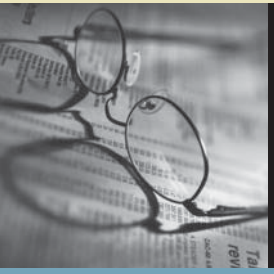

SUNGARD PUBLIC SECTOR

DataUpdate: Inserting JE Sets Using Web Service

IFAS
Integrated Financial &
Administrative Solution

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Should you wish to make a comment, or if you find an error in the text, please contact us via email:

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Document Change Log

Version	Date	Change Description
7.9.4	May 2009	7.9.4 Version

Contents

1 Inserting JE Sets Using the DataUpdate Web Service

1.1 Overview

This document outlines how JE sets can be imported in to IFAS using the DataUpdate web service.

1.1.1 Preparation

Before writing code to call in to the web service, there are two things that should be done.

Connect your application to the web service. The web service can be located at
http://<hostname>/<virtualroot>/Services/Common/DataUpdate.asmx

Generate a strongly typed DataSet with the required tables. The DataSet must include the GLBABatchMaster table, the GLAPAprvMaster table, and the GLATrnsDetail table. To get the most recent version of these schemas, they must be retrieved from the GetSchema method on the web service. To simply the process, the XML for the DataSet has been included in this document below. Once you generate this DataSet, you can use it to pass to the Insert method.

1.2 Schema Description

The table below describes the available columns. The bold columns are required.

Name	**Type / Size**	**Description**
BatchId	Char(16)	Set ID: Multiple records are grouped together in what is called a Set or Batch. NOTE: We are currently transitioning from a maximum of eight characters to 16 characters.
Ref	Char(16)	JE ID: This is the Journal Entry reference number.
Desc	Char(30)	Description: The transaction description. This should be no larger than 30 characters

Date	dateTime	Date: The transaction reference date.
Date2	dateTime	Secondary Date:
GlGr	Char(2)	GL Ledger: The General Ledger code for this entry
GlKey	Char(10)	GL Organization Key: The General Ledger Organization Key for this entry.
GlObj	Char(8)	GL Object Code: The General Ledger Object Code for this entry.
JlGr	Char(2)	JL Ledger: The Job Ledger code for this entry. If left blank, the user's default code will be used.
JlKey	Char(10)	JL Organization Key: The Job Ledger Organization Key for this entry.
JlObj	Char(8)	JL Object Code: The Job Ledger Object Code for this entry.
Wo	Char(12)	Work Order: If applicable, a Work Order number can be passed into the Journal Entry transaction.
Dr	Num(20,2)	Debit: A positive Debit or Credit dollar amount should be provided, never both.
Cr	Num(20,2)	Credit: A positive Debit or Credit dollar amount should be provided, never both.
Units	Num(20,5)	Units: A number of Units may optionally be provided along with or without a Debit/Credit amount.
OffsetIntra	Char(1)	Intrafund Offset: Set to "Y" to apply intrafund offsets automatically when distributing this transaction.
OffsetInter	Char(1)	Interfund Offset: Set to "Y" to apply interfund offsets automatically when distributing this transaction.
Ref2	Char(16)	Secondary Reference: A reference number related to the origin or subsystem of the source transaction
PeId	Char(12)	PE ID: A Person/Entity ID relating to this entry.
ContractNo	Char(16)	Contract No: A Contract number that relates to this entry.

PrepId	Char(8)	Prepared By: The User ID of the person who prepared this entry.
Misc	Char(4)	Misc: A user-defined code that identifies the transaction for reporting purposes.
HitEn	Char(2)	**Hit Other**: This field identifies the subsystem to which this transaction should be entered and this field is required: Value — Purpose N — General Ledger Only (Default) Y — Encumbrances and General Ledger E — Encumbrances Only B — Budgets Only K — Bank Reconciliation and General Ledger L — Bank Reconciliation Only O — Accounts Payable Open-Hold Only I — Accounts Payable Immediate Pay Only
EnType	Char(2)	Other Type: If the "Subsystem Flag" is not "N", then a transaction type must be entered in this field. The following transaction subsystem: Accounts Payable or Encumbrances: EN (Encumbrance), DE (Disencumbered), PP (Partial Payment), or FP (Full Payment) Bank Reconciliation: AJ (Adjustment), BF (Fee), BI (Interest), CK (Check), DP (Deposit), EF (Electronic Funds Transfer), or

