CGI Advantage® 4

Inventory
Run Sheets Guide

CGI

Table of Contents

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 Inventory Batch and Chain Processes

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

- Backorder Servicing Process

- Expiration Notification

- Forecast Demand

- Inventory Annual Close

- Inventory Receivable Generation Process

- Inventory Replenishment Process

- Inventory Replenishment Review

- Inventory Replenishment Review Transaction Generation Chain

- Lead Time Calculation

- Physical Inventory Freeze

- Physical Inventory Freeze Count Card

- Reconciliation Posting

- Reorder Quantity

- Utilization Type

- Additional Charges Allocation Process

2.1.1 Backorder Servicing Process

Description

The Backorder Servicing batch searches SRQ transactions with Backordered Inventory items and attempts to fill them with recently available items.

When to Run

Daily, as well as On Demand.

Major Input

- Inventory (R_INVN) Table
- Stock Requisition Transaction Header (SRQ_DOC_HDR)
- Stock Requisition Transaction Commodity Line (SRQ_DOC_COMM)
- Item Group Table (R_ITMG)

Output

- Inventory(R_INVN) Table
- Stock Request Transaction Header (SRQ_DOC_HDR)
- Stock Request Transaction Commodity Line (SRQ_DOC_COMM)
- Issue Queue Table (R_ISS_QUEUE)
- Statistic Output to log:
  - Job Parameters
  - Run Date
  - Run Time
  - Run Status
  - Number of SRQ transactions selected
  - Number of SRQ transactions updated
- Number of INVN items selected
- Number of INVN items updated

Parameters

Job	Parameter	Description	Default Values
Backorder Servicing	From Warehouse Code (FROM_WHSE_CD)	From Warehouse Code is required when the To Warehouse Code parameter is not blank. If the To Warehouse Code parameter is blank, then this parameter must be blank. Refer to the bulleted list below	Blank

Job	Parameter	Description	Default Values
		this table for special notes on this parameter.	
	To Warehouse Code (TO_WHSE_CD)	To Warehouse Code is required when the From Warehouse Code parameter is not blank. If the From Warehouse Code parameter is blank, then this parameter must be blank. Refer to the bulleted list below this table for special notes on this parameter.	Blank

From Warehouse Code and To Warehouse Code logic:

- The From Warehouse Code and the To Warehouse Code parameters must both either be blank or populated; otherwise, the job will fail.

- Comma delineated values cannot be entered. If a Comma is entered, Advantage will search for a Warehouse with a Comma as part of the Warehouse Code entered.

- If the From Warehouse Code and the To Warehouse Code contain the same value, then inventory items belonging to the specified warehouse are selected for processing.

- If the From Warehouse Code and the To Warehouse Code values are blank then inventory items of all warehouses are selected.

- If the From Warehouse Code and the To Warehouse Code contain two different values, then the job will select these two Warehouse codes and any Warehouse codes in between. (*The selection logic is based on the ASCII text sort order. See below for more details.) If no records are found, the job will end with a status of warning and it will issue a warning in the job log. Note: The value entered for the From Warehouse Code parameter cannot be greater than the value for the To Warehouse Code parameter or the job will fail.

Special Note on ASCII text sort order: As stated previously, if the From Warehouse Code and the To Warehouse Code contain two different values, then the job will select these two Warehouse codes and any Warehouse codes in between. The selection logic is based on the ASCII text sort order. This differs from numeric order. Items are sorted based upon the first digit or character, regardless of overall length. Thus, a value of 0500 is different than a value of 500. Alphabetic characters are greater than numeric, so A500 is greater than 500.

For example, a user wants to process a range of warehouses that contain the following six warehouse codes: 101, !A02, AAA01, AB01, cD02, and CD03. In order for the batch process to select all records in the aforementioned range, the user must specify the value of "!A02" in the "From Warehouse Code" parameter field and the value of "cD02" in the "To Warehouse Code" parameter field. The system will process stock items in this warehouse order: !A02, 101, AAA01, AB01, CD03, cD02.

Below is a table that illustrates how the characters are ranked according to the American Standard Code for Information Interchange (ASCII) ordering:

Rank	Chr	Rank	Chr	Rank	Chr
1	Space	33	@	65	`
2	!	34	A	66	a
3	"	35	B	67	b
4	#	36	C	68	c
5	$	37	D	69	d
6	%	38	E	70	e
7	&	39	F	71	f
8	'	40	G	72	g
9	(	41	H	73	h
10	)	42	I	74	i
11	*	43	J	75	j
12	+	44	K	76	k
13	,	45	L	77	l
14	-	46	M	78	m
15	.	47	N	79	n
16	/	48	O	80	o
17	0	49	P	81	p
18	1	50	Q	82	q
19	2	51	R	83	r
20	3	52	S	84	s
21	4	53	T	85	t
22	5	54	U	86	u
23	6	55	V	87	v
24	7	56	W	88	w
25	8	57	X	89	x
26	9	58	Y	90	y
27	:	59	Z	91	z
28	;	60	[	92	{
29	<	61	\	93		
30	=	62	]	94	}
31	>	63	^	95	~
32	?	64	_	96	DEL

Sort Sequence

- Oldest Stock Requisition Delivery Date first.

- Partially backordered Stock Requisitions before fully backordered.

- SRQ Transaction Code, SRQ Transaction ID, SRQ Transaction Department Code, and SRQ Transaction Version Number.

Selection Criteria

- Search final Stock Requisition transactions with backorder quantities.

- Warehouse >= From Warehouse Code And Warehouse <= To Warehouse Code parameter (if From Warehouse Code and To Warehouse Code parameters are entered)

Problem Resolution

In case of a problem, and the job needs to be restarted, it will start after the last successfully completed SRQ Transaction.

2.1.2 Expiration Notification

Job Name	Expiration Notification
Recommended Frequency	The process can be run on demand or as part of the nightly cycle after the Inventory Replenishment Review process.
Single Instance Required	Yes
Can be restarted?	No
Reports generated	The Expiration Notification Report is generated listing stock items where a notification had been sent.

Description

The Expiration Notification process sends an email notification for stock items that are nearing the Lot/Batch Expiration or Shelf Expiration dates, as specified on the Inventory Maintenance Detail (INVND) page. The process selects records from INVND with a Lot/Batch Expiration or Shelf Expiration date greater than or equal to the current application date, its respective Suppress Lot Expiry Notification or Suppress Shelf Expiry Notification is not set to *True* (checked), and the On Hand Quantity is greater than zero.

Once the records are selected, the process compares the Lot/Shelf Expiration date of the selected records with the current Application Date. If the difference between the dates (that is, respective Expiration Date and current Application Date) is found to be equal to or less than the value entered in the Notification Days Prior to Lot Expiration or Notification Days Prior to Shelf Expiration fields, the process will send an email notification. The format of the email notification, subject line and message body is specified in the job parameters. Within each parameter, Notification Subject and Notification Message, the field parameter may be used. The field parameter is the database field name from the selected INVND record and is delimited by '%' within the parameter. For example, the following Notification Subject parameter value can be entered:

> "Stock Item %STK_ITM% stored in warehouse %WHSE_CD% with Item ID %ITM_ID% is set to expire on %LOT_BAT_EXPR_DT%."

As part of the email notification, the field parameters are replaced by the corresponding INVND record value. From the above Notification Subject parameter value, if the actual values of the selected INVND record were:

Field Name	Database Field	Value
Warehouse	WHSE_CD	ABCD
Stock Item	STK_ITM	1000001
Item ID	ITM_ID	25
Lot/Batch Expiration Date	LOT_BAT_EXPR_DT	12/31/2015

The subject line of the email would read:

> "Stock Item 1000001 stored in warehouse ABCD with Item ID 25 is set to expire on 12/31/2015."

The notification is sent to the email IDs of the Primary Contact Code and Alternative Contact Code specified on the corresponding Warehouse (WHSE) table.

In addition to the email notifications, the Expiration Notification Report is generated listing stock items where a notification had been sent.

Process Steps	Messages
1. Parameter Validation	• Validating Batch Parameters • If both Warehouse and Department parameters are entered then "Warehouse and Department both cannot be entered on the job parameter" will be displayed in the log. • If neither the Warehouse nor Department parameters are entered then "Warehouse or Department is required" will be displayed in the log. • If the Department entered is invalid then " Invalid Department Code: <<Department>>" will be displayed in the log. • If the Warehouse entered is invalid then "Invalid Warehouse Code: <<Warehouse>>" will be displayed in the log. • If Expiration Type is not entered then "Expiration Type is required" will be displayed in the log. • If Expiration Type is not equal to 1, 2, or 3 then "Invalid value for Expiration Type <<Expiration Type>>. Valid values are 1 (Lot Expiration), 2 (Shelf Expiration) and 3 (Shelf and Lot Expiration)." will be displayed in the log. • Parameter validation completed.
2. Selection of Records	• Selecting eligible records • At the end, the following message will be issued: "Selection of eligible records completed."
3. Processing of Records	• Processing the selected records. • If both Primary Contact and Alternate Contact email on Warehouse are not entered then "Unable to create emails" and "Mail exception occurred while trying to send email to user" will be displayed in the log. • Processing completed.

When to Run

The process can be run on demand or as part of the nightly cycle. As the information may aid in reordering, it is recommended that the process be run before the Inventory Replenishment Review process.

Restartability Information

This job cannot be restarted. A new job should be scheduled after correcting the errors that caused the job to fail.

Major Input

• Inventory Maintenance Detail (R_INVN_DET)

• Warehouse (R_WHSE)

Parameters

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

Batch Parameters

Job	Parameter	Description	Default Values
Expiration Notifications	Warehouse (WHSE_CD)	Warehouse This parameter indicates which warehouse(s) notifications should be generated for. You can enter multiple warehouses by adding a comma after entering each warehouse code. This parameter cannot be entered if the Department has been entered.	No Default
	Department (DEPT_CD)	Department This parameter indicates which department(s) notifications should be generated. You can enter multiple departments by adding a comma after entering each department code. This parameter cannot be entered if Warehouse has been entered.	No Default
	Notification Subject (NOTIF_SUB)	Required. This parameter indicates the text that will be displayed as the Subject on the Notification Message sent.	No Default
	Notification Message (NOTIF_MSG)	Required. This parameter indicates text that will be displayed in the body of the Notification Message sent.	No Default
	Expiration Type (EXP_TYP)	Required. Expiration Type - Valid values: 1 (Lot/Batch Expiration), 2 (Shelf Expiration), 3 (Both)	1

Major Output

- ExpNotification_layout.xml

- Sends email notifications to the email IDs specified by the Primary Contact Code and Alternative Contact Code on WHSE.

- Expiration Notification Report

Batch Job Return Codes

The following table shows the potential job Return Codes for the Expiration Notification job.

Return Code	Condition
Successful (1)	All of the validations are performed successfully and report generation is successful and the notification has been sent.
Warning (4)	N/A
Non Fatal Error (8)	N/A
Failed (12)	The job fails under the following conditions: - Parameters are invalid. - Runtime exceptions encountered for any unexpected situations. - Technical failure
Terminated (16)	This Return Code is issued when the job is terminated by the user.
System Failure (20)	This Return Code is issued when the job is terminated because of database server or network issues.

Sort Criteria

Inventory items selected are sorted by:

- Inventory Maintenance Detail (R_INVN_DET)

- Warehouse (R_WHSE)

Selection Criteria

The Expiration Notification Batch job selects the Primary Contact Code and Alternative Contact Code from the Warehouse table based on the following selection criteria:

- Lot/Batch Expiration Date or Shelf Life Expiration Date is greater than or equal to the current system date of the INVND record.

- Suppress Lot Expiry Notification or Suppress Shelf Expiry Notification is not set to *True* and the On Hand Quantity is greater than zero of the INVND record.

- The job compares the Lot/Shelf expiration date of the selected records with the current Application Date and if the difference between the dates is found equal to or less than the value entered on the Notification Days Prior to Lot Expiration or Notification Days Prior to Shelf Expiration field of the INVND Record, the system will send the notification to the Primary Contact Code and Alternative Contact Code from the Warehouse table.

Problem Resolution

If the job ends with a Return Code of Failed and above, the job cannot be restarted. A new job must be scheduled.

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	All of the parameters are validated successfully.	N/A	N/A

Possible Return Codes	Condition	Recommendation	Other Instructions
Warning (4)	Job ended with a Warning because there is no active Disbursement Parameter table record. **Sample Message:** No Active Disbursement Parameter table record found:	Either set the Disbursement record to "Active" or add a new record on the Disbursement Parameter table with the Active status and restart the job.	Alternatively, the job can be rescheduled with a different set of parameters.
Non Fatal Error (8)	N/A	N/A	N/A
Failed (12)	Under the following conditions: • Invalid parameter value(s) • Unexpected runtime exception	Job can fail under the following two conditions. • Invalid parameter value(s) • Encounters any runtime exceptions If the job fails because of invalid parameter values, then correct the parameter value(s) and schedule a new job. If the job fails because of the runtime exceptions, investigate the exception reported by the process, resolve the error, and schedule new a job.	N/A
Terminated (16)	Job is terminated manually by the user.	The reason for the termination needs to be investigated. Schedule a new job.	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.	N/A

2.1.3 Forecast Demand

Description

The Forecast Demand Calculation is used to compute projected forecast demands of an inventory item by month. These forecasted quantities are then used by the Reorder Level and Reorder Quantity Calculation batch jobs to determine the optimum quantity to reorder. If an order is placed too far in advance, the stock items will have to be stored in inventory before they are ready for use. This will lead to an increase in inventory costs. If an order is placed too late, the stock items may not arrive on time, thus causing stock outs. . The Forecast Demand batch job takes the forecast month as parameter, reads the Inventory table for eligible records, calculates the forecast for that month, and updates the forecast quantity for that stock item's month on the Inventory table. Finally, the process generates an Exception report.

Please refer to the *CGI Advantage Inventory User Guide* for Forecast Demand calculation.

When to Run

This batch process is primarily run at the end of the month before Reorder Level and Reorder Quantity Calculation is run. The batch job should be able to be run multiple times but cannot be run concurrently.

Major Input

- Inventory Maintenance (R_INVN)
- ABC Classification Parameter (R_ABC)

Output

- Forecast Demand for the current month is updated on Inventory table.
- Forecast Demand Exception (INFC) Report.

Parameters

Job	Parameter	Description	Default Value
Forecast Demand	Forecast Month (FORCST_MONTH)	The Month that will be Forecasted (Valid Values are - Enter 1 for January, 2 for February,..., 12 for December)	None
	Client Name (CLIENT_NM)	Client Name to appear on the Exception Report	None
	From Warehouse Code (FROM_WHSE_CD)	From Warehouse Code is required when the To Warehouse Code parameter is not blank. If the To Warehouse Code parameter is blank, then this parameter must be blank. Refer to the bulleted list below this table for special notes on this parameter.	Blank

Job	Parameter	Description	Default Value
	To Warehouse Code (TO_WHSE_CD)	To Warehouse Code is required when the From Warehouse Code parameter is not blank. If the From Warehouse Code parameter is blank, then this parameter must be blank. Refer to the bulleted list below this table for special notes on this parameter.	Blank

From Warehouse Code and To Warehouse Code logic:

- The From Warehouse Code and the To Warehouse Code parameters must both either be blank or populated; otherwise, the job will fail.

- Comma delineated values cannot be entered. If a Comma is entered, Advantage will search for a Warehouse with a Comma as part of the Warehouse Code entered.

- If the From Warehouse Code and the To Warehouse Code contain the same value, then inventory items belonging to the specified warehouse are selected for processing.

- If the From Warehouse Code and the To Warehouse Code values are blank then inventory items of all warehouses are selected.

- If the From Warehouse Code and the To Warehouse Code contain two different values, then the job will select these two Warehouse codes and any Warehouse codes in between. (*The selection logic is based on the ASCII text sort order. See below for more details.) If no records are found, the job will end with a status of warning and it will issue a warning in the job log. Note: The value entered for the From Warehouse Code parameter cannot be greater than the value for the To Warehouse Code parameter or the job will fail.

Special Note on ASCII text sort order: As stated previously, if the From Warehouse Code and the To Warehouse Code contain two different values, then the job will select these two Warehouse codes and any Warehouse codes in between. The selection logic is based on the ASCII text sort order. This differs from numeric order. Items are sorted based upon the first digit or character, regardless of overall length. Thus, a value of 0500 is different than a value of 500. Alphabetic characters are greater than numeric, so A500 is greater than 500.

For example, a user wants to process a range of warehouses that contain the following six warehouse codes: 101, !A02, AAA01, AB01, cD02, and CD03. In order for the batch process to select all records in the aforementioned range, the user must specify the value of "!A02" in the "From Warehouse Code" parameter field and the value of "cD02" in the "To Warehouse Code" parameter field. The system will process stock items in this warehouse order: !A02, 101, AAA01, AB01, CD03, cD02.

