

ASX 00 (Code 5090)

System Integration and Extension Guidelines

Detailed technical information of the documentation for the system integration interfaces

Overview

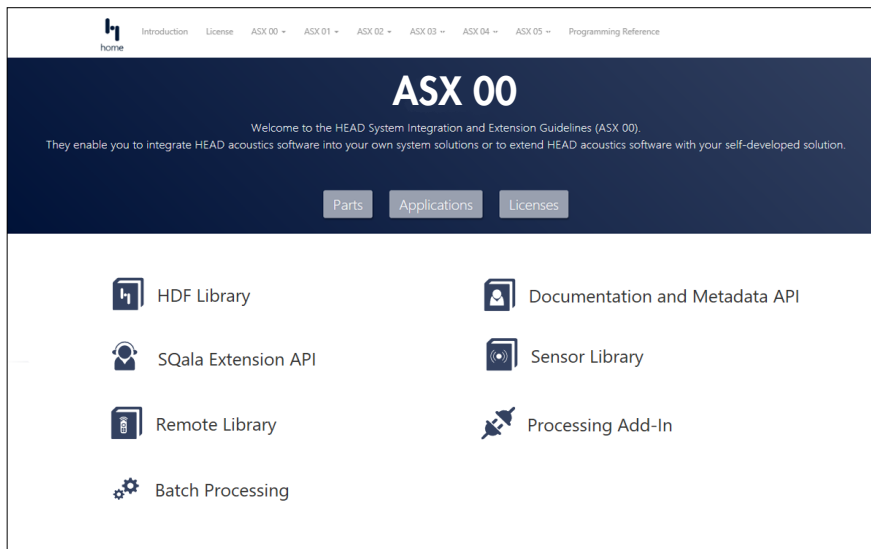
ASX 00 provides a comprehensive documentation of the system integration interfaces from HEAD acoustics, including a number of practical application examples and programming references.

Programming examples in the documentation clearly explain how the interfaces can be used. The detailed technical information contained in the documentation are very easy to use for programmers. In addition, typical programming examples are provided for most interfaces, which can be used as a starting point or inspiration for programming custom solutions.

Documentation and Metadata API (ASX 05)

HEADacoustics.API.Documentation

- Documentation of the programming interface for the comfortable creation and editing of User Documentation and Documentation Templates
- Examples
 - Read and write User Documentation
 - Create new User Documentation
 - Read, write and modify Documentation Templates
 - Apply Documentation Templates to inventory data
 - Convert User-defined Information (ArtemiS Classic) into User Documentation (ArtemiS SUITE)
 - etc.



Features

Comprehensive programming documentation with examples for the integration of ArtemiS SUITE in custom software solutions

HDF Library (ASX 01) (HEADacoustics.API.Hdf.dll)

- Documentation of the HDF Library interface for user-programmed processing of HDF files
- Examples
 - Reading and writing (e.g. with MATLAB®, C#) of
 - analysis data
 - time data
 - pulse channels
 - etc.

Processing Add-In (ASX 01)

- Documentation of the Processing Add-In interface for including custom filters and analyses in a Pool, Automation, Metric and Standardized Test Project, and exporting the results
- Examples
 - MATLAB®
 - C#
 - etc.

Remote Library (ASX 01) (HEADacoustics.API.Remote.dll)

- Documentation of the Remote Library interface (ASX 02) for interactive control of ArtemiS SUITE and the programming interface ArtemiSproc.exe
- Examples
 - Pool calculation
 - Reporting
 - etc.

SQala Extension API (ASX 03)

- Documentation of the programming interface for individual extension of the jury testing software SQala
- Developing (C#) and seamlessly integrating of user-specific jury-testing steps
- Examples
 - Adaptive Paired Comparison tests, MUSHRA tests, etc.

Data Acquisition API (ASX 04) HEADacoustics.API.Remote.Recorder

- Documentation of the programming interface for the interactive control of the Recorder of ArtemiS SUITE
- Examples
 - Start and stop the Recorder of ArtemiS SUITE (.Net)
 - Set triggers (.Net)

Features

Batch Processing (ArtemiSproc.exe)

- Documentation of user-created automatic signal processing or post-processing in batch operation using ArtemiSproc.exe (ASM 00, ASM 05 - e.g. ASM 06, ASM 01, etc.)
- The processing steps specified by the user in ArtemiS SUITE are performed without the need to load the graphical user interface of ArtemiS SUITE
- Examples
 - Batch processing of simple processes
 - Using variables for batch processing
 - etc.

