

Volume VII, Section 1 - COD School Testing Guide

Introduction

The School Testing Guide is intended for all participants in the COD System. This includes both Phase-In and Full Participants.

Included in this year's version of the School Testing Guide are Lessons Learned from the 2002-2003 award year COD School Testing. This section provides schools with insight from the schools that participated in COD School Testing last year. Schools were both Phase-In and Full Participants.

Purpose

The purpose of School Testing is to provide schools, third-party servicers and software vendors an opportunity to test business processes and system software with the COD System prior to the transmission and processing of actual production data. The School Testing enables simpler, faster, and less costly issue identification and resolution in a low-volume, controlled test environment and allows schools, third-party servicers and software vendors the opportunity to make corrections or enhancements to software applications and processes prior to entering into the "live" production environment. The goal of School Testing is to make the transmission of production data smoother and reduce the risk of production problems.

Note: Throughout this document, the term "schools" is used to indicate any entity that is participating in COD School Testing and includes schools as well as entities that process on behalf of schools (such as software vendors and third party servicers).

Scope

COD School Testing is broken down into two distinct phases of testing:

- Phase I – Common Record Manual Verification (Full Participants Only)
- Phase II – Structured Application Testing (All Participants)

The phases are described in more detail later in this document.

COD School Testing is available to all entities that participate in the COD solution, including both Full and Phase-In Participants.

Full Participant Schools are not required to test with COD, but are encouraged to participate in this testing. Full Participant Schools should refer to the *Section 2- Full Participant School Test Case* document for more information. This document contains a description of the test data sent to and from the schools to COD, with test execution guidelines and structured test cases with multiple testing cycles.

Phase-In Schools are not required to test with COD, but have the option to participate in this testing. Phase-In Schools should refer to the *Section 3- Phase-In Participant School Test Case* document for more information. This document contains a description of the test data sent to and from the schools to COD, with test execution guidelines and structured test cases with multiple testing cycles.

Schools that use a third-party servicer do not need to test with COD. Instead, the third-party servicer can complete the test on behalf of their Customers.

Schools new to the Direct Loan and/or Pell Grant Programs must complete School Testing with COD before moving into production.

All entities that wish to participate in School Testing must submit a formal sign-up sheet to the COD School Relations Center and be scheduled for each phase of testing.

Test Phase Descriptions

Phase I - Common Record Manual Verification

This phase of testing is available to Full Participants only. The purpose of the Common Record Manual Verification testing is to ensure that the school's XML Common Record is well formed and properly structured according to the rules of the XML Common Record Schema. The COD team manually reviews a Common Record document emailed to COD School Relations by the school and assists the school in the identification of potential updates to their Common Record submissions. . This testing does not validate the data submitted within the Common Record. For this phase of testing, only two student records should be sent in the Common Record.

Phase I testing assists in the preparation of the upcoming Phase II testing. This testing phase is available from February 2003 through July 2003 and is required for Full Participants prior to participating in Phase II testing. Full Participant schools must complete a signup document in order to participate and schedule a testing window with COD School Relations. Once Full Participant schools have completed Phase I, they must contact COD School Relations to schedule Phase II testing. A second signup document is not required to participate in Phase II testing.

Phase II - Structured Application Testing

Both COD Full Participant and Phase-In Participants are eligible to participate in this testing phase. The purpose of the Structured Application Testing is to ensure that schools can send, receive, and process batches of records using detailed input instructions with detailed expected results issued by COD. Schools use a test ISIR file supplied by COD that creates a test data set of students to use with the structured test cases.

During this phase, Full Participants send Common Record documents to COD and receive Common Record Receipts and Response documents back from COD. Phase-In Participants send fixed-length, flat files to COD and receive Acknowledgements in fixed-length file format back from COD. Schools must verify that these files can be loaded and processed correctly.

Phase II testing assists schools in the identification of potential updates to their system before beginning actual processing for 2003-2004. Phase II is available from March 2003 through July 2003. This

testing phase is optional. Schools must complete a signup document in order to participate and schedule a testing window with COD School Relations.

Note: Full Participant Schools that participated in Phase I testing do not need to complete a second signup document, but must schedule a second testing window with COD School Relations.

