CGI Advantage® 4

Treasury Accounting Run Sheets Guide



CGI Advantage® – Treasury Accounting Run Sheets		
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1 Purpose of the System Administration Guide

This manual is intended to help system administrators initiate, configure, monitor, and control all processing for CGI Advantage. The manual has five parts:

- The CGI Advantage System Administration Guide contains information about the CGI Advantage system architecture, and configuration (including the embedded third party components), post-installation setup, security configuration and considerations, workflow, job framework and its usage/maintenance, and other information pertinent to administering the application.
- The CGI Advantage HRM run sheet guides describe each process of CGI Advantage HRM in detail with its input, output, parameters, sort sequence, and selection criteria.
- The CGI Advantage Financial run sheet guides describe each process of CGI Advantage Financial in detail with its input, output, parameters, sort sequence, and selection criteria.
- The CGI Advantage HRM Payroll Engine System Administration Guide describes the system control tables and utilities for CGI Advantage HRM.
- The CGI Advantage VSS System Administration Guide describes each VSS process in detail with its input, output, parameters, sort sequence, and selection criteria.

System administration tasks include setting up and maintaining application security, querying and viewing the application status through logs and reports, managing workflow, setting up and maintaining system tables, and other critical application maintenance tasks.

1.1 Common terms and glossary used

The terms "Job" and "Batch" have been used interchangeably throughout the document. Please note that the CGI Advantage technical architecture is flexible enough to support the execution of jobs/batch processes while the application is available for online usage. In other words, the jobs/batch processes are technically not required to be "offline" processes.

2 Description of Processes

This chapter describes the processes in CGI Advantage that are considered system administration processes. For each process, you see information on these topics:

- Description
- Steps to Run this Process (if applicable)
- When to Run
- Major Input
- Output
- Parameters Batch and Custom
- Sort Sequence
- Selection Criteria
- Notes
- Problem Resolution

System Wide Batch Parameters:

System wide batch parameter fields are available with each batch program, which provide the path for the input/output directory. These parameters allow sites to easily and quickly update the path for individual batch processes.

System wide batch parameters can be defined at the System Level, Area Level, Chain Job level, Chain Level or Job level. There has to be a default value set for the system wide batch parameters at any of these levels mentioned above so that the process will generate, read or write the respective files from the given location.

System wide batch parameters are defined at the System Level on the System Level Process Parameters (BATSETUP) reference page, searching for the Catalog Label of *Batch Catalog* and then choosing the record-level action of *Edit*.

- AMSROOT Root directory of the batch files (for example, C:\AMSADV30\RTFiles)
- **AMSEXPORT** For files that are created by the program and need to remain after the job is completed (i.e. cannot be temporary files). This could include interface files that come from/go to third party sources (for example, \$AMSROOT\ExportImport).
- AMSIMPORT For files that are used by the program and need to remain after the job is completed (that is, cannot be temporary files). This could include interface files that come from/go to third party sources (for example, \$AMSROOT\ExportImport).
- **AMSLOGS** For batch framework log files. If the job requires its own log files, this is where it is put (for example, \$AMSROOT\Logs).
- **AMSPARM** Batch job parameter files specific to a single job instance only (for example, \$AMSROOT\Parms).
- AMSTEMP For temporary files, usually stamped with process ID (for example, C:\TEMP).
- AMSSPOOL Batch job report files, statistic files, exception reports, and so forth. These
 files may be sent to an OS print queue. File name is usually date and time stamped (for
 example, \$AMSROOT\Spool).

Note:

Assumptions while implementing system wide batch parameters: It is assumed that wherever in the Job processes system wide batch parameter variables (that is, AMSEXPORT, AMSIMPORT, AMSROOT, AMSLOGS, AMSPARM, AMSTEMP, AMSSPOOL) are declared as input parameters, care should be taken to set the overrideable flag for that variable to *true*, otherwise the process may fail.

Pivot Date/Year Validation:

Note:

Assumption for date attributes: Set the Earliest Year (EARLIEST_YEAR) and Latest Year (LATEST_YEAR) on the Application Parameter reference page. When defining the year range, attention should be given to setting a range vast enough to accommodate all system impacts (such as imported transactions). The Job input date/year must lie between the above year range; otherwise, the process will fail.

2.1 Treasury Accounting Batch and Chain Processes

Descriptions of the Advantage Investments processes are organized in this section in alphabetical order.

- Cash Sweep Process
- Cash Sweep Transaction Resubmit Process
- DTC Transmission
- Income Allocation Process
- Income Allocation Transaction Resubmit Process
- Investment Activity Report
- Local Bank File Load
- Matured Investment Process

2.1.1 Cash Sweep Process

Job Name	Cash Sweep Process
Recommended Frequency	Daily
Single Instance Required	Yes
Can the job be restarted	No
Exception Reports generated	Yes

Overview

The Cash Sweep process is designed to move cash between participatory accounts and pools. Participants and pools are defined in combinations on the Cash Sweep (SWEEP) page.

A Cash Sweep starts with those records on SWEEP that have a Status other than 'Inactivated' or 'No Updates Allowed'. The process takes selected SWEEP records and determines if there is cash to sweep from or back to the participatory account. Cash is swept from an account if the Balance (CURR_BAL) on the ITD Balance Sheet Detail (BBALD) page is greater than the Required Balance (REQ_BAL) for the participant on SWEEP. If the Balance is less than the Required Balance one of two things will happen based on the Allow Negative Investment Balance (ALW_NEG_BAL_FL) flag on the Fund page:

- If checked, then cash will be swept from the pool to the participant for an amount that makes the BBALD Balance equal the SWEEP Required Balance. This type of sweep is often referred to as a 'reverse sweep.'
- If unchecked, a reverse sweep will occur but with a limit. The limit is the amount currently in the pool for the participant that is found on the Pool History (PHIS) page.

Journal Voucher Sweep (JVSW) transactions are created to record the cash movement. Outputs from the Cash Sweep process are update records on Pool History for the process execution date; JVSW transactions update BBALD as a result of transaction processing. An exception report is generated to state all transactions successfully processed or list those JVSW transactions that rejected.

The chain includes four job steps that perform the following functions:

- 1. <u>Cash Sweep</u> This job performs parameter validation, record selection, XML file creation, PHIS updates, and the creation of files used by later job steps.
- 2. <u>Load Transaction</u> This job takes the XML file created in the previous step and loads the transactions into the Transaction Catalog.
- 3. <u>Submit Transaction</u> This job submits the transactions loaded to the Transaction Catalog according to a text file created in the first job.
- 4. <u>System Assurance Report</u> This job reviews the list of transactions created to report on all that have not reached the 'Final' Transaction Phase.

Major Input

- Cash Sweep (SWEEP): R_CASH_SW_SETP
- Balance Sheet Balance (BBALD): R_BBAL_ITD
- Pool History (PHIS): PL_HIST_INQ

Minor Input

- Treasury Accounting Special Fund Accounts (SPECFUND): R_IN_SPEC_FUND
- Infer Department and Unit (INFDU): INF_DEPT_UNIT

Major Output

- New records added to Pool History (PHIS) for the process execution date
- Treasury Accounting Sweep Journal Voucher (JVSW) transactions are created and submitted to record the cash movement

Minor Output

- System Assurance Exception Report for JVSW transactions
- Investment Special Fund Accounts (SPECFUND) is updated with the execution date as the Last Run Date For Cash Sweep Process

Chain Return Codes

The following table indicates the potential return codes with which the chain ends:

Return Code Condition	
Successful (1)	All of the jobs in the chain end with a return code of Successful
Warning (4)	When the 2 nd job in the chain ends with a return code of Warning
Non Fatal Error (8)	When the 1 st job ends with a return code of Non Fatal Error and the 2 nd job has a return code of Successful. If the 2 nd job has a return code of Warning, that will be the chain return code too.
Failed (12)	One of the jobs in the chain ends with a return code of Failed
Terminated (16)	One of the jobs in the chain ends with a return code of Terminated
System Failure (20)	One of the jobs in the chain ends with a return code of System Failure

Cash Sweep Process Chain: Cash Sweep Job

Job Name	Cash Sweep
Recommended Frequency	See the chain description
Single Instance Required	Yes
Can the job be restarted	No
Exception reports generated	No

Overview

The Cash Sweep job step performs the following tasks:

- 1. Batch Parameter Validation
- 2. JVSW Transaction XML Generation

- Select SWEEP records.
- Determine amount of cash to sweep.
- Create JVSW transactions in an XML file.
- Create the parameter and submit files for use in later job steps.

The following table shows the various steps that the job step goes through and the progression messages issued at each step.

Process Steps	Messages	
Batch Parameter Validation	Run Started Each parameter is listed with value Any parameter errors are listed	
	Transactions created: ## (where ## is the number of JVSW transactions in the XML file	
	Or (if process has already run for a date)	
JVSW Transaction	 Cash Sweep process already ran for Pool Fund XYX and Sub Fund XYZ for Process Run Date mm/dd/ccyy 	
XML Generation	Followed by either of the following depending on selection:	
	No records found to be processed	
	Transactions created: ##	
	In all cases the following is the final message	
	Run Ended	

Restartability Information

This job cannot be restarted. If the job fails for some reason, please see the tables in a later section with instructions for different return codes.

Major Input

- Cash Sweep (SWEEP): R_CASH_SW_SETP
- Balance Sheet Balance (BBALD): R_BBAL_ITD
- Pool History (PHIS): PL_HIST_INQ

Minor Input

- Treasury Accounting Special Fund Accounts (SPECFUND): R_IN_SPEC_FUND
- Infer Department and Unit (INFDU): INF_DEPT_UNIT

Batch Parameters

Parameter	Description	Default Values
AMSEXPORT	(Required) Export Location at Cash Sweep Job	\$\$AMSEXPORT\$\$ (** Refer to Note: Assumptions for SWBP about AMS* parameters)
AMSPARM	(Required) Parameter Location at Cash Sweep Job	\$\$AMSPARM\$\$ (**Refer to Note: Assumptions for SWBP AMS* parameters)
AMSLOGS	(Required) Logs Location at System Assurance Report job	\$\$AMSLOGS\$\$ (**Refer to Note: Assumptions for SWBP AMS* parameters)
CLIENT_NM	(Optional) Client Name to be printed on Cash Sweep Systems Assurance Report	(blank)
COMMIT_SIZE	(Optional) This field controls how many records are committed by the application at one time.	1
DOC_CD	(Required) Transaction Code for the generated journal voucher transactions.	JVSW
DOC_PFX	(Optional) Prefix for the generated JVSW transactions. There should be an entry in AUTO_DOC_NO (ADNT) for the prefix (**** if the parameter is left blank) along with the DOC_CD, current fiscal year, and the department of each pool on INFDU.	(blank)
EXCEP_REP_FILE _NM	(Required) System Assurance Report file(.txt) for generated JVSW transactions	CSDocExcp.txt
EXCEP_REP_IND	(Optional) System Assurance Report Type where 2 = Failed transaction listing and 4 = Detailed listing of transactions with errors. If not entered then defaulted as 2.	2
EXP_FILE_NM	(Required) Generated Transaction XML File	CashSweep.xml
PARM_FILE	(Required) Parameter(.txt) file	CSParams.txt

RUN_DT	(Optional) Process Run Date in MM/DD/YYYY format (if not entered then the Application Date is used)	(blank)
SUBMIT_FILE	(Required) Submit Parameter(.txt) file	CSSubmit.txt

Major Output

- Pool History (PL_HIST_INQ)
- CashSweep.xml (XML file of JVSW transactions)
- CSParams.txt (text file containing instructions for later steps)
- CSSubmit.txt (text file containing instructions for later step)
- Special Fund Accounts Investments (R_IN_SPEC_FUND)

Job Return Code

Return Code	Code Condition	
Successful (1)	All the validations are performed successfully.	
Warning (4)	This job does not issue this return code.	
Non Fatal Error (8)	Some of the inferences and validation of the eligible records are not valid.	
Failed (12)	The job will fail under the following conditions: • Parameters are invalid. • Technical failure. When this job ends with a return of code Failed, subsequent jobs in the chain will be set to inactive.	
Terminated (16)	This return code will be issued when the job is terminated by the user. When this job ends with a return of code Terminated subsequent jobs in the chain will be set to inactive.	
System Failure (20)	This return code will be issued when the job is terminated because of database server or network issues. When this job ends with a return of code System Failure, subsequent jobs in the chain will be set to inactive.	

Sort Sequence

 Pool Fund, Pool Sub Fund, Participatory Fund, Participatory Sub Fund, Fiscal Year, Participatory Fund Cash BSA, and Participatory Fund Cash Sub BSA.

Selection Criteria

- Records are selected for processing based on the following criteria:
 - Select all records from Cash Sweep where Sweep Status is Active or Closed By User or Deactivated By User.

If there is sufficient cash balance to move cash from Participatory Fund–Sub Fund–BSA

 Sub BSA to Pool Fund-Sub Fund then move cash to Pool History by generating JVSW transactions else perform a reverse cash sweep to move cash back from Pool Fund-Sub Fund to Participatory Fund–Sub Fund–BSA–Sub BSA.

Problem Resolution

The following table shows the possible return codes and recommendations for each processing step.

Step 1: Batch Parameter Validation:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	All batch parameter validations are successful (i.e. there are no errors raised during validations.)	N/A	N/A
Warning (4)	N/A	This step does not issue this return code.	N/A
Non Fatal Error (8)	N/A	This step does not issue this return code.	N/A
	Required parameters are not entered. Sample Message: Export file name is not specified	Enter missing required parameters or correct parameters then schedule a new job.	N/A
Failed (12)	Entered Parameters are not valid Sample Message: Entry for Journal Voucher Sweep transaction code not found in Transaction Control	Enter valid parameters and schedule a new job.	N/A
	Failed because of runtime exceptions caused by unexpected conditions	Failure reason needs to be investigated before scheduling a new job.	N/A
Terminated (16)	Job is terminated manually by the user.	A new job can be scheduled.	N/A
System Failure (20)	Job is terminated because of database server or network issues	Reason for the System Failure needs to be investigated. A new job can be scheduled once the problem has been resolved.	N/A

Step 2: JVSW Transaction XML Generation:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	JVSW Transaction XML generated successfully.	N/A	N/A
Warning (4)	N/A	This step does not issue this return code.	N/A
Non Fatal Error (8)	Required peripheral records are not valid or not found: 1. SPECFUND Investment record for a Pool not found 2. Record does not exist in the ADNT for the given Transaction Code, Current Fiscal Year, Prefix, and Department from INFDU for a pool.	 Add missing record to the Investment SPECFUND page for the Pool in the Current Fiscal Year. Add missing record to ADNT for the missing Department or with a Department of **** that will cover all Departments not explicitly defined. 	Submit another instance of the entire chain to process those records skipped.
Failed (12)	Failed because of runtime exceptions caused by unexpected conditions	Failure reason needs to be investigated before rescheduling the job.	If a failure occurred in the XML file creation so that not all or none of the necessary transactions were saved to the file, look to see if any PHIS or SPEFUND updates were made for the Run Date. If not, then restart another chain after the reason for failure is corrected. If updates were made, then either restore that table or delete the PL_HIST_INQ records with the failed Run Date. Reset the Last Run Date on R_IN_SPEC_FUND to the prior date.
Terminated (16)	Job is terminated manually by the user.	A new job can be scheduled after the above R_IN_SPEC_FUND and PL_HIST_INQ update checks are performed	See above

System Failure (20)	Job is terminated because of database server or network issues	Reason for the System Failure needs to be investigated. A new job can be scheduled after the previous R_IN_SPEC_FUND and PL_HIST_INQ update checks are performed	See above
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Cash Sweep Process Chain: Load Transaction

Job Name	Load Transaction	
Recommended Frequency	See the chain description	
Single Instance Required	Yes	
Can the job be restarted	Yes	
Exception reports generated	No	

Overview

This job step will execute a SysManUtil Import to load the JVSW transactions created by the Cash Sweep job. An upload JVSW parameter text file was created by the Cash Sweep job step specifying SMU transaction import parameters and what JVSW transaction XML file to load.

The following table shows the various steps that the job step goes through and the progression messages issued at each step.

Process Steps	Messages	
Batch Parameter Validation	Run StartedEach parameter is listed with valueAny parameter error is listed	
JVSW Transaction Loading	 Rows Processed: ## Rows Saved: ## Rows in Error: ## Run Ended 	

Major Input

- CashSweep.XML
- CSParms.txt

Batch Parameters

Parameter	Description	Default Value
PARM_FILE	(Required) File location and name of upload parameter file for generated JVSW transactions	\$\$AMSPARM\$\$/CSParams.txt

Note: The PARM_FILE only contains the subset of SMU job parameters for loading transactions.

Parameter	Default Value
ACTN_CD	DOCIMPORT
FILE_NM	\$\$AMSEXPORT\$\$/CashSweepXML.xml
COMMIT_BLOCK	1
RESTART_FL	true
GENERATE_STATS	true
BYPS_ADNT_FL	true

Please refer to "SMU Transaction Upload Job" run sheet in CGI Advantage Financial Utilities Run Sheets Guide for the full list SMU Transaction Upload Batch parameters.

Major Output

• JVSW transactions in draft status

Job Return Code

The following table shows the potential job return codes for the SMU Transaction Upload job. Please note that these return codes are applicable for each input file (data file). If the parameter file is supplied as an input file, then these return codes are applicable for each parm line on the parameter file and the job will end with the highest return code across all of the parm lines.

Return Code	Condition	
Successful (1)	All of the records are loaded into the Transaction catalog successfully.	
Warning (4)	This return code will be issued under the following conditions: The input file is empty Some records fail to load into the Transaction catalog.	
Non Fatal Error (8)	All records fail to load into the Transaction Catalog.	
Failed (12)	The job will fail under the following conditions: • Parameters are invalid • The input file is not found in the specified directory • If the error messages exceeds the maximum number	

	specified in the parameter Runtime exceptions encountered for any unexpected situations When the job ends with a return code of Failed, subsequent jobs in the chain are set to inactive.	
Terminated (16)	This return code will be issued when the job is terminated by the user. When the job ends with a return of code Terminated, subsequent jobs in the chain are set to inactive.	
System Failure (20)	This return code will be issued when the job is terminated because of database server or network issues. When this job ends with a return of code System Failure, subsequent jobs in the chain are set to inactive.	

Sort Sequence

N/A

Selection Criteria

N/A

Problem resolution

If the job ends with a return code of Failed and above, the job can be restarted only when the Save Restart Information parameter is selected and another instance of the job has not been scheduled and run successfully. If another instance of the job has already been scheduled and ran successfully, then this job should not be restarted – a new job should only be scheduled.

The following table shows the possible return codes and recommendations for each processing step specific to the job in the chain. For general errors and recommendations, refer to the "SMU Transaction Upload Job" run sheet in the CGI Advantage Financial – Utilities Run Sheets Guide.

Parameter Editing & JVSW Upload:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	All parameters are valid and all the transactions are loaded successfully	N/A	
Warning (4)	The input file is empty. Sample message: No records found on the input file	Make sure that the Cash Sweep job was run with correct parameters as no SWEEP records were selected.	This return code for the 2nd run in one day is expected.

	This return code will be issued when the job fails to load some of the transactions. Sample Message: Unable to load some of the transactions into the catalog.	Analyze the reason for the failure, resolve the issue and load all the rejected transactions.	Never start a complete chain until completing all processing from a prior one.
Non Fatal Error (8)	This return code will be issued when the job failed to load all the transactions.	Analyze the reason for the failure, resolve the issue and load all the rejected transactions with a restart of the load step.	Never start a complete chain until completing all processing from a prior one.
	This return code will be issued when the parameters are not valid. Sample Message: Parameter file could not be located/read	Make sure that the parameter file exits in the specified folder. Then schedule a new chain with the prior job disabled.	Never start a complete chain until completing all processing from a prior one.
Failed (12)	Failed because of runtime exceptions for unexpected condition	Analyze the reason for the failure and resolve the issue. Then either restart the failed job step or schedule a new chain with the prior jobs disabled.	Never start a complete chain until completing all processing from a prior one.
Terminated (16)	Job is terminated manually by the user.	Either restart the failed job step or schedule a new chain with the prior jobs disabled.	Never start a complete chain until completing all processing from a prior one.
System Failure (20)	Job is terminated because of database server or network issues	Reason for the System Failure needs to be investigated and fixed. Then either restart the failed job step or schedule a new chain with the prior jobs disabled.	Never start a complete chain until completing all processing from a prior one.

