

# **eTranscript California**

**Electronic Transcript Exchange System**

## **Implementation Guide**

**Revision 2.C**  
October, 2009

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## Scope of This Document

This document:

- Provides an overview of the functions and capabilities of eTranscript California (formerly CCTran) that will affect implementation tasks and decisions.
- Identifies issues that a college needs to address in order to prepare its technical environment for eTranscript California.
- Describes the processing logic required for the college’s software to interact with eTranscript California in order to send and/or receive electronic transcripts.
- Provides guidelines for developing and testing export files.
- Provides information about developing and testing A&R processes.

# 1 Implementation Phases

Implementation of eTranscript California, formerly CCCTran, can be divided into the following phases:

- A. Understanding how your college will use eTranscript California
  - Basic functionality: pushing transcripts, requesting, responding, etc.
  - Operational details: support for transcript holds, criteria for identifying students, etc.
  - Transcript fee policy
- B. Putting together your team
  - From A&R (Admissions and Records)
  - From IT (Information Technology)
- C. Developing your interface programs
  - Code and mentoring from other college(s)
- D. Developing your staff procedures
  - Examples and mentoring from other college(s)
- E. Training your staff
- F. Beta-testing your software and processes
  - Internal testing
  - Testing with trading partners
- G. Going live

Altogether, this may look like quite a big project, and there's no getting around the fact that there is significant work to be done in implementing eTranscript California. However, you will almost certainly be able to simplify and shorten your implementation process considerably by leveraging the implementations of colleges who are already using eTranscript California. For CCCs, there are member colleges using Peoplesoft, Banner, and Datatel student information systems that have already helped other colleges implement eTranscript California. For CSUs, there is a diverse group of fellow universities already live on eTranscript California and ready to help others.

But even if you choose to develop most of your programs and procedures from scratch, the time and money saved by streamlining and automating transcript exchange through eTranscript California will more than make up for your investment in implementing the system.

This document takes you step-by-step through each of the implementation phases above.  
*But first ...*

# UNDERSTANDING eTRANSCRIPT CALIFORNIA

This section provides a detailed description of the functions and features of eTranscript California. College IT and A&R staff will need to understand these features and functions in varying degrees in order to implement and use eTranscript California.

This section will introduce several important terms related to eTranscript California. The glossary in *Appendix A* provides a handy reference for these terms.

## 2 Overview of eTranscript California

**Understanding eTranscript California is a prerequisite for implementing and using the system. Planners, developers, and users need to understand (in varying degrees) the functions, interfaces, transaction workflow, and configuration options of the system.**

Developed under the direction of the California Community Colleges Chancellor's Office, eTranscript California (formerly CCCTran) is a statewide Internet-based system for requesting, transmitting, tracking, receiving, and viewing academic transcripts among authorized educational institutions and their trading partners. Xap Corporation provides the programming and hosting of the system.

As illustrated in *Figure 1*, eTranscript California supports direct transcript exchanges among participating California Community Colleges (CCCs), CSUs, UCs, and other subscribing institutions (e.g., University of Phoenix, National University). It also supports transcript exchanges between subscribing institutions and non-subscribing institutions via the SPEEDE Server (also called the Texas Server or UT Server). Subscribing institutions can also opt to receive transcripts via the SPEEDE Server if they so desire. In addition, eTranscript California subscribers can receive California high school transcripts via CSIS (California School Information Services). eTranscript California is an evolving system, and both the number and range of transcript exchange partners will continue to grow.

Characteristics of eTranscript California include the following:

- Central server accessed via the Internet
- ASP solution hosted and supported by Xap
- Support for EDI and XML transcript-exchange standards, plus ASCII flat-file format
- Standardized HTML and PDF transcript layouts
- Institution-oriented (no direct student access)
- Secure transmission and transcript storage
- Complete transaction tracking
- Automated email messaging
- Received transcripts can be archived on the system indefinitely

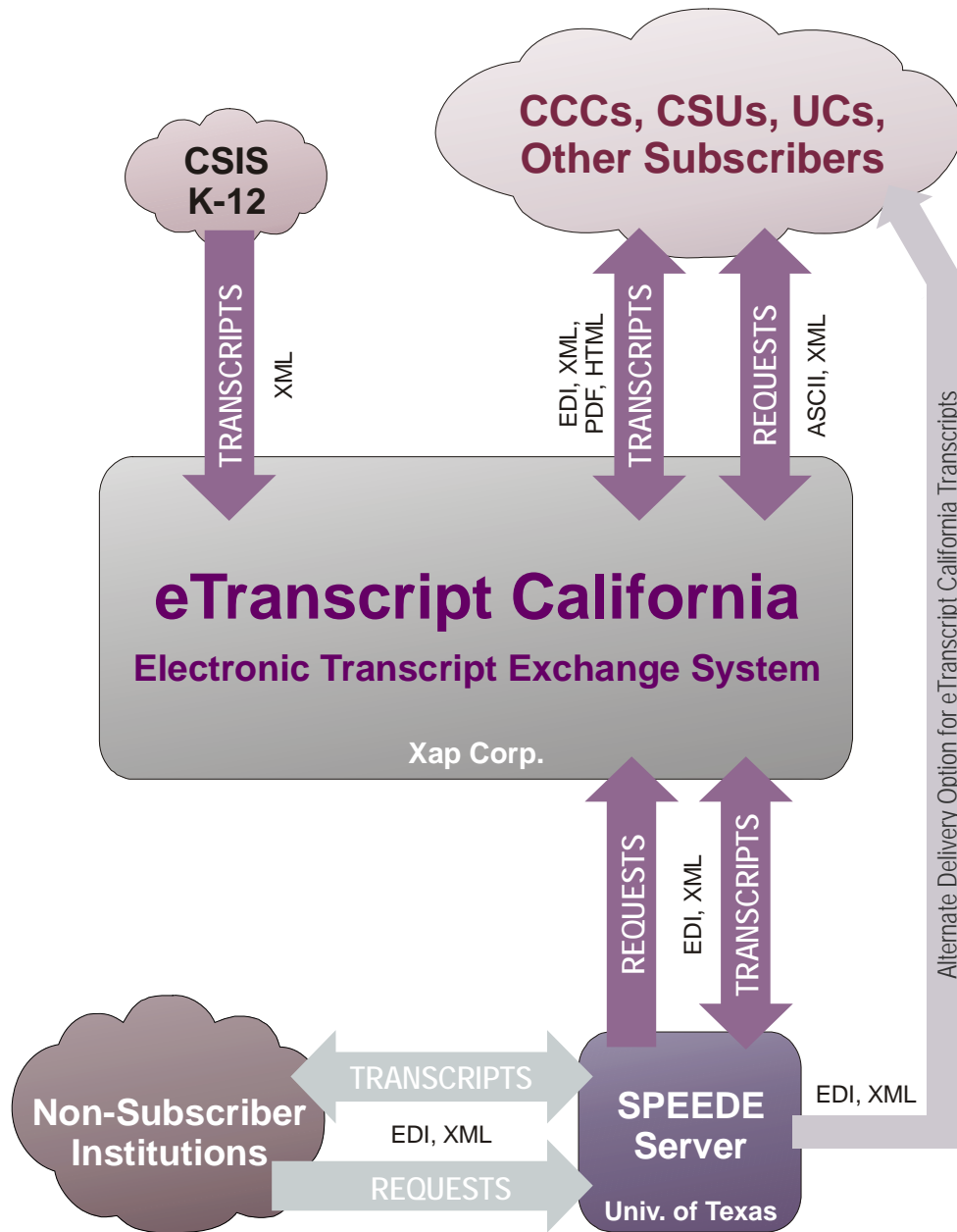


Figure 1. eTranscript California System Diagram

Colleges and their staff interact with eTranscript California in two ways:

- Interactively through the Control Center website.
- By automated file uploads and downloads.

## 2.1 Benefits of eTranscript California

The benefits of eTranscript California include:

- Dramatically lower expenditures for labor, supplies, and postage
- Increased productivity of A&R staff
- Much faster transcript exchanges
- Tracking of transcript requests and fulfillment
- Enhanced security and data integrity
- Flexibility to meet each college's particular needs
- Standardized transcript views
- One system for post-secondary and high school transcripts
- Direct data feeding into degree audit and student information systems
- Improved transcript services for students
- A 'green' solution, reducing paper consumption and waste

## 2.2 Transcript Transactions

In eTranscript California, a single request for a transcript and any responses to that request make up the standard 'transcript transaction'. The transaction may or may not result in the delivery of a requested transcript. In addition, eTranscript California also supports transactions in which unsolicited transcripts are delivered—i.e., 'pushed' transcripts for which there has not been a prior request.

### 2.2.1 Components of Transcript Transactions

In eTranscript California, transcript transactions are made up of three types of files:

- **Request** – A structured file from the requesting institution asking a transcript college for a Transcript to be sent to an identified recipient. *Request files are often system-generated based on Control Center interactions.*
- **Response** – A structured file from the transcribing college conveying a response to a Request (such as a record-matching failure, a financial hold, or an offline record search). *Response files are often system-generated based on Control Center interactions.*
- **Transcript** – A structured file from the transcribing college providing transcript data to the recipient. *Transcript files are always generated by the transcribing college.*

A completed eTranscript California transcript transaction can involve several combinations of components:

- A Request followed by a Transcript.
- A Request followed by one or more Responses followed by a Transcript.
- A Request followed by one or more Responses, the last of which ends the transaction.
- A Request followed by cancellation of the Request.
- An ‘unsolicited’ Transcript only. (In such cases, eTranscript California creates and logs a Request in which the transcript institution is also the requesting institution.)

The process of responding to a Request (whether with one or more Responses and/or with a Transcript) is called ‘fulfillment’.

*Note:* Transcript, Request, and Response will be capitalized when referring specifically to the *files* that make up an eTranscript California transaction. When transcript, request, and response have more general meanings, they will not be capitalized. For example:

- *An eTranscript California transaction consists of a single Request followed by one or more Response(s) and/or Transcript(s).*
- *Some college websites allow students to submit requests for transcripts.*

## 2.2.2 Parties in a Transcript Transaction

Each transcript transaction has three parties:

- **Requesting Institution:** The institution that submits the Request to eTranscript California.
- **Recipient Institution:** The institution to which the Transcript is to be sent. This is typically, but not always, the requesting institution.
- **Transcript Institution:** The college providing the Transcript.

*Note:* eTranscript California does not accept transcript requests directly from students, so the student is not a party in the eTranscript California transcript transaction.

## 2.2.3 District-Wide CCC Transcripts

To support community college districts in which the policy is to provide transcript information from all colleges in the district, eTranscript California allows the transcript institution to provide transcript data for multiple colleges in the same Transcript file. Characteristics of such ‘district-wide transcripts’ are as follows:

- eTranscript California does not recognize districts as institutions within the system, so Requests and Transcripts must originate from and be sent to individual colleges.
- Transmission of a requested Transcript must originate from the college receiving the Request.



- A district-wide transcript is identified by a flag in the Transcript file. When the district-wide transcript flag is set, the file must include district information and *may* include transcript data from multiple colleges.
- When there is transcript data from multiple colleges, each college’s transcript data is presented separately—i.e., first the transcript data from college A, then the transcript data from college B, etc.

### 2.3 College File Format Options

Three file formats are supported in the eTranscript California architecture:

- An ASCII ‘flat’ file structure called CCCASCII
- XML
- EDI

Automatic transformation from CCCASCII to XML or EDI and from XML to EDI is provided as part of eTranscript California, so colleges can upload either CCCASCII or XML files to eTranscript California.

*Note:* The national XML Transcript standard has been extended with a CCCUDE schema. The combination of the XML standard plus the CCC extensions is sometimes referred to as ‘CCCXML’.

Table A identifies the electronic file formats supported for various file transmissions. Institutions should choose the upload and download formats that best fit their needs, according to familiarity, programming practices already in place, and/or plans to use other colleges’ solutions.

**Table A. College File Upload and Download Formats**

	<b>Uploads to eTranscript California</b>	<b>Downloads from eTranscript California</b>	<b>To SPEEDE Server</b>	<b>From SPEEDE Server</b>
<b>Request Files</b>	ASCII, XML	ASCII, XML	<i>not supported</i>	EDI, XML
<b>Response Files</b>	ASCII, XML	<i>not supported</i>	EDI, XML	EDI, XML
<b>Transcript Files</b>	ASCII, XML	EDI, XML, PDF, HTML *	EDI, XML	EDI, XML
<i>* ASCII downloads of Transcript files are supported for testing purposes only.</i>				

In addition, individual Transcripts can be viewed (and then printed or saved, if desired) in HTML or PDF format via the interactive Control Center interface. These ‘Transcript Views’ can include the complete transcript data (Full View) or a subset (Brief and GenEd Views).

## 2.4 High School Transcripts

Beginning in the second half of 2009, eTranscript California users can receive and view electronic transcripts from California high schools via CSIS (California School Information Services). High school transcripts are always ‘unsolicited’ (i.e., they are ‘pushed’ to eTranscript California subscribers by the high schools, and cannot be requested through eTranscript California). They are received by eTranscript California in XML format and downloadable in XML, HTML, or PDF. They are available in two HTML/PDF Views (Standard and Complete).

Control Center options for listing, viewing, and downloading high school transcripts are similar to those for college transcripts, but are more limited. There are also separate configuration and access options for high school transcripts.

## 2.5 eTranscript California User Interfaces

As mentioned previously, there are two ways in which your college and its staff will interface with eTranscript California:

- Interactively through the **Control Center**.
- Through **Xap Communicator** for automated file uploading and downloading.

A basic principle of eTranscript California is that transcript request and fulfillment functions can be performed using either interface (though there are a few exceptions, such as Transcript expiration, that can only be performed interactively).

Administration, configuration, and reports are available only through the interactive Control Center interface for eTranscript California.

### 2.5.1 The Control Center Interactive Interface

The Control Center (*Figure 2*) is an Internet site through which college staff can:

- Perform administrative and configuration tasks.
- Generate Requests (individual and bulk/batch).
- Respond to Requests. (See *Figure 3*.)
- View reports of open and completed transcript transactions. (See *Figure 4*.)
- View histories of individual transcript transactions. (See *Figure 5*.)
- View Transcripts. (See *Figure 6*.)

*Note:* Where Social Security numbers (SSNs) and other personal IDs is included in the Control Center figures in this document, this data has been purposely made unreadable. It is important, when including Control Center screen captures in any documents or emails, to ensure that no sensitive student information is included. For more information about protecting SSNs, see *Recommended Practices for SSN Security* in the Recommended Practices section of the File Repository on the eTranscript California project website ([eTranscriptCA.org](http://eTranscriptCA.org)).

The Control Center is password-protected, with the college's designated administrator able to specify the access privileges of each user. Each college has access only to the transcript transactions in which it is the requesting, receiving, and/or transcribing institution.

Typically, college IT staff will use the Control Center primarily for configuration, testing, and troubleshooting.

### **2.5.2 Xap Communicator (Automated Interface)**

Xap Communicator is a stand-alone program that runs on a college server or workstation and allows IT staff to schedule and configure automatic uploads and downloads of Requests, Responses, and Transcripts. With Communicator and a custom interface program to the college's Student Information System (SIS), IT staff can fully automate the process of receiving and fulfilling transcript Requests, and/or the process of requesting and receiving Transcripts. (Some special cases, like offline record searches, require actions by A&R staff and thus will not be entirely automated.)

Typically, college A&R staff will not be involved in Communicator operation.

### **2.5.3 Requesting Transcripts**

eTranscript California provides several methods for requesting transcripts:

- **Single Request:** Entered interactively via Control Center input screens.
- **Bulk Request:** A group of Requests, also entered interactively via Control Center input screens, directed to a single institution and having the same request options, but with students identified in a structured list. The bulk list of students may be typed in, pasted in, or uploaded.
- **Batch Request:** One or more Requests in a single CCCASCII or XML file. A multi-Request batch file can target multiple institutions and have different request options. Batch files are uploaded manually via a Control Center input screen or automatically using Xap Communicator.

### **2.5.4 Receiving Transcripts**

Transcript receiving can be interactive or automated.

- Via the Control Center, Transcripts can be viewed and then printed or saved in either HTML or PDF format.
- Via Communicator, Transcripts can be automatically downloaded in EDI or XML format, then transferred into the college's SIS, as well as displayed or printed using standard or custom programs for interpreting Transcript files. It is also possible to automatically download transcripts as formatted PDF or HTML documents.

Figure 2. Control Center Home Page (eTranscript California Interactive Interface)

View Activity	Status	Response Status	Last Name	First Name	M.I.	Student ID	Date Requested	Requested By
	Transcript Delivered		Graziadei	Linda			04/01/2009	National University
	Transaction Held	HO	Marks	Janelle			04/01/2009	National University
	Transaction Held	HO	Ramahi	Anna			04/01/2009	National University
	Request Approved		Graziadei	Linda			04/06/2009	National University
	Transaction Held	OR	Robison	Lenny			04/07/2009	Sacramento City College
	Request Approved		Robison	Lenny			04/09/2009	Sacramento City College
	Transcript Delivered		ROBISON	LENNY		1234567	04/09/2009	Sacramento City College

Figure 3. Control Center: Fulfillment Manager Screen

Transcripts

+ add page to My Quicklinks
? get help for this page

Detail
Summary

---

**Transcripts We've Received Options**

View using: Default View create

From: 1/1/2009 to: 4/20/2009 Rule: None delete Results: 100 update

Search for:  leave empty for all records

---

**Transcripts We've Received [\(Open in Excel\)](#)**

View	View Activity	Status	Last Name	First Name	M. I.	Student ID	Date Requested	Received From
		Transcript Released	YOUNG	JAMES			01/08/2009	<a href="#">American River College</a>
		Transcript Released	HACKMAN	VICTORIA			01/08/2009	<a href="#">American River College</a>
		Transcript Released	KEYS	AUJA			01/09/2009	<a href="#">American River College</a>
		Transcript Released	Vazquez	Manuel			01/30/2009	<a href="#">Santa Rosa Junior College</a>
		Transcript Delivered	BOWEN	JAMIE			02/03/2009	<a href="#">American River College</a>
		Transcript Delivered	FRANKLIN	VORESS			02/03/2009	<a href="#">American River College</a>
		Transcript Released	Nagle	Candace			02/03/2009	<a href="#">Santa Rosa Junior College</a>
		Transcript Released	ON	EDITH	Y		02/10/2009	<a href="#">American River College</a>
		Transcript Released	Lofy	Josh	D		02/17/2009	<a href="#">Bakersfield College</a>
		Transcript Released	JOHNSON	JESSICA	L		02/25/2009	<a href="#">American River College</a>
		Transcript Delivered	Rappa	Kate	A		03/04/2009	<a href="#">Santa Rosa Junior College</a>
		Transcript Released	ARABA	EDWIN	L		03/09/2009	<a href="#">American River College</a>
		Transcript Released	Rappa	Kate	A		03/10/2009	<a href="#">Santa Rosa Junior College</a>
		Transcript Released	Martell	Melissa	A		03/27/2009	<a href="#">Santa Rosa Junior College</a>
		Transcript Released	HERZOG	LAURIE			04/01/2009	<a href="#">American River College</a>
		Transcript Delivered	PHILIPENKO	EUGENE			04/07/2009	<a href="#">American River College</a>
		Transcript Delivered	Trammell	Deana	T		04/08/2009	<a href="#">Santa Rosa Junior College</a>
		Transcript Delivered	BIERER	MELISSA			04/13/2009	<a href="#">American River College</a>
		Transcript Delivered	Deshazo-Couchot	Benjamin	W		04/17/2009	<a href="#">Santa Rosa Junior College</a>

Results: 1-19

**Figure 4. Control Center: Report Screen (Received Transcripts)**

Student Information			
Student name:	YOUNG, JAMES		
Date of birth:	8/21/1967		
Social security number:	A99999 999		
Transcript institution:	<a href="#">American River College</a>	Student ID:	
Recipient institution:	<a href="#">Sacramento City College</a>	Student ID:	
Student email:			
Current status:	Transcript Released		
Request conf. number:	3451499		

Transcript Transaction History		
Transcript Fulfillment Workflow <b>Done</b>		
Action	Date	Notes
New Request	1/8/2009 2:47:44 PM	
Request Approved	1/8/2009 2:47:44 PM	Automatic approval
Request Downloaded	1/8/2009 3:00:20 PM	
Transcript Fulfilled	1/8/2009 3:19:11 PM	
Transcript Released	1/8/2009 3:19:11 PM	

Actions
<span style="border: 1px solid gray; border-radius: 10px; padding: 2px 10px; margin-right: 10px;">add note</span> <span style="border: 1px solid gray; border-radius: 10px; padding: 2px 10px;">close</span>