Below is a table that illustrates how the characters are ranked according to the American Standard Code for Information Interchange (ASCII) ordering:

Rank	Chr	Rank	Chr	Rank	Chr
1	Space	33	@	65	`
2	!	34	A	66	a
3	"	35	B	67	b
4	#	36	C	68	c
5	$	37	D	69	d
6	%	38	E	70	e
7	&	39	F	71	f
8	'	40	G	72	g
9	(	41	H	73	h
10	)	42	I	74	i
11	*	43	J	75	j
12	+	44	K	76	k
13	,	45	L	77	l
14	-	46	M	78	m
15	.	47	N	79	n
16	/	48	O	80	o
17	0	49	P	81	p
18	1	50	Q	82	q
19	2	51	R	83	r
20	3	52	S	84	s
21	4	53	T	85	t
22	5	54	U	86	u
23	6	55	V	87	v
24	7	56	W	88	w
25	8	57	X	89	x
26	9	58	Y	90	y
27	:	59	Z	91	z
28	;	60	[	92	{
29	<	61	\	93		
30	=	62	]	94	}
31	>	63	^	95	~
32	?	64	_	96	DEL

Sort Sequence

Inventory records are sorted by:

- Warehouse Code   (WHSE_CD)
- Stock Item   (STK_ITM)

Selection Criteria

Select inventory records by:

- Forecast month = Zero
- Parent stock item = False
- Warehouse >= From Warehouse Code and Warehouse <= To Warehouse Code parameter (if From Warehouse Code and To Warehouse Code parameters are entered)

Problem Resolution

- Look into log of job for errors.

- The process has restart ability. When job is restarted it continues processing the records from the last committed record in INVN, before the failure occurred. Forecast Demand Exception Report is only generated at the end of job run that ended successfully irrespective of the fact whether the job was restarted one or not.

- Whenever job run for forecast month (say 1) and it ends in failure, make sure that the job is restarted and ran successfully before scheduling any other forecast job for another month (say 2) is scheduled else exception records for job run for forecast month 1 will be lost and forecast demand calculation for that month will be incomplete. This is because the exception records are stored on a temporary table, which are purged before the job starts unless it is a restarted job run.

2.1.4 Inventory Annual Close

Description

Each inventory record has fields for issued and forecasted quantities broken down by months. The monthly issued quantities are maintained for two years, and the yearly totals are maintained for an additional 3 years. The monthly forecasted quantities are maintained for one year. At the close of each year, the Annual Close process is run to roll the historical data back a year, store current data in historical data fields, and to reinitialize current year fields to zero.

When to Run

Once, at the end of each calendar year.

Major Input

- Inventory(R_INVN) Table

Output

- Inventory (R_INVN) Table
- Statistic Output to log:
  - Run Status
  - Number of INVN records updated

Parameters

None

Sort Sequence

Warehouse, Stock Item.

Selection Criteria

All items on the Inventory Table will be selected.

Problem Resolution

In case of a problem, and the job needs to be restarted, it will start at the checkpoint value, after the last inventory record was committed.

2.1.5 Inventory Receivable Generation Process

Description

The Inventory Receivable Generation Chain Job generates Receivable/General Accounting Expenditure transactions for eligible Issue Confirmation and Stock Return transactions. The chain job consists of the following two jobs:

1. Generate Receivable on the issuance of stock.

2. Generate Receivable or General Accounting Expenditure transaction on the return of stock.

The Stock Issue Receivable Generation job (Create RE Transaction XML) generates receivable transactions from eligible Issue Confirmation transactions. It selects all the Issue Confirmation transactions with a transaction type of CI and transaction subtype of CIE whose Warehouse is contained within the range of warehouses specified by the From Warehouse Code and the To Warehouse Code, or all records if the Warehouse is not specified on the batch parameters, where a Customer Code has been entered on the Vendor Component, and the Issued Quantity on the Commodity line is greater than the Closed Invoiced Quantity. If a Receivable had not been previously created for selected Issue Confirmation transaction, the process will create a new Receivable transaction else a modification of the previous Receivable transaction will be generated.

The Stock Return Receivable Generation job (Create RE/GAX Transaction XML) generates Receivable or General Accounting Expenditure transactions to credit the customer for the return of stock, less any return charges. The process will select all External Stock Return Issue Cross Reference (SNCIXREF) records, whose Warehouse is contained within the range of warehouses specified by the From Warehouse Code and the To Warehouse Code, or all records if the Warehouse is not specified on the batch parameters, where Receivable ID fields are blank and the corresponding Issue Confirmation has a Receivable applied against it. If a Receivable has not been closed for a selected SNCIXREF record, then a modification of a previous Receivable transaction will be generated else an Expenditure transaction will be generated.

The chain process consists of the following batch jobs:

- Job 1 – Create RE Transaction XML

- Job 2 – Load XML

- Job 3 – Submit Transaction

- Job 4 – Create RE/GAX Transaction XML

- Job 5 – Load XML

- Job 6 – Submit Transaction

Job No	Job	Description	Output
1	Create RE Transaction XML	Generates Receivable transaction XML for selected Issue Confirmation transactions.	Transaction XML file (EXP_FILE_NM_ISS) containing Receivable transactions
2	Load XML	Loads generated Receivable transaction	Receivable transactions are uploaded

Job No	Job	Description	Output
		XML	
3	Submit Transaction	Submits generated Receivable Transactions	Receivable transactions are submitted
4	Create RE/GAX Transaction XML	Generates Receivable/Expenditure transaction XML for selected SNCIXREF records	Transaction XML file (EXP_FILE_NM_RET) containing Receivable or/and Expenditure transactions
5	Load XML	Loads generated Receivable/Expenditure transaction XML	Receivable & Expenditure transactions are uploaded
6	Submit Transaction	Submits generated Receivable/Expenditure Transactions	Receivable & Expenditure transactions are submitted

When to Run

This process can be run On Demand.

Major Input

Issue Confirmation Transaction	CI_DOC_HDR, CI_DOC_VEND, CI_DOC_COMM, CI_DOC_ACTG
Receivable Transaction	RE_DOC_HDR, RE_DOC_VEND, RE_DOC_ACTG
External Stock Return Issue Cross Reference Table	R_EXT_SN_CI_XREF

Peripheral DataObjects

Warehouse	R_WHSE
Auto Numbering	AUTO_DOC_NO
Fiscal Year	R_FY
Transaction Control	R_GEN_DOC_CTRL
Department	R_DEPT
Unit	R_UNIT

Output

- Generates Receivable or/and Expenditure transactions.

Parameters

Chain	Parameter	Description	Default Value
Inventory Receivable Generation	RE Transaction Code (RE_DOC_CD)	The specific Receivable Transaction Code to be used on generated transactions. The Transaction Subtype for the Transaction Code entered must be 'REI'. This is a required field.	REI
	RE Transaction Department Code (RE_DOC_DEPT_CD)	The specific Department to be used on the generated Receivable transaction. The Transaction Department will be validated against the Department table. This is a required field.	None
	RE Transaction Unit Code (RE_DOC_UNIT_CD)	If entered, the specific Transaction Unit to be used on the generated Receivable transaction. The Transaction Control record will be checked to determine if the Transaction Unit is required for the Receivable Transaction Code.	None
	RE Transaction ID Prefix (RE_DOC_PFX)	The prefix to be used by automatic transaction number generating functions to create the Transaction ID for the generated RE transaction.	****
	RE transaction Record Date (RE_DOC_REC_DT)	If entered, the specific Record Date to be used on generated transactions. If not entered, the default is blank.	None
	RE Transaction Status Code (RE_DOC_STA_CD)	Receivable Transaction Status Code, 1-Held, 2-Ready Specify whether the generated Receivable transaction is to be placed in a 'Held' or 'Ready' status when it is	2

Chain	Parameter	Description	Default Value
		loaded into the application. The default transaction status is 'Ready'.	
	Reason code (REAS_CD)	The adjustment reason code to be used on modifications to receivable transactions.	None
	Expenditure Transaction Code (GAX_DOC_CD)	The specific General Accounting Expenditure Transaction Code to be used on generated transactions. This is a required field.	GAX
	Expenditure Transaction Department code (GAX_DOC_DEPT _CD)	The specific Department to be used on generated General Accounting Expenditure transactions. The Transaction Department will be validated against the Department table. This is a required field.	None
	Expenditure Transaction Unit Code (GAX_DOC_UNIT_ CD)	If entered, the specific Transaction Unit to be used on generated General Accounting Expenditure transactions. The Transaction Control record will be checked to determine if the Transaction Unit is required for the GAX transaction.	None
	Expenditure Transaction ID Prefix (GAX_DOC_PFX)	Prefix to be used by automatic transaction number generating functions to create the Transaction ID for generated General Accounting Expenditure transactions.	****
	Expenditure Transaction Status Code (GAX_DOC_STA_ CD)	Expenditure Transaction Status Code, 1-Held, 2-Ready Specify whether the generated General Accounting Expenditure transaction is to be placed in a 'Held' or	2

Chain	Parameter	Description	Default Value
		'Ready' status when it is loaded into the application. The default transaction status is 'Ready'.	
	Expenditure Transaction Record Date (GAX_DOC_REC_DT)	If entered, the specific Record Date to be used on generated transactions. If not entered, the default is blank.	None
	Select block Size (RE_SELECT_BLOCK)	Select block Size	1000
	Commit block Size (RE_COMMIT_BLOCK)	Commit block Size	1000
	Export File (EXP_FILE_NM_ISS)	Export File (.xml)	IssInvDocs.xml
	Load Parameter File (LOAD_FILE_NM_ISS)	Load Parameter File (.txt)	IssInvLoad.txt
	Submit Parameter File (SUBMIT_FILE_NM_ISS)	Submit Parameter File (.txt)	IssInvSubmit.txt
	Select block Size (GAX_SELECT_BLOCK)	Select block Size	1000
	Commit block Size (GAX_COMMIT_BLOCK)	Commit block Size	1000
	Export file (EXP_FILE_NM_RET)	Export file (.xml)	RecvExpDocs.xml
	Load Parameter File (LOAD_FILE_NM_RET)	Load Parameter File (.txt)	RecvExpLoad.txt
	Submit Parameter File (SUBMIT_FILE_NM_RET)	Submit Parameter File (.txt)	RecvExpSubmit.txt
	From Warehouse	From Warehouse Code	Blank

Chain	Parameter	Description	Default Value
	Code (FROM_WHSE_CD)	is required when the To Warehouse Code parameter is not blank. If the To Warehouse Code parameter is blank, then this parameter must be blank. Refer to the bulleted list below the following table for special notes on this parameter.	
	To Warehouse Code (TO_WHSE_CD)	To Warehouse Code is required when the From Warehouse Code parameter is not blank. If the From Warehouse Code parameter is blank, then this parameter must be blank. Refer to the bulleted list below the following table for special notes on this parameter.	Blank

Job	Parameter	Description	Default Value
Create RE Transaction XML	RE Transaction Code (RE_DOC_CD)	RE Transaction Code	REI
	RE Transaction Department Code (RE_DOC_DEPT_CD)	RE Transaction Department Code	None
	RE Transaction Unit Code (RE_DOC_UNIT_CD)	RE Transaction Unit Code	None
	RE Transaction ID Prefix (RE_DOC_PFX)	RE Transaction ID Prefix	****
	RE transaction Record Date (RE_DOC_REC_DT)	RE transaction Record Date	None
	RE Transaction Status Code (RE_DOC_STA_CD)	Receivable Transaction Status Code, 1-Held, 2-Ready	2

Job	Parameter	Description	Default Value
	Reason code (REAS_CD)	Reason code	None
	Expenditure Transaction Code (GAX_DOC_CD)	Expenditure Transaction Code	GAX
	Expenditure Transaction Department code (GAX_DOC_DEPT_CD)	Expenditure Transaction Department code	None
	Expenditure Transaction Unit Code (GAX_DOC_UNIT_CD)	Expenditure Transaction Unit Code	None
	Expenditure Transaction ID Prefix (GAX_DOC_PFX)	Expenditure Transaction ID Prefix	****
	Expenditure Transaction Status Code (GAX_DOC_STA_CD)	Expenditure Transaction Status Code, 1-Held, 2-Ready	2
	Expenditure Transaction Record Date (GAX_DOC_REC_DT)	Expenditure Transaction Record Date	None
	Select block Size (RE_SELECT_BLOCK)	Select block Size	1000
	Commit block Size (RE_COMMIT_BLOCK)	Commit block Size	1000
	Export File (EXP_FILE_NM_ISS)	Export File (.xml)	IssInvDocs.xml
	Load Parameter File (LOAD_FILE_NM_ISS)	Load Parameter File (.txt)	IssInvLoad.txt
	Submit Parameter File (SUBMIT_FILE_NM_ISS)	Submit Parameter File (.txt)	IssInvSubmit.txt
	Select block Size (GAX_SELECT_BL	Select block Size	1000

Job	Parameter	Description	Default Value
	OCK)		
	Commit block Size (GAX_COMMIT_BLOCK)	Commit block Size	1000
	Export file (EXP_FILE_NM_RET)	Export file (.xml)	RecvExpDocs.xml
	Load Parameter File (LOAD_FILE_NM_RET)	Load Parameter File (.txt)	RecvExpLoad.txt
	Submit Parameter File (SUBMIT_FILE_NM_RET)	Submit Parameter File (.txt)	RecvExpSubmit.txt
	From Warehouse Code (FROM_WHSE_CD)	From Warehouse Code is required when the To Warehouse Code parameter is not blank. If the To Warehouse Code parameter is blank, then this parameter must be blank. Refer to the bulleted list below this table for special notes on this parameter.	Blank
	To Warehouse Code (TO_WHSE_CD)	To Warehouse Code is required when the From Warehouse Code parameter is not blank. If the From Warehouse Code parameter is blank, then this parameter must be blank. Refer to the bulleted list below this table for special notes on this parameter.	Blank
SysManUtil – Load XML	Parameter File (PARM_FILE)	Load Parameter File (.txt)	IssInvLoad.txt
SysManUtil – Submit Transaction	Parameter File (PARM_FILE)	Submit Parameter File (.txt)	IssInvSubmit.txt
Create RE/GAX Transaction XML	Reason code (REAS_CD)	Reason code	None
	Expenditure	Expenditure	GAX

Job	Parameter	Description	Default Value
	Transaction Code (GAX_DOC_CD)	Transaction Code	
	Expenditure Transaction Department code (GAX_DOC_DEPT_CD)	Expenditure Transaction Department code	None
	Expenditure Transaction Unit Code (GAX_DOC_UNIT_CD)	Expenditure Transaction Unit Code	None
	Expenditure Transaction ID Prefix (GAX_DOC_PFX)	Expenditure Transaction ID Prefix	****
	Expenditure Transaction Status Code (GAX_DOC_STA_CD)	Expenditure Transaction Status Code, 1-Held, 2-Ready	2
	Expenditure Transaction Record Date (GAX_DOC_REC_DT)	Expenditure Transaction Record Date	None
	Select block Size (GAX_SELECT_BLOCK)	Select block Size	1000
	Commit block Size (GAX_COMMIT_BLOCK)	Commit block Size	1000
	Export file (EXP_FILE_NM_RET)	Export file (.xml)	RecvExpDocs.xml
	Load Parameter File (LOAD_FILE_NM_RET)	Load Parameter File (.txt)	RecvExpLoad.txt
	Submit Parameter File (SUBMIT_FILE_NM_RET)	Submit Parameter File (.txt)	RecvExpSubmit.txt
	From Warehouse Code (FROM_WHSE_CD)	From Warehouse Code is required when the To Warehouse Code parameter is not blank. If the To Warehouse Code	Blank

Job	Parameter	Description	Default Value
		parameter is blank, then this parameter must be blank. Refer to the bulleted list below this table for special notes on this parameter.	
	To Warehouse Code (TO_WHSE_CD)	To Warehouse Code is required when the From Warehouse Code parameter is not blank. If the From Warehouse Code parameter is blank, then this parameter must be blank. Refer to the bulleted list below this table for special notes on this parameter.	Blank
SysManUtil – Load XML	Parameter File (PARM_FILE)	Load Parameter File (.txt)	IssInvLoad.txt
SysManUtil – Submit Transaction	Parameter File (PARM_FILE)	Submit Parameter File (.txt)	IssInvSubmit.txt

Please Note: Every time a parameter fails validation the system logs the error and sets the Job return code to Failed, which in turn deactivates further jobs down in the chain, and prevents them from execution.

From Warehouse Code and To Warehouse Code logic:

- The From Warehouse Code and the To Warehouse Code parameters must both either be blank or populated; otherwise, the job will fail.

- Comma delineated values cannot be entered. If a Comma is entered, Advantage will search for a Warehouse with a Comma as part of the Warehouse Code entered.

- If the From Warehouse Code and the To Warehouse Code contain the same value, then inventory items belonging to the specified warehouse are selected for processing.

- If the From Warehouse Code and the To Warehouse Code values are blank, then inventory items of all warehouses are selected.

- If the From Warehouse Code and the To Warehouse Code contain two different values, then the job will select these two Warehouse codes and any Warehouse codes in between. (*The selection logic is based on the ASCII text sort order. See below for more details.) If no records are found, the job will end with a status of warning and it will issue a warning in the job log. Note: The value entered for the From Warehouse Code parameter cannot be greater than the value for the To Warehouse Code parameter or the job will fail.

Special Note on ASCII text sort order: As stated previously, if the From Warehouse Code and the To Warehouse Code contain two different values, then the job will select these two

Warehouse codes and any Warehouse codes in between. The selection logic is based on the ASCII text sort order. This differs from numeric order. Items are sorted based upon the first digit or character, regardless of overall length. Thus, a value of 0500 is different than a value of 500. Alphabetic characters are greater than numeric, so A500 is greater than 500.

For example, a user wants to process a range of warehouses that contain the following six warehouse codes: 101, !A02, AAA01, AB01, cD02, and CD03. In order for the batch process to select all records in the aforementioned range, the user must specify the value of "!A02" in the "From Warehouse Code" parameter field and the value of "cD02" in the "To Warehouse Code" parameter field. The system will process stock items in this warehouse order: !A02, 101, AAA01, AB01, CD03, cD02.

Below is a table that illustrates how the characters are ranked according to the American Standard Code for Information Interchange (ASCII) ordering:

Rank	Chr	Rank	Chr	Rank	Chr
1	Space	33	@	65	`
2	!	34	A	66	a
3	"	35	B	67	b
4	#	36	C	68	c
5	$	37	D	69	d
6	%	38	E	70	e
7	&	39	F	71	f
8	'	40	G	72	g
9	(	41	H	73	h
10	)	42	I	74	i
11	*	43	J	75	j
12	+	44	K	76	k
13	,	45	L	77	l
14	-	46	M	78	m
15	.	47	N	79	n
16	/	48	O	80	o
17	0	49	P	81	p
18	1	50	Q	82	q
19	2	51	R	83	r
20	3	52	S	84	s
21	4	53	T	85	t
22	5	54	U	86	u
23	6	55	V	87	v
24	7	56	W	88	w
25	8	57	X	89	x
26	9	58	Y	90	y
27	:	59	Z	91	z
28	;	60	[	92	{
29	<	61	\	93	|
30	=	62	]	94	}
31	>	63	^	95	~
32	?	64	_	96	DEL

Sort Sequence

- Stock Issue Receivable process (First Job)

    - Issue Confirmation Transaction Code   DOC_CD
    - Issue Confirmation Transaction Department Code DOC_DEPT_CD
    - Issue Confirmation Transaction Id   DOC_ID
    - Issue Confirmation Transaction Version No   DOC_VERS_NO
    - Issue Confirmation Transaction Commodity Line   DOC_COMM_LN_NO

- Stock Return Receivable Generation (Fourth Job)
    - Issue Confirmation Transaction Code   DOC_CD
    - Issue Confirmation Transaction Department Code   DOC_DEPT_CD
    - Issue Confirmation Transaction Id   DOC_ID
    - Issue Confirmation Transaction Version No   DOC_VERS_NO
    - Issue Confirmation Transaction Vendor Line   DOC_VEND_LN_NO
    - Issue Confirmation Transaction Commodity Line   DOC_COMM_LN_NO
    - Issue Confirmation Transaction Accounting Line   DOC_ACTG_LN_NO
    - SNCIXREF Id   SNCIXREF_ID

Selection Criteria

- Stock Issue Receivable process (First Job)
    - Selection criteria for obtaining Issue Confirmation transactions to be processed is listed below:
        - Warehouse >= From Warehouse Code and Warehouse <= To Warehouse Code parameter (if From Warehouse Code and To Warehouse Code parameters are entered)
        - Customer code has been entered on the Vendor Component.
        - Issued Quantity on the commodity line is greater than Closed Invoiced Quantity
        - Transaction Type/Transaction Subtype of Issue Confirmation is CI/CIE
- Stock Return Receivable Generation (Fourth Job)
    - Selection criteria for obtaining SNCIXREF records to be processed is listed below:
        - Warehouse >= From Warehouse Code and Warehouse <= To Warehouse Code parameter (if From Warehouse Code and To Warehouse Code parameters are entered)
        - Receivable ID fields are blank on the SNCIXREF
        - Issue Confirmation on the SNCIXREF record has a receivable applied against it

Problem Resolution

If the Stock Return Receivable Generation job is run, ensure that the generated transactions are loaded successfully in the import job (fifth job); otherwise, the customers will not be credited with the return because the SN accounting lines would have been excluded from future receivable generation.

2.1.6 Inventory Replenishment Process

Description

The Inventory Replenishment Batch process will select all entries on the Inventory Replenishment table that do not have the Exclude flag set, and creates Delivery Order, Purchase Order, Requisition, Stock Request, and/or Stock Item Transfer Issue transactions for reordering.

One transaction will be created for each entry on the IREP table with a Transaction Type of RQ. For the Transaction Subtype DO, one transaction will be created for all entries with the same Master Agreement per Vendor Line per Warehouse per Transaction Code. For the Transaction Type PO, one transaction will be created for all entries with the same Vendor Line and Warehouse. For the Transaction Type TI and Stock Request (SRQ), one transaction will be created for all entries with the same Warehouse. Note that if the maximum number commodity lines have been reached for a given transaction commodity component, the system will create a new transaction to continue processing the remaining replenishment items.

Before running the chain job for Inventory Replenishment ensure the following:

1. The User ID/Issuer ID must be authorized on the Referenced Master Agreements.
2. Auto Transaction Numbering entries are there for the generated transactions.

The chain process consists of the following batch jobs:

- Job 1 – Inventory Replenishment

- Job 2 – Load Transactions

- Job 3 – Replenishment Report

- Job 4 – Submit Transactions

Job No	Job	Description	Output
1	Inventory Replenishment	Generates Delivery Order and Requisition transaction XML for inventory items selected from IREP Table and needs to be reordered.	Transaction XML file(EXP_FILE_NM) containing created Delivery Order and Requisition transactions
2	Load Transactions	Loads generated Delivery Order and Requisition transaction XML	Delivery Order and Requisition transactions are created
3	Replenishment Report	Lists the transaction created as a result of the Inventory Replenishment process.	A report containing the transactional information along with the warehouse, quantity, and stock item details for transactions created during this run of the Inventory Replenishment process.
4	Submit	Submits generated Delivery Order and	Delivery Order and Requisition

	Transactions	Requisition Transactions	transactions are submitted

When to Run

The process can be run on request when inventory items needs to be reordered. It is typically run after the IREP Review batch process, which identified inventory items that need to be reordered and populated the Inventory Replenishment table for review.

Major Input

Inventory Replenishment   R_IREP

Peripheral DataObjects

Inventory Maintenance   R_INVN

Warehouse   R_WHSE

Auto Numbering   AUTO_DOC_NO

MA Transaction   MA_DOC_HDR, MA_DOC_VEND, MA_DOC_COMM

Commodity   R_COMM_CD

Output

- Generates Delivery Order and Requisition transactions
- Replenishment Report listing created transactions

Parameters

Job	Parameter	Description	Default Value
Inventory Replenishment	Export Location	Export Location at Inventory Replenishment Job	$$AMSROOT$$/ExportImport
	Parameter Location	Parameter Location at Inventory Replenishment Job	$$AMSROOT$$/Parms
	Chain Job ID CHAIN_JOB_ID	Parameter to store the Chain ID	$$@CHAINJOBID@$$
	Default RQ Transaction Code (DEF_RQ_DOC_CD)	Default RQ Transaction Code (Required). Value not overrideable. An RQ transaction will be created if an applicable MA is not found.	RQS
	Transaction Department Code	Transaction Department Code for	Blank

Job	Parameter	Description	Default Value
	(DOC_DEPT_CD)	created RQ, DO, TI, SRQ, and PO transactions (Required).	
	Transaction Prefix (DOC_PFX)	Transaction Prefix for created RQ, DO, TI, SRQ, and PO transactions (Optional).	Blank
	Transaction Status (DOC_STA_CD)	Receivable Transaction Status Code, 1 - Held, 2 – Ready (Required). Specify whether the generated Receivable transaction is to be placed in a 'Held' or 'Ready' status when it is loaded into the application.	1
	Transaction Unit Code (DOC_UNIT_CD)	Transaction Unit Code for created RQ, DO, TI, SRQ, and PO transactions (Optional).	Blank
	Transaction XML File (.xml - EXP_FILE_NM)	Transaction XML File for created RQ, DO, TI, SRQ, and PO transactions (.xml) (Required).	IREPDocs.xml
	Load Parameter File (.txt - LOAD_FILE_NM)	Load Parameter File (.txt) (Required). Value not overrideable.	IREPLoad.txt
	Report File Parameter (.txt) PARM_REP_FILE	Name of the text file associated with the report	IREPReport.txt
	Process Run Date (RUN_DT)	Process Run Date in MM/DD/YYYY format (Optional). If not entered, defaults to current date.	Blank
	Submit Parameter File (SUBMIT_FILE_NM)	Submit Parameter File (.txt) (Required). Value not overrideable.	IREPSubmit.txt

Job	Parameter	Description	Default Value
	User ID (USER_ID)	User ID (Required). This value is used for Issuer ID and Requestor ID on created RQ, DO, TI, SRQ, and PO transactions.	Blank
	Exclude Pending Replenishments (EXCL_PENDING)	Exclude Pending Replenishments (Required). Value must be set to Yes or No. When the value is set to Yes, the system will search for any DO, PO, RQ, SRQ, and TI transactions that are in Draft Phase for the Warehouse and Stock Item of the IREP record and the quantity ordered will be reduced accordingly.	No
	Consolidate RQS (CNSLD_RQS)	Consolidate RQS (Required). Value must be set to Yes or No. When set to Yes, the system will consolidate the Requisition (RQS) based on Commodity Code and Ship to Location. The system will not consolidate the RQS if the value is set as No.	No
	Use RQ Group Number (USE_RQ_GP)	Use RQ Group Number (Required). Value must be set to *Yes* or *No*. When set to *Yes*, the system will consolidate the Requisition (RQS) based on the RQ Group Number. The system will not consolidate the RQS if the value is set as *No*.	No
	Commodity Group	Commodity Group	Blank

Job	Parameter	Description	Default Value
	(COMM_GRP)	(Conditionally Required). This parameter is conditionally required, if Consolidate RQS is Yes. Valid values for this parameter are Class, Item, Group, and Detail. Based on the parameter's value, the system will consolidate the Commodities for a Requisition (RQS) based on that level.	
	Consolidate DO (CNSLD_DO)	Consolidate DO (Required). Value must be set to Yes or No. When set to Yes, the system will consolidate the Delivery Order (DO) based on the Master Agreement's (MA) ID, Ship to Location, and Vendor ID. The system will not consolidate DO if the value is set as No.	No
	To Warehouse Code TO_WHSE_CD	To Warehouse Code parameter is required when the From Warehouse Code parameter is not blank. If the From Warehouse Code parameter is blank, then this parameter must be blank. Refer to the bulleted list below this table for special notes on this parameter.	Blank
	From Warehouse Code FROM_WHSE_CD	From Warehouse Code is conditionally required. Must be a valid Warehouse value on the	No Default

Job	Parameter	Description	Default Value
		Warehouse table, and it is required when To Warehouse Code is provided.	
SysManUtil – Load Transactions	Load Parameter File (PARM_FILE)	Load Parameter File (.txt)	$$AMSPARM$$/IREPLoad.txt
SysManUtil – Submit Transactions	Submit Parameter File (PARM_FILE)	Submit Parameters File (.txt)	$$AMSPARM$$/IREPSubmit.txt
Replenishment Report	Chain Job ID CHAIN_JOB_ID	Parameter to store the Chain ID	$$@CHAINJOBID@$$
Replenishment Report	Report Helper File (PARM_REP_FILE)	Parameter Location to store the report text file	$$AMSPARM$$/IREPReport.txt

Please Note - Every time a parameter fails validation the system logs the error and sets the Job return code to *Failed*, which in turn deactivates further jobs down in the chain, and prevent them from execution.

Sort Sequence

- Transaction Code   DOC_CD
- Warehouse Code   WHSE_CD
- Agreement Transaction Code   AGREE_DOC_CD
- Agreement Transaction Department Code   AGREE_DOC_DEPT_CD
- Agreement Transaction Id   AGREE_DOC_ID
- Agreement Transaction Vendor Line   AGREE_VEND_LN_NO
- Stock Item   STK_ITM

Selection Criteria

- Select criteria for inventory items from Inventory Replenishment Table is:
  - Exclude flag = false

Problem Resolution

- Look into log of job for errors.
- Each job in Inventory Replenishment Chain job has restart ability. If any of the three jobs fails for any data setup reasons, then correct the data setup and restart the job.
- This batch program produces new Advantage transactions, which are subject to the line limit functionality constraints. Sites should ensure that they run this job with parameters set to ensure that the created transactions are within the line limit controls.

2.1.7 Inventory Replenishment Review

Description

The Inventory Replenishment Review process searches the Inventory table for items that need to be reordered based on the following logic to place an entry on the Inventory Replenishment (IREP) table:

When the reorder level is either zero and the stock item's Available/On Hand Quantity + On Order Quantity from Vendor + On Order from Warehouse + Currently Requested – Back Ordered quantity is less than the reorder level.

OR

When the stock item record's reorder level is not zero and the stock item's Available/On Hand Quantity + On Order Quantity from Vendor + On Order from Warehouse + Currently Requested – Back Ordered quantity is less than or equal to the reorder level.

If the Inventory record has the Parent Replenishment field checked, the transaction code on the IREP table will be set to Stock Item Transfer Issue (TI) or Stock Request (SRQ) based on the Parent Replenishment Type (REPLENISH_TPE) batch parameter. Depending on the Generate Purchasing Transactions parameter value, the transaction code will otherwise be set to Delivery Order (DO) if a valid Master Agreement is found for the inventory item (with Commodity Line Type *Item* or *Catalog*), or to Requisition (RQ) or Purchase Order (PO). Creation of the IREP record with a Stock Item Transfer Issue transaction code is controlled by the Parent Replenishment flag on the Inventory Maintenance (INVN) table for the stock item and not the Generate Purchasing Transactions parameter. The user has the choice to go online to the IREP page and select or deselect items to be reordered by selecting the Exclude flag.

The entries in IREP table are then later picked by Inventory Replenishment chain process to generate Delivery Order, Purchase Order, Requisition, Stock Request, and Stock Item Transfer Issue transactions.

When to Run

The process can be run when inventory items needs to be reordered. It should run after the Reorder Quantity batch job to get the latest reorder information to create the reorder transaction(s) Inventory Replenishment Review is typically run prior to the Inventory Replenishment batch process. The Inventory Replenishment Review batch job creates IREP table records directly. The Inventory Replenishment Review Transaction Generation chain creates a transaction, which allows for workflow/approval before creating the IREP table record. Only one of these jobs should be run as part of the nightly cycle.

