EcoStruxure Machine Expert

Script Engine User Guide

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When devices are used for applications with technical safety requirements, the relevant instructions must be followed.

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Safety Information

Important Information

NOTICE

Read these instructions carefully, and look at the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this documentation or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.

The addition of this symbol to a “Danger” or “Warning” safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ DANGER

DANGER indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

⚠ WARNING

WARNING indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

⚠ CAUTION

CAUTION indicates a hazardous situation which, if not avoided, **could result** in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to physical injury.

PLEASE NOTE

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction and operation of electrical equipment and its installation, and has received safety training to recognize and avoid the hazards involved.

BEFORE YOU BEGIN

Do not use this product on machinery lacking effective point-of-operation guarding. Lack of effective point-of-operation guarding on a machine can result in serious injury to the operator of that that machine.

⚠ WARNING

UNGUARDED EQUIPMENT

- Do not use this software and related automation equipment on equipment which does not have point-of-operation protection.
- Do not reach into machinery during operation.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

This automation equipment and related software is used to control a variety of industrial processes. The type or model of automation equipment suitable for each application will vary depending on factors such as the control function required, degree of protection required, production methods, unusual conditions, government regulations, etc. In some applications, more than one processor may be required, as when backup redundancy is needed.

Only you, the user, machine builder or system integrator can be aware of all the conditions and factors present during setup, operation, and maintenance of the machine and, therefore, can determine the automation equipment and the related safeties and interlocks which can be properly used. When selecting automation and control equipment and related software for a particular application, you should refer to the applicable local and national standards and regulations. The National Safety Council's Accident Prevention Manual (nationally recognized in the United States of America) also provides much useful information.

In some applications, such as packaging machinery, additional operator protection such as point- of-operation guarding must be provided. This is necessary if the operator's hands and other parts of the body are free to enter the pinch points or other hazardous areas and serious injury can occur. Software products alone cannot protect an operator from injury. For this reason, the software cannot be substituted for or take the place of point-of-operation protection.

Ensure that appropriate safeties and mechanical/electrical interlocks related to point-of-operation protection have been installed and are operational before placing the equipment into service. All interlocks and safeties related to point-of-operation protection must be coordinated with the related automation equipment and software programming.

NOTE: Coordination of safeties and mechanical/electrical interlocks for point-of-operation protection is outside the scope of the Function Block Library, System User Guide, or other implementation referenced in this documentation.

START-UP AND TEST

Before using electrical control and automation equipment for regular operation after installation, the system should be given a start-up test by qualified personnel to verify correct operation of the equipment. It is important that arrangements for such a check be made and that enough time is allowed to perform complete and satisfactory testing.

⚠ WARNING

EQUIPMENT OPERATION HAZARD

- Verify that all installation and setup procedures have been completed.
- Before operational tests are performed, remove all blocks or other temporary holding means used for shipment from all component devices.
- Remove tools, meters, and debris from equipment.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

Follow all start-up tests recommended in the equipment documentation. Store all equipment documentation for future references.

Software testing must be done in both simulated and real environments.

Verify that the completed system is free from all short circuits and temporary grounds that are not installed according to local regulations (according to the National Electrical Code in the U.S.A, for instance). If high-potential voltage testing is necessary, follow recommendations in equipment documentation to prevent accidental equipment damage.

Before energizing equipment:

- Remove tools, meters, and debris from equipment.
- Close the equipment enclosure door.
- Remove all temporary grounds from incoming power lines.
- Perform all start-up tests recommended by the manufacturer.

OPERATION AND ADJUSTMENTS

The following precautions are from the NEMA Standards Publication ICS 7.1-1995 (English version prevails):

- Regardless of the care exercised in the design and manufacture of equipment or in the selection and ratings of components, there are hazards that can be encountered if such equipment is improperly operated.
- It is sometimes possible to misadjust the equipment and thus produce unsatisfactory or unsafe operation. Always use the manufacturer's instructions as a guide for functional adjustments. Personnel who have access to these adjustments should be familiar with the equipment manufacturer's instructions and the machinery used with the electrical equipment.
- Only those operational adjustments required by the operator should be accessibleto the operator. Access to other controls should be restricted to prevent unauthorized changes in operating characteristics.

About the Book

At a Glance

Document Scope

The present document details the various elements of the Script Engine. Read the complete document before you use the product or products described herein.

Validity Note

The information contained in the present document is applicable only for EcoStruxure Machine Expert. This document has been updated for the release of EcoStruxure Machine Expert V1.0.

The technical characteristics of the devices described in this document also appear online. To access this information online:

Step	Action
1	Go to the Schneider Electric home page *www.schneider-electric.com*.
2	In the **Search** box type the reference of a product or the name of a product range. • Do not include blank spaces in the reference or product range. • To get information on grouping similar modules, use asterisks (*).
3	If you entered a reference, go to the **Product Datasheets** search results and click on the reference that interests you. If you entered the name of a product range, go to the **Product Ranges** search results and click on the product range that interests you.
4	If more than one reference appears in the **Products** search results, click on the reference that interests you.
5	Depending on the size of your screen, you may need to scroll down to see the data sheet.
6	To save or print a data sheet as a .pdf file, click **Download XXX product datasheet**.

The characteristics that are presented in the present document should be the same as those characteristics that appear online. In line with our policy of constant improvement, we may revise content over time to improve clarity and accuracy. If you see a difference between the document and online information, use the online information as your reference.

Product Related Information

⚠ WARNING

LOSS OF CONTROL

- The designer of any control scheme must consider the potential failure modes of control paths and, for certain critical control functions, provide a means to achieve a safe state during and after a path failure. Examples of critical control functions are emergency stop and overtravel stop, power outage and restart.
- Separate or redundant control paths must be provided for critical control functions.
- System control paths may include communication links. Consideration must be given to the implications of unanticipated transmission delays or failures of the link.
- Observe all accident prevention regulations and local safety guidelines.[1]
- Each implementation of this equipment must be individually and thoroughly tested for proper operation before being placed into service.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

[1] For additional information, refer to NEMA ICS 1.1 (latest edition), "Safety Guidelines for the Application, Installation, and Maintenance of Solid State Control" and to NEMA ICS 7.1 (latest edition), "Safety Standards for Construction and Guide for Selection, Installation and Operation of Adjustable-Speed Drive Systems" or their equivalent governing your location.

⚠ WARNING

UNINTENDED EQUIPMENT OPERATION

- Only use software approved by Schneider Electric for use with this equipment.
- Update your application program every time you change the physical hardware configuration.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

⚠ WARNING

UNINTENDED EQUIPMENT OPERATION

Do not include any programming or configuration logic, or parameter values from any of the examples in your machine or process without thoroughly testing your entire application.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

Terminology Derived from Standards

The technical terms, terminology, symbols and the corresponding descriptions in this manual, or that appear in or on the products themselves, are generally derived from the terms or definitions of international standards.

In the area of functional safety systems, drives and general automation, this may include, but is not limited to, terms such as *safety*, *safety function*, *safe state*, *fault*, *fault reset*, *malfunction*, *failure*, *error*, *error message*, *dangerous*, etc.

Among others, these standards include:

Standard	Description
IEC 61131-2:2007	Programmable controllers, part 2: Equipment requirements and tests.
ISO 13849-1:2015	Safety of machinery: Safety related parts of control systems. General principles for design.
EN 61496-1:2013	Safety of machinery: Electro-sensitive protective equipment. Part 1: General requirements and tests.
ISO 12100:2010	Safety of machinery - General principles for design - Risk assessment and risk reduction
EN 60204-1:2006	Safety of machinery - Electrical equipment of machines - Part 1: General requirements
ISO 14119:2013	Safety of machinery - Interlocking devices associated with guards - Principles for design and selection
ISO 13850:2015	Safety of machinery - Emergency stop - Principles for design
IEC 62061:2015	Safety of machinery - Functional safety of safety-related electrical, electronic, and electronic programmable control systems
IEC 61508-1:2010	Functional safety of electrical/electronic/programmable electronic safety-related systems: General requirements.
IEC 61508-2:2010	Functional safety of electrical/electronic/programmable electronic safety- related systems: Requirements for electrical/electronic/programmable electronic safety-related systems.

