



TO 130 – FORM 2000 ENHANCEMENTS Production Migration Validation

The following document contains a high level description of each component that was built as part of TO 130, associated executable name(s) and path(s), and any exception processing that has been put in place to account for errors at runtime. In addition, this document includes steps for verifying that each new component is available for use and is functioning as designed. For more detailed functional and technical information, please refer to each component's Functional and Technical Design listed in each description.

Form 2000 Enhancement Designs can be found in the following directories:

F:/ TO 130 – Form 2000 Enhancements/Functional Design/ Final/

F:/ TO 130 – Form 2000 Enhancements/Technical Design/ Final/

This document covers the customizations that were built as part of TO 130:

1. [Form 2000 Soft and Hard Edits](#)
2. [Form 2000 Negative Numbers](#)
3. [Amended Annual Form 2000](#)
4. [Annual Form 2000 Amendment Report](#)
5. [FP DataMart Transfer Program](#)
6. [Annual Form 2000 Historical GL Data Conversion](#)
7. [Annual Form 2000 GL Interface](#)

Form 2000 Soft and Hard Edits

Description

- Functional Design – FORM2000_EDITS_FORM_FD.doc
- Technical Design – FORM2000_EDITS_FORM_TD.doc
- The edits enhancement added warning and error messages to the monthly, quarterly, and annual forms when the user attempts to save, submit, or accept the form based on specified criteria in the functional and technical designs.

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Form Executable Name and Path

- Form Names – SFAMON.fmb, SFAMQRT.fmb, SFAANN.fmb
- Form Directory Path – (environment path)/1103/au/11.0.28/forms/US/
- Form Executables – SFAMON.fmx, SFAMQRT.fmx, SFAANN.fmx
- Form Executable Path - \$FFELGA_TOP/forms/US/

Production Validation Steps

Step #	Validation Step	Pass/Fail	Verification
1	Monthly, Quarterly, and Annual Forms (.fmb files) were successfully migrated to PROD	Pass	In Unix, the Operations team verified the Date and Time stamp of the form files in hpl10 & hpl11.
2	Monthly, Quarterly, and Annual Forms (.fmx files) were successfully compiled in PROD	Pass	CSC confirmed successful code compilation in the CR sent back to the Operations team on 8/3.
3	The GA Monthly Report, Monthly/Quarterly Report, and Annual Report can be opened successfully within the Oracle Applications	Pass	In the Oracle Applications the Operations Team verified that all three forms could be opened successfully.
4	Verify with Financial Partners (ie. Sandra Simmons, Barbara Johnson) that proper edits are fired when values are entered into the Monthly, Quarterly, and Annual Forms	Pass	The testing team confirmed with Barbara and Sandra that the edits are firing as expected.

Form 2000 Negative Numbers

Description

- Functional Design - FORM2000_NEG_NUM_FORM_TD.doc
- Technical Design - FORM2000_NEG_NUM_FORM_TD.doc
- The negative numbers enhancement allows the user to enter a negative number in the fields MR-17 through MR-23 (Principal Amount, Interest Amount, and Other Amount columns) of the monthly form, fields MR-24 through MR-42 (Principal Amount, Interest Amount, and Other Amount columns) of the quarterly form, and AR-15 through AR-57 (Amount/CY Actual, CY + 1 Projection, CY + 2 Projection, CY + 3 Projection, CY + 4 Projection, and CY + 5 Projection columns)of the annual form. In addition, when the user clicks on AR-20, AR-25, AR-36, and AR-39, another screen, Schedule of Itemized Line Items, appears. These fields will allow negative numbers as well.
- Negative numbers will be accepted in the Monthly, Quarterly, and Annual FTP Data File Load Programs for GA's who FTP their Forms.

