

D R A F T

Direct Loan Servicing System

Detail Design

Direct Loan Simplification (CDS Retirement)

Section 3.0 - Technical Overview

**Direct
Loans**

William D. Ford Federal Direct Loan Program

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1 **Direct Loan Servicing System**
 2 **Detail Design**
 3 **Direct Loan Simplification (CDS Retirement)**
 4 **Section 3.0 - Technical Overview**
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6 **3.0 Technical Overview**
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8 This section provides a technical overview of the modifications that will be made within the
9 Direct Loan Servicing System to support the simplification of the Direct Loan system. The
10 overview provides a series of process descriptions for all new and modified processes in the
11 DLSS that are affected by this effort. All programs, reports, screens, letters, statements, and
12 notices that are identified are detailed in the appropriate appendix of this document. Refer to
13 the main Table of Contents for appendix information.
14

15 **a. Process Flow**
16

17 The processing flow that will be in place once the simplification effort is complete is detailed
18 below:
19

- 20 1. Loan Servicing receives separate non-image transmission files directly from Loan
21 Origination, Loan Consolidation and the EDA Vendor. Image transmissions take place
22 directly between the Image Centers. Loan Servicing performs all edits necessary to
23 ensure that transactions received in the non-image files are processed successfully
24 through the Servicing System. Editing of the non-image files takes place during the
25 day. Application of accepted transactions into the Servicing databases occurs during
26 the nightly batch process.
27
- 28 2. Loan Servicing transforms incoming transactions as necessary to complete the
29 transactions' processing cycles. This includes:
 - 30 • Converting *funds* transactions to FARS readable G records.
 - 31 • Generating multiple loan level consolidation payoff notification transactions for
32 each borrower level consolidation payoff request transaction received.
 - 33 • Converting DSD transactions to their pre-Year 8 format. School File fields that are
34 larger than the current Loan Servicing fields are truncated. DLSC School Services
35 staff review the information from Loan Origination and update the Servicing
36 School File, as needed.
- 37 3. Loan Servicing deals directly with the EDA Vendor to receive EDA application and
38 change transactions, send payment request transactions, and receive payment and
39 payment reversal transactions. The Servicing Interface Group is responsible for
40 certifying payment requests and resolving issues regarding transactions sent to and
41 received from the EDA Vendor.
42
43
44
45

- 1
- 2 4. Loan Servicing tags each incoming batch with a code identifying the source of the data,
- 3 to send acknowledgements and transaction errors back to the appropriate Direct Loan
- 4 Partner. This requires the creation of separate acknowledgment files. Transmission
- 5 files sent to each of the Direct Loan Partners to identify changes made to the Loan
- 6 Servicing database contain only transactions that the receiving Partner actually
- 7 processes.
- 8
- 9 5. Loan Servicing accepts *funds* transactions from Loan Origination and Loan
- 10 Consolidation, generates entries into the *system balancing* table, converts each *fund*
- 11 transaction into its G record equivalent (FARS accounting format) and sends the G
- 12 records to FARS.
- 13
- 14 6. Loan Servicing receives updates to the *school file* through transactions received from
- 15 Loan Origination. Loan Servicing uses these transactions to replace all used fields
- 16 within the *school file*, except for a few selected fields, which are updated online by
- 17 DLSC School Services representatives. Loan Servicing sends a complete *school file*
- 18 replacement to FARS each time a Servicing daily cycle is performed.
- 19
- 20 7. Loan Servicing generates system balancing reports (schedules) and worksheets to track
- 21 the flow of transactions in and out of the Servicing system. These reports show data
- 22 specific to each Direct Loan Partner as well as a grand total of all transaction activity
- 23 within Servicing.
- 24
- 25 8. Loan Servicing provides a support team, the Servicing Interface Group, to monitor the
- 26 flow of transactions in and out of the Servicing System. They assist their counterparts
- 27 within the other interface systems in the research and resolution of rejected data and
- 28 other reconciliation items. They also interact with the EDA Vendor to resolve
- 29 transaction related issues.
- 30
- 31 9. Loan Servicing provides a database with all transaction layouts and edits, and the
- 32 Direct Loan Partner performing each edit. This replaces the current CDS Access
- 33 database.
- 34

35 **3.1 Processing Incoming Transactions**

36
37 Loan Servicing receives separate transmission files from Loan Origination, Loan Consolidation
38 and the EDA Vendor. Transmission files conform to the same format and content rules that
39 currently exist between CDS and each of the Direct Loan Partners.

41 **3.1.1 Receiving Transactions from Loan Origination and Loan Consolidation**

43 **3.1.1.1 Description**

44
45 Loan Servicing may receive multiple transmission files from Loan Origination and Loan
46 Consolidation each day. Transactions within these files are segregated into separate batches as
47 indicated in the table below. Loan Servicing pre-processes received files during the day to
48 detect and rectify any problems with a transmission file or any inconsistencies in batches within

1 a transmission file. A transmission summary report is generated for each transmission file,
 2 which details any format or content issues, and summarizes counts and amounts by transaction
 3 type within each batch. The information on this report is compared to the transmission logs
 4 sent by Loan Origination and Loan Consolidation to verify record counts by transaction type.
 5 The Servicing Interface Group reconciles the report to the corresponding log and reports any
 6 issues to the appropriate Direct Loan Partner. See section 3.9 for more information regarding
 7 interface support.
 8
 9

Batches Sent by LO and LC

Type	Category	Txn	Description
Financial	Booking	FLA	Initial disbursement
		FLB	Subsequent disbursement
		FBB	Booking participant
	Non-Booking	FCA	Consolidation payoff (LC only)
		FLC	Cancellation
		FLD	Adjustment
		FLJ	Loan amount approved change
	Funds	FAD	Document control
		FID	Institution drawdown (LO only)
		FIE	Institution excess cash
		FIG	Interagency transfer of funds
	Non-Financial	School File	DSD
Other Non-financial		DCN	Payoff request (LC only)
		DLM	Loan modification
		DBB	Participant modification (LO only)
		DLS	SSN change
General	System Balancing	GXB*	Received values by transaction type
	Acknowledgement	GAK	Batch acknowledgement
		GXE	Rejected transactions
		GXB	Accepted values by transaction type
Refer to Appendix S for a complete list of batch format requirements			

10
 11 Each financial batch received from LO or LC must have an accompanying general batch containing
 12 twelve system balancing transactions somewhere within the transmission file. Failure to send this batch
 13 results in rejection of the entire financial batch.
 14

15 **3.1.1.2 Environment**

16
 17 The CI001 process validates transmission files, verifies batch integrity, and distributes data by
 18 batches, to various files for later editing and processing. This job runs on the Alpha as part of
 19 the Interface processing cycle.
 20

21 **3.1.1.3 Inputs**

22
 23 Transmission files from Loan Origination and Loan Consolidation (*CI001S1.INP*)
 24
 25
 26

1
2
3 **3.1.1.4 Outputs**
4

- 5 1. Batch control (*ci_batch_ctrl*) and system balancing (*ci_system_bal*) entries containing
6 received counts and amounts. These records are written to their respective tables in the
7 *Interface* database.
8
9 2. Files containing the segregated batch data for later processing:
10 - Booking batches (*CI010S1.INP*)
11 - Non-booking batches (*CI020S1.INP*)
12 - School file batches (*CI030S1.INP*)
13 - Funds batches (*CI035S1.INP*)
14 - Acknowledgement batches (*CI009S1.INP*)
15
16 3. Transmission Summary Report (*CI001S1.RPT*) (*see Appendix C*)
17

18 **3.1.1.5 Process Flow**
19

20 The CI001 job determines whether or not there are transmission files that need to be processed.
21 If an unprocessed transmission file is found, the CI001 program is executed.
22

23 The CI001 program makes two passes through each transmission file.
24

25 The first pass ensures that the transmission file is structurally complete. Problems found
26 concerning the integrity of the transmission file result in the rejection of the entire transmission
27 file. See Appendix R for a complete list of transmission and batch edits. The first pass
28 through the transmission file is also used to capture system balancing records and store them in
29 a temporary file.
30

31 The second pass through the transmission file verifies the integrity of each batch. Transactions
32 must be segregated as shown in the chart in section 3.1.1.1 above. The trailer and system
33 balancing counts and amounts must match the detail records within the corresponding batch.
34 Any problem concerning the integrity of a batch results in the rejection of the entire batch. A
35 batch control record for each accepted batch is written to the *batch control* table in the
36 *Interface* database. Each batch control record contains a data value indicating the source of the
37 incoming data, used to determine where batch acknowledgements and error transactions are
38 sent (see section 3.5 concerning data routing). System balancing records for each financial
39 batch are written to the *system balancing* table in the *Interface* database (see section 3.8 for
40 further details).
41

42 As transmissions and batches are being edited, data is gathered to generate a transmission
43 control report, detailing rejected transmissions and batches, and summarizing record counts
44 and amounts. This report is printed locally and is used by the Interface Group to perform
45 reconciliation activities, and by the Production Control Group to determine data volumes for
46 the next daily processing cycle. The DLSC Data Integrity Team also uses the report to
47 reconcile the “data received” portion of their system balancing worksheets. They use the “data

1 accepted” portion of these reports to perform daily reconciliation of data processed in
2 Servicing. See Appendix C for report details.

3 4 **3.1.2 Receiving Transactions from the EDA Vendor**

5 6 **3.1.2.1 Description**

7
8 Loan Servicing receives transmission files from the EDA Vendor. Transmission files contain a
9 limited set of transactions. See section 3.4 for a complete list of valid EDA transactions. The
10 major difference between EDA Vendor transmissions and the LO/LC transmissions is that the
11 EDA Vendor does not send system balancing records to accompany their financial batches.
12 Instead, a single or multiple FAD document control transaction(s) is/are associated with each
13 financial batch, and must match the sum of the detail transactions within the batch.

14 15 **3.1.2.2 Environment**

16
17 The CI001 process performs the same transmission file and batch validation for the EDA
18 Vendor as for Loan Origination and Loan Consolidation (see section 3.1.1.2).

19 20 **3.1.2.3 Inputs**

21
22 Transmission file from EDA Vendor (*CI001SI.INP*)

23 24 **3.1.2.4 Outputs**

- 25
26 1. Batch control (*ci_batch_ctrl*) and system balancing (*ci_system_bal*) records. See
27 section 3.1.1.4.
28
29 2. Files containing the segregated batch data for later processing:
30 - Non-booking batches (*CI020SI.INP*)
31
32 3. Transmission Summary Report (*CI001SI.RPT*) (*see Appendix C*)
33

34 35 **3.1.2.5 Process Flow**

36
37 EDA transmissions are processed as described in section 3.1.1.5. Additionally, for
38 transmission files sent from the EDA Vendor containing financial transactions, CI001
39 compares the sum of the payment (FPA) and payment reversal (FNF) transactions within each
40 batch with the amount of the document control (FAD) transaction. If the amounts do not
41 match, the entire batch and its associated document control batches are rejected.

