

**NCR Advanced Marketing Solution (AMS)**

Document: Points Update Web Service

Contact:

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1. Introduction

This document describes the proper use and function of PointsUpdate.asmx, a web service designed to receive a list of customers to adjust points in a specified program. The operations included in the Points Update web service are described in the following sections.

PointsUpdate.asmx is accessible at Copient/LogixWebRoot/Connectors/PointsUpdate.asmx.

2. GUID Definition and Usage

Each of the operations of the Points Update web service accepts a string parameter named GUID. GUIDs are a globally unique identifier (GUID) used by the web service for two major reasons: to authenticate the web service caller and provide a means of identification of the caller.

Authentication is performed by checking the GUID parameter against the pre-defined GUIDs found in Logix on the Admin – Connectors tab. Clicking on the “Points Update Connector” link of the Connector list page will show a page where Logix users can add or remove GUIDs specifically for the web service. Web service callers will be authenticated if the GUID parameter is found in this list. This list is found in the LogixRT database in the ConnectorsGUIDs table where the column ConnectorID=48.

Identification of the web service caller can be determined by creating a specific GUID for a specific client/vendor and then using that GUID when calling the client/vendor calls any of the web service’s operation. The Points Update web service will write each operation call to a log file that is named for the current day (e.g. PointsUpdateWSLog.YYYYMMDD.txt). Log entries will detail whether the GUID validated, what operation was called, the GUID parameter sent to the operation and the IP address of the caller. For example a valid entry would read like this: “Validated call to AdjustPoints from GUID: 585bf7a0-0f73-4daf-b667-0eb10082d81d and IP: 71.13.215.254”. An invalid entry would appear as such: “Invalid call to AdjustPoints from GUID: 867-5309 and IP: 71.13.215.254”.

3. AdjustPoints

The AdjustPoints operation allows clients to send an XML document, conforming to the PointsUpdate.xsd schema, containing a list of Points Program adjustments for the specified point program ID. The point adjustment text is parsed from the XML document and written to the web server’s file system. Then, the file is queued in the PointsInsertQueue where the actual processing is performed by the Logix’s ProcessPointsAgent.

The operation is accessible at PointsUpdate.asmx?op=AdjustPoints and requires the following parameters:

Parameter	Value
GUID	A globally unique identifier provided by authorized personnel.
UpdateStr	An XML string that defines the operation to perform on the supplied data parameters in the XML documents. This should conform to the schema found in Copient/AgentFiles/PointsUpdate.xsd directory.

Calls to the AdjustPoints operation return an XML string in its response that details the success or failure of the call.

Requests sent to the AdjustPoints operation should include the Points Program ID (i.e. the programid attribute of the PointsAdjust tag). This value is the program ID used for all the customer point adjustments in the file.

Sample XML request for a AdjustPoints operation:

```
<PointsAdjust programid="1">
<![CDATA[40002567414,0,5
40002567415,0,5
40002567416,0,5
40002567417,0,5
40002567418,0,5
]]>
</PointsAdjust>
```

Column 1	ExternalID for the customer card you wish to adjust points in the specified points program.
Column2	ExtCardTypeID - External card type identifier for the External ID. This value is found in the LogixXS.CardTypes table.
Column 3	Adjustment Amount
Delimiter	Comma
Line Terminator	Carriage return & line feed

Responses from the AdjustPoints operation will conform to the XML schema found in Copient/AgentFiles/PointsUpdateResponse.xsd. Listed below are sample responses sent from the AdjustPoints operation.

Sample XML response sent for an AdjustPoints operation:

```
<?xml version="1.0" encoding="utf-8"?>
<PointsUpdate>
  <Status operation="AdjustPoints" success="true" responseCode="SUCCESS" message="Points adjustment file 'F:\ACS-IR\Copient\AgentFiles\WebUploads\PointsAdj.1.20110411043827.ppp' for ProgramID '1' was created and queued for processing (PKID=32). " />
</PointsUpdate>
```

Below is a comprehensive list of all returned responseCode values.

Response Code	Description
INVALID_GUID	The value sent for the GUID parameter does not match one found in Logix on

	the Admin – Connectors page for the PointsUpdate connector.
INVALID_XML_DOCUMENT	The XML string sent as the UpdateStr parameter does not conform to the PointsUpdate.xsd schema and can not be processed.
APPLICATION_EXCEPTION	When an error is encountered during processing, this return code is sent back along with a message tag containing the specific details of the error.

Sample of XML error response:

```
<?xml version="1.0" encoding="utf-8"?>
```

```
<PointsUpdate>
```

```
<Status operation="AdjustPoints" success="false" responseCode="INVALID_GUID" message="GUID 'cd74b758-c5dc-4172-b5e5-c150e44cbdefz' is not valid for the Points Update web service."/>
```

```
</PointsUpdate>
```