transaction Amount(RM)</b>	1.00
<b>Charges per Transaction(RM)</b>	0.50
<b>Total Charges(RM)</b>	0.50
<b>GST Charges(RM)</b>	0.02
<b>Grand Total(RM)</b>	1.50
<b>Initiated By</b>	NURIN
<b>Batch ID</b>	20240109000000003422
<b>Reference No.</b>	0000082034
<b>Transaction Date</b>	09/01/2024
<b>Transaction Time</b>	15:25:04



Disclaimer: This is computer generated receipt. No signature is required

Figure 67 : Edit Data Pdf Receipt

### 1.10 Process of testing – Adding GST on BSNeBIZ Authorization – Verifier

This test scenario simulates concurrent users adding GST on BSNeBiz Authorization – Verifier service. This test case depends on below test case to be executed:

#### 1.10.1 [TS-AV-GST-STEP1] – BSNeBiz Login Page – Step 1 (commonLogin.action)

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- IB\_SERVICE\_INFO. IB\_SERVICE\_INFO contains some notes or announcements.

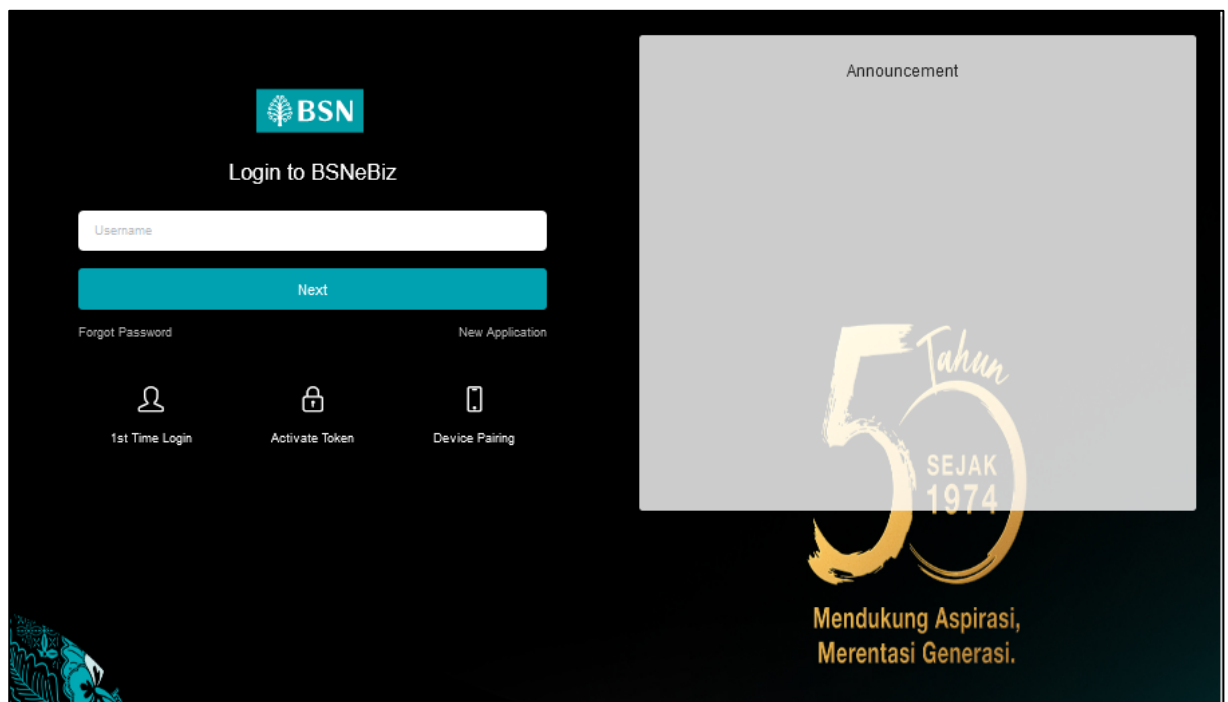


Figure 68 : BSNeBiz Login page

#### 1.10.2 [TS-AV-GST-STEP2] – BSNeBiz Login Page – Step 2 (ibPortalLoginUsername.action)

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- Database. Database contains data for BSNeBiz Login Details.

Performance Report: Goods and Services Tax (GST)

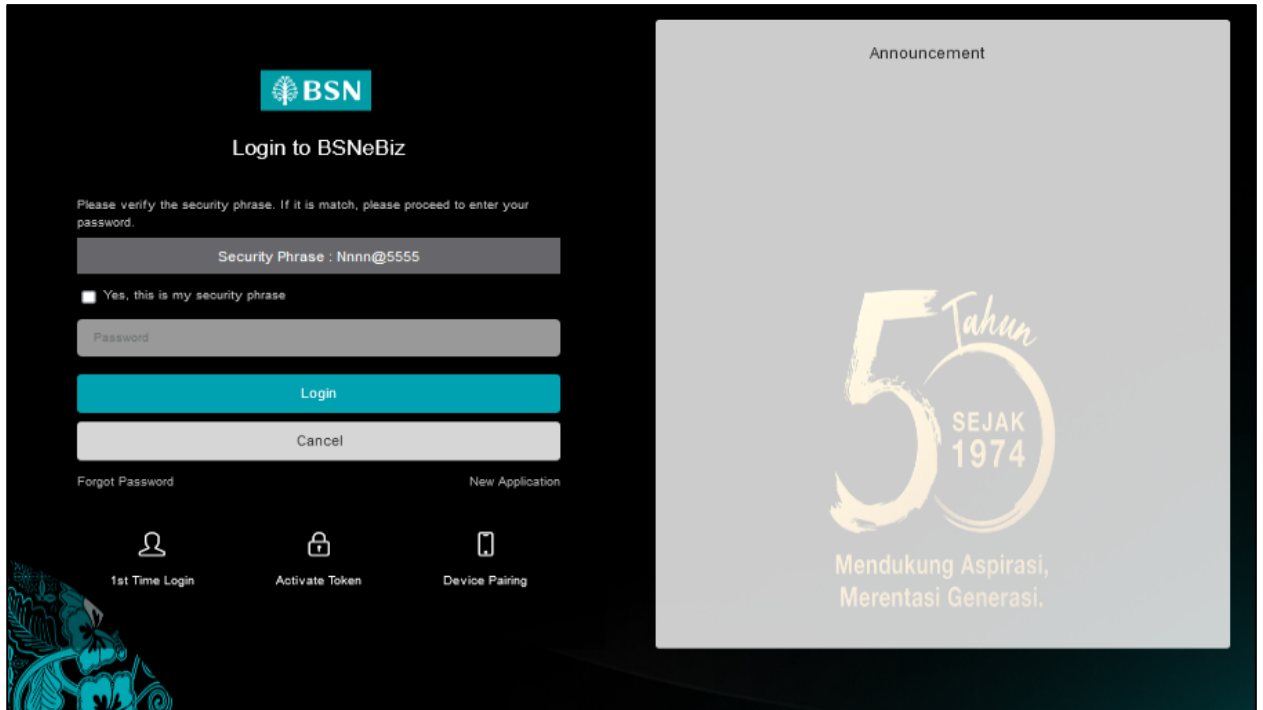


Figure 69 : BSNeBiz Login Page

**1.10.3 [TS-AV-GST-STEP3] – BSNeBiz Home Page – Step 3 (ibPortalLogin.action)**

In this stage, the CDB connects to BSNeBiz Authorization Verifier Home page:

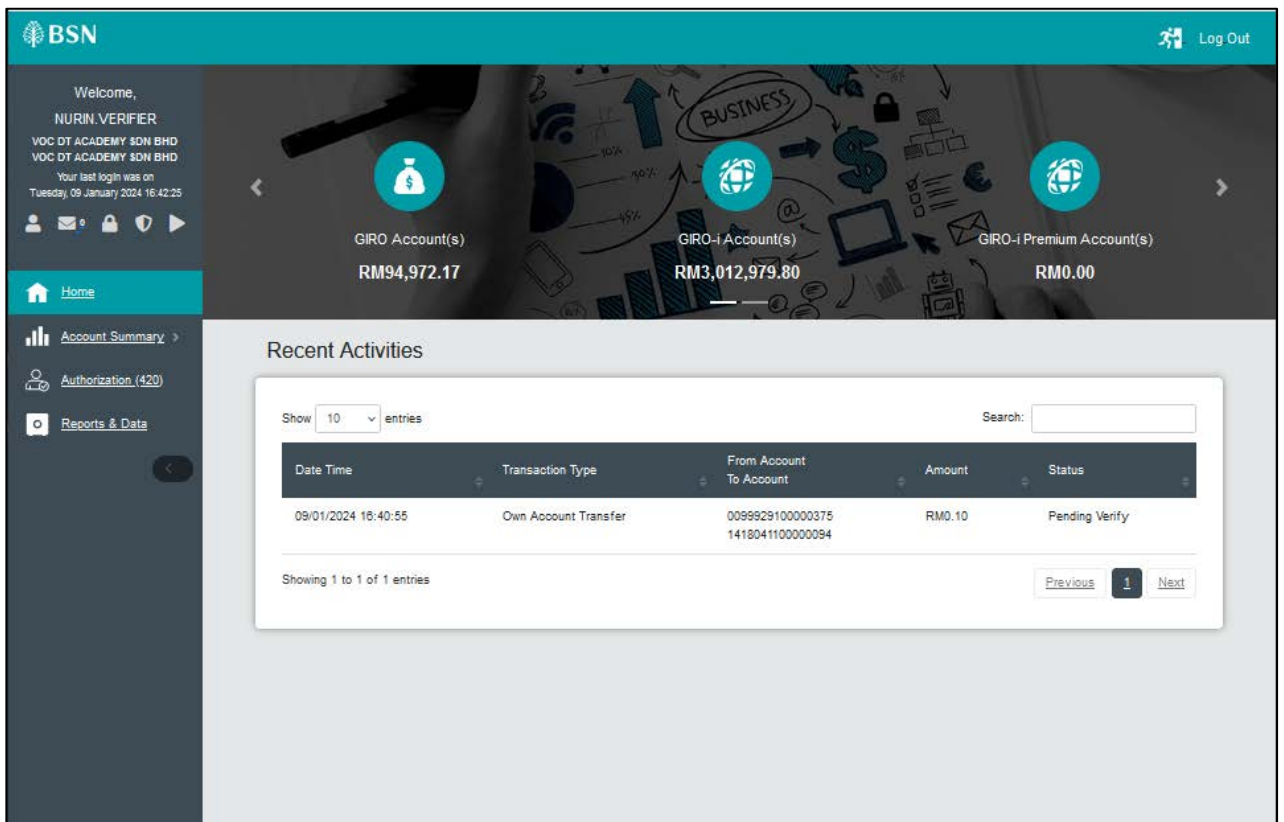


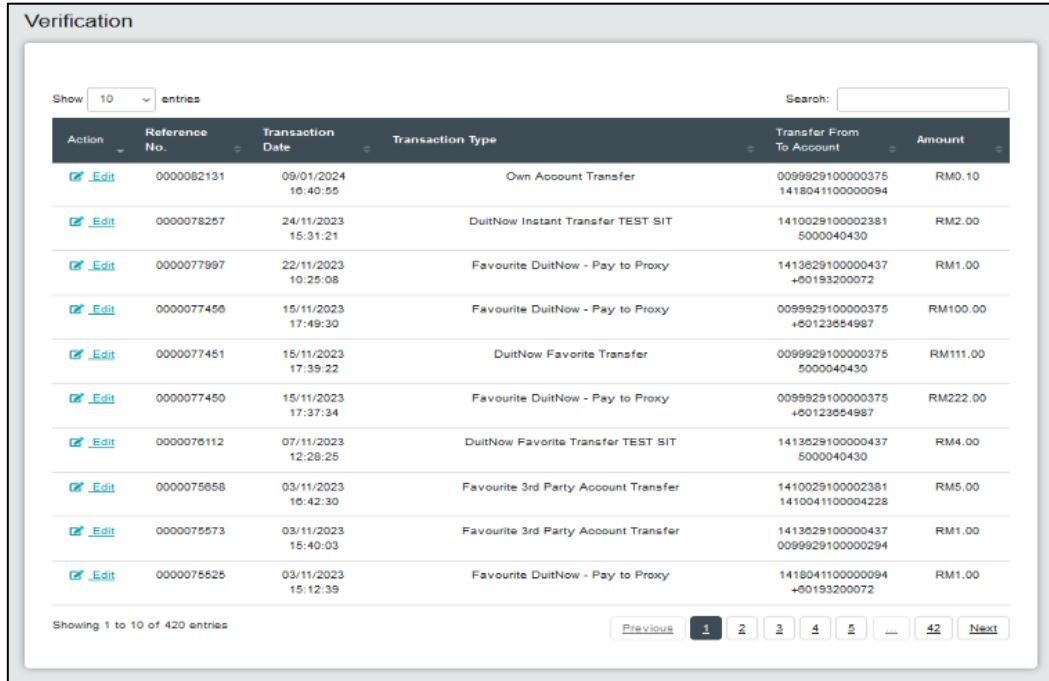
Figure 70: BSNeBiz Authorization Verifier Home page



