

**SUNGARD HIGHER EDUCATION** 

**SUMMIT 2008** 

# Implementing XML Transcript Exchange

Presented by: Julia Grubbs,
Board of Regents of the University System of Georgia
April 14, 2008
Course ID S-0638

# **Session Rules of Etiquette**

- Please turn off your cell phone/pager
- If you must leave the session early, please do so as discreetly as possible
- Please avoid side conversation during the session

Thank you for your cooperation!



### Introduction

The Georgia Board of Regents collaborated with the SunGard modifications center to develop the XML postsecondary transcript exchange functionality, which has been incorporated into baseline. We began beta testing in February 2006 based on Student 6.4 / Student 7.2 and have since trained 35 institutions in the use of this functionality. Learn the training and implementation approach used by the Georgia Board of Regents system, tips and tricks, and pitfalls to avoid. This session would be of benefit to any institution considering moving away from paper transcripts to electronic exchange.



## **Agenda**

- Who are we?
- Why the XML Transcript?
- What is PESC: Postsecondary Electronic Standards Committee ?
- What is the XML Transcript?
- How does it work?
- What are the statuses of the USG Project and Requests for Product Enhancements?





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### Who are we?

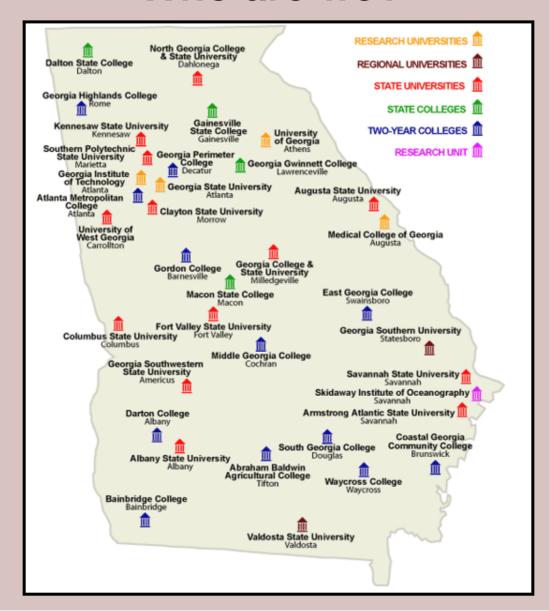
#### Who are we?

# **University System of Georgia**

- 4 Research Universities
- 2 Regional Universities
- 13 State Universities
- 7 State Colleges
- 9 Two-Year Colleges
- 1 Independent Research Unit



#### Who are we?





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# Why the XML Transcript?

## Why the XML Transcript?

- Transcripts are currently exchanged via paper documents sent through mail.
  - Modified version of SHRTRTC
  - Includes Georgia specific information
- University System elected not to use SunGard HE Banner's EDI.Smart product.



# Why the XML Transcript?

- Partnership with SunGard Higher Education
- Based on PESC standards
- More flexible than EDI
- User Defined Elements
  - Non-Course requirements
  - Regents' GPA





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## What is PESC?

### What is PESC?

- Postsecondary Electronic Standards Committee (http://www.pesc.org/)
- Established in 1997 and located in Washington, D.C.
- PESC is a non-profit, community-based, umbrella association of colleges and universities; professional and commercial organizations; data, software and service providers; and state and federal government agencies.



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### What is PESC?

- Supports EDI
- Authentication
- Neutral objective third party
- National standards in development
  - Workgroups



### What is PESC?

http://www.pesc.org



5th Annual Conference on Technology & Standards > Details & Info Fall 2008 Summit

Home

About PESC

**PESC Workgroups** 

Standards & Info

**PESC Membership** 

Resource Center

Events

#### Standards & Info

**PESC Approved Standards** 

**EDI Implementation Guides** 

Institutional Codes Crosswalk

Library of Codes

**Policies & Procedures** 

Standards & Info Overview

XML Registry & Repository

# PESC Approved Standards

Links to detail pages on each approved standard are coming soon...

- · Common Record: CommonLine(CRC)
- Data Transport Specification
- High School Transcript
- Online Loan Counseling
- Transcript Acknowledgement and Batch
- XML Postsecondary Transcript

#### DOWNLOADS

#### Core Main Info

Core Main v 1.2.0
Core Main v 1.1.0
Core Release Notice
Core Main v 1.0.0

To view the files simply click on the links above. To save to your computer, right-click and select "save target as" (in IE).

Home | About PESC | PESC Membership | PESC Workgroups | Standards & Info | Resource Center | Events

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# What is the XML Transcript?

