

Volume V, Section 1 – COD School Testing Guide

Introduction

The School Testing Guide is intended for all Schools in the COD System. Included in this year's version of the School Testing Guide are lessons learned from the 2007-2008 Award Year of COD School Testing. This section provides insight from the Schools that participated in COD School Testing.

Purpose

The purpose of COD School Testing is to provide Schools, Third-Party Servicers, and Software Vendors an opportunity to test Pell, Direct Loan, National Science & Mathematics Access to Retain Talent (SMART) Grant, and Academic Competitiveness Grant (ACG) business processes and system software with the COD System prior to the transmission and processing of actual production data. COD School Testing will enable simpler, faster, and less costly issue identification and resolution in a low-volume, controlled test environment. It will also allow 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 COD 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 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 for the upcoming award year. The testing environment will be updated with new code in conjunction with a major release of COD. Currently the code reflects the set up for processing 2007-2008 records. The major release of the 2008-2009 software will be March 14, 2008.

- Phase I – Common Record Manual Verification
- Phase II – Structured Application Testing

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

COD School Testing is available to all entities that participate in the COD process. Schools are not required to test with COD, but are encouraged to participate in Phase I testing. Schools should refer to the *Volume V, Section 2: 2008-2009 COD Test Cases* document for more information. The test case document contains descriptions of the test data that Schools will send to and from COD, test execution guidelines, and structured test cases with multiple testing cycles.

Schools that use a Third-Party Servicer or Software Vendor product do not need to test with COD. Instead, the Third-Party Servicer or Software Vendor can complete the testing on behalf of their customers.

Schools that are new participants of the Direct Loan and/or Pell, ACG, National SMART Grant Programs must complete School Testing with COD before submitting data into the production environment.

All entities that wish to participate in COD School Testing must submit a formal sign-up document (located at the end of this section) to the COD School Relations Center.

Test Phase Descriptions

Phase I - Common Record Manual Verification

1. What is the purpose of Phase I testing?

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 2.0e XML Common Record Schema. The 2.0e schema is available on the IFAP web site at: <http://ifap.ed.gov/cod/0607CODXMLSchema.html>. The COD team manually reviews a Common Record document e-mailed to the COD School Relations Center (CODsupport@acs-inc.com) 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.

2. Who should participate?

The Common Record Manual Verification phase of testing is available to all Schools.

3. When does Phase I testing take place?

Phase I testing is available from **January 2, 2008 through May 30, 2008**. Phase I testing is required for all Schools prior to participating in Phase II testing.

4. How do Schools sign up for Phase I testing?

Schools must complete a sign-up document in order to participate and schedule a testing window with the COD School Relations Center. The sign-up document is located at the end of this guide and on the COD website, <http://www.cod.ed.gov> under the "Click here if you are looking for more information on Common Origination and Disbursement" or "Today's Update" links. The completed document must be e-mailed to CODsupport@acs-inc.com, Subject: "COD School Testing Sign up", or faxed to the COD School Relations Center, 1-877-623-5082.

5. What do Schools need to do when they complete Phase I testing?

Once Schools have completed Phase I and would like to continue on to Phase II testing, they must contact the COD School Relations Center to schedule a Phase II testing start date. A second sign-up document is not required to participate in Phase II testing.

Phase II - Structured Application Testing

1. What is the purpose of Phase II Testing?

The purpose of Phase II-Structured Application Testing is to ensure that Schools can send, receive, and process batches of records using comprehensive 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. Schools cannot create their own student data to submit files during Phase II testing.

During this phase, Schools send Common Record documents to, and receive Common Record Receipt and Response documents back from the COD School Testing mailbox. Schools must verify that these files can be loaded and processed correctly in their system.

2. Who should participate?

All Schools that have completed Phase I (Manual Verification) testing.

3. When does Phase II testing take place?

Phase II testing assists Schools in the identification of potential updates to their system before beginning actual processing for 2008-2009. Phase II testing is **ONLY** available from **April 7, 2008 through June 27, 2008**. If Schools complete Phase I prior to April 7, 2008, they must wait until the Phase II testing window opens.

