

Kuali Financial System Implementation  
Collector Interface Meeting  
December 17, 2008



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- Presenters

Kevin McHenry – Information Systems

John Hunter – Financial Systems Services

A decorative graphic consisting of overlapping colored squares (blue, purple, green) and a black crosshair.

# Goals

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- Overview of the Kuali Financial System (KFS) Collector Interface Format
- Differences from FRS
- Answer your questions

A decorative graphic consisting of overlapping squares in blue, purple, and green, with a black crosshair intersecting them.

# Overview

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Implementation Date - July 1, 2009

- Fiscal Year 2010
- Replaces Financial Records System (FRS)
- Replaces Campus Information System (CIS)  
(including ABYSS for FY2011)
- Replaces Delphi Data Warehouse



# Current FRS File

---

```
$$$KLM001070109BATCH DESCRIPTN* 0000100000123456KLM  
06X1234563410REF1XXX0701TRANSACTION DESCRPTN00000123456 REF2XXX  
7654322001ID NUMBERXXREF3XXX- -----USER AREA
```

- ❑ Header Record
  
- ❑ Transaction records
  
- ❑ Fixed Position
  - Debit Account in position 4-9
  - Credit Account in position 64-69



# KFS Collector File

---

```
<?xml version="1.0" encoding="UTF-8"?>
<batch xmlns="http://www.kuali.org/modules/gl/collector" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<header>
  <chartOfAccountsCode>CO</chartOfAccountsCode>
  <organizationCode>6003</organizationCode>
  <transmissionDate>2009-07-01</transmissionDate>
  <batchSequenceNumber>0</batchSequenceNumber>
  <personUserId>kul</personUserId>
  <workgroupName>xxxxxxx@colostate.edu</workgroupName>
  <campusCode>M</campusCode>
  <phoneNumber>491-1586</phoneNumber>
  <mailingAddress>1029 Campus Delivery</mailingAddress>
  <departmentName>info Sys</departmentName>
</header>
<glEntry>
  <chartOfAccountsCode>CO</chartOfAccountsCode>
  <accountNumber>1234567</accountNumber>
  <objectCode>4707</objectCode>
  <balanceTypeCode>AC</balanceTypeCode>
  <documentTypeCode>CLTR</documentTypeCode>
  <originationCode>P1</originationCode>
  <documentNumber>KLM07010900001</documentNumber>
  <transactionLedgerEntryDescription>Description</transactionLedgerEntryDescription>
  <transactionLedgerEntryAmount>1234.56</transactionLedgerEntryAmount>
```



# KFS Collector File (Cont)

---

```
<debitOrCreditCode>C</debitOrCreditCode>
<transactionDate>2009-07-01</transactionDate>
<organizationDocumentNumber>ODN</organizationDocumentNumber>
  <organizationReferenceId>ORI</organizationReferenceId>
</glEntry>
<glEntry>
  <chartOfAccountsCode>CO</chartOfAccountsCode>
  <accountNumber>7654321</accountNumber>
  <objectCode>2001</objectCode>
  <balanceTypeCode>AC</balanceTypeCode>
  <documentTypeCode>CLTR</documentTypeCode>
  <originationCode>P1</originationCode>
  <documentNumber>KLM07010900001</documentNumber>
  <transactionLedgerEntryDescription>Description</transactionLedgerEntryDescription>
  <transactionLedgerEntryAmount>1234.56</transactionLedgerEntryAmount>
  <debitOrCreditCode>D</debitOrCreditCode>
  <transactionDate>2009-07-01</transactionDate>
  <organizationDocumentNumber>ODN</organizationDocumentNumber>
  <organizationReferenceId>ORI</organizationReferenceId>
</glEntry>
<trailer>
  <totalRecords>2</totalRecords>
  <totalAmount>1234.56</totalAmount>
</trailer>
</batch>
```