IEC 61508-3:2010	Functional safety of electrical/electronic/programmable electronic safety- related systems: Software requirements.
IEC 61784-3:2016	Industrial communication networks - Profiles - Part 3: Functional safety fieldbuses - General rules and profile definitions.
2006/42/EC	Machinery Directive
2014/30/EU	Electromagnetic Compatibility Directive
2014/35/EU	Low Voltage Directive

In addition, terms used in the present document may tangentially be used as they are derived from other standards such as:

Standard	Description
IEC 60034 series	Rotating electrical machines
IEC 61800 series	Adjustable speed electrical power drive systems
IEC 61158 series	Digital data communications for measurement and control – Fieldbus for use in industrial control systems

Finally, the term zone of operation may be used in conjunction with the description of specific hazards, and is defined as it is for a hazard zone or danger zone in the Machinery Directive (2006/42/EC) and ISO 12100:2010.

NOTE: The aforementioned standards may or may not apply to the specific products cited in the present documentation. For more information concerning the individual standards applicable to the products described herein, see the characteristics tables for those product references.

Chapter 1
SchneiderElectric.Scripting.CodeAnalysis Namespace

This namespace contains types and methods that support accessing and using Code Analysis functionality from within the Python API.

Interfaces

	Interface	Description
	IConventionsTableResults	Scripting API with code analysis results of convention table.
	IMetricsTableResults	Scripting API with code analysis results of metrics table.
	IScriptAnalysisProject	Scripting API for Machine Advisor Code Analysis with details of analysis project on cloud.
	IScriptApplicationExtension	Scripting API to extend the application script object for Code Analysis operation access (for this application).
	IScriptCloudConfiguration	Scripting API for cloud connector configuration.
	IScriptCloudConnector Interface	Scripting API for cloud connector.
	IScriptCodeAnalysis	Interface that describes the script engine of code analysis
	IScriptCompany	Scripting API for Machine Advisor Code Analysis with details of company.
	IScriptConfiguration	Scripting API to configure the code analysis query engine and code analyser.
	IScriptConventions	Scripting API to build convention table results.

IScriptConventionsObject	Scripting API attached to conventions table objects.
IScriptCreateBlockListExtension	Scripting API to extend an object for code analysis block list creation.
IScriptCreateConventionsTableExtension	Scripting API to extend an object for code analysis conventions table creation.
IScriptCreateDependencyViewExtension	Scripting API to extend an object for code analysis dependency view creation.
IScriptCreateManagerObjectExtension	Scripting API to extend an object for code analysis manager object creation.
IScriptCreateMetricsTableExtension	Scripting API to extend an object for code analysis metrics table creation.
IScriptMetrics	Scripting API to build metrics table results.
IScriptMetricsObject	Scripting API attached to metrics table objects.
IScriptPortal	Scripting API for Machine Advisor Code Analysis cloud portal.
IScriptProjectExtension	Scripting API to extend the project script object for Code Analysis operation access (for POU space)
IScriptQueries	Scripting API for Machine Advisor Code Analysis queries.
IScriptQuery	Scripting API of a query object.
IScriptQueryChain	Scripting API of a query chain object.
IScriptQueryParameter	Scripting API of a query parameter object
IScriptQueryRepository	Scripting API to access all query chains.

	IScriptSnapshotOptions	Scripting API for Machine Advisor Code Analysis snapshot options.
	IScriptSnapshots	Scripting API for Machine Advisor Code Analysis snapshots.

Enumerations

	Enumeration	Description
	HttpBackendTypes Enumeration	The available and supported Http Backend types
	TripleStorageBackendTypes	Definition of strategy used for backend type selection.

IConventionsTableResults Interface

Scripting API with code analysis results of convention table.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IConventionsTableResults
```

The **IConventionsTableResults** type exposes the following members.

Properties

	Name	Description
	analyser_version	Retrieves the analyser version.
	analysis_finished_at	Retrieves the analysis finished time.
	analysis_started_at	Retrieves the analysis start time.
	columns	Retrieves the analysis results columns.
	message	Retrieves the final analysis message (as text).
	project_path	Retrieves the analyzed project path.
	rows	Retrieves the analysis results rows.
	successful	Retrieves a value indicating whether this **IConventionsTableResults** was successful.

Methods

	Name	Description
	IConventionsTableResults.store_as_csv Method	Stores the analysis results as xml.

IConventionsTableResults.store_as_html Method	Stores the analysis results as html.
IConventionsTableResults.store_as_xml Method	Stores the analysis results as xml.

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IConventionsTableResults.IConventionsTableResults Properties

The IConventionsTableResults type exposes the following members.

Properties

	Name	Description
	IConventionsTableResults.analyser_version Property	Retrieves the analyser version.
	IConventionsTableResults.analysis_finished_at Property	Retrieves the analysis finished time.
	IConventionsTableResults.analysis_started_at Property	Retrieves the analysis start time.
	IConventionsTableResults.columns Property	Retrieves the analysis results columns.
	IConventionsTableResults.message Property	Retrieves the final analysis message (as text).
	IConventionsTableResults.project_path Property	Retrieves the analyzed project path.
	IConventionsTableResults.rows Property	Retrieves the analysis results rows.
	IConventionsTableResults.successful Property	Retrieves a value indicating whether this IConventionsTableResults was successful.

See Also

IConventionsTableResults Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IConventionsTableResults.analyser_version Property

Retrieves the analyzer version.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string analyser_version { get; }
```

Property Value

Type: String
The analyzer version.

See Also

IConventionsTableResults Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IConventionsTableResults.analysis_finished_at Property

Retrieves the analysis finished time.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string analysis_finished_at { get; }
```

Property Value

Type: String
The analysis finished time.

See Also

IConventionsTableResults Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IConventionsTableResults.analysis_started_at Property

Retrieves the analysis start time.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string analysis_started_at { get; }
```

Property Value

Type: String
The analysis start time.

See Also

IConventionsTableResults Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IConventionsTableResults.columns Property

Retrieves the analysis results columns.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string[] columns { get; }
```

Property Value

Type: String[]
The analysis results columns.

See Also

IConventionsTableResults Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IConventionsTableResults.message Property

Retrieves the final analysis message (as text).

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string message { get; }
```

Property Value

Type: String
The message.

See Also

IConventionsTableResults Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IConventionsTableResults.project_path Property

Retrieves the analyzed project path.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string project_path { get; }
```

Property Value

Type: String
The project_path.

See Also

IConventionsTableResults Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IConventionsTableResults.rows Property

Retrieves the analysis results rows.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string[][] rows { get; }
```

Property Value

Type: String[ ][ ]
The analysis results rows.

See Also

IConventionsTableResults Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IConventionsTableResults.successful Property

Retrieves a value indicating whether this IConventionsTableResults was successful.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool successful { get; }
```

Property Value

Type: Boolean
`true` if successful; otherwise, `false`.

See Also

IConventionsTableResults Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IConventionsTableResults.IConventionsTableResults Methods

The IConventionsTableResults type exposes the following members.

Methods

	Name	Description
	store_as_csv	Stores the analysis results as csv.
	store_as_html	Stores the analysis results as html.
	store_as_xml	Stores the analysis results as xml.

See Also

IConventionsTableResults Interface

SchneiderElectric.Scripting.CodeAnalysis Namespace

IConventionsTableResults.store_as_csv Method

Stores the analysis results as csv.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void store_as_csv(
      string filename
)
```

Parameters

filename

Type: System.String

The filename for analysis results.

See Also

IConventionsTableResults Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IConventionsTableResults.store_as_html Method

Stores the analysis results as html.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void store_as_html(
      string filename,
      string xsltTransformationFilename = null
)
```

Parameters

filename

Type: System.String

The filename for analysis results.

xsltTransformationFilename (Optional)

Type: System.String

The XSLT transformation filename. If null, the default transformation file is used.

See Also

IConventionsTableResults Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IConventionsTableResults.store_as_xml Method

Stores the analysis results as xml.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void store_as_xml(
      string filename
)
```

Parameters

filename

Type: System.String

The filename for analysis results.

