



Cortell Australia Pty Ltd

CoreBIS

Testing Verification

31/01/2023



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Revision History

Date	Version	Description	Author
23/01/2023	0.1	Create Document	Karl Blackler
30/01/2023	0.2	Ongoing testing of package	Karl Blackler
31/01/2023	1.0	Release	Karl Blackler

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1. Summary

This document identifies what testing has occurred on each change in this Month's CoreBIS release.

2. Code Updates

2.1 CU154: Validation failing for form not required. (Risk:L)

The rule fails if a validation rule included a form that wasn't required for your organisation.

A change was included to skip the rule should it not exist.

Test Goals: Test that a rule including a form not valid for this organisation results in a pass, not a fail.

Test Method: Find the rule and test result

Form Variant	Entity	Rule #	Message	Result	Rule Type
ARF_330_1_L	SLO_BKS.CoreBIS No.1	485939867	Please explain why Total interest expense is nil when Average interest bearing liabilities has been reported or vice versa.	PASS	CONFIRMATION
		485939944	Please explain why Cash and liquid assets, Interest has been reported when Total cash and liquid assets on ARF_323_0 is Nil or vice versa	PASS	CONFIRMATION
		485939947	Please explain why Credit card, Interest has been reported when Total other deposits or Commercial lending, Credit cards, Balance outstanding in ARF	PASS	CONFIRMATION
		485939949	Please explain why Housing loans, Interest has been reported when Total housing, Balance outstanding in ARF_323_0 is Nil or vice versa.	PASS	CONFIRMATION
		485939951	Please explain why Term loans, Interest has been reported when Other personal term loans or Commercial lending, Term loans fixed rate or Commere	PASS	CONFIRMATION
		485939954	Please explain why Lease financing, Interest has been reported when Loans to households, Leasing, Balance outstanding or Commercial lending, Leasi	PASS	CONFIRMATION
		485939956	Please explain why Deposits, Interest has been reported when Total deposits in ARF_323_0 is Nil or vice versa.	PASS	CONFIRMATION
		485939960	Please explain why Bonds, notes and long-term borrowings, Interest has been reported when Total bonds, notes and long-term borrowings in ARF_32	PASS	CONFIRMATION
		485939962	Please explain why Loan capital, Interest has been reported when Loan capital in ARF_323_0 is Nil or vice versa.	PASS	CONFIRMATION
		485940001	Please explain why Other deposits (applicable for non-bank ADIs only), Interest has been reported when Total other deposits in ARF_323_0 is Nil or vi	PASS	CONFIRMATION
		485940442	Please explain why Total interest income is nil when Average interest earning assets has been reported or vice versa.	PASS	CONFIRMATION
		710859373	The item 'Interest Expense, Derivatives-Banking Book' has changed significantly compared with movements over the last eight periods. Please explai	FAIL	CONFIRMATION
		849631086	Total Interest Income should equal the Interest Income in the Statement of Financial Performance	PASS	CONFIRMATION
		849631087	Total Interest Expense should equal the Interest Expense in the Statement of Financial Performance	PASS	CONFIRMATION

Test Status: Success


2.2 CU158: Validation incorrect for ARF_750 Nutrien (Risk:L)

The validation rule was checking tables to ensure each table's dimensions were specified. CoreBIS validates the tables beforehand, and hence this rule is not applicable.

This formula type has been added to the skip list.

Test Goals: Check that a rule with this function included shows as a pass.

Test Method: Run the ARF_750 validation rules and check the result.



APRA VALIDATIONS REPORT

Recalculate
Reevaluate Rules

APRA Entity

APRA Form Variant

Return Version

Result

Drill to Values

Form Variant	Entity	Rule #	Message	Result	Rule Type
ARF_750_0	DOM_BKS CoreBIS No.1	1102944841	TBL_ARF_750_0_Table2-Total credit outstanding of new foreclosures must be positive.	PASS	MANDATORY
		1102944844	TBL_ARF_750_0_Table1-Total number of borrowers must be positive.	PASS	MANDATORY
		1104186708	TBL_ARF_750_0_Table1-Industry classification must be selected from one of the drop-down menu items. These include Beef cattle, Sheep and sheep-	PASS	MANDATORY
		1102944840	TBL_ARF_750_0_Table2-Number of new instances of farm debt mediation must be positive.	PASS	MANDATORY
		1102944838	TBL_ARF_750_0_Table1-Total credit outstanding must be positive.	PASS	MANDATORY
		1102944839	TBL_ARF_750_0_Table1-Total credit limits must be positive.	PASS	MANDATORY
		1102944843	TBL_ARF_750_0_Table1-Total value of loans > 90 days past due must be positive.	PASS	MANDATORY
		1102944845	TBL_ARF_750_0_Table1-Total number of borrowers > 90 days past due must be positive.	PASS	MANDATORY
		1102944842	TBL_ARF_750_0_Table2-Number of new foreclosures must be positive.	PASS	MANDATORY
		1076385809	A State/territory (1) which has been entered is inconsistent with the required values. A value available in the drop down list should be selected. Please	PASS	MANDATORY
		1076385810	A Industry classification (2) which has been entered is inconsistent with the required values. A value available in the drop down list should be selected	PASS	MANDATORY
		1119728832	TBL_ARF_750_0_Table1-Agricultural activity by state and territory. A State/territory must be selected (NSW, VIC, QLD, SA, WA, TAS, ACT or NT) for est-	PASS	CONFIRMATION
		1103036919	TBL_ARF_750_0_Table2-Distress by state and territory. A State/territory must be selected (NSW, VIC, QLD, SA, WA, TAS, ACT or NT) for each row conta	PASS	MANDATORY
		1104186707	TBL_ARF_750_0_Table1-Please provide an explanation why Total credit outstanding is greater than Total credit limits.	PASS	CONFIRMATION
		1076385811	A State/territory (1) which has been entered is inconsistent with the required values. A value available in the drop down list should be selected. Please	PASS	MANDATORY
		1104276615	TBL_ARF_750_0_Table1-Please provide an explanation why Total number of borrowers is less than Total number of borrowers > 90 days past due.	PASS	CONFIRMATION

Test Status: Success

2.3 CU169: Validation Error - 230_0 APRA_Period – 771574776 (Risk:L)

Some validation rules look up prior periods, and an error will occur if these periods do not exist.