Major Input

Inventory Maintenance (R_INVN)

Peripheral DataObjects

- Warehouse (R_WHSE)

- ABC Classification (R_ABC)

- MA Transaction (MA_DOC_HDR, MA_DOC_VEND, MA_DOC_COMM)

- Commodity (R_COMM_CD)

Output

Inventory Replenishment (R_IREP)

Parameters

Job	Parameter	Description	Default Values
Inventory Replenishment Review	To Warehouse Code	To Warehouse Code parameter is required when the From Warehouse Code parameter is not blank. If the From Warehouse Code parameter is blank, then this parameter must be blank. Refer to the bulleted list below this table for special notes on this parameter.	Blank
	From Warehouse Code	From Warehouse Code (Conditionally required). Must be a valid Warehouse value on the Warehouse table, and it is required when To Warehouse Code is provided.	No Default
	ABC Class	ABC Class (Optional). Multiple values can be specified separated by commas	None
	Bill To	Bill To (Required). IREP entries will be generated with this billing location which will later appear on the generated RQ and DO transactions when Inventory Replenishment chain process is run	None
	Ship To	Ship To (Required). IREP entries will be generated with this shipping location which will later appear on the generated RQ and DO transactions when Inventory Replenishment chain process is run	None
	Exclude Pending Replenishments	Exclude Pending Replenishments (Required). Exclude Pending Replenishments (Required). Value must be set to Yes or No. When the value is set to Yes, the system will search for any DO, PO, RQ, and TI transactions that are in Draft Phase for the Warehouse and Stock Item of the Inventory record and the quantity ordered will be reduced accordingly.	No

	Generate Purchasing Transactions	Generate Purchasing Transactions (Required). Value must be 1 (Delivery Orders and Requisitions), 2 (Requisitions only), 3 (Delivery Orders and Purchase Orders), or 4 (Purchase Orders only).	1
	Delivery Order Transaction Code	Delivery Order Transaction Code (Required).	None
	Purchase Order Transaction Code	Purchase Order Transaction Code (Conditionally Required). Must be a valid Transaction Code of Transaction Type *PO*. Required when the value of Generate Purchasing Transactions parameter is set to 3 or 4.	None
	Requisition Transaction Code	Requisition Order Transaction Code (Required)	None
	Parent Replenishment Type	If set to TI, then it will create Stock Item Transfer Issues when the Parent Replenishment flag is checked on the Inventory (INVN) table. If set to SRQ, then it will create Stock Requests when the Parent Replenishment flag is checked on the Inventory (INVN) table.	TI
	Stock Request Transaction Code	Stock Request Transaction Code (Required when Parent Replenishment Type is SRQ). Must be a valid Transaction Code of Transaction Type SRQ.	
	Stock Item Transfer Issue Transaction Code	Stock Item Transfer Issue Transaction Code (Required). Must be a valid Transaction Code of Transaction Type *TI*.	TI
	Process Run Date	Process Run Date in MM/DD/YYYY format (if not entered then defaulted to Current date) (** **Refer to Note**: Pivot Date/Year Validation, while entering the date)	None

	Create IRR Transaction?	Create IRR Transaction? (Required, not overrideable). Must be 'No' for the Inventory Replenishment Review batch job.	No
	Inventory Replenishment Transaction Code	Transaction Code of the generated IRR transaction. The value is not overrideable. Must be blank for the Inventory Replenishment Review batch job.	Blank
	Inventory Replenishment Transaction Department Code	Transaction Department Code of the generated IRR transaction. The value is not overrideable. Must be blank for the Inventory Replenishment Review batch job.	Blank
	Inventory Replenishment Transaction Unit	Transaction Unit Code of the generated IRR transaction. The value is not overrideable. Must be blank for the Inventory Replenishment Review batch job.	Blank
	Inventory Replenishment Transaction Prefix	Transaction Prefix used to generate the Transaction ID of the generated IRR transaction. The value is not overrideable. Must be blank for the Inventory Replenishment Review batch job.	Blank
	Transaction Status	Status for the IRR transaction to be loaded. The value is not overridable. Must be blank for the Inventory Replenishment Review batch job.	Blank
	Set Exclude to Yes	Exclude for the IRR transaction to be loaded (Required). The value must be set to Yes or No. The Exclude check box, when checked on the IRR transaction, indicates that the generated Inventory Replenishment record will not be selected when the Inventory Replenishment batch job is run.	

	XML File Name	File name containing the IRR transaction xml. The value is not overrideable. Must be blank for the Inventory Replenishment Review batch job.	Blank
	Use Backordered Quantity from Inventory Inquiry into Reorder Quantity calculations (USE_BACK_ORDER_QTY)	Ability to use Backordered Quantities from Inventory Inquiry (INVNQ) to the Inventory Replenishment (IREP) Reorder Quantity calculations. The value must be set to either Y (Yes) or N (No). When the value is set to Y, the system will consider Backordered Quantities from INVNQ to the IREP Reorder Quantity calculations. When the value is set to N, the system will not consider Backordered Quantities from INVNQ to the IREP Reorder Quantity calculations.	N
	Assign RQ Group Number (ASGN_RQ_GP)	Assign RQ Group Number (Required). Value must be set to *Yes* or *No*. When set to *Yes*, the system will consolidate the Requisition (RQS) based on the RQ Group Number. The system will not consolidate the RQS if the value is set as *No*.	No

- **From Warehouse Code and To Warehouse Code logic:**

  - The From Warehouse and the To Warehouse parameters must both either be blank or populated; otherwise, the job will fail.

  - Comma delineated values cannot be entered. If a Comma is entered, Advantage will search for a Warehouse with a Comma as part of the Warehouse Code entered.

  - If the From Warehouse Code and the To Warehouse Code contain the same value, then inventory items belonging to the specified warehouse are selected for processing.

  - If the From Warehouse Code and the To Warehouse Code values are blank then inventory items of all warehouses are selected.

  - If the From Warehouse Code and the To Warehouse Code contain two different values, then the job will select these two Warehouse codes and any Warehouse codes in between. (*The selection logic is based on the ASCII text sort order. See below for more details.) If no records are found the job will end with a status of warning and it will issue a warning in the job log. Note: The value entered for the From Warehouse parameter cannot be greater than the value for the To Warehouse parameter or the job will fail.

- If ABC Class parameter is entered then inventory items with these ABC Classes are selected for processing. If ABC Class code is blank then inventory items with any ABC Class are selected.

- If a valid Master Agreement is found for the inventory item then Transaction Code on added IREP entry is set to Delivery Order Transaction Code parameter value else it is set to Requisition Transaction Code parameter value. Transaction Code decides whether to generate Delivery Order or Requisition transactions for reordering.

  - For a valid Master Agreement with Catalog lines, the following values are verified before creating an Inventory Replenishment (IREP) entry.

    - The IREP Review job will search for active Catalog Maintenance (CATM) records based on the Stock Item and Supplier Part Number from the Crosswalk table (starting from the default CATX record). If a match is found on CATM for the stock item and supplier part number found on the crosswalk, it will create a Delivery Order (DO) entry on the IREP table.

    - If no match is found, then the system will search if there is any Master Agreement with Line Type = Item.

- Process Run Date is used in checking the validity of Master Agreement transaction. One of the validating conditions for MA is that its effective begin date must be equal to or less than Process run date and expiration date must be equal to or greater than Process run date.

Special Note on ASCII text sort order: As stated previously, if the From Warehouse Code and the To Warehouse Code contain two different values, then the job will select these two Warehouse codes and any Warehouse codes in between. The selection logic is based on the ASCII text sort order. This differs from numeric order. Items are sorted based upon the first digit or character, regardless of overall length. Thus, a value of 0500 is different than a value of 500. Alphabetic characters are greater than numeric, so A500 is greater than 500. Below is a table that illustrates how the characters are ranked according to the American Standard Code for Information Interchange (ASCII) ordering:

Rank	Chr	Rank	Chr	Rank	Chr
1	Space	33	@	65	`
2	!	34	A	66	a
3	"	35	B	67	b
4	#	36	C	68	c
5	$	37	D	69	d
6	%	38	E	70	e
7	&	39	F	71	f
8	'	40	G	72	g
9	(	41	H	73	h
10	)	42	I	74	i
11	*	43	J	75	j
12	+	44	K	76	k
13	,	45	L	77	l
14	-	46	M	78	m
15	.	47	N	79	n
16	/	48	O	80	o
17	0	49	P	81	p
18	1	50	Q	82	q
19	2	51	R	83	r
20	3	52	S	84	s
21	4	53	T	85	t
22	5	54	U	86	u
23	6	55	V	87	v
24	7	56	W	88	w
25	8	57	X	89	x
26	9	58	Y	90	y
27	:	59	Z	91	z
28	;	60	[	92	{
29	<	61	\	93		
30	=	62	]	94	}
31	>	63	^	95	~
32	?	64	_	96	DEL

Sort Criteria

Inventory items selected are sorted by:

- Transaction Code (DOC_CD)
- Warehouse Code (WHSE_CD)
- Stock Item (STK_ITM)

Selection Criteria

- Selection criteria for obtaining inventory items from Inventory table that needs to be reordered is:

Warehouse Code >= From Warehouse Code batch parameter value and Warehouse Code <= To Warehouse Code batch parameter value if both From Warehouse Code and To Warehouse Code parameters are entered and

ABC Class = ABC Class batch parameter value if entered and

Active flag = true and

Parent Item flag = false and

Manual reorder flag = false and

If the Transfer Reorder flag on the Warehouse (WHSE) page is 'Checked' then ((Available Quantity + On Order Quantity + (Currently Requested Quantity – Back Ordered Quantity) + In Transfer Quantity) <= Reorder Level)

or

If the Transfer Reorder flag on the Warehouse (WHSE) page is 'Unchecked' then ((Available Quantity + On Order Quantity + (Currently Requested Quantity – Back Ordered Quantity)) <= Reorder Level)

and

Inventory item does not exist on Inventory Replenishment Table.

If the Exclude Pending Replenishments parameter is set to Yes, the quantity for the Inventory record's Warehouse and Stock Item are added for all Delivery Order, Purchase Order, Requisition, and Stock Item Transfer Issue transactions that are currently in a Draft Phase. Inventory records are excluded from selection when the sum of pending quantity values is equal to or greater than the reorder quantity. If the Exclude Pending Replenishments parameter is set to No, then there is no effect on the selection.

Problem Resolution

- Look into log of job for errors.
- The process has restart ability. If the job fails for any data setup reasons then correct the data setup and restart the job. When job is restarted it begins processing from the last unsuccessful inventory item on which the failure occurred.

2.1.8 Inventory Replenishment Review Transaction Generation

Chain Name	Inventory Replenishment Review Transaction Generation
Recommended Frequency	On Demand - after the Reorder Quantity batch job, and before the Inventory Replenishment chain job
Single Instance Required	Yes
Can be restarted?	N/A
Reports generated	None

Overview

The Inventory Replenishment Review Transaction Generation chain job is essentially the same as the Inventory Replenishment Review batch job, except that the batch job directly creates records on the Inventory Replenishment (IREP) table, while this chain creates Inventory Replenishment Review (IRR) transactions. Creating IRR transactions allows for adjustment of selected replenishment values, review and approval, then IREP records are created as the IRR transactions are submitted to the Final status. Only one of the jobs (Inventory Replenishment Review Transaction Generation chain or Inventory Replenishment Review job) should be run as part of the nightly cycle.

The following job steps comprise the Inventory Replenishment Review Transaction Generation chain process:

1. Inventory Replenishment
2. *System Maintenance Utility (Load Transactions)
3. *System Maintenance Utility (Submit Transactions)

*Refer to the System Maintenance Utility run sheet in the *CGI Advantage Financial - Utilities Run Sheets* guide for information on Steps 2 and 3 of this chain job.

The acceptable job return codes (configured in the Configure Chain Job section of the Job Setup in AMS Advantage) for the jobs in the Inventory Replenishment Review Transaction Generation chain are delivered to be set to Successful. As with all CGI Advantage chain jobs, these acceptable return codes are configurable and may be changed to meet certain requirements.

Chain Job Return Code

The following table shows the potential return codes for the Inventory Replenishment Review Transaction Generation chain. Note that the chain job will end with the highest return code across all of the jobs.

Return Code	Condition
Successful (1)	All of the jobs end successfully.
Warning (4)	One of the jobs in the chain ends with a return code of "Warning".

Return Code	Condition
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".

Problem Resolution

Please refer to the individual job "Problem Resolution" section for more details.

Inventory Replenishment Review Transaction Generation: Inventory Replenishment Job

Job Name	Inventory Replenishment Review
Recommended Frequency	On Demand This job must be run as part of the Inventory Replenishment Review Transaction Generation chain.
Single Instance Required	Yes
Can be restarted?	Yes
Reports generated	None

Overview

The Inventory Replenishment Review process searches the Inventory table for items that need to be reordered (generally, records where Available Quantity is less than Reorder Level) and creates an Inventory Replenishment Review (IRR) transaction for each Warehouse selected. An Inventory Replenishment record is added to the transaction for each Stock Item selected until the maximum number of lines defined on the Transaction Control (DCTRL) table is reached, and then another transaction is started for the same Warehouse. When all Stock Items grouped by Warehouse have been processed successfully, the next two System Maintenance Utility steps will load the XML file into Advantage and optionally submit the transactions.

At this point, if Workflow has been set up for IRR transactions, interested parties will have the chance to make changes and/or approve/reject. This automatically takes care of notifications and tracking of new IREP records without the need for searching on the IREP table. As a transaction is submitted to Final Phase, a record is created on the Inventory Replenishment (IREP) table with all of the values from each line on the Inventory Replenishment section exactly as if the Inventory Replenishment Review batch job had created them directly, but with any changes made during the workflow process.

If a valid Master Agreement is found for the inventory item, the Transaction Code for the IREP record is set to the Delivery Order (DO) Transaction Code; otherwise, it is set to the Requisition (RQ) Transaction Code. The user has the choice to go to the IREP page and select or deselect items to be reordered by selecting the Exclude flag.

The entries on the IREP table are then later selected by the Inventory Replenishment chain to generate Delivery Order and Requisition transactions.

Process Steps	Messages
1. Parameter Validation	• Validating Batch Parameters *If any is found to be invalid, an error will be issued*
2. Selection from Inventory (INVN) table	The following messages will be issued when the job runs. • Inventory Replenishment already has a record for the Inventory entry (Warehouse: <Warehouse>, Stock Item: <Stock Item>). Record skipped. • IRR transactions created: <count> (IREP components: <count>) • Run Ended

Major Input

• Inventory Maintenance (R_INVN)

Other Input

• ABC Classification (R_ABC)

• Commodity (R_COMM_CD)

• MA Transaction (MA_DOC_COMM, MA_DOC_HDR, MA_DOC_VEND)

• Warehouse (R_WHSE)

Batch Parameters

Parameter	Description	Default Value
ABC_CLS	ABC Class Optional.	No Default
AMSEXPORT	Export Location at Inventory Replenishment Job Required. This must be a valid directory and will be used to determine where the XML file will be written.	$$AMSROOT$$/ ExportImport

Parameter	Description	Default Value
AMSPARM	Parameter Location at Inventory Replenishment Job Required. This must be a valid directory containing the file designated by the Parameter File parameter.	$$AMSROOT$$/ Parms
BILL_LOC_CD	Bill To Required. Must be a valid Location value on the Procurement Location table with Location Type *Billing*.	No Default
CREATE_IRR_DOC	Create IRR Transaction? (Yes/No) Required, not overrideable. Must be *Yes* for the Inventory Replenishment Review Transaction Generation chain.	Yes
DOC_STA_CD	Transaction Status (1 - Held / 2 - Ready) Required. Must be 1 or 2.	2
EXCL_PENDING	Exclude Pending Replenishments (Required). Value must be Yes or No. When the value is set to Yes, the system will search for any DO, PO, RQ, and TI transactions that are in Draft Phase for the Warehouse and Stock Item of the Inventory record and the quantity ordered will be reduced accordingly.	No
GEN_PURCH_DOCS	Generate Purchasing Transactions (Required). Value must be 1 (Delivery Orders and Requisitions), 2 (Requisitions only), 3 (Delivery Orders and Purchase Orders), or 4 (Purchase Orders only).	1
DO_DOC_CD	Generate Purchasing Transactions (Required). Value must be 1 (Delivery Orders and Requisitions), 2 (Requisitions only), 3 (Delivery Orders and Purchase Orders), or 4 (Purchase Orders only).	1

Parameter	Description	Default Value
PO_DOC_CD	Purchase Order Transaction Code (Conditionally Required). Must be a Transaction Code with a Transaction Type of *PO*. This parameter is required when the value of the Generate Purchasing Transactions parameter is set to is 3 or 4.	No Default
TI_DOC_CD	Stock Item Transfer Issue Transaction Code Required. Must be a Transaction Code with a Transaction Type of *TI.*	TI
FROM_WHSE_CD	From Warehouse Code Conditionally required. Must be a valid Warehouse value on the Warehouse table, and it is required when To Warehouse Code is provided.	No Default
IRR_DOC_CD	Inventory Replenishment Transaction Code Required. Must be a Transaction Code with a Transaction Sub-Type of *IRR*.	IRR
IRR_DOC_DEPT_CD	Inventory Replenishment Transaction Dept Conditionally required. Must be a valid Department value in the Department table when the Use Warehouse Dept/Unit Parameter is *No*.	No Default
IRR_DOC_PREFIX	Inventory Replenishment Transaction Prefix Optional. Prefix used for generating the Transaction ID.	No Default
IRR_DOC_UNIT_CD	Inventory Replenishment Transaction Unit Conditionally required. Must be valid Department/Unit values on the Unit table when the Use Warehouse Dept/Unit Parameter is *No.*	No Default

Parameter	Description	Default Value
LOAD_FILE_NM	Load Parameter File (.txt) Required, not overrideable. The parameter file name for the System Maintenance Utility job, which will load IRR transactions.	IRRLoadParm.txt
RQ_DOC_CD	Requisition Transaction Code Required. Must be a Transaction Code with a Transaction Type of *RQ*.	No Default
RUN_DT	Process Run Date in MM/DD/YYYY format. Optional. If not entered, the value defaults to the current date.	No Default
SET_EXCL	Exclude for the IREP record. Required. The value must be set to Yes or No. The Exclude check box, when checked on the IREP record, indicates that it will not be selected when the Inventory Replenishment batch job is run.	No
SHIP_LOC_CD	Ship To Required. Must be a valid Location value on the Procurement Location table with a Location Type of *Shipping*.	No Default
SUBMIT_FILE_NM	Submit Parameter File (.txt) Required, not overrideable. The parameter file name for the System Maintenance Utility job, which will submit the IRR transactions.	IRRSubmit.txt
TO_WHSE_CD	To Warehouse Code Conditionally required. Must be a valid Warehouse value on the Warehouse table, required when From Warehouse Code is provided.	No Default
WHSE_DEPT_UNIT	Use Warehouse Dept/Unit? (Yes/No) Required. Must be *Yes* or *No*.	No Default

Parameter	Description	Default Value
XML_FILE_NM	Transaction XML file for created IRR Transactions (.xml) Required. The name of the file used by the System Maintenance Utility job that loads the IRR transactions.	IRRDoc.xml

Major Output

- IRR Transaction XML file

- Load Parameter file

- Submit Parameter file

Job Return Code

The following table shows the potential job return codes for the Inventory Replenishment job.