Figure 5. Control Center: Transaction History Screen


 View transcript in the format:  

Electronically submitted data provided from CCCTran  
 Complete Transcript Issued 01/08/2009 03:18:00 AM from FICE 001232

STUDENT TRANSCRIPT FOR:  
**YOUNG, JAMES**  
 LOCAL SID:  
 SENDER SID: *01/08/2009*  
 BIRTHDATE: *12/15/1989*  
 MAJOR: Business Mgmt/Office Admin

TRANSCRIPT INSTITUTION:  
**AMERICAN RIVER COLLEGE**  
 4700 College Oak Drive  
 Sacramento, CA  
 95841, US  
 CONTACT: Enrollment Services  
 PHONE: 916-484-8513  
 INST FICE: 001232

1989 Spring Semester 01/01/1989 - 05/01/1989

Course ID	Course Title	Rpt	Actn	Cred	Hon	T	Course units	Earned units	Grade points	Grade
MATH 051	Elementary Algebra					S	3.00	3.00	9.00	B
ENGL 056	Development Writing					S	3.00	3.00	9.00	B
ENGL 070	Basic Reading Skills					S	3.00	3.00	9.00	B
TERM TOTALS						T	Course units	Earned units	Grade points	GPA
Cumulative for Transcript Inst; CarryoverCredit						S	9.00	9.00	27.00	3.000
Cumulative for Combined Inst; All						S	9.00	9.00	27.00	3.000

1989 Summer Semester 06/01/1989 - 07/30/1989

Course ID	Course Title	Rpt	Actn	Cred	Hon	T	Course units	Earned units	Grade points	Grade
MATH 053	Intermediate Algebra					S	3.00	0.00	0.00	W
ENGL 058	Proficient Writing					S	3.00	3.00	3.00	D
TERM TOTALS						T	Course units	Earned units	Grade points	GPA
Cumulative for Transcript Inst; CarryoverCredit						S	3.00	3.00	3.00	1.000
Cumulative for Combined Inst; All						S	12.00	12.00	30.00	2.500

1989 Fall Semester 08/01/1989 - 12/01/1989

Course ID	Course Title	Rpt	Actn	Cred	Hon	T	Course units	Earned units	Grade points	Grade
MUFHL 006	Intro To Music					S	3.00	3.00	12.00	A
ET 030A	Dc Circuit Fundament					S	2.50	2.50	5.00	C
ET 030B	Ac Circuit Fundament					S	2.50	2.50	5.00	C
ET 051A	Math For Dc Circuits					S	1.50	1.50	4.50	B
ET 051B	Math For Ac Circuits					S	1.50	1.50	3.00	C
TERM TOTALS						T	Course units	Earned units	Grade points	GPA
Cumulative for Transcript Inst; CarryoverCredit						S	11.00	11.00	29.50	2.682
Cumulative for Combined Inst; All						S	23.00	23.00	59.50	2.587

1990 Spring Semester 01/01/1990 - 05/01/1990

Course ID	Course Title	Rpt	Actn	Cred	Hon	T	Course units	Earned units	Grade points	Grade
ET 060	Math For Semi-Conduc					S	3.00	0.00	0.00	F
ET 061	Semi-Conductor Theor					S	5.00	0.00	0.00	F

Figure 6. Control Center: Transaction View (Brief, HTML)

## 2.6 Request, Response, and Transcript Files

The CCCASCII file format is thoroughly defined in the eTranscript California Data Dictionary, available on the eTranscript California project website (*eTranscriptCA.org*) as well as on the Control Center. The Data Dictionary defines the ASCII file syntax, data elements, and allowed values, and includes notes about recommended usage. It also indicates how the CCCASCII data elements are mapped to EDI and XML by eTranscript California.

EDI and XML standards documents and implementation guides are available from the Postsecondary Electronic Standards Council at *www.pesc.org*. The CCCXML UDE (User-Defined Extension) is available on the eTranscript California project website (*eTranscriptCA.org*), and on the PESC website at *www.pesc.org/interior.php?page\_id=164* (XML College Transcripts page).

### 2.6.1 File Downloading and Uploading

The technique for downloading eTranscript California transaction files (Requests, Responses, and Transcripts) is based on user accounts, slots, and projects.

- A ‘slot’ is a communication channel that can be assigned to a single user (i.e., account) for a single purpose called a ‘project’. Each college has 30 slots for downloading college transcripts, and 30 slots for downloading high school transcripts. (If the college runs CCCApply as well as eTranscript California, there will be another set of 30 slots for CCCApply.)
- A ‘project’ is a specific type of download, such as Request downloads in ASCII format. Only one project can be assigned to a particular slot.
- A project can include a ‘rule’ that filters the file downloads. Rules can be based on various file and transaction data fields, and can be logically simple or complex, providing a wide and powerful range of download filtering options. Rules will be discussed in more depth later in this document.

File uploads (both interactive via the Control Center and automated via Communicator) do not require slots.



## 2.6.2 Transcript Request Recycling

Typically, a file is downloadable once per slot. However, eTranscript California supports repeated downloads of Requests until the transcript institution rejects or fulfills the Request. This allows the transcript institution to put a Request on hold and to ‘recycle’ the Request until the hold condition has been resolved. The Control Center includes ‘pre-generated’ rules (i.e., rules that the user does not have to create) that can be applied to download projects/slots for efficient management of Request recycling and holds.

Request recycling will be discussed in more depth in *section 6.4, Fulfilling Transcript Requests*.

## 2.7 Transcript Transaction Workflow

‘Workflow’ refers to the various steps in a standard transcript transaction, from the initiating Request to Transcript delivery. The eTranscript California workflow steps are:

- **New Request:** The requesting institution requests a Transcript for a particular student, either interactively or via file upload.
- **Request Approval:** Via the Control Center, the transcript institution approves the Request for fulfillment. Colleges can opt to make this step automatic (i.e., all Requests will be approved automatically when they are received).
- **Request Download:** The transcript institution downloads the Request.
- **Response/Transcript Upload:** The transcript institution uploads a Response to the Request, or uploads the requested Transcript. Multiple Responses can be uploaded until the Transcript is uploaded.
- **Transcript Release:** The uploaded Transcript is available for download. This step occurs automatically when a Transcript is uploaded. At this point, the uploaded Transcript still ‘belongs’ to the transcript institution.
- **Transcript Delivery:** The uploaded Transcript is downloaded or viewed by the recipient (or is transmitted out of eTranscript California—e.g., to the SPEEDE Server). Once this occurs, the uploaded Transcript ‘belongs’ to the recipient.

### 2.7.1 Optional Actions during a Transcript Transaction

In addition to the basic actions of requesting and providing Transcripts, there are several other actions that the participants in a transcript transaction can take, including:

- **Cancel a Request:** Until a Transcript has been uploaded, the Request can be canceled by the requesting institution. This will end the transcript transaction.
- **Reject a Request:** The transcript institution can reject a Request when no record for the specified student is found, when multiple records are found, when the student is deceased, or because it chooses to cancel the transaction for some other reason. This will end the transcript transaction.

- **Hold a transaction:** There are three types of ‘holds’ that a transcript institution can put on transactions:
  1. The request included a condition such as ‘delay for final grades’ that the transcript institution will honor.
  2. The transcript institution has a local condition (such as fees owed by the student) that must be resolved before the transcript can be sent.
  3. The transcript institution will search offline records for all or part of the transcript data.

Responses allow the transcript institution to specify the reason(s) a transaction is being put on hold. A transaction that is placed on hold remains on hold until the transcript institution either removes the hold (through another Response), rejects the Request, or uploads a Transcript.

- **Recall a Transcript:** After a Transcript has been released by the transcribing institution but before it has been delivered to (i.e., downloaded or viewed by, or transmitted outside of eTranscript California to) the recipient, the transcript institution can recall the Transcript. This ‘rescinds’ the Transcript upload/ release and returns the transaction to the previous workflow step at which a Response or Transcript can be uploaded.
- **Expire a Transcript:** Expiring a Transcript after it has been released makes it no longer available for downloading or viewing. After a Transcript has been released but before it has been delivered, only the transcript institution can expire the Transcript. After a Transcript has been delivered, only the recipient institution can expire the Transcript. Via the Control Center, college staff can expire individually selected Transcripts. In addition, colleges can specify time periods after which released Transcripts and delivered Transcripts will expire automatically.

Canceling a Request, recalling a Transcript, and expiring a Transcript can be performed interactively via the Control Center only; they cannot be performed by uploading a file.

### **2.7.2 Transaction Status**

At any given time, a transcript transaction has a particular status based on the most recent action taken. These statuses and the actions that cause them are identified in *Appendix B*. Transaction status is included in many of the standard lists and reports in the Control Center.

Various transaction lists and reports in the Control Center are organized by, or can be sorted or filtered by, Transaction Status. Thus, a user can view a list of Requests on hold, for example, or sort a report to identify expired Transcripts.

### **2.7.3 Transaction History**

eTranscript California stores various data regarding each transcript transaction, including student profile data, the types of actions taken, the times of the actions, requested and planned release dates, and notes provided either manually or in Response files. In the Control Center, a

Transaction History can be viewed for any transaction. The Transaction History lists all actions in the transaction, starting with the initial Request, along with the times they occurred and any associated notes. The display also includes the student profile and information about the institutions involved.

#### **2.7.4 Offline Records and Partial Transcripts**

For some colleges, recent student records are in electronic form, while older records are ‘offline’ in hard-copy form. When these colleges send a transcript, part or all of an individual student’s transcript data may be in offline records. For cases in which all records are offline, eTranscript California provides Response options for indicating that an offline search is being initiated and then that the offline transcript has been mailed or otherwise delivered outside of eTranscript California. In addition, the Transcript file includes a flag that indicates when the electronic Transcript is a partial transcript, with the remainder to be retrieved from offline records and delivered outside of eTranscript California.

Procedures for handling offline records in conjunction with electronic transcripts are described in *section 6.4.6*.

### **2.8 Custom Views and Filtering Rules**

The contents of Control Center lists and reports can be customized through the use of user-created ‘views’. Each view is given a name, and columns can be added to or deleted from the view as desired. For example, a custom view for a report of received Transcripts could include a column indicating whether each Transcript is complete or partial. Once a custom view has been created, it remains available for selection from a drop-down menu, allowing users to select a view that is appropriate for the task at hand.

Control Center lists, reports, automated emails, and automated downloads can also be limited by applying custom filters called ‘rules’. A rule can be very simple, such as ‘Student Last Name EQUALS Smith’. Or a rule can be quite complex, involving multiple fields in various logical relationships, such as ‘Student Last Name EQUALS Smith AND (Student First Name EQUALS Don OR Student First Name EQUALS Donald) AND DocumentCompleteCode EQUALS Partial.’ Once a custom rule has been created, it remains available for selection from a drop-down menu. There are also several ‘pre-generated’ rules for use in Request downloading and recycling; these will be discussed further in *section 6.4, Fulfilling Transcript Requests*.

The data fields available for use in creating custom views and rules include many of the data fields in the Request, Response, and Transcript files, plus many transaction data fields. These are defined in user documents as described in *section 3, Exploring eTranscript California Resources*.

*Appendix E* provides an example of the configuration and use of download filtering rules.

## 2.9 Transcript Fees

eTranscript California does not provide a mechanism explicitly for charging, enforcing, or tracking fees for transcripts--though automated emails can be used to inform students of required fees if desired. (See *section 2.11*.) In general, however, colleges need to decide whether they will charge for electronic transcripts, and if so, how and what they will charge.

The Education Code allows colleges to charge fees equivalent to their costs for sending transcripts. In addition, they can charge an additional fee for expediting transcripts. The CCC Chancellor's Office has advised that electronic transcripts should be considered as subject to the same fee regulations as paper transcripts, and may be considered an expedited transcript service. For more information, see *Appendix C*.

Current eTranscript California colleges take a variety of approaches to fees. Some do not charge for transcripts requested through eTranscript California. Others do not accept requests through eTranscript California, choosing instead to "push" transcripts only, because it is their policy to charge a fee for all transcripts. You should carefully consider what your fee policy will be for eTranscript California transcripts, and consult with your chief trading partners if you plan to charge a fee for requested transcripts.

## 2.10 Configuration Options (Preferences) and Institution Profiles

The user-settable 'Preferences' in eTranscript California serve two functions:

- They allow the college to configure certain aspects of eTranscript California operation, such as alternate Transcript delivery methods (email, SPEEDE server).
- They allow the college to specify various aspects of its transcript exchange practices for communication to other eTranscript California participants via Institution Profiles.

Via the 'Preference's menu path in the Control Center, each college can configure the following eTranscript California options:

- **Transcript Receipt Options:** In addition to the standard delivery options, colleges can opt to receive Transcripts via EDI or XML through the SPEEDE (Texas) Server and/or via encrypted email.
- **Transcript Expiration Policy:** Received Transcripts can automatically expire at a set time after upload or delivery, immediately after delivery, or not expire; Sent Transcripts can automatically expire at a set time after upload or not expire.
- **Fields Required in a Transcript Request:** From a list of student data fields, each college can specify one or more groups of fields that must be provided in a transcript Request in order for the college to identify an individual student in its SIS. For example, a college could specify that a Request must include one of the following sets of information:
  - Social Security Number
  - First Name, Last Name, and Date of Birth

- **Transcript Fee and Waiver Policies:** The amount and conditions of transcript fees, if any, and any institutions for which fees will be waived. (As previously described, eTranscript California does not account for, process, or enforce transcript fees.)
- **Automated Notifications via Email:** For each workflow step, email can be automatically sent to the student, other institutions involved in the transcript transaction, and/or any specified email addresses. This functionality is described in more depth in *section 2.11*.
- **Automatic Request Approval:** Whether received Requests will be automatically approved or will need to be manually approved.
- **Request Acceptance Rules:** Institutions from which Requests will be accepted or rejected.
- **Miscellaneous College Information:** Typical transcript turnaround time; Allowed terms for which transcript requests may be submitted.

Clicking on a college name in a report or other screen will display an Institution Information screen, also called the college's 'Profile'. This Profile includes:

- Contact information
- Accreditation information
- Typical turnaround time for transcripts
- Transcript expiration policies
- Transcript fee policy

### **2.10.1 Upcoming Enhancements to Preferences and Profiles**

The eTranscript California Steering Committee has approved a specification for significantly expanding the Preferences setup and the Institution Information (Profile). The result will be that the college Profiles will contain complete information about each college's implementation of eTranscript California.

The new Preferences screens will include all configuration categories described above (in some cases with additional options), plus several new categories:

- Basic eTranscript California usage: e.g., pushing transcripts, fulfilling requests, receiving transcripts
- Supported holds (requested and local)
- GenEd certification information included in transcripts
- Offline transcript records and partial transcripts
- Typical turnaround times for various transcribing processes
- General notes and comments (free text)

The Profile will include all of the information specified in the Preferences screens. In addition, Profiles will be made available in the reports menu, so any college can view any other college's Profile at any time. This will make it much easier for colleges to determine the transcript exchange processes and policies of any eTranscript California trading partner.

Development of this enhancement is expected in the fourth quarter of 2009.

## 2.11 Automated Emails

If your institution is set up to send transcripts, the Preferences settings in the Control Center let you manage automatic email notifications that may be sent to students and/or college staff at the completion of each fulfillment workflow step. (Workflow steps are identified in *section 2.7*.) For each workflow step, you can choose to enable any combination of the following email options:

- **Student Confirmation Email** – An email is sent to the email address provided in the Request (or in a Response or Transcript if not present in the Request).
- **Transcript Institution Notification Email** – An email is sent to the eTranscript California primary contact at the transcript institution.
- **Requesting Institution Notification Email** – An email is sent to the eTranscript California primary contact at the requesting institution.
- **Recipient Notification Email** – An email is sent to the recipient's email address included in the Request (or, if the address is not included in the Request, to the email address of the eTranscript California primary contact for the recipient institution).
- **Custom Notification Email** – An email notification is sent to whatever email address you specify.

A particular type of email selected to be sent at a particular workflow step is called a 'task'. For each task, you can enter custom text, including variables from the transcript transaction (for example: student name, hold reason, fee status, transaction colleges, date requested). You can also apply HTML formatting if desired. And you can apply a rule that will limit the recipients of the email—for example, to students with local holds on their transcripts. (Rules are described in *section 2.8*.) For any workflow step, you can have multiple tasks of the same kind (such as Student Confirmation Emails), each being sent to a different filtered set of email recipients.

Any automated email that you set up applies to every transaction (unless limited by a filtering rule), so the volume of emails can be quite large if you are sending a lot of transcripts. When planning the automated emails that you will send, be careful not to flood students or trading partners with unnecessary emails. Before configuring emails to be sent to your trading partners, consult with them about what emails they would find useful, if any. Typically, your trading partners will want to receive emails only in certain special cases, if at all.

*Appendix D* provides an example of the configuration and use of automated emails.

## 2.12 User Accounts

Access to eTranscript California is protected by user accounts requiring the entry of a username and password.

One or more designated users will be able to create, edit, and delete user accounts for your college. Each user account is given a particular set of access privileges chosen from the following:

- Submit college transcript requests
- Respond manually to college transcript requests
- Download college transcripts
- Download high school transcripts
- Update college transcript preferences
- Update high school transcript preferences
- Run college transcript reports
- Run high school transcript reports
- Create/edit accounts
- Reset account passwords
- View college transcripts
- View college transcript transaction history
- View high school transcripts
- View high school transcript transaction history
- Xap Communicator

## 2.13 eTranscript California and FERPA

eTranscript California is compatible with FERPA regulations regarding the privacy of student data. “FERPA allows schools to disclose those records without consent, to the following parties or under the following conditions (34 CFR § 99.31):

- School officials with legitimate educational interest;
- Other schools to which a student is transferring;
- Specified officials for audit or evaluation purposes;
- Appropriate parties in connection with financial aid to a student;”

## 2.14 Summary

The eTranscript California Electronic Transcript Exchange offers these features:

- Request Transcripts
  - Request single transcript or multiple transcripts in a batch
  - Identify trading partner preferences for transcript processing

- Ask transcript college to hold transcript for grades or other criteria
- Download requests automatically
- E-mail confirmation
- Fulfill Transcript Requests
  - View progress through transcript fulfillment workflow
  - Put requests on hold for local or requested reasons
  - Recycle requests that are on hold
  - Upload and transmit transcripts automatically
  - Automate email communication regarding transcript fulfillment
  - Exchange XML and EDI transcripts via the SPEEDE Server
- Receive Transcripts
  - View, print, and download college and high school transcripts
  - View transcripts online in three standard formats: Brief, Full, and GenEd
  - Able to receive XML and EDI transcripts via SPEEDE server
  - Receive various formats for integration into other college processes such as imaging and degree audit systems
- Other Features
  - Support for national data standards
  - Customizable online reports
  - Complete transaction event history
  - Configurable institution workflow preferences, including transcript fee and waiver rules, expiration options, e-mail communication, user accounts, etc.
  - Institution-to-institution security

### 3 Exploring eTranscript California Resources

Implementation resources include a broad set of documents, online help, Xap support staff, the CCC project team, and other users.

A wide range of documents, people, and other resources are available to help you implement eTranscript California. These include:

- **eTranscript California Implementation Guide** – The document you are reading now will guide you from implementation planning to going live.
- **eTranscript California User Documents** – These documents are available as PDFs via the Control Center’s **Help** menu:
  - ***System Reference Guide*** — An overall description of eTranscript California functionality and configuration options.
  - ***eTranscript California Configuration Guide*** — Instructions for configuring eTranscript California preferences and other setup options.



- **Basic Training Guide: Transcript Requests, Fulfillment, and Downloads** — Hands-on exercises for learning the basic features and functions of the eTranscript California System: generating transcript Requests, fulfilling Requests, and downloading Transcripts.
  - **Advanced Training Guide: Reports, Preferences, Account Manager, Other Xap Tools** — Hands-on exercises for learning the advanced and administrative features and functions of the eTranscript California System: generating reports, configuring preferences, managing accounts, setting up download slots and projects, creating custom rules and views, and using Communicator.
  - **Xap Communicator User's Guide** — Instructions for installing, configuring, and using Communicator.
- **Data Dictionary** – The two-volume *eTranscript California Data Dictionary* defines all of the eTranscript California data elements for Request, Response, and Transcript Files. It also provides an overview of eTranscript California operation. You can download the *Data Dictionary* from the [eTranscript California project website](http://eTranscriptCA.org) (*eTranscriptCA.org*) as well as from the Control Center.
  - **Online Help** – The Control Center provides extensive online help for eTranscript California.
  - **eTranscript California Project Website** – The [eTranscript California project website](http://eTranscriptCA.org) (*eTranscriptCA.org*) provides a wide range of information about eTranscript California and the participating institutions. Especially important are the list of current subscribers in live and beta modes, and the File Repository, which contains files ranging from the Data Dictionary to recommended practices to programming examples.
  - **Xap's Client Services Group** – Each eTranscript California college will have an assigned Client Services Manager to answer questions, arrange training, and facilitate implementation.
  - **Current eTranscript California Users** – Your colleagues at colleges that have already implemented eTranscript California can help you in many ways, from general advice to software you can adapt for your environment and needs.
  - **eTranscript California User Listservs** – Any of your staff you choose can join eTranscript California user listservs to communicate via email with other eTranscript California users. Contact Xap for adding names to, or removing names from, a listserv.
  - **eTranscript California Project Team** – The team can answer questions, connect you with other users with similar implementations, and help you resolve issues. Contact information is available on the [eTranscript California project website](http://eTranscriptCA.org), *eTranscriptCA.org*.
  - **eTranscript California Steering Committee** – Ongoing eTranscript California development is directed by a Steering Committee made up of representatives from several user colleges. Should you encounter a problem or deficiency in eTranscript California, the Steering Committee is there to provide resolution, and can be emailed at [eTranscriptCA-Steering@listserv.ccnex.net](mailto:eTranscriptCA-Steering@listserv.ccnex.net).