42 **3.1.3 Receiving Images**

43 44 **3.1.3.1 Description**

45
46 The Servicing Imaging Center interfaces directly with the Loan Origination and Loan
47 Consolidation Imaging Centers. The Loan Consolidation Imaging Center interfaces directly
48 with the ICR Imaging Center (formerly CDS Imaging Center) for ICR Waiver processing.

1 Therefore, originating interface IDs for imaging transactions no longer point to CDS, the
2 former transaction router. The processes to send acknowledgments and errors from Loan
3 Servicing and the ICR Imaging Center are similarly changed, in that they no longer use CDS as
4 the router.

5 6 **3.1.3.2 Environment**

7
8 There is no change to the current environment.

9 10 **3.1.3.3 Inputs**

11
12 Transmission files containing Image Header (DIH), Image Request (DRQ), and binary images
13 received from Loan Origination and Loan Consolidation

14 15 **3.1.3.4 Outputs**

16
17 Images posted to FileNet

18 19 **3.1.3.5 Process Flow**

20
21 There is no change to the current process flow for receiving images.

22 23 **3.2 Performing Edits on Incoming Transactions**

24
25 Loan Servicing edits each incoming transaction to determine whether its data is within
26 acceptable ranges. This is done to ensure that applying the transaction in Servicing does not
27 adversely affect borrower portfolios.

28 29 **3.2.1 Editing Booking Transactions**

30 31 **3.2.1.1 Description**

32
33 CI010 edits all booking transactions (FLA, FLB, and FBB) received from Loan Origination
34 and Loan Consolidation. Rejected transactions are returned to the sender as GXE transactions.
35 Appendix R contains a list of all edits performed on these transactions; Appendix L contains a
36 list of all new, modified, or deleted edits. Additionally, Servicing no longer rejects FBB
37 transactions when the corresponding FLA transaction fails; these FBB transactions are ignored,
38 and one GXE transaction is written for each error in each failed FLA, to a maximum of ten
39 GXEs for each of ten errors in a single transaction.

40
41 CI010_UPDATE processes accepted disbursement and participant transactions into the
42 *Interface database*.

43 44 **3.2.1.2 Environment**

45
46 CI010 runs on the Alpha as part of the Interface processing cycle.

47
48 CI010_UPDATE runs on the Alpha as part of the daily processing cycle.

1
2

1 **3.2.1.3 Inputs**

2
3 Booking transactions (*CI010S1.INP*)

4
5 **3.2.1.4 Outputs**

- 6
7 1. Accepted FLA and FLB transactions (*ci_disbursement_txn*)
8
9 2. Accepted FBB transactions (*ci_participant_txn*)
10
11 3. Rejected transactions (*ci_trans_error*)
12

13 **3.2.1.5 Process Flow**

14
15 CI010 groups each FLA transaction with its associated FBB transactions to apply edits.
16 Problems with establishing the relationship between an FLA and any associated FBB
17 transaction(s) or errors encountered in an associated FBB causes the entire group to be
18 rejected. Errors identified in an FLA causes the FLA transaction to be rejected but the
19 associated FBB transaction is accepted and ignored.

20
21 CI010 edits each FLB transaction by itself. An FLB failing one or more edits causes the
22 transaction to reject.

23
24 A record for each accepted FLA and FLB transaction is written to the
25 *ci_disbursement_tracking* table to indicate that the transaction has been accepted. Rejected
26 transactions are written to the *ci_trans_error* table. Appendix L (CI010.COB) lists the edits
27 that have been added or changed to support the Direct Loan Simplification task. Appendix R
28 contains a list of all edits that Servicing performs on booking transactions.

29
30 CI010_UPDATE adds accepted FLA and FLB transactions to the *ci_disbursement_txn* table
31 and adds accepted FBB transactions to the *ci_participant_txn* table. These tables are staging
32 areas for the booking process.
33

34 **3.2.2 Editing Non-booking Transactions**

35
36 **3.2.2.1 Description**

37
38 CI020 edits all non-booking (DBB, DCN, DLM, DLS, FCA, FLC, FLD, DPT, FNF and FPA)
39 transactions sent by Loan Origination, Loan Consolidation, and the EDA Vendor. Appendix R
40 contains a list of all edits performed on non-booking transactions. Additionally, when multiple
41 adjustment (FLD) transactions are received on the same day for a single disbursement, CI020
42 processes them as a group in the order received. FLD transactions received for disbursements
43 that have not yet been booked into Servicing, but have successfully passed through the edit
44 process (CI010), will be accepted as long as they pass all other FLD edits.
45
46

1 **3.2.2.2 Environment**

2
3 CI020 runs on the Alpha as part of the Interface processing cycle.

4
5 **3.2.2.3 Inputs**

6
7 Non-booking transactions (*CI020SI.INP*)

8
9 **3.2.2.4 Outputs**

- 10
- 11 1. Accepted non-booking transactions:
 - 12 - Disbursement cancellations and adjustments (*DB001SI.ADJ*)
 - 13 - Disbursement date changes (*CI025SI.DAT*)
 - 14 - Loan Modifications (*CI022SI.DAT*)
 - 15 - Participant Changes (*CI021SI.DAT*)
 - 16 - SSN Changes (*CI023SI.DAT*)
 - 17 - Consolidation Notifications and Payoffs (*ci_cons_payoff_txn*)
 - 18 - EDA payments and payment reversals (*CI070SI.DAT*)
 - 19 - EDA applications and changes (*BL140SI.DAT*)
- 20
- 21 2. Rejected transactions (*ci_trans_error*)
- 22

23 **3.2.2.5 Process Flow**

24
25 CI020 performs transaction specific edits on each transaction. Appendix L contains the list of
26 edits added to CI020 to support the Direct Loan Simplification effort. Appendix R contains the
27 entire list of edits performed by CI020.

28
29 When multiple disbursement adjustments/cancellations are received on the same day for the
30 same loan disbursement, CI020 edits them in the order they are received, keeping a running
31 total of the gross amount of the disbursement as each adjustment is applied. If the result of
32 applying the adjustment being edited to the gross amount of the disbursement in Servicing does
33 not agree with the new gross amount supplied in the adjustment transaction, the transaction is
34 rejected. All subsequent adjustments for that disbursement are rejected as well.

35
36 The following examples are for a disbursement with a current gross amount of \$1000:

37
38 **Example #1**

Transaction Type	Disb Seq Number	Gross Adjustment from Txn	Adjusted Disb Gross from Txn	Calculated Disb Gross	Pass/Reject and Reason
FLD	03	\$500.00	\$1500.00	\$1500.00	Pass
FLD	05	-\$1200.00	\$300.00	\$300.00	Pass
FLD	06	-\$300.00	\$0.00	\$0.00	Pass
FLD	08	\$500.00	\$500.00	\$500.00	Pass

1

Example #2

Transaction Type	Disb Seq Number	Gross Adjustment from Txn	Adjusted Disb Gross from Txn	Calculated Disb Gross	Pass/Reject and Reason
FLD	05	-\$1200.00	\$300.00	\$-200.00	Fail – Disbursement Gross cannot drop below zero and Calculated Disbursement Gross and Adjusted Disbursement Gross do not match.
FLD	03	\$500.00	\$1500.00	\$1500.00	Fail – Calculated Disbursement Gross and Adjusted Disbursement Gross do match (Txns probably received in wrong order), however, previous transaction has already failed

2

3

Example #3

Transaction Type	Disb Seq Number	Gross Adjustment from Txn	Adjusted Disb Gross from Txn	Calculated Disb Gross	Pass or Reject and Reason
FLD	03	\$500.00	\$1500.00	\$1500.00	Pass
FLD	05	-\$1200.00	\$300.00	\$300.00	Pass
FLD	08	\$500.00	\$500.00	\$800.00	Fail – Calculated Disbursement Gross and Adjusted Disbursement Gross do not match.

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In the above examples, Servicing does NOT check to ensure that the disbursement sequence number is correct. Loan Origination and Loan Consolidation ensure that they send transactions in the order they wish them to be edited and processed.

If an FLD passes all edits but the disbursement that is being adjusted cannot be found in the *Disbursements* table of the Main database, CI020 will check the *disbursement_tracking* table to determine whether or not the disbursement is in-house and has successfully passed the booking edits in CI010. If an accepted record is found, the FLD transaction will be accepted.

3.2.3 Editing School File Transactions

3.2.3.1 Description

1 CI030 receives all school file (DSD) transactions sent in Year 8 format from Loan Origination,
2 transforms them to the pre-Year 8 format, and edits the transactions.
3 CI030_UPDATE updates to the FICE_SCHOOL_CODES table in the main database with
4 accepted DSD transactions.
5
6

1 **3.2.3.2 Environment**

2
3 CI030 runs on the Alpha as part of the Interface processing cycle.

4
5 CI030_UPDATE runs on the Alpha as part of the daily processing cycle.

6
7 **3.2.3.3 Inputs**

8
9 School file transactions (*CI030SI.INP*)

10
11 **3.2.3.4 Outputs**

12
13 1. Accepted school file transactions (*fice_school_codes*)

14
15 2. Rejected transactions (*ci_trans_error*)

16
17 **3.2.3.5 Process Flow**

18
19 CI030 edits each DSD transaction. Appendix L lists all edits added to CI030 to support the
20 Direct Loan Simplification effort. Appendix R lists all edits performed by CI030. Section 3.7
21 provides more extensive detail regarding school file maintenance.

22
23 CI030_UPDATE takes each accepted DSD transaction and applies it to the *fice_school_codes*
24 table in the Main Database.

25
26 **3.2.4 Editing Funds Transactions**

27
28 **3.2.4.1 Description**

29
30 CI035 is a new program that edits all school file funds (FAD, FID, FIE and FIG) transactions
31 sent by Loan Origination and Loan Consolidation and creates a data file of accounting records
32 that is sent to FARS.

33
34 **3.2.4.2 Environment**

35
36 CI035 runs on the Alpha as part of the Interface processing cycle.

37
38 **3.2.4.3 Inputs**

39
40 Funds transactions (*CI035SI.INP*)

41
42 **3.2.4.4 Outputs**

43
44 1. Accepted funds transactions (*CI035S2.DAT*)

45
46 2. Rejected transactions (*ci_trans_error*)

1 **3.2.4.5 Process Flow**

2
3 CI035 edits each fund transaction. Rejected transactions are written to the *ci_trans_error*
4 table. Appendix L lists all the edits added to CI035 to support the Direct Loan Simplification
5 effort. Appendix R lists all edits performed by CI035. Section 3.6 provides more extensive
6 detail regarding processing Funds transactions.

7
8 **3.3 Storing and Transforming Data**

9
10 Loan Servicing stores data necessary to perform conversions to incoming transactions that are
11 required to successfully generate outgoing transactions to Loan Consolidation, FARS and the
12 EDA Vendor.

13
14 **3.3.1 Converting EDA Data**

15
16 **3.3.1.1 Description**

17
18 Borrower EDA bank account information currently stored in the *CDS Withdrawal (WTHDR)*
19 table must be relocated into the existing Servicing *EDA Accounts* table.

20
21 **3.3.1.2 Environment**

22
23 This is a one-time pre-implementation data conversion run on the Alpha during
24 implementation.