Return Code	Condition
Successful (1)	All of the selected records are processed successfully.
Warning (4)	This return code is issued under the following condition: - No eligible records are found on the Inventory table.

Failed (12)	The job fails under the following conditions:
	
	One or more parameter(s) are invalid.
	
	   - One or more required parameter(s) are not entered.
	   - Run time exceptions for unexpected situations.
	
	When this job ends with a return of code Failed, subsequent jobs in the chain are set to Inactive.

Terminated (16)	This return code is issued when the job is terminated by the user. When this job ends with a Return Code of Terminated subsequent jobs in the chain are set to Inactive.
System Failure (20)	This return code 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

Inventory items selected are sorted by:

- Transaction Code (DOC_CD)
- Warehouse Code (WHSE_CD)

- Stock Item (STK_ITM)

Special Note on ASCII text sort order: If the From Warehouse Code and the To Warehouse Code contain two different values, then the job will select these two Warehouse codes and any Warehouse codes in between. The selection logic is based on the ASCII text sort order. This differs from numeric order. Items are sorted based upon the first digit or character, regardless of overall length. Thus, a value of 0500 is different than a value of 500. Alphabetic characters are greater than numeric, so A500 is greater than 500. Below is a table that illustrates how the characters are ranked according to the American Standard Code for Information Interchange (ASCII) ordering:

Rank	Char		Rank	Char		Rank	Char
1	space		33	@		65	`
2	!		34	A		66	a
3	"		35	B		67	b
4	#		36	C		68	c
5	$		37	D		69	d
6	%		38	E		70	e
7	&		39	F		71	f
8	'		40	G		72	g
9	(		41	H		73	h
10	)		42	I		74	i
11	*		43	J		75	j
12	+		44	K		76	k
13	,		45	L		77	l
14	-		46	M		78	m
15	.		47	N		79	n
16	/		48	O		80	o
17	0		49	P		81	p
18	1		50	Q		82	q

Rank	Char		Rank	Char		Rank	Char
19	2		51	R		83	r
20	3		52	S		84	s
21	4		53	T		85	t
22	5		54	U		86	u
23	6		55	V		87	v
24	7		56	W		88	w
25	8		57	X		89	x
26	9		58	Y		90	y
27	:		59	Z		91	z
28	;		60	[		92	{
29	<		61	\		93	|
30	=		62	]		94	}
31	>		63	^		95	~
32	?		64	_			

Selection Criteria

Selection criteria for obtaining inventory items from the Inventory table to be reordered are:

- Warehouse Code >= From Warehouse Code batch parameter value and Warehouse Code <= To Warehouse Code batch parameter value, if both From Warehouse Code and To Warehouse Code parameters are entered

- ABC Class = ABC Class batch parameter value, if entered

- Active flag = true

- Parent Item flag = false

- Manual Reorder flag = false

- If the Transfer Reorder flag on the Warehouse (WHSE) page is checked then ((Available Quantity + On Order Quantity + (Currently Requested Quantity – Back Ordered Quantity) + In Transfer Quantity) <= Reorder Level) or else if the Transfer Reorder flag on the WHSE page is unchecked then ((Available Quantity + On Order Quantity + (Currently Requested Quantity – Back Ordered Quantity)) <= Reorder Level)

- Inventory item does not exist on the Inventory Replenishment (IREP) table.

- If the Exclude Pending Replenishments parameter is set to Yes, the quantity for the Inventory record's Warehouse and Stock Item are added for all Delivery Order, Purchase Order, Requisition, and Stock Item Transfer Issue transactions that are currently in the Draft Phase. Inventory records are excluded from selection when the sum of pending quantity values is equal to or greater than the reorder quantity. If the Exclude Pending Replenishments parameter is set to No, there is no effect on the selection.

From Warehouse Code and To Warehouse Code logic:

- The From Warehouse and the To Warehouse parameters must both either be blank or populated; otherwise, the job will fail.

- Comma-delineated values cannot be entered. If a comma is entered, Advantage will search for a Warehouse with a comma as part of the Warehouse Code entered.

- If the From Warehouse Code and the To Warehouse Code contain the same value, then inventory items belonging to the specified warehouse are selected for processing.

- If the From Warehouse Code and the To Warehouse Code values are blank, then inventory items of all warehouses are selected.

- If the From Warehouse Code and the To Warehouse Code contain two different values, then the job will select these two Warehouse Codes and any Warehouse Codes in between (the selection logic is based on the ASCII text sort order, please see the Sort Criteria section for more details). If no records are found, the job will end with a status of Warning, and it will issue a warning in the job log. Please note that the value entered for the From Warehouse parameter cannot be greater than the value for the To Warehouse parameter or the job will fail.

- If ABC Class parameter is entered then inventory items with these ABC Classes are selected for processing. If ABC Class code is blank then inventory items with any ABC Class are selected.

- If a valid Master Agreement is found for the inventory item then Transaction Code on the added IREP entry is set to the Delivery Order Transaction Code parameter value; otherwise, it is set to the Requisition Transaction Code parameter value. Transaction Code decides whether to generate Delivery Order or Requisition transactions for reordering.

  - For a valid Master Agreement with Catalog lines, the following values are verified before creating an Inventory Replenishment (IREP) entry.

    - The IREP Review job will search for active Catalog Maintenance (CATM) records based on the Stock Item and Supplier Part Number from the Crosswalk table (starting from the default CATX record). If a match is found in CATM for the stock item and supplier part number found on the crosswalk, it will create a Delivery Order (DO) entry on the IREP table.

    - If no match is found, then the system will search if there is any Master Agreement with Line Type = Item.

- Process Run Date is used in checking the validity of Master Agreement transactions. One of the validating conditions for the MA is that its Effective Begin Date must be equal to or less than Process run date and expiration date must be equal to or greater than the Process run date.

Problem Resolution

- The process has the ability to restart once all parameters have been successfully validated and record selection has progressed to the first checkpoint. When the job is restarted, it begins processing from the last unsuccessful inventory item on which the failure occurred.

The following tables show the possible return codes and recommendations for each processing step.

Step 1: Parameter Validation

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	All of the parameters are validated successfully.	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:** Delivery Order Transaction Code is required.	Schedule a new job after entering a valid value for the parameter.	N/A
	Entered parameters are not valid. **Sample Message:** Shipping Location Code with Location Type *Shipping* does not exist on the Procurement Location table.	Schedule a new job after entering a valid value for the parameter.	N/A
	Failed because of runtime exceptions for an unexpected situation.	Failure reason needs to be investigated before scheduling a new job.	N/A
Terminated (16)	Job is terminated manually by the user.	The reason for the termination needs to be investigated before	N/A

Possible Return Codes	Condition	Recommendation	Other Instructions
		scheduling a new job.	
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 scheduling a new job.	N/A

Step 2: Selection from Inventory (INVN) table

Possible Return Codes	Condition	Recommendation	Other Instructions
Successful (1)	All of the selected records processed successfully.	N/A	N/A
Warning (4)	No records are selected. This is a normal condition that sets any subsequent jobs to inactive.	Confirm selection criteria, and schedule a new job if necessary.	N/A
Non Fatal Error (8)	This step does not issue this return code.	N/A	N/A
Failed (12)	Failed during attempt to write the load parameter file or the IRR Transaction XML file.	Verify that the file system is not full and the job manager has read and write access before scheduling a new job.	N/A
	Failed because of runtime exceptions for an unexpected situation.	Failure reason needs to be investigated before scheduling a new job.	N/A
Terminated (16)	Job is terminated manually by the user.	The reason for the termination needs to be investigated before scheduling a new job.	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 scheduling a new job.	N/A

2.1.9 Lead Time Calculation

Description

The Lead Time Calculation is used to compute projected lead times for requisition processing and vendor response. The two lead times are used to determine how far in advance an order or request should be placed. If an order is placed too far in advance, the stock items will have to be stored in inventory before they are ready for use. This will lead to an increase in inventory costs. Also, if an order is placed too late, the stock items may not arrive on time, thus causing stock outs. The Requisition Processing Lead Time is the amount of time it takes for an item to be ordered once it has been requested. The vendor response lead time is the amount of time it takes between placing an order and receiving the stock items. These figures are computed using historical data of transactions found in the Commodity Journal.

The Lead Time Calculation batch job is primarily run at the end of the month before Reorder Quantity Calculation is run. It calculates the lead time for requisition processing and vendor response based on the dates of the requisition (RQ) and related purchase order (PO) and receiving (RC) transactions. The batch reads the Commodity Journal and calculates the lead time of each stock item based on the specified parameters. The Requisition and Vendor lead time columns are updated on the Inventory Table.

This program calculates the requisition and vendor lead times for all stock items with procurement activity. It searches the Commodity Journal for RQ, PO, and RC transactions that fall within a specified time frame. The amount of time between the RQ and PO is the Requisition Lead Time, and the amount of time between the PO and RC is the Vendor Lead Time. Once calculated, the lead times are then updated on the Inventory Table. Also, an Exception Report is used to show all transactions not selected due to the number of transactions processed being greater than the TOT_ALT_ORD field on the Warehouse.

The Requisition and Vendor Lead Times are calculated for each stock item with a fully referenced RQ or PO found in the Commodity Journal. The same stock item found in different warehouses will have different calculations. If an item has not been requested, ordered, or received in the given time frame, these calculations will not be computed.

Requisition Lead Time Calculation

The Requisition Lead Time is calculated by multiplying the number of items purchased by the number of days between the initial RQ and the initial PO. This calculation is done for each PO Commodity Line found referencing the Requisition. If the total number of items requested is equal to the number of items purchased, then the quantities calculated above are summed up and divided by the total number of items requested. If the quantities are not equal, the RQ is skipped, and no calculations are performed. This is the Requisition lead time for one RQ Commodity Line.

If more than one RQ Commodity Line is found, then this process is repeated until all RQ's have requisition lead time calculations. These are then averaged to produce one lead time calculation for each warehouse stock item. This value should be rounded up and is the Requisition Lead time. If no RQ or referencing PO transactions are found in the Commodity Journal the Requisition Lead Time will not be computed. If calculated, the Requisition Lead Time Field (REQ_LEAD_DY) on the Inventory Table should be updated for each stock item.

Vendor Lead Time Calculation

The Vendor lead time is calculated by multiplying the number of items received by the number of days between the initial PO and the initial RC. This calculation is done for each RC transaction found referencing the Purchase Order. If the total number of items received is equal to the

number of items purchased, then the quantities calculated above are summed up and divided by the total number of items purchased. This is the Vendor Lead Time for one PO transaction. If the quantities do not equal, the lead time is not calculated, and the next PO Commodity Line is selected.

If more than one PO Commodity Line is found, then this process is repeated until all of the PO's Commodity Lines have vendor lead time calculations. These are then averaged to produce one lead time calculation for each warehouse stock item. This value should be rounded up and is the Vendor Lead time. If no PO Commodity Line or referencing RC Commodity Lines are found in the Commodity Journal, the Vendor Lead Time will not be computed. After each calculation, the Vendor Lead Time Field (VEND_LEAD_DY) on the Inventory Table should be updated for each stock item.

When to Run

This batch process is primarily run at the end of the month before Reorder Level and Reorder Quantity Calculation is run. The batch process can only be run in singleton mode*.

Major Input

Commodity Journal (JRNL_COMM)

Output

- Inventory Table (R_INVN)

- Statistic Output to log:

  - Run Status

  - Number of Requisition Lead times calculated

  - Number of Vendor Lead times calculated

Parameters

Job	Parameter	Description	Default Value
Lead Time Calculation	From Date (FROM_DT)	Start of date range used in selecting transactions	None
	Client Name (CLIENT_NM)	Client Name to appear on Exception Report	None

Job	Parameter	Description	Default Value
	From Warehouse Code (FROM_WHSE_CD)	From Warehouse Code is required when the To Warehouse Code parameter is not blank. If the To Warehouse Code parameter is blank, then this parameter must be blank. Refer to the bulleted list below this table for special notes on this parameter.	Blank
	To Warehouse Code (TO_WHSE_CD)	To Warehouse Code is required when the From Warehouse Code parameter is not blank. If the From Warehouse Code parameter is blank, then this parameter must be blank. Refer to the bulleted list below this table for special notes on this parameter.	Blank

From Warehouse Code and To Warehouse Code logic:

- The From Warehouse Code and the To Warehouse Code parameters must both either be blank or populated; otherwise, the job will fail.

- Comma delineated values cannot be entered. If a Comma is entered, Advantage will search for a Warehouse with a Comma as part of the Warehouse Code entered.

- If the From Warehouse Code and the To Warehouse Code contain the same value, then inventory items belonging to the specified warehouse are selected for processing.

- If the From Warehouse Code and the To Warehouse Code values are blank then inventory items of all warehouses are selected.

- If the From Warehouse Code and the To Warehouse Code contain two different values, then the job will select these two Warehouse codes and any Warehouse codes in between. (*The selection logic is based on the ASCII text sort order. See below for more details.) If no records are found, the job will end with a status of warning and it will issue a warning in the job log. Note: The value entered for the From Warehouse Code parameter cannot be greater than the value for the To Warehouse Code parameter or the job will fail.

Special Note on ASCII text sort order: As stated previously, if the From Warehouse Code and the To Warehouse Code contain two different values, then the job will select these two Warehouse codes and any Warehouse codes in between. The selection logic is based on the ASCII text sort order. This differs from numeric order. Items are sorted based upon the first digit or character, regardless of overall length. Thus, a value of 0500 is different than a value of 500. Alphabetic characters are greater than numeric, so A500 is greater than 500.

For example, a user wants to process a range of warehouses that contain the following six warehouse codes: 101, !A02, AAA01, AB01, cD02, and CD03. In order for the batch process to select all records in the aforementioned range, the user must specify the value of "!A02" in the "From Warehouse Code" parameter field and the value of "cD02" in the "To Warehouse Code" parameter field. The system will process stock items in this warehouse order: !A02, 101, AAA01, AB01, CD03, cD02.

Below is a table that illustrates how the characters are ranked according to the American Standard Code for Information Interchange (ASCII) ordering:

Rank	Chr	Rank	Chr	Rank	Chr
1	Space	33	@	65	`
2	!	34	A	66	a
3	"	35	B	67	b
4	#	36	C	68	c
5	$	37	D	69	d
6	%	38	E	70	e
7	&	39	F	71	f
8	'	40	G	72	g
9	(	41	H	73	h
10	)	42	I	74	i
11	*	43	J	75	j
12	+	44	K	76	k
13	,	45	L	77	l
14	-	46	M	78	m
15	.	47	N	79	n
16	/	48	O	80	o
17	0	49	P	81	p
18	1	50	Q	82	q
19	2	51	R	83	r
20	3	52	S	84	s
21	4	53	T	85	t
22	5	54	U	86	u
23	6	55	V	87	v
24	7	56	W	88	w
25	8	57	X	89	x
26	9	58	Y	90	y
27	:	59	Z	91	z
28	;	60	[	92	{
29	<	61	\	93		
30	=	62	]	94	}
31	>	63	^	95	~
32	?	64	_	96	DEL

Sort Sequence

Primary Transactions that are selected are sorted by:

- Warehouse Code   WHSE_CD
- Commodity Code   COMM_CD
- Stock Item Suffix   STK_ITM_SFX

- Transaction Code   DOC_CD
- Transaction Department   DOC_DEPT_CD
- Transaction ID   DOC_ID
- Vendor Line Number   DOC_VEND_LN_NO
- Commodity Line Number   DOC_COMM_LN_NO
- Transaction Version Number   DOC_VER_NO
- Record Number   REC_NO

For each primary transaction that references another transaction, the referenced transactions are sorted by:

- Transaction Code   DOC_CD
- Transaction Department   DOC_DEPT_CD
- Transaction ID   DOC_ID
- Vendor Line Number   DOC_VEND_LN_NO
- Commodity Line Number   DOC_COMM_LN_NO
- Transaction Version Number   DOC_VER_NO

Selection Criteria

Selection criteria for Primary Transactions are:

- Transaction Date > From Date
- Warehouse is not null
- Transaction Type is RQ or PO
- Stock Item is not a Parent Item
- Warehouse >= From Warehouse Code And Warehouse <= To Warehouse Code parameter (if From Warehouse Code and To Warehouse Code parameters are entered)

Selection criteria for Referenced Transactions are:

- Transaction Code = Referenced Transaction Code
- Transaction Department = Referenced Transaction Department
- Transaction ID = Referenced Transaction ID
- Vendor Line Number = Referenced Vendor Line Number
- Commodity Line Number = Referenced Commodity Line Number
- Transaction Type is RQ or PO

Problem Resolution

In case of a problem, the batch process should be run again with the same parameters.

