

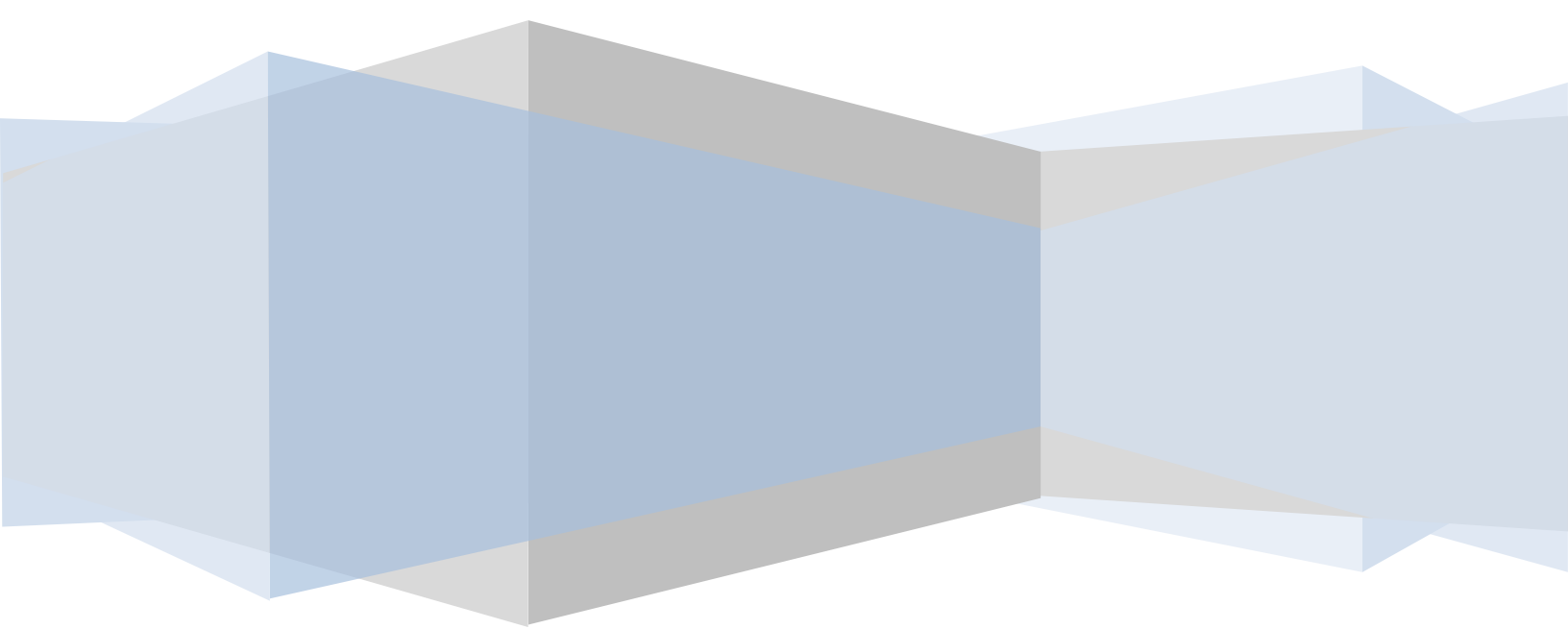


**Health Financial  
Systems**

# **HFS Application Programming Interface**

**Executive Summary**

**Health Financial Systems**



## 1.0 Overview of the HFS Application Programming Interface

The HFS Application Programming Interface (API) is a set of functions made available to external programs to allow those programs a way to communicate with the HFS Medicare Cost Report (MCRIF32) software. This communication is performed through a structured command language that tells the MCRIF32 software what type of tasks to perform. Commands can be sent to extract specific worksheet data, to write specific worksheet data, or to perform operations such as printing reports.

## 2.0 Purpose

The purpose of the API is to assist in the automated processing cost report data through user-defined tools without the need to open the MCRIF32 software or use the graphical user interface (GUI) of that software. This allows your staff, even with minimal programming knowledge, a powerful mechanism for cost report data mining.

## 3.0 Capabilities

Listed below is a list of capabilities built into the API as of 3/16/2017:

- **Data Extraction** – Commands can be sent to the API to extract data from specific worksheets within the cost report. You can extract data from one or more worksheets and from any number of fields on those worksheets, all with a single command.
- **Data Push** – Commands can be sent to the API to push data to specific worksheets within the cost report. As in data extraction, you can push data to one or more worksheets and to any number of fields on those worksheets, all with a single command.
- **Multiple File Processing** – The API command language allows for multiple files to be acted upon with a single command request. Using this feature provides for faster processing when requesting larger amounts of data from the API.
- **Worksheet Field Information** – Commands can be sent to the API to request all known field information in addition to extracting the value of the worksheet field. This type of information is useful when you need to know how the data might be formatted. For example, if the field is a date, the API will return date information about the field such as our acceptable date range and date formatting (i.e., mm/dd/yyyy).
- **Cost Centers and Statistical Basis** – Sending a cost center command to the API will return the cost centers and statistical basis information for the cost report. Cost center information includes the Worksheet A<sup>1</sup> line number, cost center code and cost center label. Statistical basis information includes the overhead cost center column number (Worksheet B-1) and statistic code statistic label for that column.

<sup>1</sup> All worksheet references are for the CMS-2552-10 cost report form set.

- **Basic File Information** – Commands can be sent to the API to retrieve basic information about the files available. Once you extract a list of the files available, you can then tell the API to give you information about one or more of those files. The information returned gives the provider name and number, fiscal year begin and end dates, and whether or not the file is calculated.
- **Edits Summary Information** – Commands can be sent to the API to retrieve a summary of the cost report Edits. The information returned gives a list of total number of Edits for each level.
- **Available Files List** – The administrator of the API can control what files will be exposed to the API. When this list is controlled, the API end user cannot add to the list of files available to the API but can query a list of those files so they can start building their requests. This approach is useful when you want to limit the file set that can potentially be modified by users of the API.
- **ECR Import** – API has the capability to import ECR files and print ECR import reports.
- **Auditor** – Commands can be sent to the API to create Auditor adjustments.

## 4.0 Extraction Formats

Because our clients use our data differently, different file output formats have been requested for the API to produce<sup>2</sup>.

- **Comma Separated Value (CSV)** – This is a standard format supported by almost every spreadsheet manufacturer. Each field is surrounded by double quotes (regardless of data type) and separated by a comma from other fields.
- **Look-up CSV** – This format is similar to the standard CSV format with the exception that some fields are combined into a “look-up” format that is useful when developing queries using Microsoft Excel.
- **Extensible Markup Language (XML)** – This format is a very flexible text format designed to transfer large amounts of variable type data in a way where that data can be easily extracted. This format follows the W3C<sup>3</sup> specifications. To use this format, more programming knowledge is required of the API end user; however the resulting data typically contains more information than the CSV formats.

<sup>2</sup> Refer to the API technical documentation for output layout and examples.

<sup>3</sup> See <http://www.w3.org/XML/> for more information.

### 5.0 API Layout Overview

The following is an overview of where the API fits into the realm of the end user program and the MCRIF32 software:

