

ASX 02 (Code 5092)

Data Processing and Representation API

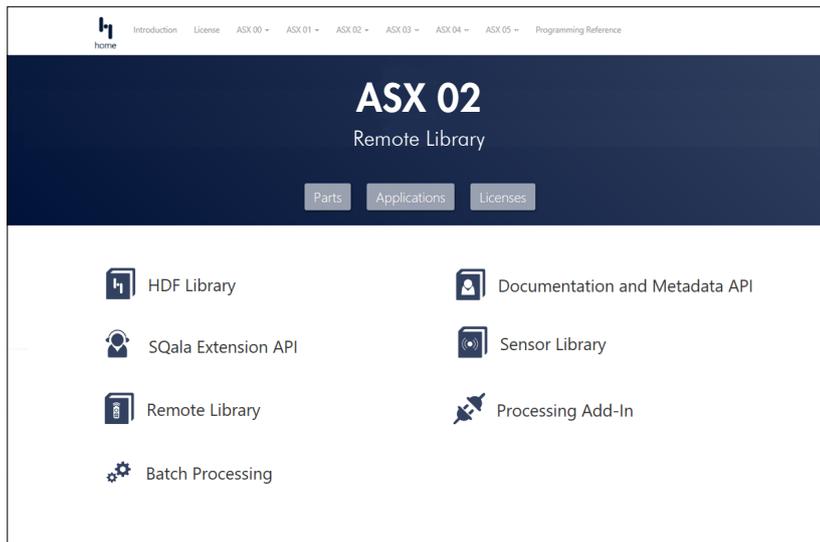
Interface for interactive control of ArtemiS SUITE and ArtemiSproc.exe from customer-specific software solutions

Overview

The interface for the Remote Library allows users to control various functions of ArtemiS SUITE interactively from their own software solutions. For example, users can parameterize and get access to functions of ArtemiS SUITE from their own custom graphical user interface (GUI), allowing for a seamless integration.

The scope of preparation and processing steps controlled by the interface ranges from populating Pool or Automation Projects and reports and triggering calculations to displaying and exporting of results.

It is possible to integrate multiple processing options of ArtemiS SUITE in custom workflows. For example, data measured with a recording software or saved in a database can be directly processed in a predefined Pool or Automation Project. The results are made available interactively or automatically, e.g. in a report, which can then be exported to PDF or PowerPoint.



Features

HEADacoustics.API.Remote.dll

- .NET interface for interactive remote control of ArtemiS SUITE and ArtemiSproc.exe from custom software solutions

Applications

- Interactive or automated remote control of various functions of ArtemiS SUITE, e.g. directly from a custom measurement software or database
- Accessing and parameterization of functions of ArtemiS SUITE, e.g. from a custom user interface for user-friendly execution of a workflows

Controllable functions of ArtemiS SUITE

- Opening of ArtemiS SUITE and preparation of selected documents, measurement data, etc.
- Initiation of calculation tasks
- Processing of user-specific data in Pool or Automation Projects
 - Cutting of marks
 - Applying various analyses
 - Calculation of Single Value results
 - Tolerance checks
- etc.

- Display of results as a report
- Export of results

Control of ArtemiSproc.exe

- Simultaneous calculation of multiple tasks (jobs) in a single instance
- Management and monitoring of jobs

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 02 (Code 5092)
Data Processing and Representation
API

Requirements and recommendations

- ASX 02
 - Required
 - 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.
- ArtemiSproc.exe
 - Required
 - ASM 00 (Code 5000)
ArtemiS SUITE Basic Framework
 - ASM 05 (Code 5005)
ArtemiS SUITE Automation API
Module
 - Recommended
 - ASM 06 (Code 5006)
ArtemiS SUITE Automation Basic
Analysis Module
 - or
 - ASM 01 (Code 5001)
ArtemiS SUITE Basic Analysis
Module
- ArtemiS SUITE
 - Required
 - All functions of ArtemiS SUITE
accessed via Remote Library
and ArtemiSproc.exe must be
licensed accordingly.

Examples

- **Tailor-made troubleshooting for measurements directly from a custom recording software (e.g. for test bench systems)**

Example: From the recording software, data acquired in a measurement are inserted into a prepared Pool Project, processed with analyses and other options, and displayed in a Data Viewer. By means of a tailor-made custom user interface (GUI), users can interact with the workflow or have the processing steps run automatically.

- **Comparison of measurement data with one or several reference measurements (e.g. for benchmarking)**

Example: Via a graphical user interface, users control the reading of measurement data, e.g. from a database, which is to be compared to a reference source. With a mouse click, the measurement is selected, automatically compared to the reference source, and the result is displayed in a report. Optionally, calculations of Single Value results and many other functions are supported as well. Afterwards, the report results can be saved as PowerPoint or PDF documents.

- **Programming example: Populating a report from ArtemiS SUITE with a measurement and subsequent PDF export of the result**

```
using HEADacoustics.API.Remote;

namespace Examples
{
    internal static class ReportExportExample
    {
        public static void Main(string[] args)
        {
            using (License.Create())
            {
                var remoteClient = ArtemiSuiteRemote.ForLatestApplication(true);
                if (!remoteClient.Application.IsAvailable)
                    remoteClient.Application.Start().Wait();

                var reportService = remoteClient.Application.GetReportingService();
                var report = reportService.NewFromTemplate(@"D:\Data\MyReport.hrx");
                reportService.AddOrReplaceRole(report, "Data", @"D:\Data\MyFile.hdf");
                var exportService = remoteClient.Application.GetDocumentExportService();
                exportService.ExportToPdf(report, @"D:\Data\MyPdf.pdf", true, false);
            }
        }
    }
}
```

System Requirements

- Windows 10 x64 (Pro, Enterprise, Education; version: 1809 or later; languages: 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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