Form & Program Executable Names and Paths

- Form Name – SFAMON.fmb, SFAMQRT.fmb, SFAANN.fmb
- Form Directory Path – (environment path)/1103/au/11.0.28/forms/US/
- Form Executable – SFAMON.fmx, SFAMQRT.fmx, SFAANN.fmx
- Form Executable Path - \$FFELGA_TOP/forms/US/
- Programs Names-
FFELGA_MONTHLY_FILE_LOAD_PKG_v602.sql,
FFELGA_QUART_FILE_LOAD_PKG_v602.sql,
FFELGA_ANNUAL_FILE_LOAD_PKG_v602.sql
- Program Directory Path - \$FFELGA_TOP/install/sql

Production Validation Steps

Step #	Validation Step	Pass/Fail	Verification
1	Monthly, Quarterly, and Annual Forms (.fmb files) were successfully migrated to PROD	Pass	In Unix, the Operations team verified the Date and Time stamp of the form files in hpl10 & hpl11.
2	Monthly, Quarterly, and Annual Forms (.fmx files) were successfully compiled in PROD	Pass	CSC confirmed successful code compilation in the CR sent back to the Operations team on 8/3.
3	Monthly, Quarterly, and Annual FTP Data File Load Programs were successfully migrated to PROD	Pass	In Unix, the Operations team verified the Date and Time stamp of the programs in hpl10 & hpl11.
4	Monthly, Quarterly, and Annual FTP Data File Load Programs were successfully compiled in PROD	Pass	CSC confirmed successful code compilation in the CR sent back to the Operations team on 8/3.
5	Verify with Financial Partners (ie. Sandra Simmons, Barbara Johnson) that negative values can be entered successfully in the Monthly, Quarterly, and Annual Forms	Pass	The testing team confirmed with Barbara and Sandra that negative numbers can be entered into the forms as expected.

Amended Annual Form 2000

Description

- Functional Design - AMENDED_ANNUAL_FORM_2000_FD.doc
- Technical Design - AMENDED_ANNUAL_FORM_2000_TD.doc
- The Amended Annual Form 2000 enhancement allows the GAs to submit an amended Annual Form 2000 after the original Annual Form 2000 has been accepted by the Financial Partner (FP) for a fiscal year. The GAs will have the ability to submit amendments to the Annual Form 2000 for a prior fiscal year an unlimited number of times until the next fiscal year Annual report is entered.

Form Executable Name and Path

- Form Name – SFAANN.fmb
- Form Directory Path – (environment path)/1103/au/11.0.28/forms/US/
- Form Executable – SFAANN.fmx
- Form Executable Path - \$FFELGA_TOP/forms/US/

Associated Executables

- Alter Table Script - FFELGA_ANNUAL_REPORTS_TAB_ALT_v602.sql
- Report File Names - SFAANN_ED.rdf, SFAANN_GA.rdf
- Report Directory Path – \$FFELGA_TOP/reports
- Procedure Name - FFELGA_SOA_PRC_v602.sql
- Procedure Directory Path - \$FFELGA_TOP/install/sql

Production Validation Steps

Step #	Validation Step	Pass/Fail	Verification
1	Annual Form (.fmb file) was successfully migrated to PROD	Pass	In Unix, the Operations team verified the Date and Time stamp of the form file in hp110 & hp111.
2	Annual Form (.fmx file) was successfully compiled in PROD	Pass	CSC confirmed successful code compilation in the CR sent back to the Operations team on 8/3.
3	FFELGA_ANNUAL_REPORTS table contains the new columns, AMENDMENT_VERSION_NUMBER and MOST_UPDATED_RECORD_FLAG	Pass	Using SQL Navigator, the Operations team queried the table and verified that the additional columns could be selected.
4	AMENDMENT_VERSION_NUMBER is '0' for all records in the FFELGA_ANNUAL_REPORTS table	Pass	Using SQL Navigator, the Operation team queried the table and verified that every AMENDMENT_VERSION_NUMBER column was populated with zero.

Annual Form 2000 Amendment Report

Description

- Functional Design - FSA_GA_ANNUAL_AMEND_RPT_TD.doc
- Technical Design – FSA_GA_ANNUAL_AMEND_RPT_TD.doc
- A custom Oracle report has been created to display the fields on the Annual Form that have changed when an amended Annual Form is created. The report is available to both GA and FP users and as a result, will be registered twice in the Oracle Apps.