Performance Report: Goods and Services Tax (GST)

**1.10.4 [TS-AV-GST-STEP4] – Verification Page – Step 4 (ibAuthorization)**

In this stage, the CDB connects to Authorization – Verification page:

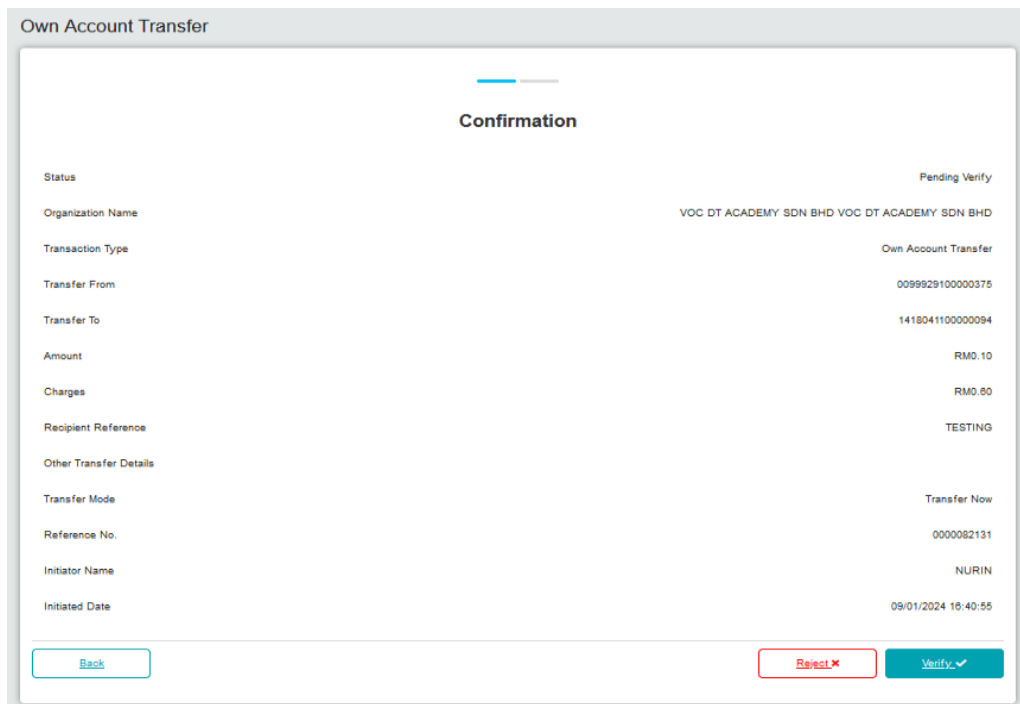


Action	Reference No.	Transaction Date	Transaction Type	Transfer From To Account	Amount
<a href="#">.Edit</a>	0000082131	09/01/2024 16:40:55	Own Account Transfer	0099929100000375 1418041100000094	RM0.10
<a href="#">.Edit</a>	0000078257	24/11/2023 15:31:21	DuitNow Instant Transfer TEST SIT	1410029100002381 5000040430	RM2.00
<a href="#">.Edit</a>	0000077997	22/11/2023 10:25:08	Favourite DuitNow - Pay to Proxy	1413629100000437 +60193200072	RM1.00
<a href="#">.Edit</a>	0000077456	15/11/2023 17:49:30	Favourite DuitNow - Pay to Proxy	0099929100000375 +60123654987	RM100.00
<a href="#">.Edit</a>	0000077451	15/11/2023 17:39:22	DuitNow Favorite Transfer	0099929100000375 5000040430	RM111.00
<a href="#">.Edit</a>	0000077450	15/11/2023 17:37:34	Favourite DuitNow - Pay to Proxy	0099929100000375 +60123654987	RM222.00
<a href="#">.Edit</a>	0000070112	07/11/2023 12:28:25	DuitNow Favorite Transfer TEST SIT	1413629100000437 5000040430	RM4.00
<a href="#">.Edit</a>	0000075658	03/11/2023 16:42:30	Favourite 3rd Party Account Transfer	1410029100002381 1410041100004228	RM5.00
<a href="#">.Edit</a>	0000075673	03/11/2023 15:40:03	Favourite 3rd Party Account Transfer	1413629100000437 0099929100000294	RM1.00
<a href="#">.Edit</a>	0000075525	03/11/2023 15:12:39	Favourite DuitNow - Pay to Proxy	1418041100000094 +60193200072	RM1.00

Figure 71 : Authorization – Verification page

**1.10.5 [TS-AV-GST-STEP5] – Confirmation Page – Step 5 (ibMaker)**

In this stage, the CDB connects to Authorization – Confirmation page:



**Own Account Transfer**

**Confirmation**

Status: Pending Verify

Organization Name: VOC DT ACADEMY SDN BHD VOC DT ACADEMY SDN BHD

Transaction Type: Own Account Transfer

Transfer From: 0099929100000375

Transfer To: 1418041100000094

Amount: RM0.10

Charges: RM0.80

Recipient Reference: TESTING

Other Transfer Details:

Transfer Mode: Transfer Now

Reference No.: 0000082131

Initiator Name: NURIN

Initiated Date: 09/01/2024 16:40:55

Buttons: [Back](#) [Reject](#) [Verify](#)

Figure 72 : Authorization - Confirmation page

### 1.10.6 [TS-AV-GST-STEP6] – Verifier Result Page – Step 6 (ibCheckerResults.action)

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- Database. Database contains data for Authorization – Verifier Result details.

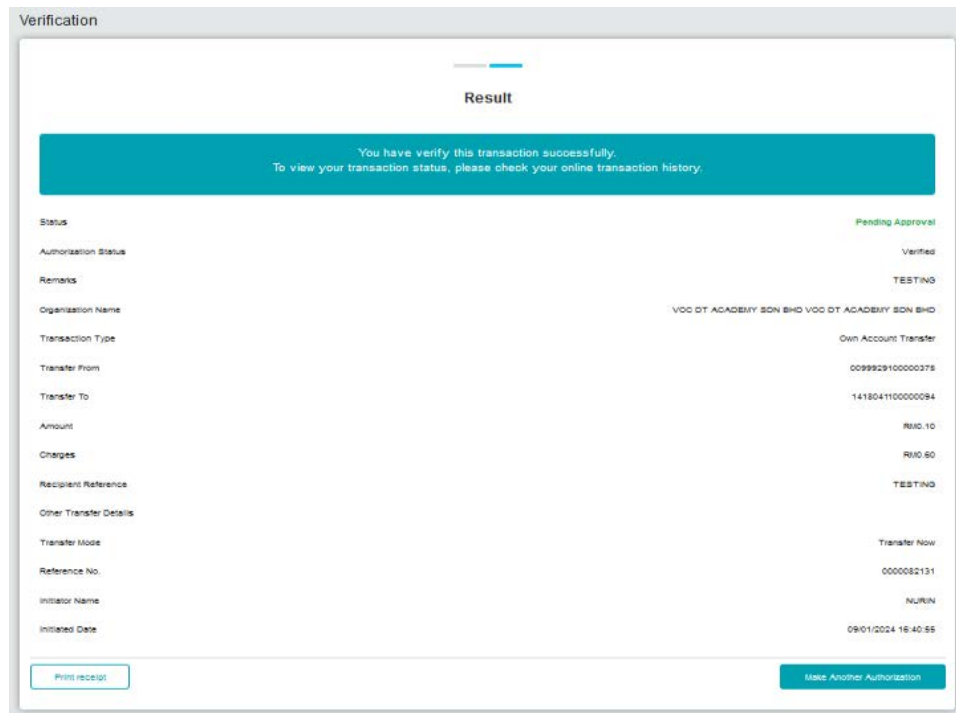


Figure 73 : Authorization - Verifier Result page

### 1.10.7 [TS-AV-GST-STEP7] – Verifier Download Receipt PDF Page – Step 7 (ibVerifierReceiptPdfDownload.action)


In this stage, the CDB connects to:

- a) DB

The DB fetches:

- BIB\_USER\_PRINT\_RECEIPT. BIB\_USER\_PRINT\_RECEIPT contains data for Authorization – Verifier details.


Performance Report: Goods and Services Tax (GST)

Tuesday, 9 Jan 2024 16:46:00

**Receipt**

**Own Account Transfer**

<b>Status</b>	Pending Approval
<b>Organization Name</b>	VOC DT ACADEMY SDN BHD VOC DT ACADEMY SDN BHD
<b>Transfer From</b>	*****0375
<b>Transfer To</b>	*****0094
<b>Amount</b>	RM0.10
<b>Charges</b>	RM0.60
<b>Recipient Reference</b>	TESTING
<b>Other Transfer Details</b>	-
<b>Transfer Mode</b>	Transfer Now
<b>Reference No.</b>	0000082131
<b>Transaction Date</b>	09/01/2024
<b>Transaction Time</b>	16:40:55



**Disclaimer: This is computer generated receipt. No signature is required**

Figure 74 : Authorization - Verifier Pdf Receipt

### 1.11 Process of testing – Adding GST on BSNeBiz Authorization – Approver

This test scenario simulates concurrent users adding GST on BSNeBiz Authorization – Approver service. This test case depends on below test case to be executed:

#### 1.11.1 [TS-AA-GST-STEP1] – BSNeBiz Login Page – Step 1 (commonLogin.action)

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- IB\_SERVICE\_INFO. IB\_SERVICE\_INFO contains some notes or announcements.

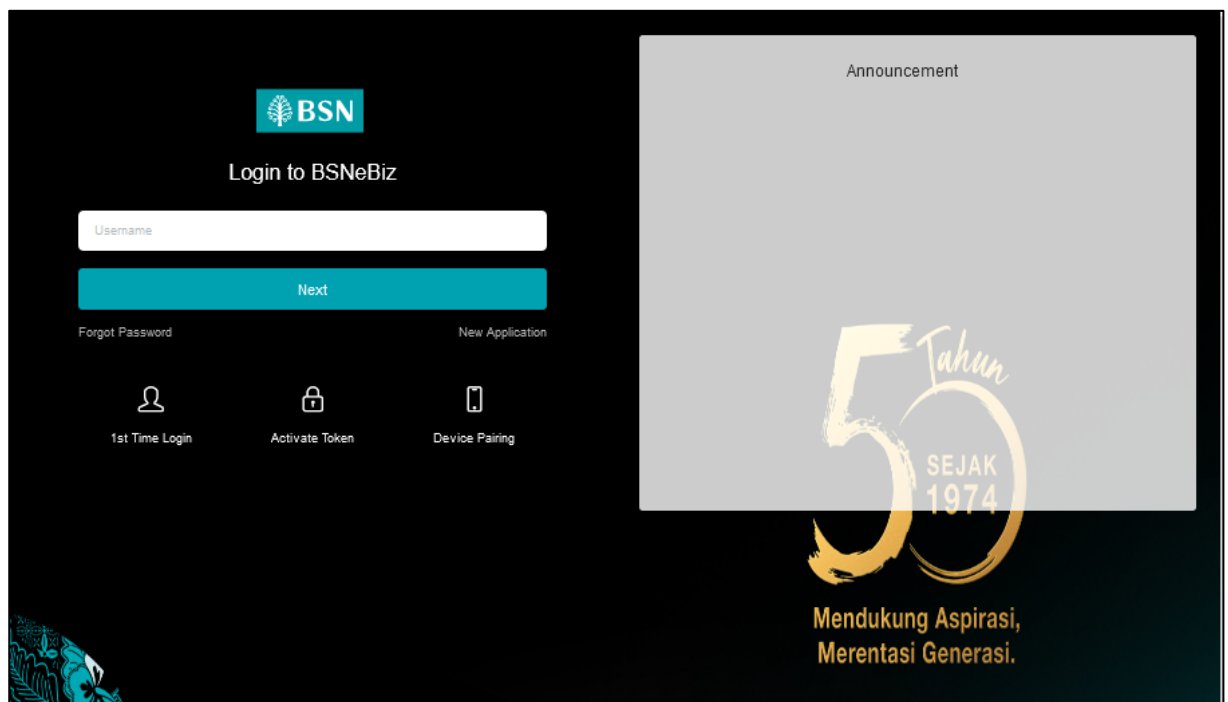


Figure 75 : BSNeBiz Login page

#### 1.11.2 [TS-AA-GST-STEP2] – BSNeBiz Login Page – Step 2 (ibPortalLoginUsername.action)

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- Database. Database contains data for BSNeBiz Login Details.

