# Utah Transit Authority (UTA)

# Activate / Deactivate Card Status: Bulk Import File Specifications



Version 1.0

August 3, 2009

## 1 Purpose

The purpose of this document is to specify the file format used by Institutions to activate and deactivate UTA Electronic Fare Collection System (EFCS) individual card status.

- An Activated card applies the appropriate contractual fare arrangement
- A Deactivated card discontinues the contractual fare arrangement

The scope of this document is limited to the file-based import of card account updates and changes.

## 2 Interface Description

The EFCS import interface allows UTA's institutional partners to send a simple text file that instructs the EFCS to process requested changes to cards associated with the institution.

These text files must be submitted in the Comma-Separated Values (CSV) format.

### 2.1 File Name

In order for the EFC system to process the file it needs to be named in a way that identifies it as belonging to a specific Institution.

The file naming convention is:

- < UTAAssignedAccountName>\_<Date>\_<Version>.cs v
- <UTAAssignedAccountName> is a unique string that UTA assigns each partner Institution. It is important that this string exactly matches the string specified in the EFCS for your Institution.
- <Date> is the date of file transmission to UTA. The date needs to be in this format: YYYYMMDD.
- <Version> indicates the version of the file within a given day. This can be any string meaningful to the Institution, such as "1", "072345", "A", etc.

Notes:

- 1. Do not include the brackets <> they are used here for explanation purposes only.
- 2. Separate these three parts of the file name with an underscore (\_), as shown above.

## 2.2 Record Format

- 1. Each line (or row) in the CSV file represents a record. That is, each line contains the changes for a single card.
- 2. Each line needs to contain 14 commas.
- 3. Records must be followed by ASCII CR and LF characters (0x0D and 0x0A).

## 2.2.1 Field Descriptions

Field	Туре	Description						
UID *	String(2)	<b>Required</b> . This field must contain the UID (Unique Identifier) from the chip on the contactless card. The EFCS uses the UID to create the card account and associate it with the Institution account specified in the file name.						
		UTA's EFCS needs the UID in hexidecimal format, with the most significant byte first: e.g. 8002CBE9B08C04						
Command	String(10)	<b>Required</b> . This field must contain either the "ACTIVATE" or "DEACTIVATE" command, for activating or deactivating the card.						
StartDate	String(8)	Ignored for Command = DEACTIVATE						
		For Command = ACTIVATE this field is optional. If left blank, the Start Date is set to either 'today' or the Institution's 'subscription start date', w hichever is later. If the specified Start Date is outside the effective date range for the product associated with the Institution, then the EFCS will use the effective start date for the product that is associated to the Institution by default (default card template).						
		The card will only become active 'today' if the default 'subscription start date' for the Institution has already passed.						
		You can enter a future date for card activation; how ever, if the future date is before the Institution's 'subscription start date', it will default to the 'subscription start date' for the Institution.						
		FORMAT: YYYYMMDD EXAMPLE: 20090528						
		Card activation occurs at midnight (12:00 AM) at the <i>beginning</i> of the Start Date.						

EndDateString(8)Ignored for Command = DEACTIVATE							
		For Command = ACTIVATE this field is optional. If this field is left blank, or if the specified start date is outside the effective date range for the product associated with the Institution, then the EFCS will use the effective end date for the product that is associated to the Institution by default (default card template).					
		FORMAT: YYYYMMDD EXAMPLE: 20090629					
		The card will not work on the specified EndDate because deactivation is effective at midnight (12:00 AM) at the <i>beginning</i> of the EndDate.					
FaceSerial *	String(20)	<b>Required.</b> This field can contain the FaceSerial number on the face of the contactless card. How ever, this field can contain any number the Institution decides they want to use. This should be a number the users know so that they can identify themselves to UTA Customer Service personnel if they call.					
Property1	String(20)	<b>Optional.</b> All Property fields (numbered 1 through 10) are available for institutions to use as they see fit. These fields are defined and utilized by the Institution. These fields are essentially informational and are not required for any EFCS functionality.					
Property2	String(20)						
Property3	String(20)						
Property4	String(20)						
Property5	String(20)						
Property6	String(40)						
Property7	String(40)						
Property8	String(80)						
Property9	String(80)						
Property0	String(160)						

\* UID and FaceSerial Note: When using a spreadsheet program (like Excel) to create the CSV file, the UID and FaceSerial fields need to be set up as a string so that the leading zeroes are not eliminated. For example, using Excel you would insert an apostrophe before entering the UID number *if the UID number begins with a zero*.

## 2.2.2 PropertyX Fields

The data provided in the PropertyX fields (Property1 through Property0) are:

- Stored in the EFCS
- Ignored by the EFCS
- If populated, the values provided will overwrite any previous values
- If empty, the previous values will be retained in the EFCS

In the future, the Property X fields will be available for reporting purposes. For example, an Institution could use Property 1 to store classifications like Employee, Staff, Student, Graduate, etc. and then Institution personnel could retrieve a report that breaks down usage of UTA transit services by this Property field.

### 2.2.3 Example Record Lines

The examples below show how these records are listed in a comma-delimited file.

#### 2.2.3.1 Deactivation Record:

8002fca15db104,DEA CTIVATE,,,,,,,,,,

The result of processing this record would be that card with UID = 8002fca15db104 will be immediately deactivated in the EFCS and will generate a "red light" when next presented to a UTA EFCS validator.