		Budgets: A (Budget Adjustment) or N (New Budget)
Date2	DateTime	Secondary Date: The subsystem reference date.
CkId	Char(2)	Check ID: The Check Stock ID or Bank ID used with this entry. This code must be defined in Nucleus Common Codes file un CKID. This field is required if "HitEn" is "K" or "L".
CkNo	Char(8)	Check Number: A Check Number that relates to this entry. This field is required if "HitEn" is "K" or "L".
BudgetOver	Char(2)	Budget Override: If users creating batches have the required Budget Override security defined in Nucleus Database Security, a this field to override budget blocks at data entry time allowing exit from and thus creation of an over-budget JE batch. NOTE: This flag only allows creation of the batch. Correction of the over-budget condition is still required before the batch wi
Subsys	Char(2)	Sub System: The Ifas sub system to which the entry will go into and this field is **Required**.
Views	Char(1)	Views: Four check boxes to select the accounting views to which these transactions will relate. Click on the box to check the vi Accrual Cash Modified Accrual

		User Defined
PostState	Char(2)	Status: This field indicating whether or not the journal entry set has been distributed and this field is **Required** DS The entry set has been distributed. BE The entry set has not been distributed.
CreateDate	DateTime	Create Date: showing the date of creation. This is useful in determining current from non-current sets
CreateUser	Char(8)	This field will display the name of the person creating the set file. The name used to log in will be the default name.
Text	Char(72)	Test: Any notes referring to the transaction.

1.3 Data Structure

The dataset contains three tables and each table must be included in a batch.

The GLBABatchMaster record represents a single batch. You cannot include two records of this table in the same batch, each must have a separate batch id.

The GLAAprvMaster record must be unique for each reference number in each batch.

The GLATrnsDetail is the detail record. There may be several records in each batch for each reference.

There are several repeated fields to attach these records together. The GLBABatchMaster record must have the same BatchId, Desc and PostState as the GLAAprvMaster and GLATrnsDetail records. The GLAPAprvMaster record must include the same BatchId, PostState, Ref and Subsys as the GLATrnsDetail rows associated with it.

1.4 Limitations

There are some limitations to using the DataUpdate web service to create JE batch records. Two major limitations are mentioned below.

If you attempt to insert a batch master or aprv master record when one already exists, you will get an error.

Multiple records can be inserted at the same time, and there is not a specific limit as to how many can be in the same insert call (other than the request must not exceed 8 megs;) however the more records inserted at a time, the more likely an error will occur. It is recommended that each call to the Insert method include five or fewer records; one record at a time is ideal.

1.5 Example Code

```
using System;

using FinCdTest.IfasServices;

using System.Data;


namespace JeInsert

{

    class Program
```

```
{
    static void Main(string[] args)
    {
        // Create a cliet prox to connect to the web service.
        DataUpdateSoapClient client = new DataUpdateSoapClient();

        // Setup some of the shared values.
        string batchId = "JEWS2";
        string desc = "JE Web Service Test";
        string postState = "BE";
        string refer = "JEREF2";
        string subsys = "JE";

        // Create a new instance of the data set.
        JeBatch jeBatch = new JeBatch();

        // Create the batch master record and populate the values.
        JeBatch._BT20_GLBABatchMasterRow masterRow =
            jeBatch._BT20_GLBABatchMaster
```

```
    .New_BT20_GLBABatchMasterRow();
masterRow.BatchId = batchId;
masterRow.Desc = desc;
masterRow.GlGr = "GL";
masterRow.PostState = postState;

// Create the aprv master record and populate the values.
JeBatch._BT20_GLAPAprvMasterRow aprvRow =
    jeBatch._BT20_GLAPAprvMaster
    .New_BT20_GLAPAprvMasterRow();
aprvRow.BatchId = batchId;
aprvRow.PostState = postState;
aprvRow.Ref = refer;
aprvRow.Subsys = subsys;

// Create the detail record and populate the values.
JeBatch._BT20_GLATrnsDetailRow dtlRow =
    jeBatch._BT20_GLATrnsDetail
    .New_BT20_GLATrnsDetailRow();
```

```
dtlRow.BatchId = batchId;

dtlRow.Ref = refer;

dtlRow.Desc = desc;

dtlRow.Date = DateTime.Today;

dtlRow.GlGr = "GL";

dtlRow.GlKey = "101500";

dtlRow.GlObj = "5000";

dtlRow.Cr = 500m;

dtlRow.HitEn = "N";

dtlRow.Subsys = subsys;

dtlRow.PostState = postState;


// Add each of the rows to the dataset.

jeBatch._BT20_GLBABatchMaster

    .Add_BT20_GLBABatchMasterRow(masterRow);

jeBatch._BT20_GLAPAprvMaster

    .Add_BT20_GLAPAprvMasterRow(aprvRow);

jeBatch._BT20_GLATrnsDetail

    .Add_BT20_GLATrnsDetailRow(dtlRow);
```

```
// Use a try catch block incase there
// are exceptions thrown.
try
{
    // Run the insert.
    ResultStatus result = client.Insert(jeBatch);

    // Report back if we succeeded.
    if (result.Success)
    {
        Console.WriteLine("We succeeded!");
    }
    else
    {
        Console.WriteLine("It didn't work :(");
    }

    // Display each of the errors.
```

```
            foreach (ErrorMessage error in result.Errors)
            {
                Console.WriteLine(error.Message);
            }
        }
        catch (Exception except)
        {
            // Display the exception thrown.
            Console.WriteLine(except.Message);
        }

        // Close out the client proxy.
        client.Close();
    }
  }
}
```