Performance Report: Goods and Services Tax (GST)

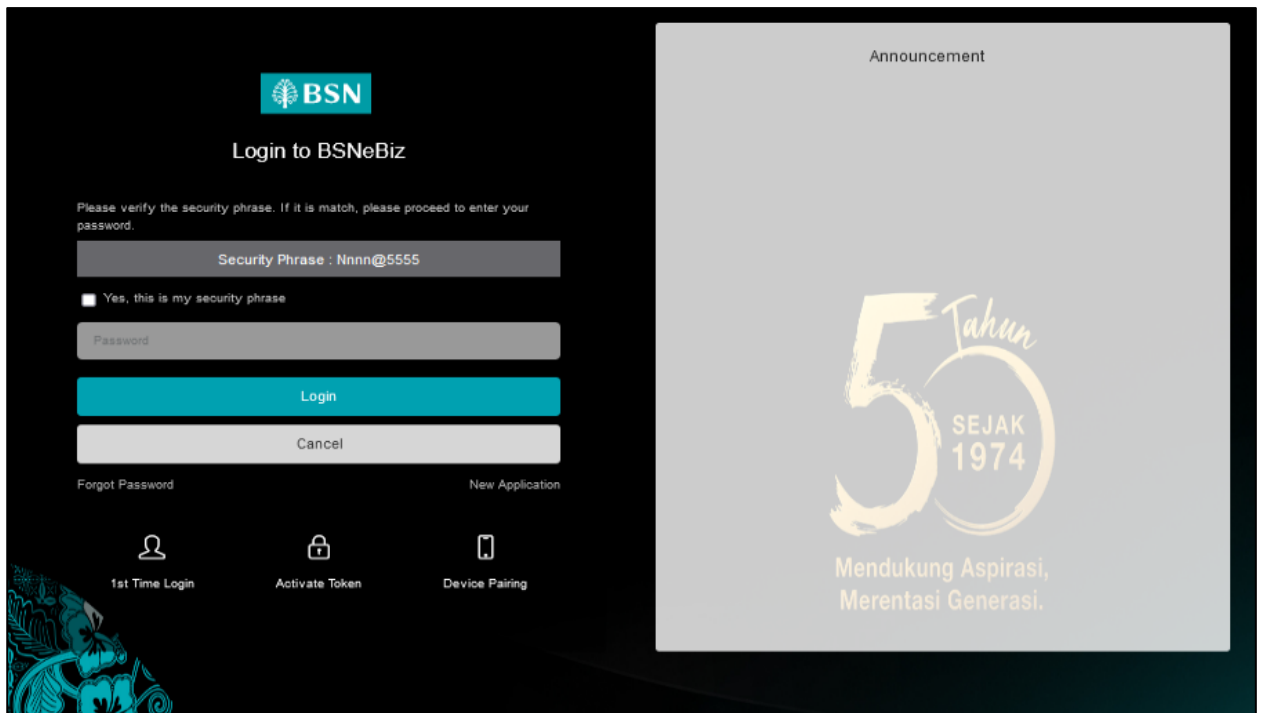


Figure 76 : BSNeBiz Login Page

1.11.3 [TS-AA-GST-STEP3] – BSNeBiz Home Page – Step 3 (ibPortalLogin.action)

In this stage, the CDB connects to BSNeBiz Authorization Approver Home page:

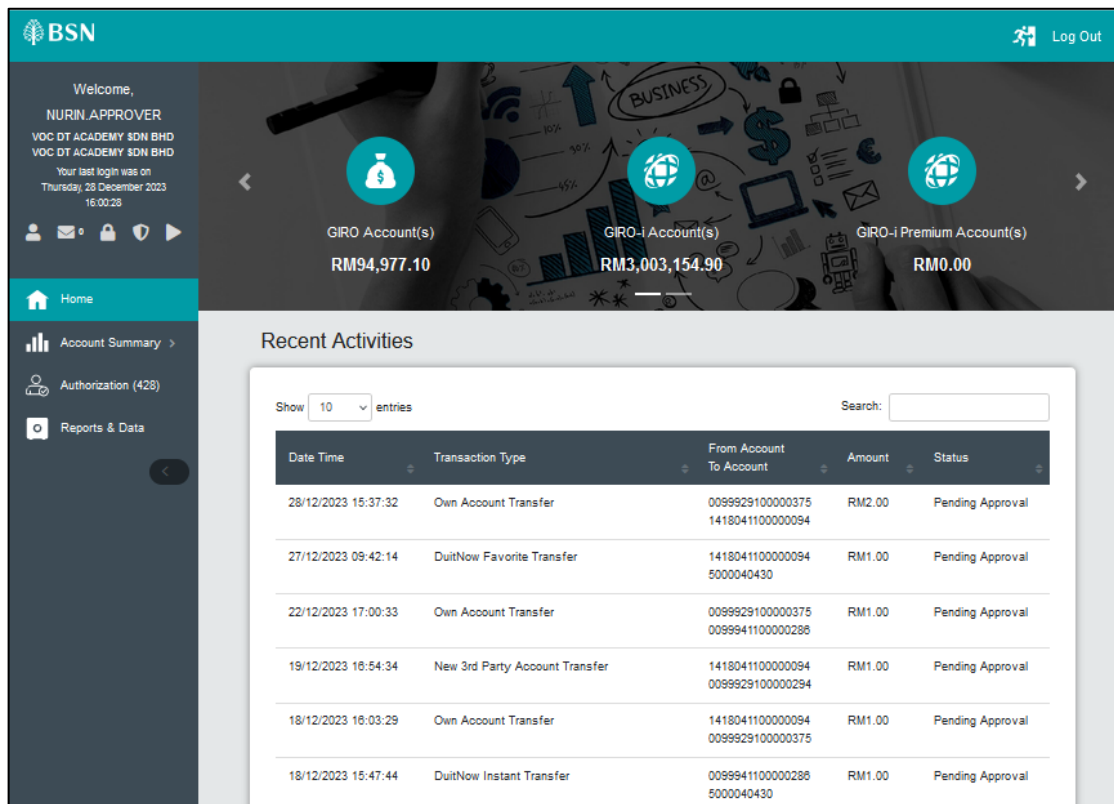


Figure 77 : Authorization - Approver BSNeBiz Homepage

Performance Report: Goods and Services Tax (GST)

**1.11.4 [TS-AA-GST-STEP4] – Approval Page – Step 4 (ibAuthorization)**

In this stage, the CDB connects to Authorization – Approval page:

Approval

Show 10 entries Search:

Action	Reference No.	Transaction Date	Transaction Type	Transfer From To Account	Amount
<a href="#">Edit</a>	0000081082	28/12/2023 15:37:32	Own Account Transfer	0099929100000375 1418041100000094	RM2.00
<a href="#">Edit</a>	0000080981	27/12/2023 09:42:14	DuitNow Favorite Transfer	1418041100000094 5000040430	RM1.00
<a href="#">Edit</a>	0000080938	22/12/2023 17:00:33	Own Account Transfer	0099929100000375 0099941100000288	RM1.00
<a href="#">Edit</a>	0000080544	19/12/2023 18:54:34	New 3rd Party Account Transfer	1418041100000094 0099929100000294	RM1.00
<a href="#">Edit</a>	0000080367	18/12/2023 18:03:29	Own Account Transfer	1418041100000094 0099929100000375	RM1.00
<a href="#">Edit</a>	0000080355	18/12/2023 15:47:44	DuitNow Instant Transfer	0099941100000288 5000040430	RM1.00
<a href="#">Edit</a>	0000080061	15/12/2023 15:59:21	Favourite Interbank GIRO Transfer	14100291000002381 1234567891011000	RM2.00
<a href="#">Edit</a>	0000079740	14/12/2023 18:56:56	Own Account Transfer	14100291000002381 1418041100000094	RM6.00
<a href="#">Edit</a>	0000079719	13/12/2023 15:03:22	Favourite Interbank GIRO Transfer	1418041100000094 1234567891011000	RM1.00
<a href="#">Edit</a>	0000079678	13/12/2023 10:52:10	Favourite JomPAY	0099929100000375 8881015405911	RM2.00

Showing 1 to 10 of 428 entries Previous 1 2 3 4 5 ... 43 Next

Figure 78 : Authorization – Verification page

**1.11.5 [TS-AA-GST-STEP5] – Confirmation Page – Step 5 (ibMaker)**

In this stage, the CDB connects to Authorization – Confirmation page:

Performance Report: Goods and Services Tax (GST)

**Own Account Transfer**

**Confirmation**

---

Status	Pending Approval
Organization Name	VOC DT ACADEMY SDN BHD VOC DT ACADEMY SDN BHD
Transaction Type	Own Account Transfer
Transfer From	0099929100000375
Transfer To	1418041100000094
Amount	RM2.00
Charges	RM0.60
Recipient Reference	TESTING
Other Transfer Details	
Transfer Mode	Transfer Now
Reference No.	0000081082
Initiator Name	NURIN
Initiated Date	28/12/2023 15:37:32

Back

Reject ✖

Approve ✔

Figure 79 : Authorization - Confirmation page

**1.11.6 [TS-AA-GST-STEP6] – Approver Result Page – Step 6 (ibCheckerResults.action)**

In this stage, the CDB connects to:

- a) DB

The DB fetches:

- Database. Database contains data for Authorization – Approver Result details.

Performance Report: Goods and Services Tax (GST)

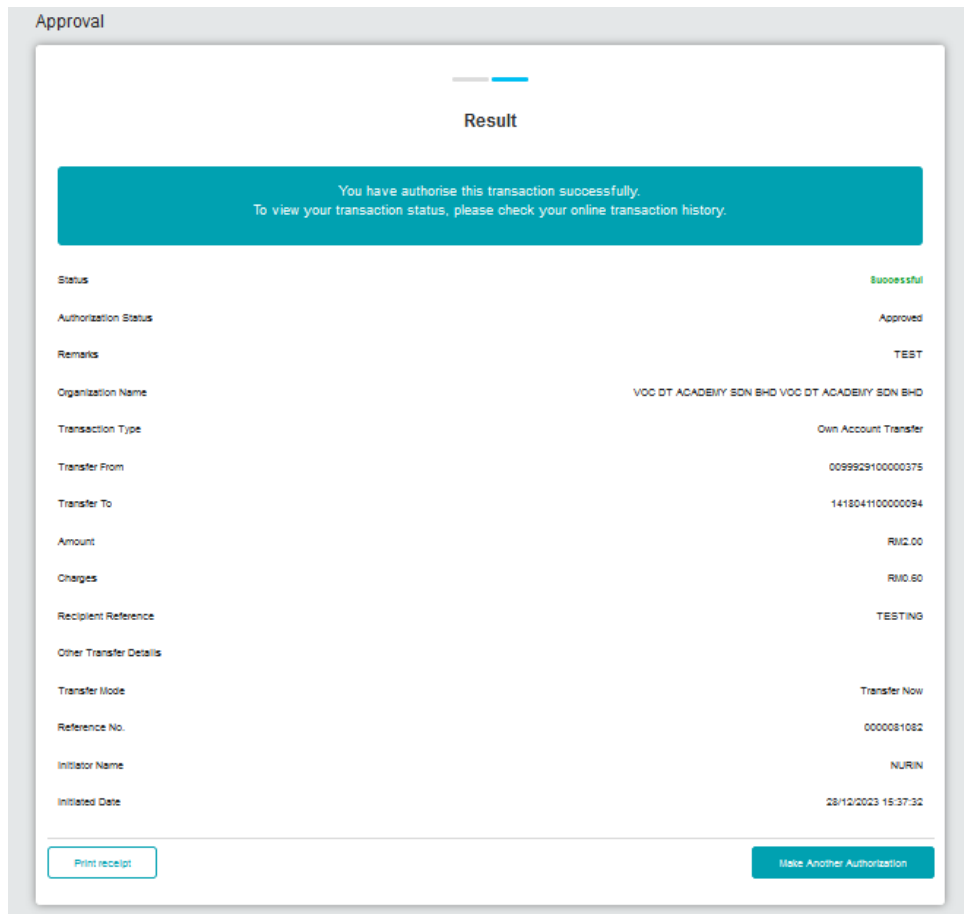


Figure 80 : Authorization - Approver Result page

**1.11.7 [TS-AA-GST-STEP7] – Approver Download Receipt PDF Page – Step 7 (ibApproverReceiptPdfDownload.action)**


In this stage, the CDB connects to:

- a) DB

The DB fetches:

- BIB\_USER\_PRINT\_RECEIPT. BIB\_USER\_PRINT\_RECEIPT contains data for Authorization – Approver details.