See Also

IConventionsTableResults Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IMetricsTableResults Interface

Scripting API with code analysis results of metrics table.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IMetricsTableResults
```

The **IMetricsTableResults** type exposes the following members.

Properties

	Name	Description
	IMetricsTableResults.analyser_version Property	Retrieves the analyser version.
	IMetricsTableResults.analysis_finished_at Property	Retrieves the analysis finished time.
	IMetricsTableResults.analysis_started_at Property	Retrieves the analysis start time.
	IMetricsTableResults.columns Property	Retrieves the analysis results columns.
	IMetricsTableResults.message Property	Retrieves the final analysis message (as text).
	IMetricsTableResults.project_path Property	Retrieves the analyzed project path.
	IMetricsTableResults.rows Property	Retrieves the analysis results rows.
	IMetricsTableResults.successful Property	Retrieves a value indicating whether this **IMetricsTableResults** was successful.

Methods

	Name	Description
	IMetricsTableResults.store_as_csv Method	Stores the analysis results as csv.
	IMetricsTableResults.store_as_html Method	Stores the analysis results as html.
	IMetricsTableResults.store_as_xml Method	Stores the analysis results as xml.

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IMetricsTableResults.IMetricsTableResults Properties

The IMetricsTableResults type exposes the following members.

Properties

	Name	Description
	analyser_version	Retrieves the analyser version.
	analysis_finished_at	Retrieves the analysis finished time.
	analysis_started_at	Retrieves the analysis start time.
	columns	Retrieves the analysis results columns.
	message	Retrieves the final analysis message (as text).
	project_path	Retrieves the analyzed project path.
	rows	Retrieves the analysis results rows.
	successful	Retrieves a value indicating whether this IMetricsTableResults was successful.

See Also

IMetricsTableResults Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IMetricsTableResults.analyser_version Property

Retrieves the analyzer version.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string analyser_version { get; }
```

Property Value

Type: String
The analyzer version.

See Also

IMetricsTableResults Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IMetricsTableResults.analysis_finished_at Property

Retrieves the analysis finished time.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string analysis_finished_at { get; }
```

Property Value

Type: String
The analysis finished time.

See Also

IMetricsTableResults Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IMetricsTableResults.analysis_started_at Property

Retrieves the analysis start time.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string analysis_started_at { get; }
```

Property Value

Type: String
The analysis start time.

See Also

IMetricsTableResults Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IMetricsTableResults.columns Property

Retrieves the analysis results columns.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string[] columns { get; }
```

Property Value

Type: String[]
The analysis results columns.

See Also

IMetricsTableResults Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IMetricsTableResults.message Property

Retrieves the final analysis message (as text).

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string message { get; }
```

Property Value

Type: String
The message.

See Also

IMetricsTableResults Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IMetricsTableResults.project_path Property

Retrieves the analyzed project path.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string project_path { get; }
```

Property Value

Type: String
The project_path.

See Also

IMetricsTableResults Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IMetricsTableResults.rows Property

Retrieves the analysis results rows.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string[][] rows { get; }
```

Property Value

Type: String[ ][ ]
The analysis results rows.

See Also

IMetricsTableResults Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IMetricsTableResults.successful Property

Retrieves a value indicating whether this IMetricsTableResults was successful.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool successful { get; }
```

Property Value

Type: Boolean
`true` if successful; otherwise, `false`.

See Also

IMetricsTableResults Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IMetricsTableResults.IMetricsTableResults Methods

The IMetricsTableResults type exposes the following members.

Methods

	Name	Description
	store_as_csv	Stores the analysis results as csv.
	store_as_html	Stores the analysis results as html.
	store_as_xml	Stores the analysis results as xml.

See Also

IMetricsTableResults Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IMetricsTableResults.store_as_csv Method

Stores the analysis results as csv.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void store_as_csv(
      string filename
)
```

Parameters

filename

Type: System.String

The filename for analysis results.

See Also

IMetricsTableResults Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IMetricsTableResults.store_as_html Method

Stores the analysis results as html.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void store_as_html(
      string filename,
      string xsltTransformationFilename = null
)
```

Parameters

filename

Type: System.String

The filename for analysis results.

xsltTransformationFilename (Optional)

Type: System.String

The XSLT transformation filename. If null, the default transformation file is used.

See Also

IMetricsTableResults Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IMetricsTableResults.store_as_xml Method

Stores the analysis results as xml.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void store_as_xml(
      string filename
)
```

Parameters

filename

Type: System.String

The filename for analysis results.

See Also

IMetricsTableResults Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptAnalysisProject Interface

Scripting API for Machine Advisor Code Analysis with details of analysis project on cloud.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptAnalysisProject
```

The **IScriptAnalysisProject** type exposes the following members.

Properties

	Name	Description
	IScriptAnalysisProject.description Property	Retrieves the description.
	IScriptAnalysisProject.id Property	Retrieves the identifier.
	IScriptAnalysisProject.name Property	Retrieves the name.

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptAnalysisProject.IScriptAnalysisProject Properties

The IScriptAnalysisProject type exposes the following members.

Properties

	Name	Description
	description	Retrieves the description.
	id	Retrieves the identifier.
	name	Retrieves the name.

See Also

IScriptAnalysisProject Interface
Chapter 1 SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptAnalysisProject.description Property

Retrieves the description.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string description { get; }
```

Property Value

Type: String
The description.

See Also

IScriptAnalysisProject Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptAnalysisProject.id Property

Retrieves the identifier.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
Guid id { get; }
```

Property Value

Type: Guid
The identifier.

See Also

IScriptAnalysisProject Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptAnalysisProject.name Property

Retrieves the name.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string name { get; }
```

Property Value

Type: String
The name.

See Also

IScriptAnalysisProject Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptApplicationExtension Interface

Scripting API to extend the application script object for Code Analysis operation access (for this application).

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptApplicationExtension
```

The **IScriptApplicationExtension** type exposes the following members.

Properties

	Name	Description
	code_analysis	Access to code_analysis scripting API.

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptApplicationExtension.IScriptApplicationExtension Properties

The IScriptApplicationExtension type exposes the following members.

Properties

	Name	Description
	IScriptApplicationExtension.code_analysis Property	Access to code_analysis scripting API.

See Also

IScriptApplicationExtension Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptApplicationExtension.code_analysis Property

Access to code_analysis scripting API.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptCodeAnalysis code_analysis { get; }
```

Property Value

Type: IScriptCodeAnalysis
The code_analysis scripting API.

See Also

IScriptApplicationExtension Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCloudConfiguration Interface

