

Technical Design Document

Project: 044217 – Oracle Bill Back Process Tool

Authors:

Sudha Velu

Chelsea Turner

April 11, 2017

Revision 1.0

TABLE OF CONTENTS

[1. Introduction 4](#_Toc442949806)

[1.1. Background 4](#_Toc442949807)

[1.2. Design Summary 4](#_Toc442949808)

[1.3. Impact to Business 4](#_Toc442949809)

[2. Design Details 4](#_Toc442949810)

[2.1. Database Design 5](#_Toc442949811)

[2.2. Application Design 4-6](#_Toc442949812)

2.3. Technologies Used 6

[2.4. Hardware Considerations](#_Toc442949813) 6

[2.5. Security Considerations](#_Toc442949814) 6

[3. Related Information](#_Toc442949815) 7

# Introduction

This document details technical design for the 044217 – Create an Oracle Billback Process Tool to assist in processing Billback Tickets. It contains a high-level overview of the architecture, database design and detailed application information regarding specific functionality needed to complete the user requirements.

## Background

044217 – Create Front-End Tool to assist in processing Billback Tickets of various service types which include but not limited to TCM, UR, CAT, CLC, OSA, and ITK. The tool will have an interface to add new service types as needed. The tool will have functionality to search the VIAONE database for claims that need processing for Billbacks. For some service types the tool will have feature to import from an excel spread sheet a list of claims. Also the tool will allow claims to be added or deleted as needed for certain cases. The tool will log all activity in the database for users as well as developers for troubleshooting the application. Users should be able to view this activity log for their session to see if steps were successfully processed or if there were errors the tool found for claims. Specific users will have permissions to use the tool and users will be authenticated after identification with Active Directory. Tool will have functionality to export claim data including claim information found in VIAONE database. Finally the tool should validate the claims and produce a pipe delimited file with all the claim data in a specific format to import into UNIX for processing.

## Design Summary

044217 – Create the Billback Application so that first the user will select service type and based on this selection appropriate buttons will be shown for Search or Import Claims, Add Claims, Remove Claims, and Validate/Process claims. Have buttons to view log file and export claim data. Have search functionality for TCM/UR claims based on Client ID, Data Set, Valuation days, claim status (OPEN or CLOSED), # of Yrs of Claim (default to 3 years). Also have functionality to further filter search by exclusion of claim sub types, exclude line codes, and include claim types in comma delimited format. After the import or search of claims, the tool will have functionality to batch update allocation amounts for claims, date pay from, date pay thru, BInvoice and Tax ID if they need to be updated. A web grid will show the claim data prior to producing the billback file in pipe delimited format. A button to add new service types should open a new window where user will add details for new service types including what buttons should be enabled the service type and what pay code logic to use (i.e. Service Interaction Logic, CA Pay Code Flip Logic, or use the Pay Code Supplied by user).

## 1.3 Impact to Business

044216 – The Guardians team receives many request tickets to process Billback claims where they would manually research, generate and format pipe delimited text files to load data into development server for validation and then to Production Server for further processing. There are more than a dozen steps involved in processing and resolving tickets related to this issue. This application would facilitate and automate the many steps involved, thus expediting Billback claim ticket support.

# Design Details

This section contains technical design specifics for databases and applications affected by this project. It also includes hardware and security considerations, along with deployment guidelines.

## Database Design

The following tables will need to be created in MC\_INTERFACES Schema on VIAONE:

1. **Activity Log Table:** All user activity that for processing claims will be logged with user data, details of any errors or exceptions that may occur for claims. The user will be able to view this data for their session at any time.
2. **Users Table**: List of users that have permissions to use the Billback Application.
3. **Service Types Table:** All Service Types used by the tool will be added to this table and additions made by users from the tool will also be added to this table.

Stored procedures will be created in this schema and used in the Data Layer of the application for all database access and updates.

## Application Design

The application will have the following functionality and requirements.

* Select Service Type Drop Down List – After selecting a Service Type show appropriate buttons for further processing.
* Import Claims Button – will allow claims data to be imported from spreadsheet. New child window will allow users to open file dialog and select Excel File to import.
* Add Claims Button – Open child window to allow user to enter claim data, validate and save data to web grid.
* Remove Claims Button – User can select claims from web grid with check boxes and Remove button will remove these claims.
* Validate / Process Button – This will validate claim data for required fields, check for bank numbers for each claim, and produce the Billback pipe delimited file and shared folder in [\\memfp02\SHARE\ANY\Guardians\Billback](file:///\\memfp02\SHARE\ANY\Guardians\Billback)
* Any failed validations should highlight rows in grid with Red X so user can further investigate.
* Batch update – functionality to update Date Pay From, Date Pay Thru, BInvoice, and distribute Allocation Amounts across all claims given a Monthly Fee amount from user.

### Technologies Used

The following technologies would be used in the application architecture and functionality.

1. Databases:
   * Oracle, PROGRESS
2. Languages:
   * C#, HTML5, CSS, CSS3, JavaScript, JQuery
3. Platform/Framework
   * Visual Studio 2010, .NET 4.0, ASP.NET, IIS 7, Active Directory for Windows Authentication, AJAX ,Bootstrap,
   * Infragistics Development Tool
4. Operating Systems Used:
   * UNIX, Windows Server 2008 that runs IIS 7

## 2.4 Hardware Considerations

|  |  |  |
| --- | --- | --- |
| **Hardware Requirement** | **Purpose** | **Notes/Specifications** |
|  |  |  |
|  |  |  |

## 

## 2.5 Security Considerations

Application will use Windows authentication to validate all users. Only users authorized to use the tool will be allowed access.

# Related Information

Project docs SVN link:

[svn://ltcsdglsvncr01.sedgwickcms.com/data/svn/documents/ProjectDocs/044216 - Manage Vendor Interfaces and Implementation](svn://ltcsdglsvncr01.sedgwickcms.com/data/svn/documents/ProjectDocs/044216%20-%20Manage%20Vendor%20Interfaces%20and%20Implementation)

Rally user story:

<https://rally.sedgwickcms.com/#/35399026d/detail/userstory/35332710>