- XML Extensible Markup Language
- Architecture of the XML Transcript
- XML Transcript Setup and Processing
- Security
  - Pretty Good Privacy (PGP)
  - Secure FTP



```
<?xml version="1.0" encoding="UTF-8" ?>
- <urn; AcademicRecordBatch xmlns; xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:core="urn:org:pesc:core:CoreMain:v1.0.1a"
   xmlns: ColTrn="urn:org:pesc:message:CollegeTranscript:v1.0.0"
   xmlns: AcRec="urn:org:pesc:sector:AcademicRecord:v1.0.0"
   xmlns:urn="urn:org:pesc:message:AcademicRecordBatch:v1.0.0">
 - <ColTrn: CollegeTranscript>
   - <TransmissionData>
      <DocumentID>transa2007-03-12T11:07:07.61
      <CreatedDateTime>2007-03-12T11:07:07.61</CreatedDateTime>
      <DocumentTypeCode>RequestedRecord/DocumentTypeCode>
      <TransmissionType>Original</TransmissionType>
     - <Source>
      - <Organization>
          <FICE>transa</FICE>
          <OrganizationName>P92711 Database</OrganizationName>
        - <Contacts>
          - <Address>
              <AddressLine>OIIT</AddressLine>
              <addressLine>2500 Daniells Bridge Road</addressLine>
              <AddressLine>Bldq 300</AddressLine>
              <City>Athens</City>
              <StateProvinceCode>GA</StateProvinceCode>
              <PostalCode>31061</PostalCode>
            </Address>
          - <Phone>
             <AreaCityCode>706</AreaCityCode>
              <PhoneNumber>5832000</PhoneNumber>
            </Phone>
          </Contacts>
        </Organization>
      </Source>
     - <Destination>
      - <Organization>
          <FICE>transb</FICE>
          <OrganizationName>Institution B</OrganizationName>
```

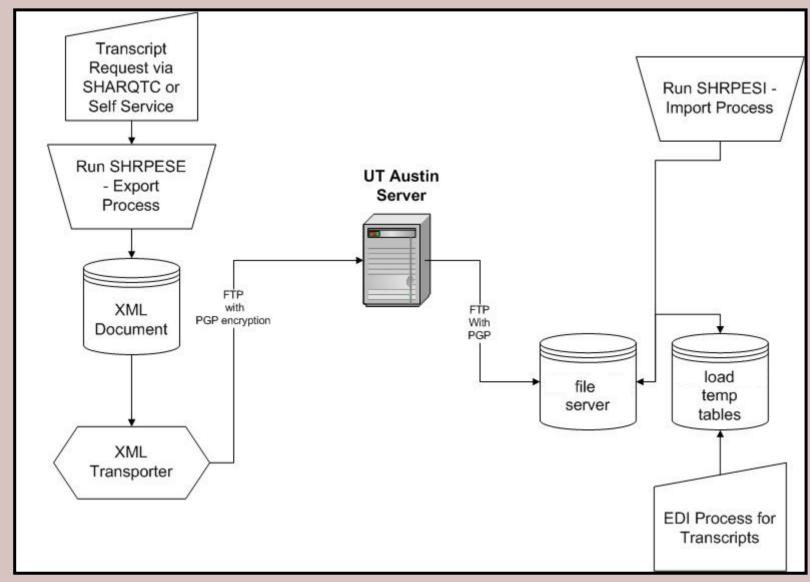


```
- <AcademicRecord>
 - <AcademicSummarv>
     <AcademicSummaryTyne>SenderOnly</AcademicSummaryTyne>
    <AcademicSummaryLevel>Undergraduate</AcademicSummaryLevel>
  - <GPA>
      <CreditHoursAttempted>31</CreditHoursAttempted>
      <CreditHoursEarned>31</CreditHoursEarned>
      <GradePointAverage>3.516129032</GradePointAverage>
      <TotalOualityPoints>109</TotalOualityPoints>
      <CreditHoursforGPA>31</CreditHoursforGPA>
     </GPA>
   </AcademicSummarv>
 - <AcademicSession>
   - <AcademicSessionDetail>
       <SessionDesignator>2004-08</SessionDesignator>
      <SessionDesignatorSuffix>08</SessionDesignatorSuffix>
      <SessionName>Fall 2004</SessionName>
      <SessionType>Semester</SessionType>
      <SessionBeginDate>2004-08-18</SessionBeginDate>
      <SessionEndDate>2004-12-06</SessionEndDate>
     </AcademicSessionDetail>
   - <StudentLevel>
       <StudentLevelCode>CollegeFirstYear</StudentLevelCode>
     </StudentLevel>
   - <Course>
       <CourseCreditBasis>Regular</CourseCreditBasis>
      <CourseCreditUnits>Semester</CourseCreditUnits>
      <CourseCreditLevel>Undergraduate</CourseCreditLevel>
       <CourseCreditValue>3</CourseCreditValue>
      <CourseCreditEarned>3</CourseCreditEarned>
      <CourseAcademicGradeScaleCode>25</CourseAcademicGradeScaleCode>
       <CourseAcademicGrade>A</CourseAcademicGrade>
       <CourseCIPCode>540101</CourseCIPCode>
       <CourseQualityPointsEarned>12</CourseQualityPointsEarned>
      <CourseSubjectAbbreviation>HIST</CourseSubjectAbbreviation>
      <CourseNumber>1131</CourseNumber>
       <CourseSectionNumber>04</CourseSectionNumber>
      <CourseTitle>World Civilization & Soc I</CourseTitle>
      <CourseBeginDate>2004-08-18</CourseBeginDate>
      <CourseEndDate>2004-12-06</CourseEndDate>
     </Course>
```