Sensor Library (SENX)

- Reading and writing the SENX file format for sensor lists
- E.g. exporting files from measurement equipment management systems
- Examples

Interfaces: Requirements and recommendations

- HDF Library
 - Required
 - ASX 01 (Code 5091) Data Access API
 - Optional
 - e.g. MATLAB® R2016b, Visual Studio Express 2012 etc., PowerShell
- Processing Add-In
 - Required
 - ASX 01 (Code 5091) Data Access API
 - ASM 00 (Code 5000) ArtemiS SUITE Basic Framework
 - ASM 01 (Code 5001) ArtemiS SUITE Basic Analysis Module
 - ASM 27 (Code 5027) ArtemiS SUITE Calculation Module
 - Optional
 - e.g. MATLAB® R2016b, Visual Studio Express 2012 etc., PowerShell
- ArtemiSproc.exe
 - Required
 - ASX 02 (Code 5092) Data Processing and Representation API
 - 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
- Remote Library
 - Required
 - ASX 02 (Code 5092) Data Processing and Representation API
- SQala Extension API
 - Required
 - ASX 03 (Code 5093) SQala Extension API
 - ASM 50 (Code 5050) SQala Basic Module
- Extension of the Remote Library for the Recorder of ArtemiS SUITE
 - Required
 - ASX 04 (Code 5094) Data Acquisition API
 - Optional
 - ASM 04 (Code 5004) ArtemiS SUITE Recorder Module
 - ASM 00 (Code 5000) ArtemiS SUITE Basic Framework
 - ASX 02 (Code 5092) Data Processing and Representation API
- Dokumentation and Metadaten-API
 - Required
 - ASX 05 (Code 5095) Documentation and Metadata API
 - Optional
 - ASM 00 (Code 5000) ArtemiS SUITE Basic Framework
- All functions of ArtemiS SUITE accessed via ASX must be licensed accordingly.

Scope of Supply

- ASX 00 (Code 5090) System Integration and Extension Guidelines

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• **HDF Library: Reading analysis channels**

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- **HEADacoustics.API.Hdf**
 - Abscissa
 - AxisPreset
 - Band
 - BandAbscissa
 - Channel
 - ChannelInfo
 - Complex3DReader
 - Complex3DWriter
 - ComplexChannel
 - CutInfo
 - Dof
 - EquidistantAbscissa
 - FileInfo
 - FileDate
 - FileInfo
 - I3DReaderChannel
 - IComplex3DReaderChannel
 - IComplex3DWriterChannel
 - IComplexVector
 - IReal3DReaderChannel
 - IReal3DWriterChannel
 - IStreamReaderChannel

Class Reader

Reads the analysis channels from an HDF file.

Inheritance

- ↳ Reader

Namespace: HEADacoustics.API.Hdf
Assembly: HEADacoustics.API.Hdf.dll

Syntax

```
public static class Reader
```

Methods

Read2D(String)

Reads a file that contains 2D analyses.

Declaration

```
public static ReaderResult Read2D(string path)
```

Parameters

IN THIS ARTICLE

Methods

• **Remote Library: Pool Project**

Enter here to filter...

- + HEADacoustics.API.Hdf
- **HEADacoustics.API.Remote**
 - ArtemiSuiteApplication
 - ArtemiSuiteRemote
 - Calculator
 - HdfMark
 - IApplicationInfo
 - IAutomationProject
 - IDataViewer
 - IDocumentExport
 - IDocuments
 - IEvents
 - IMainWindow
 - InvalidExeException
 - InvalidRegistryException
 - InvalidVersionException
 - IPoolProject**
 - IProcessing
 - IProcessingCallback
 - IRecentRecordings
 - IReporting
 - ISharedCommand
 - IStandardizedTestProject
 - JobProgress

Interface IPoolProject

Interact with Pool Projects.

Namespace: HEADacoustics.API.Remote
Assembly: HEADacoustics.API.Remote.dll

Syntax

```
[ServiceContract]
public interface IPoolProject
```

Methods

ActivateAllMarks(String)

Activates all marks of the Pool Project.

Declaration

```
[OperationContract]
void ActivateAllMarks(string documentId)
```

Parameters

Type	Name	Description
System.String	documentId	ID of the Pool Project

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Methods