This has been updated to skip rules looking up periods that do not exist in the system.

Test Goals: Ensure rules of this type show as pass.

Test Method: Run the ARF_230_0 to check if this rule passes with no error messages.

Form Variant	Entity	Rule #	Message	Result	Rule Type
ARF_230_0	GRP_BKS CoreBIS No.1	485937995	Please explain why Carrying value, Total, Australia has changed significantly from the figure reported in the previous period. Please detail the specific	PASS	CONFIRMATION
		656696607	Tourism and Leisure - Total Actual Exposures (Australia) has changed significantly compared to last period. Please explain the factors that have contri	PASS	CONFIRMATION
		710858982	The item 'Part A: Commercial Property, Retail, Total Actual Exposures, Australia' has changed significantly compared to last period. Please explain the	PASS	CONFIRMATION
		771612593	Please explain why Total actual exposures, Total, Australia has changed significantly from the figure reported in the previous period. Please detail the	PASS	CONFIRMATION
		656696566	Tourism and Leisure - Total Actual Exposures (Australia) has changed significantly compared to last period. Please explain the factors that have contri	PASS	CONFIRMATION
		710858994	The item 'Part A: Commercial Property, Retail, Total Actual Exposures, Australia' has changed significantly compared to last period. Please explain the	PASS	CONFIRMATION
		771574776	The item 'Part A: Commercial Property, Retail, Total Actual Exposures, Australia' has changed significantly compared to last period. Please explain the	PASS	CONFIRMATION
		710858970	The item 'Part A: Commercial Property, Retail, Total Actual Exposures, Australia' has changed significantly compared to last period. Please explain the	PASS	CONFIRMATION

Test Status: Success

2.4 CU173: Validation update for APRA_Return_Version_Form change (Part of CU 134 – July22) (Risk:L)

The validation rules will refer to the APRA_Return_Version_form cube before the APRA_Return_Form cube to get the form version in the current period.

Test Goals: Check that the correct form version is used when executing the validation rules.

Test Method: Change the Form Version and check that the validation uses the new version. Check that it fails with the incorrect form version.

Set ARF_747_OB to version 9 (which does not exist) and test validations update to reflect. They should fail all items.

Form Variant	Entity	Rule #	Message	Result	Rule Type
ARF_747_OB	DOMESTIC:CoreBIS No.1	1208843830	The sum of component items reported differs from the value of an equivalent total item. The value for 'Deposits outstanding - by counterparty & dep	PASS	MANDATORY
		1208846844	The values reported for equivalent sets of items differ. The sum of 'Deposits outstanding to counterparties other than resident households - by counte	PASS	MANDATORY
		1208843825	The sum of component items reported differs from the value of an equivalent total item. The value for 'Deposits outstanding to counterparties other t	PASS	MANDATORY
		1208843831	The sum of component items reported differs from the value of an equivalent total item. The value for 'Deposits outstanding - by counterparty & dep	PASS	MANDATORY
		1208843835	The values reported for equivalent sets of items differ. The sum of 'Deposits outstanding to counterparties other than resident households - by counte	PASS	MANDATORY
		1208843834	The values reported for equivalent sets of items differ. The sum of 'Deposits outstanding to counterparties other than resident households - by counte	PASS	MANDATORY

APRA_Form_Variant:Default	Required	APRA_Form_Version	Count
-- All APRA_Form_Variant (n			14
ARF_720_0A	Y	ARF_720_0Av8	1
ARF_720_1A	Y	ARF_720_1Av3	1
ARF_720_2A	Y	ARF_720_2Av2	1
ARF_720_3	Y	ARF_720_3v5	1
ARF_720_4	Y	ARF_720_4v4	1
ARF_720_5	Y	ARF_720_5v2	1
ARF_720_6	Y	ARF_720_6v1	1
ARF_720_7	Y	ARF_720_7v2	1
ARF_730_0	Y	ARF_730_0v5	1
ARF_747_OB	Y	ARF_747_OBv9	1
ARF_748_OB	Y	ARF_748_OBv5	1
ARF_920_0	Y	ARF_920_0v3	1
ARF_920_2	Y	ARF_920_2v1	1

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CoreBIS - Testing Verification - 2023_01_31.docx

APRA Entity: DOMESTIC:CoreBIS No.1
 APRA Form Variant: ARF_747_06
 Return Version: W_2021-09-30_Submission
 Result: ALL

Drill to Values

Form Variant	Entity	Rule #	Message	Result	Rule Type
ARF_747_06	DOMESTIC:CoreBIS No.1	1208843830	The sum of component items reported differs from the value of an equivalent total item. The value for 'Deposits outstanding - by counterparty & dep	FAIL	MANDATORY
		1208846844	The values reported for equivalent sets of items differ. The sum of 'Deposits outstanding to counterparties other than resident households - by counte	FAIL	MANDATORY
		1208843825	The sum of component items reported differs from the value of an equivalent total item. The value for 'Deposits outstanding to counterparties other t	FAIL	MANDATORY
		1208843831	The sum of component items reported differs from the value of an equivalent total item. The value for 'Deposits outstanding - by counterparty & dep	FAIL	MANDATORY
		1208843835	The values reported for equivalent sets of items differ. The sum of 'Deposits outstanding to counterparties other than resident households - by counte	FAIL	MANDATORY
		1208843834	The values reported for equivalent sets of items differ. The sum of 'Deposits outstanding to counterparties other than resident households - by counte	FAIL	MANDATORY

Test Status: **Success**

2.5 CU177: Add dimension to cube save data causes issues. (Risk:M)

The "Add dimension to cube" feature would create an error on large cubes due to a timed save data. This has been updated to run sequentially and thus remove the error.