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Course ID S-0638







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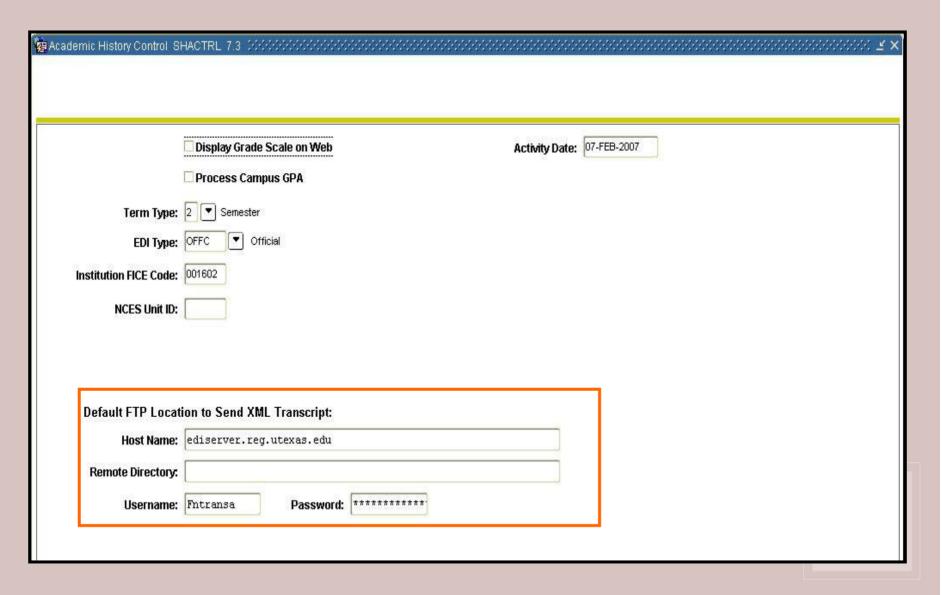
## How does it work?

#### How does it work?

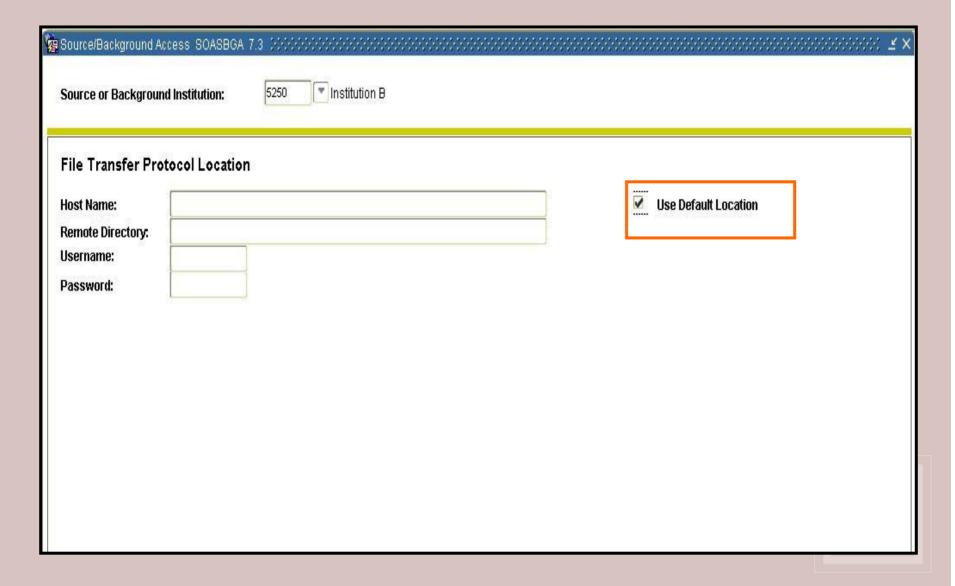
- Set up supporting validation and rules
- Set up translations on SOAXREF
- To send a transcript
  - Create transcript request
  - Run export process
- UT Austin Server
- To receive a transcript
  - Run import process
  - Match student
  - Route data to appropriate tables
- PGP / FTP



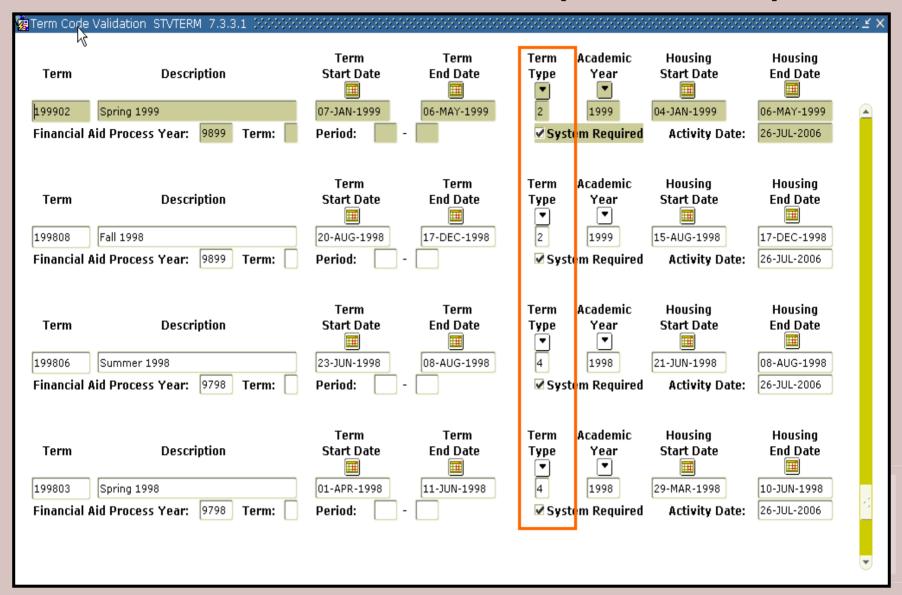
# **Academic History Control (SHACTRL)**