4. How do Schools sign up for Phase II testing?

Schools that want to continue on to Phase II testing after completing Phase I must contact the COD School Relations Center. A second sign-up document is not required to participate in Phase II testing.

5. What do Schools need to do when they complete Phase II testing?

Schools should notify the COD School Relations Center when they have completed testing. This will ensure that other Schools can begin their testing process in a timely fashion. If a School has shown no testing activity over a two week period, COD will assume your School has completed Phase II of testing, unless you have notified COD otherwise.

6. What do Schools need to do when they are ready to submit their first "live" batch?

Schools should notify the COD School Testing team prior to submitting their first "live" batch into the production environment. The School Testing team will ensure the batch processes successfully. Upon a successful submission of a batch, the School Testing team will refer the School to their primary representative.

Testing Criteria

Test Entry Criteria

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

- Complete a COD School Testing sign-up document (located at the end of this section). Upon completion, it should be submitted to the COD School Relations Center no later than the assigned deadline of **May 2, 2008**.
- Schedule individual testing date(s) specific for your School(s) for each testing phase. COD School Relations will contact you after the sign-up document is received.
- Receive a COD Entity ID for testing purposes. If needed, the COD School Relations Center will provide this information to you.
- **Note:** Vendors can test using a COD Entity ID for one of their Schools, or the COD School Relations Center can provide one for them to use for testing purposes only.
- Confirm your test plans and COD readiness. Contact the COD School Relations Center when you are ready to submit your files.
- Install the latest version of the message class table from SAIG.
- Install and implement the 2008-2009 updates to your 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 and exchange those names with COD School Testing team.
- Complete Phase I Common Record Manual Verification Testing, prior to beginning Phase II Structure Application Testing.

Test Exit Criteria

The School and the COD School Relations Center should jointly determine when the School has successfully completed COD testing. The School can select which processes to test and should continue testing until expected results are received. Once the expected results are received, the School can consider testing successful. There is no pre-defined “end” of the test, other than the published end dates for each phase of COD School Testing.

A School is considered to have completed testing with COD once any of the following steps are completed:

- It has been determined that the School has been able to satisfactorily complete the desired test scenarios by achieving the expected results.
- School has chosen to discontinue School Testing prior to completing all the desired test scenarios if the expected results have been achieved.
- School has contacted the COD School Relations Center to verify the test results.
- School has successfully sent a “live” batch into the COD Production environment.
- 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 School’s systems. Before submission of production data, Schools should also ensure that files are sent using the proper production message classes and production destination mailbox.

Test Data

The Test Data section explains test data requirements for Phase II-Structured Application Testing. More detail about the test cases can be found in the COD Test Cases document located in *Volume V, Section 2 – COD Test Cases* of the *2008-2009 COD Technical Reference*.

Common Record Test Data

COD provides an actual CPS test data ISIR file to each participating School via email. 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 using the COD School Testing message classes and the COD School Testing destination mailbox located in the *Volume V, Section 2: 2008-2009 COD Test Cases* document.

Upon receipt of a Common Record in XML format, the COD System performs an immediate check to determine if the Common Record document is readable. If the Common Record document is readable and complies with the XML schema, the COD System returns a Receipt. The COD System does not return a Receipt for records that are not readable or does not comply with the XML schema. After the COD System confirms the Common Record is readable and complies with the XML schema, the COD System classifies the record to determine how it will be processed. Once the data has been processed, Schools receive a Receipt file, along with a Response file indicating the results of each record submitted. If a record rejects, the Response record indicates which data element(s) have been rejected. Rejected records can then be corrected and resubmitted.

When processing records within the COD test environment, the anticipated time from record submission to receipt of a Response file is approximately two business days. If a School has not received a Receipt or Response within two business days of submitting the test file, they should contact their School Testing Coordinator at the COD School Relations Center.