Thursday, 28 Dec 2023 16:30:06

**Receipt**

**Own Account Transfer**

<b>Status</b>	Successful
<b>Organization Name</b>	VOC DT ACADEMY SDN BHD VOC DT ACADEMY SDN BHD
<b>Transfer From</b>	*****0375
<b>Transfer To</b>	*****0094
<b>Amount</b>	RM2.00
<b>Charges</b>	RM0.60
<b>Recipient Reference</b>	TESTING
<b>Other Transfer Details</b>	-
<b>Transfer Mode</b>	Transfer Now
<b>Reference No.</b>	0000081082
<b>Transaction Date</b>	28/12/2023
<b>Transaction Time</b>	16:28:40



**Disclaimer: This is computer generated receipt. No signature is required**

Figure 81 : Authorization - Approver Pdf Receipt

### 1.12 Process of testing – Adding GST on Transfer & Payment

This test scenario simulates concurrent users adding GST on Transfer & Payment Mobile BSNeBiz service. This test case depends on below test case to be executed:

#### 1.12.1 [TS-MB-GST-STEP1] – Mobile BSNeBiz Login Page – Step 1 (Login\_Generate)

In this stage, the CDB connects to Mobile BSNeBiz Login page:

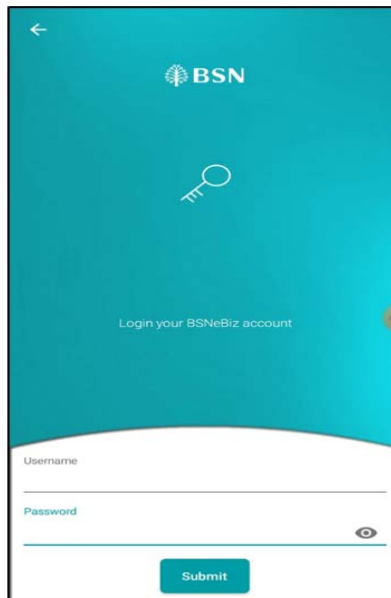


Figure 82 : Mobile BSNeBiz Login page

#### 1.12.2 [TS-MB-GST-STEP2] – Mobile BSNeBiz Home Page – Step 2 (Homepage\_Generate)

In this stage, the CDB connects to Mobile BSNeBiz Home page:

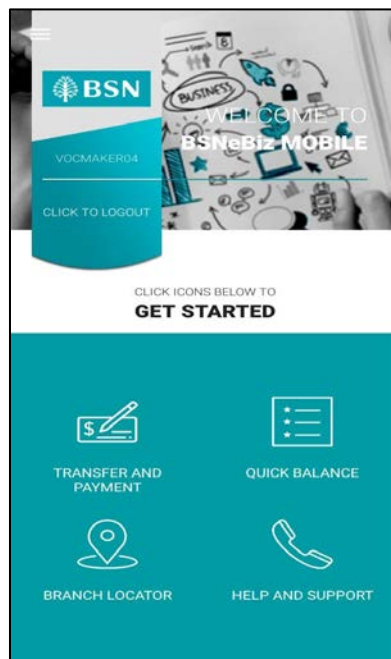


Figure 83 : Mobile BSNeBiz Home page

### 1.12.3 [TS-MB-GST-STEP3] – Transfer & Payment Page – Step 3 (Transfer\_Generate)

In this stage, the CDB connects to Mobile BSNeBiz Transfer & Payment page:

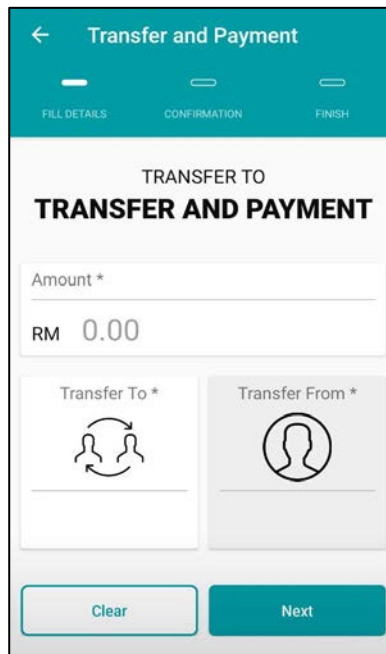


Figure 84 : Mobile BSNeBiz Transfer & Payment page

### 1.12.4 [TS-MB-GST-STEP4] – Transfer To Page – Step 4 (Transfer\_Generate)

In this stage, the CDB connects to Mobile BSNeBiz Transfer To page:

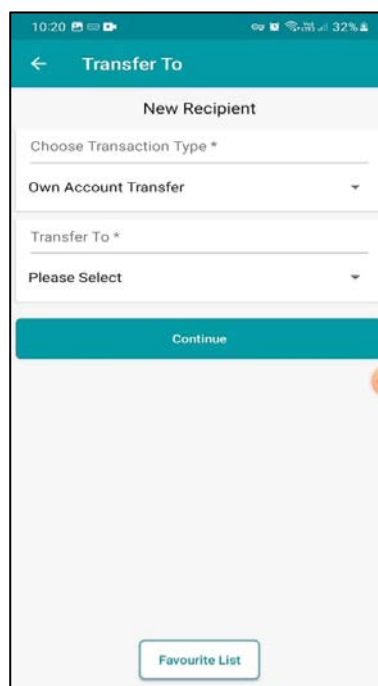
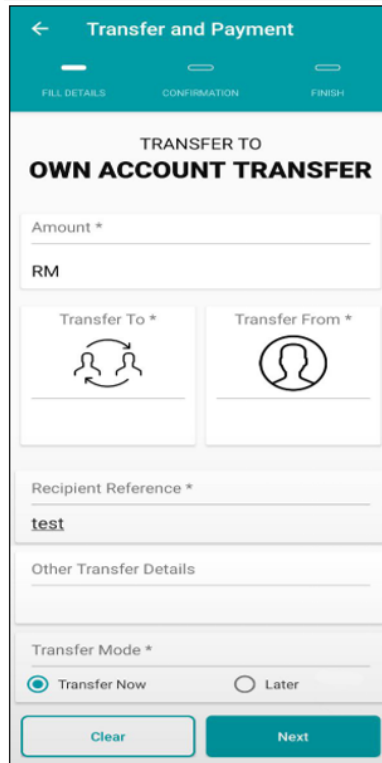


Figure 85 : Mobile BSNeBiz Transfer To page

### 1.12.5 [TS-MB-GST-STEP5] – Transfer Details Page – Step 5 (TransferDetails\_Generate)

In this stage, the CDB connects to Mobile BSNeBiz Transfer Details page:



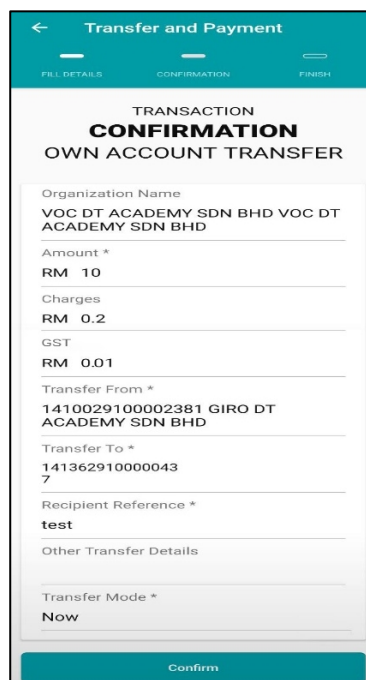
The screenshot shows the 'Transfer and Payment' screen with the following fields and options:

- Header: Transfer and Payment
- Progress: FILL DETAILS (active), CONFIRMATION, FINISH
- Title: TRANSFER TO OWN ACCOUNT TRANSFER
- Amount \*: RM
- Transfer To \*: (Icon of two people)
- Transfer From \*: (Icon of one person)
- Recipient Reference \*: test
- Other Transfer Details
- Transfer Mode \*:
  - Transfer Now
  - Later
- Buttons: Clear, Next

Figure 86 : Mobile BSNeBiz Transfer Details page

### 1.12.6 [TS-MB-GST-STEP6] – Confirmation Page – Step 6 (Confirmation\_Generate)

In this stage, the CDB connects to Mobile BSNeBiz Transfer Confirmation page:



The screenshot shows the 'Transfer and Payment' screen with the following fields and options:

- Header: Transfer and Payment
- Progress: FILL DETAILS, CONFIRMATION (active), FINISH
- Title: TRANSACTION CONFIRMATION OWN ACCOUNT TRANSFER
- Organization Name: VOC DT ACADEMY SDN BHD VOC DT ACADEMY SDN BHD
- Amount \*: RM 10
- Charges: RM 0.2
- GST: RM 0.01
- Transfer From \*: 1410029100002381 GIRO DT ACADEMY SDN BHD
- Transfer To \*: 141362910000043 7
- Recipient Reference \*: test
- Other Transfer Details
- Transfer Mode \*: Now
- Button: Confirm

Figure 87 : Mobile BSNeBiz Transfer Confirmation page

### 1.12.7 [TS-MB-GST-STEP7] – Pending Result Page – Step 7 (Pending\_Generate)

In this stage, the CDB connects to Mobile BSNeBiz Transfer Pending Result Pdf page:

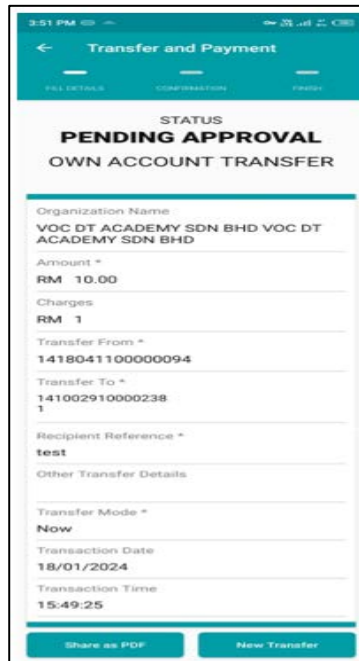


Figure 88 : Mobile BSNeBiz Transfer Pending Result

### 1.12.8 [TS-MB-GST-STEP8] – Share PDF Receipt Page – Step 8 (PdfReceipt\_Generate)

In this stage, the CDB connects to Mobile BSNeBiz Transfer Pdf Receipt page:



Figure 89 : Mobile BSNeBiz PDF Receipt

### **1.13 Tools: Apache JMeter 5.1.1 r1855137**

Apache JMeter is pure Java open-source software with the purpose of load testing functional behaviour and measuring performance of web applications. This app is chosen because it is platform independent, easy to install and provides better visualization on test results.

## 2. Business Processes Involved

### BSNeBiz – Adding GST on Transfer & Payment for Own Account, Third Party & Interbank Flow Diagram

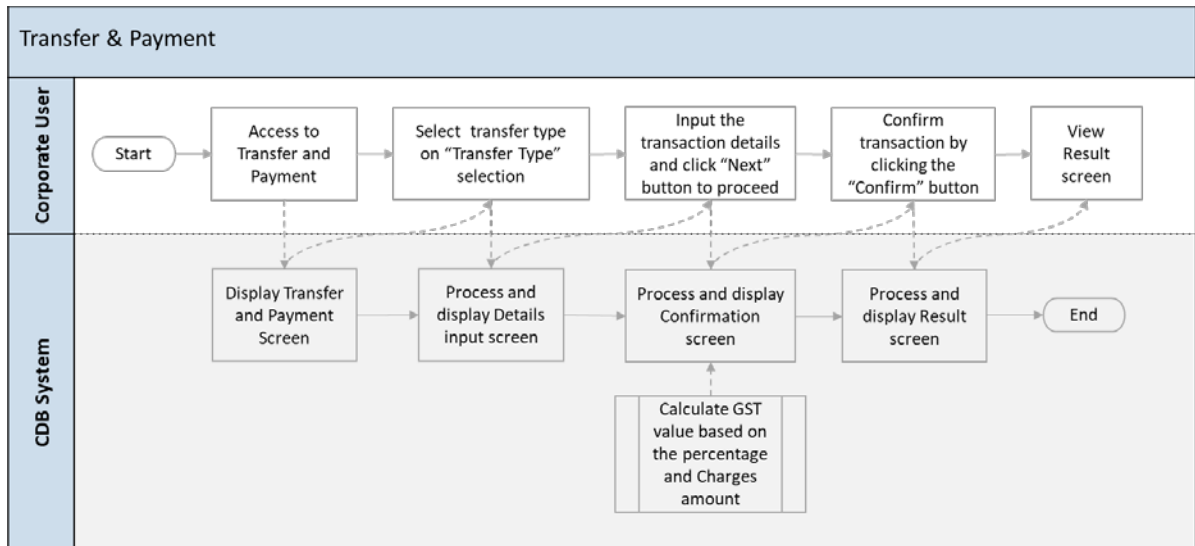


Diagram 1: Adding GST on Transfer & Payment Flow Diagram

### BSNeBiz – Adding GST on JomPay Flow Diagram

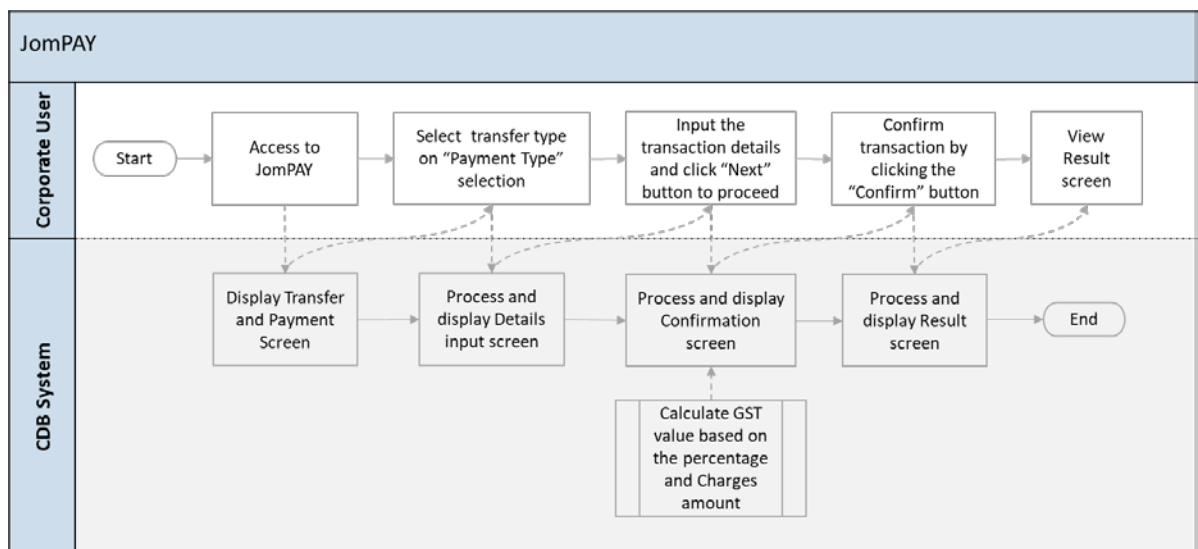


Diagram 2: Adding GST on JomPay Flow Diagram

Performance Report: Goods and Services Tax (GST)