# IMPLEMENTING PROGRAMS AND PROCESSES

## 4 Understanding How Your College Will Use eTranscript California

Before developing your specific programs and procedures, you need to determine what eTranscript California functions you will support, and how you will support them.

Before going forward to create the programs and procedures you need for implementing eTranscript California, there are a number of things you need to determine about how you will employ eTranscript California. Some of these are very general, and some are very specific, but they all affect how you will design your programs and/or your procedures.

It is a good idea to communicate with your primary trading partners at this stage so that you have a mutual understanding of the transcript data, functionality, and processes to be supported. For example, requesting colleges will want to know what requested holds you will support.

The most basic questions, which you will need to answer early in the implementation, include:

1. Will you generate Transcripts and Requests, Transcripts only, or Requests only?
2. What file formats will you upload and/or download (see *Table A*)?
3. Will you use automated uploads and/or downloads? In what situations?

Specific questions you will need to answer as you design your programs and processes include:

4. Will you support ‘hold until’ conditions in Requests?
5. Will you institute ‘holds’ based on fees owed or other situations at your college?
6. What will your Transcripts include or omit: transfer credit, grade scheme, notation legend, institutional statements, intersegmental institutions, awards/activities, etc?
7. How, if at all, will you support partial Transcripts and searches of offline student records?

Questions you will need to answer as you begin to use eTranscript California in a test environment include:

8. Who will have user accounts, and what will their access privileges be?
9. How will you configure your ‘Preferences’: fees, delivery options, expiration policy, etc?
10. How will you change your A&R procedures to accommodate electronic transcripts?
11. What custom rules/filters will you need to support your intended workflow?
12. How, if at all, will you implement automated email via eTranscript California?

It is a good idea to create top-level diagram(s) of the functionality and processes you will implement, specifying what will be done manually and what will be done programmatically.

## 5 Assembling Your Team

Implementation team members will come from IT (system analysis, program design, programming) and from A&R (process analysis, design, and implementation).

Your eTranscript California implementation team will need members from IT and A&R.

The primary task of the IT portion of your team will be to design and create the programs linking your SIS to eTranscript California. More specifically, the IT team member(s) will need to:

- Analyze the requirements for interfacing to the college's internal systems (primarily the SIS) to support the desired transcript exchange functionality. The primary guiding factors here will be the particular SIS used and the subset of eTranscript California functionality to be supported (e.g., transcript receiving only vs. transcript sending and receiving).
- Install and administer the XAP Communicator software.
- Design, create, and test the programs that will provide the required linkage between the college's internal systems and eTranscript California.

The primary task of the A&R portion of your team will be to design and implement the policies and procedures for using eTranscript California to request and/or transmit electronic transcripts. More specifically, A&R team member(s) will need to create procedures for such tasks as:

- Requesting Transcripts.
- Responding to transcript Requests. This can be a manual or automated procedure.
- Dealing with special situations, such as holds and offline records.
- Testing all possible transcript fulfillment and / or reception scenarios

## 6 Developing Your Interface Programs and Processes

Development of software programs and staff processes is at the heart of your implementation. Their extent will depend on what functions you will support and the choices you make between automated and interactive operation. Implementations can be simplified considerably by leveraging programs and processes from current users.

The programs and processes you will need to develop will depend on the eTranscript California functions your college will perform:

- Pushing transcripts
- Receiving transcripts
- Requesting transcripts
- Fulfilling transcript requests

If you will be requesting and receiving transcripts only, you will probably require little in the way of programming, but will need to develop the processes you will use to request and receive transcripts.

If you will be fulfilling transcript requests, developing the software interface between eTranscript California and your Student Information System (SIS) will no doubt be the most demanding of your eTranscript California implementation tasks. However, developing interface software can be considerably simplified by adapting the existing software from another college using the same SIS and/or implementing similar functionality.

***The best way to minimize program and process development is to leverage programs and processes already developed and implemented by other colleges. The eTranscript California Project Manager will help you identify colleges from which to adapt programs and processes.***

## 6.1 Pushing Transcripts

A college can send Transcripts in response to an eTranscript California Request, or as a result of a request from outside of eTranscript California—for example, based on a student request received by the A&R office or via a transcript request function on the college website. Sending a Transcript for which there has not been an eTranscript California Request is called ‘pushing’ a Transcript or sending an ‘unsolicited’ Transcript.

The implementation process for pushing Transcripts consists of the following steps:

- A. **Determine the file format to be used for Transcript files.** This can be either XML or an ASCII flat file. Most colleges currently create their Transcript files in ASCII format.
- B. **Determine what information your transcripts will include.** The eTranscript California Data Dictionary identifies all of the data elements supported in eTranscript California Transcript files, only a portion of which are required. It is up to the transcribing college to determine the data elements it will provide in its Transcript files, but it is expected that the eTranscript California electronic transcripts will include (at a minimum) all of the information normally included in the college’s paper transcripts. See *section 7.3.1* for more information.
- C. **Determine how transcript creation will be initiated, and how student and recipient information will be obtained.** For example, the initiation and information might come programmatically from a transcript request function on the college website, or they might be entered manually by A&R staff.

If information initiating a ‘pushed’ transcript is to be entered manually, the simplest process may be to use the Control Center to generate an eTranscript California Request to your own college. This process is outlined in *section 6.3*.

- D. **Develop a program for extracting transcript information from your SIS and converting it to a Transcript file in the format chosen.** This process is described in *section 7.3*.

In most cases, you will be able to find a college that has already developed code similar to what you need, so you will not need to develop this program from scratch. Contact eTranscript California project manager Lenny Robison ([lenny.robison@sbcglobal.net](mailto:lenny.robison@sbcglobal.net)) for assistance in identifying a college to provide you with code and technical advice.

- E. **Determine the method to be used for uploading the Transcript files into eTranscript California.** Uploads can be manual (interactive) via the Control Center, or automated using the Xap Communicator utility. Automated uploads are recommended, and relatively simple: the transcript program just needs to place the transcript files in a directory accessible to Xap Communicator, and Communicator needs to be configured to upload the files from the directory on the desired schedule. Instructions for configuring Communicator are provided in the *Xap Communicator User's Guide*.

*Note:* Uploading Transcript files via the Control Center is also a very simple process, and is especially useful for testing.

## 6.2 Receiving Transcripts

Receiving transcripts is probably the simplest eTranscript California function, as well as the function for which eTranscript California provides the greatest flexibility. Transcripts can be:

- Viewed and printed in HTML format via the Control Center.
- Viewed, printed, and saved in PDF format via the Control Center.
- Downloaded in EDI, XML, or PDF format via Communicator or the Control Center.
- Received in EDI format (and soon, XML format) via the SPEEDE Server at the University of Texas, Austin (sometimes called the Texas Server).

Any college on eTranscript California should be able, at a minimum, to receive and print transcripts via the Control Center. However, to take full advantage of the benefits of electronic transcripts, most colleges will want to do more with the transcripts sent to them.

Currently, most CSUs receive transcripts in EDI format, via either Communicator or the SPEEDE server. The EDI files are then processed by third-party or custom EDI reader software. The data and images are in turn uploaded into their PeopleSoft system, imaging system, and/or degree audit systems.

## 6.3 Requesting Transcripts

Although requesting a transcript using eTranscript California always involves the creation of a Request file, there are two ways in which the file can be created:

- eTranscript California can create the Request file based on information entered interactively via the Control Center.
- The college can create the Request file and upload it via the Control Center or Xap Communicator.

The first decision to make if your college will be requesting transcripts is to determine which of the above methods your college will employ.

To partially automate requests, your software could construct bulk list files that contain identifying data for the students whose transcripts you are requesting. These bulk list files would then be manually uploaded as part of an interactive request process.

To fully automate requests, your software could construct CCCASCII or XML Request files, then upload them via Communicator. The chief aspect of this option that needs to be determined is how the student-identifying data will be provided. Of course, obtaining another college's software as a template will greatly reduce the effort needed if this option is chosen.

### 6.3.1 Requesting Transcripts Interactively

If your college will input request information interactively via the Control Center, your staff will need to provide the following information in response to prompts from the system:

- **The college being requested to send the transcript(s).** This can be your own college, if you want to use the Control Center to initiate a pushed (unsolicited) transcript.
- **Any 'hold' conditions you would like the transcribing college to observe.** For example, you can request that the college wait until grades for the current term are available before sending the transcript(s). These requests are not binding, however; it is up to the transcribing college to determine what requested holds it will support. It is a good idea to work with your trading partners in advance to understand their capabilities.
- **Student-identifying information.** Student-identifying information can be input one student at a time, or in a bulk list for multiple students. If your college will be requesting significant volumes of transcripts, the interactive request process can still be efficient as long as you have an effective (preferably automated) way of generating bulk lists of student-identifying information.

Each college defines the sets of data it will accept for identifying a student in its SIS. eTranscript California will require that the student-identifying information entered meets the transcribing college's requirements before generating a Request.

Once you enter request information and submit it via the Control Center, eTranscript California automatically generates individual Request files and enters them into the system.

### 6.3.2 Creating and Uploading eTranscript California Request Files

As an alternative to interactively requesting transcripts, you can develop a program to create eTranscript California Request files in either ASCII or XML format. This program will need to perform the following functions:

1. Obtain the same request information identified previously.
2. Construct an eTranscript California ASCII or XML Request file that includes:
  - General transmission data.
  - Information about the institutions requesting, sending, and receiving the transcript. (For pushed transcripts, the requesting and sending institutions will be the same.)
  - The student's identifying information and transcript data.
3. If desired, concatenate multiple Request files into a batch file. (Whether Requests are uploaded singly or in a batch does not affect how they are processed within eTranscript California.)
4. Deliver the transcript file(s) to the Request upload directory for automated delivery by Xap Communicator.

*Note:* If automated upload is not desired or not yet enabled, Request files can be uploaded interactively via the Control Center.

5. Provide any appropriate indication(s) that a Request has been created and submitted.

Sample ASCII files are included in the *eTranscript California Data Dictionary, Volume 1: Overview*.

## 6.4 Fulfilling Transcript Requests

Accepting and fulfilling transcript requests is the most complex of the four eTranscript California functions. In the simplest scenario, a Request is downloaded, the student is located in your SIS, and a Transcript is generated and uploaded for delivery through eTranscript California. However, less straightforward scenarios will require that a Response file be generated to either reject the Request or to put it on hold. For example, if the student cannot be matched in your database, you would use a Response to reject the Request and indicate the reason. If the requesting institution has include a special hold request that you intend to honor (such as waiting until this term's grades are available), or if there is a local reason why you will not upload the Transcript right away (for instance, if the student has fines or fees due), you would use the Response to communicate an 'on hold' status.

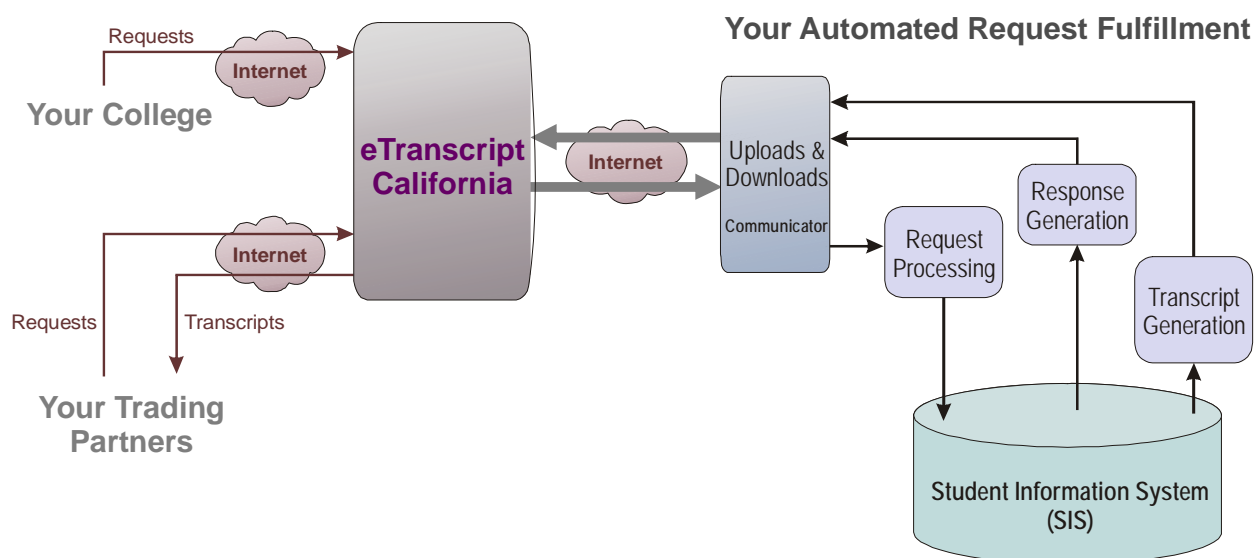
Thus, the process for fulfilling transcript requests involves several major components, including:

- Receiving and processing Requests.

- Finding the correct student in your SIS.
- Generating the proper Response if the student cannot be found, or if there is more than one match for the student-identifying information present.
- Generating a ‘hold’ Response based on a hold identified in the Request or on a local condition such as fees being owed.
- Recycling Requests if a hold Response has been sent.
- Determining whether there might be offline records for the student.
- Generating a Transcript if there is transcript data in the SIS.
- Following up with offline transcript data in hardcopy form if necessary.
- Generating email notifications of transcripts sent and transcript hold conditions as needed.

Although it would be possible to perform all of the above functions interactively, colleges will typically want to automate the entire process (except the finding and sending of offline records, which by nature cannot be done programmatically). *Figure 7* shows a simple block diagram of automated request fulfillment.

Sections 6.4.1 through 6.4.6 will detail a typical programmatic process for fulfilling transcript requests. Individual college implementations will vary depending on the Student Information System (SIS), the features to be supported, and other conditions and choices.



*Figure 7. Simple Diagram of Automated Request Fulfillment*



### 6.4.1 Preparation

In order to make interface software development as efficient as possible, it is important to be adequately prepared for the process.

1. Familiarize yourself with the transaction workflow described in this document and with the *eTranscript California Data Dictionary*.
2. Review the specific record layouts for Request, Response and Transcript files as described in the *eTranscript California Data Dictionary: Overview* (volume 1).
3. Review the data element definitions described in the *eTranscript California Data Dictionary: Data Definitions* (volume 2).
4. Become familiar with how transcript data is stored and accessed in your SIS, and how it relates to the eTranscript California data fields.
5. Obtain copies of software and sample eTranscript California files developed by other eTranscript California subscriber(s) whose SIS environment and transcript procedures are similar to yours.

### 6.4.2 Request Recycling

The simplest way to implement transcript request fulfillment would be to respond to each received Request by sending either a Transcript or a Response rejecting the Request. However, colleges will generally want to be able to put a transcript request on hold, either for a reason specified in the Request (such as hold for grades) or because of a local condition (such as fees being owed by the student). When holds are possible, there needs to be a procedure by which the Request file is repeatedly downloaded until all hold conditions are cleared and the Transcript can be sent (or until the transcript college decides to cancel the request). This procedure is called ‘Request recycling’ and is based on filtering rules applied to the Request download slot(s).

eTranscript California includes pre-generated rules that support one-slot and two-slot options for Request recycling. (The two-slot option uses different slots for downloading new and recycled Requests.) There are also rule variations that allow each Request to be downloaded just once each day or every three days. More information about these pre-generated rules is available online at [beta.control.xap.com/secure/help/manuals/RecyclingRules.pdf](http://beta.control.xap.com/secure/help/manuals/RecyclingRules.pdf). Custom rules can also be created and used as needed.

For the following discussion, we will assume that:

- All Request downloads take place using a single slot.
- All Requests must be approved before downloading (either automatically or manually).
- Both requested and local holds will be supported.
- Either there are no offline records, or presence of offline records is indicated in the SIS.
- Recycled Requests will be downloaded no more than once per day.

To support these download features, the Request download slot will use a rule that allows a Request to be downloaded in either of the following cases:

- The Request has been approved and there has not yet been a Response or Transcript sent.
- The Request is on hold, any Planned Release Date specified in a previous Response has been met, and the Request has not yet been downloaded today.

The logic of this rule is indicated in *Table B*.

*Table B. Slot Download Rule for Request Recycling*

Logic of Pre-generated Download Rule	Explanation of Rule Logic
Transaction Status = Approved OR (Transaction Status = On Hold AND (Planned Release Date is blank OR not later than today) AND Date Request Last Downloaded is not today)	Request has been Approved with no subsequent Response OR ALL of the following are true Transaction is on hold (due to a 'Hold' or 'Offline Record Search' Response) A previous Response has not specified a Planned Release Date later than today The Request has not already been downloaded today

### 6.4.3 Program Design Decisions

There are several decisions you need to make that will affect the design and coding of your request fulfillment program. These include:

- **What file formats will you download and upload?** — Typically, colleges choose to download Requests and upload Responses and Transcripts in ASCII format, but XML is also an option.
- **How often will you download requests?** — Typically, colleges download Requests several times a day; some download as often as every fifteen minutes.
- **What is the exact logic of the recycling rule you will use for your request downloads?** — Colleges can often use one of the pre-generated recycling rules, but sometimes modifications will make the rules more efficient. The recycling rule you choose will affect your program logic.
- **How often will you process newly downloaded requests?** — Typically, this will depend on how often you download Requests.
- **What holds will you support?** — You will need to consider the various types of holds that can be specified in the Request, and determine which you will support. You will also need to determine what possible local holds could occur, and how your program will check for them.
- **Will you have offline records to search?** — If so, you will need to include a process for indicating offline record searches, sending partial electronic transcripts, and finalizing transactions when offline records have been sent. If students with offline records are not identified in your SIS or another online source, you may need to do an offline search for all Requests, or at least for all Requests for students born before a certain date.

- **Will you use names for finding student records in your SIS?** — Since student names can often change or be entered in different forms, many colleges choose not use them for locating records, opting for fields such as SSN, transcript school ID, date of birth, etc. If you choose to use names, the best practice is to use a case-insensitive match that ignores spaces. This minimizes matching failures when names have different forms in the Request and the SIS: for example, ‘Delacruz’ and ‘de la Cruz’.
- **Will you store requests and/or responses locally for later access?** — There may be reasons that you would want programmatic access to previous Requests or Responses. For example, when recycling Requests on hold, it is good to be able to check your previous Responses and not repeat Responses if the hold conditions haven’t changed.

#### 6.4.4 Outline of Transcript Request Fulfillment Program

The transcript request fulfillment program will perform the following basic steps to process and respond to an approved Request. *These steps assume that all student records are in the SIS—i.e., that there are no offline records to be searched.*

1. Retrieve a Request from the directory to which it has been downloaded, and determine whether it is a new or recycled Request. If it is a recycled Request, go to step 3.
2. Extract the student data fields and attempt to match a student record in your SIS.
  - a. Respond by rejecting the Request if there is not a unique positive match. *This completes processing of the Request; return to step 1.*
  - b. Check the Request for hold conditions that you will honor. Also, check your SIS for holds you will impose. If a hold is to be placed on the transaction, generate the appropriate Response, including the date at which the hold will be released. *This completes processing of the Request; return to step 1.*
  - c. If there is no hold, generate a Transcript from the SIS data. (See *section 7.3* for details.) *This completes processing of the Request; return to step 1.*
3. For a recycled Request, check in the SIS for any continuing and/or new hold conditions.
  - a. If there is no hold, generate a Transcript from the SIS data, then upload it. *This completes processing of the Request; return to step 1.*
  - b. You will probably want to limit the length of time a Request will be recycled; otherwise, a Request might recycle ‘forever’. Send a Response canceling the Request if the Request has exceeded the recycling limit. *This completes processing of the Request; return to step 1.*
  - c. If any hold condition has changed, generate the appropriate Response. If the hold condition(s) are the same as indicated in the previous Response, ignore the Request (it will recycle). *This completes processing of the Request; return to step 1.*

*Note:* Determining that hold information has changed requires retaining and comparing the previous Response. A college may choose not to do this, in which case there will always be a Response when there are hold condition(s). This can result in many redundant Responses cluttering the Transaction History.