25
26 **3.3.1.3 Input**

27
28 The following fields from *CDS Withdrawal (WTHDR)* table:

- 29 - Authorization Account Number (*AUTH_ACCT_NUM*)
- 30 - Routing Number (*RTNG_NUM*)
- 31 - Type Code (*TYP_CD*)

32
33 **3.3.1.4 Output**

34
35 Modified version of the existing Servicing *EDA Accounts* table with the following existing
36 (added with Task Order 64) but unpopulated fields updated:

- 37
38 - EDA Bank Account Number (*EDA_BANK_ACCT_NBR*)
- 39 - EDA Routing Number (*EDA_ROUTING_NBR*)
- 40 - EDA Bank Account Type (*EDA_BANK_ACCT_TYP*)

41
42 **3.3.1.5 Process Flow**

43
44 A data file containing the borrower SSN and the three fields to be updated in Servicing is
45 extracted from the *CDS Withdrawal* table.

46
47 A one time program, *update_eda_accounts*, opens the data file and sequentially processes each
48 record. For each record selected, the corresponding record in the *EDA Accounts* table is

1 selected and the banking information is updated with the banking information from the data
2 file. The process log for the one time run contains a count of updated records to ensure all
3 records have been updated.
4

5 The following three fields from the CDS *WTHDR* table must be converted into the three new
6 corresponding fields in the Servicing *EDA Accounts* table:
7

CDS Database Fields	EDA_ACCOUNTS Fields
AUTH_ACCT_NUM	EDA_BANK_ACCT_NBR
RTNG_NUM	EDA_ROUTING_NBR
TYP_CD	EDA_BANK_ACCT_TYP

8
9 **3.3.2 Converting FARS Crosswalk Data**

10
11 **3.3.2.1 Description**

12
13 FARS information currently stored in the CDS *FARS Transaction Crosswalk*
14 (*FARS_TXN_XWALK*) and *FARS G Profile* (*FARS_GPROFL*) tables must be relocated into a
15 new Servicing Parameter table, *parm_gcodes*. This conversion supports the creation of G
16 Records by the Servicing system.
17

18 **3.3.2.2 Environment**

19
20 This is a one-time pre-implementation data conversion.
21

22 **3.3.2.3 Input**

23
24 The following fields from CDS *FARS_TXN_XWALK* table:
25

- 26 • Transaction Type Code *TXN_TYP_CD*
- 27 • Transaction Action Code *TXN_ACTN_CD*
- 28 • Account Sequence Number *ACCT_SEQ_NUM*
- 29 • First Field Value *FRST_FLD_VALUE*
- 30 • Second Field Value *SCND_FLD_VALUE*
- 31 • Third Field Value *THRD_FLD_VALUE*
- 32 • FARS Account Code *FARS_ACCT_CD*
- 33 • Document Type Code *DOC_TYP_CD*
- 34 • CDS Amount Field *CDS_AMT_FLD*
- 35 • Crosswalk Description *XWALK_DESC*
- 36 • Characters 4 and 5 of the *Comment* (*CMNT*) field in the CDS *FARS_GPROFL* table only
37 for transactions where *DOC_TYP_CD* equals 8 are converted.
38
39

3.3.2.4 Output

New Servicing table (*parm_gcodes*):

- Transaction Type Code PARM_G_TXN_TYPE
- Transaction Action Code PARM_G_ACTION_CODE
- Transaction Sequence Number PARM_G_SEQ_NBR
- First Field Value PARM_G_FIRST_FIELD
- Second Field Value PARM_G_SECOND_FIELD
- Third Field Value PARM_G_THIRD_FIELD
- FARS Action Code PARM_G_FARS_ACTION_CODE
- Document Type Code PARM_G_DOCUMENT_TYPE
- Amount Field PARM_G_AMOUNT_FIELD
- Voucher Number computed
- Crosswalk Description PARM_G_DESCRIPTION

3.3.2.5 Process Flow

A data file containing the CDS conversion data is extracted from the CDS database.

A one time program, *update_gcodes*, opens the data file and sequentially processes each record. For each record selected, a record is written to the *parm_gcodes* table. The process log for the one time run must contain a count of updated records to ensure all records have been updated.

The following fields from the CDS database must be loaded into the *parm_gcodes* table:

- TXN_TYP_CD
- TXN_ACTN_CD
- ACCT_SEQ_NUM
- FRST_FLD_VALUE
- SCND_FLD_VALUE
- THRD_FLD_VALUE
- FARS_ACCT_CD
- DOC_TYP_CD
- CDS_AMT_FLD
- XWALK_DESC

From the *CDS FARS_GPROFL* table characters 4 and 5 of the *Comment (CMNT)* field only for transactions where *DOC_TYP_CD* equals 8 are converted into the Servicing *Parm_gcode* table *voucher number* field.

3.3.3 Processing Consolidation Notification Transactions

3.3.3.1 Description

1 When Loan Consolidation sends a DCN transaction to Servicing requesting loan information
2 for a specific borrower, Servicing responds by returning a DCN for each active loan in the
3 borrower's direct portfolio.

4 **3.3.3.2 Environment**

5
6 The CI020 process validates DCN transactions. This job runs on the Alpha as part of the
7 Interface processing cycle.

8
9 The CI024 process generates DCN response transactions. This job runs on the Alpha as part
10 of the Interface processing cycle.

11 12 **3.3.3.3 Inputs**

13
14 DCN transactions from Loan Consolidation (*CI020S1.INP*)

15 16 **3.3.3.4 Outputs**

17
18 Multiple DCN transactions, one for each direct loan for that borrower, returned back to Loan
19 Consolidation (*CI024S1.DAT*)

20 21 **3.3.3.5 Process Flow**

22
23 Loan Consolidation sends DCN transactions, which solicit payoff amounts for loans in a
24 borrower's portfolio, directly to Servicing. These transactions contain either a *borrower SSN*
25 and a *loan id*, or just a *borrower SSN*.

26
27 The CI020 program edits each DCN transaction. For DCN transactions containing a *borrower*
28 *SSN* and a *loan id*, the program ensures that the SSN/loan combination exists in the Servicing
29 database as an active loan by looking up the SSN and loan id in the *Disbursements* table. If the
30 combination is found, one record for that active loan id is written to the *ci_cons_payoff_txn*
31 table. For DCN transactions containing a *borrower SSN* only, the program ensures that the
32 borrower exists in the Servicing database. If the borrower is found, one record per active loan
33 id in the borrower's portfolio is written to the *ci_cons_payoff_txn* table.

34
35 The CI024 process selects each pending *borrower/loan id* request from the
36 *ci_cons_payoff_txn* table, and fills all necessary fields using information from the
37 *Disbursements* and *Packets* tables in the Servicing Main database. The program packages
38 these loan level DCN transactions into a transmission file and sends them to Loan
39 Consolidation. This is all current functionality.

40 41 **3.4 Managing EDA Transactions**

42
43 Loan Servicing interacts directly with the EDA Vendor to receive, edit and process EDA setup
44 and change information directly from the EDA vendor. Servicing also receives, edits and
45 processes financial transactions comprised of payments, payment reversals and accounting
46 summary transactions. Servicing sends payment requests directly to the EDA Vendor and can
47 modify the request file prior to transmission (section 3.4.4). Servicing tracks and reports
48 transactions received from the EDA Vendor that are in error.

1
2

1 **3.4.1 Receiving EDA Setup and Change Information**

2
3 **3.4.1.1 Description**

4
5 The EDA Vendor sends non-financial transactions to set up borrowers on EDA or to change
6 banking information for current EDA borrowers. Applicable edits are performed as they are
7 today to ensure that the data is acceptable to Loan Servicing (see Appendix R for a list of EDA
8 edits; see Section 3.4.4 for managing EDA rejects). Accepted data is stored in the
9 *eda_accounts* table in the Servicing Main database (see Appendices K and L).

10
11 **Non-Financial EDA Transactions**

Transaction Code	Description
DPT-NA	Sent by the EDA Vendor to set a borrower up for EDA. Contains banking and demographic information
DPT-PF	Sent by the EDA Vendor to remove a borrower from EDA when the borrower's bank notifies the EDA Vendor that a debit account cannot be established.
DPT-CI	Sent by the EDA Vendor to change a borrower's banking information

12
13 **3.4.1.2 Environment**

14
15 Non-financial transactions sent by the EDA Vendor are edited in the CI020 process. This job
16 runs on the Alpha as part of the Interface processing cycle.

17
18 Transactions passing all edits are written to a sequential file to be used as input to the EDA
19 application process, BL140. This job runs on the Alpha as part of the Interface processing
20 cycle.

21
22 **3.4.1.3 Inputs**

23
24 Transmission file received from the EDA Vendor (*CI020S1.INP*)

25
26 **3.4.1.4 Outputs**

- 27
- 28 1. Updated records in the EDA Accounts table (*eda_accounts*)
- 29
- 30 2. File containing valid transactions (BL140S1.DAT)
- 31

32 **3.4.1.5 Process Flow**

33
34 In CI020, DPT transactions are edited for format, content and the existence of a borrower in
35 the Servicing Main database matching the SSN supplied within the transaction.

36
37 Accepted DPT transactions are used to create new records in the *eda_accounts* table or to
38 update existing records. Existing internal reports are generated to indicate new or changed
39 borrower information. This is current functionality that is not changed by this release.

1 Rejected transactions are stored in the standard interface error table, *ci_trans_error*. Program
2 CI002 (see section 3.5.2) extracts and adds the rejected transactions to the new EDA Error
3 table, *ci_eda_error*. This table is used for review and resolution by the Servicer Interface
4 Group (see Section 3.4.4 and Appendix K).

5
6 **3.4.2 Sending Payment Requests to the EDA Vendor.**

7
8 **3.4.2.1 Description**

9
10 Servicing sends payment request transactions directly to the EDA Vendor. The file contains
11 transmission and batch header and trailer records, as well as the payment request transactions.
12 The file is sent to the Vendor no later than 4pm one business day prior to the debit date.
13

14 **Payment Request Transaction**

Transaction Code	Description
FRW	Sent to the EDA Vendor to request a debit amount and date.

15
16 No system balancing records are sent with these financial batches. This is current functionality
17 that is not changed by this release.
18

19 **3.4.2.2 Environment**

20
21 Borrower accounts to be debited for the current payment cycle are selected by the BL016
22 process. This process runs on the Alpha once a week, four business days prior to the payment
23 due date.
24

25 The TP001 process generates FRW transactions. This process runs on the Alpha once a week,
26 two business days prior to the payment due date.
27

28 **3.4.2.3 Inputs**

29
30 EDA Accounts table (*eda_accounts*), selecting active borrowers due for the upcoming
31 payment cycle.
32

33
34 **3.4.2.4 Outputs**

- 35
36 1. Payment Request table (*ci_payment_request*)
37
38 2. Payment request transmission file containing one FRW transaction for each borrower
39 debit request (*TP001SI.DAT*)
40
41 3. Internal transmission file containing Servicing generated FPA transactions
42 (*CI001SI.INP*)
43

44 **3.4.2.5 Process Flow**

1
2 Once a week, BL016 sequentially scans the *eda_accounts* table and compares the results to
3 other tables within the Servicing Main database to determine which borrowers should be
4 debited for the upcoming payment cycle.