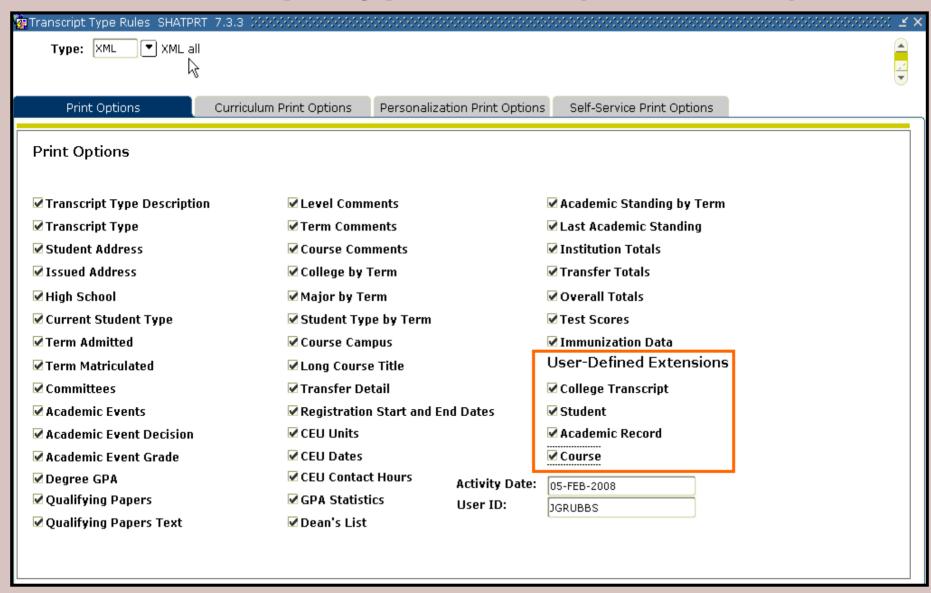
# Source/Background Access (SOASBGA)