### 6.4.5 Request Processing and Fulfillment Logic

The following steps describe in some detail the Request processing logic for the fulfillment program outlined in the previous section. *Figure 8* illustrates this logic in flowchart form.

When you download a group of Requests using the Communicator, they will be saved as separate Request files in the directory you specify. Typically, they will be downloaded in CCCASCII format (though they could be downloaded in XML format). The interface program will handle Requests one at a time, repeating as long as there are Request files in the directory.

1. Examine the Request Transmission Type field (value = 'OR' or 'RP') to determine whether the Request has been previously downloaded.
  - a. If the value is 'RP', this is a recycled Request; go to step 4.
2. Otherwise, with the value of 'OR' indicating a new Request, extract the student data from the Request, and try to match it with a single record in your SIS. If there is a unique match, go to step 2. Otherwise, generate a Response file rejecting the Request (with the Response Status set as indicated below), and put it in your upload directory. *This completes processing of the Request and ends the transaction.*
  - a. If there is not a match, set the Response Status to Offline Record Search (RSP15 = OR) if you will follow up with a manual search; otherwise, set the Response Status to No Record (RSP15 = NR).
  - b. If there are multiple records matching the provided student data, set the Response Status to Multiple Match (RSP15 = MM).
  - c. If there is a match but the student is deceased, set the Response Status to Deceased (RSP15 = DD).

*Note:* A note can be included in the Response (RSP16) to provide details about any of the above.

3. Identify any hold requests in the Hold file (RCL21-27) that you will honor and determine whether they have been met. Hold conditions that can be identified in the Request include:
  - Issue after specified degree awarded
  - Issue after specified certificate awarded
  - Issue after final grades processed
  - Issue after registration is completed for specified term
  - Issue after the specified release date
  - Issue after grade change completed for specified course
  - Other condition described in text field
  - a. If there are no hold requests that you will support, go to step 3.
  - b. Generate a Response reflecting the requested hold:
    - Set the Response Status (RSP15) to 'HO' (Hold) and the Hold Reason Code (RSP22) to 'RA' (Requested Action).

- Provide additional hold information in Response Status Note (RSP16) and Hold Reason Note (RSP23) if desired.
- Include a Planned Release Date (RSP24) by which the hold condition(s) will no longer apply.

*Note:* The slot download rule described in Table B and the interface program logic shown in *Figures 7 and 8* both assume a Planned Release Date will be provided, and that the requested hold(s) will be satisfied when the Planned Release Date is reached.

- If desired, indicate a Transcript Fee Status (RSP30) of Due, Paid, or Waived.
- c. Put the Response in your upload directory. *This completes processing of the Request.*
4. Check your SIS for any local holds. Local hold conditions that can be identified in the Response include Financial, Transcript Fee, and Other (described in text field). Up to five holds can be identified, with an explanatory note for each.
- a. If there are no local holds, go to step 5.
  - b. If there are any local hold conditions, check whether the Request is recycled. If not, go to step f.
  - c. If the Request is recycled, check whether the recycling limit has been met. If not, go to step e.
  - d. If the recycling limit has been met, generate a Response:
    - Set the Response Status (RSP15) to ‘CN’ (Cancel).
    - Provide an explanation in Response Status Note (RSP16).

Put the Response in your upload directory. *This completes processing of the Request and ends recycling.*
  - e. Check whether there has been any change in the hold reason(s) since the last Response. If not, do not generate a Response. *This completes processing of the Request.*
  - f. Generate a Response reflecting the local hold conditions:
    - Set the Response Status (RSP15) to ‘HO’ (Hold).
    - Provide additional hold information in Response Status Note (RSP16), Hold Reason Code (RSP22), and Hold Reason Note (RSP23) as desired.
    - If applicable, include a Planned Release Date (RSP24) by which the hold condition(s) should no longer apply or should be re-examined.
    - If desired, indicate a Transcript Fee Status (RSP30) of Due, Paid, or Waived.

Put the Response in your upload directory. *This completes processing of the Request.*
5. Generate a Transcript file from the SIS data. Then put the Transcript in your upload directory. *This completes processing of the Request and ends recycling.*

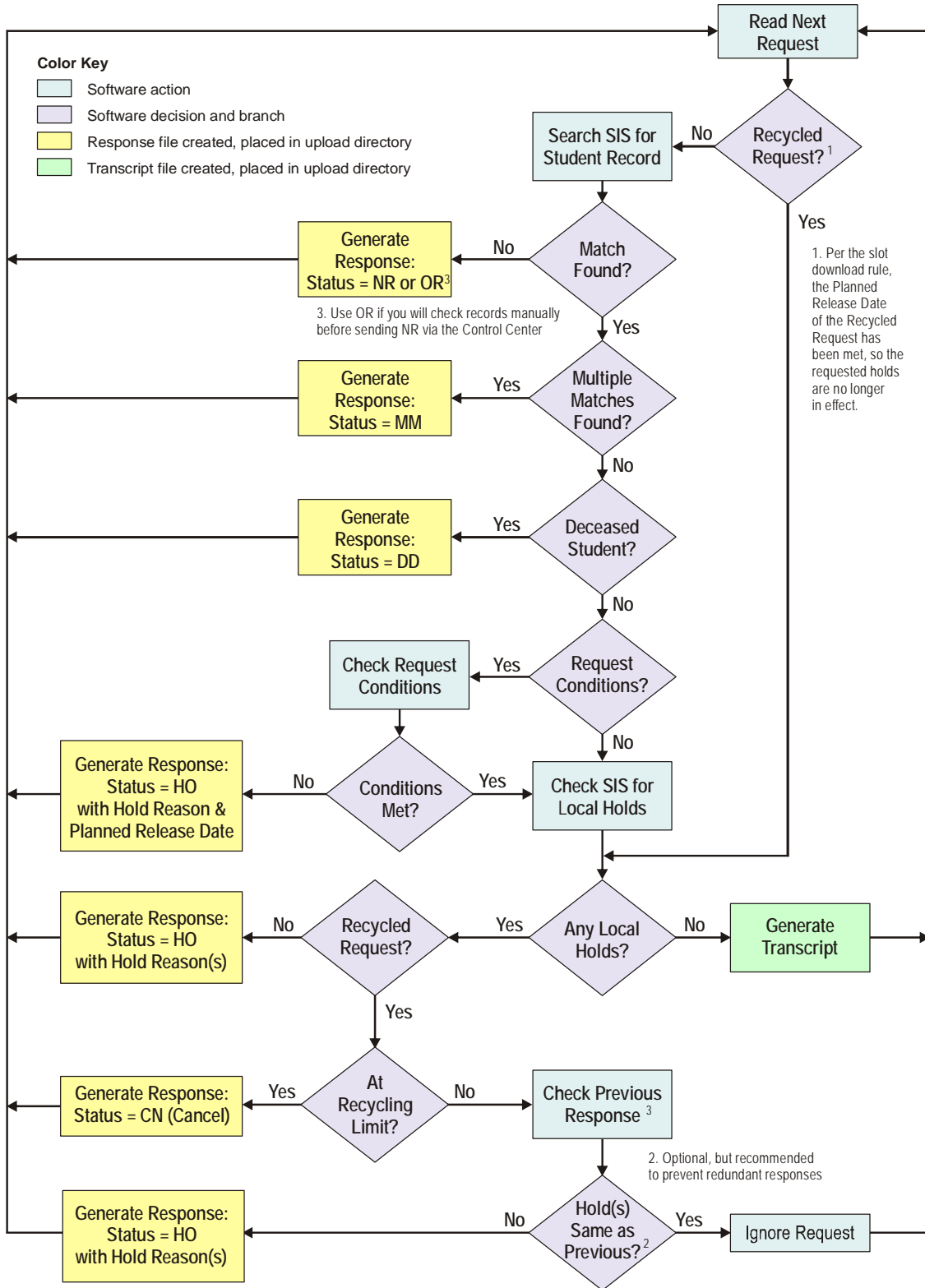


Figure 8. Request Processing Flowchart: No Offline Records

### 6.4.6 Handling Offline Records

When there are offline as well as online student records, additional processes will be required to ensure that all records are sent when a Request is received. Some of these processes may be automated; others will be manual. The specific processes will depend on several factors, including:

- Whether your SIS identifies students for whom offline records exist.**  
If your SIS (or other online system) does not identify the students for whom there are offline records, you will not be able to determine programmatically whether offline records exist for a particular Request, and will need to do a manual offline record search for all Requests (or at least all Requests where the student is old enough to have offline records). Whenever you need to search offline records, you should send a Response with the Response Status set to Offline Record Search (OR).
- Whether transcript data for a student is partially offline or totally offline.**  
In either case, you should send a Response with the Response Status set to Offline Record Search (OR) after identifying the need to search offline records. For a transcript which is comprised of offline records only, you will finalize the eTranscript California transaction by sending (via the Control Center) a Response with the Response Status set to Offline Record Sent (OS) once the offline transcript has been sent. For a transcript which is comprised of both online and offline records, you will finalize the eTranscript California transaction by sending the electronic Transcript file (with Completion Indicator = Partial). Sending of the offline records in either case will be a manual process handled outside of eTranscript California, though Transaction Notes can be manually entered to provide a record of offline process completion in the Transaction History.
- The percentage of transcripts having an offline component.**  
If you have a relatively high percentage of offline record searches, you will probably want a more automated and trackable process than you might want if you are sending only an occasional offline transcript.

*Figure 9* is an adaptation of *Figure 8* that incorporates logic for handling the existence of offline records identified in the SIS. Sections of added logic added for dealing with offline records are outlined in orange and designated by an orange letter in *Figure 9*.

- Section A comes into play once all holds have been taken care of. The logic determines whether there are offline records for the student. If so, an OR Response is sent. If not, it fulfills the request with a Complete Transcript.
- Section B handles recycled Requests after an OR Response has been sent. An electronic Partial Transcript is sent if there is online transcript data. Otherwise, the Request is ignored and will continue to be recycled until staff sends an OS Response via the Control Center to indicate that the offline records have been sent.

*Note:* After the OR Response is sent, the Transaction Status remains 'On Hold' until either a Transcript or a non-hold Response is sent. Thus, if for some reason it turns out that there are no offline records to send and an OS Response is therefore inappropriate, staff must send an NR (or TR or TS) Response to change the Transaction Status and stop the Request from recycling.

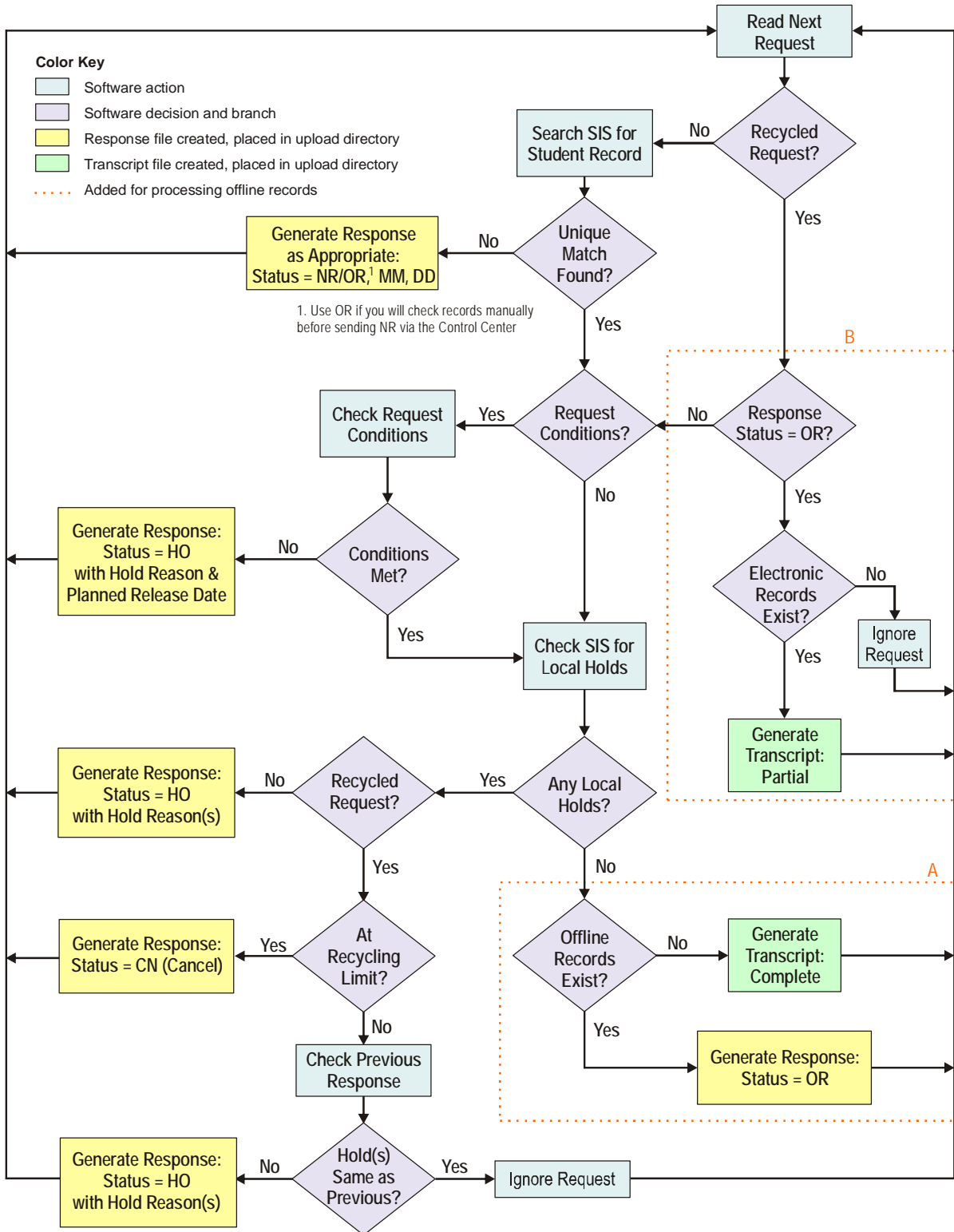


Figure 9. Request Processing Flowchart: SIS Identifies Offline Records



### ***Manual Processes for Offline Records***

Manual processes for offline records should be designed and integrated with eTranscript California in a way that optimizes reliability, trackability, and communication between exchange partners. Basic components of processing offline records will include:

1. **Informing A&R staff of the need to send offline records.** There are three basic ways to do this:
  - Configure eTranscript California to send an email to A&R staff when an ‘OR’ response is sent, indicating the need to send an offline transcript. (See *section 2.11*.)
  - Have the interface program, when it generates an ‘OR’ response, also generate email to appropriate A&R staff about the need to send an offline transcript.
  - Have A&R staff check the eTranscript California Control Center periodically for transactions that require offline records to be sent (i.e., that have Response Status = OR). This will require a custom view or rule for the Requested Transcripts report.
2. **Sending the offline records.** This might be done by mailing a paper transcript or by sending a PDF or other electronic image.
3. **Indicating via eTranscript California that the offline records have been sent.** How this is done will depend on whether there are also online records:
  - When there are offline records only, use the Control Center to send an ‘OS’ Response (indicating ‘Offline Records Sent’). This Response will finalize the transaction.
  - When there are also online records to be sent, an OS Response cannot be sent. Use the Control Center to add a note to the Transaction History indicating that offline records have been sent.

## **6.5 Implementing Xap Communicator**

Xap Communicator is a file exchange program developed by Xap Corporation that runs on a Windows operating system. The software and user manual can be downloaded via the Control Center. A Control Center user account is required for downloading and opening Communicator.

*Note:* If you already operate CCCApply, you are probably familiar with Communicator. For maximum flexibility and control, it is recommended that users of both CCCApply and eTranscript California run separate instances of Communicator on separate computers.

Communicator can be set to upload and download files on a schedule you choose. It can also be configured to initiate additional processes prior to file uploads and/or after file downloads.

When implementing Communicator, you will set up several directories which act as in-boxes and out-boxes for files exchanged through eTranscript California. Typically, you will establish separate incoming directories to receive Requests and Transcripts sent *to* your institution, and separate outgoing directories for Requests, Responses, and Transcripts *from* your institution. Your local processes will need to retrieve files from the incoming directories for local processing and place files in the outgoing directories for upload to eTranscript California.

## 6.6 Setting Preferences

eTranscript California Preferences consist of several screens of options that you will need to configure using the Control Center (menu path: Transcripts → Preferences). These Preferences have two functions:

- Some Preferences settings determine aspects of eTranscript California operation that are specific to your college, such as:
  - Required student identification fields in the Requests you receive.
  - Alternate transcript delivery modes (via email and/or the SPEEDE Server).
  - Expiration of released and delivered Transcripts.
  - Automated emails.
- Some Preferences settings are purely informational, and are communicated to other eTranscript California subscribers through the Institution Profiles viewable via the Control Center. Examples include:
  - Typical turnaround times.
  - Transcript fee policies.

For more information about Preferences and Institution Profiles, see *section 2.10*.

There are some Preferences you will need to set in conjunction with the development and testing of your programs and processes, such as the student identifications fields you will require in Requests. Some Preferences, such as Transcript expiration, you might want to configure one way for testing, and another way when you go live. Other Preferences you may need to update periodically, such as your terms list (used for some requested holds). And there may even be Preferences you don't need to set until you go live, such as your typical turnaround time.

Therefore, it is important not to neglect the Preferences settings. You should have a thorough understanding of all of the setup options, both operational and informational, and make sure to revisit them at appropriate times during your development processes.

And finally, when you are ready to go live, you need to verify that all Preferences screens have been filled out appropriately in the Production environment.

## 7 Creating Request, Response, and Transcript Files

Request, Response, and Transcript files uploaded to eTranscript California must meet certain format and data requirements, as defined in the eTranscript California Data Dictionary. All contain segments for requesting, receiving, and transcribing institutions and for the student, as well as for general transmission data. In addition, each contains data fields specific to the file type.

Previous sections referred to generating Request, Response, and Transcript files, but did not provide details about how this is done. Ultimately, these files must be constructed segment-by-segment and field-by-field as defined in the eTranscript California Data Dictionary. However, the following general overview indicates the information needed and its basic organization.

*Note:* The following discussion will be in terms of CCCASCII files. XML files use a different structure, but the basic categories of data are essentially the same.

Some community colleges are using a third party, Credentials Solutions, for assistance with taking student orders and extracting transcript data from their SIS and/or with uploading incoming transcript data into their SIS. For more information about this option, contact eTranscript California project manager Lenny Robison ([lenny.robison@sbcglobal.net](mailto:lenny.robison@sbcglobal.net)).

### 7.1 Creating Request Files

An ASCII Request file consists of six required segments, as described in *Table C*:

*Table C. Segments in ASCII Request File*

Segment	Included Information
RCL: Request Transaction Controls	Request ID; Transmission data; Requested transcript holds
REQ: Requesting Institution	Institution name, code(s), address; Contact person, office/department, phone, email
TRN: Transcribing Institution	Institution name, code(s)
REC: Receiving Institution	Institution name, code(s), address; Contact person, office/department, phone, email
STU: Student Identity	Name(s); SSN, student IDs; Dates of attendance; Date of birth, birth city; Gender; Address, phones, email
99A: End of Request	Request closing ID

Therefore, a program creating a Request file will need the following data:

- Information about the requesting, receiving, and transcribing institutions. (In most cases, the requesting and receiving institutions will be the same.) The only required elements are FICE codes and institution names.
- Information identifying the student whose transcript is requested. Each transcribing college defines the data set(s) it can use to identify a student, so you need to be sure to include enough student information to meet the transcribing college's requirements.
- Any holds you want the transcribing college to observe, such as waiting for term grades.

## 7.2 Creating Response Files

An ASCII Response file consists of five required segments, as described in *Table D*:

*Table D. Segments in ASCII Response File*

Segment	Included Information
RSP: Response Transaction Controls	Response ID; Request tracking ID; Transmission data; Request rejection reasons; Transcript holds; Offline record searches
TRN: Transcribing Institution	Institution name, code(s); Contact person, office/department, phone, email
REC: Receiving Institution	Institution name, code(s), address; Contact person, office/department, phone, email
STU: Student Identity	Name(s); SSN, student IDs; Dates of attendance; Date of birth, birth city; Gender; Address, phones, email
99A: End of Request	Response closing ID

Therefore, a program creating a Response file will need the following data:

- The Request tracking ID, for linking the Response to a Request.
- Information about the receiving and transcribing institutions. The only required elements are FICE code, institution name, and the transcribing institution office/department.
- Information identifying the student whose transcript is requested.
- The reason for the Response, such as:
  - A reason for rejecting the Request.
  - Any hold(s) being placed on the transcript.
  - The existence of offline records.