5
6 A record for each qualifying record is written the *payment_request* table for the appropriate
7 amount and debit date.

8
9 Two business days prior to the debit date, TP001 scans the *payment_request* table and
10 generates both an internal payment (FPA) transaction and a payment request (FRW)
11 transaction for each borrower being debited in the upcoming cycle.

12
13 Payment request transactions are formatted into a transmission file and sent to the EDA
14 Vendor one business day prior to the debit date.

15
16 **3.4.3 Receiving Payment and Payment Reversal Transactions**

17
18 **3.4.3.1 Description**

19
20 The EDA Vendor sends payment application (FPA) transactions, payment reversal (FNF)
21 transactions and a document control (FAD) transaction to Servicing in a standard transmission
22 file. All applicable edits are performed on each record (see Appendix R for a list of EDA
23 edits). Transactions that fail the edits are written to the *ci_trans_err* table and later sent to the
24 new *ci_eda_error* table. There are no system balancing records received with these financial
25 batches.

26
27 **Financial EDA Transactions**

Transaction Code	Description
FPA	Sent by the EDA Vendor to credit a borrower's account. Contains a payment amount, trace number, and payment date.
FNF	Sent by the EDA Vendor to reverse a previous payment. Contains a reversal amount, trace number, and payment date.
FAD	Sent by the EDA Vendor with payment (FPA) and payment reversal (FNF) transactions as an accounting summary. Multiple FAD batches may accompany one batch of FPA or FNF transactions.

28
29 **3.4.3.2 Environment**

30
31 Financial transactions sent by the EDA Vendor are edited in the CI020 process. This job runs
32 on the Alpha as a part of the Interface processing cycle.

33
34 **3.4.3.3 Inputs**

35
36 Transmission file received from the EDA Vendor (CI020S1.INP)

1 **3.4.3.4 Outputs**

- 2
- 3 1. Accepted transaction file for reconciling external and internal payments (*CI020S8.DAT*)
- 4
- 5 2. Accepted transaction file for processing payment reversal transactions (*CI070S1.DAT*)
- 6

7 **3.4.3.5 Process Flow**

8

9 CI020 edits financial transactions received from the EDA Vendor. See Appendix R for a list of

10 EDA edits. See section 3.4.4 for a description of how rejected transactions are managed. No

11 other changes are necessary to process financial transactions sent by the EDA Vendor.

12

13 **3.4.4 Managing Rejected Transactions**

14

15 **3.4.4.1 Description**

16

17 The EDA Vendor may send financial and non-financial transactions that do not pass Servicing

18 edits. These failed transactions cannot be rejected back to the EDA Vendor, since the EDA

19 Vendor has no mechanism in place to receive and resolve errors. Servicing tracks all Vendor

20 errors in the *ci_eda_error* table in the Interface database. The Servicing Interface group uses

21 aging reports and online access to *ci_eda_error* to monitor and resolve outstanding issues (see

22 section 3.4.5 for how the Interface Group accesses the data).

23

24 **3.4.4.2 Environment**

25

26 Transactions sent by the EDA Vendor are edited in the CI020 process. This job runs on the

27 Alpha as a part of the daily cycle.

28

29 The CI002 process copies EDA transaction rejects from the *ci_trans_error* table to the

30 *ci_eda_error* table. This job runs on the Alpha as part of the Interface processing cycle.

31

32 **3.4.4.3 Inputs**

33

34 Transmission file from the EDA Vendor

35

36 **3.4.4.4 Outputs**

- 37
- 38 1. Rejected transactions are written to the Interface Error table (*ci_trans_error*)
- 39
- 40 2. Rejected EDA transactions are copied to the EDA Error table (*ci_eda_error*)
- 41

42 **3.4.4.5 Process Flow**

43

44 CI020 performs applicable edits on data received from the EDA Vendor to ensure that the data

45 is acceptable to Loan Servicing (see Appendix R for a list of EDA edits). Transactions that do

46 not pass the Servicing edits are written to the *ci_trans_error* table.

47

1 CI002 copies EDA transaction errors (those with transmission source = LB021) to the
2 *ci_eda_error* table. This is a work-in-process table that is accessed by the Interface Group (see
3 section 3.9 for a more detailed description of error resolution).
4

5 The Interface Group works with the EDA Vendor to resolve the errors. Resolution of errors
6 generally require the EDA Vendor to resend individual transactions or, in some cases, entire
7 transmission files.
8

9 The Interface Group flags error records as “resolved” upon resolution (see section 3.4.5).
10

11 **3.4.5 Providing Data Access to the Interface Group**

12 **3.4.5.1 Description**

13 The Servicer Interface Group must be able to review, update and certify weekly EDA debits
14 prior to transmission of the FRW file to the EDA Vendor. With the approval of DLSC Data
15 Integrity, Servicer Interface Group members can change debit amounts, remove entire records,
16 and add records to the transmission files. Group members can also access the EDA Error table
17 to review and resolve transactions sent by the Vendor that do not pass the Servicing edits.
18
19
20

21 **3.4.5.2 Environment**

22 The Servicing Interface Group accesses the *ci_eda_error* table and the *ci_payment_request*
23 table through an ODBC connection to the *Interface* database using MS/ACCESS
24
25

26 **3.4.5.3 Inputs**

- 27 1. The EDA Error table (*ci_eda_error*)
- 28 2. The Payment Request table (*ci_payment_request*)
- 29
- 30
- 31

32 **3.4.5.4 Outputs**

33 Updated or deleted records in the *ci_eda_error* and *ci_payment_request* tables
34
35

36 **3.4.5.5 Process Flow**

37 Each week, four business days prior to the cycle due date, the BL016 process selects accounts
38 to be debited and debit amounts, and writes them to the *ci_payment_request* table. The actual
39 FRW file is not created until two business days before the cycle due date. In the two days prior
40 to the system creating the FRW transaction and applying the internal payments, the Interface
41 Group can make corrections specified by the Payment Center and/or ED to the
42 *payment_request* table.
43
44

45 The CI020 process edits and identifies failed transactions received from the EDA Vendor.
46

1 The Servicing Interface Group reviews and updates the *ci_payment_request* and the
2 *ci_eda_error* tables using an MS/ACCESS tool connecting to the *Interface* database through
3 ODBC. See Appendix D for more information regarding the MS/ACCESS screens.
4

5 **3.4.6 Providing Data Access to the Direct Loan Servicing Center (DLSC)**

6 **3.4.6.1 Description**

7
8 DLSC representatives can view, on a need to know basis, borrower bank account numbers,
9 account types, and bank routing numbers on the A19 screen of the Servicing online system.
10 Representatives with the appropriate access can update the values in these fields by accessing
11 the modified B02 EDA Borrower Maintenance screen (see Appendix D).
12
13

14 **3.4.6.2 Environment**

15
16 The A19 and B02 screens are part of the Servicing Online System, which runs on the Alpha in
17 an ACMS environment.
18

19 **3.4.6.3 Inputs**

20
21 Changes on the B02 screen to the bank account number (*eda_bank_acct_nbr*), bank routing
22 number (*eda_routing_nbr*) and account type (*eda_bank_acct_typ*) fields in the *eda_accounts*
23 table.
24

25 **3.4.6.4 Outputs**

26
27 Updated EDA accounts table (*eda_accounts*)
28

29 **3.4.6.5 Process Flow**

30
31 Privileged DLSC Representatives can access the A19 screen in Servicing to review EDA
32 account information. Representatives with the appropriate privileges can access the B02
33 screen. Typing in the account number causes a display of the current banking information for
34 the borrower, which can be overwritten. Pressing the SAVE key (F12) causes the *eda*
35 *accounts* table to update the values in the *eda_bank_acct_nbr*, *eda_routing_nbr* and the
36 *eda_bank_acct_typ* fields after moving the current values in these fields to the new fields
37 *eda_bank_acct_prior*, *eda_routing_prior*, and *eda_bank_typ_prior* respectively.
38

39 **3.4.7 Processing EDA Payments**

40 **3.4.7.1 Description**

41
42 Internal payment application (FPA) transactions are generated 2 days before a debit cycle due
43 date. These payment transactions are processed as 7018 transactions and post to borrowers'
44 accounts on the due date. External payments are received a day or two after the debit cycle
45 due date and are reconciled to the internal payments that were posted.
46
47
48

1 **3.4.7.2 Environment**

2
3 CI070 processes the internal FPA transactions. This job runs on the Alpha as a part of the new
4 daily interface cycle.

5
6 CI071 reconciles internal and external payment transactions. This job runs on the Alpha as part
7 of the new daily interface cycle.

8
9 **3.4.7.3 Input**

- 10
11 1. Internally generated FPA transactions (*CI070S1.SRT*)
12 2. External FPA transactions (*CI020S8.DAT*)

13
14 **3.4.7.4 Output**

15
16 7018 transactions for posting into Servicing (*GSL_CI070.DAT*)

17
18 **3.4.7.5 Process Flow**

19
20 Payment transactions (FPA) are created by the TP001 process two business days before a
21 cycle due date.

22
23 On the due date (or the next possible daily, if due date falls on a holiday or a Sunday), CI070
24 processes the FPA transactions and generates Servicing payment transactions (7018).

25
26 One or two days after the due date, CI071 processes external FPA transactions received from
27 the EDA Vendor with the internal FPA transactions posted to Servicing. A transaction is sent
28 to FARS containing both the internal and external document number assigned to the payments.

29
30 **3.5 Routing Transactions through Loan Servicing**

31
32 The Servicing system transmits transmission files to multiple destinations.

33
34 **3.5.1 Tracking Data Sources**

35
36 **3.5.1.1 Description**

37
38 Servicing is responsible for returning data in response to receiving transactions from Loan
39 Origination and Loan Consolidation. These responses include:

- 40
41 1. Batch acknowledgments
42 2. Positive confirmation for applied disbursement activity
43 3. Positive and negative confirmation for applied SSN changes

44
45 To ensure that the responses are sent to the appropriate Direct Loan Partner, Servicing captures
46 the *transmission source code* that is supplied as part of each transmission header record and
47 uses it to determine the destination for the responses.

1 **3.5.1.2 Environment**

2
3 The CI001 process (validate transmission files) creates records in the *batch control* and *system*
4 *balancing* tables in the *Interface* database. These tables **are already coded** with the
5 *transmission source code*.

6
7 The CI010 process (validate booking data) creates tracking records in the *disbursement*
8 *tracking* table for initial and subsequent disbursement transactions. This table **is not coded**
9 with the *transmission source code*.

10
11 The CI020 process (validate non-booking data) creates tracking records in the *disbursement*
12 *tracking* table for disbursement adjustment and cancellation transactions. It also creates
13 tracking records in the *SSN change tracking* table for SSN change transactions. These tables
14 **are not coded** with the *transmission source code*.

15
16 These processes run on the Alpha in the Interface processing cycle.