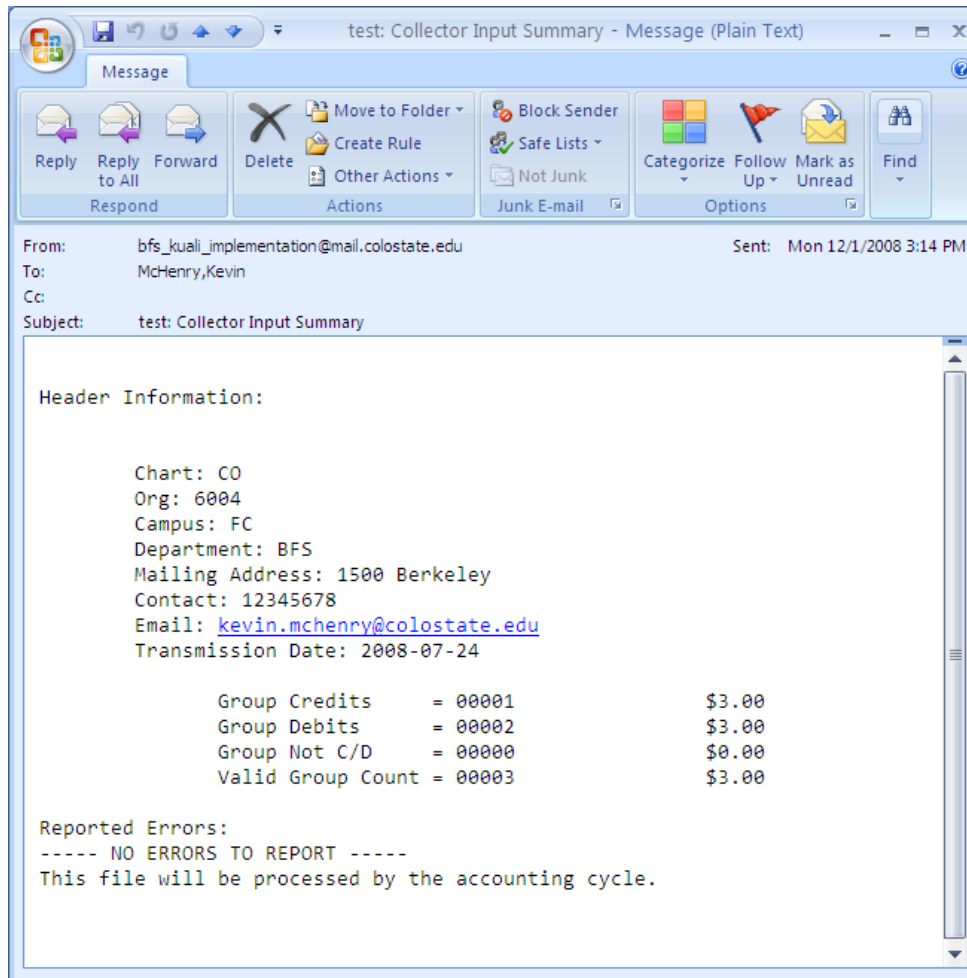


## KFS Collector File (Cont)

---

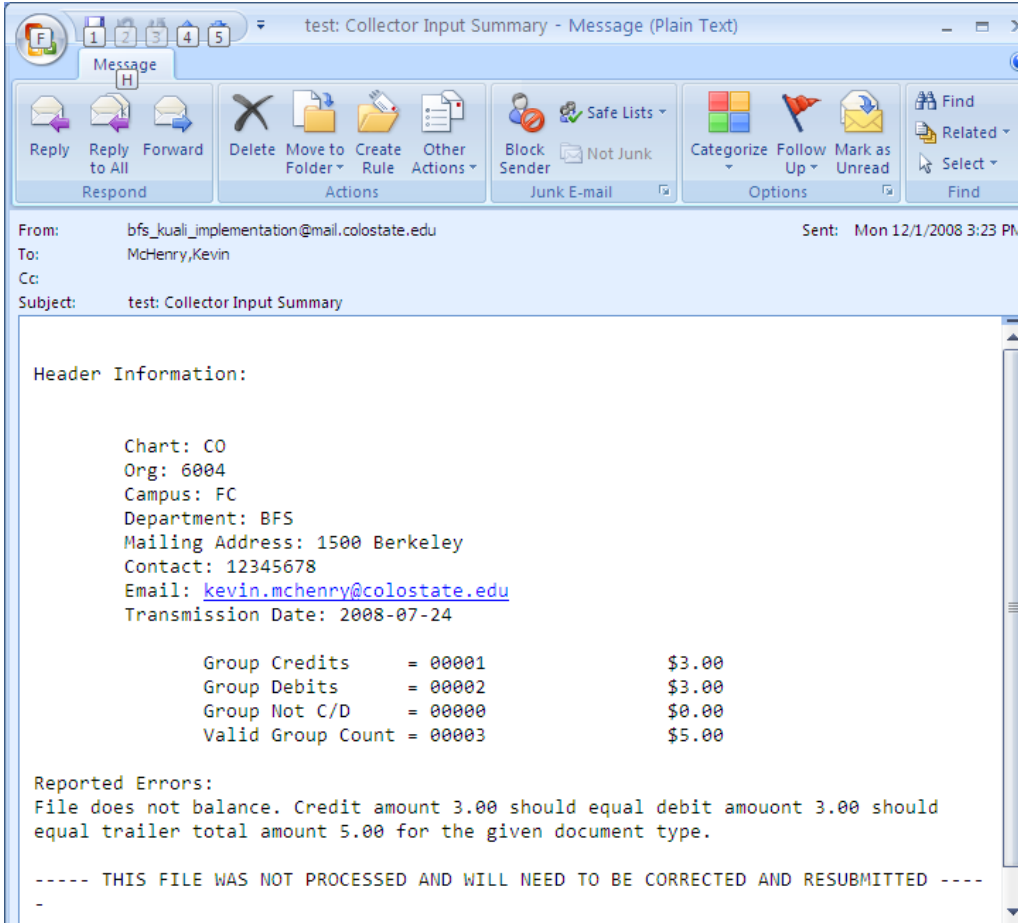
- Fixed position replaced by XML format
- Totals go in Trailer section
- Separate entry for Debits and Credits
- Debits and Credits total must equal
- Supports Mixed Case

# Example email – No Errors





# Example email – Balance Error



test: Collector Input Summary - Message (Plain Text)

Message (H)

Reply Reply Forward  
to All

Delete Move to Create Other  
Folder Rule Actions

Block Safe Lists  
Sender Not Junk

Categorize Follow Mark as  
Up Unread

Find Related  
Select  
Find

From: bfs\_kuali\_implementation@mail.colostate.edu Sent: Mon 12/1/2008 3:23 PM  
To: McHenry, Kevin  
Cc:  
Subject: test: Collector Input Summary

Header Information:

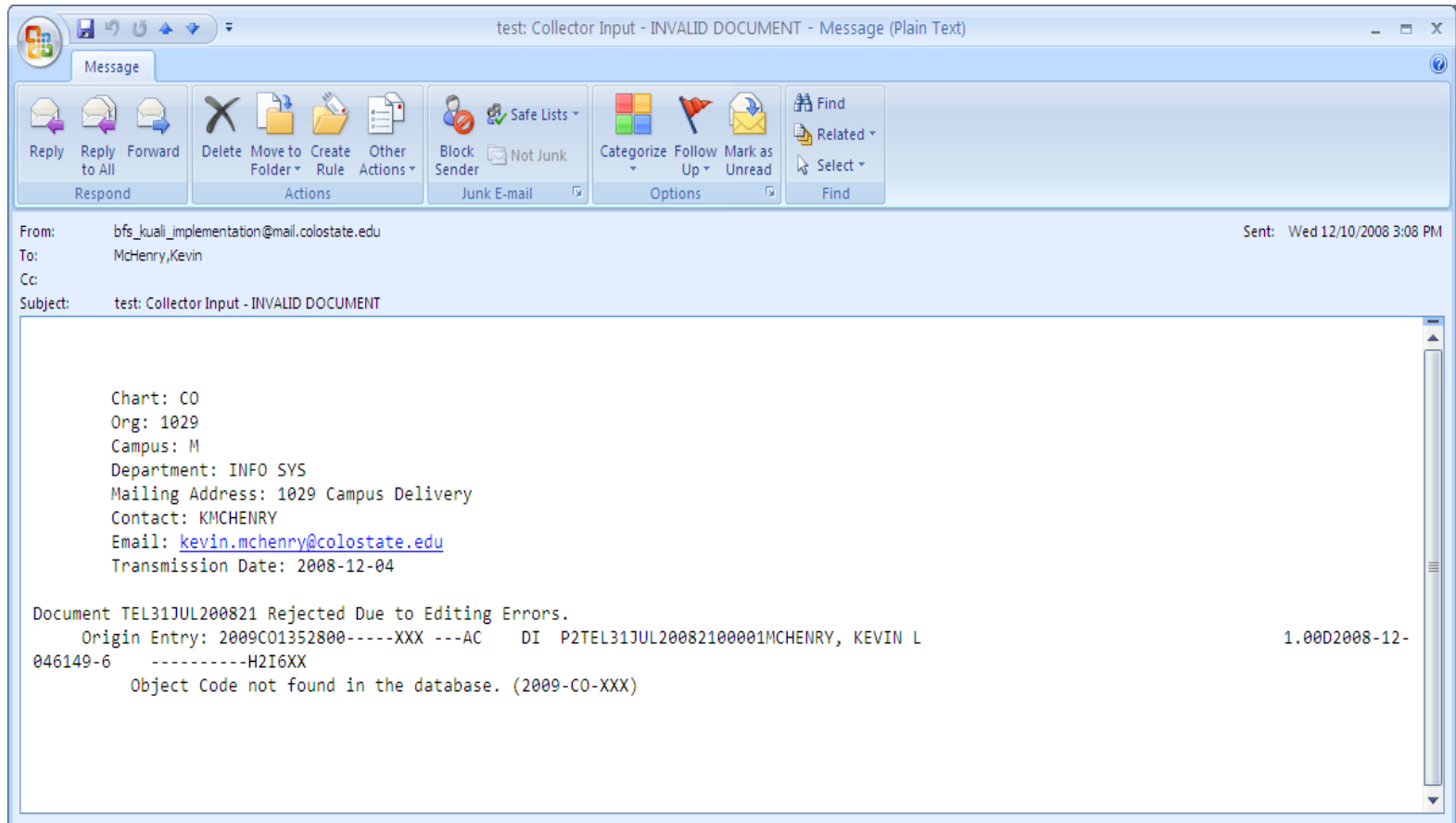
Chart: C0  
Org: 6004  
Campus: FC  
Department: BFS  
Mailing Address: 1500 Berkeley  
Contact: 12345678  
Email: [kevin.mchenry@colostate.edu](mailto:kevin.mchenry@colostate.edu)  
Transmission Date: 2008-07-24

Group Credits	= 00001	\$3.00
Group Debits	= 00002	\$3.00
Group Not C/D	= 00000	\$0.00
Valid Group Count	= 00003	\$5.00

Reported Errors:  
File does not balance. Credit amount 3.00 should equal debit amount 3.00 should equal trailer total amount 5.00 for the given document type.