2.1.10 Physical Inventory Freeze Process

Description

The Physical Inventory Freeze Process allows users to add multiple stock items to the Inventory Freeze (INVF) table simultaneously. This process will assign a single Event ID to all INVF records that it processes in each run. Items will have the Frozen for Accounting flag on the Inventory (INVN) table and Freeze for Count on the INVF record set to *Yes* depending on the Freeze Stock parameter. Items with Detail Information Required set to *Yes* on INVN will always be frozen. When an INVF record is created, the On Cycle Count flag on INVN will be set to *Yes* for that Stock Item.

When to Run

On Demand

Major Input

- Inventory Table (INVN) - R_INVN

- Inventory by Location (ILOC) - R_INVN_BY_LOC

- Inventory Maintenance Detail (INVND) - R_INVN_DET

- Inventory Freeze Table Records (INVF) – R_INVF

  - When using Count Option 2 (Manual Count)

Output

- Inventory Freeze Table Records (INVF) – R_INVF

- Statistics to log

Parameters

Job	Parameter	Description	Default Value
InvFreeze	Warehouse Code WHSE	Warehouse Code (Required) The value must exist in the Warehouse table.	Blank

Job	Parameter	Description	Default Value
	Count Option COUNT_OPT	Count Option (Required) 1 – Due to Count 2 – Manual Count 3 – ABC Class 4 –Stock Item 5 –Stock Item Range 6 – Commodity Code 7 – Negative Balance 8 – Inventory Location 9 – Inventory Location Range 10 - Wall to Wall	Blank
	Stock Group STK_GP	Stock Group (Optional).	Blank
	Adjustment Code ADJ_CD	Adjustment Code (Required) The Adjustment Code must exist in the Inventory Adjustment table and have Use for Reconciliation checked.	Blank
	From Location IDs FROM_LOC_IDS	From Location IDs 1-8 (Optional). From Location IDs 1-8 cannot be greater than To Location IDs 1-8	Blank
	To Location IDs TO_LOC_IDS	To Location IDs 1-8 (Optional). Both the From and To Location IDs 1-8 are required, if either one of the parameters is entered.	Blank
	Blind Count BLIND_CT	Blind Count (Conditionally Required). Required if Count Option is other than *2 - Manual Count*, ignored if Count Option is *2 – Manual Count*.	Y

Job	Parameter	Description	Default Value
	ABC Class ABC_CLS	ABC Class (Conditionally Required) • Required if Count Option is 3 – ABC Class. • Optional if Count Option is: 1 – Due to Count, 5 – Stock Item Range, 9 – Warehouse Storage Location Range, or 6 – Commodity Code.	Blank
	Stock Item / Stock Item From ITEM_FRM	Stock Item / Stock Item From (Conditionally Required) Required if Count Option is *4 – Stock Item* or 5 – Stock Item Range.	Blank
	Stock Item To ITEM_TO	Stock Item To (Conditionally Required) Required if Count Option is *5 – Stock Item Range*.	Blank
	Commodity Code COMM_CD	Commodity Code (Conditionally Required) Required if Count Option is *6 – Commodity Code*.	Blank
	Inventory Location/ Inventory Location From INV_LOC_FRM	Inventory Location/ Inventory Location From (Conditionally Required) Required if Count Option is *8 – Inventory Location* or *9 – Inventory Location Range*.	Blank
	Inventory Location To INV_LOC_TO	Inventory Location To (Conditionally Required) Required if Count Option is *9 – Inventory Location Range*.	Blank
	Maximum Items MAX_ITEMS	Maximum Items (Optional) Maximum number of items to be selected within the warehouse for the Cycle Counting event. If left blank, all eligible items will be selected.	Blank

Job	Parameter	Description	Default Value
	Freeze Stock	Freeze Stock: • Yes - Stock item will be frozen. • No - Stock item will not be frozen.	Yes

- **Count Option 2 – Manual Count** logic:
  - The manual count option will assign an Event ID to all INVF records where Warehouse is equal to the Warehouse parameter and currently do not have an Event ID.
  - Items with Detail Information Required set to *No* on INVN will be frozen at this time according to the Freeze Stock parameter.
  - Items with Detail Information Required set to *Yes* on INVN are frozen immediately upon insertion into INVF, not by this process.
  - The selection criteria and processing listed below do not apply to this option.

- **From Location IDs 1-8** and **To Location IDs 1-8** logic:
  - Location Structure is required, when the From/To Location IDs 1-8 are entered.
  - Both the From and To Location IDs 1-8 are required, if either one of the parameters is entered.
  - From Location IDs 1-8 cannot be greater than To Location IDs 1-8.
  - Both the From and To Location IDs 1-8 should be a valid Inventory Location on the Warehouse Inventory Location table for each of the warehouses that satisfy the Warehouse selection criteria.

- **Blind Count** logic:
  - If Y, the Blind Count check box on the created INVF records will be set to Yes (checked).
  - If N, the Blind Count check box on the created INVF records will be set to No (not checked).
  - Blind Count has no effect when using Count Option 2, Manual Count. It is set when inserting the INVF record manually.

- Based on the Count Option parameter value in the Inventory Freeze job, **Freeze Stock** parameter logic works as follows:
  - If the Count Option parameter is set to 1-9, the system freezes or unfreezes based on the Freeze Stock parameter value.
  - If the Count Option parameter is set to 10, the Freeze Stock parameter value should always be Yes. An error message "Parameter cannot be set to No when count option is 10" is issued in the job log if the parameter is set to No.
  - If the Freeze Stock parameter is left blank, the job fails during the parameter validation step. The following error is displayed in the job log: "Freeze Stock parameter is required".

Special Note on ASCII text sort order: The selection logic is based on the ASCII text sort order. This differs from numeric order. Items are sorted based upon the first digit or character, regardless of overall length. Thus, a value of 0500 is different than a value of 500. Alphabetic characters are greater than numeric, so A500 is greater than 500. Below is a table that illustrates how the characters are ranked according to the American Standard Code for Information Interchange (ASCII) ordering:

Rank	Chr	Rank	Chr	Rank	Chr
1	Space	33	@	65	`
2	!	34	A	66	a
3	"	35	B	67	b
4	#	36	C	68	c
5	$	37	D	69	d
6	%	38	E	70	e
7	&	39	F	71	f
8	'	40	G	72	g
9	(	41	H	73	h
10	)	42	I	74	i
11	*	43	J	75	j
12	+	44	K	76	k
13	,	45	L	77	l
14	-	46	M	78	m
15	.	47	N	79	n
16	/	48	O	80	o
17	0	49	P	81	p
18	1	50	Q	82	q
19	2	51	R	83	r
20	3	52	S	84	s
21	4	53	T	85	t
22	5	54	U	86	u
23	6	55	V	87	v
24	7	56	W	88	w
25	8	57	X	89	x
26	9	58	Y	90	y
27	:	59	Z	91	z
28	;	60	[	92	{
29	<	61	\	93	|
30	=	62	]	94	}
31	>	63	^	95	~
32	?	64	_	96	DEL

Sort Sequence

Sort records by Last Count Date, Stock Item, Location Structure, Inventory Location, and Item ID.

Selection Criteria

Select from the Inventory, Inventory by Location, and Inventory Detail tables where:

- Non-parent items - PNT_STK_ITM_FL = False
- And items not currently being counted - ON_CC_FL = False
- Reconciliation flag on Adjustment Code table must be checked for the Adjustment Code
- And Warehouse = Warehouse Code Parameter
- And Stock Group = Stock Group Parameter (if entered)
- And the stock Item is kept in an inventory location that is between the locations identified by the From and To Location IDs 1-8 entered in the job parameter.

- And ABC Class = ABC Class Parameter (if entered)
- And Days to Count (on ABC Class) <= system days since Last Counted date on INVN (For Count Option 1 – Due to Count)
- And Commodity Code = Commodity Code Parameter (if entered)
- And Inventory Location = Inventory Location From Parameter (if entered and Inventory Location To Parameter is blank)
- And Inventory Location >= Inventory Location From Parameter (if entered and Inventory Location From Parameter is not blank)
- And Inventory Location <= Inventory Location To Parameter (if entered)
- And Stock Item = Stock Item From Parameter (if entered and Stock Item To Parameter is blank)
- And Stock Item >= Stock Item From Parameter (if entered and Stock Item From Parameter is not blank)
- And Stock Item <= Stock Item To Parameter (if entered)

Processing Logic

The system identifies the stock items that need to be counted based on the selection criteria. This identification is done based on the selection parameters entered as the job parameter.

For each of the selected ILOC records in the warehouse:

- If the "Detail Information Required" flag for the stock item is set to No on INVN, the system creates an INVF entry with the Location Structure and Inventory Location of the selected ILOC record and a blank Item ID.

- If the "Detail Information Required" flag for the stock item is set to Yes on INVN, the system searches the INVND records for the Location Structure and Inventory Location of the selected ILOC record and creates INVF entries with Item IDs for each of the INVND records found.

- All records processed will be created with the same Event ID.

Problem Resolution

None

2.1.11 Physical Inventory Freeze Count Card

Description

The Physical Inventory Freeze Count Card batch process is designed to produce multiple count cards for performing a count of Inventory items in a Warehouse. The Count Cards allow for easy recording of inventory when counting certain items. Detail inventory item information can optionally be printed on the Count Cards. The additional information includes Part Number, Lot/Batch Number, Lot/Bat Expiration and Shelf Life Expiration dates, Hazardous Material Classification, and Special Handling Instructions. This batch process has options that allow organizing the report in several ways through the Grouping Option and Report Type parameters. When the report is created, successive counts with the same item in the same group will omit basic item information (such as Warehouse, Stock Item, Descriptions, and Event ID) to compress the report size.

When to Run

This process is run on demand.

Major Input

- Inventory Freeze Table (INVF)   R_INVF

Output

- CountCards.xml
- Statistics to log

Parameters

Job	Parameter	Description	Default Value
Count Card Print	From Warehouse Code FROM_WHSE_CD	From Warehouse Code is required when the To Warehouse Code parameter is not blank. If the To Warehouse Code parameter is blank, then this parameter must be blank. Refer to the bulleted list below this table for special notes on this parameter.	Blank

Job	Parameter	Description	Default Value
	To Warehouse Code TO_WHSE_CD	To Warehouse Code is required when the From Warehouse Code parameter is not blank. If the From Warehouse Code parameter is blank, then this parameter must be blank. Refer to the bulleted list below this table for special notes on this parameter.	Blank
	Client Name for Report CLIENT_NM		
	Print Inventory Details PRN_INVNT_DET	Print Inventory Details – (Y/N) If 'Y', additional inventory details will be printed on the counting card.	N
	Event ID CC_EVNT_ID	Event ID (Conditionally Required) Required when Require Event ID is Y.	
	Grouping Option GRP_OPT	Grouping Option (Required) 0 – None 1 to 8 – Location ID 1 to 8 9 – Stock Commodity 10 – Stock Item 11 – ILOC Record 12 – INVF Record Refer to the bulleted list below this table for special notes on this parameter.	1
	Report Type REPORT_TYPE	Report Type (Required) 1 - Stock Item 2 - Inventory Location Determines the primary field to use for ordering the report after applying the Grouping Option.	1
	Require Event ID REQ_EVNT_ID	Require Event ID (Y/N) (Required) Non-editable field used to require Event ID.	N

- **From Warehouse Code** and **To Warehouse Code** logic:

- The From Warehouse Code and the To Warehouse Code parameters must both either be blank or populated; otherwise, the job will fail.

- Comma delineated values cannot be entered. If a Comma is entered, Advantage will search for a Warehouse with a Comma as part of the Warehouse Code entered.

- If the From Warehouse Code and the To Warehouse Code contain the same value, then inventory items belonging to the specified warehouse are selected for processing.

- If the From Warehouse Code and the To Warehouse Code values are blank then inventory items of all warehouses are selected.

- If the From Warehouse Code and the To Warehouse Code contain two different values, then the job will select these two Warehouse codes and any Warehouse codes in between. (*The selection logic is based on the ASCII text sort order. See below for more details). If no records are found the job will end with a status of warning and it will issue a warning in the job log. Note: The value entered for the From Warehouse Code parameter cannot be greater than the value for the To Warehouse Code parameter or the job will fail.

- **Grouping Option** logic:

  - Grouping option determines how the counts will be grouped on the printed count cards.

    - When any field in the group changes while generating the report, a page break is inserted.

  - Pages will always break on at least Warehouse and Location Structure.

  - 0 – None: Will add no additional grouping.

  - 1 to 8 – Location ID 1 to 8: Will group the counts by Location ID 1 through the number input.

    - For example, entering 3 will additionally group counts by Location ID 1, 2, and 3.

    - Entering 8 effectively groups by location. This works even when not using all 8 Location IDs. If the highest Location ID used in any warehouse is 5, for example, then entering 5, 6, 7, or 8 will all effectively group by location.

  - 9 – Stock Commodity: Will group the counts by the Stock Item code, excluding Stock Item Suffix.

  - 10 – Stock Item: Will group the counts by the full Stock Item code.

  - 11 – ILOC record: Will group the counts by the Stock Item and Inventory Location combination. Effectively, the report will have a separate page for each ILOC record. This can still result in multiple counts on one page if the item has multiple Item IDs in that location.

  - 12 – INVF record: Will print a separate page for each INVF record so that each count has its own page.

Special Note on ASCII text sort order: As stated previously, if the From Warehouse Code and the To Warehouse Code contain two different values, then the job will select these two Warehouse codes and any Warehouse codes in between. The selection logic is based on the ASCII text sort order. This differs from numeric order. Items are sorted based upon the first digit or character, regardless of overall length. Thus, a value of 0500 is different than a value of 500. Alphabetic characters are greater than numeric, so A500 is greater than 500. Below is a table that illustrates how the characters are ranked according to the American Standard Code for Information Interchange (ASCII) ordering:

Rank	Chr	Rank	Chr	Rank	Chr
1	Space	33	@	65	`
2	!	34	A	66	a
3	"	35	B	67	b
4	#	36	C	68	c
5	$	37	D	69	d
6	%	38	E	70	e
7	&	39	F	71	f
8	'	40	G	72	g
9	(	41	H	73	h
10	)	42	I	74	i
11	*	43	J	75	j
12	+	44	K	76	k
13	,	45	L	77	l
14	-	46	M	78	m
15	.	47	N	79	n
16	/	48	O	80	o
17	0	49	P	81	p
18	1	50	Q	82	q
19	2	51	R	83	r
20	3	52	S	84	s
21	4	53	T	85	t
22	5	54	U	86	u
23	6	55	V	87	v
24	7	56	W	88	w
25	8	57	X	89	x
26	9	58	Y	90	y
27	:	59	Z	91	z
28	;	60	[	92	{
29	<	61	\	93	|
30	=	62	]	94	}
31	>	63	^	95	~
32	?	64	_	96	DEL

Upon completion the batch should state if the job was successful, what the parameters were, run date and time, and number of count cards produced. If no count cards were produced, it should state what the parameters were, run date and time and should state, "No count cards were produced".

Sort Sequence

The report is always sorted by Warehouse and Location Structure in that order, primarily, as those are always grouped. Other sorting will have a lower priority.

If a Grouping Option requires its own sorting, that sorting will have higher priority than the Report Type sorting. For example, if Option 6 is selected with Report Type Stock Item, the report overall will be sorted by Location ID 1 through 6, but within those groups, lines will be sorted by Stock Item before Inventory Locations.

Other options like 0, 11, and 12 do not require specific ordering of the report, so the Report Type will effectively determine the overall report order.

Report Type will then sort by (for option 1) Stock Item then Location or (for option 2) Location then Stock Item.

For two grouping options, 8 – Location ID 8 and 10 – Stock Item, the former will force Report Type 2 – Inventory Location, and the latter will force Report Type 1 – Stock Item. This is done due to both options attempting to order by the same field at the same time. A report ordered by

Location ID 8 will want to order by Inventory Location primarily, and a report grouping by Stock Item will want to order by Stock Item primarily.

Finally, the report will always be sorted by Item ID last.