Test Goals: Test that the update hasn't caused any issues and that the cube is saved at the end.

Test Method: Add a new dimension to the TAGGED_Residential_Mortgages cube and check the logs to ensure it is saved at the end.

Create new Dimension *Note: The dimension will be prefixed base*

Select Dimension Type: SBR Dimension
 Select APRA Dimension: APRA_MapItem - Non Dimensional Mapping
 Enter Dimension Name: RM_Testing_2023_01

Attribute Cube: Create Dimension

Created From	Auto Update	Last Updated	Update Frequency	View Members
--------------	-------------	--------------	------------------	--------------

CoreBIS Add Dimension to Cube

Cube: TAGGED_Residential_Mortgages

New Dimension 1: SBR_RM_Testing_2023_01

New Dimension 2:

Process completed successfully.

OK

Filters

Edit Source

Edit Structure

Edit Format

Select Dimension Type:

Select Cube:

Select Dimension Type:

Select APRA Dimension:

Text Search:

Enter Dimension Name:

Delete Dimension

Create Attribute Cube

Dimension Name	Dimension Type	Updated From	Auto Update
RM_LMI	Business	MANUAL	N
RM_LVR	Business	ODBC	Y
RM_Financial_Difficulty	Business	ODBC	Y
RM_Customer_Residency	Business	ODBC	Y
RM_ArrearsDays	Business	MANUAL	N
RM_LoanIncomeRatio	Business	MANUAL	N
RM_LoanVintageYrs	Business	ODBC	Y
BASE_Residential_Mortgages_Measure	Measure	MANUAL	N
SBR_RM_Asset_Quality	SBR Dimension	APRA	
SBR_RM_Counterparty_Type	SBR Dimension	APRA	
SBR_RM_Counterparty_Domicile	SBR Dimension	APRA	
SBR_RM_Loan_Characteristic	SBR Dimension	APRA	
SBR_RM_Loan_Purpose	SBR Dimension	APRA	
SBR_RM_Loan_Security	SBR Dimension	APRA	
SBR_RM_Debt_to_Income	SBR Dimension	APRA	
SBR_RM_Loan_to_Income	SBR Dimension	APRA	
SBR_RM_Loan_to_Valuation_Ratio	SBR Dimension	APRA	
SBR_RM_Loan_Type	SBR Dimension	APRA	
SBR_RM_Loan_Vintage	SBR Dimension	APRA	
SBR_RM_Collateral_Location	SBR Dimension	APRA	
SBR_RM_Testing_2023_01	SBR Dimension	APRA	Y
BASE_APRA_Entity	Business	MANUAL	N
TAGGED_Residential_Mortgages_Measure	Measure	MANUAL	N

MESSAGE LOG

[Recalculate](#)

[Email Message Log](#)

Time	User	Process	Action	Status	Message
141412.397	TM1.Chore	Chore	UserLog executed by scheduler		Full Message
-30 141342.579	TM1.Process	Process	CB_ACTION_Datasource_Add_Structure		
-30 141342.573	TM1.Process	Process	Lib_SaveData		
-30 141333.253	TM1.Process	Process	Lib_SaveData	run from process	CB_ACTION_Datasource_Add_Structure by user Karl Blackler

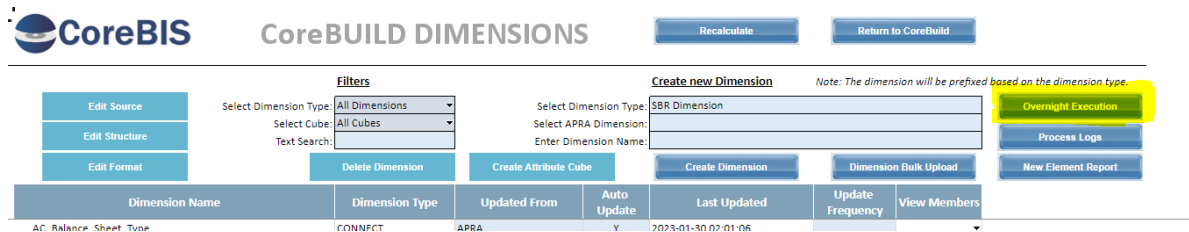
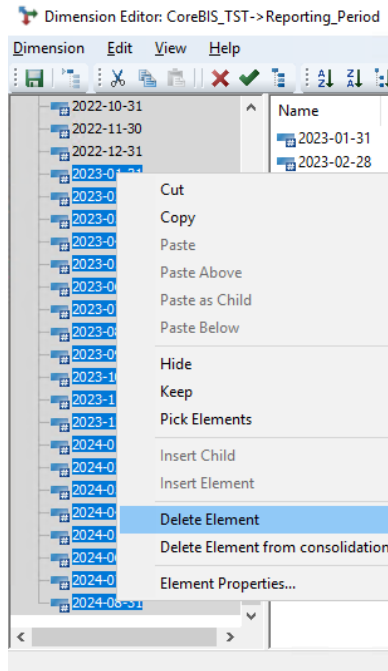
Test Status: Success

2.6 CU178: Reporting Period needs updating for 2022-12/2023/2024 (Risk:L)

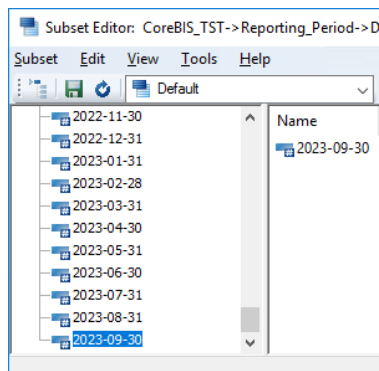
Some of our clients have run out of Reporting_Periods. A process has been created to create a rolling 24 months automatically'.

Test Goals: Automatically add new periods based on the current period.

Test Method: Delete all future reporting periods and run an overnight process to check if they get added back in.