Cash Sweep Process Chain: Submit Transaction

Job Name	Submit Transaction	
Recommended Frequency	See the chain description	
Single Instance Required	Yes	
Can the job be restarted	Yes	
Exception reports generated	No	

Overview

This job step will execute a SysManUtil Submit to submit the JVSW transaction created by the Cash Sweep job. A submit JVSW parameter text file was created by the Cash Sweep job step, specifying SMU transaction submit parameters.

The following table shows the various steps that the job step goes through and the progression messages issued at each step.

Process Steps	Messages	
Batch Parameter Validation	 Run Started Each parameter is listed with value Any parameter error is listed 	
JVSW Transaction Submit	 Each transaction instance is listed as: Long Memo Details of transaction instance End Long Memo Followed by: Total # Processed ## :Failed ## :Succeeded ## Run Ended 	

Major Input

- CSSubmit.txt
- Draft JVSW transactions on the Transaction Catalog

Batch Parameters

Parameter	Description	Default Value
PARM_FILE	(Required) File location and name of submit parameter file generated JVIA transactions.	\$\$AMSPARM\$\$/CSSubmit.txt

Note: The PARM_FILE only contains the subset of SMU job parameters for submitting transactions. Each transaction is listed as a parameter line so DOC_CD to BYPS_ADNT_FL are repeated.

Parameter	Default Value
ACTN_CD	DOCSUBMIT
DOC_CD	JVSW
DOC_DEPT_CD	varies

Parameter	Default Value
DOC_ID	varies
DOC_TYP	JV
DOC_PHASE_CD	1
DOC_STA_CD	1
EXCEP_REP_IND	depends on job step 1 parameter
EXCEP_REP_FILE_NM	&&AMSLOGS\$\$\CSDocExcp.txt
COMMIT_BLOCK	depends on job step 1 parameter
RESTART_FL	true
STATS	true
BYPS_ADNT_FL	true

Major Output

- JVSW transactions in final or draft status.
- Exception File updated by the transactions not submitted successfully.

Job Return Code

The following table shows the potential job return codes for the SMU Transaction Submit job. Please note that these return codes are applicable for each input file (data file). If the parameter file is supplied as an input file, then these return codes are applicable for each parm line on the parameter file and the job will end with the highest return code across all of the parm lines.

Return Code	Condition
Successful (1)	All the transactions submitted successfully.
Warning (4)	N/A
Non Fatal Error (8)	N/A
Failed (12)	The job will fail under the following conditions: Parameters are invalid Parameter file is not found Runtime exceptions encountered for any unexpected situations. When the job ends with a return code of failed, subsequent jobs in the chain are set to inactive.
Terminated (16)	This return code will be issued when the job is terminated by the user. When the job ends with a return of code Terminated, subsequent jobs in the chain are set to inactive.
System Failure (20)	This return code will be issued when the job is terminated because of database server or network issues. When this job ends with a return of code System Failure, subsequent jobs in the chain are set to inactive.

Sort Sequence

N/A

Selection Criteria

N/A

Problem Resolution

If this job ends with a return code of Failed, Terminated or System Failure, then no new instance of this chain should be executed until all the transactions loaded in the previous job step are submitted. This is because the submit parameter txt file that contains the transaction IDs to be submitted will get overwritten if another instance of this chain is executed. Only the submit job in the chain should be rescheduled to submit the remaining transactions. A new job can be scheduled (within a new chain with the prior jobs disabled) using the same parameter file.

Parameter Editing & JVSW Submit:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	All the transactions submitted successfully	N/A	N/A
Warning (4)	N/A	The job does not issue this return code	N/A
Non Fatal Error (8)	N/A	The job does not issue this return code	N/A
Failed (12)	This return code will be issued when the input parameter is not found in the specified directory. Sample Message: Parameter file could not be located/read	Make sure that the parameter file exits in the specified folder. Then schedule a new chain with the prior job disabled Until then another instance of the chain should not be executed.	N/A
	Failed because of runtime exceptions for unexpected situation	Analyze the reason for the failure and resolve the issue. Then either restart the failed job step or schedule a new chain with the prior jobs disabled.	Never start a complete chain until completing all processing from a prior one.
Terminated (16)	Job is terminated manually by the user.	Either restart the failed job step or schedule a new chain with the prior jobs disabled.	Never start a complete chain until completing all processing from a prior

			one.
System Failure (20)	Job is terminated because of database server or network issues	Reason for the System Failure needs to be investigated and fixed. Then either restart the failed job step or schedule a new chain with the prior jobs disabled.	Never start a complete chain until completing all processing from a prior one.

Cash Sweep Process Chain: System Assurance Job

Job Name	System Assurance
Recommended Frequency	See chain description
Single Instance Required	Yes
Can the job be restarted	No
Exception reports generated	Yes

Overview

This job of the chain generates Exception Report for JVSW transactions not submitted successfully in the previous submit job.

The following table shows the various steps that the job step goes through and the progression messages issued at each step.

Process Steps	Messages	
Batch Parameter Validation	 Run Started Each parameter is listed with value Any parameter error is listed 	
Exception Report Generation	 Report output folder mapped HTML report file path PDT report file path If no transactions reject then the following is issued. If any reject there is no job log message but the Return Code will be Non Fatal Error. No Exceptions during Transaction Submit Run Ended 	

Major Input

 JVSW transactions not submitted successfully read from the exception file updated by the submit job.

Batch Parameters

Parameter	Description	Default Values
PARM_FILE	(Required) Parameter (.txt) file for JVSW transactions.	CSParams.txt
AMSPARM	(Required) Location of the parameter file created by the 1st job step which contains the location and file name of the exception file updated by the submit job step.	\$\$AMSPARM\$\$ (** Refer to Note: Assumptions for SWBP about AMS* parameters)

Major Output

 Generates Exception Report in Htm and Pdf for JVSW transactions not submitted successfully.

Job Return Code

Return Code	Condition	
Successful (1)	All the validations are performed successfully and there are some records eligible for exception.	
Warning (4)	This job does not issue this return code	
Non Fatal Error (8)	No records found eligible for exception.	
Failed (12)	The job will fail under the following conditions: Parameters are invalid. Technical failure. When this job ends with a return of code Failed, subsequent jobs in the chain will be set to inactive.	
Terminated (16)	This return code will be issued when the job is terminated by the user. When this job ends with a return of code Terminated subsequent jobs in the chain will be set to inactive.	
System Failure (20)	This return code will be issued when the job is terminated because of database server or network issues. When this job ends with a return of code System Failure, subsequent jobs in the chain will be set to inactive.	

Sort Sequence

N/A

Selection Criteria

• Records are selected for processing based on the following criteria:

• JVSW transactions not submitted successfully read from the exception file updated by the submit job.

Problem Resolution

No database restore is required. Correct the problem and rerun the job executing the program. No restoration of datasets or files from backups is required for this program.

The following table shows the possible return codes and recommendations for each processing step.

Step 1: Batch Parameter Validation:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	All batch parameter validations are successful (i.e. there are no errors raised during validations.)	N/A	N/A
Warning (4)	N/A	This step does not issue this return code.	N/A
Non Fatal Error (8)	N/A	This step does not issue this return code.	N/A
Failed (12)	Required parameters are not entered. Sample Message: Parameter file name is not specified	Enter missing required parameters and schedule a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVSW transactions in draft or run the Cash Sweep Transaction Resubmit chain.
	Entered Parameters are not valid Sample Message: System Assurance Report Type in Transaction Submit section not found in the parameter file	Enter valid parameters and schedule a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVSW transactions in draft or run the Cash Sweep Transaction Resubmit chain.
	Failed because of runtime exceptions caused by unexpected conditions	Failure reason needs to be investigated before scheduling a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVSW transactions in draft or run the Cash Sweep Transaction Resubmit chain.
Terminated (16)	Job is terminated manually by the user.	Schedule a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVSW

			transactions in draft or run the Cash Sweep Transaction Resubmit chain.
System Failure (20)	Job is terminated because of database server or network issues	Reason for the System Failure needs to be investigated and fixed. Then schedule a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVSW transactions in draft or run the Cash Sweep Transaction Resubmit chain.

Step 2: Exception Report Generation:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	N/A	This step does not issue this return code.	N/A
Warning (4)	N/A	This step does not issue this return code.	N/A
Non Fatal Error (8)	Some records found eligible for exception report.	Address the reason for transaction failures. Changing information on the transactions is strongly discouraged unless the change doesn't impact the cash sweep. Submit the failed transactions manually or with a SMU job.	Alternatively, scan the Transaction Catalog for JVSW transactions in draft or run the Cash Sweep Transaction Resubmit chain
Failed (12)	Failed because of runtime exceptions caused by unexpected conditions	After the reason for the failure has been addressed a new chain with the prior job steps disabled can be run.	Alternatively, scan the Transaction Catalog for JVSW transactions in draft or run the Cash Sweep Transaction Resubmit chain.
Terminated (16)	Job is terminated manually by the user.	Schedule a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVSW transactions in draft or run the Cash Sweep Transaction Resubmit chain.
System Failure (20)	Job is terminated because of database server or network issues	Reason for the System Failure needs to be investigated and fixed. Then schedule a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVSW transactions in draft or run the Cash Sweep Transaction

CGI Advantage® – Treasury Accounting Run Sheets			
			Resubmit chain.

2.1.2 Cash Sweep Transaction Resubmit Process

Job Name	Cash Sweep Transaction Resubmit Process	
Recommended Frequency	As a part of daily cycle or On Demand	
Single Instance Required	Yes	
Can the job be restarted	No	
Exception Reports generated	Yes	

Overview

This process is run after the Cash Sweep process. The chain job resubmits any failed JVSW transactions given the Transaction Prefix and Transaction Record Date as was supplied to the Cash Sweep run. It also generates the Systems Assurance report (CSReSubmitExcpRep.java) to indicate the failed transactions on resubmit. This chain job can be run recursively to resubmit JVSW transactions.

The chain includes three job steps that perform the following functions:

- 1. Gather Transaction Information
- 2. Submit Transaction
- 3. System Assurance Report

Major Input

Draft JVSW transactions on the Transaction Catalog (JV_DOC_HDR)

Major Output

- JVSW transactions in final or draft status.
- System Assurance Exception Report listing the failed resubmitted transactions.

Chain Return Code

The following table indicates the potential return codes with which the chain ends:

Return Code	Condition
Successful (1)	All of the jobs in the chain end with a return code of Successful
Warning (4)	One of the jobs in the chain ends with a return code of Warning
Non Fatal Error (8)	One of the jobs in the chain ends with a return code of Non Fatal Error
Failed (12)	One of the jobs in the chain ends with a return code of Failed
Terminated (16)	One of the jobs in the chain ends with a return code of Terminated
System Failure (20)	One of the jobs in the chain ends with a return code of System Failure

Cash Sweep Transaction Resubmit Chain: Gather Transaction Information Job

Job Name	Gather Transaction Information
Recommended Frequency	See the chain description.
Single Instance Required	Yes
Can the job be restarted	No
Exception reports generated	No

Overview

The Gather Transaction Information job gathers the failed JVSW transactions information by selecting the records from JV_DOC_HDR given the Transaction Prefix and Transaction Record Date parameters that should match those supplied to the Cash Sweep chain. This job step also generates parameter files to be used by later jobs in the chain.

The following table shows the various steps that the job step goes through and the progression messages issued at each step.

Process Steps	Messages	
Batch Parameter Validation	 Run Started Each parameter is listed with value Any parameter defaulted is listed Any parameter error is listed 	
JVSW Transaction Information Gathering	 Number of JVSW transactions selected to be resubmitted : ## Run Ended 	

Major Input

Journal Voucher Transaction Header (JV_DOC_HDR)

Batch Parameters

Parameter	Description	Default Values
		\$\$AMSEXPORT\$\$
AMSEXPORT	(Required) Export Location at Gather Transaction Information Job	(** Refer to Note: Assumptions for SWBP about AMS* parameters)
AMSPARM	(Required) Parameter Location at Gather Transaction Information Job	\$\$AMSPARM\$\$ (**Refer to Note: Assumptions for SWBP AMS* parameters)

AMSLOGS	(Required) Logs Location at Gather Transaction Information Job	\$\$AMSLOGS\$\$ (**Refer to Note: Assumptions for SWBP AMS* parameters)
CLIENT_NM	(Optional) Client Name to be printed on Cash Sweep Systems Assurance Report	(blank)
COMMIT_SIZE	(Optional) This field controls how many records are committed by the application at one time.	1
DOC_CD	(Required) Transaction Code for the generated JVSW transactions. This should be same as the transaction code supplied for the Cash Sweep process whose failed JVSW transactions we are to be resubmitted.	JVSW
DOC_PFX	(Optional) Prefix for the generated JVSW transactions. This should be same as the prefix supplied for the Cash Sweep process whose failed JVSW transactions are to be resubmitted.	(blank)
EXCEP_REP_ FILE_NM	(Required) System Assurance Report file(.txt)	CSDocExcp.txt
EXCEP_REP_I ND	(Optional) System Assurance Report Type where 2 = Failed transaction listing and 4 = Detailed listing of transactions with errors. If not entered then defaulted as 2.	2
PARM_FILE	(Required) Parameter(.txt) file	CSReParams.txt
RUN_DT	(Optional) Process Run Date in MM/DD/YYYY format (if not entered then the Application Date is used)	(blank)
SUBMIT_FILE	(Required) Submit Parameter(.txt) file	CSReSubmit.txt

Major Output

Generates the parameter files to be used by all subsequent job steps.

Job Return Code

Return Code	Condition	
Successful (1)	All the validations are performed successfully.	
Warning (4)	This job does not issue this return code	
Non Fatal Error (8)	This job does not issue this return code.	
Failed (12)	The job will fail under the following conditions: • Parameters are invalid.	

	Technical failure.
	When this job ends with a return of code Failed, subsequent jobs in the chain will be set to inactive.
Terminated (16)	This return code will be issued when the job is terminated by the user. When this job ends with a return of code Terminated subsequent jobs in the chain will be set to inactive.
System Failure (20)	This return code will be issued when the job is terminated because of database server or network issues. When this job ends with a return of code System Failure, subsequent jobs in the chain will be set to inactive.

Sort Sequence

Transaction Code, Transaction Department Code, Transaction ID

Selection Criteria

- Records are selected for processing based on the following criteria:
 - Select all records from Journal Voucher Transaction Header (JV_DOC_HDR) which are in draft phase and rejected status for the given transaction code, transaction prefix and the transaction record date.

Problem Resolution

No database restore is required. Correct the problem and run another instance of the resubmit job or submit the remainder manually. No restoration of datasets or files from backups is required for this program.

The following table shows the possible return codes and recommendations for each processing step.

Step 1: Batch Parameter Validation:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	All batch parameter validations are successful (i.e. there are no errors raised during validations.)	N/A	N/A
Warning (4)	N/A	This step does not issue this return code.	N/A
Non Fatal Error (8)	N/A	This step does not issue this return code.	N/A
Failed (12)	Required parameters are not entered.	Enter missing required parameters and schedule a new job.	N/A
	Sample Message: Transaction Code is	Enter the transaction	

	required	code.	
	Entered Parameters are not valid Sample Message: No record found in Transaction Control Table for Transaction Code	Enter valid parameters and schedule a new job.	N/A
	Failed because of runtime exceptions caused by unexpected conditions	Failure reason needs to be investigated before scheduling a 2 nd chain.	N/A
Terminated (16)	Job is terminated manually by the user.	A new chain can be scheduled.	N/A
System Failure (20)	Job is terminated because of database server or network issues	Reason for the System Failure needs to be investigated. A new chain can be scheduled.	N/A

Cash Sweep Transaction Resubmit Process Chain: Submit Transaction

Job Name	Submit Transaction
Recommended Frequency	See the chain description
Single Instance Required	Yes
Can the job be restarted	No
Exception reports generated	No

Overview

This job step will execute a SysManUtil Submit to submit the JVSW transactions selected by the Cash Sweep Transaction Resubmit job. A submit JVSW parameter text file created in the Gather Transaction Information job, specifies which transactions should be submitted.

The following table shows the various steps that the job step goes through and the progression messages issued at each step.

Process Steps	Messages	
Batch Parameter Validation	Run StartedEach parameter is listed with valueAny parameter error is listed	
JVSW Transaction Submit	Each transaction instance is listed as: Action DOC_SUBMIT Processing Parameter Line: (Details of transaction instance)	

•	Total # Processed ## :Failed ## :Succeeded ##
•	Run Ended

Major Input

- SMU job parameter file
- Draft and Rejected JVSW Transactions (JV_DOC_HDR)

Batch Parameters

Parameter	Description	Default Value
PARM_FILE	(Required) File location and name of submit parameter file.	\$\$AMSPARM\$\$/CSReSubmit.txt

Major Output

- JVSW transactions in draft or final phase
- Exception File updated by the transactions not submitted successfully

Job Return Code

The following table shows the potential job return codes for the SMU Transaction Submit job.

Return Code	Condition		
Successful (1)	All the transactions submitted successfully.		
Warning (4)	N/A		
Non Fatal Error (8)	N/A		
	The job will fail under the following conditions:		
	Parameters are invalid		
Failed (12)	Parameter file is not found		
	 Runtime exceptions encountered for any unexpected situations. 		
	When the job ends with a return code of failed, subsequent jobs in the chain are set to inactive		
Terminated (16)	This return code will be issued when the job is terminated by the user. When the job ends with a return of code Terminated, subsequent jobs in the chain are set to inactive.		
System Failure (20) This return code will be issued when the job is terminated because of database server or network issues. When this job ends with a return of code System Failure, subsequent jobs in the chain are to inactive.			

Sort Sequence

N/A

Selection Criteria

N/A

Problem Resolution

If this job ends with a return code of Failed, Terminated or System Failure, then no new instance of this chain should be executed until all the transactions loaded in the previous job step are submitted. This is because the submit parameter txt file that contains the transaction IDs to be submitted will get overwritten if another instance of this chain is executed. Only the submit job in the chain should be rescheduled to submit the remaining transactions. A new job can be scheduled (within a new chain with the prior jobs disabled) using the same parameter file.

Batch Parameter Validation & JVSW Transaction Submit

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	All the transactions submitted successfully	N/A	N/A
Warning (4)	N/A	The job does not issue this return code	N/A
Non Fatal Error (8)	N/A	The job does not issue this return code	N/A
Failed (12)	This return code will be issued when the input parameter is not found in the specified directory. Sample Message: Parameter file could not be located/read	Make sure that the parameter file exits in the specified folder and schedule a new job.	N/A
	Failed because of runtime exceptions for unexpected situation	Resolve the error and schedule a new job using the same Parameter File (PARM_FILE) provided no new instance of this chain has been executed.	N/A
Terminated (16)	Job is terminated manually by the user.	Reason for the termination needs to be investigated before scheduling a new job.	N/A
System Failure (20)	Job is terminated because of database server or network issues	Reason for the System Failure needs to be investigated before scheduling a new job.	N/A

Cash Sweep Transaction Resubmit Process Chain: System Assurance Report Job

Job Name	System Assurance Report
Recommended Frequency	See chain description
Single Instance Required	Yes
Can the job be restarted	No
Exception reports generated	Yes

Overview

This job of the chain generates Exception Report for JVSW transactions not submitted successfully during the run.

The following table shows the various steps that the job step goes through and the progression messages issued at each step.

Process Steps	Messages	
Batch Parameter Validation	Run StartedEach parameter is listed with valueAny parameter error is listed	
Exception Report Generation	 Report output folder mapped HTML report file path PDT report file path If no transactions reject then the following is issued. If any reject there is no job log message but the Return Code will be Non Fatal Error. No Exceptions during Transaction Submit Run Ended 	

Major Input

 JVSW transactions not submitted successfully read from the exception file name updated by the submit job.

Batch Parameters

Parameter	Description	Default Values
AMSPARM	(Required) Parameter Location at System Assurance Report Job	\$\$AMSPARM\$\$ (**Refer to Note: Assumptions for SWBP AMS* parameters)

AMSLOGS	(Required) Parameter Location at System Assurance Report Job	\$\$AMSLOGS\$\$ (**Refer to Note: Assumptions for SWBP AMS* parameters)
PARM_FILE	(Required) Parameter(.txt) file	CSReParams.txt

Major Output

Exception Report in HTML and PDF for JVSW transactions not submitted successfully.

