

# X9Utilities: Your x9.37 development tool

## X9Utilities

- Command line
- Access to data
- Access to images
- Summary totals

## Environments

- Windows
- Linux

## Read/Write

- Item level interface
- Easy to implement

## Export/Import

- All x9 records
- All x9 fields

## x9 File Validate

- Set x9 rules
- Create errors file

## Other tools

- Find / Replace

## x9 Formats

- x9.37
- x9.100-187
- x9.100-187+UCD
- x9.100-180
- CPA 015

## File Types

- ICL
- ICLR

## Licensing

- Subscription
- Initial License
- Annual renewal

Do you have more complex needs? Please consider our SDK which be used to perform any x9 related task.

**X9Utilities** provides high level functionality for x9 users who need to read and write x9 files but do not require the more extensive capabilities and complexities that are typically associated with using a full blown SDK. Why acquire an x9 solution that requires you to write to a complex API when a utility program can provide all of the tools than you really need? If your requirements are to read, write, and validate x9 files, then X9Utilities should be considered for its simplicity and overall ease of implementation within your environment

**X9Utilities** is targeted for those organizations who need access to the X9 data (both records and tiff images) that are embedded within x9 files. X9Utilities provides the power you need to both read and write X9 files using your existing programming languages such as VB, C++, Java, PERL, RUBY, Python, or similar tools. Anything that can read and write CSV files can work with **X9Utilities**. And yes, you can just use Excel if that fits your need. This provides compatibility with your existing application environment and easy integration into your current work flow.

**X9Utilities** will do all of the heavy lifting for you. It uses our SDK and assumes all responsibility for field alignment and padding based on each x9 field definition, per the x9 standards. File totals are automatically calculated. X9Utilities is full function, easy to use, includes standard X9Ware support, leverages our SDK, and is very competitively priced when compared to other alternatives within the x9 marketplace.

**X9Utilities** is designed to process both ICL and ICLR files. It supports a wide variety of more complex x9 record types including credits, addendums and type 68 user records.

**X9Utilities** is offered for both the Windows and Linux environments and includes compiled programs that can be invoked directly from user applications, scripts, batch files, or from the command line. There is no requirement for a Java JVM to be installed on your system.

**Read/Write** are tools that can be used to both read and write x9 files using a high level item interface. X9Ware has our own simplistic x9 file format is defined at the item level. The file layout is a simple CSV that defines each item and associated front and back images. Read will create this CSV format from an existing x9 file. Write uses the CSV format to create a new x9 file. The CSV format is very straight forward and can be created directly from your internal applications.

Read/Write allows file header information (as required by your financial institution) to be stored externally in either an XML or CSV file. You do not need to embed this information directly into your file, which simplifies development, testing, and support.

Individual front and back Images are identified using a fully qualified file name. All images are retrieved and then populated into x9 record type 52.

Addendum records can be included on your CSV file and thus incorporated into the x9 file. Input can include type 26 BOFD or type 28 secondary endorsement records. The same can be done for ICLR files using the appropriate record types.

Write has several advantages. It automatically calculates and assigns all file trailer totals. It can also assign a unique file ID modifier (by calendar date) as required by most originators.

Please visit our website at [x9ware.com](http://x9ware.com), or send inquiries to [x9assist@x9ware.com](mailto:x9assist@x9ware.com). We have the x9 experience to meet your specific needs.

The logo for X9Ware LLC features the text "X9Ware" in a large, bold, black sans-serif font, with "LLC" in a smaller, lighter font to the right. The entire logo is set against a white background within a thin black rectangular border.