## 7.3 Creating Transcript Files

Generally, the program creating the Transcript file will need to perform the following functions:

1. Locate the appropriate student record in the SIS.

*Note:* If a unique student record cannot be located from the information in a Request, either a Response file must be created and uploaded, or a Response must be generated interactively.

2. Extract all transcript data from the student record in the SIS.

3. Construct an eTranscript California ASCII or XML Transcript file that includes:
  - General transmission data, including the Request tracking ID (unless the Transcript is unsolicited) and complete/partial indicator.
  - Information about the transcribing and receiving institutions:
    - If the Transcript is being sent in response to a Request, information about the receiving institution can be copied from the Request.
  - The student's identifying information.
  - The student's complete transcript data.
  - General transcript contents, such as grade scheme and institution notes.

*Figure 10* illustrates the structure of the ASCII Transcript file, identifying which segments are required and which can occur multiple times. More information about each segment is provided in *Table E*. For complete information about each field in each segment, see the *eTranscript California Data Dictionary*.

4. If desired, concatenate multiple Transcript files into a batch file. (Whether Transcripts are uploaded singly or in a batch does not affect how they are processed within eTranscript California.)
5. Deliver the Transcript file to an upload directory for automated delivery by Xap Communicator.

### **7.3.1 What Data Should You Include in Transcript Files?**

A relatively small portion of the fields in the ASCII Transcript file are required to have data in them. The majority of fields were made optional for a variety of reasons:

- They might not be applicable in all situations.
- The data might not be available in all Student Information Systems.
- Historically, they have been omitted from some community college transcripts.
- Corresponding fields in EDI and/or XML are optional.

That does not mean that providing only the required data will result in an adequate transcript, however. Generally, whether you are creating ASCII or XML files, you should include in your Transcripts:

- Everything you include in your paper transcripts.
- Any other transcript data you have in your SIS.

For example, CSUs have expressed a keen interest in receiving Gen Ed data from community colleges. ***Therefore, you should if possible provide Gen Ed data in your electronic transcripts***, even though it is not required data and you may not include it in your paper transcripts.

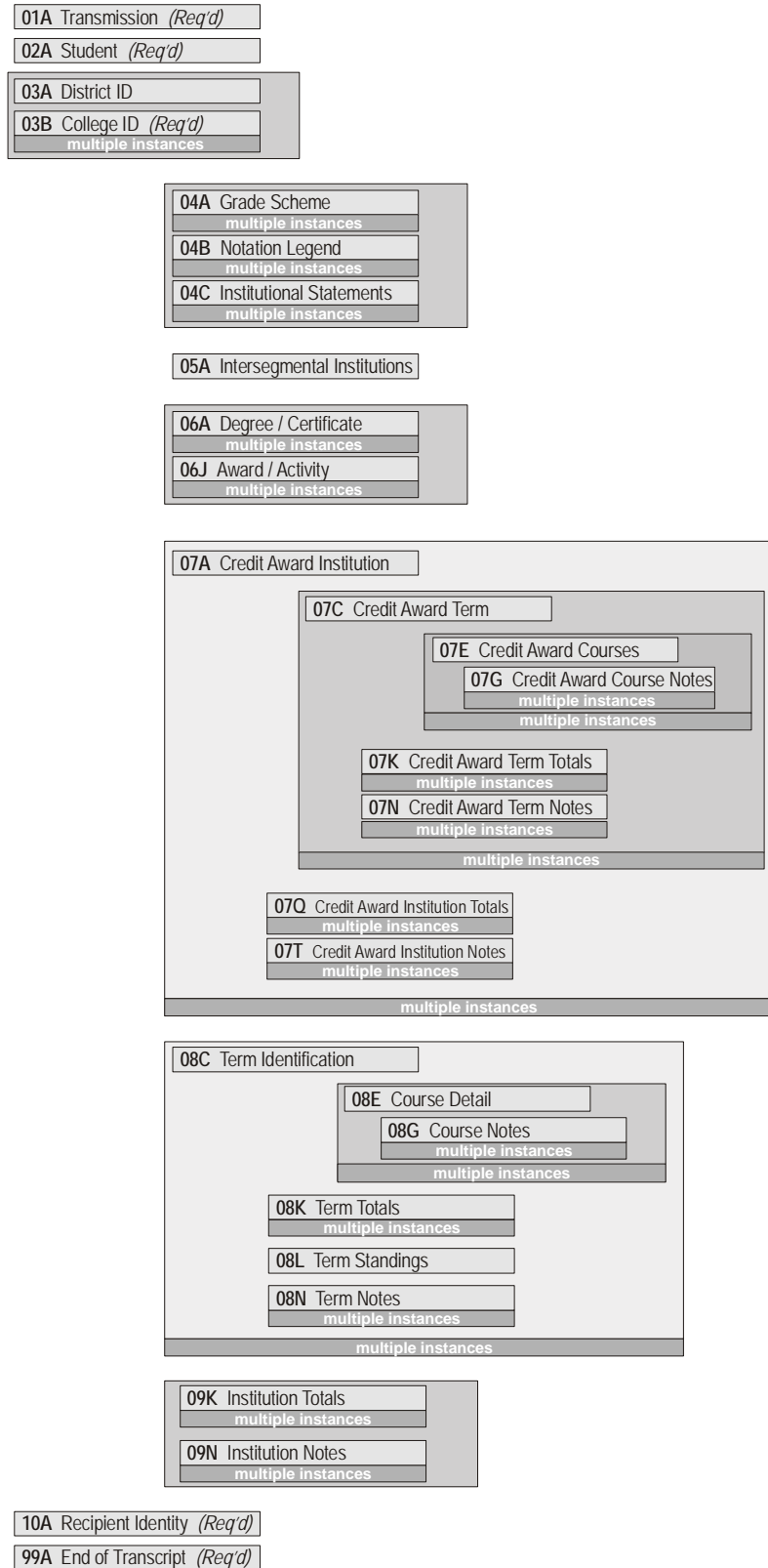


Figure 10. Structure of ASCII Transcript File

**Table E. Segments in ASCII Transcript File**

Segment	Included Information
01A: Transmission Data <sup>1,2</sup>	TranscriptID; Request tracking ID; Sender code(s), Date, time; Complete/partial indicator
02A: Student Identity <sup>1,2</sup>	Name(s); SSN, student IDs; Date of birth; Major; Email
03A: District ID <sup>2</sup>	Institution name, code(s), address; Contact office/department, phone, email; District-wide transcript flag
03B: Transcribing College ID <sup>1</sup>	Institution name, code(s), address; Contact person, office/department, phone, email; Term basis; Complete/partial indicator
04A: Grade Scheme	Grade, description, points, grade scale code; Unit, point calculations; Effective dates
04B: Notation Legend	Note code, description; Effective dates
04C: Institutional Statement	Topic; Message text
05A: Intersegmental Institution	High school name, code; Date of graduation/last attended; Completion data for CSU American History, CSU GE, CSU IGETC, UC IGETC
06A: Degree / Certificate	Degree/certificate type, title, date; credit basis, units, points, GPA; Major, secondary field; Honors, rank
06J: Award / Activity	Award/activity title, date, EDI type
07A: Credit Award Institution	Transfer credit institution name, code(s), date
07C: Credit Award Term	Term year, number, name; Start, end dates; Term basis
07E: Credit Award Course	Course ID, title, date; CSU GE, CSU IGETC, UC IGETC application; Credit basis, units, points, grade, scale, bracketing; Unit, point calculations; Drop date; Repeat status; Transferability; Degree applicability
07G: Course Notes	Notation code(s); Note text
07K: Term Totals	Cumulative/not, credit applicability; Term basis; Units, points, GPA; Description
07N: Term Notes	Notation code(s); Note text
07Q: Institution Totals	Cumulative/not, credit applicability; Term basis; Units, points, GPA; Description
07T: Institution Notes	Notation code(s); Note text
08C: Term Identification	Term year, number, name; Start, end dates; Term basis
08E: Course Detail	ID, title, date, location; Articulation IDs; CSU American Institutions, CSU GE, CSU IGETC, UC IGETC eligibility, application; Credit basis, units, points, grade, scale, bracketing; Unit, point calculations; Transferability; Degree applicability; Action code; Honors
08G: Course Notes	Notation code(s); Note text
08K: Term Totals	Cumulative/not, credit applicability; Term basis; Units, points, GPA; Description
08L: Term Standings	Honors, level; Academic status, progress status; Withdrawal type, date
08N: Term Notes	Notation code(s); Note text
09K: Institution Totals	Institution applicability, cumulative/not, credit applicability; Term basis; Units, points, GPA; Description
09N: Institution Notes	Notation code(s); Note text
10A: Receiving Institution <sup>1,2</sup>	Institution name, code(s), address; Contact person, office/department, phone, email
99A: End of Request <sup>1,2</sup>	Response closing ID
1. These segments are required.	
2. Each of these segments can occur no more than once in a Transcript file.	

## 8 Developing Your Staff Procedures

Implementing eTranscript California will require rethinking of some of your college's existing transcript exchange procedures, as well as the implementation of new procedures specific to the management and maintenance of eTranscript California. Of course, the time saved by streamlining and automating transcript exchange through eTranscript California will more than make up for this initial time investment.

Implementing eTranscript California will change some, perhaps many, of your transcript exchange procedures. When you have developed an understanding of eTranscript California's features and capabilities, and of the eTranscript California functionality your college will support, you will need to develop the procedures whereby your staff will use eTranscript California for transcript exchange.

Specific procedures you may need, depending on how you are implementing eTranscript California, include:

- **Generating transcript requests:** How will A&R staff (and possibly college software for capturing students' transcript requests) initiate transcript requests in eTranscript California?
- **Receiving transcript requests:** Will A&R staff need to review and approve new requests?
- **Fulfilling transcript requests:** What manual and/or automated processes (if any) will be used for managing fees, holds, and offline record searches?
- **Offline transcripts:** How processes will be integrated with eTranscript California when the fulfillment of a request will include offline records, as either part or all of the transcript.
- **Account management:** Who will be in charge of managing eTranscript California user accounts at your college, and what access privileges will be given to each user?
- **Download and upload management:** How will automated downloads and uploads be scheduled and monitored?
- **Managing eTranscript California configuration/preferences:** How will the various eTranscript California 'preferences' be configured, and how and when will they be reviewed and updated?



## 9 Preparing Your Staff to Use eTranscript California

Preparing staff to use eTranscript California is an important part of eTranscript California implementation. A 'beta' eTranscript California system allows complete testing of all aspects of eTranscript California implementation before going live. A full complement of user training, system documentation, online help, and vendor support will help you ensure that you staff are fully prepared to use eTranscript California.

By the time you go live, your staff will need training and experience in your new eTranscript California-based transcript exchange procedures. Resources for staff preparation include:

- A 'beta' eTranscript California system, including a separate Control Center, which fully parallels the live eTranscript California system.
- Xap training.
- eTranscript California user documentation and online help.
- Xap client services managers and support personnel.
- Other eTranscript California users (including user listservs).
- Your own internal documentation of procedures.

Of course, familiarization of staff with eTranscript California operation and fine-tuning of your internal procedures will be a significant aspect of the beta testing period before you go live with eTranscript California.

# TESTING, THEN GOING LIVE!

## 10 Beta-Testing Your Software and Processes

Before going live, you should thoroughly test your interface software, transcript exchange procedures, and staff readiness using the eTranscript California beta system. Testing should include as many as possible of the variations and special situations that could occur in your transcript data and exchange processes.

Though there will be considerable testing during development, it is also prudent to test your interface programs and transcript procedures as thoroughly as possible in the period between the completion of development and when you go live. Ideally, this beta testing should include all of the items in the following checklist that are relevant to your implementation. College usage of eTranscript California features and functions may vary so test your procedures thoroughly.

All beta testing will occur using the eTranscript California beta system, which fully mirrors the functionality of the live eTranscript California system.

Table B. Beta Test Checklist

<b>eTranscript California Setup</b>	
Preferences	All Preferences are configured as desired, and have the expected results.
Download Slots and Projects	Slots and projects that will be used for downloading files from eTranscript California are properly assigned and configured. Pay special attention to the assignment of filtering rules for Request downloading/recycling.
Xap Communicator	Communicator is properly configured to download and upload files, and to perform any related process you choose.
User Accounts	All users who need access to eTranscript California have accounts, and the accounts are configured for the appropriate privileges.
Custom Views and Filters	Rules for custom views and filters have been created as desired.
<b>File Uploading and Downloading</b>	
Upload Directory	Files for uploading are placed in the proper directory.
Scheduled Uploads	Files in the upload directory are uploaded as scheduled.
Scheduled Downloads	Files are downloaded as scheduled to the proper directory.
Download File Retrieval	The interface program properly retrieves downloaded files.
Download Filtering	The applied filtering rule(s) have the desired results.
<b>Request Parsing</b>	
Data Captured	Request ID; transaction flags; Recipient and Student segments.
Hold Requests	All individual hold request types are properly handled.
Planned Release Date	Future, past, and blank dates are properly handled.
Student Identifying Data	Student data is properly captured and used to locate SIS records.
<b>Response Generation</b>	
Captured Request Data	Request data is properly carried over to the Response.
Your College Data	Data is properly populated in TRN segment.
Rejected Request	Proper Response Status for No Record, Multiple Match, Deceased.
Holds	Proper Response Status and Hold Condition fields for all possible local holds and all supported holds from the Request.
Response Status Note	Generated and populated as intended for all rejections and holds.
Student Data	Carried over from Request or populated from SIS as appropriate
Response Format	All generated Responses are accepted by the eTranscript California parser.
<b>Transcript Generation</b>	
Captured Request Data	Request data is properly carried over to the Transcript.
Transcript Flags	District-wide and partial/complete flags are set appropriately.
Your District/College Data	03A and 03B segments are properly populated.
Student Segment	02A segment is properly populated from SIS.
Institutional Information	Grade Scheme (04A), Notation Legend (04B), and Institutional Statements (04C) segments are properly populated.
Intersegmental Institutions	Information about student's high school education, including GE and IGETC certifications, is properly populated in 05A segment(s).

Degrees, Certificates, Awards, and Activities	Degree/Certificate (06A) and/or Award/Activity (06J) segment(s) properly populated.
Transfer Data	All transfer data, if supported, is properly populated in 07x segments.
Term and Course Data	All term and course data from your college is properly populated in 08x segments. Test all possible data fields and as many combinations and values as possible.
Institutional Summaries	All credit and grade summaries and associated notes are properly populated in 09K and 09N segments.
Transcript Format	All generated Transcripts are accepted by the eTranscript California parser.
Automatic Expiration	Transcripts that have been released but not delivered are automatically expired as intended (specified in Preferences).
<b>Request Generation</b>	
Transaction Data	RCL segment is properly populated with Request ID; date and time; flags for official/unofficial, original/replacement, production/test; requested hold conditions.
Institution Segments	Requestor, Recipient, and Transcriber data is properly populated.
Student Segment	Student identifying data is properly populated and meets the requirements of the transcript institution.
Request Format	All generated Requests are accepted by the eTranscript California parser.
<b>Receiving Transcripts</b>	
Interactive Processing	Staff can retrieve, print, and save individual transcripts.
Automated Processing	Interface program provides transcripts to other automated processes and/or file readers as intended.
<b>Transaction Management and Monitoring</b>	
Transaction Histories	Staff can display and interpret individual Transaction Histories.
Reports	Staff can display and interpret transaction reports, set report parameters, sort reports, and use custom views.
Interactive Requests	Staff can enter single, bulk, and/or batch transcript requests as needed, and can interactively cancel submitted Requests.
Interactive Responses	Staff can interactively reject requests, institute holds, and add notes.
Interactive Expirations	Staff can interactively expire released and received transcripts.
<b>Transcript Exchange</b>	
Coordinate with Partner(s)	Develop a testing plan and schedule with as many of your trading partners as is practical.
Exchange with Partner(s)	Fully test transcript exchanges with your trading partner(s). For transcript request fulfillment, include as many Request, Response, and Transcript possibilities as you can. Ideally, test every hold and rejection scenario and all transcript data fields you will be supporting.
Communication Channels	Coordinate with partner(s) regarding what types of information will be provided within eTranscript California (for example, in Response Status notes) and in what situations person-to-person communication will be used.
Offline Records Process	Test transcript fulfillment and communication processes for cases where all or part of the transcript data is held in offline records.

## 11 Final Steps: Moving from Beta to Live

Once you've thoroughly developed your programs and procedures in the eTranscript California beta environment, going live is a relatively simple procedure of duplicating your configuration in the live environment. Xap will assist you in this process to help ensure that it is accurate and complete.

When you have satisfactorily tested your programs and procedures using the eTranscript California beta site, you are ready to 'go live'—i.e., move your operation to the eTranscript California live site and begin the exchange of real transcripts.

It is a good idea to schedule going live for a relatively slow transcript exchange period so that any unforeseen problems can be resolved before transcript activity gets really busy.

The live eTranscript California works just the same as the beta eTranscript California, but because of the need to maintain the independence of the live and test environments, some aspects of your test implementation will not transfer from the beta site to the live site. Xap will provide assistance and a task checklist when you are ready to go live.

Things that you must reconfigure when moving to the live site include:

- Download and upload slots.
- Automated emails (content and activation), if used.
- All 'Preferences': fees, delivery options, expiration policy, Request approval, college profile, etc.
- Custom export and print projects (edit and regenerate to activate on live site).

Rules (filters) and user accounts transfer automatically from beta to the live site.

If you are using Xap Communicator for automated uploads/downloads, you will need to reconfigure it for the live server rather than the beta server.

Maintenance and support should not be a major task after you go live. You will want to monitor your IT and A&R procedures, but if you've given them a thorough test in beta, there should be no surprises. eTranscript California Reports provide the information you need for performance auditing—for example, comparing fulfilled vs. unfulfilled Requests, or released vs. delivered Transcripts.

## 11.1 Basic Expectations of Colleges on eTranscript California Live

In order for the eTranscript California electronic transcript exchange to reliably serve the participating colleges and their students, it is important that all colleges that are ‘live’ on eTranscript California commit to a minimum level of performance. This includes:

- Receiving any electronic Transcripts sent to your college. For the sake of the students involved, this function is critical.

This does not mean your college must download and process electronic files, however. ‘Receiving’ can be as simple as viewing the Transcripts We've Received Report each day and printing any new transcripts in the report. These printed transcripts can be imaged more easily than those on security paper. Then they can be treated like any paper transcript would be in your system.

Alternatively, you could set up a transcript download slot to download transcripts directly into your imaging system.

You can also set up the download function to send you an e-mail notification when a transcript has not been downloaded within the designated time (even if you do not plan to use the electronic files). See *Appendix D* for information on setting up this function.

- In any electronic transcripts your college sends, include all of the information normally included in a paper transcript. It is critical that electronic transcripts exchanged using eTranscript California not be less complete or in any other way inferior to paper transcripts.

Consider not giving your students the choice of paper or electronic transcripts when ordering. This will save you money and save the receiving schools that are uploading the electronic transcripts directly into their student record systems considerable processing time.

- Accurate set-up for all ‘Preferences’, so that other colleges on eTranscript California can view your college’s Institution Profile and know what to expect from your college.
- Performing any other functions you indicate in your Preferences, and that appear in your college’s Institution Profile.

For the good of eTranscript California as well as their own students and applicants, colleges that are in a development or testing phase should remain on the eTranscript California beta system until they are ready to be active participants as described above.

## 11.2 Long-Term Support and Maintenance

Once eTranscript California is implemented, ongoing IT support and maintenance requirements should be minimal: monitoring system performance, occasional downloading and installation of Communicator updates, and analysis of new SIS releases for effects on interface programs.

On the A&R side, ongoing management of procedures related to eTranscript California should be minor compared to the efficiencies gained by using eTranscript California.

## Appendix A. Glossary

This glossary defines the significant terms used to describe the functions and features of eTranscript California.

### Account

See *User Account*

### Approved Request

Request approval is the typical first step after a college has received a Request. Requests can be approved automatically as soon as they are received (per an option in the ‘Preferences’), or they can be approved individually via the Control Center’s Fulfillment Manager. However, eTranscript California does not require Requests to be approved before they can be downloaded, responded to, or fulfilled.