**BSNeBiz – Adding GST on Bulk Payment – File Upload Flow Diagram**

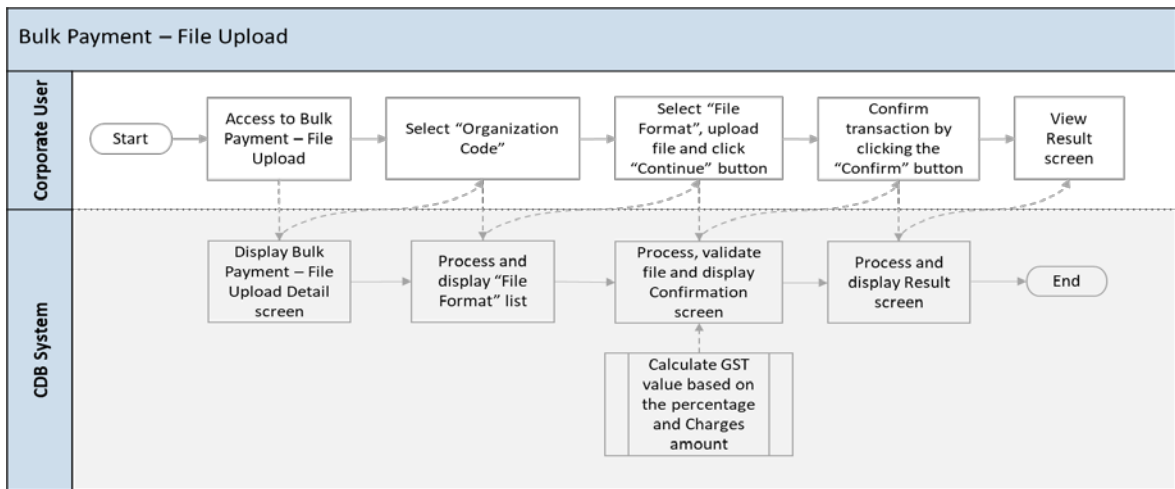


Diagram 3 : Adding GST on Bulk Payment - File Upload Flow Diagram

**BSNeBiz – Adding GST on Bulk Payment – Data Entry (New Data Entry) Flow Diagram**

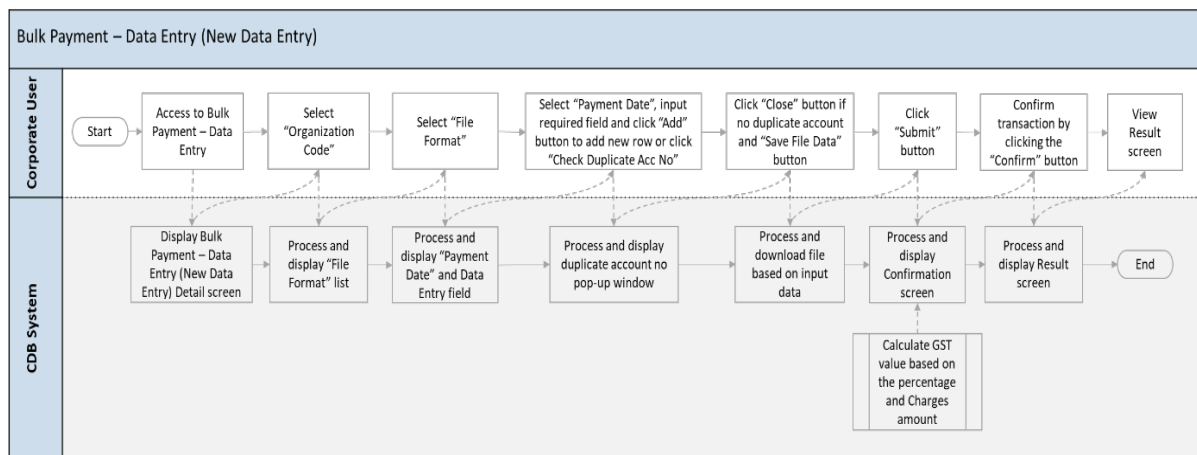


Diagram 4 : Adding GST on Bulk Payment – Data Entry (New Data Entry) Flow Diagram

**BSNeBiz – Adding GST on Bulk Payment – Data Entry (Edit Data Entry) Flow Diagram**

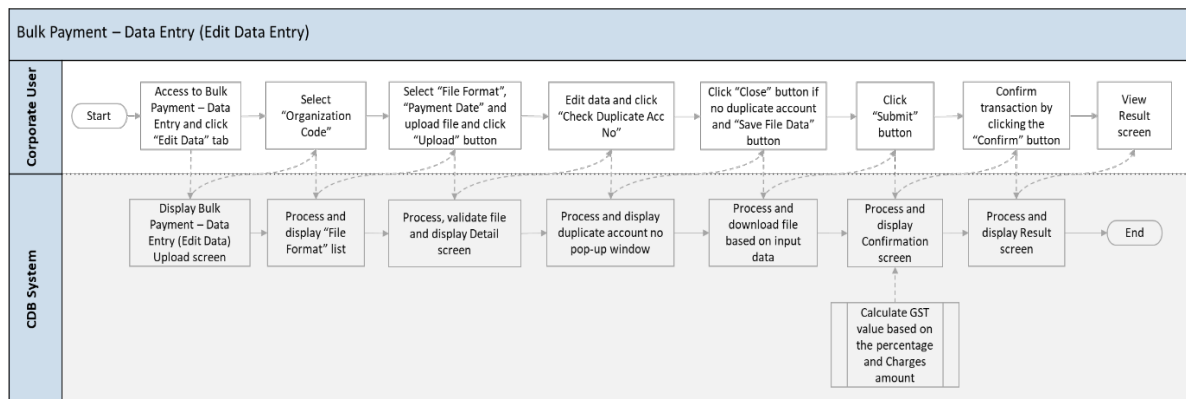


Diagram 5 : Adding GST on Bulk Payment – Data Entry (Edit Data Entry) Flow Diagram



**BSNeBiz – Adding GST on Authorization – Verifier Flow Diagram**

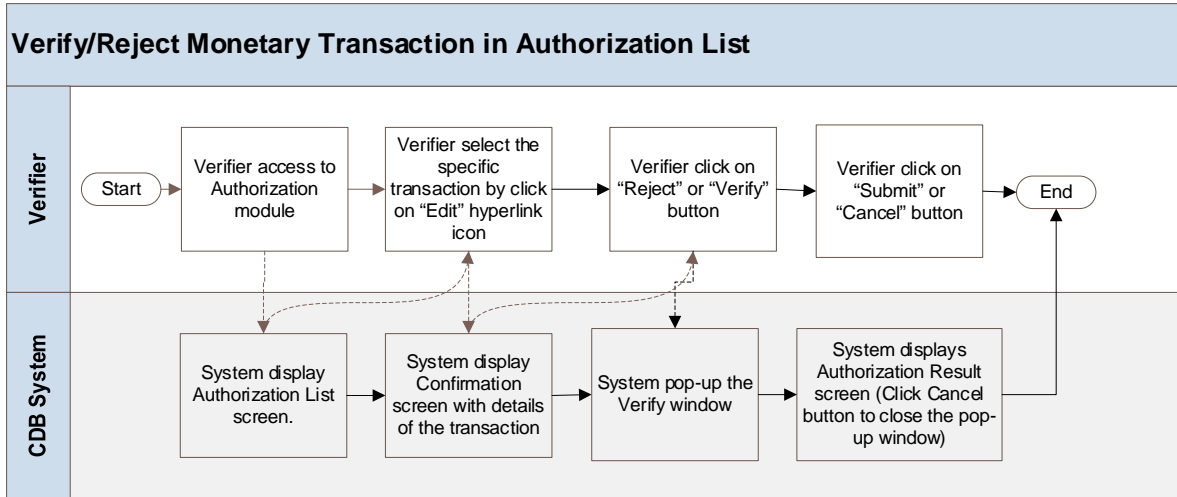


Diagram 6 : Adding GST on Authorization - Verifier Flow Diagram

**BSNeBiz – Adding GST on Authorization – Approver Flow Diagram**

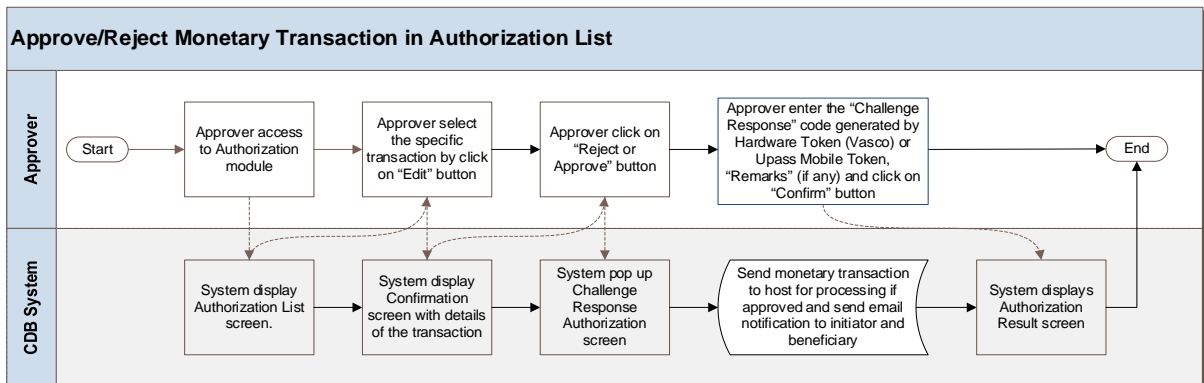


Diagram 7 : Adding GST on Authorization - Approver Flow Diagram

**Mobile BSNeBiz – Adding GST on Transfer & Payment Flow Diagram**

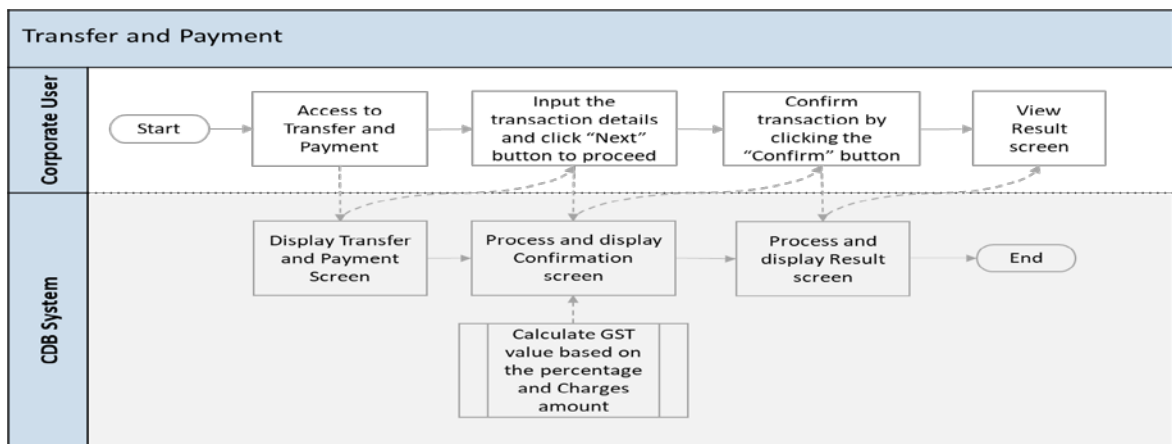


Diagram 8 : Mobile BSNeBiz - Adding GST on Transfer & Payment Flow Diagram

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## Performance Report: Goods and Services Tax (GST)

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This is a simplified flow diagram of load test flow scenarios representing Corporate Digital Banking Customers performing BSNeBiz Adding GST on Transfer & Payment Own Account process, BSNeBiz Adding GST on Transfer & Payment process for Third Party, BSNeBiz Adding GST on Transfer & Payment process for Interbank, BSNeBiz Adding GST on JomPay process, BSNeBiz Adding GST on Bulk Payment – File Upload process, BSNeBiz Adding GST on Bulk Payment – Data Entry (New Data Entry) process, BSNeBiz Adding GST on Bulk Payment – Data Entry (Edit Data Entry) process, BSNeBiz Adding GST on Authorization Verifier process, BSNeBiz Adding GST on Authorization Approver process and Mobile BSNeBiz Adding GST on Transfer & Payment process.