17
18 **3.5.1.3 Inputs**

19
20 Transaction batches received from Loan Origination and Loan Consolidation.

21
22 **3.5.1.4 Outputs**

23
24 Populated *transmission source code* field in the *ci_disbursement_tracking* and
25 *ci_ssn_tracking* tables

26
27 **3.5.1.5 Process Flow**

28
29 CI001 validates transmissions and batches as they are received from LO and LC. The
30 *transmission source code* from the transmission header record is written to the *ci_batch_ctrl*
31 and *ci_system_bal* tables. CI001 recognizes the Loan Origination (LO0301) and Loan
32 Consolidation (LO0101), Loan Consolidation Express Refinance (LO0201), ED Loan
33 Origination Reconciliation (LO0401), and EDA Vendor (LB0201) interface codes as
34 valid data sources.

35
36 CI010 edits booking transactions one batch at a time. Each time a new batch header is read,
37 the program reads the corresponding record from the *ci_batch_ctrl* table. Each record in the
38 batch is then sequentially read, edited, and either accepted or rejected. Accepted records are
39 written to the *ci_disbursement_tracking* table. The *transmission source code* field
40 corresponding to the current batch is included in the record written to the
41 *ci_disbursement_tracking* table. Rejected records are written to the *ci_trans_error* table.

42
43 CI020 edits non-booking transactions, one batch at a time. Each time a batch header is read,
44 the program reads the corresponding record from the *ci_batch_ctrl* table. Each record in the
45 batch is the sequentially read, edited, and either accepted or rejected. Accepted adjustment and
46 cancellation records are written to the *ci_disbursement_tracking* table. Accepted SSN change

1 transactions are written to the *ci_ssn_tracking* table. The *transmission source code* field
2 corresponding to the current batch is in the records written to the *ci_disbursement_tracking*
3 and *ci_ssn_tracking* tables. Rejected records are written to the *ci_trans_error* table.
4

5 CI030 edits school information transactions, one batch at a time. Each time a batch header is
6 read, the program reads the corresponding record from the *ci_batch_ctrl* table. Each record in
7 the batch is the sequentially read, edited, and either accepted or rejected. Accepted school
8 information transactions are applied to the *fiice_school_codes* table. Rejected records are
9 written to the *ci_trans_error* table.
10

11 CI035 edits funds transactions, one batch at a time. Each time a batch header is read, the
12 program reads the corresponding record from the *ci_batch_ctrl* table. Each record in the batch
13 is the sequentially read, edited, and either accepted or rejected. Accepted funds transactions
14 are used to create the G records used by FARS. Rejected records are written to the
15 *ci_trans_error* table.
16

17 **3.5.2 Sending Batch Acknowledgements**

18 **3.5.2.1 Description**

19 Once transmission files and their batches are verified and the detail records within the batches
20 are accepted or rejected, a transmission file containing batch acknowledgements is generated
21 and sent to the Direct Loan Partner that originally sent the data. These acknowledgement files
22 contain the following:
23

- 24 1. A single GAK (batch acknowledgement) record for every batch in the transmission
- 25 2. Twelve (12) GXB (system balancing) records for every financial batch
- 26 3. One or more GXE (transaction error) records for every rejected transaction. If a
27 transaction fails for more than one edit, multiple GXE transactions can be sent for the
28 same transaction, to maximum of ten GXEs.
29

30 Loan Origination and Loan Consolidation receive transmission acknowledgement files
31 containing information pertaining only to the data that they sent. The EDA Vendor does not
32 receive acknowledgements or transaction error records; however, EDA transaction errors are
33 copied to the new *ci_eda_error* table at this time.
34

35 **3.5.2.2 Environment**

36 The CI002 process generates acknowledgement transmission files. This program runs on the
37 Alpha as part of the Interface processing cycle.
38

39 **3.5.2.3 Inputs**

- 40 1. Batch control table in the *Interface* database (*ci_batch_ctrl*)
- 41 2. System Balancing table in the *Interface* database (*ci_system_bal*)
42
43
44
45
46
47
48

- 1
2 3. Transaction Error table in the *Interface* database (*ci_trans_error*)
3

4 **3.5.2.4 Outputs**

- 5
6 1. Transmission Acknowledgment file (CI002S1_LO.DAT) for Loan Origination
7
8 2. Transmission Acknowledgment file (CI002S1_LC.DAT) for Loan Consolidation
9
10 3. EDA Error table (*ci_eda_error*) for the Servicing Interface Group
11

12 **3.5.2.5 Process Flow**

13
14 CI002 selects records from the *ci_batch_ctrl* table that have completed the editing process but
15 have not yet been acknowledged. Each selected record is formatted as a GAK record and
16 written to a data file. The program then selects associated records from the *ci_system_bal*
17 table and *ci_trans_error* table, formats these records as GXB and GXE records respectively,
18 and writes them to the data file. Once all unacknowledged batches have been selected and
19 written, the data file is put into the standard transmission file format.
20

21 The CI002 process executes the CI002 program three times in each daily cycle.
22

23 The first run selects only Loan Origination batches and generates an acknowledgement file.
24

25 The second pass selects Loan Consolidation batches and generates a second acknowledgement
26 file.
27

28 The final pass selects EDA error transactions and copies them to the *ci_eda_error* table.
29

30 Once the third pass is complete, acknowledgement files are sent to LO and LC.
31

32 **3.5.3 Handling Extraneous Transactions**

34 **3.5.3.1 Description**

35
36 Servicing generates several transactions that it currently sends to CDS (DBB, DCN, DLS,
37 DPT, DRQ, FCA, FLD, GAK, GXB, GXE, and RDC). Some of these transactions are passed
38 to Loan Origination and/or Loan Consolidation, and others are used to update the CDS
39 database itself to keep Servicing and CDS in synch. Loan Origination and Loan Consolidation
40 have provided Loan Servicing with lists of which transactions they receive from Servicing that
41 are actually used to update their systems. Servicing no longer generates and sends unused
42 transactions to the Direct Loan Partners (DBB, DPT). Servicing no longer generates
43 transactions to send to CDS.
44

1 **3.5.3.2 Environment**

2
3 The IF110 process generates SSN change (DLS) and participant change (DBB) transactions
4 (date of birth changes only). This program runs on the Alpha as part of the daily process.

5
6 The IF115 process generates Participant change (DBB) transactions for address changes. This
7 job runs on the Alpha as part of the daily process.

8
9 The IF120 process generates Consolidation Payoff (FCA) transactions for over/under
10 consolidation payoffs. This job runs on the Alpha as part of the daily process.

11
12 The IF130 process generates Disbursement Adjustment (FLD) transactions for disbursement
13 refunds processed by DLSC. This job runs on the Alpha as part of the daily process.

14
15 The BL016 process generates EDA payment request transactions. This job runs on the Alpha
16 once a week as part of the daily process.

17
18 The TP001 process generates internal EDA payment transactions. This job runs on the Alpha
19 as part of the daily process.

20
21 **3.5.3.3 Inputs**

- 22
23 1. EDA Processing
24 2. On-line demographic information changes performed by DLSC personnel (3001, name
25 change) and from SSCR processing.
26 3. High security batch transactions performed by DLSC personnel (4040) to change SSNs.

27
28 **3.5.3.4 Outputs**

29
30 Transmission files for LO, LC and the EDA Vendor

31
32 **3.5.3.5 Process Flow**

33
34 The IF115 process is no longer run since any other Direct Loan Partner does not use address
35 changes initiated in Loan Servicing.

36
37 BL016 does not generate payment setup (DPT-IN/OT) transactions since they are currently
38 used by CDS to generate payment request (FRW) transactions for the EDA Vendor.

39
40 TP001 generates payment request (FRW) transactions and sends them to the EDA Vendor at
41 the same time internal payment (FPA) transactions are generated.

42
43 IF110 does not generate participant transactions (DBB) to send with SSN Change (DLS)
44 transactions and it does not generate participant transactions for date of birth changes. Neither
45 Loan Origination nor Loan Consolidation processes these records. IF110 does not generate
46 SSN change transactions for consolidation borrowers. Loan Consolidation does not update its
47 database with DLS transactions initiated in Servicing.

1 **3.5.4 Determining Outgoing Transaction Destination**

2
3 **3.5.4.1 Description**

4
5 Interface transactions are generated by Servicing and sent to Loan Origination, Loan
6 Consolidation, and the EDA Vendor. Servicing programs contain the necessary logic to create
7 and send these transactions to their appropriate destinations.
8

9 **3.5.4.2 Environment**

10 Each of the following jobs runs on the Alpha as part of the daily processing cycle:

11
12 The TP001 process generates EDA Payment Request transactions.

13
14 The IF110 process generates SSN change transactions and Image Request transactions.

15
16 The CI024 process generates Consolidation Notification transactions.

17
18 The IF130 process identifies Cash Cancellation transactions entered in Servicing.

19
20 The CI005 process builds transmission files of outgoing transactions for each of the Direct
21 Loan Partners and the EDA Vendor.
22

23
24 **3.5.4.3 Inputs**

- 25
26 1. Online transactions entered at DLSC
27 - Image Requests (3049)
28 - Cash Cancellations (7003C)
29 2. High security batch transactions for SSN changes (4040)
30 3. Consolidation notification (DCN) and Consolidation payoff (FCA) transactions sent by
31 Loan Consolidation
32 4. EDA Payment Requests (FRW)
33

34 **3.5.4.4 Outputs**

- 35
36 1. Financial and non-financial batches for Loan Origination
37 2. Financial and non-financial batches for Loan Consolidation
38 3. Payment Request batches for the EDA vendor (see section 3.4.3.4)
39

40 **3.5.4.5 Process Flow**

41
42 **a. FRW Transactions**

43
44 Payment Request transactions are sent only to the EDA Vendor (LB0201). See section 3.4 for
45 more detail regarding EDA processing. These transactions are generated in the TP001
46 process.
47

1
2 **b. FCA Transactions**
3

4 Consolidation payoff transactions are sent only to Loan Consolidation (LO0101). When these
5 transactions are created, they are placed in a financial batch for LO0101. Financial batches for
6 LO0101 must have an accompanying general batch containing 12 system balancing (GXB)
7 transactions. The FCA transactions are generated in the IF120 process. The CI005 process
8 adds the accompanying system balancing batch.
9

10 **c. DCN Transactions**
11

12 Consolidation notification transactions are sent only to Loan Consolidation. When these
13 transactions are created, they are placed in a non-financial batch for LO0101. The CI024
14 process generates these transactions.
15

16 **d. FLD-S Transactions**
17

18 Cash cancellation transactions are sent only to Loan Origination (LO0301). When these are
19 created, they are placed in a financial batch for LO0301. Financial batches for LO0301 must
20 have an accompanying general batch containing 12 system balancing (GXB) transactions. The
21 FLD-S transactions are generated in the IF130 process. The CI005 process adds the
22 accompanying system balancing batch.
23

24 **e. DLS Transactions**
25

26 SSN change transactions are sent only to Loan Origination (LO0301). The following logic is
27 used in the IF110 process to determine whether or not an SSN change needs to be sent to Loan
28 Origination:
29