Testing Criteria

Test Entry Criteria

In order to begin testing with COD, schools need to complete the following steps:

- Complete a COD School Testing Signup document located at the end of this document and submit it to the COD School Relations Center no later than the assigned phase deadline.
- Schedule individual testing date(s) specific for your school(s) for each testing phase by contacting the COD School Relations Center.
- Receive a testing Routing ID to be used just for testing purposes from the COD School Relations Center.
- Note: A new test Routing ID is assigned for testing for Full Participants only. Vendors will test using a COD Routing IDs for testing purposes only.
- Receive a call from the COD School Relations Center or the COD School Test Team confirming test plans and COD readiness.
- Install the latest version of the message class table from SAIG.
- Install and implement the 2003-2004 updates to the software applications.
- Develop a means of keeping testing data segregated from production environment.
- Identify individuals at the school responsible for completing the COD school testing process.
- Develop a means of forward dating schools test environment.
- For Full Participant schools only, successful completion of Phase I Common Record Manual Verification Testing is required prior to beginning Phase II Structured Application Testing.

Test Exit Criteria

The school and COD School Relations Center should jointly determine when the school has successfully completed COD testing. Schools can select which processes to test and schools are able

to continue testing until expected results are received and testing is considered successful. There is no pre-defined “end” of the test other than the published end dates for each COD School Testing phase.

Test Exit Criteria:

- School determines that they have been able to satisfactorily complete the desired test scenarios by achieving the expected results.
- School chooses to discontinue school testing prior to completing the desired test scenarios and achieving the expected results.
- COD School Relations Center contacts school to verify the test results.
- Testing phase window closes prior to test completion by school.

Testing Completion Clean Up

In order to begin the production phase, all test data must be removed from the participating systems. Schools should ensure that files are sent using the proper production message classes and production destination.

Test Data

The Test data section explains test data requirements for Phase II Structure Application Testing. More detail can be found in the *Full Participant Test Cases* and *Phase-In Participant Test Cases* documents located in Volume 7 of the 2003-2004 COD Technical Reference.

Full Participant Common Record Test Data

Full Participants are schools that will be processing in the 2003-2004 award year using the Common Record in XML format. Schools that have elected to participate in this manner test using the Common Record Layout in Volume 2 of the 2003-2004 COD Technical Reference..

COD provides actual CPS test data via an ISIR file to each participating school. Each school processes the ISIR data that COD provides and generates student award transactions using its normal awarding process. Schools are required to send this file to COD using the normal SAIG processing protocols with the exception of the school testing message classes and the COD school testing destination mailbox, which will be provided during a school setup meeting. Upon submission of each test file, a school receives a “Receipt” file confirming that the file has been received by COD and is in a readable XML format. Once the data has been processed, schools receive a Response file indicating

the results of each record submitted. If a record rejects, the Response record indicates which data element(s) have rejected. Rejected records can then be corrected and resubmitted.

The anticipated time from record submission to receipt of a Response file is approximately two business days.

Phase-In Participant Test Data

Phase-In Participants continue to use flat fixed-length files to submit data and to receive responses from COD. The record layouts to be used by Phase-In Participants for 2003-2004 are in Volume 3 and Volume 4 of the 2003-2004 COD Technical Reference. For these schools, there should be no significant change in business processes other than a few minor adjustments to the 2003-2004 record formats.

Each school processes the COD provided ISIR data and generates origination and disbursement transactions using its normal process. Schools submit their test files to COD using the normal SAIG processing protocols with the exception of sending the specified Phase-In School Testing message classes and using the specified COD School Testing mailbox destination, which will be provided during the school setup meeting.

Once COD has processed the data for the school, a Response file is generated and translated to the appropriate fix-length Acknowledgement file. The Acknowledgment is sent back indicating the results of each record submitted. If a record rejects, the Acknowledgment provides a reject reason. If the expected results were not intended to be a rejected record, schools can correct and resubmit the rejected records.

The anticipated time from record submission to receipt of an Acknowledgement file is approximately two business days for the purposes of testing.

Testing Message Classes

Full Participant Schools

Common Record message classes are not year specific and are to be used from year to year. However, different test message classes must be used for testing. During Phase II testing, schools use the following message classes when sending in Common Records for testing:

Common Record Test Message Classes for Full Participants

Common Record Test Message Classes	
Common Record Documents sent from school to COD	CRTESTIN
Receipts and Responses sent from COD to school	CRTESTOP

Phase-In Participant Schools

Legacy message classes continue to be year specific. However, different test message classes must be used for testing than for production. During Phase II testing, phase-in schools use the following message classes for testing:

Direct Loan Test Message Classes for Phase-In Participants

Direct Loan Phase-In Test Message Classes	
Origination	
Full Subsidized/Unsubsidized Loan Origination Record	DTSF04IN
Full Loan Origination Acknowledgement	DTOD04OP
Change	
Origination Change Record	DTSC04IN
Origination Change Acknowledgement	DTOC04OP
Disbursement	
Disbursement Record	DTSD04IN
Disbursement Acknowledgement	DTOD04OP

Booking Notification	DTOD04OP
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Pell Test Message Classes for Phase-In Participants

Pell Phase-In Test Message Classes	
Origination Records	PTOR04IN
Origination Acknowledgment	PTOA04OP
Disbursement Records	PTDR04IN
Disbursement Acknowledgement	PTDA04OP

School Testing Sign-Up Process

Schools register for testing by completing the Signup document located at the end of this School Testing Guide and submitting it to the COD School Relations Center. Once the school has submitted the Signup, the COD School Relations Center will contact the school by telephone to obtain school-specific information and to schedule specific test dates for the school. The COD School Relations Center will also conduct testing readiness calls to provide additional information such as the testing Routing Number to be used by the school for the phase of testing.