### 3. Performance Test Environment

Test Region	:	SIT Environment
Instance Testing	:	BSNeBIZ – SIT Environment Web : <a href="http://58.27.45.179:8080/bsn-cdb-sit/commonLogin">http://58.27.45.179:8080/bsn-cdb-sit/commonLogin</a>
Apache JMeter	:	Version 5.6.2
Java Version	:	JDK 1.8

#### 4. Test Scenario & Test Result with Explanation in Layman Terms

**Testing Objective:**

Bank would like to establish baseline (no. of concurrent users) of: 20 users

- A. BSNeBiz Adding GST on Transfer & Payment for Own Account Transfer
- B. BSNeBiz Adding GST on Transfer & Payment for Third Party Transfer
- C. BSNeBiz Adding GST on Transfer & Payment for Interbank Transfer
- D. BSNeBiz Adding GST on JomPay
- E. BSNeBiz Adding GST on Bulk Payment – File Upload
- F. BSNeBiz Adding GST on Bulk Payment – Data Entry (New Data Entry)
- G. BSNeBiz Adding GST on Bulk Payment – Data Entry (Edit Data Entry)
- H. BSNeBiz Adding GST on Authorization – Verifier
- I. BSNeBiz Adding GST on Authorization – Approver
- J. Mobile BSNeBiz Adding GST on Transfer & Payment

##### A. BSNeBIZ Adding GST on Transfer & Payment for Own Account Transfer

To simulate the maximum number of requests to perform BSNeBIZ Adding GST on Transfer & Payment for Own Account Transfer with goal of:

- Error < 1%.
- Criteria of throughput (second / request) & TPS for each flow:
  - commonLogin.action <5 second or >0.2 TPS
    - To proceed login process
  - ibPortalLoginUsername.action <5 second or >0.2 TPS
    - To proceed login process
  - ibPortalLogin.action <5 second or >0.2 TPS
    - To load the BSNeBiz home page
  - ibTransferInit <5 second or >0.2 TPS
    - To load the Transfer & Payment page
  - ibTransferForward.action <5 second or >0.2 TPS
    - To load the Transfer & Payment details page and select Transfer Type
  - ibOwnTransferForward.action <5 second or >0.2 TPS
    - To load the Own Account Transfer details page
  - ibTransferConfirm.action <5 second or >0.2 TPS
    - To load the Own Account Transfer Confirmation details page
  - ibTransferResults.action <5 second or >0.2 TPS
    - To load the Own Account Transfer Result page
  - ibTransferReceiptPdfDownload.action <5 second or >0.2 TPS
    - To download the Own Account Transfer receipt in pdf format

##### I. Perform login service for 20 concurrent users

Performance Report: Goods and Services Tax (GST)

**-Jmeter Execution Date: 19/01/2024**

- Test Criteria
  - Perform transaction for 20 concurrent users for 1 loop
- Summary of Testing
 

The performance test result has passed the test against the benchmarks that have been set above (such as number of concurrent users, error percentage, and throughput).
- Declaration
  - `ibTransferReceiptPdfDownload.action` caused error because of there is no POST action to navigate to the next page when the Print Receipt button is click.
  - Therefore, `ibTransferReceiptPdfDownload.action` have error in test result.
- Test Result
  - The JMeter result shows that the system can support 20 concurrent users to perform transactions with 11.11% error. It takes 58 seconds to complete the transaction process for all users.
  - Throughput (min/request)
 

The system is capable of completing a http request within 20.8 s (fastest) and 20.8 s (slowest).
  - TPS (Transaction per Second)
 

The system is capable of performing 0.048 TPS (fastest) and 0.048 TPS (slowest).
  - The reasonable ramp-up period without any error is 60 seconds for 20 users.

Summary Report

Name: Summary Report

Comments:

Write results to file / Read from file

Filename:   Log/Display Only:  Errors  Successes

Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
commonLogin.action	20	259	0	2765	591.80	0.00%	20.8/min	0.86	0.15	2543.0
ibPortalLoginUsername.action	20	139	0	917	187.00	0.00%	20.8/min	3.01	0.23	8877.0
ibPortalLogin.action	20	101	0	603	116.13	0.00%	20.8/min	3.01	0.23	8877.0
ibTransferInit	20	70	0	311	56.31	0.00%	20.8/min	3.01	0.20	8877.0
ibTransferForward.action	20	72	0	145	18.57	0.00%	20.8/min	3.01	0.30	8877.0
ibOwnTransferForward.action	20	65	0	84	7.14	0.00%	20.8/min	3.01	0.26	8877.0
ibTransferConfirm.action	20	66	0	84	9.24	0.00%	20.8/min	3.01	0.34	8877.0
ibTransferResults.action	20	65	0	94	10.42	0.00%	20.8/min	3.01	0.25	8877.0
ibTransferReceiptPdfDownload.acti...	20	57	0	84	10.44	100.00%	20.8/min	0.26	0.23	773.0
TOTAL	180	99	0	2765	220.21	11.11%	3.1/sec	21.96	2.18	7272.8

Image 1 : JMeter Test Result - 20 BSNeBiz users for Transfer & Payment for Own Account Transfer

## Performance Report: Goods and Services Tax (GST)

**B. BSNeBIZ Adding GST on Transfer & Payment for Third Party**

To simulate the maximum number of requests to perform BSNeBIZ Adding GST on Transfer & Payment for Third Party with goal of:

- Error < 1%.
- Criteria of throughput (second / request) & TPS for each flow:
  - commonLogin.action <5 second or >0.2 TPS
    - To proceed login process
  - ibPortalLoginUsername.action <5 second or >0.2 TPS
    - To proceed login process
  - ibPortalLogin.action <5 second or >0.2 TPS
    - To load the BSNeBiz home page
  - ibTransferInit <5 second or >0.2 TPS
    - To load the Transfer & Payment page
  - ibTransferForward.action <5 second or >0.2 TPS
    - To load the Transfer & Payment details page and select Transfer Type
  - ibThirdPartyTransferConfirm.action <5 second or >0.2 TPS
    - To load the Third Party Transfer Confirmation details page
  - ibThirdPartyTransferResults.action <5 second or >0.2 TPS
    - To load the Third Party Transfer Result page
  - ibThirdPartyTransferReceiptPdfDownload.action <5 second or >0.2 TPS
    - To download the Third Party Transfer receipt in pdf format

**I. Perform login service for 20 concurrent users**

Performance Report: Goods and Services Tax (GST)

**-Jmeter Execution Date: 29/01/2024**

- Test Criteria
  - Perform transaction for 20 concurrent users for 1 loop
- Summary of Testing
 

The performance test result has passed the test against the benchmarks that have been set above (such as number of concurrent users, error percentage, and throughput).
- Declaration
  - Therefore, ibThirdPartyTransferConfirm.action and ibThirdPartyTransferResults.action cause error due to the requests not being found at the redirected location when new URL is redirected
  - Therefore, ibThirdPartyTransferConfirm.action and ibThirdPartyTransferResults.action have error in test result.
  - ibThirdPartyTransferReceiptPdfDownload.action caused error because of there is no POST action to navigate to the next page when the Print Receipt button is click.
  - Therefore, ibThirdPartyTransferReceiptPdfDownload.action have error in test result.
- Test Result
  - The JMeter result shows that the system can support 20 concurrent users to perform transactions with 37.5% error. It takes 57 seconds to complete the transaction process for all users.
  - Throughput (min/request)
 

The system is capable of completing a http request within 21.1 s (fastest) and 21.0 s (slowest).
  - TPS (Transaction per Second)
 

The system is capable of performing 0.0473 TPS (fastest) and 0.0476 TPS (slowest).
  - The reasonable ramp-up period without any error is 60 seconds for 20 users.

Summary Report

Name: Summary Report

Comments:

Write results to file / Read from file

Filename:    Log/Display Only:  Errors  Successes

Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
commonLogin.action	20	96	0	152	13.67	0.00%	21.0/min	0.87	0.19	2543.0
ibPortallLoginUsername.action	20	110	0	195	24.97	0.00%	21.0/min	3.04	0.25	8877.0
ibPortallLogin.action	20	82	0	173	30.03	0.00%	21.1/min	3.04	0.25	8877.0
ibTransferInit	20	55	0	82	10.42	0.00%	21.1/min	3.04	0.22	8877.0
ibTransferForward.action	20	79	0	374	68.49	0.00%	21.1/min	3.04	0.32	8877.0
ibThirdPartyTransferConfirm.a...	20	76	0	107	10.83	100.00%	21.1/min	0.27	0.36	782.0
ibThirdPartyTransferResults.act...	20	83	0	109	8.92	100.00%	21.1/min	0.27	0.27	782.0
ibThirdPartyTransferReceiptPdf...	20	89	0	734	148.00	100.00%	21.1/min	0.27	0.23	773.0
TOTAL	160	84	0	734	61.59	37.50%	2.8/sec	13.72	2.07	5048.5

Image 2 : JMeter Test Result - 20 BSNeBiz users for Transfer & Payment for Third Party

### C. BSNeBIZ Adding GST on Transfer & Payment for Interbank Transfer

To simulate the maximum number of requests to perform BSNeBIZ Adding GST on Transfer & Payment for Interbank Transfer with goal of:

- Error < 1%.
- Criteria of throughput (second / request) & TPS for each flow:
  - commonLogin.action <5 second or >0.2 TPS
    - To proceed login process
  - ibPortalLoginUsername.action <5 second or >0.2 TPS
    - To proceed login process
  - ibPortalLogin.action <5 second or >0.2 TPS
    - To load the BSNeBiz home page
  - ibTransferInit <5 second or >0.2 TPS
    - To load the Transfer & Payment page
  - ibTransferForward.action <5 second or >0.2 TPS
    - To load the Transfer & Payment details page and select Transfer Type
  - ibInterbankTransferForward.action <5 second or >0.2 TPS
    - To load the Interbank Transfer details page
  - ibInterbankTransferConfirm.action <5 second or >0.2 TPS
    - To load the Interbank Transfer Confirmation details page
  - ibInterbankTransferResults.action <5 second or >0.2 TPS
    - To load the Interbank Transfer Result page
  - ibInterbankTransferReceiptPdfDownload.action <5 second or >0.2 TPS
    - To download the Interbank Transfer receipt in pdf format

#### I. Perform login service for 20 concurrent users

Performance Report: Goods and Services Tax (GST)

**-Jmeter Execution Date: 29/01/2024**

- Test Criteria
  - Perform transaction for 20 concurrent users for 1 loop
- Summary of Testing
 

The performance test result has passed the test against the benchmarks that have been set above (such as number of concurrent users, error percentage, and throughput).
- Declaration
  - Therefore, ibInterbankTransferConfirm.action and ibInterbankTransferResults.action cause error due to the requests not being found at the redirected location when new URL is redirected
  - Therefore, ibInterbankTransferConfirm.action and ibInterbankTransferResults.action have error in test result.
  - ibInterbankTransferReceiptPdfDownload.action caused error because of there is no POST action to navigate to the next page when the Print Receipt button is click.
  - Therefore, ibInterbankTransferReceiptPdfDownload.action have error in test result.
- Test Result
  - The JMeter result shows that the system can support 20 concurrent users to perform transactions with 33.33% error. It takes 77 seconds to complete the transaction process for all users.
  - Throughput (min/request)  
The system is capable of completing a http request within 19.6 s (fastest) and 17.3 s (slowest).
  - TPS (Transaction per Second)  
The system is capable of performing 0.051 TPS (fastest) and 0.057 TPS (slowest).
  - The reasonable ramp-up period without any error is 60 seconds for 20 users.

