

SAF_ImportService.config

Resides in directory with SAF_ImportService.exe. Any changes to the configuration requires the service to be restarted.

- FileDependency – When set to True this requires the collector to process files one at a time. It implies that there is some dependency between the files. Default value is False and should only be set to True in unique situations.
- Interval – Frequency, in number of seconds, files are processed. Default value is 10.
- InputDirectory – Directory location that the service will monitor for files being placed. Multiple directories may be defined if there is data being imported from multiple sources with different file formats.
- NumberOfTasks – Controls the number of tasks utilized when FileDependency is set to False. Default value is 12.

SAF_Import.config

Required for each directory being monitored and must reside in each directory. Any changes to the configuration requires the service to be restarted.

- AllowInsertedData – Determines if SAF will insert out of order data or if data must be received in chronological order. Default value is true.
- AutoCreateDataSet – Determines if SAF would create a dataset in the Historian if the dataset doesn't currently exist. Default value is true.
- AutoWriteNoData – Determines if SAF will insert a no data quality for each tag when a session disconnects. Default value is false.
- BranchOffset – Column position to be used as a branch name while building a tag name.
- BranchPosition – Row/Column offset of the name to be used as a branch name while building a tag name.
- DataSet – Name of dataset to route data to in the Historian. DataSet or DataSetOffset are required if dataset not encoded in tag name being imported.
- DataSetOffset – Column position to be used as the dataset name while building a tag name. DataSet or DataSetOffset are required if the dataset name is not encoded in the tag name being imported.
- DataTypeOffset - Column position to be used if the data type is included with the value.
- DateFormat – Format of date being imported if a non-standard format is used that .Net can't convert automatically.
- DateOffset – Column position to be used for the date. Can be used in conjunction with the TimeOffset parameter if date and time are located in separate columns. Otherwise the TimestampOffset parameter would be used when date and time are combined in a column.
- DateTimeFormat - Format of datetime being imported if a non-standard format is used that .Net can't convert automatically.
- DefaultIntervalOffset – Default interval between each row for file formats that are interval-based but don't specify the interval as a column on each row. The time between each sample is assumed to be consistent.
- EngUnitReplace - (Used in conjunction with TagNameMatch) Allows the user to define which capture group to use as the Eng Units property.
- FileDate – Allows the user to define the date of the hdb file within the historian.
- HeaderCount – Number of rows to skip when reading a file to either get to the beginning of the data for row-based processing or to the record layout for table-based processing.
- Historian – Name of Historian to route data to. Default value is localhost.
- InputDelimiter – Character used to parse each line of data. Use the word "tab" to indicate a tab delimiter. Default value is ","
- IntervalOffset – For file formats that are interval-based, column position of the interval or delta between each row
- IntervalOffsetUnits – The units (seconds or minutes) that are used for the interval between each row.

- **KeepProcessedFiles** – Determines if files are moved to another directory or deleted when processing is complete.
- **NoDataValues** – A comma separated list of specific values that will instruct SAF to insert a no data quality for a particular TVQ.
- **PostProcessRegex** - (Used in conjunction with **TagNameMatch**) Determines if the **TagNameMatch** regular expression will be run against the tag name before or after the dataset and branch have been prepended.
- **ProcessedDirectory** – Directory to copy files to when processing is complete if the **KeepProcessedFiles** is set to true.
- **PropertyNames** – Define a comma separated list of tag property names to correspond to the list of **PropertyOffsets**.
- **PropertyOffsets** – Define a comma separated list of column offsets for tag property values. Each entry may contain a range such as 2-10.
- **QualityOffset** - Column position to be used for the quality.
- **StartDatePosition** – For file formats that are interval-based this gives the user an initial date to use to calculate the timestamp of each value.
- **StartTimePosition** – For file formats that are interval-based this gives the user an initial time to use to calculate the timestamp of each value.
- **SubHeaderCount** – The number of rows between the header and the actual data in the file.
- **TagNameMatch** – (Used in conjunction with **TagNameReplace**) Allows the user to define a regular expression in order to parse column headers.
- **TagNameOffset** - Column position to be used as a tag name.
- **TagNameReplace** – (Used in conjunction with **TagNameMatch**) Allows the user to define which capture group to use as the tagname.
- **TagOffsets** – Used in table-based processing to define a comma separated list of column offsets for tag names. Each entry may contain a range such as 2-10 or may be encoded as 2-* for files with varying number of columns.
- **TimeFormat** - Format of time being imported if a non-standard format is used that .Net can't convert automatically.
- **TimeOffset** - Column position to be used for the time. Can be used in conjunction with the **DateOffset** parameter if date and time are located in separate columns. Otherwise the **TimeStampOffset** parameter would be used when date and time are combined in a column.
- **TimeStampOffset** - Column position to be used for the date and time. Can be used if date and time are located in the same column. Otherwise, the **DateOffset** and **TimeOffset** parameters would be used when date and time are in separate columns.
- **UseFileNameAsBranch** – The file name without extension that will be used to name a branch in the historian.
- **UseSystemCultureForValueParsing** – This is a Boolean value that tells us to use the machine's culture instead of the invariant culture.

- UTCTimestamp – Determines if the datetime provided is in UTC or a local time format. Default value is False.
- ValueOffset – Column position to be used for the value.
- UnixTimestampOffset – Column position to be used for the date and time that is held in a Unix timestamp format. It can be a 10 digit(unix epoc). 13 digit (unix epoc + millisecond), 16 digit (unix epoc + microsecond), or 19 digit (unix epoc + nanosecond). Note that nanoseconds are rounded to the nearest microsecond.

Sample Config

```
<Settings>
  <InputDelimiter>,</InputDelimiter>
  <HeaderCount>1</HeaderCount>
  <Historian>OSCAR</Historian>
  <DataSet>ImportSample</DataSet>
  <TagNameOffset>0</TagNameOffset>
  <ValueOffset>2</ValueOffset>
  <TimestampOffset>1</TimestampOffset>
  <QualityOffset>4</QualityOffset>
  <DataTypeOffset>3</DataTypeOffset>
  <NoDataValues>#VALUE!, </NoDataValues>
  <KeepProcessedFiles>True</KeepProcessedFiles>
  <ProcessedDirectory>C:\SAF Import\Completed</ProcessedDirectory>
  <AutoCreateDataSet>True</AutoCreateDataSet>
  <AllowInsertedData>True</AllowInsertedData>
</Settings>
```