Note: Upon receipt of the signup document, the COD team must complete a considerable setup process to establish the school in the COD test environment before testing can begin. This process can take up to several weeks to complete. Schools should take this setup process into account when planning to participate in COD School Testing and provide enough lead-time in their schedule.

The COD School Relations Center can be contacted by dialing either the Pell number 1-800-474-7268 or the Direct Loan number 1-800-848-0978. When prompted for Award Year, enter 1 for the 02-03 Award Year and forward. When calling, ask for COD School Testing Support, or send email at CODsupport@acs-inc.com with the subject line COD School Testing Support.

Contact Names

Each school participating in testing notifies the COD School Relations Center of their designated contact person on the testing sign-up document. The contact person should be consistent for the period of time before, during, and upon completion of the test. The testing process likely involves a technical resource within the financial aid office. This person should be a technically oriented staff member who is very

knowledgeable about the school's financial aid system. This person should be available to assist in problem analysis and to coordinate any follow-up tests that may be required. If a school uses a Third Party Servicer and the servicer is conducting the test on behalf of the school, COD needs the name and telephone number of the servicer contact person.

Scheduling

The School Testing Sign-up Document must be completed and emailed to the COD School Relations Center by the appropriate deadlines shown below:

Testing Phase	Testing Phase Description	Sign Up Deadline	Who can Participate
Phase I	Common Record Manual Verification Testing	07/10/2003	Full-Participants Only
Phase II	Structured Application Testing	07/10/2003	All

When a school completes the School Testing Sign-up Document, the school is contacted by the COD School Relations Center to schedule testing dates within each phase of testing. The time frames for each phase of testing is shown below:

Testing Phase	Testing Phase Description	Start Date	End Date
Phase I	Common Record Manual Verification Testing	February 2003	July 30, 2003
Phase II	Structured Application Testing	March 2003	July 30, 2003

Support Services

While a school is going through the testing, there are many support sources available for assistance, as listed below:

School Support Services		
Support Service	For Information on the Following:	Contact
School Testing Sign-Up	Registering for School Testing.	Contact COD School Relations Center
ISIR Data Issues	Problems with ISIR data only.	Contact CPS/WAN Customer Service
SAIG	Issues concerning connectivity to SAIG only.	Contact CPS/WAN Customer Service
COD	Issues concerning all items related to Pell and DL processing only.	Contact COD School Relations Center
School Testing Issues	Issues concerning all items related to COD School Testing only.	Contact COD School Relations Center
School Testing Results	To obtain or report School Testing results for COD School Structured Testing only.	Contact COD School Relations Center

Resource Planning

Hardware/Software

Schools should have all hardware and software capabilities ready before testing. Each school should have all upgrades installed from vendors or regulatory releases for 2003-2004.

Roles and Responsibilities

In order for Schools Testing to be completed successfully, it requires a collaborative effort between the participating schools and the COD School Relations Center. The expected roles and responsibilities of each entity are described below:

Schools, Vendors, and Third Party Servicers

Schools are responsible for completing the following steps associated with COD School Testing:

- Review all COD School Testing documentation posted on the IFAP web site.
- Review the COD Implementation Guide in the COD Technical Reference.
- Review all documentation that is emailed to the participating school (if applicable).
- Schedule testing dates with the COD School Relations Center using the signup document via email.
- Prepare a test environment for COD School Testing that uses the test destination mailbox, test message classes and the test common school identifier.
- Ensure test environment allows forward dating capabilities.
- Prepare test data to execute the Structured COD School Testing scripts for submissions.
- Receive a technical readiness call from the COD School Relations Center after scheduling testing dates for each testing phase.
- Send the test data to COD via the SAIG.
- Retrieve receipts and responses from COD via the SAIG (Full Participants).
- Retrieve acknowledgments from COD via the SAIG (Phase-In Participants).
- Process submitted receipts (Full Participating Schools).
- Process responses/acknowledgments.
- Communicate results with the COD School Relations Center.
- Remove all data used for testing when completed from the school and/or vendor environment.

Note: Do not use real student data or production data during any phase of testing. Utilize the student data provided in the ISIR provided by COD.