Summary Report

Name: Summary Report

Comments:

Write results to file / Read from file

Filename:

Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
commonLogin.action	20	6641	0	9343	1615.13	0.00%	18.5/min	551.16	7.03	1831182.6
ibPortalLoginUsername.action	20	6033	0	10693	1736.79	0.00%	18.1/min	497.68	5.86	1691986.9
ibPortalLogin.action	20	6236	0	8000	1085.37	0.00%	17.3/min	477.48	5.76	1691941.9
ibTransferInit	20	6130	0	7924	1197.45	0.00%	17.3/min	477.50	4.91	1691986.9
ibTransferForward.action	20	6031	0	8644	1859.92	0.00%	17.6/min	484.68	6.98	1691987.0
ibInterbankTransferForward.action	20	5399	0	8488	1633.59	0.00%	17.9/min	492.93	5.98	1691941.9
ibInterbankTransferConfirm.action	40	130	0	465	91.54	100.00%	19.2/min	0.25	0.31	17940
ibInterbankTransferResults.action	20	124	0	229	43.23	100.00%	19.6/min	0.25	0.25	77940
ibInterbankTransferReceiptPdfDownlo...	20	92	0	241	48.86	100.00%	19.6/min	0.25	0.21	77340
TOTAL	180	4123	0	10693	3124.77	33.33%	2.0/sec	2246.38	28.06	1143706.5

Image 3 : JMeter Test Result - 20 BSNeBiz users for Transfer & Payment for Interbank Transfer



#### D. BSNeBIZ Adding GST on JomPay

To simulate the maximum number of requests to perform BSNeBIZ Adding GST on JomPay with goal of:

- Error < 1%.
- Criteria of throughput (second / request) & TPS for each flow:
  - commonLogin.action <5 second or >0.2 TPS
    - To proceed login process
  - ibPortalLoginUsername.action <5 second or >0.2 TPS
    - To proceed login process
  - ibPortalLogin.action <5 second or >0.2 TPS
    - To load the BSNeBiz home page
  - ibJomPayInit <5 second or >0.2 TPS
    - To load the JomPay page
  - ibJomPayForward.action <5 second or >0.2 TPS
    - To load the JomPay details page and select Payment Type
  - ibJomPayConfirm.action <5 second or >0.2 TPS
    - To load the JomPay Confirmation details page
  - ibJomPayResults.action <5 second or >0.2 TPS
    - To load the JomPay Result page
  - ibJomPayReceiptPdfDownload.action <5 second or >0.2 TPS
    - To download the JomPay receipt in pdf format

#### I. Perform login service for 20 concurrent users

-Jmeter Execution Date: 19/01/2024

- Test Criteria
  - Perform transaction for 20 concurrent users for 1 loop
- Summary of Testing

The performance test result has passed the test against the benchmarks that have been set above (such as number of concurrent users, error percentage, and throughput).
- Declaration
  - ibJomPayReceiptPdfDownload.action caused error because of there is no POST action to navigate to the next page when the Print Receipt button is click.
  - Therefore, ibJomPayReceiptPdfDownload.action have error in test result.
- Test Result
  - The JMeter result shows that the system can support 20 concurrent users to perform transactions with 12.5% error. It takes 58 seconds to complete the transaction process for all users.
  - Throughput (min/request)

The system is capable of completing a http request within 21.2 s (fastest) and 21.1 s (slowest).

Performance Report: Goods and Services Tax (GST)

- TPS (Transaction per Second)  
The system is capable of performing 0.0471 TPS (fastest) and 0.0473 TPS (slowest).
- The reasonable ramp-up period without any error is 60 seconds for 20 users.

Summary Report

Name: Summary Report

Comments:

Write results to file / Read from file

Filename:    Log/Display Only:  Errors  Successes

Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
commonLogin.action	20	123	0	461	85.65	0.00%	21.1/min	0.87	0.15	2543.0
ibPortalLoginUsername.action	20	102	0	307	52.55	0.00%	21.1/min	3.05	0.23	8877.0
ibPortalLogin.action	20	100	0	307	54.94	0.00%	21.1/min	3.06	0.24	8877.0
ibJomPayinit	20	77	0	324	60.59	0.00%	21.2/min	3.06	0.21	8877.0
ibJomPayForward.action	20	162	0	632	113.79	0.00%	21.1/min	5.87	0.30	17088.0
ibJomPayConfirm.action	20	78	0	134	21.47	0.00%	21.1/min	3.05	0.32	8877.0
ibJomPayResults.action	20	80	0	111	14.27	0.00%	21.2/min	3.06	0.25	8877.0
ibJomPayReceiptPdfDownload.action	20	74	0	109	14.83	100.00%	21.2/min	0.27	0.23	773.0
TOTAL	160	99	0	632	68.09	12.50%	2.8/sec	21.99	1.91	8098.6

Image 4 : JMeter Test Result - 20 BSNeBiz users for JomPay

## Performance Report: Goods and Services Tax (GST)

## E. BSNeBIZ Adding GST on Bulk Payment – File Upload

To simulate the maximum number of requests to perform BSNeBIZ Adding GST on Bulk Payment – File Upload with goal of:

- Error < 1%.
- Criteria of throughput (second / request) & TPS for each flow:
  - commonLogin.action <5 second or >0.2 TPS
    - To proceed login process
  - ibPortalLoginUsername.action <5 second or >0.2 TPS
    - To proceed login process
  - ibPortalLogin.action <5 second or >0.2 TPS
    - To load the BSNeBiz Home Page
  - ibFileUploadDetails <5 second or >0.2 TPS
    - To load the File Upload page
  - ibFileUploadConfirmOrganizationCode.action <5 second or >0.2 TPS
    - To confirm Organization Code
  - ibFileUploadDetailsUploadFile.action <5 second or >0.2 TPS
    - To upload file in file upload
  - ibFileUploadConfirm.action <5 second or >0.2 TPS
    - To load the File Upload Confirmation details page
  - ibFileUploadResults.action <5 second or >0.2 TPS
    - To load the File Upload Result page
  - ibFileUploadReceiptPdfDownload.action <5 second or >0.2 TPS
    - To download the JomPay receipt in pdf format

## I. Perform login service for 20 concurrent users

Performance Report: Goods and Services Tax (GST)

-Jmeter Execution Date: 19/01/2024

- Test Criteria
  - Perform transaction for 20 concurrent users for 1 loop
- Summary of Testing
 

The performance test result has passed the test against the benchmarks that have been set above (such as number of concurrent users, error percentage, and throughput).
- Declaration
  - ibFileUploadReceiptPdfDownload.action caused error because of there is no POST action to navigate to the next page when the Print Receipt button is click.
  - Therefore, ibFileUploadReceiptPdfDownload.action have error in test result.
- Test Result
  - The JMeter result shows that the system can support 20 concurrent users to perform transactions with 11.11% error. It takes 63 seconds to complete the transaction process for all users.
  - Throughput (min/request)
 

The system is capable of completing a http request within 21.0 s (fastest) and 19.1 s (slowest).
  - TPS (Transaction per Second)
 

The system is capable of performing 0.047 TPS (fastest) and 0.0523 TPS (slowest).
  - The reasonable ramp-up period without any error is 60 seconds for 20 users.

Summary Report

Name: Summary Report

Comments:

Write results to file / Read from file

Filename:    Log/Display Only  Errors  Successes

Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
commonLogin.action	20	88	0	151	18.21	0.00%	21.0/min	0.87	0.15	2543.0
ibPortalLoginUsername.action	20	109	0	131	13.10	0.00%	21.0/min	3.04	0.23	8877.0
ibPortalLogin.action	20	77	0	127	16.05	0.00%	21.0/min	3.04	0.25	8877.0
ibFileUploadDetails	20	18608	0	45610	15404.83	0.00%	19.7/min	10.97	0.21	34292.0
ibFileUploadConfirmOrganizationC...	20	3050	0	48598	10452.26	0.00%	19.4/min	10.85	0.48	34291.9
ibFileUploadDetailsUploadFile.action	20	776	0	1154	289.30	0.00%	19.2/min	10.70	0.68	34292.0
ibFileUploadConfirm.action	20	592	0	995	231.60	0.00%	19.1/min	10.68	0.46	34292.0
ibFileUploadResults.action	20	118	0	215	42.53	0.00%	19.1/min	2.76	0.25	8877.0
ibFileUploadReceiptPdfDownload.a...	20	88	0	234	41.81	100.00%	19.1/min	0.24	0.21	773.0
TOTAL	180	2612	0	48598	8444.95	11.11%	2.8/sec	51.02	2.79	18568.3

Image 5 : JMeter Test Result - 20 BSNeBiz users for Bulk Payment - File Upload

#### F. BSNeBIZ Adding GST on Bulk Payment – Data Entry (New Data Entry)

To simulate the maximum number of requests to perform BSNeBIZ Adding GST on Bulk Payment – Data Entry (New Data Entry) with goal of:

- Error < 1%.
- Criteria of throughput (second / request) & TPS for each flow:
  - commonLogin.action <5 second or >0.2 TPS
    - To proceed login process
  - ibPortalLoginUsername.action <5 second or >0.2 TPS
    - To proceed login process
  - ibPortalLogin.action <5 second or >0.2 TPS
    - To load the BSNeBiz Home Page
  - ibDataEntryDetails <5 second or >0.2 TPS
    - To load the Data Entry page
  - ibDataEntryConfirmOrganizationCode.action <5 second or >0.2 TPS
    - To confirm Organization Code in Data Entry details page
  - ibDataEntryConfirmFileFormat.action <5 second or >0.2 TPS
    - To confirm File Format in Data Entry details page
  - ibDataEntryCheckDuplicate.action <5 second or >0.2 TPS
    - To check duplicate account no in Data Entry details page
  - ibDataEntrySaveFile.action <5 second or >0.2 TPS
    - To save file of the data entry in Data Entry details page
  - ibDataEntryConfirm.action <5 second or >0.2 TPS
    - To load confirmation page
  - ibDataEntryResults.action <5 second or >0.2 TPS
    - To load the Data Entry Result page
  - ibDataEntryReceiptPdfDownload.action <5 second or >0.2 TPS
    - To download the Data Entry receipt in pdf format

#### I. Perform login service for 20 concurrent users

Performance Report: Goods and Services Tax (GST)

**-Jmeter Execution Date: 19/01/2024**

- Test Criteria
  - Perform transaction for 20 concurrent users for 1 loop
- Summary of Testing
 

The performance test result has passed the test against the benchmarks that have been set above (such as number of concurrent users, error percentage, and throughput).
- Declaration
  - `ibDataEntryReceiptPdfDownload.action` caused error because of there is no POST action to navigate to the next page when the Print Receipt button is click.
  - Therefore, `ibDataEntryReceiptPdfDownload.action` have error in test result.
- Test Result
  - The JMeter result shows that the system can support 20 concurrent users to perform transactions with 9.09% error. It takes 59 seconds to complete the transaction process for all users.
  - Throughput (min/request)
 

The system is capable of completing a http request within 21.0 s (fastest) and 20.8 s (slowest).
  - TPS (Transaction per Second)
 

The system is capable of performing 0.047 TPS (fastest) and 0.048 TPS (slowest).
  - The reasonable ramp-up period without any error is 60 seconds for 20 users.

Summary Report

Name:

Comments:

Write results to file / Read from file

Filename:    Log/Display Only  Errors  Successes

Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
commonLogin.action	20	84	0	99	5.19	0.00%	21.0/min	0.87	0.15	2543.0
ibPortalLoginUsername.action	20	85	0	136	16.11	0.00%	21.0/min	3.03	0.25	8877.0
ibPortalLogin.action	20	69	0	91	9.18	0.00%	21.0/min	3.04	0.25	8877.0
ibDataEntryDetails	20	190	0	227	21.74	0.00%	21.0/min	13.57	0.26	39787.9
ibDataEntryConfirmOrganizationCo...	20	301	0	518	54.38	0.00%	20.9/min	13.61	0.55	39943.7
ibDataEntryConfirmFileFormat.action	20	282	0	346	22.78	0.00%	20.9/min	13.61	0.54	39943.6
ibDataEntryCheckDuplicate.action	20	349	0	644	71.14	0.00%	20.8/min	13.45	0.89	39739.0
ibDataEntrySaveFile.action	20	371	0	495	39.07	0.00%	20.8/min	13.45	0.85	39739.0
ibDataEntryConfirm.action	20	352	0	437	29.58	0.00%	20.8/min	13.44	0.85	39738.9
ibDataEntryResults.action	20	70	0	109	11.56	0.00%	20.9/min	3.02	0.27	8877.0
ibDataEntryReceiptPdfDownload.ac...	20	56	0	72	7.05	100.00%	20.9/min	0.26	0.23	773.0
TOTAL	220	201	0	644	129.74	9.09%	3.7/sec	88.19	4.92	24439.9

Image 6 : JMeter Test Result - 20 BSNeBiz users for Bulk Payment - New Data Entry

### G. BSNeBIZ Adding GST on Bulk Payment – Data Entry (Edit Data Entry)

To simulate the maximum number of requests to perform BSNeBIZ Adding GST on Bulk Payment – Data Entry (Edit Data Entry) with goal of:

- Error < 1%.
- Criteria of throughput (second / request) & TPS for each flow:
  - commonLogin.action <5 second or >0.2 TPS
    - To proceed login process
  - ibPortalLoginUsername.action <5 second or >0.2 TPS
    - To proceed login process
  - ibPortalLogin.action <5 second or >0.2 TPS
    - To load the BSNeBiz Home Page
  - ibDataEntryDetails <5 second or >0.2 TPS
    - To load the Data Entry page
  - ibEditData <5 second or >0.2 TPS
    - To load the Edit Data page
  - ibEditDataDetailOrganizationCode.action <5 second or >0.2 TPS
    - To confirm Organization Code in Edit Data Upload page
  - ibEditDataDetailFileFormat.action <5 second or >0.2 TPS
    - To confirm File Format in Edit Data Upload page
  - ibEditDataDetailUploadFile.action <5 second or >0.2 TPS
    - To upload file in Edit Data Upload page
  - ibEditDataConfirmCheckDuplicate.action <5 second or >0.2 TPS
    - To check duplicate account no in Edit Data details page
  - ibEditDataConfirmSaveFile.action <5 second or >0.2 TPS
    - To save file of the data entry in Edit Data details page
  - ibEditDataConfirmSubmit.action <5 second or >0.2 TPS
    - To load confirmation page
  - ibEditDataResults.action <5 second or >0.2 TPS
    - To load the Edit Data Result page
  - ibEditDataReceiptPdfDownload.action <5 second or >0.2 TPS
    - To download the Edit Data receipt in pdf format

### I. Perform login service for 20 concurrent users

Performance Report: Goods and Services Tax (GST)

**-Jmeter Execution Date: 19/01/2024**

- Test Criteria
  - Perform transaction for 20 concurrent users for 1 loop
- Summary of Testing
 

The performance test result has passed the test against the benchmarks that have been set above (such as number of concurrent users, error percentage, and throughput).
- Declaration
  - `ibEditDataReceiptPdfDownload.action` caused error because of there is no POST action to navigate to the next page when the Print Receipt button is click.
  - Therefore, `ibEditDataReceiptPdfDownload.action` have error in test result.
- Test Result
  - The JMeter result shows that the system can support 20 concurrent users to perform transactions with 7.69% error. It takes 60 seconds to complete the transaction process for all users.
  - Throughput (min/request)
 

The system is capable of completing a http request within 21.0 s (fastest) and 20.5 s (slowest).
  - TPS (Transaction per Second)
 

The system is capable of performing 0.0476 TPS (fastest) and 0.0487 TPS (slowest).
  - The reasonable ramp-up period without any error is 60 seconds for 20 users.