Example with Grouping Option 0 and Report Type 1:

- Warehouse, Location Structure, Stock Item, Location ID 1, Location ID 2, Location ID 3, Location ID 4, Location ID 5, Location ID 6, Location ID 7, Location ID 8, Item ID

Example with Grouping Option 1 and Report Type 1 (Default):

- Warehouse, Location Structure, Location ID 1, Stock Item, Location ID 2, Location ID 3, Location ID 4, Location ID 5, Location ID 6, Location ID 7, Location ID 8, Item ID

Example with Grouping Option 6 and Report Type 1:

- Warehouse, Location Structure, Location ID 1, Location ID 2, Location ID 3, Location ID 4, Location ID 5, Location ID 6, Stock Item, Location ID 7, Location ID 8, Item ID

Example with Grouping Option 6 and Report Type 2:

- Warehouse, Location Structure, Location ID 1, Location ID 2, Location ID 3, Location ID 4, Location ID 5, Location ID 6, Location ID 7, Location ID 8, Stock Item, Item ID

Example with Grouping Option 9 and Report Type 2:

- Warehouse, Location Structure, Stock Commodity Code, Location ID 1, Location ID 2, Location ID 3, Location ID 4, Location ID 5, Location ID 6, Location ID 7, Location ID 8, Stock Item, Item ID

Selection Criteria

Records will be selected from R_INVF where:

- Warehouse Code >= From Warehouse Code Parameter and Warehouse Code <= To Warehouse Code Parameter if both From Warehouse Code and To Warehouse Code parameters are entered.
- Event ID = Event ID parameter if Event ID parameter is entered.

This job will select all records from R_INVF if the From Warehouse Code, To Warehouse Code, and Event ID parameters are blank.

Problem Resolution

None

2.1.12 Reconciliation Posting

Description

Reconciliation Posting searches the Inventory Freeze Table (INVF) for any records of a specific Event ID, where all INVF records for matched Warehouse and Stock Item combinations have a populated Actual Quantity field. That is to say that Stock Items are only picked up by Reconciliation Posting when they are fully counted. If there is a discrepancy between the Actual Quantity and the On Hand Quantity of the Inventory Item, then an Inventory Adjustment Cycle Count (IACC) transaction is created for each Stock Item to reconcile the difference. Otherwise, if the Quantities are equal, the Inventory Freeze record is deleted, and the Inventory Item is set to *No* for On Cycle Count and Frozen for Accounting on the Inventory Table (INVN). INVF records deleted by this process that do not contain Item IDs will be copied to the Inventory Freeze History Table (INVFH) and have an entry made on the Item Transaction History (ITH) table with a 0 quantity change. If an IACC transaction is not Submitted to Final by the Submit Transactions step (including if it was Rejected or is Submitted in Pending), or the Submit Transactions step is disabled, a link to the IACC can be found on the INVF record(s) for that Stock Item in the Reconciliation Transaction field. If the Actual Quantity is changed on one or more INVF records for a Warehouse and Stock Item that has at least one INVF record with the linked, draft IACC, then the next time Reconciliation Posting is run, it will add, edit, or delete lines on that IACC to reflect the change; if all lines are deleted, the IACC will be discarded.

The chain process consists of the following batch jobs:

- Job 1 – Reconciliation Posting
- Job 2 – Load Transactions
- Job 3 – Reconciliation Report and Cleanup
- Job 4 – Submit Transactions

Job No	Job	Description	Output
1	Reconciliation Posting	Generates Inventory Adjustment Transaction XML for Inventory Freeze Records that reference an Inventory Item with a difference between the Actual Quantity and On Hand Quantity	Transaction XML file (Export File) containing created Inventory Adjustment Transactions
2	Load Transactions	Loads generated Inventory Adjustment Transaction XML	Inventory Adjustment Transactions Created
3	Reconciliation Report and Cleanup	Generates Reconciliation report	Reconciliation Report
4	Submit Transactions	Submits generated Inventory Adjustment Transactions with Ready Status	Inventory Adjustment Transactions Submitted

When to Run

The process can be run on demand typically after a Physical Inventory count, to create Inventory Adjustment Transactions for Inventory Freeze Records with a difference between the Actual Quantity and the On Hand Quantity.

Parameters

Job No	Job	Parameter	Description	Default Values
1	Reconciliation Posting	From Warehouse Code	From Warehouse Code is required when the To Warehouse Code parameter is not blank. If the To Warehouse Code parameter is blank, then this parameter must be blank. Refer to the bulleted list below this table for special notes on this parameter.	Blank
		To Warehouse Code	To Warehouse Code is required when the From Warehouse Code parameter is not blank. If the From Warehouse Code parameter is blank, then this parameter must be blank. Refer to the bulleted list below this table for special notes on this parameter.	Blank
		Delete Empty Inventory Freeze entries (DEL_NULL_INVF)	Delete Empty Inventory Freeze entries (Optional). Can enter either a 1 (True) or a 2 (False). Refer to the bulleted list below this table for special notes on this parameter.	Default is 'False' (2)
		IA Transaction Code (IA_DOC_CD)	IA Transaction Code (Required) This transaction code must be an IACC subtype.	
		IA Transaction Department Code (IA_DOC_DEPT_CD)	IA Transaction Department Code (Required)	
		IA Transaction Unit Code (IA_DOC_UNIT)	IA Transaction Unit Code (Optional)	
		IA Transaction Status	Transaction Status Code (Required). Enter 1 for	

Job No	Job	Parameter	Description	Default Values
		Code (DOC_STA_CD)	'Held' or 2 for 'Ready'.	
		Transaction Fiscal Year (DOC_FY)	Transaction Fiscal Year (Optional) (** **Refer to Note**: Pivot Date/Year Validation, while entering the year)	
		Transaction Period (DOC_PER)	Transaction Period (Optional)	
		Transaction Budget Fiscal Year (DOC_BFY)	Transaction Budget Fiscal Year (Optional) (** **Refer to Note**: Pivot Date/Year Validation, while entering the year)	
		Transaction Prefix (PREFIX)	IA Transaction ID Prefix (Optional). To be used in conjunction with auto numbering.	INRP
		Load Parameter File (LOAD_FILE)	Non-Editable field used to specify the file Reconciliation Posting will write parameters for the Load Transactions Job.	Recon_Load.txt
		Export File (EXP_FILE)	Non-Editable field used to specify the filename Reconciliation Posting will write Transaction XML for the Load Transactions Job.	Recon_Docs.xml
		Submit Parameter File (SUBMIT_FILE)	Non-Editable field used to specify file to which Reconciliation Posting will write parameters for the Submit Transactions Job.	Recon_Submit.txt
		Client Name (CLIENT_NM)	Client Name (Optional) used to populate the Exception Report.	
		AMSEXPORT (** **Refer to Note**: Assumptions for SWBP on page no. 5)	Export Location at Reconciliation Posting Job	-
		Event ID (EVNT_ID)	Event ID (Required) The Event ID for the chain to process. This	

Job No	Job	Parameter	Description	Default Values
			Event ID must exist on INVF.	
		AMSPARM (**Refer to Note**: Assumptions for SWBP on page no. 5)	Parameter Location at Reconciliation Posting Job	-
		Chain Job ID CHAIN_JOB_ID	Parameter to store the Chain ID.	$$@CHAINJOBID@$$
		Delete INVF records on IACC discard DEL_ON_DISCARD	Delete INVF records on IACC discard (Optional). Can enter either a 1 (True) or a 2 (False). Refer to the bulleted list below this table for special notes on this parameter.	
2	Load Transactions	Parameter File (PARM_FILE)	Same as Load Parameter file from Reconciliation Posting. Used to read in Parameters.	$$AMSPARM$$/Recon_Load.txt
3	Reconciliation Report and Cleanup	Client Name (CLIENT_NM)	Client Name (Optional) used to populate the Reconciliation Report.	
		Event ID (EVNT_ID)	Event ID (Required) This Event ID must exist on INVF. This field will be inferred from the 1st job when processing the full chain.	System defaults it to value from 1st job parameter
4	Submit Transactions	Parameter File (PARM_FILE)	Submit Parameter file (.txt). This parameter value should be same as Submit Parameter File parameter value for Reconciliation Posting job.	$$AMSPARM$$/Recon_Submit.txt

- **From Warehouse Code** and **To Warehouse Code** logic:
  - The From Warehouse Code and the To Warehouse Code parameters must both either be blank or populated; otherwise, the job will fail.
  - Comma delineated values cannot be entered. If a Comma is entered, Advantage will search for a Warehouse with a Comma as part of the Warehouse Code entered.
  - If the From Warehouse Code and the To Warehouse Code contain the same value, then inventory items belonging to the specified warehouse are selected for processing.
  - If the From Warehouse Code and the To Warehouse Code values are blank then inventory items of all warehouses are selected.

- If the From Warehouse Code and the To Warehouse Code contain two different values, then the job will select these two Warehouse codes and any Warehouse codes in between. (*The selection logic is based on the ASCII text sort order. See below for more details). If no records are found the job will end with a status of warning and it will issue a warning in the job log. Note: The value entered for the From Warehouse Code parameter cannot be greater than the value for the To Warehouse Code parameter or the job will fail.

- **Delete Empty Inventory Freeze entries** logic:

  - Entering 1 for this option will cause INVF records with the provided Event ID and no Actual Quantity value to be deleted. Any remaining INVF records for this Event ID *will* be selected for processing, as they will all have an Actual Quantity value.

  - Entering 2 for this option or leaving it blank will not delete INVF records with the provided Event ID and no Actual Quantity value.

  - This delete will *not* copy INVF records to INVFH or ITH as they were not counted.

- **Delete INVF records on IACC discard** logic:

  - Entering 1 for this option will cause INVF records to be deleted in the same run when their associated IACC transaction is discarded by Reconciliation Posting.

  - Entering 2 for this option will cause INVF records to remain on INVF with Require Reconciliation set to Yes when their associated IACC transaction is discarded by Reconciliation Posting. Running the chain again for the same Event ID with no changes to Actual Quantity will cause the records to be deleted as usual.

  - This delete will copy applicable INVF records to INVFH and ITH.

Special Note on ASCII text sort order: As stated previously, if the From Warehouse Code and the To Warehouse Code contain two different values, then the job will select these two Warehouse codes and any Warehouse codes in between. The selection logic is based on the ASCII text sort order. This differs from numeric order. Items are sorted based upon the first digit or character, regardless of overall length. Thus, a value of 0500 is different than a value of 500. Alphabetic characters are greater than numeric, so A500 is greater than 500. Below is a table that illustrates how the characters are ranked according to the American Standard Code for Information Interchange (ASCII) ordering:

Rank	Chr	Rank	Chr	Rank	Chr
1	Space	33	@	65	`
2	!	34	A	66	a
3	"	35	B	67	b
4	#	36	C	68	c
5	$	37	D	69	d
6	%	38	E	70	e
7	&	39	F	71	f
8	'	40	G	72	g
9	(	41	H	73	h
10	)	42	I	74	i
11	*	43	J	75	j
12	+	44	K	76	k
13	,	45	L	77	l
14	-	46	M	78	m
15	.	47	N	79	n
16	/	48	O	80	o
17	0	49	P	81	p
18	1	50	Q	82	q
19	2	51	R	83	r
20	3	52	S	84	s
21	4	53	T	85	t
22	5	54	U	86	u
23	6	55	V	87	v
24	7	56	W	88	w
25	8	57	X	89	x
26	9	58	Y	90	y
27	:	59	Z	91	z
28	;	60	[	92	{
29	<	61	\	93	|
30	=	62	]	94	}
31	>	63	^	95	~
32	?	64	_	96	DEL

Note - Every time a parameter fails validation the system logs the error and sets the Job return code to *Failed*, which in turn deactivates further jobs down in the chain, and prevents them from execution.

Major Input

- Inventory Freeze (R_INVF)

Output

- Inventory Freeze (R_INVF)

- IACC Transactions (IA_DOC_HDR, IA_DOC_COMMLN, and IA_DOC_COMMDET)

  - IACC transactions will contain Commodity Detail records if the related INVF record(s) have Item ID populated.

- Exception Report

- Reconciliation Report

Sort Criteria

Inventory Freeze Records selected are sorted by:

- Warehouse Code (WHSE_CD)

- Stock Commodity Code (STK_COMM_CD)

- Stock Item Suffix (STK_ITM_SFX)

- Location Structure (LOC_STRU)

- Inventory Location (INVN_LOC)

- Item ID (ITM_ID)

Selection Criteria

Inventory Freeze records are selected from the Inventory Freeze table based on the following criteria:

- This job will select records from the Inventory Freeze table where the Event ID field has the same value as the Job parameter's value and where there are no other records of the matched Warehouse and Stock Item combinations that have no Actual Quantity value.

    - A subset of Stock Items from the Event ID can be picked up provided that all the INVF records for the individual stock items are counted (have a value in Actual Quantity).

- If the Warehouse Code on the Inventory Freeze table is >= the From Warehouse Code Parameter and the Warehouse Code on the Inventory Freeze table is <= the To Warehouse Code Parameter when both the From Warehouse Code and the To Warehouse Code parameters are entered.

- This job will select all records if both the From Warehouse Code and the To Warehouse Code parameters are blank.

Processing Logic

Step 1: Reconciliation Posting

- Selected records are evaluated in groups by Warehouse and Stock Item. The On-Hand Quantity and Discrepancy on each INVF record in the group is refreshed to account for potential changes to the "real" On-Hand Quantity shown on INVF according to its Count Time and Count Date, and Require Reconciliation is set to No.

- If any record in a group contains a discrepancy:

    - If none of the records have an associated IACC transaction, a new one is added for that item to the XML to be loaded by the Load Transaction step. This IACC transaction will contain Commodity and Commodity Detail records as necessary to correct the discrepancy.

    - If any of the records does have an associated IACC transaction, that transaction is updated to reflect the changes on the INVF record(s). The IACC transaction will have Commodity and Commodity Detail records added, removed, or edited depending on whether a discrepancy has been added, removed, or changed, respectively.

- If no record in a group contains a discrepancy:

    - If none of the records have an associated IACC transaction, nothing happens.

    - If one of the records does have an associated IACC transaction, that transaction is discarded.

        - When this happens, any INVF records with the discarded transaction linked will have Require Reconciliation updated to Yes.

- If the Delete INVF records on the IACC discard parameter is set to 1, these records will have Require Reconciliation updated to No at this point.

Step 2: Load Transactions

- The XML for new IACC transactions are loaded.

Step 3: Reconciliation Report and Cleanup

- INVF records are deleted where the Event ID equals the Event ID parameter and where there are no other records with the same Event ID, Warehouse, and Stock Item that have a Discrepancy or Require Reconciliation is set to Yes.

    - INVF records without Item ID will be copied to INVFH and ITH records with 0 quantity change will be created for each.

- INVF records have Require Reconciliation updated to No where Event ID equals the Event ID, Require Reconciliation is Yes, and where there are other records with the same Warehouse and Stock Item that have a linked IACC transaction.

    - This step compensates for Commodity records being removed from IACC and setting Require Reconciliation to Yes on the related INVF records.

- The Cycle Counting Reconciliation Report is created, which lists all IACC transactions that exist for this Event ID with details of the adjustments that are being made to reconcile the discrepancies.

Step 4: Submit Transactions

- IACC Transactions loaded during this process are Submitted.

Problem Resolution

- Look into the job log for errors.

- If the job fails for any data setup reasons in the first job of Reconciliation Posting, then correct the data setup and schedule a new job.

- If the job fails for any data setup reasons in the second job of Reconciliation Posting, SysManUtil, used to load the transactions, has restart ability.

- This batch program produces new Advantage transactions, which are subject to the line limit functionality constraints. Sites should ensure that they run this job with parameters set to ensure that the created transactions are within the line limit controls.

For more information on the Inventory Freeze (INVF) page, refer to the "Inventory Freeze Table" topic of the *CGI Advantage – Inventory User Guide*.

For more information on the Inventory Adjustment Cycle Count (IACC) transaction, refer to the Inventory Adjustment Cycle Counting (IACC) portion of the IA Delivered Transaction Codes section of the *CGI Advantage – Inventory User Guide*.

2.1.13 Reorder Quantity

Description

Reorder Quantity process can be run periodically to calculate Reorder Quantity of a Stock Item based on the previous demand of that Stock Item. It calculates and updates Safety Stock quantity and Reorder Level for the selected inventory stock items when Order Quantity method is Order Up To or EOQ. When the Order Quantity Method is EOQ, the reorder quantity process calculates and updates the Reorder Level and Reorder Quantity for the selected inventory stock items. When the Order Quantity Method is EOQ, the job provides flexibility in the Reorder Quantity calculation for parent warehouses. For parent warehouses, when the Include Child Warehouses in Reorder Calculation flag on the Inventory Maintenance page is set to *Yes*, the Reorder Quantity is calculated as the addition of the Reorder Quantity calculation and the summed up Reorder Quantity values of the same stock item in all child warehouses. When the Order Quantity Method is EOQ, the job also provides an option to consider the stock item Shelf Life in the Reorder Quantity calculation. The Shelf Life is included in the Reorder Quantity calculation when the Include Shelf Life in Reorder Calculation flag on the Inventory Maintenance page is set to *Yes* for the selected inventory stock items. When the Order Quantity Method is Order Up To, then it only calculates the Reorder Level for the selected inventory stock items. If the Order Quantity Method is Manual, then the inventory item is not selected. Parent Stock Items will not be selected for processing in either method. It also generates a Reorder Quantity Exception Report to log all exceptions occurred during the process.