COD School Relations Center

The COD School Relations Center provides the following support during testing:

- Provide and process School Testing Signup documents.
- Schedule specific test dates for schools.
- Conduct technical readiness calls with Schools.

- Provide schools/vendors with their own Testing COD Routing ID to use only during a specific testing phase.
- Process submitted data.
- Send receipts and responses (for Full Participates) via the SAIG.
- Send acknowledgments (for Phase-In Participates) via the SAIG.
- Update schools/vendors of their testing status.
- Assist with issue identification and resolution.
- Provide testing technical guidance.

Lessons Learned from 2002-2003

Schools and vendors that participated in COD School Testing for 2002-2003 provided COD with feedback on their experience. The following sections provide you with insight as to what schools/vendors should test, how to prepare and, and how to schedule testing within your institution.

Should I participate in school testing?

- All software vendors are encouraged to test their software with the COD system.
- Entities that modify their own software solution are encouraged to test with the COD system.
- EDEExpress users do not need to test with the COD system. FSA ensures that EDEExpress is extensively tested each year with COD prior to its annual release(s) to the schools.
- Schools who use a software vendor product do not need to test with the COD system as most software vendors test with COD on their schools behalf's and minimize the need for schools to retest with COD. Schools are encouraged to contact their software vendor to discuss their test plans and results.
- New schools to Title IV Financial Aid that are not using ED Express are encouraged to test with COD.

How do I prepare for school testing?

- Schools should have all of their development and internal unit testing completed prior to conducting testing with the COD system.
- Schools should manually compare their test output files against the published COD Technical Reference and schemas prior to testing with COD.

- Schools should ensure their school contact information is up to date in PEPS and also on the School Testing Sign-up document so that COD School Relations can keep in touch with your school.
- Schools should keep all of their COD school options up to date on the COD Website to help achieve valid test results.
- Schools should have a separate testing environment available to them at their school as to keep their production data and processes separate from their testing ones. Production operations of prior award years and COD School Testing need to be able to occur in parallel without interference.
- Full Participant Schools must complete Common Record Manual Verification testing before participating in additional testing with the COD system.
- Schools should have a solid understanding of SAIG OSM (On-line screen manager) to see that files were sent and received correctly.
- Schools should sign-up for testing in advance and allow at least 3 weeks of setup time before beginning testing. COD has considerable setup work to set-up each testing participant to ensure a successful test.
- Schools that want to test should identify a strategy to load their fictitious test students several weeks prior to the start of testing. Schools can either manually enter the fictitious test students into their testing environment or accept the simulated CPS ISIR file provided by COD.

What can I expect during school testing?

- Only sign-up for COD School Testing if you actually intend to test and complete testing with COD. Do not sign-up to reserve your right to test with COD. COD has considerable setup work to set-up each testing participant to ensure a successful test.
- Plan to test and start early in the testing window. Do not wait till the end of the testing window to sign-up or begin testing. Allow and plan time for retesting with the COD system.
- Plan and allow time to encounter issues and errors and expect time delays during the resolution process.
- Schools should be very careful to send test files to the correct SAIG mailbox and to use the correct SAIG testing message classes to avoid problems with accidentally submitting data to the COD production environment. Schools that use EDConnect should ensure that they select the correct test message class and not the production message class.
- Proactively contact COD School Relations to resolve issues, provide testing status, and answer questions during the testing process. Schools may experience delays in the testing process while issues are identified, researched, and resolved.
- Communicate to COD School Relations when the school has satisfactory completed school testing or chooses to discontinue school testing.
- In order to begin the production phase, all test data must be removed from the participating systems. Schools should ensure that files are sent using the proper production message classes and production destination.



COD School Testing 0304 Sign-Up Sheet

Please complete and send to CODSupport@acs-inc.com

*Please allow up to three weeks for the sign-up and set-up processes prior to testing.
Please allow sufficient time for re-testing to meet your specific testing needs.*

Date Submitted: _____

Organization: _____

Campus (if applicable): _____

COD Routing ID (Full Participants Only): _____

OPE ID #: _____

Aid Programs (Check all applicable for your test)	() Pell Grant	() Direct Loan
Desired Test Phase	() Full Participant (Phase I/II) () Phase-In (Phase I)	() Full Participant (Phase I/II) () Phase-In (Phase I)
Main Frame	() Yes () No	() Yes () No
Vendor Product Used (if applicable)		
Organization Type (check all applicable)	() School () Vendor () Servicer	() School () Vendor () Servicer
Testing TG Mailbox #:		
Contact Person (Last, First):		
Contact Phone Number:		-
Contact Email Address:		
Additional Contact Info:		
Reporting School:		
Attending School:		
Funding Type:		

