NCR Advanced Marketing Solution (AMS)

Document:	Process Points Programs Agent
Contact:	
Revision:	A
Last Edit Date:	11 April 2011
Prepared By:	Mark McGregor
Reviewed By:	
Developers and technical contributors:	Mark McGregor
Management:	Adam Blake

This is a version-controlled document. Please ensure that you have the latest revision of this document, available in the AMS document repository.

Table of Contents

1. Introduction

This document describes the proper use and function of the Process Points Programs agent as a part of the AMS system. This agent processes adjustments to customers points balances in a specified program.

 The Process Points Programs agent is a Windows Service that runs on an application server. Only a single instance of this or any AMS agent should run at a given installation. This is done to mitigate locking the database for other uses within the AMS application.

2. General Agent Overview

The Process Points Programs agent is a Windows service that continually runs but only performs activities at certain intervals.   Upon startup, the agent will look for work to complete. It will perform its tasks as long as work remains. When all of its necessary duties have completed the agent will enter a rest period before it checks again for more work to be completed.

The agent's rest period can be configured via the Logix user interface by a user with sufficient privileges. The setting can be found in Admin > Agents > ProcessPoints Agent > Run frequency. When a change is made to the run frequency, it may take up to 10 minutes for the agent to recognize the change and adjust its rest period.

3. Processing flow

At the end of the rest period, the Process Points Programs agent checks the LogixXS.PointsInsertQueue table to see if there are any points adjustment files to process. For each queue entry, the agent will bulk insert the file contents into the LogixXS.PointsInsert Temp table, verify proper customer identifiers and ID types, pad customer identifiers if necessary, create any new customer records as necessary, and call the pa_PointsProgInsert stored procedure.

The pa_PointsProgInsert stored procedure process the records from the PointsInsertTemp table in 2000 record chunks to avoid lock escalation on any of the LogixXS tables with which it interacts. The stored procedure applies the points adjustment to the Points table, creates an entry in the Points History table, updates the customer's UpdateLevel field (if the CM engine is installed), and stages cross shopping adjustment records for TransDownload (if the CPE engine is installed). Finally, the entry in the PointsInsertQueue is removed and the imported file is deleted. The agent will continue processing entries in the queue table until the table is empty. When the queue table is empty, the agent will go back to sleep.

4. Bulk data format

The Process Points Programs agent processes flat files that are created by the PointsUpdate connector. The data for the flat file comes from the CDATA section of the XML passed to the PointsUpdate connector. The format of the flat file should be as follows:

Column 1	ExternalID
Column2	ExtCardTypeID
Column 3	Adjustment Amount
Delimiter	Comma
Line Terminator	Carriage return & line feed

Sample bulk data:

```
40002567414,0,5
40002567415,0,1
40002567416,0,2
40002567417,0,3
40002567418,0,4
```