Scripting API for cloud connector configuration.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptCloudConfiguration
```

The **IScriptCloudConfiguration** type exposes the following members.

Properties

	Name	Description
	IScriptCloudConfiguration.data_endpoint Property	Retrieves the data endpoint.
	IScriptCloudConfiguration.dataset Property	Retrieves or sets the dataset name.
	IScriptCloudConfiguration.http_backend_type Property	Retrieves or sets the triple storage http backend type.
	IScriptCloudConfiguration.max_upload_triple_count_per_request Property	Retrieves or sets the maximum upload triple count per request.

	IScriptCloudConfiguration.query_endpoint Property	Retrieves the query endpoint. Will be combined with server Uri.
	IScriptCloudConfiguration.relative_data_endpoint Property	Retrieves or sets the data endpoint.
	IScriptCloudConfiguration.relative_query_endpoint Property	Retrieves or sets the query endpoint. Will be combined with server UUriRL.
	IScriptCloudConfiguration.relative_sparql_endpoint Property	Retrieves or sets the data endpoint.
	IScriptCloudConfiguration.relative_update_endpoint Property	Retrieves or sets the update endpoint. Will be combined with server Uri.
	IScriptCloudConfiguration.server_Uri Property	Retrieves or sets the server Uri for Web based RDF backend.
	IScriptCloudConfiguration.sparql_endpoint Property	Retrieves the data endpoint.
	IScriptCloudConfiguration.update_endpoint Property	Retrieves the update endpoint. Will be combined with server Uri.

	IScriptCloudConfiguration.update_execution_timeout Property	Retrieves or sets the update execution timeout.

Methods

	Name	Description
	IScriptCloudConfiguration.reset Method	Resets the current configuration

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCloudConfiguration.IScriptCloudConfiguration Properties

The IScriptCloudConfiguration type exposes the following members.

Properties

	Name	Description
	data_endpoint	Retrieves the data endpoint.
	dataset	Retrieves or sets the dataset name.
	http_backend_type	Retrieves or sets the triple storage http backend type.
	max_upload_triple_count_per_request	Retrieves or sets the maximum upload triple count per request.
	query_endpoint	Retrieves the query endpoint. Will be combined with server Uri.
	relative_data_endpoint	Retrieves or sets the data endpoint.
	relative_query_endpoint	Retrieves or sets the query endpoint. Will be combined with server UUriRL.
	relative_sparql_endpoint	Retrieves or sets the data endpoint.
	relative_update_endpoint	Retrieves or sets the update endpoint. Will be combined with server Uri.
	server_Uri	Retrieves or sets the server Uri for Web based RDF backend.
	sparql_endpoint	Retrieves the data endpoint.
	update_endpoint	Retrieves the update endpoint. Will be combined with server Uri.
	update_execution_timeout	Retrieves or sets the update execution timeout.

See Also

IScriptCloudConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCloudConfiguration.data_endpoint Property

Retrieves the data endpoint.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string data_endpoint { get; }
```

Property Value

Type: String
The data endpoint.

See Also

IScriptCloudConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCloudConfiguration.dataset Property

Retrieves or sets the dataset name.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string dataset { get; set; }
```

Property Value

Type: String
The dataset name.

See Also

IScriptCloudConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCloudConfiguration.http_backend_type Property

Retrieves or sets the triple storage http backend type.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
HttpBackendTypes http_backend_type { get; set; }
```

Property Value

Type: HttpBackendTypes
The triple storage http backend type.

See Also

IScriptCloudConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCloudConfiguration.max_upload_triple_count_per_request Property

Retrieves or sets the maximum upload triple count per request.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
int max_upload_triple_count_per_request { get; set; }
```

Property Value

Type: Int32
The maximum upload triple count per request.

See Also

IScriptCloudConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCloudConfiguration.query_endpoint Property

Retrieves the query endpoint. Will be combined with server Uri.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string query_endpoint { get; }
```

Property Value

Type: String
The query endpoint. Will be combined with server Uri.

See Also

IScriptCloudConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCloudConfiguration.relative_data_endpoint Property

Retrieves or sets the data endpoint.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string relative_data_endpoint { get; set; }
```

Property Value

Type: String
The data endpoint.

See Also

IScriptCloudConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCloudConfiguration.relative_query_endpoint Property

Retrieves or sets the query endpoint. Will be combined with server UUriRL.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string relative_query_endpoint { get; set; }
```

Property Value

Type: String
The query endpoint. Will be combined with server Uri.

See Also

IScriptCloudConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCloudConfiguration.relative_sparql_endpoint Property

Retrieves or sets the data endpoint.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string relative_sparql_endpoint { get; set; }
```

Property Value

Type: String
The data endpoint.

See Also

IScriptCloudConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCloudConfiguration.relative_update_endpoint Property

Retrieves or sets the update endpoint. Will be combined with server Uri.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string relative_update_endpoint { get; set; }
```

Property Value

Type: String
The update endpoint. Will be combined with server Uri.

See Also

IScriptCloudConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCloudConfiguration.server_Uri Property

Retrieves or sets the server Uri for Web based RDF backend.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string server_Uri { get; set; }
```

Property Value

Type: String
The server Uri for Web based RDF backend.

See Also

IScriptCloudConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCloudConfiguration.sparql_endpoint Property

Retrieves the data endpoint.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string sparql_endpoint { get; }
```

Property Value

Type: String
The data endpoint.

See Also

IScriptCloudConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCloudConfiguration.update_endpoint Property

Retrieves the update endpoint. Will be combined with server Uri.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string update_endpoint { get; }
```

Property Value

Type: String
The update endpoint. Will be combined with server Uri.

See Also

IScriptCloudConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCloudConfiguration.update_execution_timeout Property

Retrieves or sets the update execution timeout.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
long update_execution_timeout { get; set; }
```

Property Value

Type: Int64
The update execution timeout.

See Also

IScriptCloudConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCloudConfiguration.IScriptCloudConfiguration Methods

The IScriptCloudConfiguration type exposes the following members.

Methods

	Name	Description
	reset	Resets the current configuration

See Also

IScriptCloudConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCloudConfiguration.reset Method

Resets the current configuration

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void reset()
```

See Also

IScriptCloudConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCloudConnector Interface

Scripting API for cloud connector.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptCloudConnector
```

The **IScriptCloudConnector** type exposes the following members.

Properties

	Name	Description
	IScriptCloudConnector.configuration Property	Retrieves the code analysis cloud configuration.

Methods

	Name	Description
	IScriptCloudConnector.upload_to_triple_storage Method	Uploads the analysis results to a triple storage.

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCloudConnector.IScriptCloudConnector Properties

The IScriptCloudConnector type exposes the following members.

Properties

	Name	Description
	configuration	Retrieves the code analysis cloud configuration.

See Also

IScriptCloudConnector Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCloudConnector.configuration Property

Retrieves the code analysis cloud configuration.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptCloudConfiguration configuration { get; }
```

Property Value

Type: IScriptCloudConfiguration
The code analysis cloud configuration.

See Also

IScriptCloudConnector Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCloudConnector.IScriptCloudConnector Methods

The IScriptCloudConnector type exposes the following members.

Methods

	Name	Description
	upload_to_triple_storage	Uploads the analysis results to a triple storage.

See Also

IScriptCloudConnector Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCloudConnector.upload_to_triple_storage Method

Uploads the analysis results to a triple storage.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void upload_to_triple_storage(
       string snapshot_name
)
```

Parameters

snapshot_name

Type: System.String

The snapshot name.

See Also

IScriptCloudConnector Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCodeAnalysis Interface

Interface that describes the script engine of code analysis

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptCodeAnalysis
```

The **IScriptCodeAnalysis** type exposes the following members.

Properties

	Name	Description
	IScriptCodeAnalysis.cloud_connector Property	Retrieves the cloud connector.
	IScriptCodeAnalysis.configuration Property	Retrieves the code analysis configuration.
	IScriptCodeAnalysis.conventions Property	Retrieves the conventions scripting API.
	IScriptCodeAnalysis.metrics Property	Retrieves the metrics scripting API.
	IScriptCodeAnalysis.portal Property	Retrieves the Machine Advisor Code Analysis portal API.
	IScriptCodeAnalysis.query_repository Property	Retrieves the query repository scripting API.

Methods

	Name	Description
	IScriptCodeAnalysis.clear Method	Clears all the Dependency Models (Analysis Controller and Query Engines).
	IScriptCodeAnalysis.perform_full_analysis Method	Perform full code analysis.
	IScriptCodeAnalysis.store_dependency_model Method	Stores the dependency model to file.
	IScriptCodeAnalysis.store_ttl Method	Stores analysis results as ttl file.

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCodeAnalysis.IScriptCodeAnalysis Properties

The IScriptCodeAnalysis type exposes the following members.

Properties

	Name	Description
	cloud_connector	Retrieves the cloud connector.
	configuration	Retrieves the code analysis configuration.
	conventions	Retrieves the conventions scripting API.
	metrics	Retrieves the metrics scripting API.
	portal	Retrieves the Machine Advisor Code Analysis portal API.
	query_repository	Retrieves the query repository scripting API.

See Also

IScriptCodeAnalysis Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCodeAnalysis.cloud_connector Property

Retrieves the cloud connector.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptCloudConnector cloud_connector { get; }
```

Property Value

Type: IScriptCloudConnector
The cloud connector.