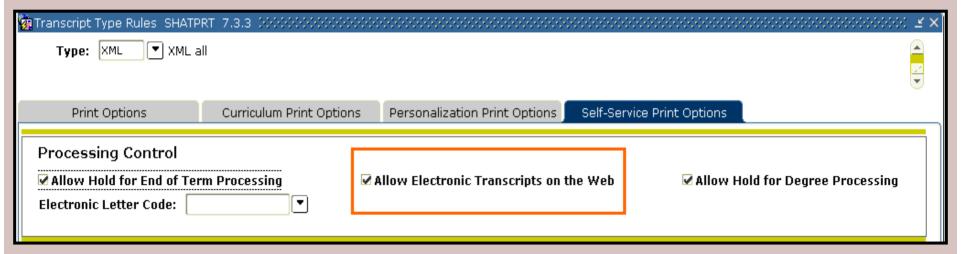
# **Term Code Validation (STVTERM)**



# **Transcript Type Rules (SHATPRT)**



# **Transcript Type Rules (SHATPRT)**



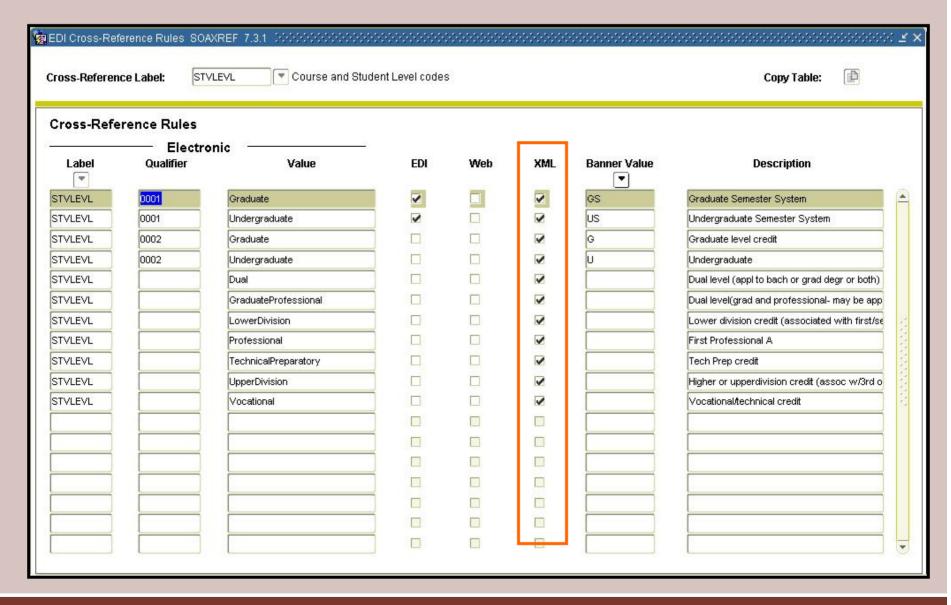


# Source/Background Institution Code Validation (STVSBGI)

rce/Background Institution Code Validation S rce or Background Institution Description		Туре	Source Indicator	Admissions Request	Electronic FICE		Voice Response Message Number	
<mark>5250</mark>	Institution B	С			Р	001573		
5252	Institution A	C			P	001602		
					<del></del>			
					<del></del>			
					<del></del>			
					<del></del>		4	
			_		<del></del>		-	
					<del></del>		4	



# **EDI Cross-Reference Rules (SOAXREF)**



# **SOAXREF Setup (sample)**

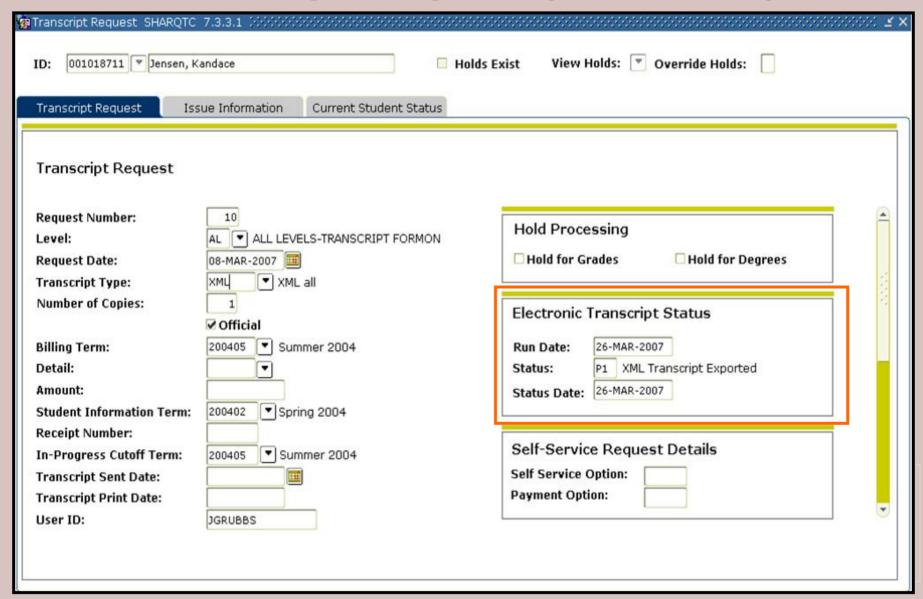
- Academic Standing
- Class Standing
- Grade Mode
- Honors
- Levels
- Nations
- States
- Colleges
- High Schools
- Test Codes



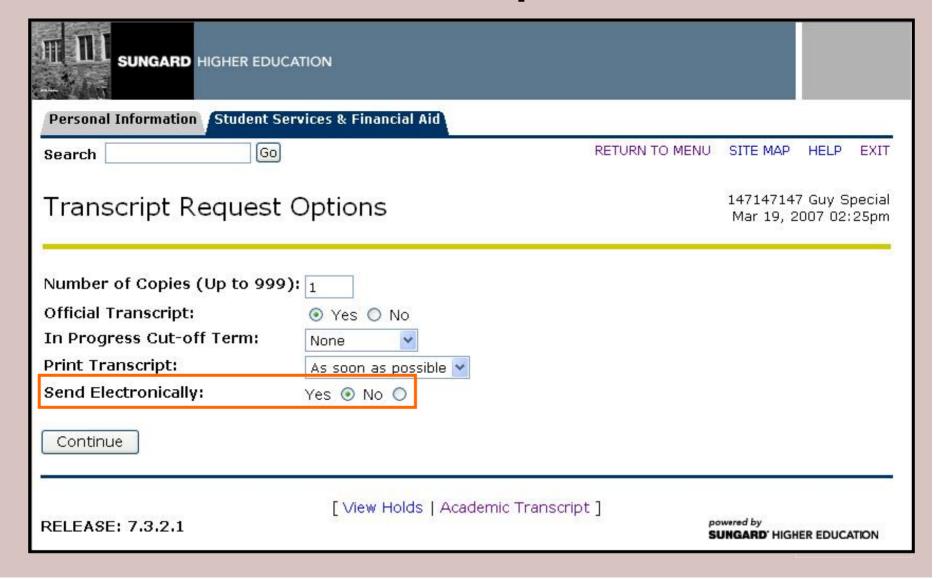
# Electronic Document Status Code Validation (STVDSTS)