----- THIS FILE WAS NOT PROCESSED AND WILL NEED TO BE CORRECTED AND RESUBMITTED -----  
-

# Example email – Invalid Document





# KFS Collector File Sections

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- **<header>...</header>**
  - One per file
  - General information
  - workgroupName tag used to send email. Only one address
  - Used to detect/reject duplicate files
  
- **<glEntry>...</glEntry>**
  - Contains all elements an individual accounting line
  - Each glEntry contains one side of the accounting entry
  - All glEntry records must be the same document type code

# KFS Collector File Sections (Cont)

---

- **<trailer>...</trailer>**
  - One per file
  - <totalRecords> contains number of glEntry records
  - <totalAmount> contains sum of credit (or debit) amounts
  - Debit and Credit totals must equal
  - Email generated indicating file doesn't balance
  - Entire file must be resubmitted.



# Required <header> Fields

---

- <chartOfAccountsCode>
  - Usually CO. Also BG
- <organizationCode>
  - Four digit department number
- <transmissionDate>
  - Format CCYY-MM-DD
- <batchSequenceNumber>
  - System uses these four fields to detect duplicate files
  - Increment when multiple files for same date, or resending a rejected file



## Required <header> Fields (Cont)

---

- <personUserId> 8 characters
- <workgroupName> 70 characters
  - Email address to be notified of file status
- <campusCode> 2 characters
  - Use M
- <phoneNumber> 20 characters
- <mailingAddress> 30 characters
- <departmentName> 30 characters



# Required <glEntry> Fields

---

- <chartOfAccountsCode>
  - Based on Account. Usually CO. Also BG
- <accountNumber>
  - FRS GL and SL Accounts merged into one
  - Seven digits
  - Conversion available on BFS website, [kuali.colostate.edu](http://kuali.colostate.edu)
- <objectCode>
  - Conversion ????
- <balanceTypeCode>
  - Always use AC

# Required <glEntry> Fields (Cont)

---

- <documentTypeCode>
  - Always use CLTR
  
- <documentNumber>
  - Individual documents removed from file
  - Use to group debit/credit transactions. GL Poster will “demerge” all trans for Doc#, example: Frozen account.
  - Suggest XXXMMDDYY12345 = BatchRef + Date + Seq#. Allows for 99,999 dr/cr pairs



# Required <glEntry> Fields (Cont)

- <originationCode>
  - Assigned by Kuali team
  - Uniquely identifies each interfacing system

Department	KFS Origination Code	FRS Batch Ref
1018 ACNS	A1	CCB
8035 Bookstore	B1	SCM
6011 Central Receiving	C1	YMS
1644 Diag Lab	D1	DOO
6030 Facilities	F1	PPL
2007 Lab Animal Resources	L1	VRS
2021 Macro Res Facil	M1	YBC
6004 Payroll	P1	YPL
1009 Telecom	T1	TEL
2002 Spon Pgm	S1	VRA
1620 VTH	V1	YVH

# Required <glEntry> Fields (Cont)

---

- <transactionLedgerEntryDescription>

- 40 characters. FRS was only 20.

- <transactionLedgerEntryAmount>

- No implied decimal, must include.

<transactionLedgerEntryAmount>100</transactionLedgerEntryAmount>  
\$100 not \$1.00

- Positive. Use <debitOrCreditCode> to control sign.

- <debitOrCreditCode>

- C or D

- <transactionDate>

- Format CCYY-MM-DD



# Optional <glEntry> Fields

---

- <organizationDocumentNumber>
  - 10 characters
  - Can be used to replace FRS REF1 field
  
- <organizationReferenceId>
  - 8 characters
  - Can be used to replace FRS REF2 field



# New <glEntry> Fields

---

- <subAccountNumber>
  - 5 characters
- <subObjectCode>
  - 3 characters
- <projectCode>
  - 10 characters

May be desired/required on your customer's accounting entry.