See Also

IScriptCodeAnalysis Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCodeAnalysis.configuration Property

Retrieves the code analysis configuration.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptConfiguration configuration { get; }
```

Property Value

Type: IScriptConfiguration
The code analysis configuration.

See Also

IScriptCodeAnalysis Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCodeAnalysis.conventions Property

Retrieves the conventions scripting API.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptConventions conventions { get; }
```

Property Value

Type: IScriptConventions
The conventions scripting API.

See Also

IScriptCodeAnalysis Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCodeAnalysis.metrics Property

Retrieves the metrics scripting API.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptMetrics metrics { get; }
```

Property Value

Type: IScriptMetrics
The metrics scripting API.

See Also

IScriptCodeAnalysis Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCodeAnalysis.portal Property

Retrieves the Machine Advisor Code Analysis portal API.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptPortal portal { get; }
```

Property Value

Type: IScriptPortal
The Machine Advisor Code Analysis portal API.

See Also

IScriptCodeAnalysis Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCodeAnalysis.query_repository Property

Retrieves the query repository scripting API.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptQueryRepository query_repository { get; }
```

Property Value

Type: IScriptQueryRepository
The query repository scripting API.

See Also

IScriptCodeAnalysis Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCodeAnalysis.IScriptCodeAnalysis Methods

The IScriptCodeAnalysis type exposes the following members.

Methods

	Name	Description
	clear	Clears all the Dependency Models (Analysis Controller and Query Engines).
	perform_full_analysis	Perform full code analysis.
	store_dependency_model	Stores the dependency model to file.
	store_ttl	Stores analysis results as ttl file.

See Also

IScriptCodeAnalysis Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCodeAnalysis.clear Method

Clears all the Dependency Models (Analysis Controller and Query Engines).

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void clear()
```

See Also

IScriptCodeAnalysis Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCodeAnalysis.perform_full_analysis Method

Perform full code analysis.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void perform_full_analysis()
```

See Also

IScriptCodeAnalysis Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCodeAnalysis.store_dependency_model Method

Stores the dependency model to file.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void store_dependency_model(
      string filename
)
```

Parameters

filename

Type: System.String

The filename.

See Also

IScriptCodeAnalysis Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCodeAnalysis.store_ttl Method

Stores analysis results as ttl file.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void store_ttl(
      string filename
)
```

Parameters

filename

Type: System.String

The filename.

See Also

IScriptCodeAnalysis Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCompany Interface

Scripting API for Machine Advisor Code Analysis with details of company.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptCompany
```

The **IScriptCompany** type exposes the following members.

Properties

	Name	Description
	IScriptCompany.city Property	Retrieves the city.
	IScriptCompany.id Property	Retrieves the identifier.
	IScriptCompany.name Property	Retrieves the name.
	IScriptCompany.street Property	Retrieves the street.

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCompany.IScriptCompany Properties

The IScriptCompany type exposes the following members.

Properties

	Name	Description
	city	Retrieves the city.
	id	Retrieves the identifier.
	name	Retrieves the name.
	street	Retrieves the street.

See Also

IScriptCompany Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCompany.city Property

Retrieves the city.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string city { get; }
```

Property Value

Type: String
The city.

See Also

IScriptCompany Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCompany.id Property

Retrieves the identifier.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
Guid id { get; }
```

Property Value

Type: Guid
The identifier.

See Also

IScriptCompany Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCompany.name Property

Retrieves the name.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string name { get; }
```

Property Value

Type: String
The name.

See Also

IScriptCompany Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCompany.street Property

Retrieves the street.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string street { get; }
```

Property Value

Type: String
The street.

See Also

IScriptCompany Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConfiguration Interface

Scripting API to configure the code analysis query engine and code analyser.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptConfiguration
```

The **IScriptConfiguration** type exposes the following members.

Properties

	Name	Description
	IScriptConfiguration.consider_check_functions Property	Retrieves or sets a value indicating whether to consider check functions.
	IScriptConfiguration.consider_devices Property	Retrieves or sets a value indicating whether to consider devices.
	IScriptConfiguration.consider_implicit_methods Property	Retrieves or sets a value indicating whether to consider implicit methods.
	IScriptConfiguration.consider_library_analysis_in_deep Property	Retrieves or sets a value indicating

		whether to consider library analysis in depth.
	IScriptConfiguration.consider_property_accessor_functions Property	Retrieves or sets a value indicating whether to consider property accessor functions.
	IScriptConfiguration.data_endpoint Property	Retrieves the data endpoint.
	IScriptConfiguration.dataset Property	Retrieves or sets the dataset name.
	IScriptConfiguration.graph_name Property	Sets the graph name.
	IScriptConfiguration.max_upload_triple_count_per_request Property	Retrieves or sets the maximum upload triple count per request.
	IScriptConfiguration.query_endpoint Property	Retrieves the query endpoint. Will be combined with server Uri.
	IScriptConfiguration.query_execution_timeout Property	Retrieves or sets the query execution timeout.
	IScriptConfiguration.relative_data_endpoint Property	Retrieves or sets the data endpoint.

IScriptConfiguration.relative_query_endpoint Property	Retrieves or sets the query endpoint. Will be combined with server Uri.
IScriptConfiguration.relative_sparql_endpoint Property	Retrieves or sets the data endpoint.
IScriptConfiguration.relative_update_endpoint Property	Retrieves or sets the update endpoint. Will be combined with server Uri.
IScriptConfiguration.server_Uri Property	Retrieves or sets the server Uri for Web based RDF backend.
IScriptConfiguration.sparql_endpoint Property	Retrieves the data endpoint.
IScriptConfiguration.thresshold_for_out_proc_backend_usage Property	Retrieves or sets the threshold for out process backend usage.
IScriptConfiguration.triple_storage_backend_type Property	Retrieves or sets the triple storage backend type.
IScriptConfiguration.update_endpoint Property	Retrieves the update endpoint. Will be combined with server Uri.
IScriptConfiguration.update_execution_timeout Property	Retrieves or sets the update

		execution timeout.

Methods

	Name	Description
	IScriptConfiguration.reset Method	Resets the current configuration

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConfiguration.IScriptConfiguration Properties

The IScriptConfiguration type exposes the following members.

Properties

	Name	Description
	consider_check_functions	Retrieves or sets a value indicating whether to consider check functions.
	consider_devices	Retrieves or sets a value indicating whether to consider devices.
	consider_implicit_methods	Retrieves or sets a value indicating whether to consider implicit methods.
	consider_library_analysis_in_deep	Retrieves or sets a value indicating whether to consider library analysis in depth.
	consider_property_accessor_functions	Retrieves or sets a value indicating whether to consider property accessor functions.
	data_endpoint	Retrieves the data endpoint.
	dataset	Retrieves or sets the dataset name.
	graph_name	Sets the graph name.
	max_upload_triple_count_per_request	Retrieves or sets the maximum upload triple count per request.
	query_endpoint	Retrieves the query endpoint. Will be combined with server Uri.
	query_execution_timeout	Retrieves or sets the query execution timeout.
	relative_data_endpoint	Retrieves or sets the data endpoint.

	relative_query_endpoint	Retrieves or sets the query endpoint. Will be combined with server UUriRL.
	relative_sparql_endpoint	Retrieves or sets the data endpoint.
	relative_update_endpoint	Retrieves or sets the update endpoint. Will be combined with server Uri.
	server_Uri	Retrieves or sets the server Uri for Web based RDF backend.
	sparql_endpoint	Retrieves the data endpoint.
	thresshold_for_out_proc_backend_usage	Retrieves or sets the threshold for out proc backend usage.
	triple_storage_backend_type	Retrieves or sets the triple storage backend type.
	update_endpoint	Retrieves the update endpoint. Will be combined with server Uri.
	update_execution_timeout	Retrieves or sets the update execution timeout.

See Also

IScriptConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConfiguration.consider_check_functions Property

Retrieves or sets a value indicating whether to consider check functions.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool consider_check_functions { get; set; }
```

Property Value

Type: Boolean
`true` if to consider check functions; otherwise, `false`.