Status Code Description Priority Indicator Ind	User-Defined Extensions  Academic			
vMMU         Immunization (GOAIMMU)         80         N         N         N         Y         N         N           ICRS         Non-Course Requirements         75         N         N         N         N         N         N         N         Y           EST         Test Scores         70         N         N         Y         N         N         N           RAN         Transfer Articulation         50         Y         N         N         N         N         N	Record	Course		
CRS         Non-Course Requirements         75         N         N         N         N         N         Y           SST         Test Scores         70         N         N         Y         N	N	N		
Test Scores	N	N		
RAN Transfer Articulation 50 Y N N N N	N	N		
	N	N		
ERF         Verify Person         1         N	N	N		
	N	N		

# **Transcript Request (SHARQTC)**



# Student Self-Service – Request Printed Transcript



# PESC/XML Export Process (SHRPESE)

- Selects records with Output Type of "P" (SHARQTC)
- Extracts data mapped to PESC/XML standards (SOAXREF)
- Prepares XML file
- Contains multiple transcripts with multiple destinations in a single file



# PESC/XML Export Process (SHRPESE)

- Any translation errors must be resolved (.lis file) before a file will transmit successfully
  - Fix errors as appropriate
  - Request new transcript (SHARQTC)
  - Run SHRPESE



### **UT Austin Server**

- http://registrar.utexas.edu/speede
- Acts like an electronic post office
- Very responsive staff
- E-mail notifications
  - Sending institution Texas received file from you
  - Receiving institution Texas delivered file to you
  - Any technical (ftp, encryption, etc.) issues



#### **UT Austin Server**

# *Speede*

Home

Docs

Reports

Tools

TREX

Help

Links

Contact

Welcome to the SPEEDE Server at the University of Texas at Austin

» New - Jan 2008 - SPEEDE implementation of the Texas Records Exchange (TREx)

#### Documentation

PGP Quick Guide

SSH Questions & Answers

SPEEDE Implementation

Registration Steps

Registration Form

Transcript Receipt Checklist

ETN to SPEEDE Conversion

TREx Implementation

#### Help & FAQs

SPEEDE FAQ

PGP FAQ

SSH FAQ

FTPS (Wikipedia)

Registration Form

#### Tools & Software

Quick 'n' Easy (QnE) Utility

QNE Java Version (For Beta Testing Only)

ApplyTexas Software and Documentation

SPONSORED BY





Home Accessibility Contact

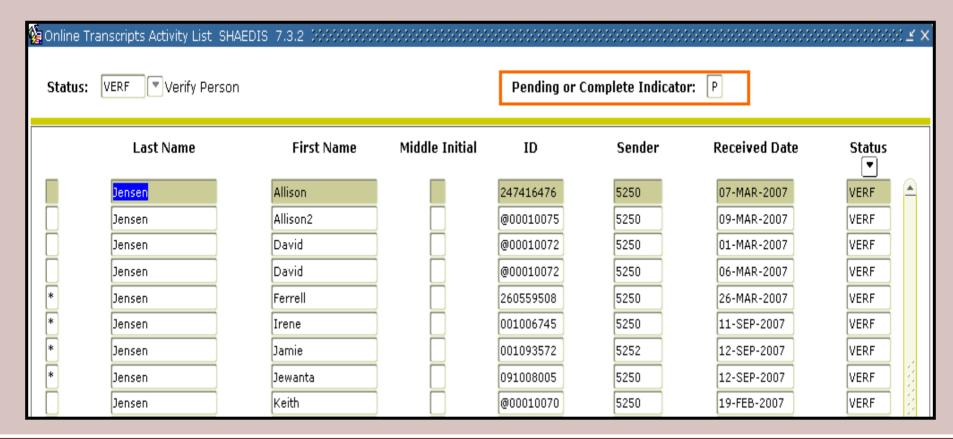
Modified 23 January 2008

# PESC/XML Import Process (SHRPESI)

- Imports any available files from specified directory
- Translates PESC standard codes to institutional Banner values at time of import
- Must resolve any translation errors
- Loads data into temporary tables
- Appends ".old" to file when successfully imported