# Required <trailer> Fields

---

- <totalRecords>
  - Number of glEntry records
- <totalAmount>
  - sum of credit (or debit) amounts



# General XML Rules

---

- Stands for EXtensible Markup Language
- Similar to HTML (used to display data)
- Designed to transport and store data
- XML files form a tree structure that starts at the “root” and branches to the “leaves”
- First line is XML Declaration
  - `<?xml version="1.0" encoding="UTF-8"?>`
- Next line describes the root element
  - `<batch xmlns="http://www.kuali.org/modules/gl/collector" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" >`
- Lines following describe child elements of the root
- Last line defines the end of the root element
  - `</batch>`



# General XML Rules (Cont)

---

- Elements enclosed within tags

```
<header>
```

```
  <transmissionDate>2009-07-01</transmissionDate>
```

```
</header>
```

- Tags are case-sensitive
- Elements must be properly nested

```
<a>
```

```
  <b>
```

```
    <c>Bad Example</c>
```

```
  </a>
```

```
</b>
```



## General XML Rules (Cont)

---

- No spaces at begin or end of tags

`< subObjectCode>XX</subObjectCode >`

Wrong

`<subObjectCode>XX</subObjectCode>`

Right

- Tags must not be empty

`<subObjectCode></subObjectCode>`

Do not include line





## General XML Rules (Cont)

---

- Coding of special characters
  - less than = &lt;
  - greater than = &gt;
  - Ampersand = &amp;
  - Apostrophe = &apos;
  - quotation mark = &quot;

`<deptName>B&FS</deptName>`

Wrong

`<deptName>B&amp;FS</deptName>`

Right

# FRS to KFS Mapping

KFS Tag	Length	FRS Field	Start	End
<accountNumber>	7	Debit Account	4	9
<accountNumber>	7	Credit Account	65	80
<objectCode>	4	Debit Subcode	10	13
<objectCode>	4	Credit Subcode	70	73
<transactionLedgerEntryDescription>	40	Trans Description	25	44
<transactionLedgerEntryAmount>	17	Trans Amount	45	55
<organizationDocumentNumber>	10	Ref 1	14	20
<organizationReferenceId>	8	Ref 2	57	63

A decorative graphic on the left side of the slide consisting of overlapping squares in blue, purple, and green, with a black crosshair.