Job Return Code

Return Code	Condition	
Successful (1)	All the validations are performed successfully and there are some records eligible for exception.	
Warning (4)	This job does not issue this return code	
Non Fatal Error (8)	No records found eligible for exception.	
Failed (12)	The job will fail under the following conditions: Parameters are invalid. Technical failure. When this job ends with a return of code Failed, subsequent jobs in the chain will be set to inactive.	
Terminated (16)	This return code will be issued when the job is terminated by the user. When this job ends with a return of code Terminated subsequent jobs in the chain will be set to inactive.	
System Failure (20) This return code will be issued when the job is terminated because database server or network issues. When this job ends with a return code System Failure, subsequent jobs in the chain will be set to inactive.		

Sort Sequence

N/A

Selection Criteria

- Records are selected for processing based on the following criteria:
 - JVSW transactions not submitted successfully read from the exception file name updated by the submit job.

Problem Resolution

No database restore is required. Correct the problem and rerun the job executing the program. No restoration of datasets or files from backups is required for this program.

The following table shows the possible return codes and recommendations for each processing step.

Step 1: Batch Parameter Validation:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	All batch parameter validations are successful (i.e. there are no errors raised during validations.)	N/A	N/A
Warning (4)	N/A	This step does not issue this return code.	N/A
Non Fatal Error (8)	N/A	This step does not issue this return code.	N/A
Failed (12)	Required parameters are not entered. Sample Message: Parameter file name is not specified	Enter missing required parameters and schedule a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVSW transactions in draft or run the entire Cash Sweep Transaction Resubmit chain again.
	Entered Parameters are not valid Sample Message: System Assurance Report Type in Transaction Submit section not found in the parameter file	Enter valid parameters and schedule a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVSW transactions in draft or run the entire Cash Sweep Transaction Resubmit chain again.
	Failed because of runtime exceptions caused by unexpected conditions	Failure reason needs to be investigated before scheduling a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVSW transactions in draft or run the entire Cash Sweep Transaction Resubmit chain again.
Terminated (16)	Job is terminated manually by the user.	Schedule a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVSW transactions in draft or run the entire Cash Sweep Transaction Resubmit chain

			again.
System Failure (20)	Job is terminated because of database server or network issues	Reason for the System Failure needs to be investigated and fixed. Then schedule a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVSW transactions in draft or run the entire Cash Sweep Transaction Resubmit chain again.

Step 2: Exception Report Generation:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	N/A	This step does not issue this return code.	N/A
Warning (4)	N/A	This step does not issue this return code.	N/A
Non Fatal Error (8)	Some records found eligible for exception report.	N/A	N/A
Failed (12)	Failed because of runtime exceptions caused by unexpected conditions	After the reason for the failure has been addressed a new chain with the prior job steps disabled can be run.	Alternatively, scan the Transaction Catalog for JVSW transactions in draft or run the entire Cash Sweep Transaction Resubmit chain again.
Terminated (16)	Job is terminated manually by the user.	Schedule a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVSW transactions in draft or run the entire Cash Sweep Transaction Resubmit chain again.
System Failure (20)	Job is terminated because of database server or network issues	Reason for the System Failure needs to be investigated and fixed. Then schedule a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVSW transactions in draft or run the entire Cash Sweep Transaction Resubmit chain again.



2.1.3 DTC Transmission

Chain Name	DTC Transmission	
Recommended Frequency Daily as part of the nightly cycle or on demand		
Single Instance Required Yes		
Can be restarted?	N/A	
Reports generated	Daily Treasury Collection Summary Report	
	Daily Treasury Collection Detail Report	

Overview

Daily Treasury Collection Transmission is a process that takes the data available in the Bank File Management (BANKFM) page and performs three functions. The first is a creation of ACH files in the CCD format to move money between the external bank accounts, which are then sent to the respective banks. The second is to create transactions to transfer that cash between those two bank accounts within Advantage, while updating tracking information on Bank Transmission Maintenance. The third is to generate a report with details of the transfer.

This chain has the following jobs:

- ACH XML Files Generation
- Transaction Generation
- Upload
- Submit
- Report Generation

Note: Even though the above jobs in the chain can be run individually by disabling other jobs, it is recommended to always run the entire chain.

Major Input

- Bank File Management (BANKFM / R_BANK_MGMT)
- Bank Department Combination (DEPTACCT / R_BANK_DEPT)

Major Output

- ACH Files
- GAX transactions
- CR transactions
- Daily Treasury Collection Report

Chain Return Codes

When an active job step in the chain ends with a Return Code of anything other than *Successful*, any remaining job steps have a Run Status of *Inactive*. Please see documentation on individual

job steps for possible Return Codes for those steps, as *Warning* and *Non-Fatal Error* are not always possible outcomes.

Problem Resolution

If any of the jobs in the chain failed due to errors, it is advisable to submit a new chain that starts at the job after correcting the errors. See the Problem Resolution sections of each step of the chain job to determine resolution.

DTC Transmission Chain: ACH XML File Generation

Job Name	ACH XML File Generation
Recommended Frequency	See chain
Can be restarted?	No
Reports generated	None

Overview

The ACH XML file generation sub-job systematically processes the data present on the Bank File Management page, in accordance with the transmission date specified in the sub-job parameter. This process culminates in the creation of both ACH and XML files. To ensure the successful execution of this task, it's imperative that the local bank sweep status for the data within the Bank File Management page is set to *Close*.

The following table lists the different processing steps of the job.

Process Steps	Messages
Parameter Validation	 Validating Batch Parameters Parameters are valid or invalid depending on the validation. If the parameter is invalid, the invalid value is displayed in the log. If the parameters are valid, check for valid data available on the BANKFM page. Batch Parameter validation completed
2. Selection of Records	 Processing BANKTM records started. Fetching records from BANKTM page. If the selection returns 0 records, then the job fails with the following message issued: "No eligible record found on Bank Transmission Maintenance table". Number of records (count) selected is displayed. At the end, the following message is issued: "Processing BANKTM records finished."
3. ACH XML Output	Start generating ACH XML File for Concentration Bank Account ABA Number = (bank account) Fetching records from BANKTM and BANK for CONC_ABA_NO: (bank account) Successfully generating ACH XML File for Concentration Bank Account ABA Number = (bank account)

Process Steps	Messages	
	Start Generating CCD flat file.	
	Successfully Generated CCD flat file.	
	Renaming Interim Files started.	
	Renaming Interim Files finished.	
	ACH XML Files Generation batch job ended.	

Major Input

- Bank File Management (BANKFM / R_BANK_MGMT)
- Disbursement Format (DISF / R_AP_DISB_FRMT)

Batch Parameters

The following are the delivered parameter values, which may have been updated through Batch Setup to meet local needs.

Parameter	Description	Default Value
Export Location (AMSEXPORT)	The required location at which the output files are written.	\$\$AMSEXPORT\$\$
EFT Format (EFT_FORMAT)	The required EFT format. Currently, CCD is the only supported format.	CCD
Select Block Size (SEL_BLK_SIZE)	A required performance parameter that controls how many records are selected in an instance	10
Transmission Date (TRANS_DT) The required date recorded as the Transmission Date in the ACH file. Must be specified as (mm/dd/yyyy). If left blank, the Application System Date defaults.		(blank)

Major Output

• ACH File: CCD_ABAnumber_batchjobID.dat

• XML File: CCD_ABAnumber_batchjobID.xml

Problem Resolution

The following table shows the potential job return codes for this job.

Return Code	Condition	
Successful (1)	The job ends as successful when all parameters are valid and at least one record was selected and processed successfully.	
Warning (4)	This job ends in Warning in two situations:	
	When there are no eligible Bank Transmission Maintenance records found. The record status must be closed and have not been previously processed	

Return Code	Condition	
	When no records are found on Disbursement Format (DISF) for the entered format.	
Non-Fatal Error (8)	This job does not issue this return code.	
Failed (12)	 The job fails under the following conditions: Parameters are invalid. Run time exceptions for unexpected situations. 	
Terminated (16)	The job is terminated by the user. When this job is terminated, subsequent jobs in the chain are set to <i>Inactive</i> .	
System Failure (20)	A system failure is issued when the job is terminated because of database server or network issues. When this job encounters a system failure, subsequent jobs in the chain are set to <i>Inactive</i> .	

Sort Criteria

None

Selection Criteria

The ACH XML generation job selects the ABA Number, Bank Account Number, Date, and Amount fields from Bank File Management.

Problem Resolution

The following table shows the possible return codes and recommendations for each processing step.

Step 1: Parameter Validation

Return Code	Condition	Recommendation	Other Instructions
Successful (1)	All parameters are validated successfully.	N/A	N/A
Failed (12)	One of the parameters failed validation.	Populate all required parameters with valid values	N/A
Terminated (16)	Job is terminated manually by the user.	The reason for the termination needs to be investigated. Schedule a new job once resolved.	N/A
System Failure (20)	When the job is terminated because of database server or network issues.	The reason for the System Failure needs to be investigated. Schedule a new job once resolved.	N/A

Step 2: Selection of Records

Return Code	Condition	Recommendation	Other Instructions
Successful (1)	At least one eligible record is found and is processed successfully.	N/A	N/A
Warning (4)	Records are not found in either of the two locations documented earlier.	Review selection parameters and application data being read to verify if there are no records to process or parameters were invalid.	N/A
Failed (12)	Error occurs while processing an eligible record.	Verify that the file being processed contains valid records.	N/A
Terminated (16)	Job is terminated manually by the user.	The reason for the termination needs to be investigated. Schedule a new job once resolved.	N/A
System Failure (20)	When the job is terminated because of database server or network issues.	The reason for the System failure needs to be investigated. Schedule a new job once resolved.	N/A

Step 3: ACH XML Output

Return Code	Condition	Recommendation	Other Instructions
Successful (1)	Successfully processes records and generates XML file.	N/A	N/A
Failed (12)	Error occurs while generating XML file.	Check that Sweep ACH Company ID for the bank being processed exists on BANK.	N/A
Terminated (16)	Job is terminated manually by the user.	The reason for the termination needs to be investigated. Schedule a new job once resolved.	N/A
System Failure (20)	When the job is terminated because of database server or network issues.	The reason for the System failure needs to be investigated. Schedule a new job once resolved.	N/A

DTC Transmission Chain: Transaction Generation Job

Job Name	Transaction Generation
Recommended Frequency	See chain
Can be restarted?	No
Reports generated	None

Overview

This job step uses the XML file created in the previous step to create General Accounting Expense (GAX) or Cash Receipt (CR) transactions into a new XML file for later job steps to load and submit.

- In Bank Department Combination page, if BSA code is available then a GAX transaction is created.
- In Bank Department Combination page, if BSA code is not available then a CR transaction is created.

The following table lists the different processing steps of the job.

Process Steps	Messages
1. Parameter	Validating Batch Parameters.
Validation	 Parameters are valid or invalid depending on the Validation. If the parameter is invalid, the invalid value is displayed in the log.
	Batch Parameter validation completed.
Selection of Records	 Processing Bank Transmission Maintenance record started.
	If the selection returns 0 records, then the following message is issued: "No records on the Bank Transmission Maintenance table are selected for document generation."
3. XML File Creation	 If records are selected, a file is created with the name specified in the batch parameter; Transaction XML File (DOC_OUTPUT_XML).
	Job completed successfully.

Major Input

- CCD_ABAnumber_batchjobID.dat
- CCD_ABAnumber_batchjobID.xml
- Bank Department Combination (DEPTACCT / R_BANK_DEPT)

Batch Parameters

The following are the delivered parameter values, which may have been updated through Batch Setup to meet local needs.

Parameter	Description	Default Value
Export Directory (AMSEXPORT)	The required location at which the output file is written.	\$\$AMSEXPORT\$\$
Parameter File Directory (AMSPARM)	The required location at which the parameter file for later job steps is written.	\$\$AMSPARM\$\$
Transaction Code for Revenues (DOC_CD_REV_TRANS)	The required transaction code used when creating revenue transactions.	CR
Transaction Code for Balance Sheets (DOC_CD_BSA_TRANS)	The required transaction code used when creating balance sheet transactions.	GAX
Transaction Department (DOC_DEPT)	The required department used for transaction numbering and security.	(blank)
Transaction Unit (DOC_UNIT)	An optional unit for security.	(blank)
Transaction Prefix (DOC_PREFIX)	An optional prefix used for transaction numbering.	(blank)
Adjustment Transaction Prefix (ADJ_DOC_PREFIX)	During the Transaction Generation process if the action is considered an Adjustment, then the Transaction ID begins with the value that is set in this parameter. If value is left blank, the value defaults to: **** when searching Automatic Transaction Numbering.	(blank)
Adjustment Transaction Type (ADJ_TRANS_TYPE)	BAI Type Code (Transaction Type) used to formulate the Deposit Ticket on the header when the generated transaction is recording an adjustment.	201
Sweeps Transaction Type (SWEEP_TRANS_TYPE)	BAI Type Code (Transaction Type) used to formulate the Deposit Ticket on the header when the generated document records a sweep.	165
Payment Bank Transaction Type (HIT_TRANS_TYPE)	BAI Type Code (Transaction Type) used to formulate the Deposit Ticket on the header when the generated document records a hit.	501
Default Sweeps Transaction Description (BAI_LOAD_SWEEP_DOC_ DESC)	An optional description that is used as the transaction description if the Bank Account Type on BANK is listed as Concentration Sweeps.	(blank)
Default Hits Doc Description (BAI_LOAD_HIT_DOC_DES C)	An optional description that is used as the transaction description if the Bank Account Type on BANK is listed as Concentration Disbursements.	(blank)
Transaction XML File	The required name of the XML file of	LocalBankSweepDocs

(DOC_OUTPUT_XML)	transactions created to record deposit and payment activities.	.xml
Load Parameter File (LOAD_PARA_FILE)	The required name of the parameter file with instructions passed to the Load job step.	LoadLocalBankSweep Docs.txt
Submit Parameter File (SUBMIT_PARA_FILE	The required name of the parameter file with instructions passed to the Submit job step.	SubmitLocalBankSwe epDocs.txt
Commit Block Size (COMMIT_SIZE)	A required performance parameter that controls the number of records recorded in a single update. If left blank, 1000 defaults.	1000
Apply Overrides (APPLY_OVERRIDES)	A required processing parameter that instructs the later Load job step to load transactions with error overrides applied.	true
Override Level (OVERRIDE_LVL)	A processing parameter used when Apply Overrides is true for a level of override. If blank, no overrides will be applied, even if Apply Overrides is true.	
Bypass Approval (BYPASS_APPROVAL)	A required processing parameter that instructs the later Load job step to load transactions with the bypass approval option.	true
Transaction Status (DOC_STATUS)	A required output parameter for the transaction status used by the Load job step (1-Held, 2-Ready).	1
Event Type for Negative Revenue (REV_NEG_EVNT_TYP)	The required event type used on negative revenue accounting lines.	(blank)
Event Type for Positive Revenue (REV_POS_EVNT_TYP)	The required event type used on positive revenue accounting lines.	(blank)
Event Type for Balance Sheets (BSA_EVNT_TYP)	The required event type used on balance sheet accounting lines.	(blank)
Select Block Size (SEL_BLK_SIZE)	A required performance parameter that controls the number of records selected in a single instance.	1000
Progression Counter Size (PROG_CTR_SIZE)	A required performance parameter used to supply job log messaging for processing status.	5000

Major Output

- Transaction XML File- LocalBankSweepDocs.xml
- Load Parameter File- LoadLocalBankSweepDocs.txt

Submit Parameter File- SubmitLocalBankSweepDocs.txt

Problem Resolution

The following table shows the potential job return codes for this job.

Return Code	Condition
Successful (1)	The job ends as successful when parameter validations are successful and at least one record was successfully loaded.
Warning (4)	If no eligible records are selected for transaction generation, then the job ends with a warning.
Non-Fatal Error (8)	This job does not issue this return code.
Failed (12)	The job fails under the following conditions: Parameters are invalid.Input file is not found.
Terminated (16)	The job is terminated by the user.
System Failure (20)	A system failure is issued when the job is terminated because of database server or network issues.

Sort Criteria

The records selected from Bank Transmission Maintenance are ordered by Concentration Bank Account, Bank Account, Transmission Date, and Action.

Selection Criteria

The records are selected from Bank Transmission Maintenance matching the following selection criteria:

- Intended Close Date = Application Date.
- Transaction Created Date is null.
- If Transaction Action is not Correction, then Transfer Amount is not null or not zero.
- If Transaction Action is Correction, then Corrected Transfer Amount is not null or not zero.

Step 1: Parameter Validation

Return Code	Condition	Recommendation	Other Instructions
Successful (1)	All parameters were valid.	N/A	N/A
Failed (12)	Parameter error	Run new instance of the chain, starting at this job step.	N/A

Return Code	Condition	Recommendation	Other Instructions
Terminated (16)	Job is terminated manually by the user.	The reason for the termination needs to be investigated. Schedule a new job once resolved.	N/A
System Failure (20)	When the job is terminated because of database server or network issues.	The reason for the System failure needs to be investigated. Schedule a new job once resolved.	N/A

Step 2: Record Selection

Return Code	Condition	Recommendation	Other Instructions
Successful (1)	At least one eligible record is found and is processed successfully	N/A	N/A
Warning (4)	No records were selected for transaction generation.	Compare parameters to application data to determine if incorrect parameters were used. If so, submit another instance of the chain.	N/A
Failed (12)	Error occurs while processing an eligible record	Verify that the file being processed contains valid records.	N/A
Terminated (16)	Job is terminated manually by the user.	The reason for the termination needs to be investigated. Schedule a new job once resolved.	N/A
System Failure (20)	When the job is terminated because of database server or network issues.	The reason for the System failure needs to be investigated. Schedule a new job once resolved.	N/A

Step 3: XML File Creation

Return Code	Condition	Recommendation	Other Instructions
Successful (1)	At least one eligible record is found and is processed successfully	N/A	N/A
Failed (12)	Error occurs while processing an eligible record	Verify that the file being processed contains valid records.	N/A
Terminated (16)	Job is terminated manually by the user.	The reason for the termination needs to be investigated. Schedule a	N/A

Return Code	Condition	Recommendation	Other Instructions
		new job once resolved.	
System Failure (20)	When the job is terminated because of database server or network issues.	The reason for the System failure needs to be investigated. Schedule a new job once resolved.	N/A

DTC Transmission Chain: Upload Job

Job Name	Upload
Recommended Frequency	See chain
Can be restarted?	No
Reports generated	None

Overview

The Upload job step uses the System Maintenance Utility (SMU) to load the transactions generated in the Transaction Generation step as per the instructions written to the load parameter file.

The following table lists the different processing steps of the job.

Process Steps	Messages
Parameter Validation	 Validating Batch Parameters Parameters are valid or invalid depending on the validation. If the parameter is invalid, the invalid value is displayed in the log. Batch Parameter validation completed
2. XML Load	Rows ProcessedRows SavedRows in Error

Major Input

- Transaction XML File- LocalBankSweepDocs.xml
- Load Parameter File- LoadLocalBankSweepDocs.txt

Batch Parameters

The following are the delivered parameter values, which may have been updated through Batch Setup to meet local needs.

Parameter	Description	Default Value
Parameter File (PARM_FILE)	The required location and parameter file with loading instructions.	\$\$AMSPARM\$\$/LoadLocalBankSweepDocs.txt

Major Output

- Draft General Accounting Expense transactions
- Draft Cash Receipt transactions

Problem Resolution

The following table shows the potential job return codes for this job.

Return Code	Condition	
Successful (1)	The job ends as successful when parameter validations are successful and at least one record was successfully loaded.	
Warning (4)	An empty XML file will result in this return code.	
	Some records fail to load into the Transaction Catalog.	
Non-Fatal Error (8)	All records fail to load into the Transaction Catalog.	
Failed (12)	The job fails under the following conditions:	
	Parameters are invalid.	
	Input file is not found.	
	If the error messages exceed the maximum number specified in the parameter	
	Runtime exceptions encountered for any unexpected situations.	
	When the job ends with a return code of Failed, subsequent jobs in the chain are set to Inactive.	
Terminated (16)	The job is terminated by the user. When the job ends with a return code of Terminated, subsequent jobs in the chain are set to Inactive.	
System Failure (20)	A system failure is issued when the job is terminated because of database server or network issues. When this job ends with a return code of System Failure, subsequent jobs in the chain are set to Inactive.	

Sort Criteria

None

Selection Criteria

None

Problem Resolution

The following table shows the potential job return codes for this job.