Based on the current period of 2021-09-30, we expect monthly periods to be added until 2023-09-30.



Test Status: Success

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CoreBIS - Testing Verification - 2023_01_31.docx

2.7 CU179: Review processes that can not run in parallel and add synchronise (Risk:M)

Some processes in CoreBIS would error when a user presses the button twice. These have been fixed so that only a user can run these processes sequentially. These include;

- Base Cube Data Archiving
- Tagged Cube Data Archiving
- D2A update process
- Master Overnight process

Test Goals: Make everyone wait for the first execution of a process to finish before starting.

Test Method: Archive some data in two different sessions and ensure one waits for the other to complete before starting.

CoreBIS BASE LOAD DATA

Base Cube: BASE_General_Ledger_Daily

BASE_General_Ledger_Daily_Load_Date	Used by Tagging	Action	Archived	Reporting Period	Transaction Count	Transaction Amount
All BASE_General_Ledger_Daily_Load_Date (n)	138					
2020-05-05				2020-05-05	1,774	0
2020-05-06		Archive		2020-05-06	1,774	0
2020-05-07		Archive		2020-05-07	1,774	0
2020-05-08		Archive		2020-05-08	1,774	0
2020-05-09		Archive		2020-05-09	1,774	0
2020-05-10		Archive		2020-05-10	1,774	0

CoreBIS BASE LOAD DATA

Base Cube: BASE_General_Ledger_Daily

BASE_General_Ledger_Daily_Load_Date	Used by Tagging	Action	Archived	Reporting Period	Transaction Count	Transaction Amount
2021-04-20 02:00:57		Archive		2021-04-20	1,774	0
2021-04-21 02:00:55	0	Archive		2021-04-21	1,774	0
2021-04-22 02:00:51	0	Archive		2021-04-22	1,774	0
2021-04-23 02:00:55	0	Archive		2021-04-23	1,774	0
2021-04-24 02:00:54	0	Archive		2021-04-24	1,774	0
2021-04-25 02:00:51	0	Archive		2021-04-25	1,774	0
2021-04-26 02:00:53	0	Archive		2021-04-26	1,774	0
2021-04-27 02:00:59	0	Archive		2021-04-27	1,774	0
2021-04-28 02:00:50	0	Archive		2021-04-28	1,774	0
2021-04-29 02:00:50	0	Archive		2021-04-29	1,774	0

Execute the same time, and check TM1Top for waiting.

```
tm1top: -adminhost localhost -servername corebis_TST -refresh 1
```

Cmd: Id	Username	Context	State	Function	Object Type	Object Name	Info
41908	Th:Pseudo	-	Idle	-	-	-	-
41896	Th:DynamicConfig	-	Idle	-	-	-	-
10048	Karl Blackler	TM1 Web	Wait:IXC	CubeCellValueSet	Cube	}ElementAttributes_BASE_Genera	waitingOn (30200)ad_Date
30200	Karl Blackler	TM1 Web	Run:R	ProcessExecuteEx	Process	Lib_Archive_Zip_Unzip	Prolog (44)
12356	Karl Blackler	Architect	Idle	-	-	-	-

Test Status: Success

2.8 CU180: Archiving base data not completing (Risk:L)

Some clients were having issues archiving base data. After reviewing these environments, it appears that the archive process was being executed multiple times, causing files to be exported multiple times and error. On error, the procedure would not correctly set the flags in the system. Once a file exists, the archive would never complete correctly unless the file was manually removed.

To remediate these issues, we applied a synchronisation of the process (CU179) so that it could only be run once at a time. We removed any files from previous errored executions so that it would not error again.

Test Goals: Test that any existing export files are removed before starting archiving, and test that the archive finished successfully.

Test Method: Archive some data from the BASE_General_Ledger_Daily Cube using existing files for unarchived data to test if the files are removed.

We added some files to the archive folder with the same name as the load date we want to archive.

bm > CoreBIS_TST > temp > Archive >

Name	Date modified	Type	Size
BASE_General_Ledger_Daily_2021-05-02_02_00_49H.zip	30/01/2023 2:42 PM	Compressed (zipp...	17 KB
BASE_General_Ledger_Daily_2023-01-15_02_03_04H.txt	30/01/2023 2:42 PM	Text Document	624 KB
BASE_General_Ledger_Daily_2023-01-15_02_03_04H.zip	30/01/2023 2:42 PM	Compressed (zipp...	17 KB
BASE_General_Ledger_Daily_2021-05-01_02_00_49H.zip	30/01/2023 2:42 PM	Compressed (zipp...	17 KB

BASE_General_Ledger_Daily_Load_Date	Used by Tagging	Action	Archived
2023-01-13 02:03:12	0		2023-01-
2023-01-14	0		
2023-01-14 02:03:11	0		2023-01-
2023-01-15	0		
2023-01-15 02:03:04	0	Archive	2023-01-
2023-01-16	0		
2023-01-16 02:03:05	0		2023-01-
2023-01-17	0		
2023-01-17 02:03:10	0		2023-01-

Successfully deleted the files and created archive, zipped and deleted txt file.

ibm > CoreBIS_TST > temp > Archive >

Name	Date modified	Type	Size
BASE_General_Ledger_Daily_2023-01-15_02_03_04H.zip	30/01/2023 2:46 PM	Compressed (zipp...	17 KB
BASE_General_Ledger_Daily_2021-05-02_02_00_49H.zip	30/01/2023 2:42 PM	Compressed (zipp...	17 KB

BASE_General_Ledger_Daily_Load_Date	Used by Tagging	Action	Archived
2023-01-14 02:03:11	0		2023-01-14
2023-01-15	0		
2023-01-15 02:03:04	0		2023-01-15
2023-01-16	0		
2023-01-16 02:03:05	0		2023-01-16

Test Status: Success

2.9 CU181: Data Loads slowed by Mapping process (Risk:L)

When dimensions are updated, a mapping checking process reviews the mapping to ensure the names of the mapped elements still exist. This process was used excessively, causing a slow response time. Improvements to the process have reduced the time taken.