See Also

IScriptConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConfiguration.consider_devices Property

Retrieves or sets a value indicating whether to devices.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool consider_devices { get; set; }
```

Property Value

Type: Boolean
`true` if to consider devices; otherwise, `false`.

See Also

IScriptConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConfiguration.consider_implicit_methods Property

Retrieves or sets a value indicating whether to consider implicit methods.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool consider_implicit_methods { get; set; }
```

Property Value

Type: Boolean
`true` if to consider implicit methods; otherwise, `false`.

See Also

IScriptConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConfiguration.consider_library_analysis_in_deep Property

Retrieves or sets a value indicating whether to consider library analysis in deep.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool consider_library_analysis_in_deep { get; set; }
```

Property Value

Type: Boolean
`true` if to consider library analysis in deep; otherwise, `false`.

See Also

IScriptConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConfiguration.consider_property_accessor_functions Property

Retrieves or sets a value indicating whether to consider property accessor functions.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool consider_property_accessor_functions { get; set; }
```

Property Value

Type: Boolean
`true` if to consider property accessor functions; otherwise, `false`.

See Also

IScriptConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConfiguration.data_endpoint Property

Retrieves the data endpoint.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string data_endpoint { get; }
```

Property Value

Type: String
The data endpoint.

See Also

IScriptConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConfiguration.dataset Property

Retrieves or sets the dataset name.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string dataset { get; set; }
```

Property Value

Type: String
The dataset name.

See Also

IScriptConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConfiguration.graph_name Property

Sets the graph name.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string graph_name { get; set; }
```

Property Value

Type: String
The graph_Uri.

See Also

IScriptConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConfiguration.max_upload_triple_count_per_request Property

Retrieves or sets the maximum upload triple count per request.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
int max_upload_triple_count_per_request { get; set; }
```

Property Value

Type: Int32
The maximum upload triple count per request.

See Also

IScriptConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConfiguration.query_endpoint Property

Retrieves the query endpoint. Will be combined with server Uri.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string query_endpoint { get; }
```

Property Value

Type: String
The query endpoint. Will be combined with server Uri.

See Also

IScriptConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConfiguration.query_execution_timeout Property

Retrieves or sets the query execution timeout.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
long query_execution_timeout { get; set; }
```

Property Value

Type: Int64
The query execution timeout.

See Also

IScriptConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConfiguration.relative_data_endpoint Property

Retrieves or sets the data endpoint.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string relative_data_endpoint { get; set; }
```

Property Value

Type: String
The data endpoint.

See Also

IScriptConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConfiguration.relative_query_endpoint Property

Retrieves or sets the query endpoint. Will be combined with server UUriRL.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll)
Version: Version 1.0-dev (developer build)

Syntax

C#

```
string relative_query_endpoint { get; set; }
```

Property Value

Type: String
The query endpoint. Will be combined with server Uri.

See Also

IScriptConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConfiguration.relative_sparql_endpoint Property

Retrieves or sets the data endpoint.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string relative_sparql_endpoint { get; set; }
```

Property Value

Type: String
The data endpoint.

See Also

IScriptConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConfiguration.relative_update_endpoint Property

Retrieves or sets the update endpoint. Will be combined with server Uri.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string relative_update_endpoint { get; set; }
```

Property Value

Type: String
The update endpoint. Will be combined with server Uri.

See Also

IScriptConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConfiguration.server_Uri Property

Retrieves or sets the server Uri for Web based RDF backend.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string server_Uri { get; set; }
```

Property Value

Type: String
The server Uri for Web based RDF backend.

See Also

IScriptConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConfiguration.sparql_endpoint Property

Retrieves the data endpoint.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string sparql_endpoint { get; }
```

Property Value

Type: String
The data endpoint.

See Also

IScriptConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConfiguration.thresshold_for_out_proc_backend_usage Property

Retrieves or sets the threshold for out process backend usage.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
int thresshold_for_out_proc_backend_usage { get; set; }
```

Property Value

Type: Int32
The threshold for out process backend usage.

See Also

IScriptConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConfiguration.triple_storage_backend_type Property

Retrieves or sets the triple storage backend type.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
TripleStorageBackendTypes triple_storage_backend_type { get; set; }
```

Property Value

Type: TripleStorageBackendTypes
The triple storage backend type.

See Also

IScriptConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConfiguration.update_endpoint Property

Retrieves the update endpoint. Will be combined with server Uri.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string update_endpoint { get; }
```

Property Value

Type: String
The update endpoint. Will be combined with server Uri.

See Also

IScriptConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConfiguration.update_execution_timeout Property

Retrieves or sets the update execution timeout.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
long update_execution_timeout { get; set; }
```

Property Value

Type: Int64
The update execution timeout.

See Also

IScriptConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConfiguration.IScriptConfiguration Methods

The IScriptConfiguration type exposes the following members.

Methods

	Name	Description
	reset	Resets the current configuration

See Also

IScriptConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConfiguration.reset Method

Resets the current configuration.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void reset()
```

See Also

IScriptConfiguration Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConventions Interface

Scripting API to build convention table results.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptConventions
```

The **IScriptConventions** type exposes the following members.

Methods

	Name	Description
	IScriptConventions.conventions_table Method	Starts the full Code Analysis and returns the conventions table for requested query chains.
	IScriptConventions.full_conventions_table Method	Starts the full Code Analysis and returns the full conventions table.
	IScriptConventions.get_all_conventions Method	Returns all available and valid convention names.

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConventions.IScriptConventions Methods

The IScriptConventions type exposes the following members.

Methods

	Name	Description
	conventions_table	Starts the full Code Analysis and returns the conventions table for requested query chains.
	full_conventions_table	Starts the full Code Analysis and returns the full conventions table.
	get_all_conventions	Returns all available and valid convention names.

See Also

IScriptConventions Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConventions.conventions_table Method

Starts the full Code Analysis and returns the conventions table for requested query chains.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IConventionsTableResults conventions_table(
      string[] query_chain_names
)
```

Parameters

query_chain_names

Type: System.String[ ]

query chains to execute

Return Value

Type: IConventionsTableResults
Conventions table result

See Also

IScriptConventions Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConventions.full_conventions_table Method

Starts the full Code Analysis and returns the full conventions table.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IConventionsTableResults full_conventions_table()
```

Return Value

Type: IConventionsTableResults
Conventions table result

See Also

IScriptConventions Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConventions.get_all_conventions Method

Returns all available and valid convention names.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string[] get_all_conventions()
```

Return Value

Type: String[ ]
All conventions

See Also

IScriptConventions Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConventionsObject Interface

Scripting API attached to conventions table objects.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptConventionsObject
```

The **IScriptConventionsObject** type exposes the following members.

Methods

	Name	Description
	IScriptConventionsObject.conventions_table Method	Starts the full Code Analysis and returns the conventions table for requested query chains.

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConventionsObject.IScriptConventionsObject Methods

The IScriptConventionsObject type exposes the following members.

Methods

	Name	Description
	conventions_table	Starts the full Code Analysis and returns the conventions table for requested query chains.

See Also

IScriptConventionsObject Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptConventionsObject.conventions_table Method

Starts the full Code Analysis and returns the conventions table for requested query chains.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IConventionsTableResults conventions_table()
```

Return Value

Type: IConventionsTableResults
Conventions table result.

See Also

IScriptConventionsObject Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCreateBlockListExtension Interface

Scripting API to extend an object for code analysis block list creation.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptCreateBlockListExtension
```

The **IScriptCreateBlockListExtension** type exposes the following members.

Methods

	Name	Description
	IScriptCreateBlockListExtension.create_code_analysis_block_list Method	Creates a code analysis block list with the specified name.

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCreateBlockListExtension.IScriptCreateBlockListExtension Methods

The IScriptCreateBlockListExtension type exposes the following members.

Methods

	Name	Description
	create_code_analysis_block_list	Creates a code analysis block list with the specified name.

See Also

IScriptCreateBlockListExtension Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCreateBlockListExtension.create_code_analysis_block_list Method

Creates a code analysis block list with the specified name.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IExtendedObject<IScriptObject>
create_code_analysis_block_list()
```

Return Value

Type: **IExtendedObject**(**IScriptObject**)
The **IScriptObject** of the newly created code analysis block list.