File Name and Path

- Report File Name - FSA_AMMEND.rdf
- Report Directory Path - \$FFELGA_TOP/reports

Associated Executables

- Update View Script - FFELGA_ANNUAL_REPORTS_V_v602.sql
- Script Directory Path - \$FFELGA_TOP/install/sql

Parameters:

Parameter Name	Data type	Default Value	Required (Y/N)	Value Set	Comments
GA_CODE	Number	If GA user, then GA Code is defaulted to associated user	Y	EDSFA_GA_CODE	If GA user, then the report only requires the Fiscal Year parameter and the GA Code parameter is automatically defaulted.
F_YEAR	Number	None	Y	SFA_FFEL_Year_Code_Value_Set	N/A

Runtime Processing

- The report will be kicked off manually, as needed, utilizing the parameters GA_CODE and F_YEAR

Error Handling:

Potential Errors	Possible Reasons	Solution Strategy	Error Messages / Error Files	Error Communication
No data found when GA runs report	No data exists for specified GA Code and Year since no amendments have been made to the specified form	Verify that an amendment has been submitted for the Fiscal Year entered	The following message will be displayed: ***** No Data Found *****	Error message will be displayed within report.
No data found when FP runs report	No data exists for specified GA Code and Year since no amendments have been made to the specified form	Verify that an amendment has been submitted for the GA Code and Fiscal Year entered	The following message will be displayed: ***** No Data Found *****	Error message will be displayed within report.

Production Validation Steps

Step #	Validation Step	Pass/Fail	Verification
1	Amendment Report (.rdf file) was successfully migrated to PROD	Pass	In Unix, the Operations team verified the Date and Time stamp of the report file in hp110 & hp111.
2	Amendment Report (.rdf file) was successfully compiled in PROD	Pass	CSC confirmed successful code compilation in the CR sent back to the Operations team on 8/3.
3	The “SFA FFEL GA Amended Annual Report – FP” is available for the appropriate responsibility; when selected from the List of Values both GA Code and Fiscal Year parameters are displayed	Pass	In the Oracle Applications the Operations team verified that the report is available for the following responsibilities: SFA Financial Partner Manager, SFA FP Inquiry. They also verified that both GA Code and Fiscal Year parameters were prompted and required.
4	The “SFA FFEL GA Amended Annual Report – GA” is available for the appropriate responsibility; when selected from the List of Values only the Fiscal Year parameter is displayed	Pass	In the Oracle Applications the Operations team verified that the report is available for the following responsibilities: SFA GA Manager, SFA GA Inquiry, SFA GA User. They also verified that only the Fiscal Year parameter was prompted and required.

FP DataMart Transfer Program

Description

- Functional Design – FORM2000_FP_DATAMART_INT_FD.doc
- The FSA FP DataMart Data Transfer Program, which loads the values of the FMS FFELGA Annual Reports Table into the DataMart Annual Reports Table, has been enhanced to accept the two additional columns in the FMS FFELGA Annual Reports Table (Most Updated Record Flag, and Amendment Version Number).
- For more technical information please contact the DataMart team

Production Validation Steps

Step #	Validation Step	Pass/Fail	Verification
1	DataMart Annual Reports Table contains two additional columns, MOST_UPDATED_RECORD_FLAG and AMENDMENT_VERSION_NUMBER	Pass	Using their development tool, the DataMart team queried the DataMart Tables and verified that the additional columns are present.

Annual Form 2000 Historical GL Data Conversion

Description

- Functional Design - ANNUAL_FORM2000_GL_INT_FD.doc
- Data Mapping – Appendix_B_ANNUAL_FORM2000_GL_CONVERSION_Data_Mapping.xls
- Technical Design - ANNUAL_FORM2000_HIST_GL_CNV_TD.doc
- The objective of the Annual Form 2000 Historical Data Conversion is to transfer all data from Annual Form 2000 reports FY02 and forward into the Oracle GL Base Tables, GL_JE_BATCHES, GL_JE_HEADERS and GL_JE_LINES.
- A custom conversion program to load historical Annual Form 2000 data into the FMS GL will be run once prior to the Annual Form 2000 GL Interface processing begins.