Test Goals: The purpose of the mapping process is to check for updated alias and refresh the mapping to reflect.

Test Method: Test that this procedure still works and that the time taken isn't excessive.

Test by updating the "TAGGED_Debt_Security_Measure" dimension alias for DE956.

CoreBIS MAPPING BY FORM

Status: *Mapping Version open for data entry*

Map Version: MV5
 Data Source: TAGGED_Debt_Security
 APRA Form Version: ARF_720_4v4

Attribute	Description	TAGGED_Debt_Security_Measure
BSAO28038	1.2. Short-term debt securities issued by residents - of which	
BSAO28039	1.2.1. Bills of exchange - Total	
BSAO28040	1.2.1. Bills of exchange - of which: Denominated in FX (AUD	
BSAO28041	1.2.1.1. Bank accepted - Total	DE956 - Debt Securities Held
BSAO28042	1.2.1.1. Bank accepted - of which: Denominated in FX (AUD	DE956 - Debt Securities Held
BSAO28043	1.2.1.2. Other - Total	DE956 - Debt Securities Held
BSAO28044	1.2.1.2. Other - of which: Denominated in FX (AUD equivalent	DE956 - Debt Securities Held
BSAO28045	1.2.2. Other short-term debt securities: - Total	
BSAO28046	1.2.2. Other short-term debt securities: - of which: Denomi	
BSAO28047	1.2.2.1. Community service organisations - Total	DE956 - Debt Securities Held
BSAO28048	1.2.2.1. Community service organisations - of which: Deno	DE956 - Debt Securities Held
BSAO28049	1.2.2.2. Non-financial businesses - Total	
BSAO28050	1.2.2.2. Non-financial businesses - of which: Denominated	

CoreBIS MANUAL UPDATE

Select Dimension: TAGGED_Debt_Security_Measure

0 to 2 of 2

Row	Element	Name	Type
1	No TAGGED_Debt_Security_Measure Element		Numeric
2	DE956	Debt Securities Held TESTING	Numeric
3			
4			

Execution time was almost instant, with a successful message within a second.

Dimension Updated

OK

Status: *Mapping Version open for data entry*

Map Version:	MV5
Data Source:	TAGGED_Debt_Security
APRA Form Version:	ARF_720_4v4

Attribute	Description	TAGGED_Debt_Security_Measure
038	1.2. Short-term debt securities issued by residents - of which	
039	1.2.1. Bills of exchange - Total	
040	1.2.1. Bills of exchange - of which: Denominated in FX (AUD	
041	1.2.1.1. Bank accepted - Total	DE956 - Debt Securities Held TESTING
042	1.2.1.1. Bank accepted - of which: Denominated in FX (AUD	DE956 - Debt Securities Held TESTING
043	1.2.1.2. Other - Total	DE956 - Debt Securities Held TESTING
044	1.2.1.2. Other - of which: Denominated in FX (AUD equivalent	DE956 - Debt Securities Held TESTING
045	1.2.2. Other short-term debt securities - Total	
046	1.2.2. Other short-term debt securities - of which: Denomi	
047	1.2.2.1. Community service organisations - Total	DE956 - Debt Securities Held TESTING
048	1.2.2.1. Community service organisations - of which: Deno	DE956 - Debt Securities Held TESTING
049	1.2.2.2. Non-financial businesses - Total	
050	1.2.2.2. Non-financial businesses - of which: Denominated	
051	1.2.2.2.1. Private non-financial investment funds - Total	DE956 - Debt Securities Held TESTING

Test Status: **Success**

2.10 CU182: Average Interest Rate Calculation Error (Risk:M)

The Average Interest Rate Calculation will automatically work out an average weighted interest rate on the forms given data from multiple sources. The assumptions for this were that interest rates and the amounts were of the same origin. Should these be from separate origins, then the calculation would incorrectly calculate 0.

Multiple flags have been added to the system to allow the system not to calculate the average or to exclude a specific attribute from the calculation.

Test Goals: Test that this functionality can be turned off.

Test Method: Check that the rule works, turn off just one attribute, and turn the functionality off completely.

1. The Average Calculation feature is working;

Cube Viewer: CoreBIS_TST->INT_DataSource->Default

APRA_Attribute	Value	APRAValue	APRA_Calculation	-- All Unrounded Sources	-- Lite Data	LITE_EFS_Forms	WeightedAverageCalc	-- All Unrounded Sources	-- Lite Data	LITE_EFS_Forms
-- ARF_747_0Bv8	65198940075.082	65198940075.082	14228805161.602	50970134913.48	50970134913.48	50970134913.48	0	81655896247.04	81655896247.04	81655896247.04
BSL22470	19492	19492	0	19492	19492	19492	0	0	0	0
BSL22471	789871372	789871372	0	789871372	789871372	789871372	0	0	0	0
BSL22472	5.42	5.42	0	5.42	5.42	5.42	4281102836.24	4281102836.24	4281102836.24	4281102836.24
BSL22475	218	218	0	218	218	218	0	0	0	0
BSL22476	543680	543680	0	543680	543680	543680	0	0	0	0
BSL22477	1.02	1.02	0	1.02	1.02	1.02	554553.6	554553.6	554553.6	554553.6
BSL22485	1052638	1052638	0	1052638	1052638	1052638	0	0	0	0

2. Turn the BSL22472 attribute off.

Cube Viewer: CoreBIS_TST->}ElementAttributes_APRA_Attribute_WeightedAverageCalcFlag->I

APRA_Attribute_WeightedAverageCalcFlag	Exclude	Interest Rate	Balance
ARF_747_0Bv8:BSL22462	0	BSL22462	BSL22461
ARF_747_0Bv8:BSL22472	1	BSL22472	BSL22471
ARF_747_0Bv8:BSL22477	0	BSL22477	BSL22476