Exceptions

Exception	Condition
Exception	Any exception which occurs if the name is not an IEC identifier, or an object with the same name already exists within the same namespace, or the object cannot be created under the parent.

See Also

IScriptCreateBlockListExtension Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCreateConventionsTableExtension Interface

Scripting API to extend an object for code analysis conventions table creation.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptCreateConventionsTableExtension
```

The **IScriptCreateConventionsTableExtension** type exposes the following members.

Methods

	Name	Description
	IScriptCreateConventionsTableExtension.create_code_analysis_conventions_table Method	Creates a code analysis conventions table with the specified name.

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCreateConventionsTableExtension.IScriptCreateConventionsTableExtension Methods

The IScriptCreateConventionsTableExtension type exposes the following members.

Methods

	Name	Description
	create_code_analysis_conventions_table	Creates a code analysis conventions table with the specified name.

See Also

IScriptCreateConventionsTableExtension Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCreateConventionsTableExtension.create_code_analysis_conventions_table Method

Creates a code analysis conventions table with the specified name.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll)
Version: Version 1.0-dev (developer build)

Syntax

C#

```
IExtendedObject<IScriptObject>
create_code_analysis_conventions_table(
      string name
)
```

Parameters

name

Type: System.String

The name.

Return Value

Type: **IExtendedObject**(**IScriptObject**)
The **IScriptObject** of the newly created code analysis conventions table.

Exceptions

Exception	Condition
Exception	Any exception which occurs if the name is not an IEC identifier, or an object with the same name already exists within the same namespace, or the object cannot be created under the parent.

See Also

IScriptCreateConventionsTableExtension Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCreateDependencyViewExtension Interface

Scripting API to extend an object for code analysis dependency view creation.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptCreateDependencyViewExtension
```

The **IScriptCreateDependencyViewExtension** type exposes the following members.

Methods

	Name	Description
	IScriptCreateDependencyViewExtension.create_code_analysis_dependency_view Method	Creates a code analysis dependency view with the specified name.

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCreateDependencyViewExtension.IScriptCreateDependencyViewExtension Methods

The IScriptCreateDependencyViewExtension type exposes the following members.

Methods

	Name	Description
	create_code_analysis_dependency_view	Creates a code analysis dependency view with the specified name.

See Also

IScriptCreateDependencyViewExtension Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCreateDependencyViewExtension.create_code_analysis_dependency_view Method

Creates a code analysis dependency view with the specified name.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll)
Version: Version 1.0-dev (developer build)

Syntax

C#

```
IExtendedObject<IScriptObject> create_code_analysis_dependency_view(
      string name
)
```

Parameters

name

Type: System.String

The name.

Return Value

Type: **IExtendedObject**(**IScriptObject**)
The **IScriptObject** of the newly created code analysis dependency view.

Exceptions

Exception	Condition
Exception	Any exception which occurs if the name is not an IEC identifier, or an object with the same name already exists within the same namespace, or the object cannot be created under the parent.

See Also

IScriptCreateDependencyViewExtension Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCreateManagerObjectExtension Interface

Scripting API to extend an object for code analysis manager object creation.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptCreateManagerObjectExtension
```

The **IScriptCreateManagerObjectExtension** type exposes the following members.

Methods

	Name	Description
	IScriptCreateManagerObjectExtension.create_code_analysis_manager_object Method	Creates a code analysis manager object.

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCreateManagerObjectExtension.IScriptCreateManagerObjectExtension Methods

The IScriptCreateManagerObjectExtension type exposes the following members.

Methods

	Name	Description
	create_code_analysis_manager_object	Creates a code analysis manager object.

See Also

IScriptCreateManagerObjectExtension Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCreateManagerObjectExtension.create_code_analysis_manager_object Method

Creates a code analysis manager object.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IExtendedObject<IScriptObject> create_code_analysis_manager_object()
```

Return Value

Type: **IExtendedObject**(**IScriptObject**)
The **IScriptObject** of the newly created code analysis manager object.

Exceptions

Exception	Condition
Exception	Any exception which occurs if the name is not an IEC identifier, or an object with the same name already exists within the same namespace, or the object cannot be created under the parent.

See Also

IScriptCreateManagerObjectExtension Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCreateMetricsTableExtension Interface

Scripting API to extend an object for code analysis metrics table creation.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptCreateMetricsTableExtension
```

The **IScriptCreateMetricsTableExtension** type exposes the following members.

Methods

	Name	Description
	IScriptCreateMetricsTableExtension.create_code_analysis_metrics_table Method	Creates a code analysis metrics table with the specified name.

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCreateMetricsTableExtension.IScriptCreateMetricsTableExtension Methods

The IScriptCreateMetricsTableExtension type exposes the following members.

Methods

	Name	Description
	create_code_analysis_metrics_table	Creates a code analysis metrics table with the specified name.

See Also

IScriptCreateMetricsTableExtension Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptCreateMetricsTableExtension.create_code_analysis_metrics_table Method

Creates a code analysis metrics table with the specified name.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll)
Version: Version 1.0-dev (developer build)

Syntax

C#

```
IExtendedObject<IScriptObject> create_code_analysis_metrics_table(
      string name
)
```

Parameters

name

Type: System.String

The name.

Return Value

Type: **IExtendedObject**(**IScriptObject**)
The **IScriptObject** of the newly created code analysis metrics table.

Exceptions

Exception	Condition
Exception	Any exception which occurs if the name is not an IEC identifier, or an object with the same name already exists within the same namespace, or the object cannot be created under the parent.

See Also

IScriptCreateMetricsTableExtension Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptMetrics Interface

Scripting API to build metrics table results.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptMetrics
```

The **IScriptMetrics** type exposes the following members.

Methods

	Name	Description
	IScriptMetrics.full_metrics_table Method	Starts the full Code Analysis and returns the full metrics table.
	get_all_metrics	Returns all available and valid metrics names.
	metrics_table	Starts the full Code Analysis and returns the metrics table for requested query chains.

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptMetrics.IScriptMetrics Methods

The IScriptMetrics type exposes the following members.

Methods

	Name	Description
	full_metrics_table	Starts the full Code Analysis and returns the full metrics table.
	IScriptMetrics.get_all_metrics Method	Returns all available and valid metrics names.
	IScriptMetrics.metrics_table Method	Starts the full Code Analysis and returns the metrics table for requested query chains.

See Also

IScriptMetrics Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptMetrics.full_metrics_table Method

Starts the full Code Analysis and returns the full metrics table.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IMetricsTableResults full_metrics_table()
```

Return Value

Type: IMetricsTableResults
The metrics result table.

See Also

IScriptMetrics Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptMetrics.get_all_metrics Method

Returns all available and valid metrics names.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string[] get_all_metrics()
```

Return Value

Type: String[ ]
All available metric queries

See Also

IScriptMetrics Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptMetrics.metrics_table Method

Starts the full Code Analysis and returns the metrics table for requested query chains.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IMetricsTableResults metrics_table(
      string[] query_chain_names
)
```

Parameters

query_chain_names

Type: System.String[ ]

query chains to execute

Return Value

Type: IMetricsTableResults
The metrics result table

See Also

IScriptMetrics Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptMetricsObject Interface

Scripting API attached to metrics table objects.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptMetricsObject
```

The **IScriptMetricsObject** type exposes the following members.

Methods

	Name	Description
	IScriptMetricsObject.metrics_table Method	Starts the full Code Analysis and returns the metrics table for requested query chains.

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptMetricsObject.IScriptMetricsObject Methods

The IScriptMetricsObject type exposes the following members.

Methods

	Name	Description
	metrics_table	Starts the full Code Analysis and returns the metrics table for requested query chains.