PL/SQL Package Name

- Package Spec Name - FFELGA_ANNUAL_HIST_GL_CNV_PKG_S_v602.sql
- Package Body Name – FFELGA_ANNUAL_HIST_GL_CNV_PKG_B_v602.sql

Associated Executables

- Conversion Package Grant Script - FFELGA_ANNUAL_HIST_GL_CNV_PKG_GRT_v602.sql
- Conversion Package Synonym Script - FFELGA_ANNUAL_HIST_GL_CNV_PKG_SYN_v602.sql
- Conversion Validation Package Spec - FFELGA_ANNUAL_CNV_COUNT_PKG_S_v602.sql
- Conversion Validation Package Body - FFELGA_ANNUAL_CNV_COUNT_PKG_B_v602.sql
- Conversion Validation Script - FFELGA_ANNUAL_CNV_COUNT_Script_v602.sql
- Table Update Script - FFELGA_ANNUAL_REPORTS_TAB_UPD_v602.sql

Parameters

- See the table below for a listing of the OUT parameters.

Parameter Name	Datatype	Default Value	Required (Y/N)	Value Set	In/Out	Comments
p_errbuff	VARCHAR2	None	Y		OUT	
p_retcode	NUMBER	None	Y		OUT	

Runtime Processing

- The program will be executed manually to load Annual Form 2000 data into the Oracle Open Interface Tables.
- The program will be executed once, validated, and then disabled.

Exception Processing

- If an unexpected error occurs the PL/SQL program will ROLLBACK all records inserted into the GL_INTERFACE table; Once the system is back up the Conversion program will need to be run again.

Module	Potential Errors	Possible Reasons	Solution Strategy	Error Messages / Error Files	Error Communication
PL/SQL	Annual Form 2000 data record fails the Journal Import.	Account mapping is not set up for a particular account.	- Contact FSA Accounting division to review account mapping - Correct record in GL Open Interface window and rerun Journal Import	Journal Import Execution Report	Program completes in ERROR writes Oracle error message to log.
PL/SQL	Journal period is closed.	The period was never created or it is set to 'CLOSED'	Open the period and rerun.	Journal Import Execution Report	Program completes in ERROR writes Oracle error message to log.
PL/SQL	System fails while the conversion program is processing	System failure	If an unexpected error occurs the PL/SQL program will ROLLBACK all records inserted into the GL_INTERFACE table; Once the system is back up the Conversion program will need to be run again.	User defined error message written to program log.	Program completes in ERROR writes user defined error message to log.

Production Validation Steps

Step #	Validation Step	Pass/Fail	Verification
1	All records were successfully processed by the conversion program: SELECT count(*) FROM gl.gl_Interface WHERE user_je_source_name = 'Form 2000' AND user_je_category_name = 'Annual' AND group_id = '2002' equals 0	Pass	Using SQL Navigator, the Operations team verified that the select statement in the Validation Step returned a value of '0'.
2	Separate batches were created for each converted 2002 Annual Report: SELECT * FROM gl.gl_je_batches WHERE name LIKE '%Annual 2002%'	Pass	Using SQL Navigator, the Operations team verified that 37 batches were created by the conversion.
3	Journal Header and Line information can be queried in the Oracle Applications for each batch created by the conversion.	Pass	In the Oracle Applications the Operations team verified that both Journal Header and Line information could be queried for each converted annual report (batch)
4	The conversion program, FFELGA Annual Form 2000 Historical Conversion Program, cannot be accessed from the Requests windows because it has been disabled.	Pass	In the Oracle Applications the Operations team verified that the conversion program is no longer enabled.

Annual Form 2000 GL Interface

Description

- Functional Design – ANNUAL_FORM2000_GL_FD.doc
- Data Mapping – Appendix_A_ANNUAL_FORM2000_GL_INT_Data_Mapping.xls
- Technical Design – ANNUAL_FORM2000_GL_TD.doc
- The custom interface loads Annual Form 2000 transaction data, entered by the GAs, into the FMS GL. The interface will consist of a custom PL/SQL program which will be automatically submitted once the FP accepts the Annual Form 2000 report.