30 The IF110 process identifies SSN change transactions in the daily transaction table
31 (*current_month_transactions*) and generates DLS transactions. Prior to generating the DLS
32 transaction, the program looks for a matching record in the *ci_ssn_tracking* table. If a record is
33 found, it indicates that the SSN change was initiated by one of the Direct Loan Partners. If the
34 *transmission source code* field in the table (section 3.5.1) indicates that the source of the
35 original transaction is Loan Origination, the DLS is not built. If no matching record is found in
36 the *ci_ssn_tracking* table, it is an indication that the SSN change was initiated by Loan
37 Servicing. In this case, the *packet* record where the SSN change occurred is examined. If the
38 *pkt_loan_type* indicates that the packet contains consolidation loans, no DLS transaction is
39 generated. If the *pkt_loan_type* indicates that the packet contains non-consolidation loans, a
40 DLS transaction is built for each loan associated with the packet. No DBB transactions are
41 built to accompany the DLS transactions.
42

43 **f. DRQ Transactions**
44

1 Image Request transactions are generated when DLSC personnel process 3049 transactions
2 online. These transactions are identified in the IF110 program. The following logic based on
3 packet loan type can be implemented to decide where to route a DRQ transaction:
4

5 If the DRQ transaction requests consolidation document images (Image Document
6 Type field is APCN, ADOI, WAIV, or CERT), the transaction is routed to a non-
7 financial batch to LO0101 (Loan Consolidation).
8

9 If the DRQ transaction requests origination document images (Image Document Type
10 field is ADDN, ENDA, PROM, POAT, or *ALL), the transaction is routed to a non-
11 financial batch to LO0301 (Loan Origination) for non-consolidated loans.
12

13 If the DRQ transaction requests origination document images (Image Document Type
14 field is ADDN, ENDA, PROM, POAT, or *ALL), the transaction is routed to a non-
15 financial batch to LO0101 (Loan Consolidation) for consolidated loans.
16

17 **3.5.5 Processing Image Transactions**

18 **3.5.5.1 Description**

19 Image transactions flow directly between the four Image Centers (Loan Origination, Loan
20 Consolidation, Loan Servicing, and ICR Waiver).
21

22 **3.5.5.2 Environment**

23 This process runs on a RISC 6000 with Unix operating system and using FileNet software.
24

25 **3.5.5.3 Inputs**

- 26 1. Image transactions
- 27 2. Images in TIFF4 format

28 **3.5.5.4 Outputs**

- 29 1. Image transactions
- 30 2. Images in TIFF4 format

31 **3.5.5.5 Process Flow**

32 Changes are necessary for directly transmitting to/receiving from Loan Origination and/or Loan
33 Consolidation and/or the Imaging Centers. Destination and origination interface Ids for
34 transmissions are changing.
35

36 **3.6 Routing Cash and Drawdown Transactions to FARS**

37 The Servicing system receives cash and drawdown transactions from Loan Origination and
38 Loan Consolidation.
39

1
2

1
2 The end of a batch triggers updates to the *ci_batch_ctrl* and *ci_system_bal* tables.
3

4 **3.7 Maintaining School File Data**

5
6 As part of the daily interface schedule, Servicing receives School File Update (DSD)
7 transactions in the new RTS 057 Year 8 format from Loan Origination, transforms them to the
8 old pre-Year 8 format, and edits all fields. Accepted DSDs are listed in a School File Update
9 report for DLSC School Services and the Servicing Interface Group. Rejected DSDs are
10 returned to Loan Origination via GXE transactions. The DSD transaction updates are applied
11 to the Servicing School File at the end of the nightly schedule. School Services representatives
12 with the appropriate access use the D02 School File Maintenance screen to directly update the
13 values in the Servicing School File fields. The Servicing Interface Group uses the D02 screen
14 to view Servicing School File records. With each nightly run, Servicing creates a complete
15 copy of the School File and sends it to FARS.
16

17 **3.7.1 Transforming and Applying DSD Transactions**

18 **3.7.1.1 Description**

19
20
21 The CI030 process receives each DSD transaction passed from CI001 in the new Year 8
22 format (see section 3.2.3 Editing School File Transactions) and calls new routine
23 CI030_REFORMAT_DSD to transform the DSD into the pre-Year 8 format. CI030 then edits
24 the transactions and prints the new School File Update Report, listing those incoming DSD
25 transactions that will be applied to the School File in the next CI030_UPDATE process. This
26 report is used by DLSC School Services and the Servicing Interface Group to research
27 potential OPEID, name, and address changes. See Appendix C for report details.
28

29 The CI030_UPDATE process applies accepted DSD transactions to the School File.
30

31 **3.7.1.2 Environment**

32
33 CI030 runs on the Alpha during the day as part of the Interface processing cycle.
34

35 CI030_UPDATE runs on the Alpha as part of the Daily processing cycle, after all bills and
36 notices have been printed.
37

38 **3.7.1.3 Input**

- 39
40 1. Accepted DSD School file transactions in Year 8 format
41 2. Servicing School File (FICE_SCHOOL_CODES on the main database)
42

1 **3.7.1.4 Output**

- 2
- 3 1. Updated Servicing School File (FICE_SCHOOL_CODES on the main database)
- 4 2. School File Update Summary Report (no change)
- 5 3. School File Update Report (new)
- 6 4. School File Update Reject Report (no change)-
- 7

8 **3.7.1.5 Process Flow**

9

10 The incoming DSD fields are transformed according to the rules in the following table.

11

12

Map New DSD Format to Old

Existing Field	Outgoing Field	Comments
Batch ID	Batch ID	"D"
Transaction Type	Transaction Type	"SD"
Transaction Seq #	Transaction Seq #	
reserved	Reserved	
School Short Name	School Short Name	
School Long Name	School Long Name	truncated from 70 to 35 positions
FAO Mailing Addr 1	Mailing Addr 1	truncated from 35 to 33 positions
FAO Mailing Addr 2		not transformed
FAO City	City	truncated from 25 to 16 positions
FAO State	State	
FAO Zip Code	Zip Code	truncated from 14 to 9 positions
FAO Foreign Province		not transformed
FAO Country	Country	
DLS # (6 positions)	DLS # (12 positions)	left justify (followed by 6 blanks)
OPEID	OPEID	
Corrected OPEID		not transformed, but reported
Main Campus DLS # (6)	Main Campus DLS # (12)	left justify (followed by 6 blanks)
Congressional District	Congressional District	truncated from 8 to 2 positions
Institution Type	Institution Control	values 5, 6, 7 are transformed to 4
FAO Name	FAO Name	truncated from 46 to 25 positions
FAO Phone	FAO Phone	truncated from 19 to 10 positions
DUNS #	DUNS #	
Exit Interview Lead Time	Exit Interview Lead Time	default is 060 *does not update Servicing table
Ethnic Code	Ethnic Code	
School Region Code	School Region Code	
School Sequence Number	School Sequence Number	
Program Length (2 digits)	Institution Type (1 digit)	transformed: 00 to 0 06 to 5 01 to 0 07 to 4 02 to 1 08 to 6 03 to 2 09 to 2 04 to 3 10 to 5 05 to 3 11 to 4 12 to 3
Official Addr1	OSA Mailing Addr 1	truncated from 35 to 33 positions
Official Addr 2		not transformed

Transaction Field	Original Field	Comments
Official City	OSA City	truncated from 25 to 16 positions
Official State	OSA State	
Official Zip Code	OSA Zip Code	truncated from 14 to 9 positions
Official Province		not transformed
Official Country	OSA Country	
Deferment Eligibility Indicator (1)	Title IV Flag (2)	(1) not present in pre-Year 8 format (2) not present in Year 8 format
Closed School Date	Closed School Date	
Reserved		91 character positions

Every transformed DSD transaction is then edited; CI030 editing changes with this release are in Appendix L. Rejected DSD transactions are handled as usual. Verified DSDs are applied to the Servicing School Codes table, with the following changes to program CI030.

1. The DSD Deferment Eligibility Indicator is moved to the School File Title IV Flag.
2. The following fields in the Servicing School Codes table are not updated from the corresponding DSD transaction fields:
 - Bursar name and phone
 - Financial Aid Office (FAO) name, address and phone
 - Registrar name and phone
 - Entity number
 - PIN number and password
 - Exit Interview lead time
 - Entity number
 - Special handling code
 - Team
 - WAN indicator
 - Title IV WAN effective date

3.7.2 Using the School File Maintenance Screen

3.7.2.1 Description

Modify the D02 screen to allow privileged School Services Representatives at the DLSC to update any field on the screen. The Comments and Account Manager Flag fields in the Servicing School File are available for viewing and update on the D02 screen, but are not present in the DSD transaction; these fields are for DLSC School Services use.

Give read only access to the Servicing Interface Group for the D02 screen.

3.7.2.2 Environment

The D02 screen is part of the Servicing Online System, which runs on the Alpha in an ACMS environment.

1 **3.7.2.3 Input**

- 2
3 1. Servicing School File
4 2. Changes on the D02 screen, for privileged School Services representatives
5

6 **3.7.2.4 Output**

- 7
8 1. Updated Servicing School File, for privileged School Services representatives
9 2. Populated D02 School File Maintenance screen, for Servicing Interface Group
10

11 **3.7.2.5 Process Flow**

12
13 Privileged School Services representatives at the DLSC School Services use the D02 School
14 File Maintenance screen to update the Servicing School File field *sch_dis_lead_time* field, as
15 necessary. These representatives can also use the D02 screen to update any other fields from
16 the Servicing School File on the screen. This full update capability is needed until Servicing
17 FY00 Release 3 (Year 8) is implemented; until then, the Servicing School File is out of synch
18 with the master LO School File.
19

20 The Servicing Interface Group uses the D02 School File Maintenance screen to view school
21 records online.
22

23 **3.7.3 Sending School File Data to FARS**

24
25 **3.7.3.1 Description**

26
27 Pass a flat file copy of the Servicing School File, in FARS School File format, to FARS in each
28 Daily run. The School File Year data, previously maintained via DSY transactions, will be
29 retired with the FY00Rel 3 (Year 8) release in February, 2001. FARS does need the School
30 File Year data, and ED will work with LO, the owner of the School File, if School File yearly
31 data is needed for queries, reports, etc. Archived program IF030, retired when Servicing
32 passed ownership of the School File to CDS, must be re-activated and brought up to date, to
33 generate the FARS School File extract. There is no change to the format of this extract file; it
34 continues to be in FARS School File format, with no Year (deleted DSY transaction) data.
35

36 **3.7.3.2 Environment**

37
38 The IF030 job runs on the Alpha as part of the Daily processing cycle, after CI030_UPDATE
39 runs to completion.
40

41 **3.7.3.3 Input**

42
43 Servicing School file (FICE_SCHOOL_CODES in main database)
44

45 **3.7.3.4 Output**

46
47 Flat file copy of FARS School File (*if030s1.dat*)
48

1 **3.7.3.5 Process Flow**

2
3 IF030 moves corresponding fields from the FICE_SCHOOL_CODES table to the FARS
4 School Code extract file, for every Servicing School Codes table entry, and writes and sends
5 the output file for FARS.
6