#### 2.2.3.2 Activation Records:

8002fca15db104,ACTIVATE,20090102,,08700124,,,,,,,,,,

The result of processing this record would be that card with UID = 8002fca15db104 will become activated in the EFCS on Jan 2, 2009, after which it will generate a "green light" when next presented to a UTA EFCS validator. The card will not expire until the EdPass/EcoPass contract expires.

8002fca15db104,ACTIVATE,20090102,20090104,08700124,,,,,,,,,

The result of processing this record would be that card with UID = 8002fca15db104 and FaceSerial = 08700124 will become activated in the EFCS on Jan 2, 2009. The card will not generate a "green light" when next presented to a UTA EFCS validator until that date. The card will expire two days later on Jan 4, 2009; from that date the card will generate a "red light" when presented to a UTA EFCS validator.

#### 2.2.3.3 Activation with Custom Properties

8002fca15db104,ACTIVATE,,,08700651,Employee,,,,,School of Engineering,,,,

Note that custom PropertyX fields are stored, but ignored, by the EFCS.

## 2.3 File Submission

Follow this protocol when submitting the CSV text file to UTA via email:

- Attach the CSV file that follows the naming convention explained above: <UTAAssignedAccountName >\_<Date>\_<Version>.cs v
- You can use the file name as the Subject of the email, but this is not required
- Send the CSV file to this email address: efcbulkimport@rideuta.com

## **3 Working with Spreadsheets**

This section explains how to use a spreadsheet application (e.g. Excel) to create the CSV file.

## 3.1 **Basic Instructions**

Step 1: Create a Header row to assist with data insertion. Refer to the Field Descriptions in 2.2.1 above.

Step 2: Create one row for each card to be activated or deactivated. Ensure that all data cells are bounded by line borders, as shown in the examples.

Step 3: Populate fields as appropriate. If there is no data for a particular field, leave the field blank (*do not delete any of the columns*).

- Columns 'A', 'B' and 'E' are required fields (UID, Command, FaceSerial).
- Format columns 'A' and 'E' as **text fields** or you risk the spreadsheet application stripping any leading zeroes from the numbers in these fields.

Step 4: Delete the Header row (1<sup>st</sup> row), leaving only the rows with actual bulk import data.

Step 5: Use the Save As option to convert the spreadsheet to a CSV (Commadelimited) file, as illustrated below. Be sure to use the Institution name in the first part of the file name, as explained in 2.3 above.



Step 6: Open and review the **.csv** file in Notepad. You should see rows of data, each row containing 15 comma-separated fields and 14 commas.

11/30/2009

## 3.2 Examples

### Example 1

In this example, the spreadsheet has been set up with 1 Header row and 11 Record rows. All cells in rows 1 through 12 and columns A through 0 have borders (the spreadsheetexample has been cropped for this illustration).

InstitutionName.xls										
	А	В	С	D	E	F	G	н (		
1	UID	COMMAND	START DATE	END DATE	FACE SERIAL #	PROPERTY 1	PROPERTY 2	PROPERTY 3		
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

#### Example 2

In this example, the Header has been deleted and the first five fields in the eleven rows are populated. The spreadsheet is ready to be saved as a comma-delimited file.

<b>B</b> ) 1	InstitutionName.xls															
	А	В	С	D	E	F	G	Н	1	J	K	L	М	Ν	0	Р
1	8402fca119af04	ACTIVATE	20090528	20090629	85001251											
2	8002fca15eb104	ACTIVATE	20090528	20090629	85001252											
3	8002fca15db104	ACTIVATE	20090528	20090629	85001253											
4	8401fca18db103	ACTIVATE	20090528	20090629	85001254											
5	8001fca17db102	ACTIVATE	20090528	20090629	85001255											
6	8402fca107af04	ACTIVATE	20090528	20090629	85001256											
7	8002fca106db05	ACTIVATE	20090528	20090629	85001257											
8	8002fca14db102	ACTIVATE	20090528	20090629	85001258											
9	8001fca15af101	ACTIVATE	20090528	20090629	85001259											
10	8400fca14af106	ACTIVATE	20090528	20090629	85001260											
11	8002fca13db107	ACTIVATE	20090528	20090629	85001261											
12																
13																
13																

## Example 3

The same spreadsheet has been saved as a comma-delimited file and then opened in Notepad for review. This is the file you send to UTA.

InstitutionName_20090731_1.csv - Notepad Fie Edit Format View Heb	
8402fca119af04,ACTIVATE,20090528,20090629,85001251,,,,,,,, 8002fca15eb104,ACTIVATE,20090528,20090629,85001252,,,,,,,, 8002fca15db104,ACTIVATE,20090528,20090629,85001253,,,,,,, 8401fca18db103,ACTIVATE,20090528,20090629,85001255,,,,,,, 8001fca17db102,ACTIVATE,20090528,20090629,85001256,,,,,,,, 8402fca107af04,ACTIVATE,20090528,20090629,85001256,,,,,,,, 8002fca106db05,ACTIVATE,20090528,20090629,85001257,,,,,,,, 8002fca14db102,ACTIVATE,20090528,20090629,85001258,,,,,,,, 8002fca14db102,ACTIVATE,20090528,20090629,85001258,,,,,,,,, 8002fca14db102,ACTIVATE,20090528,20090629,85001259,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	