



The CSVStore Driver

The CSVStore driver allows a North ObSys device to export data from its Essential Data to a comma-separated text file (CSV), suitable for import into applications such as Microsoft Excel. Available for ObSys.

This document relates to CSVStore driver version 2.0

Please read the *ObSys Manual* alongside this document, available from www.northbt.com

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Purpose of CSVStore Driver

The CSVStore driver allows a North ObSys device to export data from its Essential Data to a comma-separated text file (CSV), suitable for import into applications such as Microsoft Excel.

The driver periodically exports selected Essential Data values to a single line within the CSV file.

The first item of each line of the file is the date and time the line was written, followed by values from Essential Data each separated by a comma.

CSVStore can store the file on the local PC or via a network path.

Not all values from Essential Data are exported. Only Essential Data objects with logging enabled are exported, and since only 200 objects can be logged, a maximum of 200 object values are stored in the file.

To prevent all available disk space being used, the CSVStore driver has a Maximum File Size object. Before writing a line, if the current file is greater in size than the Maximum File Size, the file is 'shrunk' to 70% of the maximum, before the new line is written.

Values

The driver creates a file with a header line. Any value that has logging enabled will be written to the file, including:

- Text
- OffOn and NoYes
- Num and Float
- ENum
- Times and Profiles

Prerequisites

The CSVStore driver requires Essential Data v3.0 (build 01/09/2015) or later.

Determine the file and location that the CSVStore driver should create. Ensure current access privileges allow modification of files in the chosen location.

Be aware that when editing or viewing a file, some software locks the file so that other applications cannot read or write it. When this happens, the driver creates a temporary file (with a .tmp extension) which is later appended to the real file when available.

CSV File

The driver writes a header line, containing the comma-separated label of each object that will be recorded.

The driver records a single comma-separated line each time-period. The line contains the date and time, followed by each value that has logging enabled.

Example CSV File

The example below shows a comma-separated value file recording three values (temperature, setpoint, and alarm status). The folder and file name can be specified.

OurCSVFile.csv

```
Date Time,Temperature,Setpoint,Alarm Status
14/12/16 10:35,21.5,21,0
14/12/16 10:40,21.7,21,0
14/12/16 10:45,21.8,21,0
14/12/16 10:50,22,21,0
14/12/16 10:55,21.5,21,0
14/12/16 11:00,21.3,21,0
```

Using the Driver

On ObSys, the CSVStore driver is pre-installed. Once started, you will need to set up the driver before it can write data to a comma-separated file.

Starting the Interface

- 📖 To start an interface using the CSVStore driver, follow these steps:
 - **Start Engineering** your North device using ObSys
 - Navigate to **Configuration, Interfaces**, and set an unused **Interface** to 'CSVStore' to start the particular interface
 - Navigate to the top-level of your North device and re-scan it

The driver setup object (Mc), labelled **CSVStore Setup**, should now be available.

Setting up the Driver

- 📖 To set up the driver, follow these steps:
 - Navigate to the **CSVStore Setup** object (Mc). For example, if you started interface 1 with the driver earlier, then the object reference will be 'M1'
 - Set the **Filename** (FN) and **Write Rate** (WR)
 - Set the **Maximum File Size** (MS)

Object Specifications

Once an interface is started, one or more extra objects become available within the top-level object of the device. As with all North objects, each of these extra objects may contain sub-objects, (and each of these may contain sub-objects, and so on) - the whole object structure being a multi-layer hierarchy. It is possible to navigate around the objects using the ObSys Engineering Software.

Each object is specified below, along with its sub-objects.

Device Top-Level Objects

When an interface is started using the CSVStore driver, the objects below become available within the top-level object of the device. For example, if interface 1 is started, then the object reference 'M1' becomes available.

Description	Reference	Type
CSVStore Setup Set up the CSVStore driver, started on interface <i>c</i> (<i>c</i> is the interface number)	Mc	Fixed Container: <i>[OSM v20\CSVStore v20]</i>

CSVStore Setup

Object Type: [OSM v20\CSVStore v20]

The CSVStore driver setup contains the following objects.

Description	Reference	Type
CSV File Full path of the file to create. For example: 'C:\CSV\Data.csv'	FN	Obj\File; Max chars:127; Adjustable
Write Rate The rate at which a new line in the file is written. The driver synchronises the write trigger with the platform clock, i.e. a 1hour write will occur on the hour.	WR	Obj\Enum; Range: 0..7; Adjustable; Where: 0= 5min, 1=15min, 2=30min, 3=1hr, 4=3hr, 5=6hr, 6=12hr, 7=1day
Maximum File Size (MB) The maximum size the file should grow to. When it exceeds this size, the file will be shrunk (by removing older lines of data)	MS	Obj\Num; Range: 0..10; Adjustable
Last Write Result Last write state of the file	LR	Obj\Enum; Range 0..2 Where: 0=OK, 1=TmpFile, 2=Failed

Driver Versions

Version	Build Date	Details
1.0	02/10/2012	Driver released
1.0	05/03/2013	Resolve issue with numbers without a VH or VL unable to get to CSV
2.0	01/09/2016	Added compatibility with FastComms in Essential Data v2.0

Next Steps...

If you require help, contact support on 01273 694422 or visit www.northbt.com/support



North Building Technologies Ltd
+44 (0) 1273 694422
support@northbt.com
www.northbt.com

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Author: TM
Checked by: BS

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