7 **3.8 Managing the System Balancing Process**

8
9 Loan Servicing maintains system balancing to accommodate both internal and external
10 reconciliation.
11

12 External requirements include capturing and reporting system balancing items for each
13 interface that sends data to and receives data from Loan Servicing. This information is used by
14 the Servicing Interface Group and its interface counterparts to reconcile transactions sent back
15 and forth between the interfaces.
16

17 Internally, the DLSC Data Integrity Group needs to see the flow of data into and out of Loan
18 Servicing at a summary level to reconcile total processed and total work in process items
19 against transactions accepted from the other interfaces. The Accounting Group also balances
20 accepted and processed counts and dollar amounts.
21

22 **3.8.1 Using the Batch Control Record to Establish Relationships**

23
24 **3.8.1.1 Description**

25
26 The batch control table, *ci_batch_ctrl*, in the *Interface* database, is used to track the receipt and
27 acknowledgement of incoming batches, and the sending and acknowledgement of outgoing
28 batches. All system balancing records in the system balancing table, *ci_system_bal*, are
29 attached to a record in the *ci_batch_ctrl* table. Using this relationship, it is easy to associate
30 system balancing information with the appropriate data flow. The key fields in the
31 *ci_batch_ctrl* table used to identify the data flow are *cibc_transmission_code* and
32 *cibc_reply_transmission_code*. The value in the first field identifies the source of a batch.
33 The value in the second field identifies the source of the acknowledgement (which is equivalent
34 to the destination) for that same batch. The possible data flows and code combinations are
35 listed in the following table.
36
37

Batch Control Values Indicating Data Flow

Data Flow	Transmission Code	Reply Transmission Code
LO to LS	LO0301	SV0101
LC to LS	LO0101	SV0101
EDA to LS	LB0201	SV0101
LS to LS (internal transactions)	LO0201	SV0101
LS to FARS*	SV0101	CD0101
LS to EDA*	SV0101	LB0201
LS to LO	SV0101	LO0301
LS to LC	SV0101	LO0101

38

1 * No actual acknowledgements are sent or received from the EDA Vendor, and no acknowledgments are
2 received from FARS; however, records are written to *ci_batch_ctrl* and *ci_system_bal* to capture the
3 appropriate system balancing information.
4

5 **3.8.1.2 Environment**

6
7 The CI005 process generates non-acknowledgement transmission files for each of the other
8 interfaces. This program also creates entries in the *ci_batch_ctrl* and *ci_system_bal* tables.
9 This job runs on the Alpha as part of both the Interface and weekly processing cycles.
10

11 The CI006 process generates transmission files for FARS solely to create entries in the
12 *ci_batch_ctrl* and *ci_system_bal* tables. These transmission files are never sent to FARS.
13 This job runs on the Alpha as part of both the Interface and weekly processing cycles.
14

15 **3.8.1.3 Inputs**

16
17 Non-formatted batches of outgoing transactions including:

- 18 – SSN changes for LO (*IF110S1.DAT*)
 - 19 – Image Requests for LO (*IF110S1.DAT*)
 - 20 – Cash Cancellations for LO (*IF130S2.DAT*)
 - 21 – Consolidation Notifications for LC (*CI024S1.DAT*)
 - 22 – Consolidation Payoff Results for LC (*IF120S1.DAT*)
 - 23 – Image Requests for LC (*IF110S1.DAT*)
 - 24 – Internal EDA Payments (*TP001S1.DAT*)
 - 25 – EDA Payment Requests (*TP001S2.DAT*)
 - 26 – FARS Financial Updates (*IF130S1.DAT*)
- 27

28 **3.8.1.4 Outputs**

29
30 New records in the batch control and system balancing tables
31

32 **3.8.1.5 Process Flow**

33
34 CI005 generates records in the *ci_batch_ctrl* table every time it assembles a batch of
35 transactions. The program assigns a value of SV0101 or LO0201 to the
36 *cibc_transmission_code* field, signifying the receiving interface. The program also assigns a
37 value to the *cibc_reply_transmission_code* field, indicating the destination of the batch. This
38 allows system balancing programs within Servicing to identify the destination of outgoing
39 batches prior to receiving an acknowledgment. Logic to determine batch destination is detailed
40 in section 3.5.4.
41

42 CI006 generates records in the *ci_batch_ctrl* table when it assembles batches of FARS
43 crosswalk transactions. The program assigns a value of SV0101 to the
44 *cibc_transmission_code* field and a value of CD0101 to the *cibc_reply_transmission_code*
45 field. This is an indication that financial data has been processed in Servicing and sent to
46 FARS.
47

1 **3.8.2 Capturing New System Balancing Items**

2
3 **3.8.2.1 Description**

4
5 Servicing captures system balancing information for the original set of seventeen financial
6 transactions established between CDS and Loan Servicing, and the additional financial
7 transactions establish between CDS and Loan Origination and Loan Consolidation. Servicing
8 is responsible for maintaining system balancing information for the following financial
9 transactions (transactions added to support the simplification task are in *italics*):

10
11 **System Balancing Transactions**

TRANSACTION TYPE	DESCRIPTION
<i>FAD</i>	<i>Document Control Transaction</i>
<i>FAU</i>	<i>Unidentified Deposit Transaction</i>
FCA	Consolidation Payoff Transaction
<i>FID</i>	<i>Institution Drawdown Transaction</i>
<i>FIE</i>	<i>Institution Excess Cash Transaction</i>
<i>FIF</i>	<i>Institution Fees Transaction</i>
<i>FIG</i>	<i>Interagency Fund Transfer of Payments Transaction</i>
FLA	Loan Applied (Booked) Transaction
FLB	Subsequent Loan Disbursement Transaction
FLC	Loan Disbursement Cancellation Transaction
FLD	Loan Disbursement Adjustment Transaction
FLI	Capitalized Interest Transaction
FLJ	Loan Amount Approved Adjustment
FLK	Loan Interest, Charges and Fees Transaction
FLL	Loan Adjustment Transaction
FLW	Loan Write Off/Up Transaction
FNA	Non-Sufficient Funds Application Transaction
FNF	Non-Sufficient Funds Transaction
FPA	Payment Receipt Transaction
<i>FRW</i>	<i>Request Withdraw Transaction</i>
FSA	Payment Application Transaction
FSJ	Payment Adjustment Transaction
FSO	Overpayment Refund Transaction

12

1 **3.8.2.2 Environment**

2
3 The modules *pb_trans_xb_add* and *pb_trans_xb_write* are code libraries used to collect and
4 write system balancing information. The programs relevant to this section that access this code
5 are:

- 6
7
 - CI001 generates system balancing records for incoming batches.
 - CI005 generates system balancing records for outgoing batches.
 - CI035 updates accepted counts and amounts in existing system balancing records for
11 funds transactions.

12
13
14 These programs run on the Alpha as part of the Interface processing cycle.

15
16 **3.8.2.3 Inputs**

- 17
18 1. Incoming Transmission Files (*CI001S1.INP*)
19
20 2. Outgoing Transmission Files (*CI005S1.DAT*)

21
22 **3.8.2.4 Outputs**

23
24 New and Updated System Balancing Records (*ci_system_bal*)

25
26 **3.8.2.5 Process Flow**

27
28 When CI001 processes a financial batch received from Loan Origination or Loan
29 Consolidation, it calls the system balancing routines *pd_trans_xb_add* and *pd_trans_xb_write*
30 to create records in the system balancing table *ci_system_bal*. These routines create records
31 for all financial transactions, including *funds* transactions.

32
33 When CI035 edits a batch of *funds* transactions, it calls the system balancing routines to update
34 the accepted counts and amounts stored in the system balancing records. These routines
35 update records for all financial transactions.

36
37 When CI005 generates a financial batch to send to Loan Origination or Loan Consolidation, it
38 calls the system balancing routines to build the general batch of system balancing transactions
39 to accompany the financial batch. Every general batch of system balancing transactions
40 contains the twelve (12) system balancing transactions originally established between CDS and
41 LO and LC.

42
43 The system balancing routines capture and store the following field values:

44
45 **System Balancing Fields**

Txn Type	Field 1	Field 2	Field 3	Field 4	Field 5	Field 6
----------	---------	---------	---------	---------	---------	---------

Txn Type	Field 1	Field 2	Field 3	Field 4	Field 5	Field 6
FAD	Document Amount	N/A	N/A	N/A	N/A	N/A
FAU	Payment Amount	N/A	N/A	N/A	N/A	N/A
FCA	Payoff Amount	N/A	N/A	N/A	N/A	N/A
FID	Drawdown Amount	N/A	N/A	N/A	N/A	N/A
FIE	Excess Cash Amt	N/A	N/A	N/A	N/A	N/A
FIF	Institution Fees	N/A	N/A	N/A	N/A	N/A
FIG	Document Amount	N/A	N/A	N/A	N/A	N/A
FLA	Disb Gross	Disb Fee	N/A	N/A	N/A	N/A
FLB	Disb Gross	Disb Fee	N/A	N/A	N/A	N/A
FLC	Disb Gross	Disb Fee	N/A	N/A	N/A	N/A
FLD	Disb Gross Adjustment	Disb Fee Adjustment	N/A	N/A	N/A	N/A
FLI	Capitalized Int Amount	N/A	N/A	N/A	N/A	N/A
FLJ	Loan Amount Approved	Corrected Loan Amt Approved	N/A	N/A	N/A	N/A
FLK	Int Accrual Amount	Charges Accrual Amount	Fees Accrual Amount	N/A	N/A	N/A
FLL	Principal Amount	Interest Amount	Charges Amount	Fees Amount	N/A	N/A
FLW	Write Off Amount	Principal Amount	Interest Amount	Charges Amount	Fees Amount	N/A
FNA	Payment Amount	Principal Amount	Interest Amount	Charges Amount	Fees Amount	N/A
FNF	NSF Amount	N/A	N/A	N/A	N/A	N/A
FPA	Payment Amount	N/A	N/A	N/A	N/A	N/A
FRW	Payment Amount	N/A	N/A	N/A	N/A	N/A
FSA	Payment Amount	Principal Amount	Interest Amount	Charges Amount	Fees Amount	Origination Fee
FSJ	Principal Amount	Interest Amount	Charges Amount	Fees Amount	N/A	N/A
FSO	Overpayment Amount	Principal Amount	Interest Amount	Charges Amount	Fees Amount	N/A

1 **3.8.3 Generating System Balancing Reports**

2
3 **3.8.3.1 Description**

4
5 Loan Servicing generates reports and worksheets to reconcile incoming and outgoing
6 transactions, and to reconcile transactions accepted by Servicing with transactions processed by
7 Servicing.

8
9 **3.8.3.2 Environment**

10
11 The CI001 process validates transmission files and generates a transmission summary report
12 for every processed transmission file. This job runs on the Alpha as part of the Interface
13 processing cycle.