Please refer to the *CGI Advantage Inventory User Guide* for information on calculating the Reorder Quantity.

When to Run

The process can be run on demand, usually at the end of the month. Since the process takes into account forecast quantities and Lead time for Reorder calculation, it should be run after Forecast Demand and Lead Time Calculation batch processes are executed.

Major Input

- Inventory Maintenance (R_INVN)

Other Input

- ABC Classification Parameter (R_ABC)

Output

- Reorder level, Safety stock quantity and Reorder Quantity are updated on Inventory table.
- Reorder Quantity Exception Report

Parameters

Batch Parameters

Job	Parameter	Description	Default Values
Reorder	Reorder month	Reorder Month (Values 1 to 12) –	None

Quantity	(REORD_MO)	Required Parameter	
	Client Name (CLIENT_NM)	Client name to be displayed on Reorder Quantity Exception Report – Optional Parameter	None
	From Warehouse Code (FROM_WHSE_CD)	From Warehouse Code is required when the To Warehouse Code parameter is not blank. If the To Warehouse Code parameter is blank, then this parameter must be blank. Refer to the bulleted list below this table for special notes on this parameter.	Blank
	To Warehouse Code (TO_WHSE_CD)	To Warehouse Code is required when the From Warehouse Code parameter is not blank. If the From Warehouse Code parameter is blank, then this parameter must be blank. Refer to the bulleted list below this table for special notes on this parameter.	Blank

From Warehouse Code and To Warehouse Code logic:

- The From Warehouse Code and the To Warehouse Code parameters must both either be blank or populated; otherwise, the job will fail.

- Comma delineated values cannot be entered. If a Comma is entered, Advantage will search for a Warehouse with a Comma as part of the Warehouse Code entered.

- If the From Warehouse Code and the To Warehouse Code contain the same value, then inventory items belonging to the specified warehouse are selected for processing.

- If the From Warehouse Code and the To Warehouse Code values are blank then inventory items of all warehouses are selected.

- If the From Warehouse Code and the To Warehouse Code contain two different values, then the job will select these two Warehouse codes and any Warehouse codes in between. (*The selection logic is based on the ASCII text sort order. See below for more details.) If no records are found, the job will end with a status of warning and it will issue a warning in the job log. Note: The value entered for the From Warehouse Code parameter cannot be greater than the value for the To Warehouse Code parameter or the job will fail.

Special Note on ASCII text sort order: As stated previously, if the From Warehouse Code and the To Warehouse Code contain two different values, then the job will select these two Warehouse codes and any Warehouse codes in between. The selection logic is based on the ASCII text sort order. This differs from numeric order. Items are sorted based upon the first digit or character, regardless of overall length. Thus, a value of 0500 is different than a value of 500. Alphabetic characters are greater than numeric, so A500 is greater than 500.

For example, a user wants to process a range of warehouses that contain the following six warehouse codes: 101, !A02, AAA01, AB01, cD02, and CD03. In order for the batch process to select all records in the aforementioned range, the user must specify the value of "!A02" in the "From Warehouse Code" parameter field and the value of "cD02" in the "To Warehouse Code" parameter field. The system will process stock items in this warehouse order: !A02, 101, AAA01, AB01, CD03, cD02.

Below is a table that illustrates how the characters are ranked according to the American Standard Code for Information Interchange (ASCII) ordering:

Rank	Chr	Rank	Chr	Rank	Chr
1	Space	33	@	65	`
2	!	34	A	66	a
3	"	35	B	67	b
4	#	36	C	68	c
5	$	37	D	69	d
6	%	38	E	70	e
7	&	39	F	71	f
8	'	40	G	72	g
9	(	41	H	73	h
10	)	42	I	74	i
11	*	43	J	75	j
12	+	44	K	76	k
13	,	45	L	77	l
14	-	46	M	78	m
15	.	47	N	79	n
16	/	48	O	80	o
17	0	49	P	81	p
18	1	50	Q	82	q
19	2	51	R	83	r
20	3	52	S	84	s
21	4	53	T	85	t
22	5	54	U	86	u
23	6	55	V	87	v
24	7	56	W	88	w
25	8	57	X	89	x
26	9	58	Y	90	y
27	:	59	Z	91	z
28	;	60	[	92	{
29	<	61	\	93	|
30	=	62	]	94	}
31	>	63	^	95	~
32	?	64	_	96	DEL

Sort Criteria

Inventory items selected are sorted by:

- Warehouse Code (WHSE_CD)

- Stock Item (STK_ITM)

Selection Criteria

Selection criteria for obtaining inventory items from Inventory table is:

- Manual Reorder is false, and

- Stock item is not a Parent item, and

- Warehouse >= From Warehouse Code And Warehouse <= To Warehouse Code parameter (if From Warehouse Code and To Warehouse Code parameters are entered)

Problem Resolution

- Look into log of job for errors.

- The process has restart ability. If the job fails for any data setup reasons then correct the data setup and restart the job. When job is restarted it begins processing from the last unsuccessful inventory item on which the failure occurred. Reorder Quantity Exception Report is only generated at the end of job run that ended successfully irrespective of the fact whether the job was restarted one or not. Whenever job run for reorder month say 1 ends in failure, make sure that the job is restarted and ran successfully before any another run for another reorder month say 2 is scheduled else exception records for job run for reorder month 1 will be lost. This is because the exception records are stored on a temporary table that is purged before the job starts unless it is a restarted job run.

2.1.14 Utilization Type

Description

The Utilization Type process is used to calculate ABC class for each stock item and Utilization percentage for each ABC class for a warehouse or a range of warehouses or all warehouses. It also calculates Order up to Quantity and Reorder Level for each item. This job computes stock usage data from the Inventory Usage (INVNU) table and categorizes items as defined on the ABC Classification Parameter (ABCP) table.

When to Run

This job will be setup to run at the end of every fiscal quarter and is independent of other Advantage jobs.

Major Input

- Inventory Maintenance Table (R_INVN)

- ABC Classification Parameter (R_ABC)

- Calculate Order Up to Quantity and Reorder Level based on Stock item history from INVNU.

Output

- Inventory Maintenance Table (R_INVN)

- ABC class on the Inventory table

- Auto update UPW - Utilization Percentage of each class and number of items.

Parameters

Batch Parameters

Job	Parameter	Description	Default Values
Utilization Type	Commit Block Size	Commit Block Size (Optional). For performance, shows how often the job commits its changes	100
	Exclude Salvage Warehouses	Exclude Salvage Warehouses (Required). Determines whether to exclude Salvage warehouses. Enter Y for Yes or N for No	Y
	Warehouse/From Warehouse	Warehouse/From Warehouse (Optional)	
	Progression Counter Size	Progression Counter Size (Optional). Gives log entries for each number of records	1000

		processed and has to be greater than zero	

Sort Sequence

None

Selection Criteria

Records are selected from R_INVN, where:

- Warehouse Code >= Warehouse/From Warehouse Parameter and <= To Warehouse Parameter if both parameters are entered.

- This job selects all records from R_INVN if both parameters are blank.

From Warehouse Code and To Warehouse Code logic:

- The From Warehouse Code and the To Warehouse Code parameters must both either be blank or populated; otherwise, the job will fail.

- Comma delineated values cannot be entered. If a comma is entered, Advantage will search for a Warehouse with a comma as part of the Warehouse Code entered.

- If the From Warehouse Code and the To Warehouse Code contain the same value, then inventory items belonging to the specified warehouse are selected for processing.

- If the From Warehouse Code and the To Warehouse Code values are blank then inventory items of all warehouses are selected.

- If the From Warehouse Code and the To Warehouse Code contain two different values, then the job will select these two Warehouse codes and any Warehouse codes in between. (*The selection logic is based on the ASCII text sort order. See below for more details.) If no records are found, the job will end with a status of warning and it will issue a warning in the job log. Note: The value entered for the From Warehouse Code parameter cannot be greater than the value for the To Warehouse Code parameter or the job will fail.

Special Note on ASCII text sort order: If the From Warehouse Code and the To Warehouse Code contain two different values, then the job will select these two Warehouse codes and any Warehouse codes in between. The selection logic is based on the ASCII text sort order. This differs from numeric order. Items are sorted based upon the first digit or character, regardless of overall length. Thus, a value of 0500 is different than a value of 500. Alphabetic characters are greater than numeric, so A500 is greater than 500. Below is a table that illustrates how the characters are ranked according to the American Standard Code for Information Interchange (ASCII) ordering:

Rank	Chr	Rank	Chr	Rank	Chr
1	Space	33	@	65	`
2	!	34	A	66	a
3	"	35	B	67	b
4	#	36	C	68	c
5	$	37	D	69	d
6	%	38	E	70	e
7	&	39	F	71	f
8	'	40	G	72	g
9	(	41	H	73	h
10	)	42	I	74	i
11	*	43	J	75	j
12	+	44	K	76	k
13	,	45	L	77	l
14	-	46	M	78	m
15	.	47	N	79	n
16	/	48	O	80	o
17	0	49	P	81	p
18	1	50	Q	82	q
19	2	51	R	83	r
20	3	52	S	84	s
21	4	53	T	85	t
22	5	54	U	86	u
23	6	55	V	87	v
24	7	56	W	88	w
25	8	57	X	89	x
26	9	58	Y	90	y
27	:	59	Z	91	z
28	;	60	[	92	{
29	<	61	\	93		
30	=	62	]	94	}
31	>	63	^	95	~
32	?	64	_	96	DEL

Problem Resolution

- Look into log of job for errors.

- The process has restart ability. If the job fails for any data setup reasons then correct the data setup and restart the job. When the job is restarted it begins processing from the last unsuccessful inventory item on which the failure occurred.

2.1.15   Additional Charges Allocation Process

Description

Additional charges allocation Process job will read the Accounting Journal and select payment request transactions (PRM) that have an additional charge amount line on the payment request transaction. The job will select commodity lines that have the flag Apply Additional Charges checked. The job will then calculate the additional charge amount as a proportion of the dollar value of the lines that have the flag checked. The job will then generate xml files to create the IA transactions to have the additional charges applied to each of the commodities on the PRM transaction. The system will load and submit the IA transactions into Advantage and an exception report will be generated that will identify the transactions that do not successfully submit. An exception table will be populated to identify items that have an on-hand quantity of zero.

The chain process consists of the following batch jobs:

- Job 1 – Additional Charges Allocation

- Job 2 – Load IA Transactions

- Job 3 – Additional Charges Allocation Exception Report

Job No	Job	Description	Output
1	Additional Charges Allocation	The batch job will create Inventory Adjustment Freight (IA) Transactions for the stock items that need to have the additional charges added to the value of the item	IA XML file created
2	Load IA Transactions	This step loads and submits the XML file containing IA Transaction	Exception Report file created
3	Additional Charges Allocation Exception Report	The Exception Report process reads the exception file that was created by the SysManUtil Load & Submit batch job	Exception report provided in HTML and PDF format

When to Run

The Chain Job can be run On Demand.

Major Input

Journal accounting – JRNL_ACTG

Payment request transaction commodity line - PR_DOC_COMM

Output

- IA transactions
- Generates the Exception report
- Inventory Adjustment Freight Exception Worklist (IAFW)

Parameters

Job: Additional Charges Allocation

Parameter	Description	Default Value
Department Adjustment Code (DEPT_ADJ_CD)	<Required> Comma separated list of Departments and their adjustment codes. Must be separated by a ':'	
Transaction Prefix (DOC_PREF)	Transaction ID Prefix, must be a valid value on the ADNT table	
Export File Name (EXP_FILE_NM)	XML document file name.	IACHRGExport.xml
Export/Import Location (FILE_LOCATION)	Specify the location for the export and import file.	$$AMSROOT$$/ExportImport
IA Transaction Code (IAF_DOC_CD)	<Required> Transaction Code used for IA Transaction or clone. Must be valid on the Transaction Control Table and have a Transaction Type 'IA'.	IA
IA Transaction Department (IAF_DOC_DEPT)	Transaction Department that is specified on the Inventory Adjustment (IA) transactions. When blank will populate IA transaction with the transaction department from PRM, when not blank, the value must be a valid value on the Department table.	
Journal Record Number (LAST_REC_NO)	Journal Record Number to start with. Will be updated every time this job is run	
Maximum Commodity Lines (MAX_COMM_LN)	Maximum number of Commodity Lines allowed on the generated transaction. When line count is exceeded then a new transaction is generated.	200

Parameter	Description	Default Value
Progression Counter (PROG_COUNTER)	Writes a message to the batch job log after the specified number of IA Commodity Line records have been written to the XML file	1000
PR Transaction Codes (PR_DOC_CD)	Specify the Payment Request transactions to be selected by the batch job. Multiple values must be separated by a comma. Valid value is PRM	PRM
Posting Code (PSTNG_CD)	<Required> Identifies the specific posting code to be selected from the Accounting Journal to identify. Value must exist on Posting Code Table.	

Job: Load IA Transactions

Parameter	Description	Default Value
BLOCK_SIZE	Block size to use for splitting files	10
COMMIT_BLOCK_SIZE	Commit block size while importing	10
FILE_INPUT_DIR	The location of the source file of records	
FILE_LIST	Comma separated list of input XML files	IACHRGExport.xml
FILE_OUTPUT_DIR	Output location for the file segments	
FILE_PREFIX	File prefix for parameter and data files created by jobs	IA
I_SMU_APPLY_OVERRIDES	Apply overrides	
I_SMU_BYPASS_APPROVAL	Bypass Approval	
I_SMU_BYPS_ADNT_FL	SysManUtil import parameter - Bypass ADNT	
I_SMU_COMMIT_BLOCK_SIZE	Commit block size while importing	10
I_SMU_DOC_PHASE_CD	SysManUtil import parameter - Doc Phase	1

Parameter	Description	Default Value
I_SMU_DOC_STA_CD	SysManUtil import parameter - Doc Status	2
I_SMU_OVERRIDE_LVL	System Maintenance Utility Override Level for Import Mode	
I_SMU_RESTART_FL	System Maintenance Utility Override Level for Import Mode	
LOG_STATUS_INTERVAL	Logging frequency (in seconds) for controller thread reporting status of child threads to the system log.	300
MODE	Mode (1=import only, 2=import & submit, 3=import, other action, submit)	2
OTHER_ACTION	Custom action code if mode=3	
O_SMU_DOC_PHASE_CD	SysManUtil other parameter - Doc Phase	1
O_SMU_DOC_STA_CD	SysManUtil submit (it should be other) parameter - Doc Status	2
SLEEP_INTERVAL	Polling frequency (in seconds) for internal controller thread for checking child processes.	5
SMU_CTLG_ID	Catalog id of the System Maintenance Utility job which is spawned as the child process.	3
STAGGER_TIME	Stagger Time in Seconds	5
S_SMU_APPLY_OVERRIDES	System Maintenance Utility flag to indicate Apply Overrides in Submit Mode	
S_SMU_BYPASS_APPROVAL	System Maintenance Utility flag to indicate Bypass Approvals in Submit Mode	
S_SMU_DOC_PHASE_CD	SysManUtil submit parameter - Doc Phase	1
S_SMU_DOC_STA_CD	SysManUtil submit parameter - Doc Status	2
S_SMU_EXCEP_REP_FILE_NM	Exception Report File name	IAADCHG_EXCP.txt
S_SMU_EXCEP_REP_IND	Exception Report Indicator	4
S_SMU_EXP_SEV_FL	Severity Flag 0->False, 1->True	1
S_SMU_OVERRIDE_LVL	System Maintenance Utility Override Level for Submit Mode	
S_SMU_RESTART_FL	System Maintenance Utility to	

Parameter	Description	Default Value
	indicate Save Restart info in Submit Mode	
THREAD_COUNT	Number of jobs to start	1

Job: Additional Charges Allocation Exception Report

Parameter	Description	Default Value
AMSLOGS	Logs Location at UseTaxPayableExcepRep Job	$$AMSLOGS$$
EXCEP_REP_FILE_NM	Exception File Name(Required)	IAADCHG_EXCP.txt

Please Note - Every time a parameter fails validation the system logs the error and sets the Job return code to *Failed*, which in turn deactivates further jobs down in the chain, and prevent them from execution.

Sort Sequence

NA

Selection Criteria

- The basic Selection criteria will be as follows:

  - Read the Accounting Journal and select PRM Transactions with additional charge amounts and select commodity lines that have the flag Apply Additional Charges as *true*.

  - PR transaction code - PRM

  - Other conditions specified in the Batch Parameters are met.

Problem Resolution

- Look into log of job for errors.

- The batch job is designed to allow for restart in the event of job failure. The batch job will track the last journal record number that was processed successfully to create the IA xml file. The batch job can be re-submitted, and the job will restart from the last journal record number that was processed successfully. If the job fails after the first step, i.e. after creation of the xml file, then only run the second step (multi-import load/submit) and/or third step (exception report) to complete the process.