Cube Viewer: CoreBIS_TST->INT_DataSource->Default

APRA_Attribute	Value	APRAValue	APRA_Calculation	-- All Unrounded Sources	-- Lite Data	LITE_EFS_Forms	WeightedAverageCalc	-- All Unrounded Sources	-- Lite Data	LITE_EFS_Forms
-- ARF_747_0Bv8	65198940075.082	65198940075.082	14228805161.602	50970134913.48	50970134913.48	50970134913.48	0	77374793410.8	77374793410.8	77374793410.8
BSL22470	19492	19492	0	19492	19492	19492	0	0	0	0
BSL22471	789871372	789871372	0	789871372	789871372	789871372	0	0	0	0
BSL22472	5.42	5.42	0	5.42	5.42	5.42	0	0	0	0
BSL22475	218	218	0	218	218	218	0	0	0	0
BSL22476	543680	543680	0	543680	543680	543680	0	0	0	0
BSL22477	1.02	1.02	0	1.02	1.02	1.02	554553.6	554553.6	554553.6	554553.6

3. Turn the average calculation functionality off completely.

Cube Viewer: CoreBIS_TST->|ElementAttributes_SYS_CONTROL->Default

SYS_CONTROL.Default	Number	Value
Excel EXE	0	C:\Program Files (x86)\Mi
Export Folder	0	E:\bm\CoreBIS_tst\Exp
Form Precision Override (Min Decimal Places)	2	
Form Precision Override (Y/N)	0	Y
INT_DataSource Avg Calc Flag	1	
License - Admin Entitlement	0	

Cube Viewer: CoreBIS_TST->|ElementAttributes_SYS_CONTROL->Default

SYS_CONTROL.Default	Number	Value
Excel EXE	0	C:\Program Files (x86)\Microsoft Office\Office15\Excel.exe
Export Folder	0	E:\bm\CoreBIS_tst\Export\
Form Precision Override (Min Decimal Places)	2	
Form Precision Override (Y/N)	0	Y
INT_DataSource Avg Calc Flag	0	
License - Admin Entitlement	0	

Cube Viewer: CoreBIS_TST->INT_DataSource->Default

ARF_747_0B | DOMESTIC:CoreBIS No.1 | W_2021-03-31_Submission

APRA_Attribute	Value	APRAValue	APRA_Calculation	-- All Unrounded Sources	-- Lite Data	LITE_EFS_Forms
-- ARF_747_0Bv8	65198940075.082	65198940075.082	14228805161.602	50970134913.48	50970134913.48	50970134913.48
BSL22470	19492	19492	0	19492	19492	19492
BSL22471	789871372	789871372	0	789871372	789871372	789871372
BSL22472	5.42	5.42	0	5.42	5.42	5.42
BSL22475	218	218	0	218	218	218
BSL22476	543680	543680	0	543680	543680	543680
BSL22477	1.02	1.02	0	1.02	1.02	1.02
BSL22485	1052638	1052638	0	1052638	1052638	1052638
BSL22486	17746478756	17746478756	0	17746478756	17746478756	17746478756
BSL22487	1.54	1.54	0	1.54	1.54	1.54

Test Status: **Success**

3. Enhancements to Existing Features

3.1 EF139: Multi-threading of tagging to improve performance (Risk:M)

The tagging process can be relatively complex, and with the addition of the "Next Level" to facilitate more complex multi-step tagging, the tagging process can take some time to run. We've introduced a new update method, which allows you to run the tagging using multi-threads/cpus, thus speeding up this process immensely.

As each model is unique, a parameterised dimension is required, and a selection of the number of cores to use. These selections are dependent on the environment and cube being run, but the main things to consider are;

- Pick a dimension with up to 100 elements.
- Pick a dimension that has data equally spread between those items.
- The Number of Cores to use is how many executions concurrently are executed, so depending on the hardware, the higher the number, the better.

Test Goal: The Tagged Cube load process is much faster when using the multi-threading load.

Test Method: Test that the process executes successfully, the values are the same as single-threaded mode, and the process runs faster.

Testing was completed at a CoreBIS client using the TAGGED_Deposits cube. This test showed that single thread execution was completed successfully in 2297 seconds.

When the BASE_DP_Rim_Class_Code dimension with 20 threads was used as parameters, the multi-threading was completed successfully in 1933 seconds (saving of approx 15%)

When the BASE_Deposits_Measure dimension with 10 threads was used as parameters, the multi-threading was completed successfully in 821 seconds (saving of approx 65%)

Test Status: **Success**

3.2 EF141: ARF_922_2 (Risk:L)

Adding the COVID form ARF_922_2

Test Goal: The form opens from the workflow and displays the correct parameters.

Test Method: Open form.

CoreBIS

APRA Entity: LEVEL2:CoreBIS No.1
 INT DataSource: All INT_DataSource (n)
 APRA Return Version: W_2019-09-30_Submission

Recalculate
 Show Data Sources
 Trend Analysis

ARF_922_2: COVID-19 Liquidity - MLH Forecast

Institution Name: CoreBIS No.1

Reporting Date (data current as at): 2019-09-30 Revision: 1

1. LCR / NSFR / MLH forecast assuming the forecast you would present to the Board as the "base case" or expected scenario

1.1. LCR / (level 1 - all currencies) or MLH (MLH ADIs should only report on the highest consolidation level (i.e. level 1 or level 2))

	As at reporting date	Five business days forecast	30 calendar days forecast	60 calendar days forecast	Comment (if any)
1.1.1 Total HQLA (or MLH liquid assets)	0	0	0	0	
1.1.1.1 Of which: notes and coin	0				
1.1.1.2 Of which: AGS	0				
1.1.1.3 Of which: Semis	0				
1.1.7 LCR / MLH ratio	0	0	0	0	

Test Status: Success

3.3 EF142: ARF_922_3 (Risk:L)

Adding the COVID form ARF_922_3

Test Goal: The form opens from the workflow and displays the correct parameters.

Test Method: Open form.