### ASCII Format

A proprietary set of Request, Response, and Transcript file formats using ‘flat’ ASCII text in a structured sequence of delimited fields and records. ASCII files are transmitted only between eTranscript California subscribers and the eTranscript California system.

### Automated Email

eTranscript California can automatically generate and send email to specified recipients at various points in the fulfillment workflow. Email contents can be customized as desired (including HTML content). Rules can be applied to limit the triggering situations and/or the recipients of automated emails.

### Batch Requests

In the Transcript Request Wizard, the ‘batch requests’ option allows a file containing one or more complete ASCII or XML Requests to be uploaded.

### Bulk List

See *Bulk Requests*

### Bulk Requests

In the Transcript Request Wizard, the ‘bulk requests’ option allows one or more transcripts to be requested by entering or uploading a structured list (‘bulk list’) of student-identifying data.

### CCCASCII

See *ASCII Format*

### CCC

California Community College.

### eTranscript California Project Team

Employees and contractors of the California Community Colleges Chancellor’s Office (CCCCO), including the Project Director and the Project Manager, who work on the eTranscript California project.

**eTranscript California Project Website**

A website (*eTranscriptCA.org*) maintained by the eTranscript California Project Team, providing a range of information about eTranscript California including a document repository.

**eTranscript California Steering Committee**

A committee of representatives of selected eTranscript California subscribing colleges and the eTranscript California project team that guides the ongoing management and development of eTranscript California.

**eTranscript California Subscriber**

A college or other institution that is a member of eTranscript California and can participate in eTranscript California transcript transactions.

**Communicator**

See *Xap Communicator*

**Control Center**

The secure, limited-access website (*control.xap.com* and, for testing, *beta.control.xap.com*) through which staff of eTranscript California subscribers interact with eTranscript California.

**CSIS (California School Information Services)**

A legislative initiative charged in 1997 with developing and implementing an electronic statewide school information system. Transcripts from California high schools come to eTranscript California from CSIS.

**CSU**

California State University

**Data Dictionary**

A document that defines all of the data elements of the ASCII Request, Response, and Transcript files, and details the mapping of these data elements in corresponding EDI and XML files. The Data Dictionary is maintained by the eTranscript California project team.

**District-Wide Transcript**

A Transcript that includes a student's academic records at all colleges in a CCC district. Such a Transcript file includes a district-wide flag, district identity fields, and consecutive academic records from one or more colleges in the district. Since only colleges (not districts) can be eTranscript California subscribers, a district-wide Transcript must originate from a subscribing college, and in the case of a requested Transcript, must originate from the college receiving the Request.

**Download**

The transfer of a Request or Transcript file from eTranscript California to a subscribing institution. Currently, eTranscript California does not support downloading of Response files. Downloads can occur via the Control Center or Xap Communicator.

**Download Manager**

A Control Center module (menu paths: Transcripts → Download College Transcripts and Transcripts → Download High School Transcripts) for setting up downloads. The download

managers are used to assign download ‘slots’ to users, define the type of file (‘project’) a slot will be used for, and specify download options such as batch size, email notifications, etc.

**Download Slot**

A virtual download channel assigned that can be assigned to a particular user and configured for a particular type of file download. Each eTranscript California subscriber has 30 slots for college transcripts and 30 slots for high school transcripts.

**EDI**

EDI (Electronic Data Interchange) is the first widely used format for electronic transcript exchange.

**Expiration**

The removal of a transcript from eTranscript California. Expired transcripts are no longer available for downloading.

**Fulfillment**

The process of responding to a transcript request.

**Fulfillment Manager**

See *Transcript Fulfillment Manager*

**Fulfillment Workflow**

The series of steps through which a transaction proceeds from request submission to transcript delivery:

- Transcript Request Submitted
- Transcript Request Approved
- Transcript Request Downloaded
- Response/Transcript Uploaded
- Transcript Released
- Transcript Delivered

The transition from one workflow step to the next can initiate automated emails as configured by the transcript institution.

**Hold**

A response to a transcript request specifying that transmission of the requested transcript will be delayed until one or more conditions is met. The transcript institution may place the hold because of a condition included in the request (such as waiting for current term grades to be available) or because of a condition at the transcript institution (such as fees owed).

**Institution Profile**

A Control Center screen that provides information about an eTranscript California subscriber.

**Local Hold**

A hold on a transcript that results from a condition at the transcript institution (such as fees owed) rather than a delay asked for by the requesting institution (such as waiting for current term grades).

**Offline Record Search**

A search for a particular student’s transcript data in hard-copy records that pre-date the transcript institution’s electronic records.



**Partial Transcript**

An electronic transcript that is not a complete academic record for a student at a particular institution because part of the academic record is 'offline'—i.e., not available in electronic form. Each eTranscript California transcript includes a flag indicating whether it is partial or complete.

**PESC**

Postsecondary Electronics Standards Council - Established in 1997 and located in Washington, D.C., PESC - the Postsecondary Electronic Standards Council is a 501(c)(3) non-profit, community-based, umbrella association of colleges and universities; professional and commercial organizations; data, software and service providers; non-profit organizations and associations; and state and federal government agencies.

**Preferences**

A set of Control Center screens by which an eTranscript California subscriber selects various options and provides information about its eTranscript California implementation and practices that will be included in its Institution Profile.

**Project**

For download slots, a particular format in which a request or transcript can be downloaded.

**Project Website**

See *eTranscript California Project Website*

**Pushed Transcript**

A transcript that is initiated by the transcribing institution rather than by a request from the recipient; an unsolicited transcript.

**Recipient Institution (or Recipient)**

The college or other institution that is to receive a transcript via eTranscript California. The recipient is usually, but is not required to be, the same as the requestor.

**Recycling**

See *Request Recycling*

**Request File**

A structured ASCII, EDI, or XML file that requests a transcript for a specified student.

**Request Recycling**

Repeated downloads of a request until holds conditions are cleared and the requested transcript can be released.

**Requested Hold**

Elements in a request that ask the transcriber to hold or delay transcript release until a certain condition is met, such as availability of grades for the current term. Transcribers are not required to support requested holds

**Requesting Institution (or Requestor)**

The college or other institution that is requesting a transcript via eTranscript California.

**Response File**

A structured ASCII, EDI, or XML file that responds to a request for a transcript with information other than the transcript. eTranscript California currently does not support the downloading of Response files, but their contents are reflected in Control Center displays.

**Rule**

A Boolean logical statement regarding one or more aspects of a transcript transaction that is used as a filter for Control Center lists or slot downloads. For example, the rule “Transaction Status EQUALS On Hold” could be used to limit a report to transactions that are currently on hold.

**Slot**

See *Download Slot*

**SPEEDE Server**

A server at the University of Texas, Austin that serves as a national hub for electronic transcript exchanges in EDI or XML format between institutions registered with the server. Also called the Texas Server.

**SPEEDE Server Registrant**

An institution that has registered for transcript exchanges via the SPEEDE Server.

**Subscriber**

See *eTranscript California Subscriber*

**Texas Server**

See *SPEEDE Server*

**Transaction**

All of the file transfers (and their interactive equivalents) for a particular requested or unsolicited transcript. For example, a transaction might consist of an interactive request, a download of the request, an interactive response, and the uploading and downloading of a transcript file.

**Transaction Status**

A particular stage of a transaction, based on the immediately previous action—for example, ‘Request Approved’, ‘On Hold’, or ‘Transcript Delivered’.

**Transcript Delivery**

The receipt of a transcript by the destination institution. Within eTranscript California, delivery occurs when the recipient views the transcript or downloads it. For a transcript sent outside of eTranscript California (through the SPEEDE Server), delivery occurs when the transcript is transmitted outside of eTranscript California.

**Transcript Fee**

A fee charged by the transcript institution for providing a transcript. Institutions’ transcript fee policies vary greatly. eTranscript California does not provide any means of assessing or paying transcript fees; these must be handled outside of eTranscript California.

**Transcript File**

A structured ASCII, EDI, or XML file containing the academic transcript for a single student.

**Transcript Fulfillment Manager**

A Control Center module (menu path: Transcripts → Fulfill College Transcript Requests) that allows a college to list all transcript requests in a specified time period, view the current transaction status of each, respond to requests, and upload transcript files.

**Transcript Hold**

See *Hold*

**Transcript Institution (or Transcribing Institution or Transcriptor)**

The college that provides, or is requested to provide, a transcript via eTranscript California.

**Transcript Release**

The uploading of a transcript into eTranscript California by an eTranscript California subscriber.

**Transcript Request Wizard**

A Control Center module (menu path: Transcripts → Request College Transcripts) that allows staff at eTranscript California subscriber institutions to generate requests for transcripts from eTranscript California subscribers.

**Transcript Transaction**

See *Transaction*

**Transcript View**

A formatted transcript that can be viewed in HTML or PDF format, and can also be printed or saved as an electronic file.

**Unsolicited Transcript**

A transcript that has not been requested. The term can have slightly different meanings, depending on the context:

- In the context of the transcriptor, an unsolicited transcript is one for which there was not a previous, independent request. (eTranscript California will automatically generate a request when it processes an unsolicited transcript, and the request will become part of the transaction history, but this request is neither previous to nor independent of the transcript.)
- In the context of the recipient, an unsolicited transcript is one that it did not request. However, the transcript could have been generated in response to an eTranscript California request submitted by the transcript institution or a third party, in which case it would not be unsolicited in the context of the transcriptor.

**Upload**

The transfer of a Request, Response, or Transcript file from a subscribing institution to eTranscript California. Uploads can occur via the Control Center or Xap Communicator.

**User Account**

A personal account giving a staff member at a subscribing college access to the Control Center or Communicator. Each account has a username and password to protect against unauthorized access. Functions that can be performed using a particular account (i.e., the account privileges) are configurable from an administrator-level account with account management privileges.

**Workflow**

See *Fulfillment Workflow*

**Xap**

Xap Corporation, the vendor for eTranscript California. Through an agreement with the eTranscript California project initiated by the California Community Colleges Chancellor's Office (CCCCO), Xap creates eTranscript California software, hosts the eTranscript California servers, establishes contracts with eTranscript California subscribers, and provides technical support for eTranscript California users.

**Xap Communicator**

A software utility that runs on a Windows-based server at an eTranscript California subscribing institution and allows automated file transfers to and from eTranscript California.

**XML**

XML (eXtensible Markup Language) is a relatively new format for electronic transcript exchange, offering greater flexibility than the older EDI format. Development and approval of XML standards for transcript exchanges are guided by the Postsecondary Electronic Standards Council (PESC). For more information, see [www.pesc.org](http://www.pesc.org).

**XML UDE**

A User-Defined Extension to an XML standard ('schema') that allows the addition of data elements by an entity using XML (such as eTranscript California).

## Appendix B. Transaction Status/Events Matrix

The matrix below relates all of the eTranscript California transaction statuses and the events (i.e., actions by eTranscript California users) that can occur within a transcript transaction. Each column represents a transaction status (labeled in the pale yellow cells), and each row represents an event (labeled in the pale green cells). The cells in the body of the table thus represent a particular action (indicated by the row) occurring when the transaction has a particular status (indicated by the column). A gray cell means that the action cannot occur when a transaction is in that status. The text in a white cell identifies the transaction status that will result when indicated action occurs within a transaction having the indicated status.

Event	Transaction Status											
	None	New Request	Request Approved	Request Downloaded	Response Uploaded	Request On Hold	Request Rejected	Transcript Recalled	Transaction Cancelled <sup>1</sup>	Transcript Released	Transcript Delivered	Transcript Expired <sup>1</sup>
Request Submitted	New Request											
Request Approved		Request Approved					Request Approved					
Request Downloaded <sup>7</sup>		Request Downloaded	Request Downloaded	No change	No change	No change				No change	No change	
Request Cancelled by Requestor		Request Cancelled	Request Cancelled	Request Cancelled	Request Cancelled	Request Cancelled	Transaction Cancelled					
Response: OR (Offline Search)		Request On Hold <sup>3</sup>	Request On Hold <sup>3</sup>	Request On Hold <sup>3</sup>	Request On Hold <sup>3</sup>	No change						
Response: TR (Request Received)		Response Uploaded	Response Uploaded	Response Uploaded	No change	Previous Status						
Response: OS (Offline Sent)		Response Uploaded	Response Uploaded	Response Uploaded	No change	Previous Status						
Response: TS (Transcript Sent)		Response Uploaded	Response Uploaded	Response Uploaded	No change	Previous Status						
Response: DD (Deceased)		Request Rejected <sup>4</sup>	Request Rejected <sup>4</sup>	Request Rejected <sup>4</sup>	Request Rejected <sup>4</sup>	Request Rejected <sup>4</sup>						
Response: NR (No Record)		Request Rejected <sup>4</sup>	Request Rejected <sup>4</sup>	Request Rejected <sup>4</sup>	Request Rejected <sup>4</sup>	Request Rejected <sup>4</sup>						
Response: MM (Multiple Match)		Request Rejected <sup>4</sup>	Request Rejected <sup>4</sup>	Request Rejected <sup>4</sup>	Request Rejected <sup>4</sup>	Request Rejected <sup>4</sup>						
Response: CN (Cancel)		Request Rejected <sup>4</sup>	Request Rejected <sup>4</sup>	Request Rejected <sup>4</sup>	Request Rejected <sup>4</sup>	Request Rejected <sup>4</sup>						
Response: HO (Hold)		Request On Hold <sup>3</sup>	Request On Hold <sup>3</sup>	Request On Hold <sup>3</sup>	Request On Hold <sup>3</sup>	No change						
Holds Released, Interactive <sup>2</sup>						Previous Status						
Transcript Uploaded <sup>5</sup>	Transcript Released <sup>6</sup>	Transcript Released	Transcript Released	Transcript Released	Transcript Released	Transcript Released		Transcript Released				
Transcript Recalled										Transcript Recalled		
Transcript Viewed or Downloaded										Transcript Delivered	No change	
Expired by Transcriptor								Transaction Expired		Transaction Expired		
Expired by Recipient											Transaction Expired	

*Notes:*

1: Transcript will not be viewable or downloadable and Transaction will not be listed in Fulfillment Manager. Transaction will be listed in relevant Reports(s).

2: When all Holds are released, the transaction status reverts to the status it had before the transaction was placed On Hold.

3: Transaction goes to Response Uploaded status, and then moves to Request On Hold status

4: Transaction goes to Response Uploaded status, and then moves to Request Rejected Status

5: When a Transcript is uploaded, the status goes first to Transcript Fulfilled (not included in the matrix because it is always momentary), then immediately to Transcript Released.

6: When an unsolicited transcript is uploaded, eTranscript California automatically generates and approves a Request. Thus, a series of momentary statuses precede Transcript Released.

7: Downloading a Request changes the Transaction Status to Request Downloaded only on the first download. The Transaction Status will not change on subsequent downloads.

## Appendix C. Transcript Fees: CCCC Legal Opinion

*In Legal Opinion O 09-02, Staff Counsel Jonathan Lee provided the following responses to questions presented by the Steering Committee. The complete legal opinion can be viewed online at <http://www.cccco.edu/ChancellorsOffice/Divisions/Legal/LegalOpinions/tabid/293/Default.aspx>.*

### **1. Is it appropriate for California community college districts (district or college) to charge a per-transcript fee for an entirely electronic transcript (one that does not entail the direct costs of printing, labor, postage, etc.) if the student has already received his or her first two transcripts?**

Education Code section 76223 governs what charges can be made by community colleges in regards to transcript requests. It states:

“Any community college may make a reasonable charge in an amount not to exceed the actual cost of furnishing copies of any student record; provided, however, that no charge shall be made for furnishing (1) up to two transcripts of students' records or (2) up to two verifications of various records of students. No charge may be made to search for or to retrieve any student record.”

Education Code section 76223 sets clear limits as to what a district can charge for transcripts. Those costs are limited to only the direct costs of distributing those transcripts. Electronic transcript fees derived from use with eTranscript California should be treated no differently. The direct costs of eTranscript California could include labor, system maintenance, operational costs, participation in the program, etc. As noted in our Student Fee Handbook (also known as Legal Opinion M 06-11), any attempt to make these per-transcript fees flat should be based on an actual demonstrable cost.

Based on the above reasoning, districts can charge a per-transcript fee for transcripts ordered through eTranscript California. These fees must be based on the actual costs of implementing the program. Those costs may include features unique to the eTranscript California program and are not limited to the traditional costs of operating standard transcript retrieval programs.

### **2. Is it appropriate for a district to charge an “expedited service fee” for transcripts generated and transmitted electronically?**

The Student Fee Handbook noted that districts may offer expedited copying for an additional fee. This allowance is conditioned on the fact that this service is optional. If a student can still retrieve her records without an enhanced charge for expedited service this practice would be allowed. It should be noted, if a situation arose where eTranscript California becomes the only option for students to retrieve transcripts, this expedited surcharge would be prohibited.

Currently, however, there is no indication that the more traditional form of transcript requests would cease to operate upon the full implementation of eTranscript California. eTranscript

California is a system that would provide an additional method for students to retrieve their records. Students would have the option to use eTranscript California or not.

Additionally, eTranscript California is an expedited service. The very nature of the eTranscript California system is that it can generate and transmit documents instantaneously. Anyone receiving a transcript from eTranscript California would receive those results potentially within seconds, and at the slowest on a daily basis. As standard waiting periods can take weeks, students using eTranscript California would not have to wait the usual waiting period as required in the Student Fee Handbook.

Thus, schools using the eTranscript California service may charge an expedited service fee for transcripts generated and transmitted electronically, if a student chooses to use this service over other nonexpedited transcript retrieval services.

**3. When another institution (such as a California State University) requests an electronic transcript from a district on behalf of a transferring student, is it appropriate to hold the transcript until the transferring student pays a fee to the district?**

The current practices governing fees and standard transcript requests from outside institutions should apply to this situation. If a college currently requires a transferring student to pay fees prior to sending a standard transcript to another college, then that same process should hold true for electronic transcripts retrieved through eTranscript California.

**Conclusion**

eTranscript California is a new service that is being offered by colleges that can instantaneously generate and transmit transcripts upon request. Fees for this new service should be based on the actual costs of running this program. Expedited fees may be charged by colleges for using this service as long as other transcript services remain available. All other practices related to fees and transcripts should make no distinction between electronic and standard transcript requests.

## Appendix D. Email Notification for Received Transcripts

In eTranscript California, if a college is listed on the 'production' Xap Control Center, then other colleges see them as being ready to accept transcripts. When colleges new to eTranscript California have not yet set up automated processes to receive electronic transcripts into their internal systems, they sometimes may be unaware that other eTranscript California colleges are sending electronic transcripts to them. Even if a college is not ready to accept incoming transcripts into their student information system, they can still benefit by receiving the transcript to view online, print, and process manually. And most importantly, this ensures that student transcripts receive the prompt attention they deserve.

One way for a college to make sure received transcripts do not go unnoticed is to use the automated email function associated with transcript downloading. This function sends an email notification if a transcript has been received but not downloaded within a user-selected period of time.

The basic steps involved in this solution are:

- A. Log into the Control Center using the account of the person who will be receiving the email notification of transcripts received.
- B. Using the Download Manager (menu path Transcripts → Download College Transcripts), set up an eTranscript California transcript download slot to download transcript files in the desired format (PDF, EDI, or XML). Typically, you will want to select the PDF format unless you have software to process XML or EDI transcripts.
- C. When configuring the transcript download slot, select the option to send an email when a received transcript has not been downloaded, and select the period of time after receipt of the transcript when the email will be sent.

When an email notification of a received transcript arrives, there are two basic approaches that can be employed for retrieving and processing the transcript:

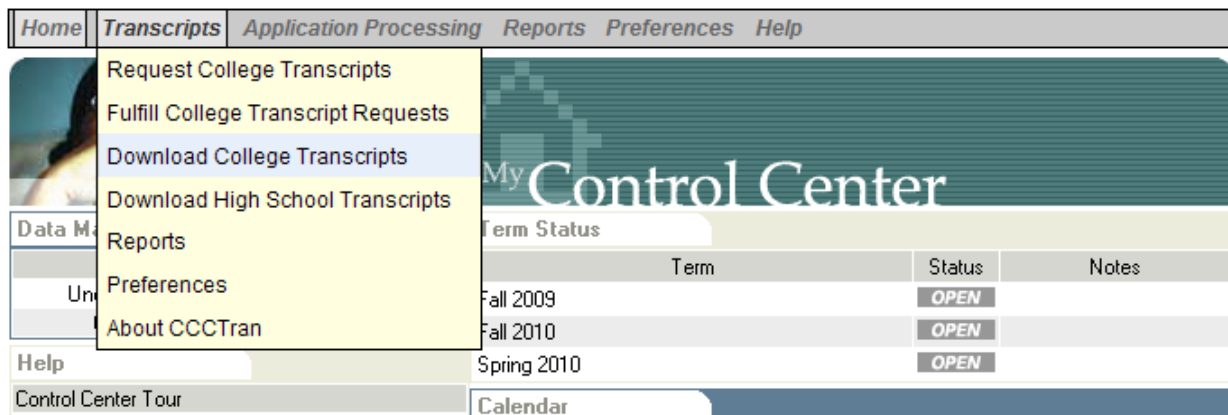
- Using the Transcripts We've Received Report in the Control Center, you can view and print transcripts online to process them manually.
- You can retrieve the downloaded file and print or process it as appropriate.

