

ASX 05 (Code 5095)

Documentation and Metadata API

Interface for the comfortable creation and editing of User Documentation and Documentation Templates with easy-to-program software solutions

Overview

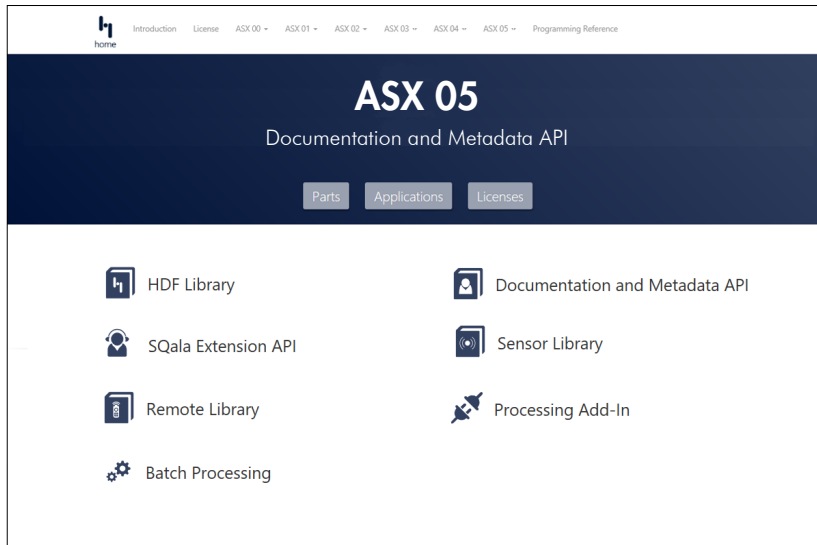
The ASX 05 interface allows it to seamlessly integrate User Documentation and Documentation Templates of ArtemiS SUITE into own software solutions.

Users are allowed to extend their software, for storing User Documentation on test benches or in mobile operations, for example. The information can be fully used for analysis in ArtemiS SUITE, databases, etc. In addition, data management systems can also be extended automatically or manually.

The API interface allows reading, modifying, and writing external or embedded User Documentation, as well as adding Documentation Templates and applying them to inventory data.

The User-Defined Information (UDI) known from ArtemiS Classic can be converted securely into User Documentation of ArtemiS SUITE by means of the API interface, so that it can be utilized completely.

Using the detailed documentation provided by the API, programming of own applications is easy. In addition, clear programming examples are available to help users creating their own applications quickly and securely.



Features

HEADacoustics.API.Documentation.dll

- Creating and editing User Documentation and Documentation Templates with user-specific software solutions
- Programming platforms
 - .Net
 - Python
 - MATLAB®

Functions

- Reading and writing of User Documentation for
 - HDF files
 - directories
 - other data formats
- Creating new User Documentation
- Filtering / searching
 - Documentation fields
 - Content of documentation fields
- Modifying content (to correct typing errors in existing User Documentation, for example)
- Deleting documentation elements
- Copy-and-paste into other directories / files

- Documentation Templates
 - Reading, writing, and modifying
 - Transfer and apply to inventory data
- UDI

UDI (User-Defined Information) is a documentation format from ArtemiS Classic and older versions of HEAD Recorder, which has been replaced by the User Documentation of ArtemiS SUITE

 - Reading
 - Converting UDI (ArtemiS Classic) into User Documentation (ArtemiS SUITE)

Future-proof

ASX will be extended with more interfaces from HEAD acoustics in future releases.

The interfaces are based on state-of-the-art technologies and offer reliability, investment protection, compatibility, and stability for all users - also in future versions.

Scope of Supply

- License file:
ASX 05 (Code 5095)
Documentation and Metadata API

Requirements and recommendations

- ASX 00 (Code 5090)
System Integration and Extension Guidelines
With ASX 00, users are provided with comprehensive documentation including a number of practical application examples and programming references for all ASX interfaces.

The documentation is enhanced with programming examples that clearly explain how the interfaces can be used.

- ASM 00 (Code 5000)
ArtemiS SUITE Basic Framework
Included:
 - User Documentation (documentation created by the user)
 - System Documentation (documentation provided by the system)
 - Editor for an easy and fast creation of Documentation Templates

Examples

- Programming example: Creating new User Documentation (MATLAB®).

```
.Net  MATLAB  Python

NET.AddAssembly('C:\Program Files\HEAD System Integration and Extension (ASX)\HEADacoustics.API.Documentation.dll');
NET.AddAssembly('C:\Program Files\HEAD System Integration and Extension (ASX)\HEADacoustics.API.License.dll');

import HEADacoustics.API.Documentation.*;
import HEADacoustics.API.License.*;

license = License.Create([ProductCode.ASX_05_DocumentationAndMetadataAPI]);

outPath = 'C:\temp\Example';

inDoc = Documentation.Create("Created by API");

textField = TextField.Create("Name", "Meier");
dateField = DateField.Create("Created", System.DateTime.Now);
inDoc.AddField(textField);
inDoc.AddField(dateField);

isWritten = DocumentationWriter.WriteDirectoryDocumentation(inDoc, outPath);

license.Dispose();
```

- Programming example: Converting UDI (documentation format in ArtemiS Classic) into the User Documentation of ArtemiS SUITE (Python).

```
.Net  MATLAB  Python

import clr
import os
import sys

sys.path.append(os.sep.join(['C:', 'Program Files', 'HEAD System Integration and Extension (ASX)']))
clr.AddReference('HEADacoustics.API.Documentation')
clr.AddReference('HEADacoustics.API.License')

import HEADacoustics.API.Documentation as ASX05
from HEADacoustics.API.License import License, ProductCode

license = License.Create([ProductCode.ASX_05_DocumentationAndMetadataAPI])

pathDir = os.sep.join(['C:', 'temp'])
inFile = 'originalLegacyUdiDocu.hdf'
outFile = 'convertedToUserDocu.hdf'
inPath = os.sep.join([pathDir, inFile])
outPath = os.sep.join([pathDir, outFile])

readonlyDocumentation = ASX05.LegacyUdiReader.ReadUdi(inPath)
documentation = ASX05.DocumentationConverter.ToUserDocumentation(readonlyDocumentation)

isWritten = ASX05.DocumentationWriter.WriteFileDocumentation(documentation, outPath, ASX05.Storage.PreferEmbedded)

license.Dispose();
```

System Requirements

- Windows 10 x64 (Pro, Enterprise, Education; version: 1809 or later; language: US/Western European)
- .NET Framework 4.8 (in order to use the libraries)
- HASP Dongle driver (in order to use the libraries)
- Internet Explorer 11

In order to install software and drivers from HEAD acoustics, administrator rights are required. To operate the software, only standard user rights are needed.

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