1.6 DataSet Schema Xml

```
<?xml version="1.0" standalone="yes"?>
```

```
<xs:schema id="JeBatch" xmlns="" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:msdata="urn:schemas-microsoft-com:xml-msdata" xmlns:msprop="urn:schemas-microsoft-com:xml-msprop">
  <xs:element name="JeBatch" msdata:IsDataSet="true" msdata:UseCurrentLocale="true">
    <xs:complexType>
      <xs:choice minOccurs="0" maxOccurs="unbounded">
        <xs:element name="BT20.GLBABatchMaster" msprop:ActualTableName="glba_batch_mstr">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="BatchId" type="xs:string" minOccurs="0" />
              <xs:element name="Desc" type="xs:string" minOccurs="0" />
              <xs:element name="CreateUser" type="xs:string" minOccurs="0" />
              <xs:element name="CreateDate" type="xs:dateTime" minOccurs="0" />
              <xs:element name="UpdateUser" type="xs:string" minOccurs="0" />
              <xs:element name="UpdateDate" type="xs:dateTime" minOccurs="0" />
              <xs:element name="PostState" type="xs:string" minOccurs="0" />
              <xs:element name="UniqueKey" type="xs:string" minOccurs="0" />
              <xs:element name="GlGr" type="xs:string" default="--" minOccurs="0" />
              <xs:element name="JlGr" type="xs:string" default="--" minOccurs="0" />
              <xs:element name="RecordCount" type="xs:string" default="0" minOccurs="0" />
              <xs:element name="JeCount" type="xs:string" default="0" minOccurs="0" />
```

```
      <xs:element name="TotalDR" type="xs:string" default="0.0000000" minOccurs="0" />
      <xs:element name="TotalCR" type="xs:string" default="0.0000000" minOccurs="0" />
      <xs:element name="TotalNet" type="xs:string" default="0.0000000" minOccurs="0" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="BT20.GLAPAprvMaster" msprop:ActualTableName="glap_aprv_mstr">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="Subsys" type="xs:string" default="JE" minOccurs="0" />
      <xs:element name="Ref" type="xs:string" minOccurs="0" />
      <xs:element name="BatchId" type="xs:string" minOccurs="0" />
      <xs:element name="JeidAcg" type="xs:string" minOccurs="0" />
      <xs:element name="NextAprv" type="xs:string" minOccurs="0" />
      <xs:element name="PostState" type="xs:string" minOccurs="0" />
      <xs:element name="PostJobNo" type="xs:int" default="0" minOccurs="0" />
      <xs:element name="SeqNo" type="xs:short" default="0" minOccurs="0" />
      <xs:element name="UniqueKey" type="xs:string" minOccurs="0" />
      <xs:element name="BalanceStatusText" type="xs:string" minOccurs="0" />
```

```
      <xs:element name="RecordCount" type="xs:string" default="0" minOccurs="0" />
      <xs:element name="Status" type="xs:string" default="Approved" minOccurs="0" />
      <xs:element name="TotalDR" type="xs:string" default="0.0000000" minOccurs="0" />
      <xs:element name="TotalCR" type="xs:string" default="0.0000000" minOccurs="0" />
      <xs:element name="TotalNet" type="xs:string" default="0.0000000" minOccurs="0" />
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="BT20.GLATrnsDetail" msprop:ActualTableName="gla_trns_dtl">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="Subsys" type="xs:string" default="JE" minOccurs="0" />
      <xs:element name="GlGr" type="xs:string" minOccurs="0" />
      <xs:element name="GlKey" type="xs:string" minOccurs="0" />
      <xs:element name="GlObj" type="xs:string" minOccurs="0" />
      <xs:element name="GlFy" type="xs:string" minOccurs="0" />
      <xs:element name="GlPr" type="xs:string" minOccurs="0" />
      <xs:element name="JlGr" type="xs:string" minOccurs="0" />
      <xs:element name="JlKey" type="xs:string" minOccurs="0" />
```

```
<xs:element name="JlObj" type="xs:string" minOccurs="0" />
<xs:element name="JlFy" type="xs:string" minOccurs="0" />
<xs:element name="JlPr" type="xs:string" minOccurs="0" />
<xs:element name="Ref" type="xs:string" minOccurs="0" />
<xs:element name="PeId" type="xs:string" minOccurs="0" />
<xs:element name="Per" type="xs:string" minOccurs="0" />
<xs:element name="Type" type="xs:string" default="ST" minOccurs="0" />
<xs:element name="Desc" type="xs:string" minOccurs="0" />
<xs:element name="Misc" type="xs:string" minOccurs="0" />
<xs:element name="Ref2" type="xs:string" minOccurs="0" />
<xs:element name="Date2" type="xs:dateTime" minOccurs="0" />
<xs:element name="BatchId" type="xs:string" minOccurs="0" />
<xs:element name="Dr" type="xs:decimal" minOccurs="0" />
<xs:element name="Cr" type="xs:decimal" minOccurs="0" />
<xs:element name="SubsId" type="xs:string" default="JE" minOccurs="0" />
<xs:element name="PedbCd" type="xs:string" minOccurs="0" />
<xs:element name="CkId" type="xs:string" minOccurs="0" />
<xs:element name="CkNo" type="xs:string" minOccurs="0" />
<xs:element name="Units" type="xs:decimal" minOccurs="0" />
```