Step 1: Parameter Validation

Return Code	Condition	Recommendation	Other Instructions
Successful (1)	The job ends as successful when parameter validation is successful and all transactions in the XML file are loaded successfully.	N/A	N/A
Failed (12)	The job fails under the following conditions:	N/A	N/A
	Parameters are invalid		
	XML file not found		
	When this job fails, subsequent jobs in the chain are set to <i>Inactive</i> .		
Terminated (16)	The job is terminated by the user.	Run a new instance of the chain, starting at this job step.	N/A
System Failure (20)	A system failure is issued when the job is terminated because of database server or network issues.	The reason for the System failure needs to be investigated. Schedule a new job once resolved.	N/A

Step 2: XML Load

Return Code	Condition	Recommendation	Other Instructions
Successful (1)	The job completes successfully when all records from XML are processed without error.	N/A	N/A
Warning (4)	A warning results when the XML file is empty or when the job fails to load some of the transactions. For general errors and recommendations, refer to the SMU Transaction Upload run sheet in the CGI Advantage Financial – Utilities Run Sheet Guide.	If the XML file is empty, verify nothing went wrong with the prior job step. Analyze the reason why records failed to load to the Transaction Catalog. Resolve issues and schedule a new job with the same input parameter file name.	N/A
Non-Fatal Error (8)	This return code will be issued when the job failed to load all of the transactions.	Analyze the reason that records failed to load to the Transaction Catalog and schedule a new job using the same Parameter File	

Return Code	Condition	Recommendation	Other Instructions
		(PARM_FILE).	
Failed (12)	 The job fails under the following conditions: Parameter is not valid. The input file is not found. The number of error messages exceeds the maximum number specified on the batch parameter. Runtime exceptions for an unexpected situation. 	The reason for the failure needs to be investigated. Schedule a new job once resolved using the same Parameter File (PARM_FILE).	N/A
Terminated (16)	The job is terminated by the user.	The reason for the termination needs to be investigated. Schedule a new job once resolved.	N/A
System Failure (20)	A system failure is issued when the job is terminated because of database server or network issues.	The reason for the System failure needs to be investigated. Schedule a new job once resolved.	N/A

DTC Transmission Chain: Submit

Job Name	Submit
Recommended Frequency	See chain
Can be restarted?	No
Reports generated	None

Overview

The Submit job step uses the System Maintenance Utility (SMU) to submit the transaction generated in the Transaction Generation step as per the instructions written to the Submit Parameter File.

The following table lists the different processing steps of the job.

Process Steps	Messages	
Parameter Validation	 Shows Parameter value that is entered Parameters are valid or invalid depending on the validation. If the parameter is invalid, the invalid value is displayed in the log. 	
Submit Transactions	• N/A	

Major Input

- Draft ABS and CR transactions
- Submit Parameter File- SubmitLocalBankSweepDocs.txt

Batch Parameters

The following are the delivered parameter values, which may have been updated through Batch Setup to meet local needs.

Parameter	Description	Default Value
Parameter File (PARMFILE)	The required location and parameter file with loading instructions.	\$\$AMSPARM\$\$/SubmitLocalBankSweepDocs.txt

Major Output

- Submitted General Accounting Expense transactions
- Submitted Cash Receipt transactions

Problem Resolution

The following table shows the potential job return codes for this job.

Return Code	Condition	
Successful (1)	The job ends as successful when all transactions submit successfully.	
Warning (4)	This job does not issue this return code.	
Non-Fatal Error (8)	This job does not issue this return code.	
Failed (12)	The job fails under the following conditions:	
	Parameters are invalid.	
	Input file is not found.	
Terminated (16)	The job is terminated by the user.	
System Failure (20)	A system failure is issued when the job is terminated because of database server or network issues.	

Sort Criteria

None

Selection Criteria

None

Problem Resolution

The following table shows the potential job return codes for this job.

Step 1: Parameter Validation

Return Code	Condition	Recommendation	Other Instructions
Successful (1)	The job ends as successful when Parameter validation successful and file to be processed is found	N/A	N/A
Failed (12)	Parameter error	Run new instance of the chain, starting at this job step.	N/A
Terminated (16)	The job is terminated by the user.	The reason for the termination needs to be investigated. Schedule a new job once resolved.	N/A
System Failure (20)	A system failure is issued when the job is terminated because of database server or network issues.	The reason for the System failure needs to be investigated. Schedule a new job once resolved.	N/A

Step 2: Submit Transactions

Return Code	Condition	Recommendation	Other Instructions
Successful (1)	The job ends as successful when there is no error in submitting Transactions	N/A	N/A
Warning (4)	N/A	This job does not issue this return code.	
Non-Fatal Error (8)	N/A	This job does not issue this return code.	
Failed (12)	The job fails under the following conditions • Error occurs while submitting Transactions	If the job fails because of any runtime exceptions or parameter errors, investigate the exception/error reported by the process, resolve the error, and schedule another job.	N/A
Terminated (16)	The job is terminated by the user.	The reason for the termination needs to be	If another instance of the job has already

Return Code	Condition	Recommendation	Other Instructions
		investigated. The job can either be restarted or schedule a new job.	been scheduled and run successfully, then this job should not be restarted – only a new job should be scheduled.
System Failure (20)	A system failure is issued when the job is terminated because of database server or network issues.	The reason for the system failure needs to be investigated. The job can either be restarted or schedule a new job.	If another instance of the job has already been scheduled and run successfully, then this job should not be restarted – only a new job should be scheduled.

DTC Transmission Chain: Report Generation

Job Name	Report Generation	
Recommended Frequency	See Chain	
Can be restarted?	No	
Reports generated	Daily Treasury Collection Summary Report	
	Daily Treasury Collection Detail Report	

Overview

This job step generates the Summary and Detail Daily Treasury Collection reports, which are divided into a summary portion and a detailed portion. The reports apply to depository activities only; adjustment and hit activities are not part of the reports.

The following table lists the different processing steps of the job.

Process Steps	Messages
Parameter	Validating Batch Parameters
Validation	 Parameters are valid or invalid depending on the Validation. If the parameter is invalid, the invalid value is displayed in the log.
	Batch Parameter validation completed
2. Report Generation	Selecting Eligible Records
	Summary Report Generated
	Reports output folder mapped
	Selecting eligible records for Detail Report

Major Input

• Records in Bank File Management where the Local Bank Sweep status is Close.

Batch Parameters

The following are the delivered parameter values, which may have been updated through Batch Setup to meet local needs.

Parameter	Description	Default Value
Client Name (CLIENT_NM)	An optional name to appear in the report headers.	(blank)
Detail Report ID (DET_REPORT_ID)	An optional report ID used for routing purposes.	(blank)
Summary Report ID (SUMM_REPORT_ID)	An optional report ID used for routing purposes.	(blank)
Detail Report Title (DET_REPORT_TITLE)	An optional report title to appear in the header of the detail report.	(blank)
Summary Report Title (SUMM_REPORT_TITLE)	An optional report title to appear in the header of the summary report.	(blank)
Transmission Date (TRANS_DT)	An optional date used as the report's Transmission Date, else the Application System Date is used.	(blank)
Progression Counter Size (PROG_CTR_SIZE)	A required processing parameter that is used to provide progression messaging in the job log. If left blank, 5000 defaults.	5000

Major Output

Daily Treasury Collection Summary and Detail reports

Problem Resolution

The following table shows the potential job return codes for this job.

Return Code	Condition	
Successful (1)	The job ends as successful when reports are produced.	
Warning (4)	This job does not issue this return code.	
Non-Fatal Error (8)	This job does not issue this return code.	
Failed (12)	The job fails under the following conditions:	
	Parameters are invalid.	
	Input file is not found.	
Terminated (16)	The job is terminated by the user.	
System Failure (20)	A system failure is issued when the job is terminated because of database server or network issues.	

Sort Criteria

The selected records are sorted in the order of Concentration Bank Account ABA Number, Concentration Bank Account Number, Intended Close Date, Bank Account, Transmission Date, and Action.

Selection Criteria

The selection of records from Bank Transmission Maintenance is based on the following criteria:

- Sweep/Payment Indicator = Sweep
- Transmission Date = Job Parameter
- · Action is not Adjustment.
- If Action is BAI Loaded or Manual Entry, then Transfer Amount is not Zero.
- If Action is Correction, then Correction Transfer Amount is not Zero.

Problem Resolution

The following table shows the potential job return codes for this job.

Step 1: Parameter Validation

Return Code	Condition	Recommendation	Other Instructions
Successful (1)	The job ends as successful when parameters are valid, and reports are produced.	N/A	N/A
Failed (12)	The job fails under the following conditions: Parameters are invalid.	Run new instance of the chain, starting at this job step.	N/A
Terminated (16)	The job is terminated by the user.	The reason for the termination needs to be investigated. Schedule a new job once resolved.	N/A
System Failure (20)	A system failure is issued when the job is terminated because of database server or network issues.	The reason for the System failure needs to be investigated. Schedule a new job once resolved.	N/A

Step 2: Report Generation

Return Code	Condition	Recommendation	Other Instruction
Successful (1)	The job ends as successful when parameters are valid, and reports are produced.	N/A	N/A
Warning (4)	If no deposit activities match selection criteria.	Review selection parameters against application data and run another instance if parameters were incorrect.	N/A
Failed (12)	The job fails under the following conditions: • Unexpected error that occurs during the creation of the Summary Report. • Unexpected error that occurs during the creation of the Detailed Report	The reason for the failure needs to be investigated. Schedule a new job once resolved.	N/A
Terminated (16)	The job is terminated by the user.	The reason for the termination needs to be investigated. Schedule a new job once resolved.	N/A
System Failure (20)	A system failure is issued when the job is terminated because of database server or network issues.	The reason for the system failure needs to be investigated. Schedule a new job once resolved.	N/A

2.1.4 Income Allocation Process

Job Name	Income Allocation Process
Recommended Frequency	Daily or less frequently as needed
Single Instance Required	Yes
Can the job be restarted	No
Exception Reports generated	Yes

Overview

The Income Allocation Process is designed to allocate earnings recorded with the Pool Fund Investment Earnings (PFIE) transaction, which are recorded on the Cash Collection Inquiry (CCOL) page.

Journal Voucher Income Allocation (JVIA) transactions are created to record the investment income and cash allocation. When a participant is an external party a General Accounting Expense (GAX) transaction is also created in order to trigger the Automatic Disbursement Process to generate a payment of that participant's share. This functionality is triggered by the population of the External Participant Vendor Code field on the Sweep page. External participants without that field will automatically reinvest earnings allocated by the JVIA with the next run of the Cash Sweep chain.

The allocation is based on the daily cash balance each participant had in the pool as recorded on the Pool History (PHIS) page. The JVIA and GAX transactions will update CCOL reflecting the date of the allocation and the individual transaction used in that allocation.

The chain includes six job steps that perform the following functions:

- Income Allocation Process This job performs parameter validation, record selection, XML file creation (2 possible files), CCOL updates, and the creation of other files used by later job steps.
- 2. <u>Load JVIA Transaction</u> This job takes the XML file created in the previous step and loads the JVIA transactions into the Transaction Catalog.
- 3. <u>Submit JVIA Transaction</u> This job submits the JVIA transactions loaded to the Transaction Catalog according to a text file created by the first job.
- 4. <u>Load GAX Transaction</u> This job takes the XML file created in the previous step and loads the GAX transactions into the Transaction Catalog.
- 5. <u>Submit GAX Transaction</u> This job submits the GAX transactions loaded to the Transaction Catalog according to a text file created by the first job.
- 6. <u>System Assurance Report</u> This job reviews the list of transactions created to report on all that have not reached the 'Final' Transaction Phase.

Major Input

- Cash Collection Inquiry (CCOL): CASH COLL INQ
- Cash Sweep (SWEEP): R CASH SW SETP
- Pool History (PHIS): PL_HIST_INQ

Minor Input

- Treasury Accounting Special Fund Accounts (SPECFUND): R_IN_SPEC_FUND
- Infer Department and Unit (INFDU): INF_DEPT_UNIT

Major Output

- Updates Cash Collection Inquiry (CASH_COLL_INQ) records processed with an Allocated Date.
- Updates the tables used to support the grid on the bottom of CCOL: CASH_COLL_INQ and CASH_COLL_INQ_BAK to list transactions created.
 - Journal Voucher Income Allocation (JVIA) transactions are created and submitted to record the income allocation.
 - General Accounting Expense (GAX) transactions are created and submitted to record the income allocation.

Minor Output

System Assurance Exception Report for JVIA and GAX transactions

Chain Return Code

The following table indicates the potential return codes with which the chain ends:

Return Code	Condition	
Successful (1)	All jobs in the chain end with a return code of Successful	
Warning (4)	1 job in the chain ends with a return code of Warning	
Non Fatal Error (8)	1 job in the chain ends with a return code of Non Fatal Error	
Failed (12)	1 job in the chain ends with a return code of Failed	
Terminated (16)	1 job in the chain ends with a return code of Terminated	
System Failure (20)	1 job in the chain ends with a return code of System Failure	

Income Allocation Process Chain: Income Allocation Job

Job Name	Income Allocation
Recommended Frequency	See the chain description
Single Instance Required	Yes
Can the job be restarted	No
Exception reports generated	No

Overview

The Income Allocation job step performs the following tasks:

- 1. Batch Parameter Validation
- 2. JVIA & GAX Transaction XML Generation Processing
 - Select CCOL records
 - b. Determine allocation percentages and allocate income
 - c. Create JVIA transactions in an XML file
 - d. Create GAX transactions in an XML file
 - e. Create the parameter and submit files for use in later job steps

The determination of the allocation percentage for a participant is a multi-step process with the following formula:

(Individual Participant's Sum of Accumulated Balances / Sum of Accumulated Balances for All Participants in Pool)

- Select eligible participants from the SWEEP page. To have income allocated, the Status (SW_STA) on SWEEP has to be Active (1), Closed by User (2), or Inactivated (3). This selection is for all pools or only the pool specified in batch parameters. Any other Status value means the participant will not be selected for allocation nor will the PHIS records for that participant be selected for the Pool's Accumulated Balance.
- 2. Select eligible CCOL records of all pools or just the specified pool. To be eligible, a CCOL record has to have the Allocated Date (ALLOC_DT) blank.
- 3. For each participant selected in #1 select PHIS records by matching the PHIS History Date (HIST_DT) with CCOL From Date (FROM_DT) and To Date (TO_DT) values.
 - a. If the number of days between the From Date and To Date is 1, then only do 'Earliest PHIS record selection' to determine the **Participant's Sum of**Accumulated Balances. If the number of days >1 then do both selections.
 - b. Earliest PHIS record selection will use 3bi only if a match is found in that step otherwise 3bii will be done.
 - i. History Date = From Date
 - ii. History Date < From Date and only select the nearest record
 - c. Remaining PHIS record selection will select records with a History Date > From Date through records with a History Date <= To Date.
 - d. If no records have been selected for a participant to this point, then that participant has not contributed and will not get an allocation.
- 4. Add all PHIS records selected for each individual participant in a pool to get the **Participant's Sum of Accumulated Balances.**
- 5. Add all PHIS records selected for all participants in a pool to get the Sum of Accumulated Balances for All Participants in Pool.
- 6. Calculate the percentage of each participant in each pool
- 7. Multiply that percentage by the **Income for Allocation** which is calculated from CCOL as:

Income for Allocation = Cash Amount + Discount - Accrued Interest Amount - Premium

The following table shows the various steps that the job step goes through and the progression messages issued at each step.

Process Steps	Messages		
Batch Parameter Validation	 Run Started Each parameter is listed with value Any parameter to default is listed with the default value Any parameter errors are listed 		
JVIA & GAX Transaction XML Generation	 JVIA transactions created: ## GAX transactions created: ## Or No records found to be processed In all cases the following is the final message Run Ended 		

Major Input

- Cash Collection Inquiry (CCOL): CASH_COLL_INQ
- Cash Sweep (SWEEP): R_CASH_SW_SETP
- Pool History (PHIS): PL_HIST_INQ

Minor Input

- Treasury Accounting Special Fund Accounts (SPECFUND): R_IN_SPEC_FUND
- Infer Department and Unit (INFDU): INF_DEPT_UNIT

Batch Parameters

Parameter	Description	Default Values
AMSEXPORT	Export Location at Income Allocation Job	\$\$AMSEXPORT\$\$ (** Refer to Note: Assumptions for SWBP about AMS* parameters)
AMSPARM	Parameter Location at Income Allocation Job	\$\$AMSPARM\$\$ (**Refer to Note: Assumptions for SWBP AMS* parameters)
AMSLOGS	Logs Location at Income Allocation Job	\$\$AMSLOGS\$\$ (**Refer to Note: Assumptions for SWBP AMS* parameters)

		I
CLIENT_NM	(Optional) Client Name to be printed on Income Allocation Systems Assurance Report	(blank)
COMMIT_SIZE	(Optional) This field controls how many records are committed by the application at one time.	1
EXCEP_REP_IND	(Optional) System Assurance Report Type where 2 = Failed transaction listing and 4 = Detailed listing of transactions with errors. If not entered then defaulted as 2.	2
GAX_DOC_CD	(Required) Transaction Code for generated GAX transactions	GAX
GAX_DOC_PFX	(Optional) Transaction Prefix for generated GAX transactions There should be an entry in AUTO_DOC_NO table (ADNT page) for the prefix (**** if the parameter is left blank) along with the GAX_DOC_CD, current fiscal year, and the department for each pool on INFDU.	(blank)
GAX_EXCEP_REP_ FILE_NM	(Required) System Assurance Report file(.txt) for generated GAX transactions	InvExtDocExcp.txt
GAX_EXP_FILE_NM	(Required) Generated GAX XML File	InvExtAlloc.xml
GAX_PARM_FILE	(Required) Parameter(.txt) file for generated GAX transactions	InvExtParams.txt
GAX_SUBMIT_FILE	(Required) Submit Parameter(.txt) file for generated GAX transactions	InvExtSubmit.txt
JVIA_DOC_CD	(Required) Transaction Code for the generated journal voucher transactions	JVIA
JVIA_DOC_PFX	(Optional) Transaction Prefix for generated JVIA transactions There should be an entry in AUTO_DOC_NO (ADNT) for the prefix (**** if the parameter is left blank) along with the JVIA_DOC_CD, current fiscal year, and the department for each pool on INFDU.	(blank)
JVIA_EXCEP_REP_	(Required) System Assurance	InvIntDocExcp.txt

FILE_NM	Report file(.txt) for generated JVIA transactions	
JVIA_EXP_FILE_NM	(Required) Generated JVIA XML File	InvIntAlloc.xml
JVIA_PARM_FILE	(Required) Parameter(.txt) file for generated JVIA transactions	InvIntParams.txt
JVIA_SUBMIT_FILE	(Required) Submit Parameter(.txt) file for generated JVIA transactions	InvIntSubmit.txt
POOL_FUND_CD	(Optional) Specific pool fund for allocation. If left blank then all pools are selected. This parameter is required if the Pool Sub Fund parameter is used.	(blank)
POOL_SFUND_CD	(Optional) Specific pool sub fund for allocation. If left blank and Pool Fund parameter is used, only records for the Pool Fund and Sub Fund of 'BLNK' on CCOL will be selected.	(blank)
RUN_DT	(Optional) Process Run Date in MM/DD/YYYY format (if not entered then the Application Date is used)	(blank)

Major Output

- Cash Collection Inquiry CASH_COLL_INQ
- InvIntAlloc.xml (XML file of JVIA transactions)
- InvExtAlloc.xml (XML file of GAX transactions)
- InvIntParams.txt (text file containing instructions for later steps)
- InvIntSubmit.txt (text file containing instructions for later steps)
- InvExtParams.txt (text file containing instructions for later steps)
- InvExtSubmit.txt (text file containing instructions for later steps)

Job Return Code

Return Code	Condition
Successful (1)	All the validations are performed successfully.
Warning (4)	This job does not issue this return code
Non Fatal Error (8)	Some of the inferences and validation of the eligible records are not valid.
Failed (12)	The job will fail under the following conditions:

	Parameters are invalid.
	Technical failure.
	When this job ends with a return of code Failed, subsequent jobs in the chain will be set to inactive.
Terminated (16)	This return code will be issued when the job is terminated by the user. When this job ends with a return of code Terminated subsequent jobs in the chain will be set to inactive.
System Failure (20)	This return code will be issued when the job is terminated because of database server or network issues. When this job ends with a return of code System Failure, subsequent jobs in the chain will be set to inactive.

Sort Sequence

• Pool Fund, Pool Sub Fund, Sequence Number

Selection Criteria

Please see earlier Overview section for details.

Problem Resolution

The following table shows the possible return codes and recommendations for each processing step.