# File Transmission

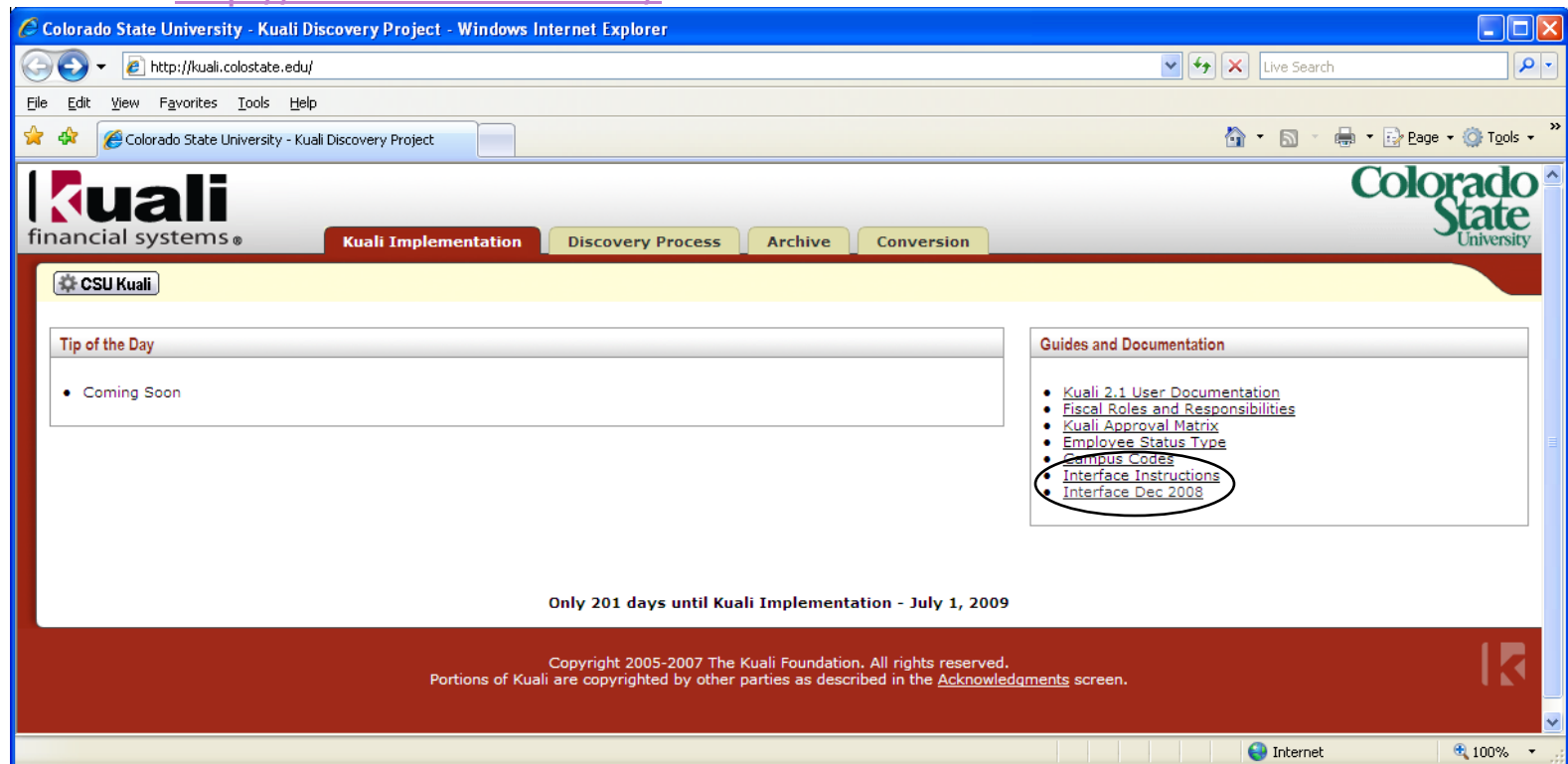
---

- Test files
  - [Email to:](mailto:bfs_kuali_implementation@mail.colostate.edu)  
[bfs\\_kuali\\_implementation@mail.colostate.edu](mailto:bfs_kuali_implementation@mail.colostate.edu)
  
- Production files
  - Details for sending production files will be communicated in the Spring 2009.
  - Will require sftp or SSH.

# More information/questions

[bfs\\_kuali\\_implementation@mail.colostate.edu](mailto:bfs_kuali_implementation@mail.colostate.edu)

<http://kuali.colostate.edu/>



The screenshot shows a Windows Internet Explorer browser window displaying the Colorado State University - Kuali Discovery Project website. The address bar shows <http://kuali.colostate.edu/>. The website header includes the Kuali financial systems logo on the left and the Colorado State University logo on the right. Below the logos are navigation tabs: **Kuali Implementation**, Discovery Process, Archive, and Conversion. A yellow banner below the tabs contains a gear icon and the text "CSU Kuali".

The main content area is divided into two columns. The left column has a "Tip of the Day" section with a single bullet point: "Coming Soon". The right column has a "Guides and Documentation" section with a list of links:

- [Kuali 2.1 User Documentation](#)
- [Fiscal Roles and Responsibilities](#)
- [Kuali Approval Matrix](#)
- [Employee Status Type](#)
- [Campus Codes](#)
- [Interface Instructions](#)
- [Interface Dec 2008](#)

The "Interface Instructions" and "Interface Dec 2008" links are circled in black. Below the content area, a red banner reads "Only 201 days until Kuali Implementation - July 1, 2009". At the bottom of the page, a copyright notice states: "Copyright 2005-2007 The Kuali Foundation. All rights reserved. Portions of Kuali are copyrighted by other parties as described in the [Acknowledgments](#) screen." The browser's status bar at the bottom shows "Internet" and "100%".