Testing Message Classes

Common Record production message classes are year specific and are to be used from year to year in the production environment. However, different test message classes must be used for testing. During Phase II testing, Schools should use the following message classes when sending in Common Records for testing:

Common Record Test Message Classes

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

School Testing Sign-Up Process

Schools register for COD testing by completing the Sign-up Document located at the end of this School Testing Guide and submitting it to the COD School Relations Center. Once the COD School Relations Center has received the School's testing Sign-up Document, a confirmation letter will be sent to the School, via email, verifying that their Sign-up document was received. Once the Sign-up document has been processed, the COD School Relations Center will send the School a Readiness letter, via email, to provide additional information needed to begin testing such as the testing Entity ID Number to be used by the School, the assigned testing start date, and the name of the School Testing Coordinator assigned to the School. A new Readiness letter will be sent to the School, via email, for each specified phase of testing.

Note: Upon receipt of the sign-up 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 calling, ask for COD School Testing Support, or send e-mail at CODsupport@acs-inc.com with the subject line "COD School Testing Support".

Contact Names

Each School participating in COD 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. 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, the COD School Relations Center will need the name and telephone number of the Servicer contact person.

Scheduling

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

The deadline to sign up for COD School Testing is **May 2, 2008**.

When a School submits their 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 frame for each phase of testing is shown below:

Testing Phase	Testing Phase Description	Start Date	End Date
Phase I	Common Record Manual Verification Testing	01/02/08	05/30/08
Phase II	Structured Application Testing	04/07/08	06/27/08

Please note that Phase II – Structured Application Testing and Unstructured Testing for the 2008-2009 Award Year were scheduled for the periods April 7, 2008 through June 27, 2008 and June 2, 2008 through September 30, 2008, respectively (12/13/2007 Electronic Announcement and 2008-2009 COD Technical Reference). To accommodate CCRAA School Testing, we must change the COD School Testing schedule as follows:

- **Phase II – Structured Application Testing:** This testing period must end earlier than scheduled on Friday, June 27, 2008. Please work with the COD School Testing Support Team to complete this testing by **8:00 P.M. (ET) on June 27, 2008.**
- **Unstructured Testing:** This optional testing period has been cancelled. As previously explained, Phase II – Structured Application Testing will be available until June 27, 2008. Schools, third party servicers, and software providers are strongly encouraged to take advantage of Phase II testing.

Support Services

While a School is going through 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 (800) 330-5947
SAIG	Issues concerning connectivity to SAIG only	Contact CPS/WAN Customer Service (800) 330-5947
COD Processing	Issues concerning all items related to Pell, Direct Loan, ACG and National SMART 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 2008-2009.

Roles and Responsibilities

A collaborative effort between participating Schools and the COD School Relations Center is necessary for COD School Testing to be completed successfully. 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 and the Common Record Layout in the COD Technical Reference.
- Review all documentation that is e-mailed to the participating School (if applicable).
- Schedule testing dates with the COD School Relations Center using the sign-up document (preferably returned via e-mail).
- Prepare a test environment for COD School Testing that uses the test destination mailbox, test message classes, and the test Entity ID.
- Prepare provided test data to execute the Structured COD School Testing scripts for submissions.
- Send the test data to COD via the SAIG.
- Retrieve Receipts and Responses from COD via the SAIG.
- Process submitted Receipts.
- Process Responses/acknowledgments.
- Communicate results with the COD School Relations Center.
- Once testing is completed, remove all data 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 COD School Testing Sign-up documents.
- Schedule specific test dates for Schools.
- Provide Vendors with their own testing Entity ID to use only during a specific testing phase (if needed).
- Process submitted data.
- Send Receipts and Responses via the SAIG.
- Update Schools/Vendors of their testing status.
- Assist with issue identification and resolution.
- Provide testing technical guidance.

Lessons Learned from 2007-2008

Schools and Vendors that participated in COD School Testing for 2007-2008 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 prior to submitting production data.
- Schools that use homegrown or mainframe systems are also encouraged to test.
- 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 are encouraged to contact their Software Vendor to discuss their test plans and results. Schools that 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. This helps minimize the need for Schools to retest with COD.
- 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?