Step 1: Batch Parameter Validation:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	All batch parameter validations are successful (i.e. there are no errors raised during validations.)	N/A	N/A
Warning (4)	This step does not issue this return code.	N/A	N/A
Non Fatal Error (8)	This step does not issue this return code.	N/A	N/A
Failed (12)	Required parameters are not entered. Sample Message: Export file name for Journal Voucher Income Allocation Transaction is not specified	Enter missing required parameters and schedule a new job.	N/A

	Entered Parameters are not valid Sample Message: Entry for GAX transaction not found in Transaction Control Table	Enter valid parameters and schedule a new job.	N/A
	Failed because of runtime exceptions caused by unexpected conditions	Failure reason needs to be investigated before scheduling a new job.	N/A
Terminated (16)	Job is terminated manually by the user.	A new job can be scheduled.	N/A
System Failure (20)	Job is terminated because of database server or network issues	Reason for the System Failure needs to be investigated. A new job can be scheduled once the problem has been resolved.	N/A

Step 2: JVIA and GAX Transaction XML Generation:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	JVIA and GAX Transaction XML generated successfully.	N/A	N/A
Warning (4)	N/A	This step does not issue this return code.	N/A
Non Fatal Error (8)	Required peripheral records are not valid or not found. 1. Investment Special Fund Accounts Table record for Pool Fund and Sub Fund not found 2. Record does not exists in the Auto Numbering table for the given Transaction Code 3. JVIA or GAX record is missing for the pool on the Infer Department Unit (INFDU) page	 Ensure that the a record exist in Investment SPECFUND for the Pool Fund and Sub Fund in the Current Fiscal Year Add missing record to ADNT for the missing Department or with a Department of **** that will cover all Departments not explicitly defined. Setup the missing INFDU record. 	Submit another instance of the entire chain to process those records skipped.

Failed (12)	Failed because of runtime exceptions caused by unexpected conditions	Failure reason needs to be investigated before rescheduling the job.	If a failure occurred in the XML file creation so that not all or none of the necessary transactions were saved to the file, look to see if any CCOL updates were made for the Run Date. If not, then restart another chain after the reason for failure is corrected. If updates were made then restore CCOL.
Terminated (16)	Job is terminated manually by the user.	A new job can be scheduled after the above CCOL update checks are performed	See above
System Failure (20)	Job is terminated because of database server or network issues	Reason for the System Failure needs to be investigated. A new job can be scheduled after the above CCOL update checks are performed	See above

Income Allocation Process Chain: Load JVIA Transaction

Job Name	Load JVIA Transaction
Recommended Frequency	See the chain description
Single Instance Required	Yes
Can the job be restarted	Yes
Exception reports generated	No

Overview

This job step will execute a SysManUtil Import to load the JVIA transactions created by the Income Allocation job. This step will be executed if previous step completed with return code as Successful, Warning or Non Fatal Error. An upload JVIA parameter text file is created by the Income Allocation job step specifying SMU transaction import parameters and what JVIA transaction XML file to load.

The following table shows the various steps that the job step goes through and the progression messages issued at each step.

Process Steps	Messages	
Batch Parameter Validation	Run StartedEach parameter is listed with valueAny parameter error is listed	
JVIA Transaction Loading	 Rows Processed: ## Rows Saved: ## Rows in Error: ## Run Ended 	

Major Input

- InvIntAlloc.xml
- InvIntParams.txt

Batch Parameters

Parameter	Description	Default Value
PARM_FILE	(Required) File location and name of upload parameter file for generated JVIA transactions.	\$\$AMSPARM\$\$/InvIntParams.txt

Note: The PARM_FILE only contains the subset of SMU job parameters for loading transactions.

Parameter	Default Value
ACTN_CD	DOCIMPORT
FILE_NM	\$\$AMSEXPORT\$\$/InvIntAlloc.xml
COMMIT_BLOCK	1
RESTART_FL	true
GENERATE_STATS	true
BYPS_ADNT_FL	true

Please refer to "SMU Transaction Upload Job" run sheet in CGI Advantage Financial Utilities Run Sheets Guide for the full list SMU Transaction Upload Batch parameters.

Major Output

JVIA transactions in draft status

Job Return Code

The following table shows the potential job return codes for the SMU Transaction Upload job. Please note that these return codes are applicable for each input file (data file). If the parameter file is supplied as an input file, then these return codes are applicable for each parm line on the parameter file and the job will end with the highest return code across all of the parm lines.

Return Code	Condition	
Successful (1)	All of the records are loaded into the Transaction catalog successfully.	
Warning (4)	This return code will be issued under the following conditions: The input file is empty Some records fail to load into the Transaction catalog.	
Non Fatal Error (8)	All records fail to load into the Transaction Catalog.	
Failed (12)	The job will fail under the following conditions: Parameters are invalid The input file is not found in the specified directory If the error messages exceeds the maximum number specified in the parameter Runtime exceptions encountered for any unexpected situations When the job ends with a return code of Failed, subsequent jobs in the chain are set to inactive.	
Terminated (16)	This return code will be issued when the job is terminated by the user. When the job ends with a return of code Terminated, subsequent jobs in the chain are set to inactive.	
System Failure (20)	This return code will be issued when the job is terminated because of database server or network issues. When this job ends with a return of code System Failure, subsequent jobs in the chain are set to inactive.	

Sort Sequence

N/A

Selection Criteria

N/A

Problem Resolution

If the job ends with a return code of failed, the job can be restarted only when the Save Restart Information parameter is selected and another instance of the job has not been scheduled and run successfully. If another instance of the job has already been scheduled and ran successfully, then this job should not be restarted – a new job should only be scheduled.

The following table shows the possible return codes and recommendations for each processing step specific to the job in the chain. For general errors and recommendations, refer to the "SMU Transaction Upload Job" run sheet in the CGI Advantage Financial – Utilities Run Sheets Guide.

Parameter Editing & JVIA Upload:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	All parameters are valid and all the transactions are loaded successfully	N/A	N/A
Warning (4)	The input file is empty. Sample message: No records found on the input file	Make sure that the Income Allocation job was run with correct parameters as no CCOL records were selected.	This return code for the 2nd run in one day is expected.
Walling (4)	This return code will be issued when the job fails to load some of the transactions. Sample Message: Unable to load some of the transactions into the catalog.	Analyze the reason for the failure, resolve the issue and load all the rejected transactions.	Never start a complete chain until completing all processing from a prior one.
Non Fatal Error (8)	This return code will be issued when the job failed to load all the transactions.	Analyze the reason for the failure, resolve the issue and load all the rejected transactions.	Never start a complete chain until completing all processing from a prior one.
Failed (12)	This return code will be issued when the parameters are not valid. Sample Message: Parameter file could not be located/read	Make sure that the parameter file exits in the specified folder and schedule a new chain with the prior jobs disabled.	Never start a complete chain until completing all processing from a prior one.
Talleu (12)	Failed because of runtime exceptions for unexpected condition	Analyze the reason for the failure, resolve the issue and schedule a new chain with the prior jobs disabled.	Never start a complete chain until completing all processing from a prior one.
Terminated (16)	Job is terminated manually by the user.	Either restart the failed job step or schedule a new chain with the prior jobs disabled.	Never start a complete chain until completing all processing from a prior one.
System Failure (20)	Job is terminated because of database server or network issues	Reason for the System Failure needs to be investigated and fixed. Then either restart the	Never start a complete chain until completing all processing

with the prior jobs disabled.

Income Allocation Process Chain: Submit JVIA Transaction

Job Name	Submit JVIA Transaction
Recommended Frequency	See the chain description
Single Instance Required	Yes
Can the job be restarted	Yes
Exception reports generated	No

Overview

This job step will execute a SysManUtil Submit to submit the JVIA transaction created by the Income Allocation job. A submit JVIA parameter text file created in Income Allocation process, specifies which transactions should be submitted.

The following table shows the various steps that the job step goes through and the progression messages issued at each step.

Process Steps	Messages
Batch Parameter Validation	 Run Started Each parameter is listed with value Any parameter error is listed
JVIA Transaction Submit	 Each transaction instance is listed as: Long Memo Details of transaction instance End Long Memo Followed by: Total # Processed ## :Failed ## :Succeeded ## Run Ended

Major Input

- InvIntSubmit.txt
- Draft JVIA Transactions in the transaction catalog

Batch Parameters

Parameter	Description	Default Value
PARM_FILE	(Required) File location and name	\$\$AMSPARM\$\$/InvIntSubmit.txt

of submit parameter file for	
generated JVIA transactions.	

Note: The PARM_FILE only contains the subset of SMU job parameters for submitting transactions. Each transaction is listed as a parameter line so DOC_CD to BYPS_ADNT_FL are repeated.

Parameter	Default Value
ACTN_CD	DOCSUBMIT
DOC_CD	JVIA
DOC_DEPT_CD	varies
DOC_ID	varies
DOC_TYP	JV
DOC_PHASE_CD	1
DOC_STA_CD	1
EXCEP_REP_IND	depends on job step 1 parameter
EXCEP_REP_FILE_NM	&&AMSLOGS\$\$\ InvIntDocExcp.txt
COMMIT_BLOCK	depends on job step 1 parameter
RESTART_FL	true
STATS	true
BYPS_ADNT_FL	true

Major Output

- JVIA transactions in final or draft status.
- Exception File updated by the JVIA transactions not submitted successfully.

Job Return Code

The following table shows the potential job return codes for the SMU Transaction Submit job. Please note that these return codes are applicable for each input file (data file). If the parameter file is supplied as an input file, then these return codes are applicable for each parm line on the parameter file and the job will end with the highest return code across all of the parm lines.

Return Code	Condition
Successful (1)	All the transactions submitted successfully.
Warning (4)	N/A
Non Fatal Error (8)	N/A
Failed (12)	The job will fail under the following conditions: Parameters are invalid Parameter file is not found

	Runtime exceptions encountered for any unexpected situations.
	When the job ends with a return code of failed, subsequent jobs in the chain are set to inactive
Terminated (16)	This return code will be issued when the job is terminated by the user. When the job ends with a return of code Terminated, subsequent jobs in the chain are set to inactive.
System Failure (20)	This return code will be issued when the job is terminated because of database server or network issues. When this job ends with a return of code System Failure, subsequent jobs in the chain are set to inactive.

Sort Sequence

N/A

Selection Criteria

N/A

Problem Resolution

If this job ends with a return code of Failed, Terminated or System Failure, then no new instance of this chain should be executed until all the transactions loaded in the previous job step are submitted. This is because the submit parameter txt file that contains the transaction IDs to be submitted will get overwritten if another instance of this chain is executed. Only the submit job in the chain should be rescheduled to submit the remaining transactions. A new job can be scheduled (within a new chain with the prior jobs disabled) using the same parameter file.

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	All the transactions submitted successfully	N/A	N/A
Warning (4)	N/A	The job does not issue this return code	N/A
Non Fatal Error (8)	N/A	The job does not issue this return code	N/A
Failed (12)	This return code will be issued when the input parameter is not found in the specified directory. Sample Message: Parameter file could not be located/read	Make sure that the parameter file exits in the specified folder and schedule a new job.	N/A

	Failed because of runtime exceptions for unexpected situation	Analyze the reason for the failure and resolve the issue. Then either restart the failed job step or schedule a new chain with the prior jobs disabled.	Never start a complete chain until completing all processing from a prior one.
Terminated (16)	Job is terminated manually by the user.	Either restart the failed job step or schedule a new chain with the prior jobs disabled.	Never start a complete chain until completing all processing from a prior one.
System Failure (20)	Job is terminated because of database server or network issues	Reason for the System Failure needs to be investigated and fixed. Then either restart the failed job step or schedule a new chain with the prior jobs disabled.	Never start a complete chain until completing all processing from a prior one.

Income Allocation Process Chain: Load GAX Transaction

Job Name	Load GAX Transaction
Recommended Frequency	See the chain description
Single Instance Required	Yes
Can the job be restarted	Yes
Exception reports generated	No

Overview

This job step will execute a SysManUtil Import to load the GAX transactions created by the Income Allocation job. An upload GAX parameter text file is created by the Income Allocation job step specifying SMU transaction import parameters and what GAX transaction XML file to load.

The following table shows the various steps that the job step goes through and the progression messages issued at each step.

Process Steps	Messages
Batch Parameter Validation	Run StartedEach parameter is listed with valueAny parameter error is listed
GAX Transaction Loading	 Rows Processed: ## Rows Saved: ## Rows in Error: ## Run Ended

Major Input

- InvExtAlloc.xml
- InvExtParams.txt

Batch Parameters

Parameter	Description	Default Value
PARM_FILE	(Required) File location and name of upload parameter file for generated GAX transactions.	\$\$AMSPARM\$\$/InvIntParams.txt

Note: The PARM_FILE only contains the subset of SMU job parameters for loading transactions.

Parameter	Default Value
ACTN_CD	DOCIMPORT
FILE_NM	\$\$AMSEXPORT\$\$/InvExtAlloc.xml
COMMIT_BLOCK	1
RESTART_FL	true
GENERATE_STATS	true
BYPS_ADNT_FL	true

Please refer to "SMU Transaction Upload Job" run sheet in CGI Advantage Financial Utilities Run Sheets Guide for the full list SMU Transaction Upload Batch parameters.

Major Output

GAX transactions in draft status

Job Return Code

The following table shows the potential job return codes for the SMU Transaction Upload job. Please note that these return codes are applicable for each input file (data file). If the parameter file is supplied as an input file, then these return codes are applicable for each parm line on the parameter file and the job will end with the highest return code across all of the parm lines.

Return Code	Condition
Successful (1)	All of the records are loaded into the Transaction catalog successfully.
Warning (4)	This return code will be issued under the following conditions: • The input file is empty

	Some records fail to load into the Transaction catalog.
Non Fatal Error (8)	All records fail to load into the Transaction Catalog.
	The job will fail under the following conditions:
	 Parameters are invalid
	 The input file is not found in the specified directory
Failed (12)	 If the error messages exceeds the maximum number specified in the parameter
	 Runtime exceptions encountered for any unexpected situations
	When the job ends with a return code of Failed, subsequent jobs in the chain are set to inactive.
Terminated (16)	This return code will be issued when the job is terminated by the user. When the job ends with a return of code Terminated, subsequent jobs in the chain are set to inactive.
System Failure (20)	This return code will be issued when the job is terminated because of database server or network issues. When this job ends with a return of code System Failure, subsequent jobs in the chain are set to inactive.

Sort Sequence

N/A

Selection Criteria

N/A

Problem Resolution

If the job ends with a return code of failed, the job can be restarted only when the Save Restart Information parameter is selected and another instance of the job has not been scheduled and run successfully. If another instance of the job has already been scheduled and ran successfully, then this job should not be restarted – a new job should only be scheduled.

The following table shows the possible return codes and recommendations for each processing step specific to the job in the chain. For general errors and recommendations, refer to the "SMU Transaction Upload Job" run sheet in the CGI Advantage Financial – Utilities Run Sheets Guide.

Parameter Editing & GAX Upload:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	All parameters are valid and all the transactions are loaded successfully	N/A	N/A

Mania (4)	The input file is empty. Sample message: No records found on the input file	Make sure that the Income Allocation job was run with correct parameters as no CCOL records were selected.	This return code for the 2nd run in one day is expected.
Warning (4)	This return code will be issued when the job fails to load some of the transactions. Sample Message: Unable to load some of the transactions into the catalog.	Analyze the reason for the failure, resolve the issue and load all the rejected transactions.	Never start a complete chain until completing all processing from a prior one.
Non Fatal Error (8)	This return code will be issued when the job failed to load all the transactions.	Analyze the reason for the failure, resolve the issue and load all the rejected transactions.	Never start a complete chain until completing all processing from a prior one.
Failed (12)	This return code will be issued when the parameters are not valid. Sample Message: Parameter file could not be located/read	Make sure that the parameter file exits in the specified folder and schedule a new chain with the prior jobs disabled.	Never start a complete chain until completing all processing from a prior one.
. 4.104 (12)	Failed because of runtime exceptions for unexpected condition	Analyze the reason for the failure, resolve the issue and schedule a new chain with the prior jobs disabled.	Never start a complete chain until completing all processing from a prior one.
Terminated (16)	Job is terminated manually by the user.	Either restart the failed job step or schedule a new chain with the prior jobs disabled.	Never start a complete chain until completing all processing from a prior one.
System Failure (20)	Job is terminated because of database server or network issues	Reason for the System Failure needs to be investigated and fixed. Then either restart the failed job step or schedule a new chain with the prior jobs disabled.	Never start a complete chain until completing all processing from a prior one.

Income Allocation Process Chain: Submit GAX Transaction

Job Name Submit GAX Transaction

Recommended Frequency	See the chain description
Single Instance Required	Yes
Can the job be restarted	Yes
Exception reports generated	No

Overview

This job step will execute a SysManUtil Submit to submit the GAX transaction created by the Income Allocation job. A submit GAX parameter text file created in Income Allocation process, specifies which transactions should be submitted.

The following table shows the various steps that the job step goes through and the progression messages issued at each step.

Process Steps	Messages	
Batch Parameter Validation	Run StartedEach parameter is listed with valueAny parameter error is listed	
GAX Transaction Submit	 Each transaction instance is listed as: Long Memo Details of transaction instance End Long Memo Followed by: Total # Processed ## :Failed ## :Succeeded ## Run Ended 	

Major Input

- InvExtSubmit.txt
- Draft GAX Transactions in the transaction catalog

Batch Parameters

Parameter	Description	Default Value
PARM_FILE	(Required) File location and name of submit parameter file for generated GAX transactions.	\$\$AMSPARM\$\$/InvExtSubmit.txt

Note: The PARM_FILE only contains the subset of SMU job parameters for submitting transactions. Each transaction is listed as a parameter line so DOC_CD to BYPS_ADNT_FL are repeated.

Parameter	Default Value
ACTN_CD	DOCSUBMIT
DOC_CD	GAX
DOC_DEPT_CD	varies
DOC_ID	varies
DOC_TYP	ABS
DOC_PHASE_CD	1
DOC_STA_CD	1
EXCEP_REP_IND	depends on job step 1 parameter
EXCEP_REP_FILE_NM	&&AMSLOGS\$\$\ InvExtDocExcp.txt
COMMIT_BLOCK	depends on job step 1 parameter
RESTART_FL	true
STATS	true
BYPS_ADNT_FL	true

Major Output

- GAX transactions in final or draft status.
- Exception File updated by the GAX transactions not submitted successfully.

Job Return Code

The following table shows the potential job return codes for the SMU Transaction Submit job. Please note that these return codes are applicable for each input file (data file). If the parameter file is supplied as an input file, then these return codes are applicable for each parm line on the parameter file and the job will end with the highest return code across all of the parm lines.

Return Code	Condition	
Successful (1)	All the transactions submitted successfully.	
Warning (4)	N/A	
Non Fatal Error (8)	N/A	
Failed (12)	The job will fail under the following conditions: • Parameters are invalid • Parameter file is not found • Runtime exceptions encountered for any unexpected situations. When the job ends with a return code of failed, subsequent jobs in the chain are set to inactive	
Terminated (16)	This return code will be issued when the job is terminated by the user. When the job ends with a return of code Terminated, subsequent jobs in the chain are set to inactive.	

System Failure (20)	This return code will be issued when the job is terminated because of database server or network issues. When this job ends with a return of code System Failure, subsequent jobs in the chain are set to inactive.
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Sort Sequence

N/A

Selection Criteria

N/A

Problem Resolution

If this job ends with a return code of Failed, Terminated or System Failure, then no new instance of this chain should be executed until all the transactions loaded in the previous job step are submitted. This is because the submit parameter txt file that contains the transaction IDs to be submitted will get overwritten if another instance of this chain is executed. Only the submit job in the chain should be rescheduled to submit the remaining transactions. A new job can be scheduled (within a new chain with the prior jobs disabled) using the same parameter file.

Parameter Editing & GAX Submit:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	All the transactions submitted successfully	N/A	N/A
Warning (4)	N/A	The job does not issue this return code	N/A
Non Fatal Error (8)	N/A	The job does not issue this return code	N/A
Failed (12)	This return code will be issued when the input parameter is not found in the specified directory.	Make sure that the parameter file exits in the specified folder and schedule a new job.	N/A
	Sample Message: Parameter file could not be located/read		
	Failed because of runtime exceptions for unexpected situation	Analyze the reason for the failure and resolve the issue. Then either restart the failed job step or schedule a new chain with the prior jobs disabled.	Never start a complete chain until completing all processing from a prior one.

Terminated (16)	Job is terminated manually by the user.	Either restart the failed job step or schedule a new chain with the prior jobs disabled.	Never start a complete chain until completing all processing from a prior one.
System Failure (20)	Job is terminated because of database server or network issues	Reason for the System Failure needs to be investigated and fixed. Then either restart the failed job step or schedule a new chain with the prior jobs disabled.	Never start a complete chain until completing all processing from a prior one.