14
15 The CI005 process generates outgoing transmission files and generates a transmission
16 summary report for every transmission file generated. This job runs on the Alpha as part of the
17 Interface and weekly processing cycles.

18
19 The CI006 process generates transmission files containing FARS crosswalk transactions (never
20 sent to FARS) and generates a transmission summary report. This job runs on the Alpha as
21 part of the Interface and weekly processing cycles.

22
23 The CI310 process generates the Schedule A Worksheet used to compare received transactions
24 with accepted transactions. This job runs on the Alpha as part of the Interface processing
25 cycle.

26
27 The CI301 process generates the formal Schedule A report. This job runs on the Alpha as part
28 of the Interface, weekly and monthly processing cycles.

29
30 **3.8.3.3 Inputs**

- 31
32 1. Incoming Transmission files (*CI001S1.INP*)
33 2. Outgoing Transmission files (*CI005S1.DAT, CI006S1.DAT*)

34
35 **3.8.3.4 Outputs**

- 36
37 1. Transmission Summary Reports (*CI001S1.RPT, CI005S1.RPT, CI006S1.RPT*) (see
38 Appendix C)
39 2. Schedule Worksheets (*CI310S1.RPT, CI310S2.RPT, CI310S3.RPT, CI311S1.RPT,*
40 *CI311S2.RPT, CI311S3.RPT, CI320S1.RPT*) (see Appendix C)
41 3. Schedule A and C Reports (*CI301S1.RPT*) (see Appendix C)

42
43 **3.8.3.5 Process Flow**

44
45 CI001 generates a transmission summary report every time an incoming transmission file is
46 processed. This report summarizes accepted and rejected batches, subtotals transaction counts
47 and amounts by transaction type within each batch, and provides a total count and amount by
48 transaction type for the entire transmission file. The Servicing Interface Group compares count

1 totals from this report to the transmission logs provided by LO and LC to ensure that all
2 transactions are accounted for.

3
4 CI310 generates schedule worksheets identifying received and accepted financial transactions
5 within a specified time period for each interface. Three versions of these reports are produced.
6 The first two reports identify financial data received from LO and LC respectively. The
7 Servicing Interface Group uses the “received” portion of these reports to reconcile the CI001
8 transmission summary reports generated on the previous business day. The third version of the
9 CI310 reports includes data received from all sources. The DLSC Data Integrity Group uses
10 the “accepted” portion of these reports to reconcile accepted financial transactions with
11 transactions processed through Servicing. The Accounting Group uses a monthly version of
12 this report to reconcile Servicing with FARS.

13
14 CI311 generates schedule worksheets identifying sent and accepted financial transactions
15 within a specified time period for each interface. One version of these reports is produced.
16 The Servicing Interface Group can use these reports to reconcile with the other interface
17 partners and with FARS.

18
19 CI320 generates a worksheet grouping work in process items by month. Comparing the
20 current month CI320 worksheet with the previous month’s report identifies resolved work in
21 process items during the current month. Three versions of these reports are produced. The first
22 two reports identify data received from LO and LC respectively. The third report summarizes
23 all work in process items.

24
25 CI005 generates a transmission summary report every time an outgoing transmission file is
26 generated. This report summarizes counts and amounts by transaction type within each batch,
27 and provides a total count and amount by transaction type for the entire transmission file. This
28 report can be used to reconcile received counts at each of the other interfaces that receive
29 transmission files from Loan Servicing.

30
31 CI006 generates a transmission summary report every time a transmission file of FARS
32 crosswalk transactions is generated. This report summarizes counts and amounts by
33 transaction type within each batch and provides a total count and amount by transaction type
34 for the entire transmission file. This report can be used to reconcile received counts and
35 amounts in FARS with financial data processed by Servicing.

36
37 CI301 generates a Schedule A report for a specified period of time. Schedule A identifies
38 received and accepted transactions, and sent and accepted transactions on a single report.
39 CI301 generates three versions of the Schedule A report. The first (main) report summarizes
40 all financial transactions coming into and going out of Servicing. The second report
41 summarizes financial data passed between Loan Origination and Loan Servicing. The third
42 report summarizes financial data passed between Loan Consolidation and Loan Servicing. The
43 second and third versions of the Schedule A report are compared to Schedule A reports sent
44 (faxed) to the Servicing Interface Group by LO and LC on the business day after the data has
45 been edited and acknowledged to complete the reconciliation between the Direct Loan
46 Partners.

47
48 Samples of each of these reports are in Appendix C.

1
2 **3.9 Providing Interface Support**
3

4 The Servicing Interface Group is responsible for monitoring transmissions between Loan
5 Servicing and other Direct Loan Partners and Vendors. This includes identifying transmission
6 failures, verifying record counts and amounts, researching and resolving rejected batches and
7 transactions, and assisting their interface counterparts at Loan Origination and Loan
8 Consolidation.
9

10 The Servicing Interface Group is also responsible for monitoring transactions being sent to and
11 received from the EDA Vendor. This includes removing and generating EDA debit requests,
12 changing the debit amount or the borrower's banking information prior to sending the request
13 to the Vendor, and researching failed transactions.
14

15 **3.9.1 Interfacing with Direct Loan Partners**

16
17 **3.9.1.1 Description**
18

19 The Servicing Interface Group uses a combination of online access, structured queries, and
20 reports to monitor transmissions, verify record counts and amounts, and research and resolve
21 rejected batches and transactions.
22

23 The Servicing Interface Group uses a variety of production reports to monitor the flow of data
24 between Loan Servicing and the other Direct Loan Partners (see Section 3.8). They also have
25 access to tables in the Interface database, *gsl_cds_int_db*, to support research efforts.
26
27

Interface Support Tables

Table Name	Content
Ci_Batch_Ctrl	Batch processing status including event dates and times (events are received, edited, acknowledged) and accepted and rejected counts and amounts.
Ci_Trans_Error	Batch and transaction level rejects for data received by Loan Servicing.
Ci_Trans_Recycle	Batch and transaction level rejects for data sent from Loan Servicing to LO or LC that has subsequently been rejected back to Servicing.
Ci_Event_Log	Transaction/event level records for a subset of transactions sent to or from Loan Servicing. Transactions tracked in this table include FLA, FLB, FLC, FLD, and FCA. Events tracked for incoming transactions are <i>received, accepted, rejected and processed</i> . Events tracked for outgoing transactions are <i>sent and rejected</i> .

28 The Interface Group runs pre-written queries and reports that can be filtered, sorted, and
29 produced as needed from the tables listed above. The table below indicates the Interface
30 Group's current resources and sources of the monitoring data.
31
32
33

Interface Resources

Current Outputs	Source of Data
Detail of batches rejected by Servicing	Structured query to the <i>CI_TRANS_ERROR</i> table selected on batch date range.
Detail of transmissions failed/rejected by	CI001 Report on the same day the failure occurs.

Detail of batches sent to partners for which Servicing has not received acknowledgment.	Structured query to the <i>CI_BATCH_CRTL</i> table selected on batch date range.
Detail of accepted and not accepted transactions	Structured query into the <i>EVENT_LOG</i> table (joined to other tables as necessary)

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3.9.1.2 Environment

Access to tables in the Interface database is through ODBC and a data translation tool, MS/ACCESS, during certain times of the day (schedule/timing TBD).

3.9.1.3 Inputs

Queries that can be modified based on certain parameters such as *date range* or *Social Security Number*

3.9.1.4 Outputs

1. Ad hoc reports and queries that can be filtered and sorted as necessary
2. Resolved errors

3.9.1.5 Process Flow

In performing daily validation, the Servicing Interface Group compares transmission summary reports and system balancing schedules produced in Loan Servicing to transmission logs and Schedule A reports faxed by LO and LC.

When transactions fail edits or when Servicing reports cannot be reconciled to Loan Origination or Loan Consolidation reports, the Servicing Interface Group runs pre-written queries against the Interface tables to identify and resolve issues. Access to these tables is provided through an ODBC connection to *gsl_cds_int_db* from the Rockville LAN and manipulated through an MS/ACCESS front end. See Appendices C and D for sample query reports and ACCESS screens respectively.

3.9.2 Interfacing with the EDA Vendor

The Servicing Interface Group monitors transactions sent to and received from the EDA Vendor. They remove and generate EDA debit requests, change debit amounts, and change banking information prior to sending payment requests to the EDA Vendor. They also research failed transactions.

3.9.2.1 Description

The Servicing Interface Group uses a combination of online access, structured queries, and reports to manage the flow of transactions between Loan Servicing and the EDA Vendor.

1 They also have access to tables in the Interface database, *gsl_cds_int_db*, to support their
 2 efforts.
 3
 4

Interface Support Tables

Table Name	Content
Ci_Eda_error	Batch and transaction level rejects for data received by Loan Servicing from the EDA Vendor
Ci_Payment_Request	Borrower level EDA payment records used to generate internal payment transactions (FPA) and external payment request transactions (FRW)

5
 6 The Interface Group runs pre-written queries and reports that can be filtered, sorted, and
 7 produced as needed on the tables listed above. The table below indicates the Interface Groups
 8 current resources and the source of the monitoring data.
 9
 10

Interface Resources

Current Outputs	Source of Data
Detail of transmissions failed/rejected by Servicing	CI001 Report generated on the day the failure occurs
Detail of rejected DPT transactions	Structured query to the <i>CI_EDA_ERROR</i> table selected by batch date range
EDA borrower debit detail	Structured query to the <i>CI_PAYMENT_REQUEST</i> table selected by borrower SSN and debit date range
Copy of FRW file	File can be copied from Servicing external IBM directory

11 3.9.2.2 Environment

12 The Servicing Interface Group has access to Interface database tables using ODBC and
 13 MS/ACCESS during certain times of the day (schedule TBD).
 14

15 3.9.2.3 Inputs

16 Queries that can be modified based on certain parameters such as *date range* or *account*
 17
 18

19 3.9.2.4 Outputs

- 20
 21
 22
 23
 24
 25
 26
1. Ad hoc reports and queries that can be filtered and sorted as necessary
 2. Certification of FRW file to the EDA Vendor
 3. Resolved errors

27 3.9.2.5 Process Flow

28
 29 Each week, four business days prior to the next payment due date, BL016 selects the
 30 borrowers to be debited and writes the records to the *ci_payment_request* table. Two business
 31 days prior to the debit date, the internal payment (FPA) and external payment request (FRW)
 32 transactions are created through the TP001 process. The Servicing Interface Group, working
 33 with the DLSC Data Integrity Group, uses the two day period between the BL016 and TP001
 34 runs to reconcile, review, and update records in the *ci_payment_request* table.
 35

1 Transmission files are received from the EDA Vendor on a daily basis. The Interface Group
2 monitors transactions received from the EDA Vendor. Transactions that fail the Servicing edits
3 are written to the *ci_eda_error* table (see section 3.4.5). The Interface Group reviews these
4 errors and works with the EDA Vendor to resolve issues.

5
6 Access to these tables is provided through an ODBC connection to *gsl_cds_int_db* from the
7 Rockville LAN and manipulated through an MS/ACCESS front end. See Appendices C and D
8 for sample query reports and ACCESS screens respectively.