



EPV zParser V12
Running on z/OS in USS
Technical Note

*IT Cost
Under Control*



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About this note

This technical note is intended to help anyone who wants to install and run EPV zParser on z/OS in USS.

Changes

Technical changes or additions to the text are indicated by a vertical line to the left of the change.



1 Overview

EPV zParser is normally used in distributed environments, such as Windows, Unix, Linux (and z/Linux). This choice provides many advantages but the most important is the reduction of the cost, in terms of resources and software licenses, of managing SMF, IMS and other z/OS data.

EPV zParser can be considered composed of two functionalities: parsing and collecting.

Parsing will read the input data and produce .txt files including all the data. It also produce .hdr files that includes column name and data type.

Collecting read the .txt and .hdr files and loads the data in SQL tables.

At the moment MySQL and MS SQL Server are supported.

In some situations it may be useful to run only the Parsing phase. This can be done easily on distributed systems by setting the appropriate parameters.

This note explains what you have to do in order to run the EPV zParser Parsing phase on z/OS in Unix System Services (USS).

Warning: Collecting data in an SQL DB (MySQL or DB2) could also be possible but at the moment it's not supported.



2 Product installation

EPV zParser for USS comes in a CD in compressed format (tar.gz), the files must be transferred (e.g. via FTP) to USS on a z/OS system.

Once the file has been transferred, you must un-compress and extract it; you can find the needed commands below:

- **gzip -d EPVzParserUSS.tar.gz**
- **tar -xvf EPVzParserUSS.tar**

Note that the files contains the complete product structure, 2 EPV profiles (USSFULL to be used with zParser in full mode, USSLIGHT to be used with zParser in light mode) and all the needed Perl modules so you may put the compressed file in the location were the product has to be installed. The directory structure starts with /EPVROOT/ path so, if you intend to have a final dir structure like this /u/youruser/EPVROOT/.. you must put the compressed file in /u/youruser/ and decompress it.

Now you must tell the system were to find the Perl modules distributed with the product; export them with these commands:

- **export PERL5LIB=/u/youruser/EPVROOT/PERL_LIB_OS390_USS/lib**
- **export PERL5LIB="\$PERL5LIB:
/u/youruser/EPVROOT/PERL_LIB_OS390_USS/lib/lib/site_perl/5.8.7/os390-thread-multi"**

You should also export the EPVPATH variable with the command:

- **export EPVPATH=/u/youruser/EPVROOT**

If you want all the above exported variables to be always correctly set, you must put all the above commands in the ".profile" member present in the user path assigned to run zParser; in our example it should be in /u/youruser.

In this way each time the user logs on, the commands are executed and all the required variables are correctly set.

3 Running zParser in USS

To run EPV zParser in USS using the USSLIGHT profile follow these steps¹:

1. FTP an SMF dump data, zipped or not, into the INPUT path

The INPUT path is: /u/youruser/EPVROOT/USERPROFILE/USSLIGHT/INPUT/EPVZPARSER_INPUT/SMF_INPUT

¹ Same considerations apply when using the USSFULL profile.



2. Run the **EPVzParser_ZOS.sh** shell script that will start the parsing procedure, it is located in:

`/u/youruser/EPVROOT/USSLIGHT/EPVZPARSER/PROCS/EPVzParser_ZOS.sh`

3. All the produced txt and hdr data will be put in:

`/u/youruser/EPVROOT/USERPROFILE/USSLIGHT/WORK/EPVZPARSER_WORK/SMF_WORK/Work`

If for any reason you want to send the .txt and .hdr files produced to a distributed system (Linux, Unix or Windows) remember to specify the appropriate code page in the FTP command to convert EBCDIC produced data, into ASCII coding.

Example: `QUOTE SITE SBDATACONN=(IBM-1047,ISO8859-1)`

4 Creating your own profiles

If you want to modify or create your own EPV profiles, you need also to install EPV zParser on a Windows system.

You can do that in just a few minutes. See the “EPV Plus V12 Installation and Customization” manual for details.

Once you have created the new profile, compress it in tar.gz format and transfer it in the USERPROFILE path.

Then decompress it with the command:

```
gzip -d newprofile.tar.gz
```

Finally extract and convert it from ASCII to EBCDIC with the command:

```
pax -rvf newprofile.tar -o to=IBM-1047
```

5 Missing Perl modules

The package provided contains all the required Perl modules; they are:

Package :

- Archive::Zip
- Bit::Vector
- Carp::Clan
- Compress::Zlib
- Convert::EPV390 (provided with the installation package)
- Convert::IBM390



- Cwd
- Data::Dumper
- Date::Calc
- Date::Calc::XS
- DBD::CSV
- DBD::mysql
- DBI
- DBM::Deep
- Encode
- File::Copy::Recursive
- FileHandle
- File::Temp
- File::stat
- File::Copy
- HTTP::Date
- IO::Compress
- Net::FTP
- Number::Format
- Parallel::Jobs
- POSIX
- Shell
- SQL::Statement
- Test::Simple
- Text::CSV_XS
- Text::FormatTable
- Time::gmtime
- Time::localtime

However, depending on the Perl level installed in your z/OS system, it may happen that some error occurs claiming that a Perl module is missing.

In that case you must install it; this is the procedure to follow:

1. download missing packages from the **www.cpan.org** web site
1. export compiler mode with the command: **export _C89_CCMODE=1**
2. upload the module you just downloaded from CPAN, via FTP in binary mode, in the chosen directory
3. decompress it with the command: **gzip -d yourmodule.tar.gz**
4. convert it, and extract, to EBCDIC coding with the command:
pax -rvf yourmodule.tar -o to=IBM-1047
5. run **Makefile.PL** against the source with the command:

Perl Makefile.PL PREFIX=/u/youruser/EPVROOT/PERL_LIB_OS390_USS/lib

Note that with the PREFIX option you tell the compiler where to put the compiled module, in our case it must be put where all the other Perl modules reside



6. Remove the “NOECHO=@” line into the just created Makefile; this line, if not removed, prevents the module to compile and gives an error
7. Run the **make** command to compile the module
8. Run the **make install** command to copy the new compiled module in the Perl environment



6 Customer support

For any technical problem with or question about the EPV products please write an email to:

epv.support@epvtech.com

For any other issue about EPV products please write an email to:

epv.info@epvtech.com



Related documentation

The following manuals complement the information provided in this note:

- *EPV zParser V12 Installation and Customization*