Income Allocation Process Chain: System Assurance Report Job

Job Name	System Assurance Report
Recommended Frequency	See chain description
Single Instance Required	Yes
Can the job be restarted	No
Exception reports generated	Yes

Overview

This job of the chain generates Exception Report for JVIA and GAX transactions not submitted successfully in the previous submit job.

The following table shows the various steps that the job step goes through and the progression messages issued at each step.

Process Steps	Messages	
Batch Parameter Validation	 Run Started Each parameter is listed with value Any parameter error is listed 	
Exception Report Generation	 Report output folder mapped HTML report file path PDT report file path If no transactions reject then the following is issued. If any reject there is no job log message but the Return Code will be Non Fatal Error. No Exceptions during (JVIA or GAX) Transaction Submit Run Ended 	

Major Input

- JVIA transactions not submitted successfully read from the exception file name updated by the submit job.
- GAX transactions not submitted successfully read from the exception file name updated by the submit job.

Batch Parameters

Parameter	Parameter Description	
JVIA_PARM_FILE	(Required) Parameter (.txt) file for JVIA transactions.	InvIntParams.txt
GAX_PARM_FILE	(Required) Parameter (.txt) file for GAX transactions.	InvExtParams.txt
AMSPARM	(Required) Location of the parameter file created by the 1st job step which contains the location and file name of the exception file updated by the submit job step.	\$\$AMSPARM\$\$ (** Refer to Note: Assumptions for SWBP about AMS* parameters)

Major Output

 Generates Exception Report in Htm and Pdf for JVIA and GAX transactions not submitted successfully.

Job Return Code

Return Code	Condition	
Successful (1)	All the validations are performed successfully and there are some records eligible for exception.	
Warning (4)	This job does not issue this return code	
Non Fatal Error (8)	No records found eligible for exception.	
Failed (12)	The job will fail under the following conditions: • Parameters are invalid. • Technical failure. When this job ends with a return of code Failed, subsequent jobs in the chain will be set to inactive.	
Terminated (16)	This return code will be issued when the job is terminated by the user. When this job ends with a return of code Terminated subsequent jobs in the chain will be set to inactive.	
System Failure (20)	This return code will be issued when the job is terminated because of database server or network issues. When this job ends with a return of code System Failure, subsequent jobs in the chain will be set to inactive.	

Sort Sequence

N/A

Selection Criteria

- Records are selected for processing based on the following criteria:
 - JVIA transactions not submitted successfully read from the exception file name updated by the submit job.
 - GAX transactions not submitted successfully read from the exception file name updated by the submit job.

Problem Resolution

No database restore is required. Correct the problem and rerun the job executing the program. No restoration of datasets or files from backups is required for this program

The following table shows the possible return codes and recommendations for each processing step.

Step 1: Batch Parameter Validation:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	All batch parameter validations are successful (i.e. there are no errors raised during validations.)	N/A	N/A
Warning (4)	N/A	This step does not issue this return code.	N/A
Non Fatal Error (8)	N/A	This step does not issue this return code.	N/A
	Required parameters are not entered. Sample Message: Parameter file name is not specified	Enter missing required parameters and schedule a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVIA & GAX transactions in draft or run the Income Allocation Transaction Resubmit chain.
Failed (12)	Entered Parameters are not valid Sample Message: System Assurance Report Type in Transaction Submit section not found in the parameter file	Enter valid parameters and schedule a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVIA & GAX transactions in draft or run the Income Allocation Transaction Resubmit chain.

	Failed because of runtime exceptions caused by unexpected conditions	Failure reason needs to be investigated before scheduling a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVIA & GAX transactions in draft or run the Income Allocation Transaction Resubmit chain.
Terminated (16)	Job is terminated manually by the user.	Schedule a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVIA & GAX transactions in draft or run the Income Allocation Transaction Resubmit chain.
System Failure (20)	Job is terminated because of database server or network issues	Reason for the System Failure needs to be investigated and fixed. Then schedule a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVIA & GAX transactions in draft or run the Income Allocation Transaction Resubmit chain.

Step 2: Exception Report Generation:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	N/A	This step does not issue this return code.	N/A
Warning (4)	N/A	This step does not issue this return code.	N/A
Non Fatal Error (8)	Some records found eligible for exception report.	Address the reason for transaction failures. Changing information on the transactions is strongly discouraged unless the change doesn't impact the income allocation. Submit the failed transactions manually or with a SMU job.	Alternatively, scan the Transaction Catalog for JVIA and GAX transactions in draft or run the Income Allocation Transaction Resubmit chain
Failed (12)	Failed because of runtime exceptions caused by unexpected conditions	After the reason for the failure has been addressed a new chain with the prior job steps disabled can be run.	Alternatively, scan the Transaction Catalog for JVIA and GAX transactions in draft or run the Income Allocation

			Transaction Resubmit chain
Terminated (16)	Job is terminated manually by the user.	Schedule a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVIA and GAX transactions in draft or run the Income Allocation Transaction Resubmit chain
System Failure (20)	Job is terminated because of database server or network issues	Reason for the System Failure needs to be investigated and fixed. Then schedule a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVIA and GAX transactions in draft or run the Income Allocation Transaction Resubmit chain

2.1.5 Income Allocation Transaction Resubmit Process

Job Name	Income Allocation Transaction Resubmit Process
Recommended Frequency	As a part of daily cycle or On Demand
Single Instance Required	Yes
Can the job be restarted	No
Exception Reports generated	Yes

Overview

This process is run after the Investment Income Receipt Apportionment Process is run. The chain job on the whole resubmits any failed JVIA and GAX transactions given the Transaction Prefix and Transaction Record Date as was supplied to the Investment Income Receipt Apportionment Process run. It also generates the Systems Assurance report (IntAllocDocReSubmit.java) to indicate failed transactions on resubmit. This chain job can be run recursively to resubmit JVIA and GAX transactions.

The chain includes four job steps that perform the following functions:

- 1. Gather Transaction Information
- 2. Submit JVIA Transaction
- 3. Submit GAX Transaction
- 4. System Assurance Report

Major Input

- Draft JVIA transactions on the Transaction Catalog (JV DOC HDR)
- Draft GAX transactions on the Transaction Catalog (ABS_DOC_HDR)

Major Output

- JVIA transactions in final or draft status
- GAX transactions in final or draft status
- System Assurance Exception Report listing the failed resubmitted transactions.

Chain Return Code

The following table indicates the potential return codes with which the chain ends:

Return Code	Condition
Successful (1)	All of the jobs in the chain end with a return code of Successful
Warning (4)	One of the jobs in the chain ends with a return code of Warning
Non Fatal Error (8)	One of the jobs in the chain ends with a return code of Non Fatal Error
Failed (12)	One of the jobs in the chain ends with a return code of Failed

Terminated (16)	One of the jobs in the chain ends with a return code of Terminated
System Failure (20)	One of the jobs in the chain ends with a return code of System Failure

Income Allocation Transaction Resubmit Chain: Gather Transaction Information Job

Job Name	Gather Transaction Information
Recommended Frequency	See the chain description
Single Instance Required	Yes
Can the job be restarted	No
Exception reports generated	No

Overview

The Gather Transaction Information job gathers the failed JVIA and GAX transactions information by selecting the records from the JV_DOC_HDR and ABS_DOC_HDR tables respectively given the Transaction Prefix and Transaction Record Date as was supplied during the Income Allocation run. It generates the parameter files to be used by all subsequent sub-processes.

The following table shows the various steps that the job step goes through and the progression messages issued at each step.

Process Steps	Messages
Batch Parameter Validation	 Run Started Each parameter is listed with value Any parameter defaulted is listed Any parameter error is listed
JVIA & GAX Transaction Information Gathering	 Number of JVIA transactions selected to be resubmitted: ## Number of GAX transactions selected to be resubmitted: ## Run Ended

Major Input

- Journal Voucher Transaction Header (JV_DOC_HDR)
- Accounting Based Spending Header (ABS_DOC_HDR)

Batch Parameters

Parameter	Description	Default Values
AMSPARM	(Required) Parameter Location at Gather Transaction Information Job	\$\$AMSPARM\$\$ (**Refer to Note: Assumptions for SWBP AMS* parameters)

AMSLOGS	(Required) Logs Location at Gather Transaction Information Job	\$\$AMSLOGS\$\$ (**Refer to Note: Assumptions for SWBP AMS* parameters)
CLIENT_NM	(Optional) Client Name to be printed on Income Allocation Systems Assurance Report	(blank)
COMMIT_SIZE	(Optional) This field controls how many records are committed by the application at one time.	1
EXCEP_REP_IND	(Optional) System Assurance Report Type where 2 = Failed transaction listing and 4 = Detailed listing of transactions with errors. If not entered then defaulted as 2.	2
GAX_DOC_CD	(Required) Transaction Code for the generated GAX transactions. This should be same as the prefix supplied for the Income Allocation Process whose failed GAX transactions are being resubmitted.	GAX
GAX_DOC_PFX	(Optional) Prefix for the generated GAX transactions. This should be same as the prefix supplied for the Income Allocation Process whose failed GAX transactions are being resubmitted.	(blank)
GAX_EXCEP_RE P_FILE_NM	(Required) System Assurance Report file(.txt) for General Accounting Expense (GAX) transactions.	InvExtDocExcp.txt
GAX_PARM_FILE	(Required) Parameter(.txt) file for General Accounting Expense (GAX) transactions.	InvExtReParams.txt
GAX_SUBMIT_FI LE	(Required) Submit Parameter(.txt) file for General Accounting Expense (GAX) transactions.	InvExtReSubmit.txt
JVIA_DOC_CD	(Required) Transaction Code for the generated JVIA transactions. This should be same as the transaction code supplied for the Income Allocation Process whose failed JVIA transactions are to be resubmitted.	JVIA
JVIA_DOC_PFX	(Optional) Prefix for the generated JVIA transactions. This should be same as the prefix supplied for the Income Allocation Process whose failed JVIA transactions are being resubmitted.	(blank)

JVIA_EXCEP_RE P_FILE_NM	(Required) System Assurance Report file (.txt) for JVIA transactions.	InvIntDocExcp.txt
JVIA_PARM_FILE	(Required) Parameter (.txt) file for JVIA transactions.	InvIntReParams.txt
JVIA_SUBMIT_FI LE	(Required) Submit Parameter (.txt) file for JVIA transactions.	InvIntReSubmit.txt
RUN_DT	(Optional) Process Run Date in MM/DD/YYYY format (if not entered then the Application Date is used)	(blank)

Major Output

• Generates the parameter files to be used by all subsequent sub-processes.

Job Return Code

Return Code	Condition	
Successful (1)	All the validations are performed successfully.	
Warning (4)	This job does not issue this return code	
Non Fatal Error (8)	This job does not issue this return code.	
Failed (12)	The job will fail under the following conditions: Parameters are invalid. Technical failure. When this job ends with a return of code Failed, subsequent jobs in the chain will be set to inactive.	
Terminated (16)	This return code will be issued when the job is terminated by the user. When this job ends with a return of code Terminated subsequent jobs in the chain will be set to inactive.	
System Failure (20)	This return code will be issued when the job is terminated because of database server or network issues. When this job ends with a return of code System Failure, subsequent jobs in the chain will be set to inactive.	

Sort Sequence

Transaction Code, Transaction Department Code, Transaction Id

Selection Criteria

- Records are selected for processing based on the following criteria:
 - Select all records from Journal Voucher Transaction Header (JV_DOC_HDR) table which are in draft phase and rejected status for the given transaction code, transaction prefix and the transaction record date.

Select all records from Accounting Based Spending Header (ABS_DOC_HDR) table
which are in draft phase and rejected status for the given transaction code, transaction
prefix and the transaction record date.

Problem Resolution

No database restore is required. Correct the problem and run another instance of the resubmit job or submit the remainder manually. No restoration of datasets or files from backups is required for this program

The following table shows the possible return codes and recommendations for each processing step.

Step 1: Batch Parameter Validation:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	All batch parameter validations are successful (i.e. there are no errors raised during validations.)	N/A	N/A
Warning (4)	N/A	This step does not issue this return code.	N/A
Non Fatal Error (8)	N/A	This step does not issue this return code.	N/A
	Required parameters are not entered. Sample Message: Transaction Code for generating Journal Voucher Income Allocation transactions is required	Enter missing required parameters and schedule a new job.	N/A
Failed (12)	Entered Parameters are not valid Sample Message: No record found in Transaction Control Table for Transaction Code GAX	Enter valid parameters and schedule a new job.	N/A
	Failed because of runtime exceptions caused by unexpected conditions	Failure reason needs to be investigated before rescheduling the job.	N/A
Terminated (16)	Job is terminated manually by the user.	A new job can be scheduled.	N/A
System Failure (20)	Job is terminated because of database server or network issues	Reason for the System Failure needs to be investigated. A new job	N/A

	can be scheduled.	

Income Allocation Transaction Resubmit Chain: Submit JVIA Transaction

Job Name	Submit JVIA Transaction
Recommended Frequency	See the chain description
Single Instance Required	Yes
Can the job be restarted	No
Exception reports generated	No

Overview

This job step will execute a SysManUtil Submit to submit the JVIA transaction reported by the Income Allocation Transaction Resubmit job. A submit JVIA parameter text file created in Gather Transaction Information process, specifies which transactions should be submitted.

The following table shows the various steps that the job step goes through and the progression messages issued at each step.

Process Steps	Messages	
Batch Parameter Validation	Run StartedEach parameter is listed with valueAny parameter error is listed	
	Each transaction instance is listed as:	
JVIA Transaction Submit	 Action DOC_SUBMIT Processing Parameter Line: (Details of transaction instance) 	
	Total # Processed ## :Failed ## :Succeeded ##	
	Run Ended	

Major Input

- SMU job parameter file
- Draft and Rejected JVIA Transactions (JV_DOC_HDR)

Batch Parameters

Parameter	Description	Default Value
PARM_FILE	(Required) File location and name of submit parameter file.	\$\$AMSPARM\$\$/InvIntReSubmit.txt

Major Output

- JVIA transactions in draft or final phase
- Exception File updated by the transactions not submitted successfully

Job Return Code

The following table shows the potential job return codes for the SMU Transaction Submit job.

Return Code	Condition
Successful (1)	All the transactions submitted successfully.
Warning (4)	N/A
Non Fatal Error (8)	N/A
Failed (12)	The job will fail under the following conditions: Parameters are invalid Parameter file is not found Runtime exceptions encountered for any unexpected situations. When the job ends with a return code of failed, subsequent jobs in the chain are set to inactive
Terminated (16)	This return code will be issued when the job is terminated by the user. When the job ends with a return of code Terminated, subsequent jobs in the chain are set to inactive.
System Failure (20)	This return code will be issued when the job is terminated because of database server or network issues. When this job ends with a return of code System Failure, subsequent jobs in the chain are set to inactive.

Sort Sequence

N/A

Selection Criteria

N/A

Problem Resolution

If this job ends with a return code of Failed, Terminated or System Failure, then no new instance of this chain should be executed until all the transactions loaded in the previous job step are submitted. This is because the submit parameter txt file that contains the transaction IDs to be submitted will get overwritten if another instance of this chain is executed. Only the submit job in the chain should be rescheduled to submit the remaining transactions. A new job can be scheduled (within a new chain with the prior jobs disabled) using the same parameter file.

Batch Parameter Validation & JVIA Transaction Submit

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	All the transactions submitted successfully	N/A	N/A
Warning (4)	N/A	The job does not issue this return code	N/A
Non Fatal Error (8)	N/A	The job does not issue this return code	N/A
Failed (12)	This return code will be issued when the input parameter is not found in the specified directory. Sample Message: Parameter file could not be located/read	Make sure that the parameter file exits in the specified folder and schedule a new job.	N/A
	Failed because of runtime exceptions for unexpected situation	Resolve the error and schedule a new job using the same Parameter File (PARM_FILE) provided no new instance of this chain has been executed.	N/A
Terminated (16)	Job is terminated manually by the user.	Reason for the termination needs to be investigated before scheduling a new job.	N/A
System Failure (20)	Job is terminated because of database server or network issues	Reason for the System Failure needs to be investigated before scheduling a new job.	N/A

Income Allocation Transaction Resubmit Process Chain: Submit GAX Transaction

Job Name	Submit GAX Transaction
Recommended Frequency	See the chain description
Single Instance Required	Yes
Can the job be restarted	No
Exception reports generated	No

Overview

This job step executes a SysManUtil Submit to submit the GAX transaction reported by the Income Allocation Transaction Resubmit job. A submit GAX parameter text file created in Gather Transaction Information process specifies which transactions should be submitted.

The following table shows the various steps that the job step goes through and the progression messages issued at each step.

Process Steps	Messages	
Batch Parameter Validation	Run StartedEach parameter is listed with valueAny parameter error is listed	
	Each transaction instance is listed as:	
GAX Transaction Submit	 Action DOC_SUBMIT Processing Parameter Line: (Details of transaction instance) 	
	Total # Processed ## :Failed ## :Succeeded ##	
	Run Ended	

Major Input

- SMU job parameter file
- Draft and Rejected GAX Transactions (ABS_DOC_ACTG)

Batch Parameters

Parameter	Description	Default Value
PARM_FILE	(Required) File location and name of submit parameter file.	\$\$AMSPARM\$\$/InvExtReSubmit.txt

Major Output

- GAX transactions in draft or final phase
- Exception File updated by the transactions not submitted successfully

Job Return Code

The following table shows the potential job return codes for the SMU Transaction Submit job.

Return Code	Condition	
Successful (1)	All the transactions submitted successfully.	
Warning (4)	N/A	
Non Fatal Error (8)	N/A	
Failed (12)	 The job will fail under the following conditions: Parameters are invalid Parameter file is not found Runtime exceptions encountered for any unexpected situations. When the job ends with a return code of failed, subsequent jobs in the chain are set to inactive 	

Terminated (16)	This return code will be issued when the job is terminated by the user. When the job ends with a return of code Terminated, subsequent jobs in the chain are set to inactive.
System Failure (20)	This return code will be issued when the job is terminated because of database server or network issues. When this job ends with a return of code System Failure, subsequent jobs in the chain are set to inactive.

Sort Sequence

N/A

Selection Criteria

N/A

Problem Resolution

If this job ends with a return code of Failed, Terminated or System Failure, then no new instance of this chain should be executed until all the transactions loaded in the previous job step are submitted. This is because the submit parameter txt file that contains the transaction IDs to be submitted will get overwritten if another instance of this chain is executed. Only the submit job in the chain should be rescheduled to submit the remaining transactions. A new job can be scheduled (within a new chain with the prior jobs disabled) using the same parameter file.

Batch Parameter Validation & GAX Transaction Submit

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	All the transactions submitted successfully	N/A	N/A
Warning (4)	N/A	The job does not issue this return code	N/A
Non Fatal Error (8)	N/A	The job does not issue this return code	N/A
Failed (12)	This return code will be issued when the input parameter is not found in the specified directory. Sample Message: Parameter file could not be located/read	Make sure that the parameter file exits in the specified folder and schedule a new job.	N/A

	Failed because of runtime exceptions for unexpected situation	Resolve the error and schedule a new job using the same Parameter File (PARM_FILE) provided no new instance of this chain has been executed.	N/A
Terminated (16)	Job is terminated manually by the user.	Reason for the termination needs to be investigated before scheduling a new job.	N/A
System Failure (20)	Job is terminated because of database server or network issues	Reason for the System Failure needs to be investigated before scheduling a new job.	N/A

Income Allocation Transaction Resubmit Process Chain: System Assurance Report Job

Job Name	System Assurance Report
Recommended Frequency	As a part of daily cycle or On Demand.
Single Instance Required	Yes
Can the job be restarted	No
Exception reports generated	Yes

Overview

This job of the chain generates the Exception Report for JVIA and GAX transactions not submitted successfully during the run.

The following table shows the various steps that the job step goes through and the progression messages issued at each step.

Process Steps	Messages
Batch Parameter Validation	 Run Started Each parameter is listed with value Any parameter error is listed
Exception Report Generation	 Report output folder mapped HTML report file path PDT report file path If no transactions reject then the following is issued. If any reject there is no job log message but the Return Code will be Non Fatal Error. No Exceptions during Transaction Submit Run Ended

Major Input

- JVIA transactions not submitted successfully read from the exception file name updated by the submit job - InvIntDocExcp.txt.
- GAX transactions not submitted successfully read from the exception file name updated by the submit job InvExtDocExcp.txt.