### Implementation Steps for Email Notification

The user performing these steps must have been granted the ability to download college transcripts via the Account Manager. (See your eTranscript California administrator for help if you need to be granted this ability.) The email address that is used for notification of received transcripts is the email address associated with the user account signed in during these steps.

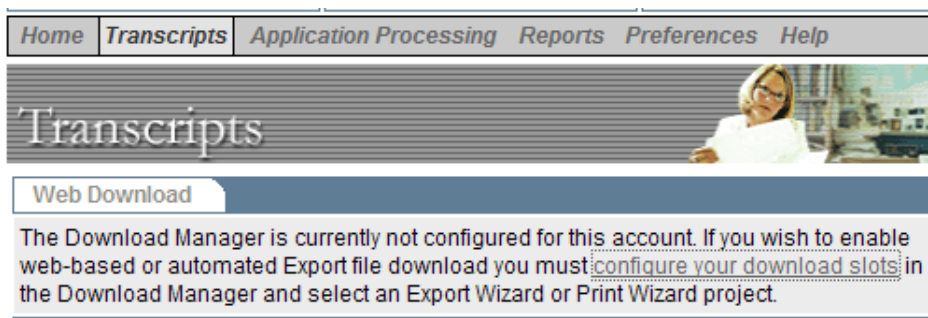


1. Log into the Control Center. Then, from the Transcripts drop-down menu, select “Download College Transcripts” as shown in *Figure D-1*.



*Figure D-1. Transcripts Drop-Down Menu*

2. If the resulting screen is like the one shown in *Figure D-2*, then there are no download slots allocated to this account, and you will need to allocate one. Otherwise, skip to step 3.



*Figure D-2. Web Download Screen (No Slots Allocated)*

- a. In the screen shown in *Figure D-2*, click on the link, “configure your download slots”. This will result in the screen shown in *Figure D-3*.
- b. Click on “Slot Allocation” in the left column to display the Download Slot Allocation screen (*Figure D-4*).
- c. Click on one of the open slots, then select the account holder’s name from the Download Menu.
- d. Click on the “update” button at the bottom of the screen. This will display the College Download Slot Settings screen like the one shown in *Figure D-6*. Go to step 4.



Figure D-3. College Download Setting Screen (No Slots Allocated)

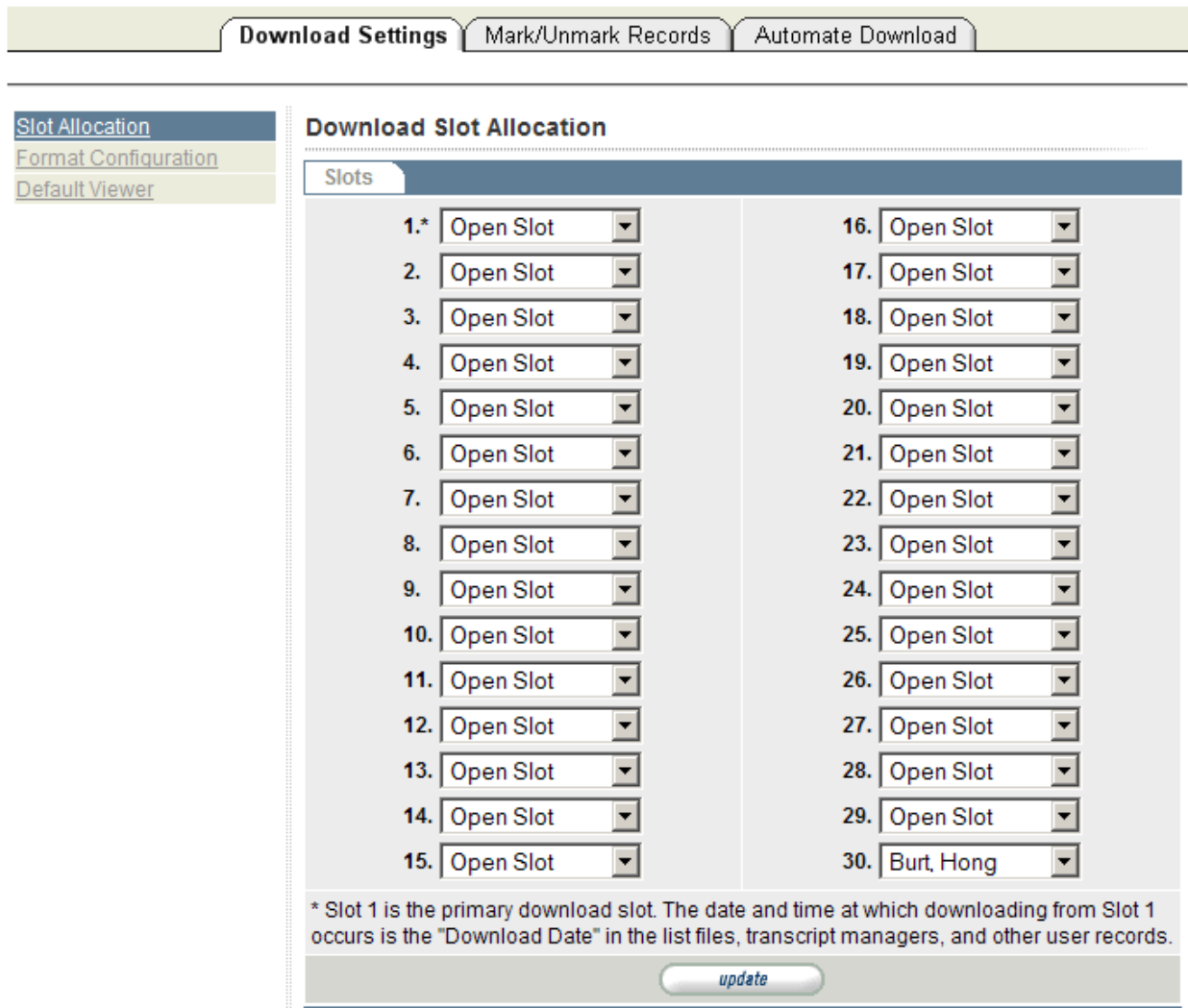
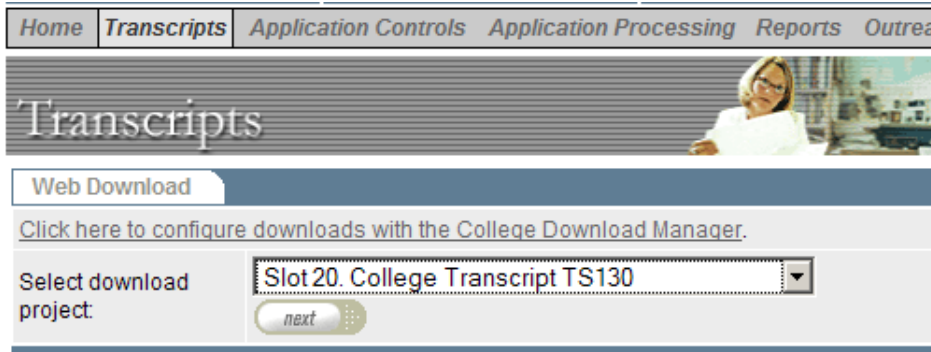


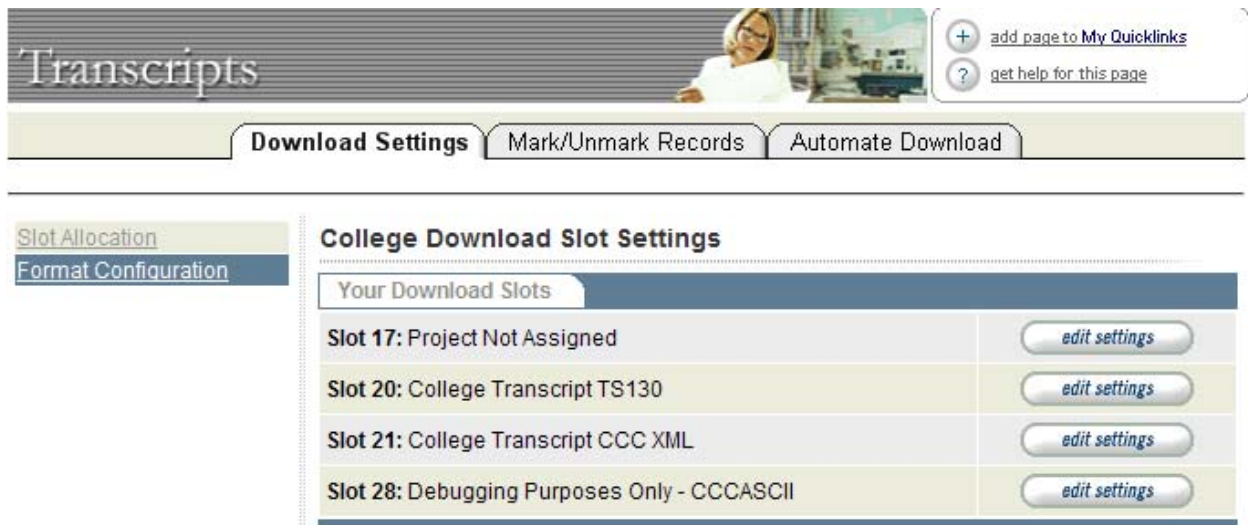
Figure D-4. Download Slot Allocation Screen

3. If the screen that results from step 1 is like the one shown in *Figure D-5*, then there is at least one download slot allocated to this account.



*Figure D-5. Web Download Screen (Slots Allocated)*

- a. Click on the link, “Click here to configure downloads with the College Download Manager”. This will display the College Download Slot Settings screen like the one shown in *Figure D-6*.
  - b. If you want to add a new slot rather than add email notification on an existing slot, follow the procedure in steps 2.b to 2.d.
4. The College Download Slot Settings screen (*Figure D-6*) lists the slots assigned to your account, and identifies the download ‘project’ assigned to the slot. Click on “edit settings” for the download slot you want to use for email notification.



*Figure D-6. College Download Setting Screen (Slots Allocated)*

- a. If you have selected a slot *not* labeled “Project Not Assigned”, the main Edit College Download Slot Settings screen (*Figure D-8*) will be displayed. Go to step 5.
- b. If you have selected a slot labeled “Project Not Assigned”, choose a “Pre-generated” project from the list shown in *Figure D-7*. For a slot whose prime purpose is email notification, one of the College Transcript View projects is recommended.

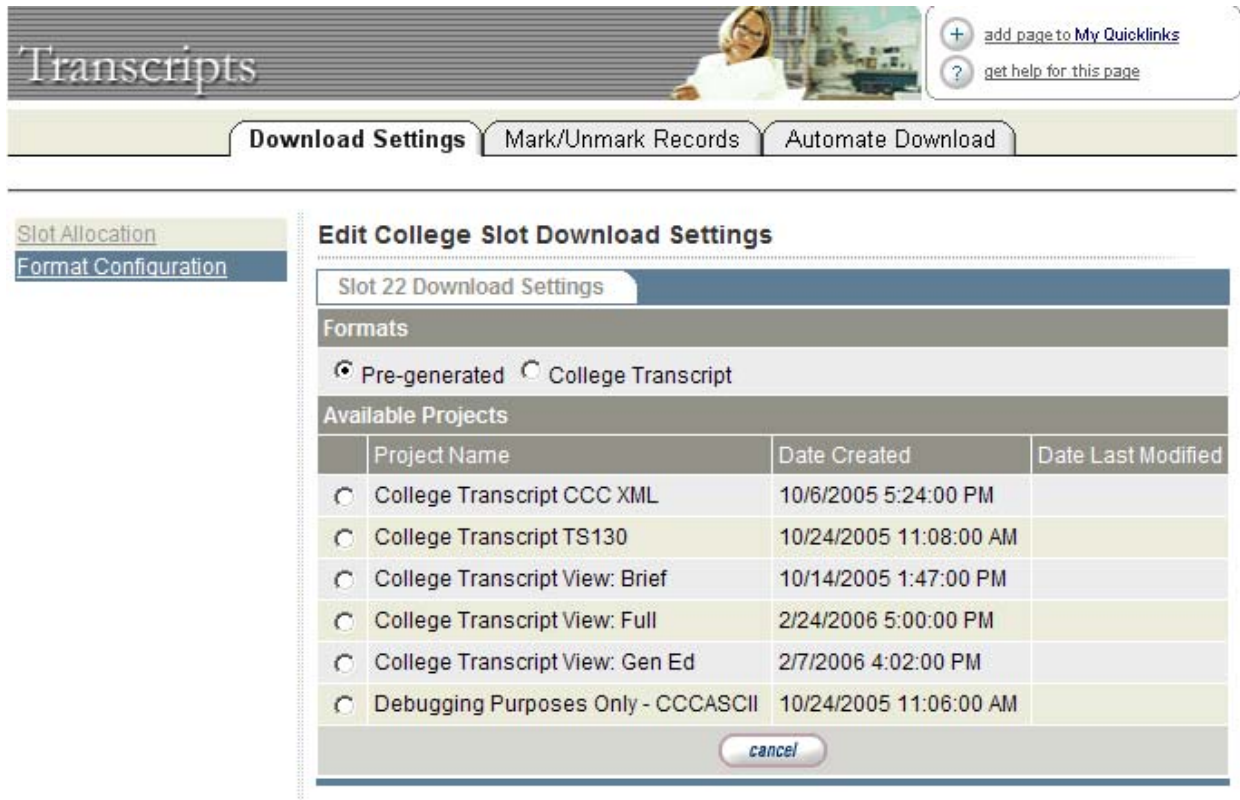


Figure D-7. Edit College Slot Download Setting Screen: Choosing a Project

The screenshot displays the 'Edit College Slot Download Settings' interface. At the top, there are navigation tabs: 'Download Settings', 'Mark/Unmark Records', and 'Automate Download'. The main content area is titled 'Edit College Slot Download Settings' and includes a sub-tab for 'Slot 22 Download Settings'. The settings are organized into several rows:

- Setting name:** College Transcript View: Full
- Current download format (project is pre-generated):** College Transcript View: Full (with a 'clear' button)
- Downloaded file format:** PDF (dropdown menu)
- Download Filter:** None (dropdown menu with a help icon)
- Remind me by e-mail when new transcripts arrive:** Yes (selected) / No
- New transcript reminder schedule:** Daily (dropdown menu)
- File name pattern for files that contain information for a specifically chosen student:** Xap\_Download (dropdown) .pdf (dropdown)
- File name pattern for files that contain information for multiple students:** Xap\_Download (dropdown) .pdf (dropdown)
- Number of transcripts per file:** 999 (max download 9999)

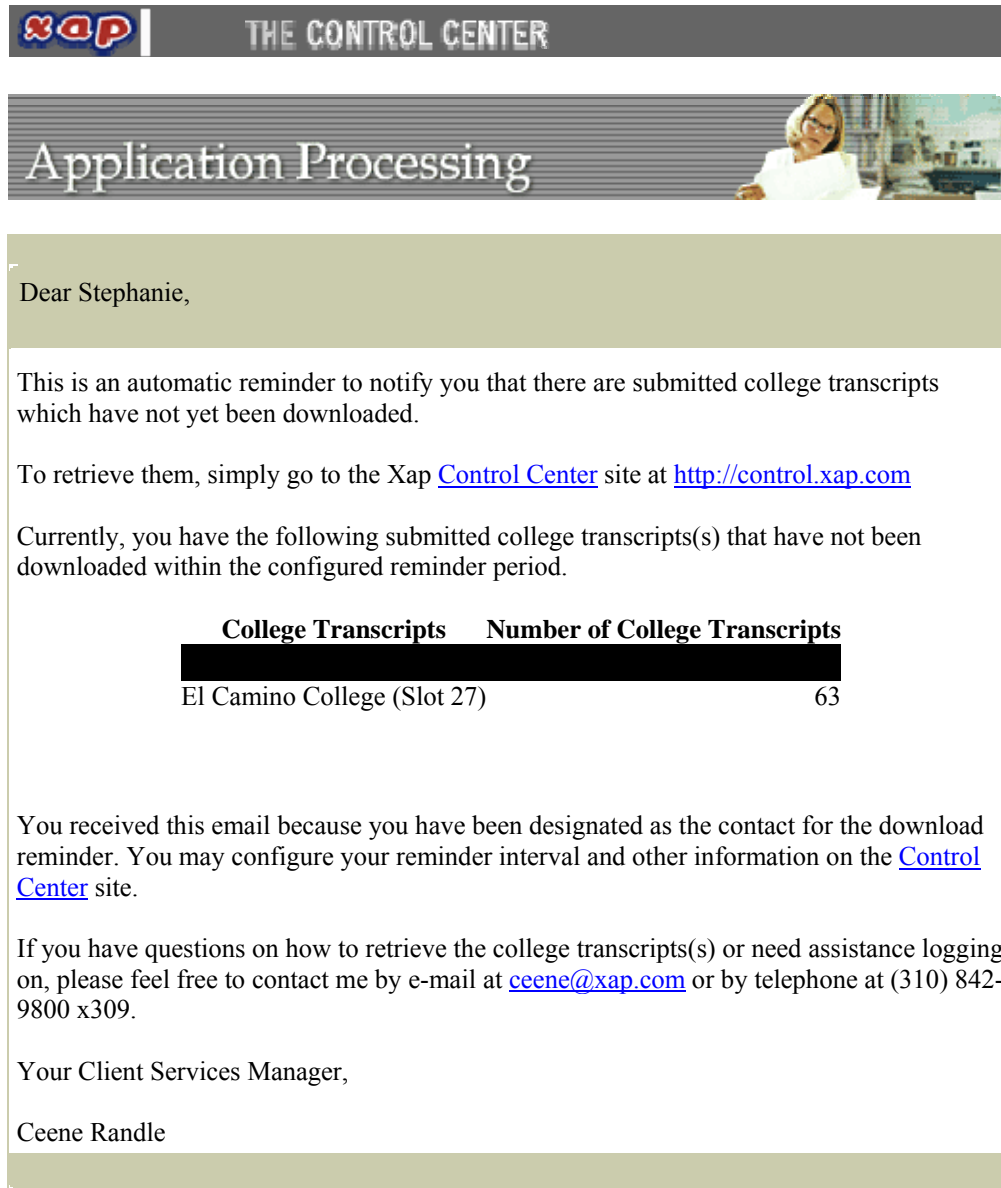
At the bottom of the settings area, there are 'save' and 'cancel' buttons.

Figure D-8. Edit College Download Setting Screen

5. Use the Edit College Slot Download Setting screen to configure the slot. *Figure 2-8* shows recommended settings.
  - a. The critical settings for enabling email notification of new transcripts are:
    - “Remind me by e-mail when new transcripts arrive” = “Yes”
    - “New transcript reminder schedule” = “Daily” (or any other option except “Never”)
  - b. Other settings can be modified as desired.
  - c. Click “save” at the bottom of the page to finalize the slot configuration. This completes the setup for email notification of new transcripts.

## Responding to Email Notification

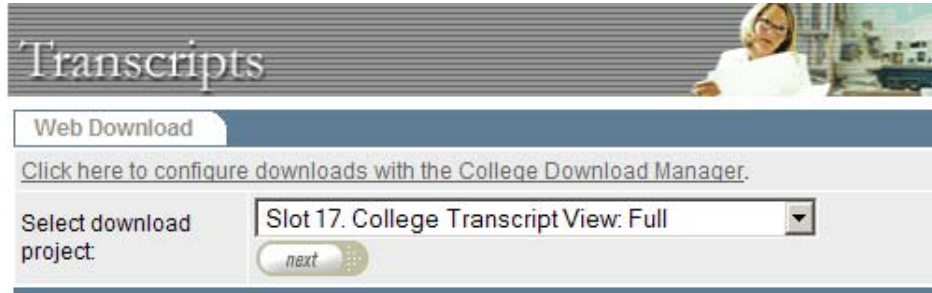
Figure D-9 shows a typical transcript notification email. The content and format of this notification are not user-definable.