CoreBIS

APRA Entity: LEVEL2:CoreBIS No.1
 INT DataSource: All INT_DataSource (n)
 APRA Return Version: W_2019-09-30_Submission

Recalculate
 Show Data Sources
 Trend Analysis

ARF_922_3: COVID-19 Liquidity - MLH

Institution Name: CoreBIS No.1

Reporting Date (data current as at): 2019-09-30 Revision: 1

1. RBA repo-eligible asset position (Level 1)

	As at reporting date	Comment (if any)
1.1 RBA repo-eligible third party securities (post haircut)	0.0	
1.1.1 Of which: used for ESA	0.0	
1.1.2 Of which: used to collateralise drawn RBA TFF	0.0	
1.1.3 Of which: used for other RBA repo (OMO or Standing Facility)	0.0	
1.2 RBA repo-eligible self-securitisation amount (post haircut)	0.0	
1.2.1 Of which: used for ESA	0.0	
1.2.2 Of which: used to collateralise drawn RBA TFF	0.0	
2.2.3 Of which: used for other RBA repo (OMO or Standing Facility)	0.0	
1.4 Available RBA TFF Funding Allowance	0.0	
1.5 Estimate of eligible residential mortgages not currently securitised (including self-securitisation) or utilised for covered bond collateral (i.e. necessary to meet rating agency or other requirements for the cover pool)	0.0	

2. Liquidity / credit facilities provided to customers (Level 1)

	Funding facilities available			Comment (if any)
	Facility size (\$)	Drawn (\$)	Capacity	
2.1 Non-redraw committed credit/liquidity facilities - Retail	0.0	0.0	0.0	
2.2 Redraw capacity	0.0	0.0	0.0	

Test Status: Success

4. New Features

4.1 NF45 P6: Integrate CoreBIS with APRA Connect. (Risk: M)

Code Updates: Updates to 110/112 setups to include:

1. Removal of the TREFDs from the APRA Connect dimensions and elements.
APRA has informed Cortell that the TREF ID's will no longer be provided in the taxonomy and hence to use the Key field instead. This has been reflected in the model, and any existing AC dimensions will convert over on deployment.
2. Addition of the ARS_110 form
The ARS_110 form will appear the same as a D2A form. Cortell has made up APRA_Attributes for each item to fit in with existing form mapping, adjustments, attribute calculations, data lineage, movement reports, etc.
3. Update the APRA Connect Export process to convert the ARS_110 form to a table before exporting to XML for APRA Connect.

Test Goal 1: Ensure the new taxonomy imports and updates correctly

Test Method 1: Run the **MASTER_D2A_Master** process and review the execution

The screenshot displays the CoreBIS APRA RETURN MANAGEMENT interface. At the top, there are buttons for 'Recalculate' and 'Return to Main Menu'. Below this, there are two dropdown menus: 'APRA Entity' set to 'P_CoreBIS No.1' and 'APRA Period' set to '2021-10-31'. To the right, there is an 'Add New Form Entry' section with a 'Select Form Version' dropdown set to 'ADI_CAPADv1', 'Scale' set to 'None', and 'Due Date' field. Below these are 'Add' and 'Export to APRA' buttons. A yellow highlight is present over the 'Update CoreBIS from D2A' button. At the bottom, a message box states 'D2A data updated Successfully.' with an 'OK' button.

Test Status: **Success**

Test Goal 2: Ensure no TREF IDs remain for the APRA Connect objects.

Test Method 2: Review the dimension attributes and check the dimension edit screens to ensure reference to the name, not TREF ID.

SBR dimension still has TREF IDs

[Create new Dimension](#) *Note: The dimension will b*

SBR Dimension

APRA_MapItem - Non Dimensional Mapping

DM1 - AustralianStatesTerritoriesAndOffShoreArea

DM2 - AustralianStatesAndTerritoriesDimension

DM3 - EmployerGroupStatusDimension

DM4 - LiabilityEstimationMethodDimension

DM5 - ReportPartyTypeDimension

Connect dimension does NOT have TREF IDs

[Create new Dimension](#) *Note: The dim*

Connect Dimension

APRA_MapItem

ACD_AdditionalTier1CapitalType

ACD_ADIOpRiskAdjustmentType

ACD_ADIOpRiskBSClassification

ACD ADIOpRiskPnl Classification

Correctly, no TREF ID listed.

CoreBIS EDIT STRUCTURE

Recalculate Return to

Select Dimension: AC_Balance_Sheet_Type

SBR Dimension: ACD_BalanceSheetType

Update from APRA

Selected Parent: All AC_Balance_Sheet_Type (n)

Action: 1. Add new child to parent

Selected Child:

or New Child:

Weighting: 1

Perform Action

Note: To change the Name attribu

Children of selected Parent	Creation Date	Weighting	Name
All AC_Balance_Sheet_Type (n)	25/01/2023 16:52		
No AC_Balance_Sheet_Type Element	25/01/2023 16:52	1	
NotApplicable	25/01/2023 16:52	1	Not Applicable
OffBalanceSheet	25/01/2023 16:52	1	Off-balance sheet
OnBalanceSheet	25/01/2023 16:52	1	On-balance sheet

Test Status: Success

Test Goal 3: Ensure the new ARS_110 form works as expected.

Test Method 3: Add the form to a workflow and test that it can be opened and adjusted.