Before you begin testing, Schools should:

- Establish a separate testing environment to keep production data separate from their testing data. Production operations of prior award years and COD School Testing need to be able to occur in parallel without interference.
- Complete all of their development and internal unit testing
- Compare test output files against the published COD Technical Reference and schemas.
- Signup for testing in advance and allow at least three (3) weeks of setup time before you are able to begin testing. COD has considerable setup work to set-up each testing participant to ensure a successful test.
- Identify a strategy for loading 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, via email, by COD.

- Review the COD Technical Reference and understand the COD process for Pell, ACG, National SMART Grants and Direct Loans.

What can I expect during School Testing?

- 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 the COD School Relations Center when the School has satisfactorily completed School Testing or chooses to discontinue School Testing.

COD School Testing Sign-up Document

On the following page you will find the COD School Testing Sign-up Document. This document should be completed to the best of your ability upon submission. The completed document should be sent to the COD School Relations Center.

Send the completed document to COD School Relations at:

- E-mail: CODsupport@acs-inc.com, subject of “COD School Testing Sign up”
- Fax: 1-877-623-5082

Definitions of terms in the sign-up document and what information should be contained in them are listed below.

Field Name	Definition
Organization	If you are a Third-Party Servicer, or Software Vendor, list your name here.
School Name	If you are a School, list your name here.
COD Entity ID	Enter your Entity ID here. If you are unaware of your Entity ID, you can find this information on the COD web site, www.cod.ed.gov , or contact the COD School Relations Center.
Desired Test Phase	Select the phase(s) of testing that you want to complete, Phase I and/or Phase II.
Mainframe	If you are a School, indicate if you use a mainframe system to submit records to COD.
Vendor Product Used	If you are a School, indicate the Vendor product/Software type you use to submit records to COD.
Organization Type	Indicate if you are a School, Software Vendor, or Third-Party Servicer.
Testing TG Mailbox #	Enter the TG mailbox number of the mailbox you will be transmitting your test files to and from. You must use the same TG mailbox number for all programs tested.
Contact Info (Name, Phone, E-mail)	Enter the contact information of the person who will be working with the COD School Testing personnel.
Reporting School Entity ID	Enter the COD Entity ID of the School that will be submitting the records to COD.
Attending School Entity ID	If it is different from the reporting School, enter the COD Entity ID of the School where student attends class.
Pell ID	Enter the Pell ID of the School where student attends class.
Direct Loan ID	Enter the Direct Loan ID of the School where student attends class.

Funding Type	<p>If you are a School, enter the funding type here. This would be Advanced, Pushed Cash, Cash Monitoring I, Cash Monitoring II, or Reimbursement.</p> <p>Note: ACG and National SMART will only be Advanced, Cash Monitoring I, Cash Monitoring II, or Reimbursement.</p>
Expected Testing Readiness Date	<p>The date when you will be ready to begin the COD School Testing process.</p>



COD School Testing **2008-2009** Sign-Up Document

Please complete and send to **CODSupport@acs-inc.com** or Fax to (877) 623-5082

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:		
School Name (If Applicable):		
COD Entity ID		

Aid Programs (Check all applicable for your test)	Pell	ACG/National SMART	Direct Loan
Desired Test Phase	() Phase I () Phase I, II	() Phase I () Phase I, II	() Phase I () Phase I, II
Mainframe	() Yes () No	() Yes () No	() Yes () No
Vendor Product Used (if applicable)	() Yes () No	() Yes () No	() Yes () No
Organization Type (check all applicable)	() School () Vendor () Servicer	() School () Vendor () Servicer	() School () Vendor () Servicer
Testing TG Mailbox #			
Contact Person (Last, First):			
Contact Phone Number:			
Contact E-mail Address:			
Additional Contact Person (Last, First):			
Additional Contact E-mail Address:			
Reporting School ID:			
Attending School ID:			
School Pell ID:			
School Direct Loan ID:			
Funding Type			
Expected Testing Readiness Date:			