Batch Parameters

Parameter	Description	Default Values
AMSPARM	(Required) Parameter Location at System Assurance Report Job	\$\$AMSPARM\$\$ (**Refer to Note: Assumptions for SWBP AMS* parameters)
AMSLOGS	(Required) Parameter Location at System Assurance Report Job	\$\$AMSLOGS\$\$ (**Refer to Note: Assumptions for SWBP AMS* parameters)
JVIA_PARM_FILE	(Required) Parameter (.txt) file for JVIA transactions	InvIntReParams.txt
GAX_PARM_FILE	(Required) Parameter (.txt) file for GAX transactions.	InvExtReParams.txt

Major Output

• Exception Report in Htm and Pdf for JVIA and GAX transactions not submitted successfully.

Job Return Code

Return Code	Condition	
Successful (1)	All the validations are performed successfully and there are some records eligible for exception.	
Warning (4)	This job does not issue this return code	
Non Fatal Error (8)	No records found eligible for exception.	
Failed (12)	The job will fail under the following conditions: Parameters are invalid. Technical failure. When this job ends with a return of code Failed, subsequent jobs in the chain will be set to inactive.	
Terminated (16)	This return code will be issued when the job is terminated by the user. When this job ends with a return of code Terminated subsequent jobs in the chain will be set to inactive.	
System Failure (20)	This return code will be issued when the job is terminated because of database server or network issues. When this job ends with a return of code System Failure, subsequent jobs in the chain will be set to	

inactive.
madivo.

Sort Sequence

N/A

Selection Criteria

- Records are selected for processing based on the following criteria:
 - JVIA transactions not resubmitted successfully read from the exception file name updated by the submit job.
 - GAX transactions not resubmitted successfully read from the exception file name updated by the submit job.

Problem Resolution

No database restore is required. Correct the problem and rerun the job executing the program. No restoration of datasets or files from backups is required for this program

The following table shows the possible return codes and recommendations for each processing step.

Step 1: Batch Parameter Validation:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	All batch parameter validations are successful (i.e. there are no errors raised during validations.)	N/A	N/A
Warning (4)	N/A	This step does not issue this return code.	N/A
Non Fatal Error (8)	N/A	This step does not issue this return code.	N/A
Failed (12)	Required parameters are not entered. Sample Message: Parameter file name is not specified	Enter missing required parameters and schedule a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVIA and GAX transactions in draft or run the entire Income Allocation Transaction Resubmit chain again.
	Entered Parameters are not valid Sample Message:	Enter valid parameters and schedule a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVIA and GAX transactions in draft

	System Assurance Report Type in Transaction Submit section not found in the parameter file		or run the entire Income Allocation Transaction Resubmit chain again.
	Failed because of runtime exceptions caused by unexpected conditions	Failure reason needs to be investigated before scheduling a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVIA and GAX transactions in draft or run the entire Income Allocation Transaction Resubmit chain again.
Terminated (16)	Job is terminated manually by the user.	Schedule a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVIA and GAX transactions in draft or run the entire Income Allocation Transaction Resubmit chain again.
System Failure (20)	Job is terminated because of database server or network issues	Reason for the System Failure needs to be investigated and fixed. Then schedule a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVIA and GAX transactions in draft or run the entire Income Allocation Transaction Resubmit chain again.

Step 2: Exception Report Generation:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	N/A	This step does not issue this return code.	N/A
Warning (4)	N/A	This step does not issue this return code.	N/A
Non Fatal Error (8)	Some records found eligible for exception report.	N/A	N/A
Failed (12)	Failed because of runtime exceptions caused by unexpected conditions	After the reason for the failure has been addressed a new chain with the prior job steps	Alternatively, scan the Transaction Catalog for JVIA and GAX

		disabled can be run.	transactions in draft or run the entire Income Allocation Transaction Resubmit chain again.
Terminated (16)	Job is terminated manually by the user.	Schedule a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVIA and GAX transactions in draft or run the entire Income Allocation Transaction Resubmit chain again.
System Failure (20)	Job is terminated because of database server or network issues	Reason for the System Failure needs to be investigated and fixed. Then schedule a new chain with the prior job steps disabled.	Alternatively, scan the Transaction Catalog for JVIA and GAX transactions in draft or run the entire Income Allocation Transaction Resubmit chain again.

2.1.6 Investment Activity Report

Batch Job Name	Investment Activity Report	
Recommended Frequency	Daily as part of the nightly cycle or on demand	
Single Instance Required	N/A	
Can be restarted?	N/A	
Reports generated	Yes	

Overview

The Investment Activity Report shows investments from the Investment Activity Journal (INVACTV) that contain a balance greater than \$0 as of the date when the report is generated. A balance of \$0 may show for investments that are not marked with a Sale Type of Final upon redemption or sale. The report can be generated at the end of each business day and can be used to validate activity and current balances recorded in Advantage that match the activity and current balances at the investment institutions.

The report can be run in summary mode or detail mode. Summary mode will provide a consolidated view of investments across all investment accounts. Detail mode provides event level detail by investment account and provides the ability to include or exclude investment accounts within the report.

Process Steps	Messages	
Parameter Validation	 Run Started Each parameter is listed with values If any parameters are invalid, job will end and error message is displayed followed by – Parameter Validation Failed If Report Mode is Summary (1) then Include Investment Account and Exclude Investment Account parameters are prohibited. If Report Mode is Detail (2) and both Include 	
	Investment Account and Exclude Investment Account parameters are populated, the job will end and issue error.	
Selection of Records	 Report output folder mapped. PDF and HTML output locations mapped. Number of records (count) selected. 	
Report Generation	Rendering report startedRendering report completedRun Ended	

Major Input

Investment Activity Journal (R_INVACTV)

Batch Parameters

Note: The default values listed are those delivered with the software. Actual values may vary based on your site's setup.

Parameter	Parameter Description	Default Value
Client Name (CLIENT_NM)	An optional name to be printed on the report header.	(blank)
Report Name (RPT_NM)	An optional report name to be printed on the report header.	(blank)
Report Mode (RPT_MODE)	A required output parameter defining how the report will present selected records. Report can be run either in 1-Summary or 2-Detail. In summarized mode all investment accounts are selected. In detailed mode the user can limit investment account selection by using the Include/Exclude parameters.	1
Include Investment Account (INCL_INV_ACCT)	An optional selection parameter for one or more investment accounts included in the report. A blank value will include all accounts unless the Exclude Investment Account parameter is populated.	(blank)
Exclude Investment Account (EXL_INV_ACCT)	An optional selection parameter for one or more investment accounts excluded in the report. A blank value will include all accounts unless the Include Investment Account parameter is populated.	(blank)
As of Date (AS_OF_DT)	An optional selection parameter of a date for which records equal to or after will be selected. If no value is populated, the Application Date is used.	(blank)

Job Return code

This table shows the potential job return codes.

Return Code	Condition
Successful (1)	All parameters were valid, investment records were selected, and are included in the report either in summary or detail mode.
Warning (4)	The Include Investment Account parameter accepts comma separated values that must be valid on the Investment Account (INVACCT) page. If one of the values in the Include Investment Account parameter is not valid, then a warning will be written to the job log and continue processing.

Return Code	Condition	
	When no eligible records were found to process for the report.	
Non-Fatal Error (8)	The job does not use this return code.	
	The job will fail under the following conditions:	
	If the Report Mode Parameter is set to any value other than 1 or 2.	
Failed (12)	If the Report Mode Parameter is set to Summary (1) and the Include Investment Account and Exclude Investment Account parameters are not blank.	
	 Include Investment Account and Exclude Investment Account parameters are initially set to blank and are mutually exclusive. If both parameters are populated at the same time, the job will fail. 	
	If As of Date format is invalid. The correct format is MM/DD/YYYY.	
	The Exclude Investment Account parameter contains an invalid account from the Investment Account (INVACCT) page.	
Terminated (16)	This return code will be issued when the job is terminated by the user.	
System Failure (20)	This return code will be issued when the job is terminated because of database server or network issues.	

Sort Criteria

- For Summary Report Mode, the report will sort by Fund, Sub Fund, Department, Security Name, and Security Type.
- For Detail Report Mode, the report will sort by Investment Account Code, Fund, Sub Fund, Department, Purchase Date, Security Name, and Security Type.

Selection Criteria

The job selects values from the Investment Activity Journal (R_INVACTV) table based on the parameters entered. The job considers the following conditions to select records from the table:

- Report Mode = Summary:
 - Records for all investment accounts are selected.
- Report Mode = Detail:
 - Records are selected based upon the Include Investment Account or Exclude Investment Account parameters and are mutually exclusive, meaning both cannot be populated at the same time:
 - i. If an Investment Account Code is listed in the Include Investment Account parameter, then that record is selected.
 - ii. If an Investment Account Code is not listed in the Include Investment Account parameter, then that record is not selected.

- iii. If an Investment Account Code is listed in the Exclude Investment Account parameter, then that record is not selected.
- iv. If an Investment Account Code is not listed in the Exclude Investment Account parameter, then that record is selected.
- v. If Include Investment Account and Exclude Investment Account are blank, then all records are selected.

Record Selection for both Summary and Detail reports will consider the following:

- The records with the 'Closed' flag set to False will only be selected. All records with 'Closed' flag set to True are ignored for reporting.
- If multiple versions of the transaction are available, then the record with the latest version
 whose Purchase Date is also prior or equal to the As of Date will be selected. If only one
 version of the transaction is available, then the record will be selected if the Purchase
 Date is prior or equal to the As of Date. Otherwise, no records will be selected.

Major Output

Investment Activity Report either in Summary or Detail mode:

Report Mode Summary:

- The Investment Account information does not appear in the header of the Summary View as investment records are summarized across accounts.
- The Include and Exclude Parameter labels in the report header will not display in the header.
- Records displayed will derive the Net Amount by summarizing selected records from R_INVACTV by Fund, Sub Fund, Department, Security Name, and Security Type combination.

Report Mode Detail:

- For each Investment Account included on the report, the system will generate a new header on a new page and provide a grid section.
- The records displayed will be summarized by: Fund, Sub Fund; Department and CUSIP ID or Investment ID (only up to one of these fields will be populated with a value) for each of the investment accounts included in the report.
- The Include Investment Account and Exclude Investment Account parameter values will be displayed in the Report Header. If no value is present in the batch parameter field then the value "None" will appear.

Both Report Modes

- If the Sale Type is set to 'Final', then the record will not be displayed.
- The job will set the 'Closed' flag to checked for all records associated with the Investment Account Code or CUSIP ID included in the report, if the Sale Type is 'Final'.
- As of Date will be displayed in the Report Header.

Problem Resolution (All Process Steps)

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	All of the parameters are validated successfully and at least 1 record was selected.	N/A	N/A
Warning (4)	The job ended with a Warning because there are no records selected for the report. A message will be issued saying "No Investment records found matching selection criteria."	Verify investment activity and check that parameters entered are valid.	Alternatively, the job can be rescheduled with a different set of parameters.
Non-Fatal Error (8)	This return code will be issued when records are selected that do not match.	Review report and take any manual actions necessary.	N/A
Failed (12)	Job failed due to Fatal conditions or invalid parameter.	In this step, the job can fail under the following conditions: 1) Parameters entered are invalid. 2) Encounters any runtime exceptions 3) Failed during restart. If the job fails because of the runtime exceptions, investigate the exception reported by the process, resolve the error, and restart the job.	If another instance of the job has already been scheduled and run successfully, then this job should not be restarted – only a new job should be scheduled.
Terminated (16)	Job is terminated manually by the user.	The reason for the termination needs to be investigated. The job can either be restarted or schedule a new job.	If another instance of the job has already been scheduled and run successfully, then this job should not be restarted – only a new job should be scheduled.
System Failure (20)	When the job is terminated because of database server or network issues.	The Reason for the System Failure needs to be investigated. The job can either be restarted or schedule a new job.	If another instance of the job has already been scheduled and run successfully, then this job should not be restarted – only a new job should be

Possible Return Codes	Condition	Recommendation	Other Instructions
			scheduled.

2.1.7 Local Bank File Load

Chain Name	Local Bank File Load
Recommended Frequency	Daily as part of the nightly cycle or on demand
Single Instance Required	Yes
Can be restarted?	N/A
Reports generated	N/A

Overview

Local Bank File Load is a process to take the BAI file from a local bank and load it into the Bank Transmission Maintenance page for manual review and subsequent processing. This same chain job is able to delete the records from Bank Transmission Maintenance page if required. The individual transmission records from the Bank Transmission Maintenance page that are for the same Bank and Transmission Date are summarized on Bank File Management (BANKFM).

This chain has the following jobs:

- Local Bank Sweep XML Processing
- Bank Transmission Maintenance Table Load
- Bank Transmission Listing Report

Note: Even though the above jobs in the chain can be run individually by disabling other jobs, it is recommended to always run the entire chain.

Major Input

BAI Bank File

Major Output

- Bank Transmission Maintenance (BANKTM / R_TRANS_MAINT)
- Bank File Management (BANKFM / R_BANK_MGMT)
- Bank Transmission Listing Report (PDF Report)

Chain Return Codes

When an active job step in the chain ends with a Return Code of anything other than *Successful*, any remaining job steps have a Run Status of *Inactive*. Refer to documentation on individual job steps for possible Return Codes for those steps, as *Warning* and *Non-Fatal Error* are not always possible outcomes.

Problem Resolution

See the Problem Resolution sections of each step of the chain job to determine resolution.

Local Bank File Load: Local Bank Sweep XML Processing Job

Job Name	Local Bank Sweep XML Processing
Recommended Frequency	See chain
Single Instance Required	N/A
Can be restarted?	No
Reports generated	None

Overview

Local Bank Sweep XML Processing supports two Run Modes: *Load* and *Purge*. Load validates the file structure and data of the BAI file as well as configuration for the Local Bank Sweep functionality. If no errors are found, a BANKTM.xml file and a parameter file are used by SysManUtil (SMU) to import the data into Bank Transmission Maintenance.

The *Purge* mode deletes specific Bank Transmission Maintenance records by using a specified Job ID. When purging records, procedurally, the user should disable the subsequent steps within the chain as the table load and reports are not needed.

The Local Bank Sweep XML processing job performs the following processing steps:

Process Steps	Messages	
Parameter Validation	 Validating batch parameters Parameters are valid or invalid depending on the validation. If the parameter is invalid, the invalid value is displayed in the log. Batch parameter validation completed 	
5. Selection of Records	 Selecting eligible records If the selection returns 0 records, then the following message is displayed: "No eligible record found". Number of records (count) selected is displayed. At the end, the following message is displayed: "Selection of records completed." 	
6. XML Output	Progression counting as records are written.The BANKTM.xml file is created.	

Major Input

- BAI file
- Bank Department Combination (DEPTACCT / R_BANK_DEPT)
- Bank (BANK / R_AP_BANK_ACCT)

Batch Parameters

The following are the delivered parameter values which may have been updated through Batch Setup to meet local needs.

Parameter	Description	Default Value
Parameter Location (AMSPARM)	The required location where the created parameter file is written.	\$\$AMSROOT\$\$/Parms
BAI Input File (BAI_INPUT_FILE)	The conditionally required name of the bank file with the txt extension. Required when Run Mode = 1 (load) and prohibited when Run Mode = 2 (purge).	(No Default)
Error File Name (ERROR_FILE_NM)	The required file name to record conversion errors.	\$\$AMSROOT\$\$/Logs/ErrLocal Bnk\$\$@CHAINJOBID@\$\$.txt
Job ID (JOB_ID)	The required job ID of records to purge from Bank Transmission Maintenance when Run Mode is 2 (purge).	(No Default)
Load Parameter File (LOAD_PARM_FILE)	The required name of the SMU load parameter file created.	LocalBankLoadParm\$\$@CHAI NJOBID@\$\$.txt
Location of BAI Input File (LOC_BAI_FILE)	The required location where the BAI Input File is located.	\$\$AMSROOT\$\$/ExportImport
Location of the BANKTM xml (LOC_BANKTM_FILE)	The required location where the XML file is written.	\$\$AMSROOT\$\$/ExportImport
Progression Counter Size (PROG_CTR_SIZE)	A required number of records used when writing progression message to the job log while writing records to xml file in Load mode and while purging records in Purge mode. If blank or invalid, defaults to 100.	100
Run Mode (RUN_MODE)	The required mode in which the job step will be run: 1 (load) or 2 (purge).	1
User ID (USER_ID)	An optional User ID used when SMU loads records, else it will be the ID of the user that submits the process.	(No Default)

Major Output

Local Bank Sweep XML file: BAlfile_(chainjobID).xml

Field Name	Data Source
Transmission Date	First obtain the As-of-date from the BAI File Record Type 02. Set the Transmission Date to the next business day after the As-of-date.
ABA Number	From BAI File
Bank Account Number	From BAI file

Transfer Amount	The Transfer Amount is included in the BANKTM XML file if this is a local bank account or Local Bank 2 on DEPTACCT.	
	 First obtain the Amount from the BAI file on the Account Identifier or the respective Continuation records Balance Type of 400. 	
	 If Amount > 0, set Amount from local bank file to Transfer Amount; otherwise set Transfer Amount to 0.00. 	
	Note: The Transfer Amount is not included in the BANKTM XML file if this is a Local Department Bank Account on DEPTACCT.	
Type Code	From BAI File, Record Type 03.	
Balance Amount	First obtain the Amount from the BAI file on the Account Identifier matching the Type Code.	
	 If this is a Local Department Bank Account on DEPTACCT, set Amount from local bank file to Balance Amount; otherwise, do not set Balance Amount. 	
	Note: The Balance Amount is not set for hits because there is just a value of an outflow of cash from a bank account and a balance is not applicable.	
Department	From DEPTACCT	
Bank Account	From BANK	
Job ID	Chain job ID of current run	
Action	BAI Loaded	
Created By, Last Modified By	User ID input parameter or if blank, the User ID of current run.	
Created On, Last Modified On	System date time	

Sort Criteria

None as records are written in the order of the input file.

Selection Criteria

None

Problem Resolution

Return Code	Condition
Successful (1)	The job ends as successful when all parameters are valid and the input file is successfully converted into XML.
Warning (4)	The job returns with a Return Code of Warning under the following conditions:
	 There are not any records found in the BAI input file.
	Bank ABA Number and Bank Account Number are

Return Code	Condition		
	missing from the input BAI File.		
	 Bank ABA Number and Bank Account Number do not exist on BANK. 		
	 Bank ABA Number and Bank Account Number do not exist on DEPTACCT. 		
	 Bank ABA Number and Bank Account Number are missing the information for Type Code. 		
	There are no records met the selection criteria for purging.		
Non-Fatal Error (8)	The job does not use this return code.		
Failed (12)	The job fails under the following conditions:		
	Parameters are invalid.		
	 Unable to find settings outside of parameters on BANKACCT or BANK. 		
	Run time exceptions for unexpected situations.		
	When this job fails, subsequent jobs in the chain are set to <i>Inactive</i> .		
Terminated (16)	The job is terminated by the user. When this job is terminated, subsequent jobs in the chain are set to <i>Inactive</i> .		
System Failure (20)	A System Failure Return Code is issued when the job is terminated because of database server or network issues. When this job encounters a system failure, subsequent jobs in the chain are set to <i>Inactive</i> .		

Problem Resolution

The following table shows the possible return codes and recommendations for each processing step.

Step 1: Parameter Validation:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	All parameters are validated successfully.	N/A	N/A
Warning (4)	The step does not use this return code.	N/A	N/A
Non-Fatal Error (8)	The step does not use this return code.	N/A	N/A
Failed (12)	One of the parameters failed validation.	Populate all required parameters with valid values.	N/A

Possible Return Codes	Condition	Recommendation	Other Instructions
Terminated (16)	Job is terminated manually by the user.	The reason for the termination needs to be investigated before submitting another chain.	N/A
System Failure (20)	When the job is terminated because of database server or network issues.	The reason for the System Failure needs to be investigated before submitting another chain.	N/A

Step 2: Selection of Records:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	File was found and record(s) selected.	N/A	N/A
Warning (4)	No records in the input file to process or Job ID. Sample Message: No records found with the specified Job ID:	 Verify if the Bank Transmission Maintenance table contains records with the Job ID = parameter value. Verify if the Transmission Date on the Bank Transmission Maintenance records still has Local Bank Sweep Status = Open on Local Bank Transmission. Verify that the File Creation Date must be less than or equal to the Application System Date considering weekends and holidays. As-of-date on the Group Header (Record Type 02) must be one business day prior to the Application System Date. The system uses the 	Alternatively, the job can be rescheduled with a different set of parameters.