CoreBIS APRA CONNECT MANAGEMENT Recalculate Return to Return Mgmt

APRA AC Entity: Add New Entity Clear Table Validate Table Submit to Return Mgmt

Name	Reference	Revision	Categories	Status	End Date	Due Date	Reporting Consolidation	Validation
1 ARS_112	ADI_CRSTDv1			open	2023-01-31	2032-06-30	LEVEL1	Valid
2 ARS_112	ADI_CRSTDv1			open	2023-01-31	2032-06-30	LEVEL2	Valid
3 ARS_110	ADI_CAPADv1			open	2023-01-31	2032-06-30	LEVEL2	Valid
4 ARS_110	ADI_CAPADv1			open	2023-01-31	2032-06-30	LEVEL1	Valid
5								Skip
6								Skip

CoreBIS WORKFLOW OVERVIEW

Open Task Task Detail Submit Task

Filter: Filter Workflow Version:

Description of Task	APRA Due Date	Current Status
Review Data Loading of TAGGED_GL	04/02/2023	Ready
Review Data Loading of TAGGED_Profit_Loss	04/02/2023	No Workflow Requirement
Review Data Loading of TAGGED_Off_Balance_Sheet	04/02/2023	No Workflow Requirement
Review Data Loading of TAGGED_Loan_Book	04/02/2023	Ready
Review Data Loading of TAGGED_Manual_Input	04/02/2023	Ready
Review Data Loading of TAGGED_BEAR_Details	04/02/2023	No Workflow Requirement
Review Data Loading of TAGGED_testing_2021-02-18	04/02/2023	No Workflow Requirement
Review Data Loading of TAGGED_220_0_Exposures_and_Provisions	04/02/2023	Ready
Review Data Loading of TAGGED_Business_Loans	04/02/2023	No Workflow Requirement
Review Data Loading of TAGGED_Fee_Allocation	04/02/2023	No Workflow Requirement
Review Data Loading of TAGGED_TextFile_Test	04/02/2023	No Workflow Requirement
Review Data Loading of LITE_EFS_Forms	04/02/2023	No Workflow Requirement
Review Data Loading of LITE_Credit	04/02/2023	No Workflow Requirement
All Forms		
Capital Adequacy Return - Standardised		
ARF_111_0 (LEVEL1 CoreBIS No.1) - Fair Values (Capital Adequacy Return - Standardise)	04/02/2023	Waiting on Data Approval
ARF_111_0 (LEVEL1 CoreBIS No.1) - Fair Values (Capital Adequacy Return - Standardise)	04/02/2023	Waiting on Data Approval
ARS 112.0 Capital Adequacy - Standardised Approach to Credit Risk		
ADI_CRSTD (AC_LEVEL1 Cortell Australia Pty Ltd) - ARS 112.0 Capital Adequacy - Standa	30/06/2023	No Workflow Requirement
ADI_CRSTD (AC_LEVEL2 Cortell Australia Pty Ltd) - ARS 112.0 Capital Adequacy - Standa	30/06/2023	No Workflow Requirement
ARS 110.0 Capital Adequacy		
ADI_CAPAD (AC_LEVEL1 Cortell Australia Pty Ltd) - ARS 110.0 Capital Adequacy (ARS 11	30/06/2023	No Workflow Requirement
ADI_CAPAD (AC_LEVEL2 Cortell Australia Pty Ltd) - ARS 110.0 Capital Adequacy (ARS 11	30/06/2023	No Workflow Requirement

CoreBIS MANUAL ADJUSTMENTS Recalculate Return to Datasource Drill

APRA Entity: Bulk Manual Adjustments

APRA Form Variant: Recurring

APRA Return Version:

APRA Attribute:

Data Type:

APRA Table Attribute:

Values from Data Sources:

Description of Adjustment	Value	User	Timestamp	Recurring	Rolling Balance
test	5,000,000.00	Kari Blackler	30 JAN 2023 16:07	No	0.00 + 5,000,000.00 = 5,000,000.00
Add Adjustment					
Total Adjustments	5,000,000.00				
TOTAL	5,000,000.00				

ARS_110_0 - Capital Adequacy

Institution Name	Cortell Australia Pty Ltd
Australian Business Number	86096725667
Reporting Period	2023-01-31
Reporting Consolidation	LEVEL1

Section A: Regulatory Capital

- 1. Tier 1 capital
 - 1.1. Common Equity Tier 1 Capital
 - 1.1.1. Common Equity Tier 1 Capital before regulatory adjustments
 - 1.1.1.1. Paid-up ordinary share capital
 - 1.1.1.2. Mutual Equity Interests
 - 1.1.1.3. Retained earnings
 - 1.1.1.4. Current year earnings (excluding upfront fee income)
 - 1.1.1.5. Current year earnings - Upfront fee income
 - 1.1.1.6. Accumulated other comprehensive income (and other reserves):
 - 1.1.1.6.1. Unrealised gains and losses on investment securities
 - 1.1.1.6.2. Gains and losses on cash flow hedges

5,000,000
0
0
0
0
0
0
0
0

Test Status: Success

Test Goal 4: Test that the APRA Connect XML file is produced correctly from the ARS_110 form.

Test Method 4: Run the export procedure and check the resulting export file.

The screenshot displays the 'EXPORT TO XML' interface in the CoreBIS system. At the top left is the CoreBIS logo. The main header reads 'EXPORT TO XML'. On the right, there are two buttons: 'Recalculate' and 'Return to Main Menu'. Below the header, there are three dropdown menus for 'APRA Entity' (set to 'All APRA_Entity (n)'), 'APRA Period' (set to '2023-01-31'), and 'APRA Return' (set to 'All APRA_Return (n)'). Underneath, the 'Optional Selections' section includes 'APRA Form' (set to 'ADI_CAPAD') and 'APRA Return Version' (set to 'W_2023-01-31_Submission'). A note states 'This will default to the Final version; 2023-01-31'. An 'Export' button is centered below these options. Below the button, the text 'Export folder: E:\ibm\CoreBIS_tst\Export\' is shown. A light gray dialog box with the text 'XML output to EXPORT folder on the server.' and an 'OK' button is displayed. At the bottom, a file explorer view shows the path 'ibm > CoreBIS_TST > Export' with two XML files listed: 'AC_2023-01-31_ARS 110.0 Capital Adequacy_ADI_CAPAD_ADI_CAPAD_6200_LEVEL1_2023JAN30_161016.xml' and 'AC_2023-01-31_ARS 110.0 Capital Adequacy_ADI_CAPAD_ADI_CAPAD_6200_LEVEL2_2023JAN30_161016.xml'.

Test Status: **Success**