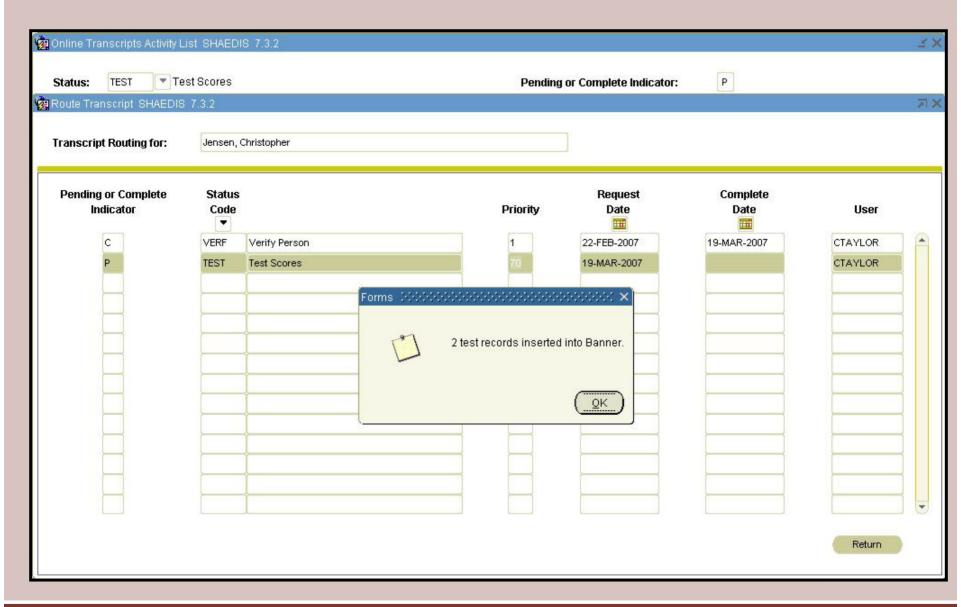


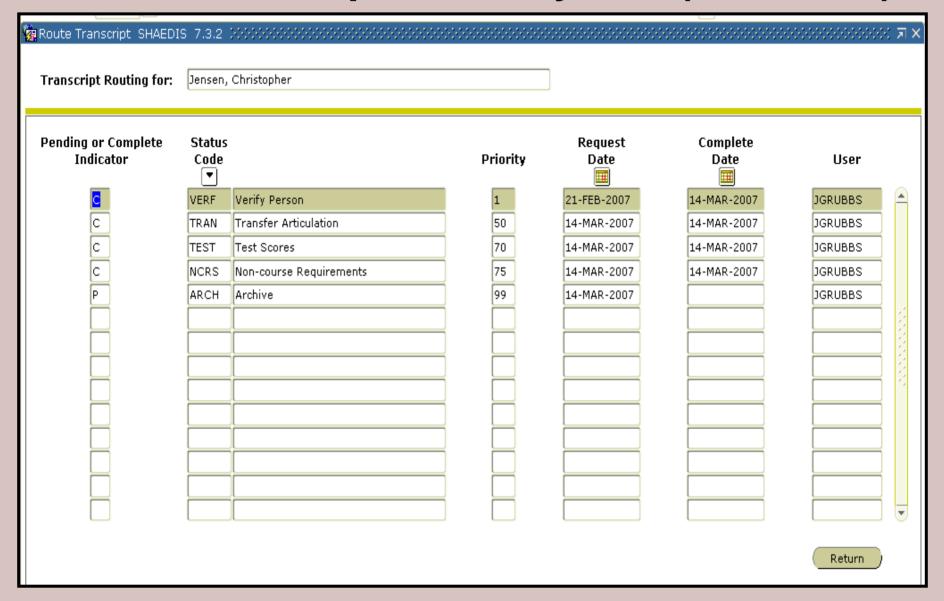
- Imported records appear in Verify Pending list
- Match the student (GOAMTCH)



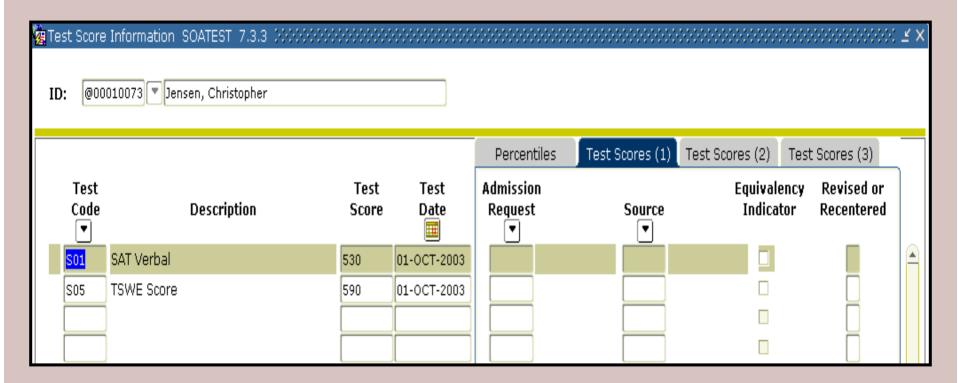
- Route data
  - Test Scores (SOATEST)
  - Immunization (GOAIMMU)
  - Courses (SHATAEQ, SHATRNS)
  - User Defined Elements