Possible Return Codes	Condition	Recommendation	Other Instructions
		Calendar Date (CLDT) to determine weekends and holidays.	
Non-Fatal Error (8)	This Return Code is issued under the following: Local Bank Sweep Status is not Open on Local Bank Transmission page and message is issued: Local Bank Sweep Status must be open in order to run the Local Bank File Load.	N/A	N/A
Failed (12)	Job failed due to Fatal conditions. Sample Message: The Local Bank Sweep Status for the records requested to be purged is set to Closed and therefore not allowed to be purged. Transmission Date is greater than the Application System Date. Effective Date must be one business day prior to the Application System Date.	In this step, the job can fail under the following two conditions. • Encounters any runtime exceptions. • Failed during restart. If the job fails because of the runtime exceptions, investigate the exception reported by the process, resolve the error, and restart the job.	If another instance of the job has already been scheduled and run successfully, then this job should not be restarted – only a new job should be scheduled.
	Failed while restarting the job since another instance of the job has already been run successfully. Sample Message: Cannot restart the job since another instance of this job has already been run successfully.	Recommendation: Schedule a new job.	

Possible Return Codes	Condition	Recommendation	Other Instructions
Terminated (16)	Job is terminated manually by the user.	The reason for the termination needs to be investigated before submitting another chain.	N/A
System Failure (20)	When the job is terminated because of database server or network issues.	The reason for the System Failure needs to be investigated before submitting another chain.	N/A

Step 3: Build the BANKTM XML file:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	File built successfully.	N/A	N/A
Warning (4)	The step does not use this return code.	N/A	N/A
Non-Fatal Error (8)	The step does not use this return code.	N/A	N/A
Failed (12)	Job failed due to Fatal conditions. Data for the same bank has already been loaded for the transmission date. Data must be purged before reloading.	In this step, the job can fail under the following two conditions. • Encounters any runtime exceptions. • Failed during restart. If the job fails because of the runtime exceptions, investigate the exception reported by the process, resolve the error, and restart the job.	If another instance of the job has already been scheduled and run successfully, then this job should not be restarted – only a new job should be scheduled. If the job failed during SMU loading to the BANKTM table, a purge mode run is needed to clean up any partially loaded records for this file before reprocessing the same file.
	Failed while restarting the job since another instance of the job has already been run successfully.	Recommendation: Schedule a new job.	
	Sample Message: Cannot restart the job since another		

Possible Return Codes	Condition	Recommendation	Other Instructions
	instance of this job has already been run successfully.		
Terminated (16)	Job is terminated manually by the user.	The reason for the termination needs to be investigated before submitting another chain.	N/A
System Failure (20)	When the job is terminated because of database server or network issues.	The reason for the System Failure needs to be investigated before submitting another chain.	N/A

Local Bank File Load Chain: Bank Transmission Maintenance Table Load Job

Job Name	Bank Transmission Maintenance Table Load	
Recommended Frequency	See chain	
Single Instance Required	N/A	
Can be restarted?	No	
Reports generated	No	

Overview

The Bank Transmission Maintenance Table Load job step takes the BANKTM XML file created in the previous job step and loads records in the Bank Transmission Maintenance.

The job performs the following steps:

Process Steps	Messages	
Parameter Validation	 Validating batch parameters Parameters are valid or invalid depending on the validation. If the parameter is invalid, the invalid value is displayed in the log. 	
	Batch parameter validation completed	
2. Upload	No messages are issued for this step.	

Major Input

- BAlfile_(batchjobID).xml
- LocalBankLoadParm(chainjobID).txt

Batch Parameters

The following are the delivered parameter values which may have been updated through Batch Setup to meet local needs.

Parameter	Description	Default Value
Export/Import Location (AMSEXPORT)	The required location where the parameter file created in the previous job step is located for the import.	\$\$AMSROOT\$\$/Parms
Parameter File (PARM_FILE)	The required name of the parameter file.	LocalBankLoadParm\$\$@CHAINJOBID@\$\$.txt

Major Output

Bank Transmission Maintenance (BANKTM / R_TRANS_MAINT)

Sort Criteria

None

Selection Criteria

None

Problem Resolution

The following table shows the potential job return codes for this job.

Return Code	Condition	
Successful (1)	The job ends as successful when parameter validations are successful and at least one record was successfully loaded.	
Warning (4)	A warning results when the file is empty.	
Non-Fatal Error (8)	This job does not end with this return code.	
Failed (12)	The job fails under the following conditions: • Parameters are invalid.	
Terminated (16)	Input file is not found. The job is terminated by the user.	
System Failure (20)	A system failure is issued when the job is terminated because of database server or network issues.	

Problem Resolution

Step 1: Parameter Validation:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	Parameters are validated successfully.	N/A	N/A
Warning (4)	This step does not use this return code.	N/A	N/A
Non-Fatal Error (8)	This step does not use this return code.	N/A	N/A
Failed (12)	One of the parameters failed validation.	A batch parameter can fail if a required parameter is not provided or a user specified an invalid value.	N/A
	The input file is not found.	Check that the file path to the input file is valid and/or file name is correct.	N/A
Terminated (16)	Job is terminated manually by the user.	The reason for the termination needs to be investigated before submitting another chain.	N/A
System Failure (20)	When the job is terminated because of database server or network issues.	The reason for the System Failure needs to be investigated before submitting another chain.	N/A

Step 2: Load Table:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	All records were committed to the target table(s) of the database successfully.	N/A	N/A
Warning (4)	This step does not use this return code.	N/A	N/A
Non-Fatal Error (8)	This step does not use this return code.	N/A	N/A
Failed (12)	Run time exceptions for unexpected situations.	Check the system debug log for SysManUtil to observe the error messages.	Analyze the log error messages to derive a possible root cause behind the issue.

Possible Return Codes	Condition	Recommendation	Other Instructions
Terminated (16)	Job is terminated manually by the user.	The reason for the termination needs to be investigated before submitting another chain.	N/A
System Failure (20)	When the job is terminated because of database server or network issues.	The reason for the System Failure needs to be investigated before submitting another chain.	N/A

Local Bank File Load Chain: Bank Transmission Listing Report Job

Job Name	Bank Transmission Listing Report	
Recommended Frequency	See chain	
Single Instance Required	N/A	
Can be restarted?	No	
Reports generated	Yes	

Overview

The Bank Transmission Listing Report lists the BAI loaded transmissions with descriptive information and amounts (for example, Balance, Previous, Transfer and Difference) for each loaded bank, department, intended close date, bank, and bank account. The report can be run as part of the chain or independently.

The following table summarizes the major elements of the Bank Transmission Listing Report:

Field Name	Description
Bank Name	Bank Name infers from the Bank File Management table for the corresponding Transmission Date and ABA Number.
ABA Number	ABA Number displays the ABA Number from the selected record.
Contact	Contact is a concatenation of First Name + Last Name from Contact (CNTAC) using the Contact Code stored in the BANK record corresponding to the Bank Account of the selected record.
Phone Number	Phone Number is inferred from Contact (CNTAC) using the Contact Code stored in the BANK record corresponding to the Bank Account of the selected record.
Ext	Ext represents the extension of contact Number. It is inferred from Contact (CNTAC) using the Contact Code stored in the BANK record corresponding to the Bank Account of the selected record.
Bank Account	Bank Account displays the Bank Account from the selected record. Also displays one space and an asterisk (*) after the Bank Account code if the record has an Action of Correction.
Account Number	Account Number displays the Bank Account Number from the

Field Name	Description	
	selected record.	
Account Description	Account Description displays the Bank Account Description stored in the BANK record corresponding to the Bank Account of the selected record.	
Balance	Balance amount displays the Balance Amount from the selected record.	
Previous	Previous amount displays the Previous Reported Transfer Amount stored in Bank Department Combination (DEPTACCT).	
Transfer *	Transfer amount represents the amount to transfer for the current Transmission.	
	Use the Transfer Amount if the record has an Action of BAI Loaded or Manual Entry. Use the Corrected Transfer Amount if the record has an Action of Correction.	
	Note that the Transfer amount displayed in the report is used to calculate the Difference, Bank Total, Grand Total, and Record Count.	
Difference	Difference amount represents the difference of Balance amount minus previous amount Plus transfer amount.	
Balance Total	Balance Total is the total of Balance amount for the Intended Close Date and ABA Number.	
Bank Total	Bank Total represents the total of Transfer Amount for the Intended Close Date and ABA Number.	
Grand Total	Grand total is the total for the day's transfer amounts, no matter if the intended close date is current business day or next business day.	
Record Count	Record Count is a count of Non-Zero Records and Zero Records.	
	Non-zero Records is count of non-zero Transfer Amount present in the Bank Transmission Listing Report.	
	Zero Records is a count of zero Transfer Amount present in the Bank Transmission Listing Report.	

The job performs the following steps:

Process Steps	Messages	
1. Parameter	Validating batch parameters	
Validation	 Parameters are valid or invalid depending on the validation. If the parameter is invalid, the invalid value is displayed in the log. 	
	Batch parameter validation completed	

Process Steps	Messages	
2. Report Generation	Message if no records are found.	
	Number of records selected	
	Selection of records completed	

Major Input

- Bank File Management (BANKFM / R_BANK_MGMT)
- Bank Transmission Maintenance (BANKTM / R_TRANS_MAINT)
- Bank Department Combination (DEPTACCT / R_BANK_DEPT)

Batch Parameters

The following are the delivered parameter values which may have been updated through Batch Setup to meet local needs.

Parameter	Description	Default Value
ABA Number (ABA_NO)	A required selection parameter used when Department and Transmission Date selection parameters are supplied. When used, a single value can be entered, or the parameter can be left blank or the value of ALL entered to get all records matching Department and Transmission Date.	(No Default)
Client Name for Report CLIENT_NM	Optional name that appears on the report header.	(No Default)
Department (DEPT_CD)	A required selection parameter used in conjunction with ABA Number and Transmission Date. A single value can be specified, or the parameter can be left blank or a value of ALL to get all departments.	(No Default)
Report ID (REPORT_ID)	Optional ID that appears in the report header for routing.	(No Default)
Report Title (REPORT_TITLE)	Optional title that appears on the report.	Bank Transmission Listing Report
Transmission Date (TRANS_DT)	A required selection parameter used in conjunction with ABA Number and Department. Use this format: MM/DD/YYYY.	(No Default)

Major Output

Bank Transmission Listing Report

Sort Criteria

Intended Close Date, ABA Number, and Bank Account

Selection Criteria

Records are selected based on the following criteria when Department, ABA Number, and Transmission Date are specified:

- Department matches the parameter value (disregard criterion if parameter value = ALL)
- ABA Number matches the parameter value (disregard if parameter value = ALL)
- Transmission Date matches the parameter value
- Action = BAI Loaded or Manual Entry or Correction
- Sweep/Hit Indicator = Sweep

If Department, ABA Number, and Transmission Date are not specified, the report is run as part of Local Bank File Load Chain Job. Retrieve the Chain ID and use it to select records:

- Job ID matches the Chain ID retrieved
- Action = BAI Loaded or Manual Entry or Correction
- Sweep/Hit Indicator = Sweep

Problem Resolution

Step 1: Parameter Validation:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	Parameters are validated successfully.	N/A	N/A
Warning (4)	This step does not use this return code.	N/A	N/A
Non-Fatal Error (8)	This step does not use this return code.	N/A	N/A
Failed (12)	One of the parameters failed validation.	Address the parameter when running a new instance of the report job	N/A

Possible Return Codes	Condition	Recommendation	Other Instructions
		only.	
Terminated (16)	Job is terminated manually by the user.	The reason for the termination needs to be investigated before running a new instance of the report job only.	N/A
System Failure (20)	When the job is terminated because of database server or network issues.	The reason for the System Failure needs to be investigated before running a new instance of the report job only.	N/A

Step 2: Report Generation:

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	Parameters are validated successfully.	N/A	N/A
Warning (4)	No matching records were found.	Review parameters used against existing data.	N/A
Non-Fatal Error (8)	This step does not use this return code.	N/A	N/A
Failed (12)	The step encountered and exception error.	Investigate the reason for the exception before running a new instance of the report job only.	N/A
Terminated (16)	Job is terminated manually by the user.	The reason for the termination needs to be investigated before running a new instance of the report job only.	N/A
System Failure (20)	When the job is terminated because of database server or network issues.	The reason for the System Failure needs to be investigated before running a new instance of the report job only.	N/A

2.1.8 Matured Investment Process

Chain Name	Matured Investment Process
Recommended Frequency	As a part of daily cycle or On Demand
Single Instance Required	N/A
Can be restarted?	Yes, after resolving error
Reports generated	N/A

Overview

The Matured Investment Process chain reads records from the Investment Activity Journal (INVACTV) and automatically generates an INVEST transaction to record the sale or redemption of an investment upon maturity. The chain selects records from INVACTV for creating an INVEST transaction, creates an XML file of INVEST transactions, and updates the records on INVACTV to indicate the generated INVEST sale transaction has been created by the Matured Investment Process. The chain job also utilizes the System Maintenance Utility (SMU) job to load and submit the INVEST transaction.

This chain has the following jobs:

- 1. INVEST XML Generation
- 2. INVEST Upload
- 3. INVEST Submit

Note: Even though the above jobs in the chain can be run individually by disabling other jobs, it is recommended to always run the entire chain.

Major Input

Investment Activity Journal (R_INVACTV)

Major Output

INVEST Transactions

Chain Return Codes

When an active job step in the chain ends with a Return Code of anything other than *Successful*, any remaining job steps have a Run Status of *Inactive*. Refer to documentation on individual job steps for possible Return Codes for those steps, as *Warning* and *Non-Fatal Error* are not always possible outcomes.

Problem Resolution

See the Problem Resolution sections of each step of the chain job to determine resolution.

Matured Investment Process: INVEST XML Generation

Job Name	INVEST XML Generation
Recommended Frequency	See the chain description
Can be restarted?	Yes, after resolving error
Reports generated	None

Overview

The INVEST XML Generation job is the first job in the Matured Investment Process and produces an XML file containing INVEST transactions for the eligible Investment Activity Journal (INVACTV) records. This section explains the Parameters, validation of parameters, source of input, selection criteria, output, and error handling.

Major Input

Investment Activity Journal (R_INVACTV)

Batch Parameters

Note: The default values listed are those delivered with the software. Actual values may vary based on your site's setup.

Parameter	Description	Default Value
Export Location (AMSEXPORT)	A required location where to write the INVEST XML file.	\$\$AMSEXPORT\$\$
Job Log Location (AMSLOGS)	A required location where to write the exception log created by the submit step is stored.	\$\$AMSLOGS\$\$
Parameter File Location (AMSPARM)	A required location where the parameter file for later job steps to use is written.	\$\$AMSPARM\$\$
Apply Overrides (APPLY_OVERRIDES)	An optional output parameter for the application of overrides: True/False.	(No Default)
Commit Block Size (COMMIT_SIZE)	A required performance parameter controlling the number of records written out to the report in a single instance.	1000
Transaction Code (DOC_CD)	A required output parameter of the transaction code created. It must be a code within the INVEST Transaction Sub Type.	INVEST
Transaction Department (DOC_DEPT)	A required department used in the creation of transactions.	(No Default)
Transaction	An optional output parameter of	(No Default)

Description (DOC_DSCR)	text that will be placed in the Transaction Description field.	
Transaction Prefix (DOC_PREFIX)	An optional output parameter of a prefix used in Transaction ID generation from Automatic Transaction Numbering.	(No Default)
Transaction Unit (DOC_UNIT)	An optional unit code used in the creation of transactions for security.	(No Default)
Event Type (EVNT_TYP)	A required output parameter for the event type used to record the maturity/sale event.	IV12
Exclude Security Types (EXCL_SCTY_TYP)	An optional selection parameter of one or more security types excluded from selection because even with a maturity date, they do not result in a sale or maturity.	(No Default)
Investment XML File (INVEST_XML)	The required name of the XML output file.	INVEST.xml
Load Parameter File Name (LOAD_PARA_FILE)	The required name of the SMU load parameter file that will be created by this job step and later used as input to the INVEST Upload job.	INVESTParm.txt
Override Level (OVERRIDE_LVL)	An optional Override Level of 1 to 10 applied when the Apply Overrides Parameter is True.	(No Default)
Progression Block Size (PROG_CTR_SIZE)	A required processing parameter used to control job log messaging giving details to progression of the job step.	100
Submit Parameter File (SUBMIT_PARA_FILE)	The required name of the SMU submit parameter file that will be created by this job step and later used as input to the INVEST Submit job.	INVESTSubmitParm.txts
BAI Type Code (TRAN_TYP)	An optional BAI Type Code populated on the generated transaction header.	(No Default)

If any error occurs during parameter validations, the job step ends in error and all subsequent job steps are disabled.

Selection Criteria

The INVEST XML Generation job selects records from the Investment Activity Journal (INVACTV) that match the following conditions:

- The Maturity Date is less than or equal to the application system date on APPCTRL, AND;
- The Redemption Transaction Generated flag is False, AND;
- The Closed Flag is False, AND;
- No sales transaction has been processed for that investment record (i.e. no INVEST transaction exists with a Sale Type set to Partial or Final for the same Investment ID/CUSIP ID and Investment Account combination)

If more than one record exists on INVACTV with the same Investment ID/CUSIP ID and Investment Account, then the latest version is selected, and the selection conditions are applied on those records. If the latest version is a cancellation version, then that record should not be selected.

If no eligible records are found, the system shall end the job with a warning return code and the job log message "No eligible records found".

Major Output

INVEST.xml

The generated INVEST transaction will use the same fields from the selected INVACTV record except for those specified in the job parameters.

- The Principal (Cash) Amount in the generated INVEST transaction is calculated based on the Actual Amount of the selected record in INVACTV, corresponding to the most recently modified INVEST transaction.
- The Sale Type on the generated INVEST transaction will be set to 'Final' to indicate that it is a sale or redemption.
- When the INVEST transaction is generated, the process will update the Redemption Transaction Generated flag to Yes. If generated transactions are cancelled, the Redemption Transaction Generated flag is set back to No.

Re-startability:

If the job fails in any of the above steps, it can be restarted after resolving the error. If the job is restarted, it will resume from the step where it last committed the changes. There is no need to back out any updates when this job fails.

Problem Resolution

Return Code	Condition
Successful (1)	The job ends as successful when parameter validations are successful and at least one record is successfully processed.
Warning (4)	No eligible records have been found for processing.
Non-Fatal Error (8)	This job does not end with this return code.
Failed (12)	The job fails under the following conditions:
	Parameters are invalid.
Terminated (16)	The job is terminated by the user.

Return Code	Condition
System Failure (20)	A system failure is issued when the job is terminated because of database server or network issues.

Matured Investment Process: INVEST Upload

Job Name	INVEST Upload
Recommended Frequency	See the chain description
Can be restarted?	No
Reports generated	N/A

INVEST Upload is the second job in the Matured Investment Process chain. This job uses the System Maintenance Utility (SMU) to read the SMU load parameter file (INVESTLoadPARM.txt) created by the first job to load the transactions contained in the xml file into the transaction catalog.

Parameter	Description	Default Value
PARM_FILE	(Required) Name of the XML output file that will be loaded by the system and used as an input for the submit step.	\$\$AMSPARM\$\$/INVESTParm.txt

Problem Resolution

Return Code	Condition	
Successful (1)	The job ends as successful when parameter validations are successful and at least one record is successfully loaded.	
Warning (4)	A warning results when the file is empty.	
Non-Fatal Error (8)	This job does not end with this return code.	
Failed (12)	The job fails under the following conditions: • Input file is not found.	
Terminated (16)	The job is terminated by the user.	
System Failure (20)	A system failure is issued when the job is terminated because of database server or network issues.	

Matured Investment Process: INVEST Submit

Job Name	INVEST Submit
Recommended Frequency	See the chain description
Single Instance Required	N/A
Can be restarted?	No
Reports generated	None

INVEST Submit is the third job in the Matured Investment Process chain. This job will use the System Maintenance Utility (SMU) to submit the transactions loaded by the INVEST Upload job.

Parameter	Description	Default Value
PARM_FILE	(Required) Name of the XML output file that will be submitted by the system.	\$\$AMSPARM\$\$/INVESTSubmitParm.txt

Problem Resolution

Return Code	Condition	
Successful (1)	The job ends as successful when parameter validations are successful and at least one record is successfully loaded.	
Warning (4)	A warning results when the file is empty.	
Non-Fatal Error (8)	This job does not end with this return code.	
Failed (12)	The job fails under the following conditions: • Input file is not found.	
Terminated (16)	The job is terminated by the user.	
System Failure (20)	A system failure is issued when the job is terminated because of database server or network issues.	