<xs:element name="JobNo" type="xs:int" default="0" minOccurs="0" />

<xs:element name="Wo" type="xs:string" minOccurs="0" />

<xs:element name="FcDr" type="xs:decimal" minOccurs="0" />

<xs:element name="FcCr" type="xs:decimal" minOccurs="0" />

<xs:element name="CurrCd" type="xs:string" minOccurs="0" />

<xs:element name="CurrRate" type="xs:decimal" minOccurs="0" />

<xs:element name="UserNo" type="xs:short" default="0" minOccurs="0" />

<xs:element name="SeqNo" type="xs:short" default="0" minOccurs="0" />

<xs:element name="Date" type="xs:dateTime" default="2009-04-23T00:00:00-07:00" minOccurs="0" />

<xs:element name="PrepId" type="xs:string" minOccurs="0" />

<xs:element name="ContractNo" type="xs:string" minOccurs="0" />

<xs:element name="OrigFy" type="xs:string" minOccurs="0" />

<xs:element name="JeidAcg" type="xs:string" minOccurs="0" />

<xs:element name="TrnsAcg" type="xs:string" minOccurs="0" />

<xs:element name="EntryDate" type="xs:dateTime" minOccurs="0" />

<xs:element name="EntryTime" type="xs:string" minOccurs="0" />

<xs:element name="ViewA" type="xs:string" default="Y" minOccurs="0" />

<xs:element name="ViewC" type="xs:string" default="Y" minOccurs="0" />

<xs:element name="ViewM" type="xs:string" default="Y" minOccurs="0" />

<xs:element name="ViewU" type="xs:string" default="N" minOccurs="0" />

<xs:element name="PostState" type="xs:string" minOccurs="0" />

<xs:element name="DeleteFlag" type="xs:short" default="0" minOccurs="0" />

<xs:element name="OffsetIntra" type="xs:string" default="N" minOccurs="0" />

<xs:element name="OffsetInter" type="xs:string" default="N" minOccurs="0" />

<xs:element name="HitEn" type="xs:string" default="N" minOccurs="0" />

<xs:element name="EnType" type="xs:string" minOccurs="0" />

<xs:element name="BudgetOver" type="xs:string" minOccurs="0" />

<xs:element name="RecNo" type="xs:int" default="0" minOccurs="0" />

<xs:element name="EntryNo" type="xs:int" default="0" minOccurs="0" />

<xs:element name="UserId" type="xs:string" minOccurs="0" />

<xs:element name="FormsFile" type="xs:string" minOccurs="0" />

<xs:element name="FormName" type="xs:string" minOccurs="0" />

<xs:element name="UndoJobNo" type="xs:int" default="0" minOccurs="0" />

<xs:element name="UniqueKey" type="xs:string" minOccurs="0" />

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<xs:element name="Fund" type="xs:string" minOccurs="0" />

<xs:element name="AcctValue" type="xs:string" minOccurs="0" />

```
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          </xs:complexType>
        </xs:element>
      </xs:choice>
    </xs:complexType>
  </xs:element>
</xs:schema>
```