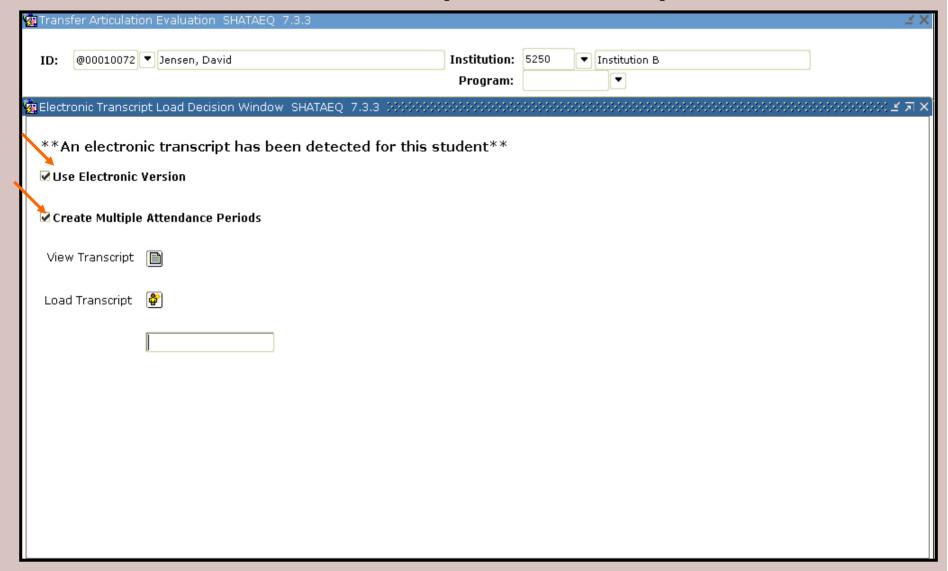


# **Verification of Imported Data**





# Electronic Transcript Load Decision Window (SHATAEQ)



# Transfer Articulation Evaluation (SHATAEQ)

Transfer Articulation Evaluation SHATAEQ 7.3.3 \$6666666666666666666666666666666666														
Attendanc Period	e Term ▼	Level	Trans F Group	rimary	/ Subject ▼	Course ▼	Credit Hours	Grade ▼	Articulate Ind	Equivalent Level Subject	Course	Credit Hours	Grade ▼	
1	200402	U			MATH	1111	3.000	А						
2	200408	U			СНЕМ	1211	3.000	А						
2	200408	U			CHEM	1211L	1.000	А						
2	200408	U			ENGL	1101	3.000	В						
2	200408	U			MATH	1120	4.000	В						
2	200408	U			THEA	1100	3.000	В						- 1
	200408						1.000	A						**************************************

# **Pretty Good Privacy (PGP)**

- Download freeware for PGP
  - http://www.pgpi.org/products/pgp/versions/freeware/
  - Version 6.5.8 supports RSA keys.
- Update pgp.properties file in both export (SHRPESE) and import (SHRPESI) processes to use pgp encryption
- Register your institution's key
  - http://registrar.utexas.edu/speede/docs/pgp-faq.html



#### **Secure FTP**

- Secure FTP available with Student 7.3.1
- Write shell script for shrpese.jar to use SFTP
- Advantage over PGP? User login credentials protected





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# What are the statuses of the USG Project and Requests for Product Enhancements?

### Status of the USG Project

- June 2006 Released mod to USG
- August 2006 Recommended postponing implementation until baseline released
- December 2006 Released Student 7.3, 7.3.1, General 7.4 to USG
- February 2007 Released Student 7.3.2 (immunization transmission)

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#### Status of the USG Project

- February/March 2007 Implementation
  - Five training sessions
  - 32 institutions
  - Functional and technical staff
  - Setup on Test and Production database
- Recommissioned Georgia Enhancement print transcript
- October 2007 Released Student 7.4 to USG



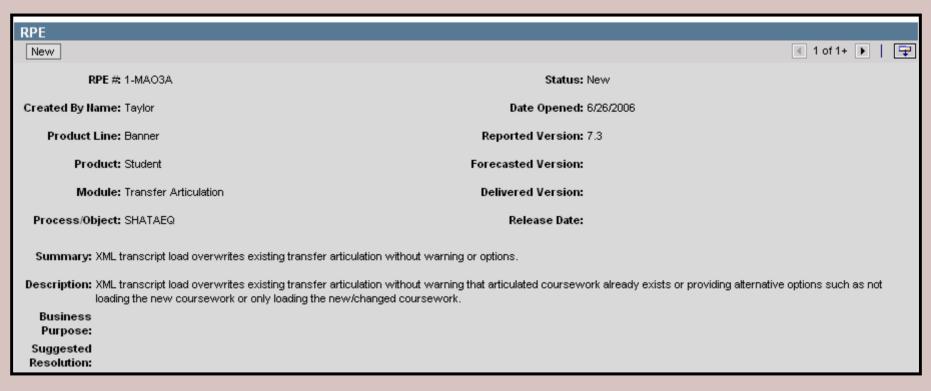
#### Status of the USG Project

Resolving issues encountered during training

- Requests for Product Enhancements
  - Update SOAPCOL Prior College and Admissions Request fields
  - Load Academic Award info (SHADEGR)
  - Only load new/changed transfer courses



#### RPE # 1-MAO3A





#### RPE # 1-MAO3A

- Executive commitment
- Proposed solution is planned for Banner Student 8.1
- Possible solutions
  - Provide option to load only new coursework
  - Provide warning if coursework exists
  - Provide display of existing transfer articulation
  - Provide option to choose overwrite with new or keep existing



#### RPE # 1-MAO3A

#### **SGHE Transfer Articulation Focus Group**

- Conference calls
- Prioritize enhancements
- Review White Paper Transfer Articulation Focus Group
  - Mid to Late March
- Present and Validate White Paper at Summit
  - Monday, April 14 @12:30pm-1:30pm



# **Next Steps**





#### Summary

- Test, test, and test again
- Accurate translation is vital
- Review institutional business process
- Submit and support RPEs



#### **Questions & Answers**





#### **Thank You!**

#### **Julia Grubbs**

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(888) 875-3697 or (706) 583-2000 julia.grubbs@usg.edu

Please complete the online class evaluation form Course ID S-0638

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