
Medi-Cal Electronic Attachment and Image
Specifications
Third-Party Vendors

MEDI-CAL ELECTRONIC ATTACHMENT IMAGE SPECIFICATIONS
THIRD-PARTY VENDORS

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Section 1 - Image File Specifications

- Images must be encoded as multiple-page TIFF image data.
- Images must use “bi-level” encoding, as specified in **Section 3** of the *TIFF 6.0 Specification* PDF document found on the Adobe Web site:
<http://partners.adobe.com/public/developer/tiff/index.html>
- Bi-level images can only have a 1-bit color depth (meaning they can only have two colors: black and white). Color and gray scale images are not accepted.
- Images should be encoded using one of the following CCITT bi-level compression settings (commonly used for fax transmission):
 - “CCITT Group 3 1-Dimensional Modified Huffman run length encoding” – described in **Section 3** of the *TIFF 6.0 Specification*.
 - “T4-encoding” – described in **Section 11** of the *TIFF 6.0 Specification*. This compression is sometimes referred to as Group 3-1D and Group 3-2D.
 - “T6-encoding” – described in **Section 11** of the *TIFF 6.0 Specification*. This compression is sometimes referred to as Group 4. This is the preferred form of compression.
- Have a maximum page size of 8.5 inches wide x 11 inches high.
- Have a minimum page size of 5 inches wide by 3 inches high.
- The resolution should not be higher than 300 pixels per inch and not be lower than 200 pixels per inch. The preferred resolution is 200 pixels per inch.
- As a result of the size rules above, images should have a maximum overall size of 2,550 pixels wide by 3,300 pixels high and a minimum overall size of 1,000 pixels wide by 600 pixels high.
- All pages of the submitted image must adhere to all of the above rules.

Section 2 - Attachment Control Number (ACN) Assignment

- The ACN must be 10 numeric serialized digits, followed by an 11th check digit.
- The check digit must be calculated according to the LUHN formula (modulus 10) check digit algorithm. More information about the check digit algorithm can be obtained from the Medi-Cal Web site (<http://www.medi-cal.ca.gov>). From the home page, click “Technical Specs” under “Provider Resources,” then click “Medi-Cal POS Pharmacy Transaction Specifications, Third-Party Vendors” and download the “[Check Digit Algorithms](#)” supplemental document (in PDF format).
- The ACN assigned to an attachment must be within the range of ACNs allocated to each vendor. If all of the allotted ACNs have been used, vendors can restart their ACN numbering at the beginning of the allotted range. Duplicate ACNs will not interfere with each other, as long as a minimum of 61 days has passed between the receipt of duplicate ACNs.
- Contact EDS if additional ACN ranges are required. There is no guarantee that additional allowed ranges will sequentially follow previously assigned ranges.

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Section 3 - Image File Names

Names of individual image files must provide basic information about the image. The file name must consist of the following:

- The Attachment Control Number (ACN) assigned to the attachment in the image
- A dash or minus sign (“-”) to separate values.
- The billing provider number used on the claim (which the attachment image supports). Provider numbers are nine digits in length.
- The file extension “.TIF” or “.TIFF.” Additional file extensions relating to compression of files (as described in the next section) are also supported.

Note: Any additional values in the filename (i.e. such as non-alphanumeric values like “-“ or “.”) will be ignored, so vendors may implement their own naming convention.

Examples

- An attachment image for provider number HSC999998 with ACN 41238077681 would yield the file name “41238077681-HSC999998.tif.”
- The name “41238077681-HSC999998-received01-12-2005-0815am.tif” would also be acceptable.

Section 4 - File Compression/Bundling

Files may be compressed or bundled together for convenience if desired. The TIFF image data is already compressed, so there is little to be gained by compressing the TIFF file. However, bundling several TIFF image files together into a single file may ease the file transfer process. If standard compression or bundling utilities are used, one of the following file extensions must be added, depending on the utility used. Compression or bundling utilities may be combined or used in any sequence, as long as the file extension name rules are maintained. The following table illustrates the supported compression and bundling utilities and the expected file extensions:

Compression/Bundling Utility	File Extension	Notes
ZIP format (PKZIP or WinZip are examples)	.zip	Recommended – especially useful if files are stored with no compression. In order to process zip files, the extension must be in lower case letters.
Tar (Unix OS)	.tar	Recommended.
GZip	.gz	Supported, but not recommended.
“compress” format (Unix OS)	.Z	Supported, but not recommended.

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Examples of compression and bundling:

- Original files are:
21234567890-HSP33333F-vendorimage.tif and 21234567908-HSP33333F-vendorimage.tif
- Files are bundled together (and compressed if desired) using ZIP compression and the new file name is: *anyfilenamedesired.zip*

- Original files are:
31234567890-HSP33333F-vendorimage.tif and 31234567908-HSP33333F-vendorimage.tif
- Files are bundled together using the Tar (Unix) file bundling utility and the new file name is: *anyfilenamedesired.tar*

Section 5 - File Transfer

Files must be transferred using Secure File Transfer Protocol (SFTP). The following guidelines must be followed to ensure that files are not picked up for processing before they have completed the transfer process:

- During the file transfer process, files must have a name that ends with “.tmp”.
- After transfer has successfully completed, the .tmp file must be renamed to its original name without the .tmp extension.
- Only files that end with “.tif”, “.tiff”, “.zip”, “.Z”, “.gz”, or “.tar” will be processed.
- While the system is processing a file, it will be renamed with a “.processing” extension.
- Once processing is complete and the image file is successfully stored in Medi-Cal image archive system, the file will be removed from the vendor’s upload directory.
- There are multiple servers that accept SFTP transfer of third-party vendor images, so once a client disconnects from a server, there is no guarantee that a subsequent connection would be made to the same server.
- Only files placed in the vendor’s “/upload” directory will be processed.

Section 6 - File Handling at Medi-Cal

Attachment image files will be processed periodically, several times throughout each weekday.