PL/SQL Package Name

- Package Spec Name - FFELGA_ANNUAL_GL_LOAD_PKG_S_v602.sql
- Package Body Name – FFELGA_ANNUAL_GL_LOAD_PKG_B_v602.sql

Associated Executables

- Interface Package Grant Script - FFELGA_ANNUAL_GL_LOAD_PKG_GRT_v602.sql
- Interface Package Synonym Script - FFELGA_ANNUAL_HIST_GL_CNV_PKG_SYN_v602.sql
- Lookup Table Grant Script - FFELGA_FND_LOOKUPS_GRT_v602.sql
- Lookup Table Synonym Script - FFELGA_FND_LOOKUPS_SYN_v602.sql

Program Parameters

- See the table below for a listing of the IN and OUT parameters.

Parameter Name	Datatype	Default Value	Required (Y/N)	Value Set	In/Out	Comments
p_errbuff	VARCHAR2		Y		OUT	
p_retcode	NUMBER		Y		OUT	
p_ga_code	VARCHAR2		N		IN	
p_year	VARCHAR2		N		IN	
p_report_type	VARCHAR2	“A”	N		IN	
p_institution	VARCHAR2	NULL	N		IN	
p_amendment_version_number	NUMBER		N		IN	

Runtime Processing

- All processing of this component is automated and called from the ‘Accept’ button from the Annual Form 2000
- The Annual GL Conversion should be run before the interface starts running to convert the historical data.

Exception Processing

- If any of the following exceptions occur the concurrent manager log file will report a status of 'Success' or 'Failure' and other error messages for the Annual Form 2000 report.
- If an error occurs during the Annual Form 2000 GL Interface processing:
 - 1) Review concurrent manager log file to determine the cause of the processing error.
 - 2) Correct error and resubmit the Annual Form 2000 GL Interface program manually from the Oracle concurrent manager.
- If an error occurs during the Journal Import processing:
 - 1) Correct any Journal Import specific errors in the Journal Import interface screen.
 - 2) Re-submit the Journal Import manually from the Oracle concurrent manager.

Module	Potential Errors	Possible Reasons	Solution Strategy	Error Messages / Error Files	Error Communication
PL/SQL	Annual Form 2000 data record fails the Journal Import.	-Account mapping is not set up for a particular account or the GL period is not open. - The database is unavailable - The table is locked.	- Contact FSA Accounting division to review account mapping - Correct record in GL Open Interface window and rerun Journal Import	Error –Oracle error message	Program completes in ERROR and writes an Oracle error message to log.

Production Validation Steps

Step #	Validation Step	Pass/Fail	Verification
1	The following Annual Form 2000 Interface related code was successfully migrated to PROD: - FFELGA_ANNUAL_GL_LOAD_PKG_S_v602.sql - FFELGA_ANNUAL_GL_LOAD_PKG_B_v602.sql - FFELGA_ANNUAL_GL_LOAD_PKG_GRT_v602.sql - FFELGA_ANNUAL_GL_LOAD_PKG_SYN_v602.sql - FFELGA_ANNUAL_GL_LOAD_PKG_GRT_v602.sql - FFELGA_FND_LOOKUPS_SYN_v602.sql	Pass	In Unix, the Operations team verified the Date and Time stamp of the programs in hpl10 & hpl11.
2	The following Annual Form 2000 Interface related code was successfully compiled in PROD: - FFELGA_ANNUAL_GL_LOAD_PKG_S_v602.sql - FFELGA_ANNUAL_GL_LOAD_PKG_B_v602.sql - FFELGA_ANNUAL_GL_LOAD_PKG_GRT_v602.sql - FFELGA_ANNUAL_GL_LOAD_PKG_SYN_v602.sql - FFELGA_ANNUAL_GL_LOAD_PKG_GRT_v602.sql - FFELGA_FND_LOOKUPS_SYN_v602.sql	Pass	CSC confirmed successful code compilation in the CR sent back to the Operations team on 8/3.
3	The interface program, FMS Annual Form 2000 GL Interface, can be accessed only through the System Administrator Responsibility; when selected from the List of Values the following parameters appear: GA Code, Year, Amendment Version Number	Pass	In the Oracle Applications, the Operations team verified that the interface program can only be accessed through the System Administrator Responsibility and the correct parameters appear.