*Figure D-9. Typical Transcript Notification Email*

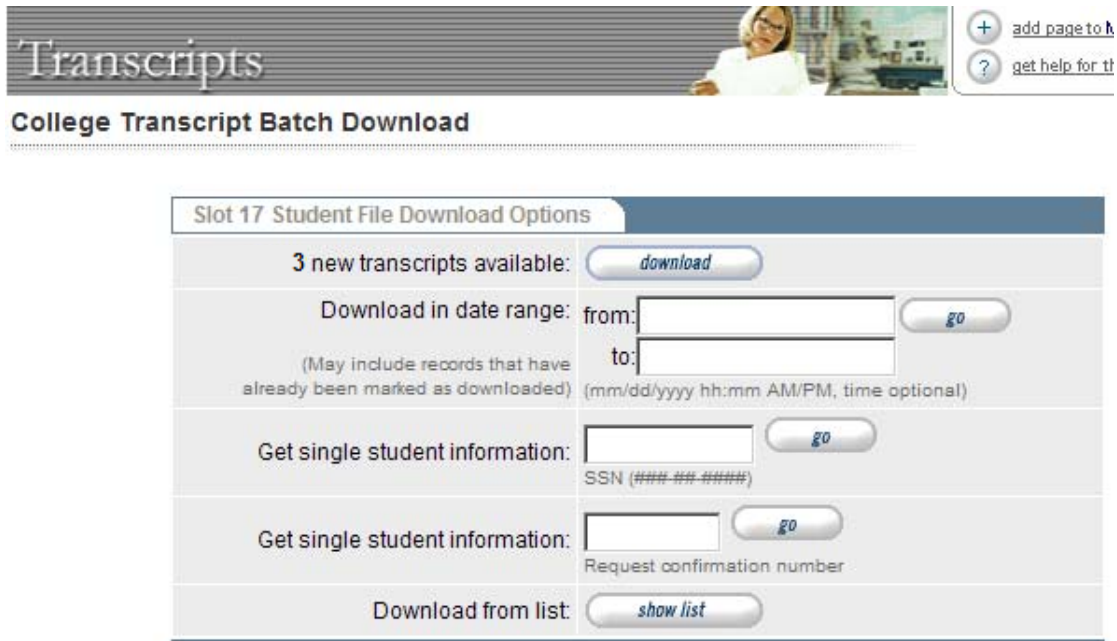
You will continue to receive this email daily (or as otherwise scheduled) until you download the transcripts via the slot identified in the email. Therefore, even in you use the Transcripts We've Received Report to view and print transcripts, you must perform the following steps to clear the slot and prevent repeated emails for the same transcripts.

1. When you receive an transcript notification email, log into the Control Center. Then, from the Transcripts drop-down menu, select “Download College Transcripts” (as shown in *Figure D-1*).
2. On the Web Download screen (*Figure D-10*), select the slot used for email notification. Then click on the “next” button.



*Figure D-10. Web Download Screen*

3. On the College Transcript Batch Download screen (*Figure D-11*), click on the “download” button to initiate download of the new transcripts. Continue as prompted. (Download procedures will vary.)



*Figure D-11. College Transcript Batch Download Screen*

4. Process the PDF transcripts according to your college’s procedures.

## Appendix E.

### Downloading from Different Colleges in Different Formats

Some eTranscript California colleges may find it necessary to process electronic transcripts in significantly different ways depending on the college from which the transcript is received. For example, a college may be able to process transcripts from a primary “feeder” college in EDI or XML format, but will need to receive transcripts from other colleges in PDF format to print and process as paper transcripts.

As an example, this appendix outlines a procedure for downloading transcripts from one college in EDI TS130 format, and downloading transcripts from all other colleges in PDF format. The procedure uses two slots, one for EDI downloads and one for PDF downloads. Custom filters (called ‘rules’) are applied to the two slots to determine the colleges whose transcripts will be downloaded in each slot (i.e., format).

#### Download Slot Allocation

You will need to have at least two slots allocated for this procedure. A “College Transcript TS130 project must be assigned to one slot, and a “College Transcript View: Full” (i.e., PDF) project must be assigned to another slot.

For this example, slot 25 is configured to download TS130 transcripts, and slot 26 is configured to download PDF transcripts, as shown in *Figure E-1*.

The screenshot displays the 'College Download Slot Settings' interface. At the top, there are navigation tabs: 'Download Settings', 'Mark/Unmark Records', and 'Automate Download'. Below this, a table lists the configured download slots:

Your Download Slots	
Slot 13: College Transcript CCC XML	<a href="#">edit settings</a>
Slot 16: College Transcript View: Brief	<a href="#">edit settings</a>
Slot 20: Debugging Purposes Only - CCCASCII	<a href="#">edit settings</a>
Slot 24: Debugging Purposes Only - CCCASCII	<a href="#">edit settings</a>
Slot 25: College Transcript TS130	<a href="#">edit settings</a>
Slot 26: College Transcript View: Full	<a href="#">edit settings</a>

At the bottom of the page, the breadcrumb trail reads 'Home : Transcripts : Download College Transcripts' and the time zone is 'PST'.

*Figure E-1. College Download Slot Settings*



## Applying a Filtering Rule for the TS130 Slot

In this example, we want to create a rule that filters the transcripts downloaded in slot 25 so that only transcripts from Butte College are downloaded. The procedure for doing this is as follows:

1. Select “edit settings” for slot 25 on the College Download Slot Settings screen (*Figure E-1*). This will bring up the Edit College Download Slot Settings screen, as shown in *Figure E-2*.

The screenshot shows the 'Edit College Slot Download Settings' interface. On the left, there is a sidebar with 'Slot Allocation' and 'Format Configuration'. The main area is titled 'Edit College Slot Download Settings' and has a sub-tab 'Slot 25 Download Settings'. The settings are as follows:

- Setting name: College Transcript TS130
- Current download format: (project is pre-generated) College Transcript TS130 (with a 'clear' button)
- Downloaded file format: HTML
- Download Filter: Create New Rule (with a magnifying glass icon)
- Remind me by e-mail when new transcripts arrive: None
- New transcript reminder schedule: new
- File name pattern for files that contain information for a specifically chosen student: parthik\_download .txt
- File name pattern for files that contain information for multiple students: Xap\_Download .txt
- Number of transcripts per file: 999 (max download 9999)
- Allow Xap Communicator (formerly known as Xap Auto-Downloader) to download this slot: Yes (selected) No

Figure E-2. Edit College Download Slot Settings Screen

2. For “Download Filter”, select “Create New Rule” as shown in *Figure E-2*. Then click the magnifying glass icon at the right of “Create New Rule”. This will open the Rules Wizard as shown in *Figure E-3*.

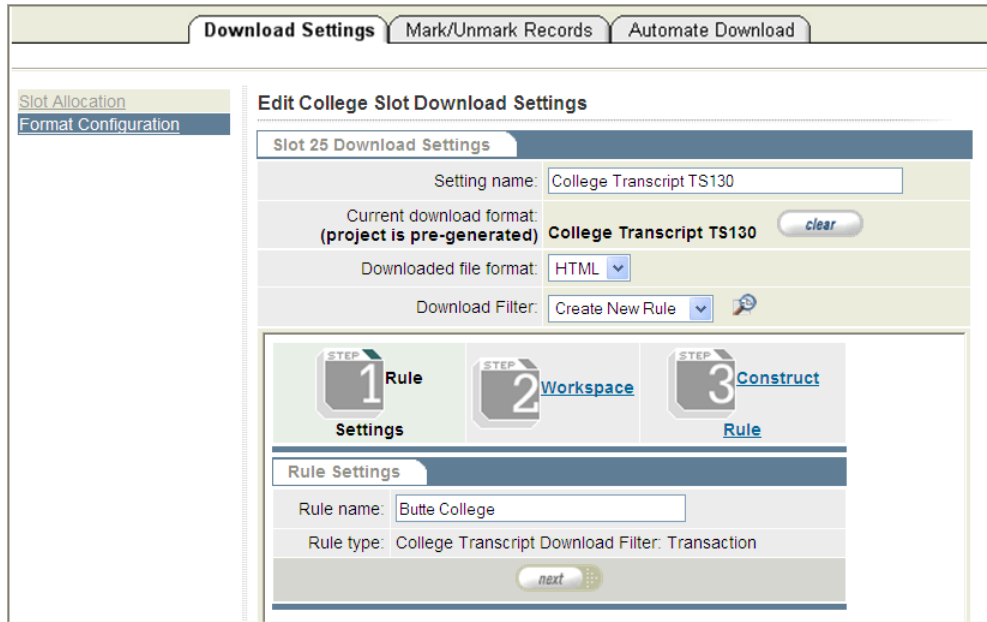


Figure E-3. Edit College Download Slot Settings Screen with Rules Wizard

3. Enter a name for the new filter/rule being created. Since in this case we will use the TS130 slot to download transcripts only from Butte College, we will name the rule “Butte College”, as shown in *Figure E-3*. Then click “next”. The Rules Wizard will advance to the Workspace segment as shown in *Figure E-4*.

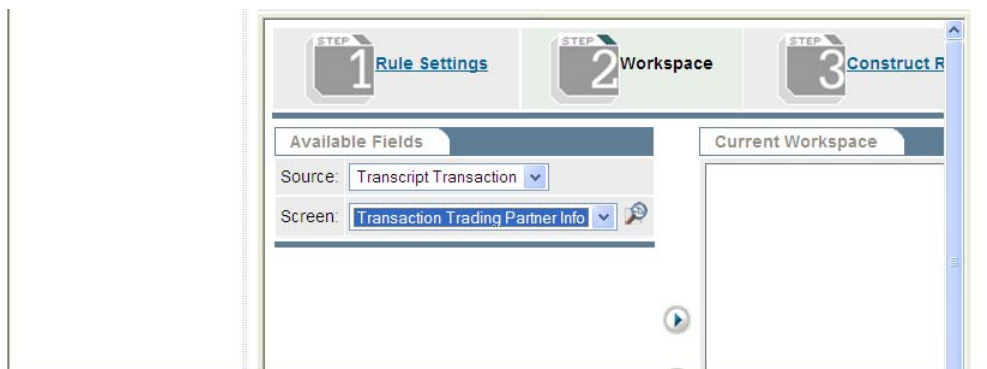


Figure E-4. Rules Wizard, Workspace Segment

4. For the “Source”, select “Transcript Transaction”. For the “Screen”, select “Transaction Trading Partner Info”. The list of Available Fields will populate as shown in *Figure E-5*.

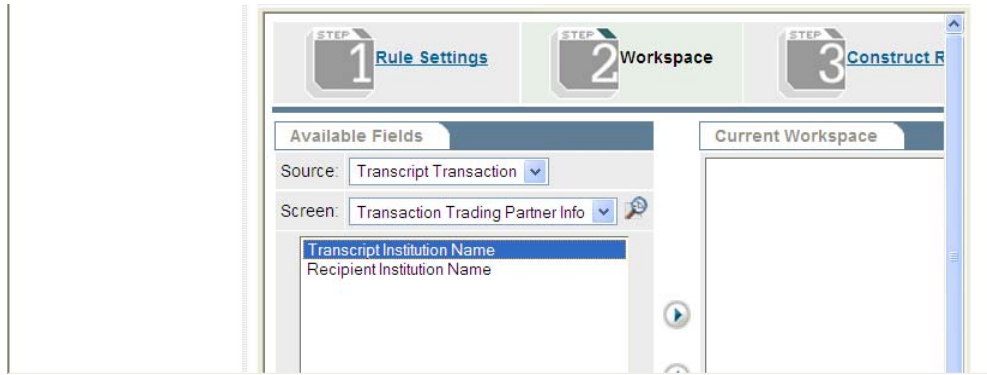


Figure E-5. Rules Wizard, Workspace Segment: Fields Listed

5. From the listed fields, select “Transcript Institution Name” as shown in *Figure E-5*. Click the right-pointing arrow to move that value into the “Current Workspace” column, as shown in *Figure E-6*.

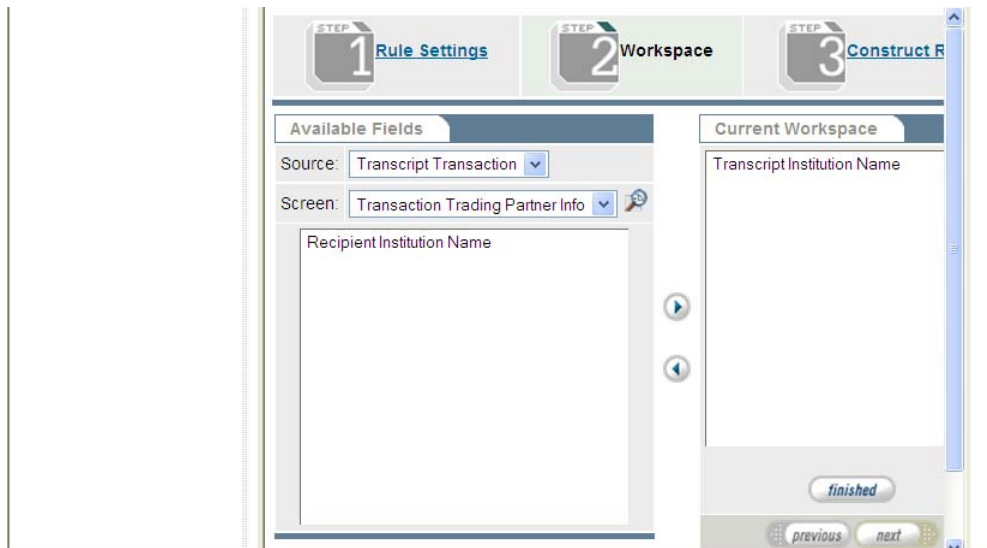


Figure E-6. Rules Wizard, Workspace Segment: Field Selected

6. Click the “finished” button directly below “Current Workspace”. The Rules Wizard will advance to the Construct Rule segment as shown in *Figure E-7*.



Figure E-7. Rules Wizard, Workspace Segment: Field Selected

7. At this point you’ll begin constructing the rule as a Boolean logical statement.

- a. First click on “Transcript Institution Name” in the left column. That field will appear in the Rules Wizard Statement for Butte College as shown in Figure E-8.

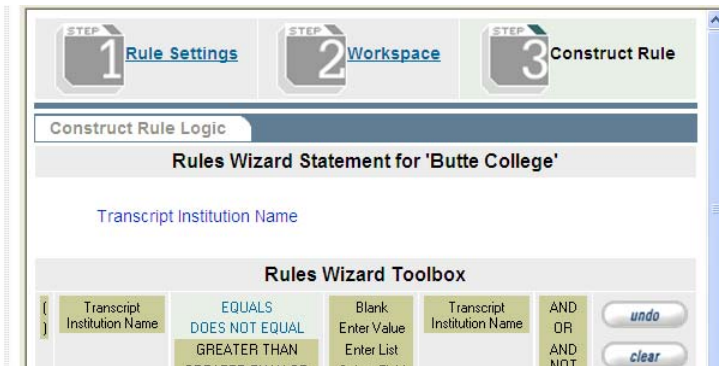


Figure E-8. Rules Wizard: Constructing the Rule

- b. Moving from left to right in the Rules Wizard Toolbox, click on “EQUALS”, which will then appear in the Rules Wizard Statement as shown in Figure E-9.

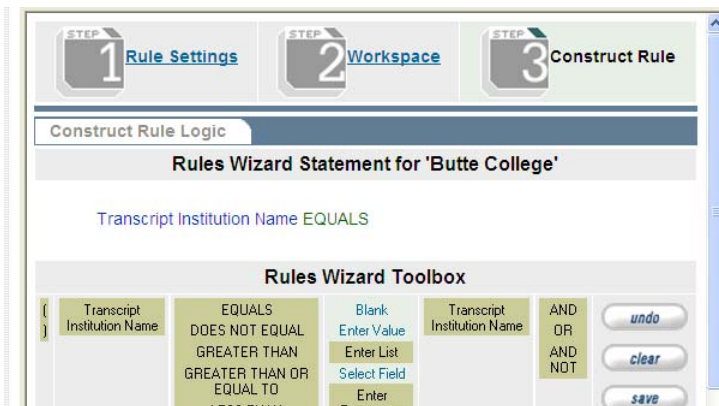
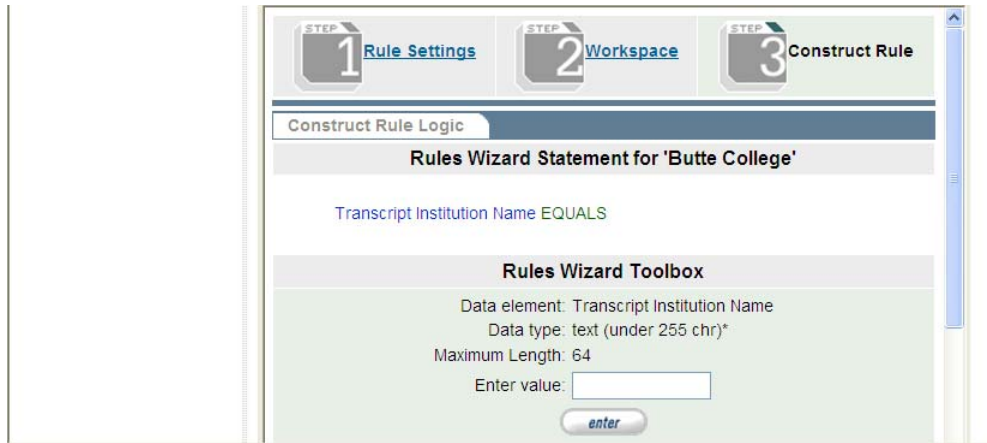


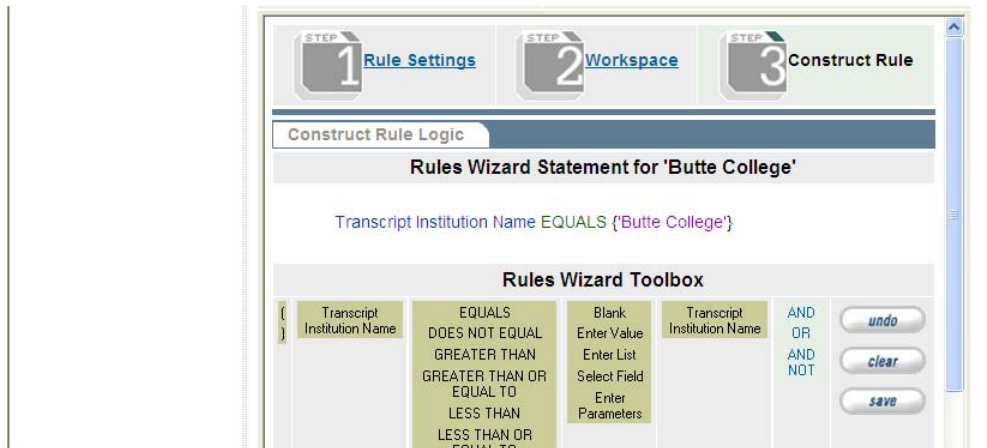
Figure E-9. Rules Wizard: Constructing the Rule

- c. Click on “Enter Value”. The Toolbox will then show the value-entry section shown in *Figure E-10*.



*Figure E-10. Rules Wizard: Constructing the Rule*

- d. Enter the college name EXACTLY as it appears in eTranscript California: in this case, “Butte College”. Then click “enter”. The Rules Wizard Statement will be completed as shown in *Figure E-9*.



*Figure E-11. Rules Wizard: Constructing the Rule*

- e. Click the “save” button. This will create the new rule and close the Rules Wizard.

The screenshot displays the 'Edit College Slot Download Settings' interface for 'Slot 25 Download Settings'. The settings are as follows:

- Setting name:** College Transcript TS130
- Current download format:** College Transcript TS130 (project is pre-generated) with a 'clear' button.
- Downloaded file format:** HTML
- Download Filter:** Butte College
- Remind me by e-mail when new transcripts arrive:** No (selected)
- New transcript reminder schedule:** Daily
- File name pattern for files that contain information for a specifically chosen student:** Xap\_Download .bt
- File name pattern for files that contain information for multiple students:** Xap\_Download .bt
- Number of transcripts per file:** 999 (max download 9999)
- Allow Xap Communicator (formerly known as Xap Auto-Downloader) to download this slot:** Yes (selected)

*Figure E-12. Edit College Download Slot Settings Screen: Rule Applied*

- In the Edit College Download Slot Settings screen, complete any other configuration for the slot that you would like. Then click the “save” button at the bottom of the screen. This will save the new slot configuration, including the added Download Filter.

### **Applying a Filtering Rule for the PDF (Transcript View) Slot**

In this example, we want to create a rule that filters the transcripts downloaded in slot 26 so that all transcripts are downloaded EXCEPT transcripts from Butte College. The procedure for doing this is exactly the same as given above for the TS130 slot, except:

- At step 3, name the rule “Not Butte College”.
- At step 7.b, select “DOES NOT EQUAL” (instead of “EQUALS”).