Summary Report

Name: Summary Report

Comments:

Write results to file / Read from file

Filename:    Log/Display Only:  Errors  Successes

Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
commonLogin.action	20	84	0	147	19.59	0.00%	21.0/min	0.87	0.15	2543.0
ibPortal.LoginUsername.action	20	91	0	110	11.32	0.00%	21.0/min	3.03	0.25	8877.0
ibPortal.Login.action	20	70	0	119	16.61	0.00%	21.0/min	3.03	0.25	8877.0
ibDataEntry.Details	20	164	0	248	31.23	0.00%	21.0/min	13.58	0.22	39787.9
ibEditData	20	139	0	200	19.95	0.00%	21.0/min	12.12	0.28	35504.8
ibEditData.DetailOrganizationCode...	20	325	0	763	167.47	0.00%	20.8/min	12.03	0.60	35504.9
ibEditData.DetailFileFormat.action	20	305	0	990	168.66	0.00%	20.7/min	11.98	0.58	35504.8
ibEditData.DetailUploadFile.action	20	262	0	522	67.67	0.00%	20.7/min	11.89	0.81	35299.8
ibEditData.ConfirmCheckDuplicate...	20	336	0	622	79.29	0.00%	20.5/min	13.28	0.78	39733.8
ibEditData.ConfirmSaveFile.action	20	314	0	424	36.87	0.00%	20.5/min	13.26	0.75	39733.7
ibEditData.ConfirmSubmit.action	20	309	0	459	45.35	0.00%	20.5/min	13.25	0.75	39733.6
ibEditData.Results.action	20	76	0	316	55.42	0.00%	20.5/min	2.96	0.26	8877.0
ibEditData.ReceiptPdfDownload.acti...	20	55	0	91	11.50	100.00%	20.5/min	0.26	0.22	773.0
TOTAL	260	195	0	990	133.94	7.69%	4.3/sec	106.18	5.62	25442.3

Image 7 : JMeter Test Result - 20 BSNeBiz users for Bulk Payment - Edit Data Entry



#### H. BSNeBIZ Adding GST on Authorization - Verifier

To simulate the maximum number of requests to perform BSNeBIZ Adding GST on Authorization – Verifier with goal of:

- Error < 1%.
- Criteria of throughput (second / request) & TPS for each flow:
  - commonLogin.action <5 second or >0.2 TPS
    - To proceed login process
  - ibPortalLoginUsername.action <5 second or >0.2 TPS
    - To proceed login process
  - ibPortalLogin.action <5 second or >0.2 TPS
    - To load the BSNeBiz Authorization Home Page
  - ibAuthorization <5 second or >0.2 TPS
    - To load the Verification page
  - ibMaker <5 second or >0.2 TPS
    - To load confirmation page
  - ibCheckerResults.action <5 second or >0.2 TPS
    - To load verification results page
  - ibVerifierReceiptPdfDownload.action <5 second or >0.2 TPS
    - To download the Authorization Verifier receipt in pdf format

#### I. Perform login service for 20 concurrent users

-Jmeter Execution Date: 19/01/2024

- Test Criteria
  - Perform transaction for 20 concurrent users for 1 loop
- Summary of Testing
 

The performance test result has passed the test against the benchmarks that have been set above (such as number of concurrent users, error percentage, and throughput).
- Declaration
  - ibVerifierReceiptPdfDownload.action caused error because of there is no POST action to navigate to the next page when the Print Receipt button is click.
  - Therefore, ibVerifierReceiptPdfDownload.action have error in test result.
- Test Result
  - The JMeter result shows that the system can support 20 concurrent users to perform transactions with 14.29% error. It takes 60 seconds to complete the transaction process for all users.
  - Throughput (min/request)
 

The system is capable of completing a http request within 21.0 s (fastest) and 19.9 s (slowest).
  - TPS (Transaction per Second)
 

The system is capable of performing 0.047 TPS (fastest) and 0.05 TPS (slowest).

Performance Report: Goods and Services Tax (GST)

- The reasonable ramp-up period without any error is 60 seconds for 20 users.

Summary Report

Name: Summary Report

Comments:

Write results to file / Read from file

Filename:    Log/Display Only  Errors  Successes

Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
commonLogin.action	20	103	0	582	109.87	0.00%	21.0/min	0.87	0.15	2543.0
ibPortalLoginUsername.action	20	87	0	297	48.94	0.00%	21.0/min	3.04	0.23	8877.0
ibPortalLogin.action	20	84	0	348	61.43	0.00%	21.0/min	3.04	0.24	8877.0
ibAuthorization	20	53	0	108	13.84	0.00%	21.0/min	3.04	0.21	8877.0
ibMaker	20	49	0	71	6.91	0.00%	21.0/min	3.04	0.31	8877.0
ibCheckerResults.action	20	64	0	82	8.02	0.00%	21.0/min	3.04	0.43	8877.0
ibVerifierReceiptPdfDownload.action	20	20537	0	48158	15996.57	100.00%	19.9/min	0.25	0.21	773.0
TOTAL	140	2997	0	48158	9371.93	14.29%	2.3/sec	15.36	1.68	6814.4

Image 8 : JMeter Test Result - 20 BSNeBiz users for Authorization – Verifier

## Performance Report: Goods and Services Tax (GST)

### I. BSNeBIZ Adding GST on Authorization - Approver

To simulate the maximum number of requests to perform BSNeBIZ Adding GST on Authorization – Approver with goal of:

- Error < 1%.
- Criteria of throughput (second / request) & TPS for each flow:
  - commonLogin.action <5 second or >0.2 TPS
    - To proceed login process
  - ibPortalLoginUsername.action <5 second or >0.2 TPS
    - To proceed login process
  - ibPortalLogin.action <5 second or >0.2 TPS
    - To load the BSNeBiz Authorization Home Page
  - ibAuthorization <5 second or >0.2 TPS
    - To load the Approval page
  - ibMaker <5 second or >0.2 TPS
    - To load Confirmation page
  - ibCheckerResults.action <5 second or >0.2 TPS
    - To load the Authorization Approver result page
  - ibApproverReceiptPdfDownload.action <5 second or >0.2 TPS
    - To load the Authorization Approver receipt in pdf format

### I. Perform login service for 20 concurrent users

-JMeter Execution Date: 19/01/2024

- Test Criteria
  - Perform transaction for 20 concurrent users for 1 loop
- Summary of Testing

The performance test result has passed the test against the benchmarks that have been set above (such as number of concurrent users, error percentage, and throughput).
- Declaration
  - ibApproverReceiptPdfDownload.action caused error because of there is no POST action to navigate to the next page when the Print Receipt button is click.
  - Therefore, ibApproverReceiptPdfDownload.action have error in test result.
- Test Result
  - The JMeter result shows that the system can support 20 concurrent users to perform transactions with 14.29% error. It takes 57 seconds to complete the transaction process for all users.
  - Throughput (min/request)  
The system is capable of completing a http request within 21.0 s (fastest) and 20.9 s (slowest).
  - TPS (Transaction per Second)  
The system is capable of performing 0.0476 TPS (fastest) and 0.0478 TPS (slowest).

Performance Report: Goods and Services Tax (GST)

- The reasonable ramp-up period without any error is 60 seconds for 20 users.

Summary Report

Name:

Comments:

Write results to file / Read from file

Filename    Log/Display Only  Errors  Successes

Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
commonLogin.action	20	87	0	124	15.87	0.00%	21.0/min	0.87	0.15	2543.0
ibPortalLoginUsername.action	20	90	0	315	53.98	0.00%	21.0/min	3.03	0.23	8877.0
ibPortalLogin.action	20	83	0	133	19.31	0.00%	21.0/min	3.03	0.30	8877.0
ibAuthorization	20	56	0	76	8.36	0.00%	21.0/min	3.03	0.21	8877.0
ibMaker	20	50	0	68	5.82	0.00%	21.0/min	3.03	0.31	8877.0
ibCheckerResults.action	20	68	0	103	13.39	0.00%	20.9/min	3.03	0.43	8877.0
ibApproverReceiptPdfDownload.ac...	20	60	0	107	13.94	100.00%	20.9/min	0.26	0.22	773.0
TOTAL	140	71	0	315	28.27	14.29%	2.4/sec	16.14	1.84	6814.4

Image 9 : JMeter Test Result - 20 BSNeBiz users for Authorization – Approver

## Performance Report: Goods and Services Tax (GST)

## J. Mobile BSNeBIZ Adding GST on Transfer &amp; Payment

To simulate the maximum number of requests to perform Mobile BSNeBIZ Adding GST on Transfer & Payment with goal of:

- Error < 1%.
- Criteria of throughput (second / request) & TPS for each flow:
  - Login\_Generate <5 second or >0.2 TPS
    - To proceed login process
  - Homepage\_Generate <5 second or >0.2 TPS
    - To load Mobile BSNeBiz Home page
  - Transfer\_Generate <5 second or >0.2 TPS
    - To load the Transfer & Payment page
  - TransferTo\_Generate <5 second or >0.2 TPS
    - To load the Transfer To details
  - TransferDetails\_Generate <5 second or >0.2 TPS
    - To fill Transfer & Payment Details
  - Confirmation\_Generate <5 second or >0.2 TPS
    - To load the Transfer & Payment Confirmation details page
  - Pending\_Generate <5 second or >0.2 TPS
    - To load the Transfer & Payment Result page
  - PdfReceipt\_Generate <5 second or >0.2 TPS
    - To load Transfer & Payment Receipt in pdf format

## I. Perform login service for 20 concurrent users

Performance Report: Goods and Services Tax (GST)

**-JMeter Execution Date: 19/01/2024**

- Test Criteria
  - Perform transaction for 20 concurrent users for 1 loop
- Summary of Testing
 

The performance test result has passed/ not passed the test against the benchmarks that have been set above (such as number of concurrent users, error percentage, and throughput).
- Test Result
  - The JMeter result shows that the system can support 20 concurrent users to perform transactions with 0.0% error. It takes 57 seconds to complete the transaction process for all users.
  - Throughput (min/request)
 

The system is capable of completing a http request within 21.0s (fastest) and 21.0s (slowest).
  - TPS (Transaction per Second)
 

The system is capable of performing 0.047 TPS (fastest) and 0.047 TPS (slowest).
  - The reasonable ramp-up period without any error is 60 seconds for 20 users.

Summary Report

Name:

Comments:

Write results to file / Read from file

Filename    Log/Display Only  Errors  Successes

Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
Login_Generate	20	74	0	416	80.10	0.00%	21.0/min	0.04	0.08	127.0
Homepage_Generate	20	32	0	63	11.40	0.00%	21.0/min	0.04	0.08	127.0
Transfer_Generate	20	43	0	285	57.11	0.00%	21.0/min	0.04	0.08	127.0
TransferTo_Generate	20	29	0	69	10.72	0.00%	21.0/min	0.04	0.08	127.0
TransferDetails_Generate	20	39	0	284	56.47	0.00%	21.0/min	0.04	0.08	127.0
Confirmation_Generate	20	30	0	67	12.57	0.00%	21.0/min	0.04	0.08	127.0
Pending_Generate	20	43	0	287	57.02	0.00%	21.0/min	0.04	0.08	127.0
PdfReceipt_Generate	20	78	0	304	55.90	0.00%	21.0/min	0.04	0.08	127.0
TOTAL	160	46	0	416	52.77	0.00%	2.8/sec	0.35	0.63	127.0

Image 10 : JMeter Test Result - 20 Mobile BSNeBiz users for Transfer & Payment