See Also

IScriptMetricsObject Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptMetricsObject.metrics_table Method

Starts the full Code Analysis and returns the metrics table for requested query chains.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IMetricsTableResults metrics_table()
```

Return Value

Type: IMetricsTableResults
The metrics result table.

See Also

IScriptMetricsObject Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptPortal Interface

Scripting API for Machine Advisor Code Analysis cloud portal.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptPortal
```

The **IScriptPortal** type exposes the following members.

Properties

	Name	Description
	IScriptPortal.analysis_project Property	Retrieves or sets the current analysis project.
	IScriptPortal.analysis_projects Property	Retrieves the available analysis_projects
	IScriptPortal.companies Property	Retrieves the available companies
	IScriptPortal.company Property	Retrieves or sets the current company.
	IScriptPortal.queries Property	Retrieves the Machine Advisor Code Analysis queries API.
	IScriptPortal.snapshots Property	Retrieves the Machine Advisor Code Analysis snapshots API.
	IScriptPortal.URL Property	Configures the URL for Machine Advisor Code Analysis cloud portal.

Methods

	Name	Description
	IScriptPortal.login Method	Performs the login with the specified access token.
	IScriptPortal.logout Method	Performs logout.

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptPortal.IScriptPortal Properties

The IScriptPortal type exposes the following members.

Properties

	Name	Description
	analysis_project	Retrieves or sets the current analysis project.
	analysis_projects	Retrieves the available analysis_projects.
	companies	Retrieves the available companies.
	company	Retrieves or sets the current company.
	queries	Retrieves the Machine Advisor Code Analysis queries API.
	snapshots	Retrieves the Machine Advisor Code Analysis snapshots API.
	URL	Configures the URL for Machine Advisor Code Analysis cloud portal.

See Also

IScriptPortal Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptPortal.analysis_project Property

Retrieves or sets the current analysis project.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptAnalysisProject analysis_project { get; set; }
```

Property Value

Type: IScriptAnalysisProject
The current analysis project.

See Also

IScriptPortal Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptPortal.analysis_projects Property

Retrieves the available analysis_projects

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptAnalysisProject[] analysis_projects { get; }
```

Property Value

Type: IScriptAnalysisProject[]

See Also

IScriptPortal Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptPortal.companies Property

Retrieves the available companies

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptCompany[] companies { get; }
```

Property Value

Type: IScriptCompany[ ]

See Also

IScriptPortal Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptPortal.company Property

Retrieves or sets the current company.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptCompany company { get; set; }
```

Property Value

Type: IScriptCompany
The current company.

See Also

IScriptPortal Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptPortal.queries Property

Retrieves the Machine Advisor Code Analysis queries API.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptQueries queries { get; }
```

Property Value

Type: IScriptQueries
The Machine Advisor Code Analysis queries API.

See Also

IScriptPortal Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptPortal.snapshots Property

Retrieves the Machine Advisor Code Analysis snapshots API.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptSnapshots snapshots { get; }
```

Property Value

Type: IScriptSnapshots
The Machine Advisor Code Analysis snapshots API.

See Also

IScriptPortal Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptPortal.URL Property

Configures the URL for Machine Advisor Code Analysis cloud portal.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string URL { get; set; }
```

Property Value

Type: String

See Also

IScriptPortal Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptPortal.IScriptPortal Methods

The IScriptPortal type exposes the following members.

Methods

	Name	Description
	login	Performs the login with the specified access token.
	logout	Performs logout.

See Also

IScriptPortal Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptPortal.login Method

Performs the login with the specified access token.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void login(
      string access_token = null
)
```

Parameters

access_token (Optional)

Type: System.String

The access token.

See Also

IScriptPortal Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptPortal.logout Method

Performs logout.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void logout()
```

See Also

IScriptPortal Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptProjectExtension Interface

Scripting API to extend the project script object for Code Analysis operation access (for POU space).

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#
`public interface IScriptProjectExtension`

The **IScriptProjectExtension** type exposes the following members.

Properties

	Name	Description
	IScriptProjectExtension.code_analysis Property	Access to code_analysis scripting API.

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptProjectExtension.IScriptProjectExtension Properties

The IScriptProjectExtension type exposes the following members.

Properties

	Name	Description
	code_analysis	Access to code_analysis scripting API.

See Also

IScriptProjectExtension Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptProjectExtension.code_analysis Property

Access to code_analysis scripting API.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptCodeAnalysis code_analysis { get; }
```

Property Value

Type: IScriptCodeAnalysis
The code_analysis scripting API.

See Also

IScriptProjectExtension Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueries Interface

Scripting API for Machine Advisor Code Analysis queries.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptQueries
```

The **IScriptQueries** type exposes the following members.

Methods

	Name	Description
	IScriptQueries.upload Method	Upload specified query chain (and its queries) to Machine Advisor Code Analysis cloud.
	upload(IEnumerable(IScriptQueryChain))	Upload specified query chains (and its queries) to Machine Advisor Code Analysis cloud.
	upload_all	Upload all query chains (and its queries) to Machine Advisor Code Analysis cloud.

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueries.IScriptQueries Methods

The IScriptQueries type exposes the following members.

Methods

	Name	Description
	upload(IScriptQueryChain)	Upload specified query chain (and its queries) to Machine Advisor Code Analysis cloud.
	IScriptQueries.upload Method (IScriptQueryChain)	Upload specified query chains (and its queries) to Machine Advisor Code Analysis cloud.
	IScriptQueries.upload_all Method	Upload all query chains (and its queries) to Machine Advisor Code Analysis cloud.

See Also

IScriptQueries Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueries.upload Method

Overload List

	Name	Description
	upload(IScriptQueryChain)	Upload specified query chain (and its queries) to Machine Advisor Code Analysis cloud.
	upload(IEnumerable(IScriptQueryChain))	Upload specified query chains (and its queries) to Machine Advisor Code Analysis cloud.

See Also

IScriptQueries Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueries.upload Method (IScriptQueryChain)

Upload specified query chain (and its queries) to Machine Advisor Code Analysis cloud.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool upload(
      IScriptQueryChain query_chain
)
```

Parameters

query_chain

Type: SchneiderElectric.Scripting.CodeAnalysis.IScriptQueryChain

The query to upload.

Return Value

Type: Boolean
Indicates if upload succeeded

See Also

IScriptQueries Interface
upload Overload
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueries.upload Method (IEnumerable(IScriptQueryChain))

Upload specified query chains (and its queries) to Machine Advisor Code Analysis cloud.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool upload(
      IEnumerable<IScriptQueryChain> query_chains
)
```

Parameters

query_chains

Type: System.Collections.Generic.IEnumerable(IScriptQueryChain)

The queries to upload.

Return Value

Type: Boolean
Indicates if upload succeeded

See Also

IScriptQueries Interface
upload Overload
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueries.upload_all Method

Upload all query chains (and its queries) to Machine Advisor Code Analysis cloud.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool upload_all()
```

Return Value

Type: Boolean
Indicates if upload succeeded

See Also

IScriptQueries Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQuery Interface

Scripting API of a query object.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptQuery
```

The **IScriptQuery** type exposes the following members.

Properties

	Name	Description
	IScriptQuery.category Property	Retrieves the category.
	IScriptQuery.editable Property	Retrieves a value indicating whether this **IScriptQuery** is editable.
	IScriptQuery.name Property	Retrieves the name.
	IScriptQuery.parameters Property	Retrieves the parameters.
	IScriptQuery.text Property	Retrieves the text.
	IScriptQuery.unique_id Property	Retrieves the unique identifier.

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQuery.IScriptQuery Properties

The IScriptQuery type exposes the following members.

Properties

	Name	Description
	category	Retrieves the category.
	editable	Retrieves a value indicating whether this IScriptQuery is editable.
	name	Retrieves the name.
	parameters	Retrieves the parameters.
	text	Retrieves the text.
	unique_id	Retrieves the unique identifier.

See Also

IScriptQuery Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQuery.category Property

Retrieves the category.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string category { get; }
```

Property Value

Type: String
The category.

See Also

IScriptQuery Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQuery.editable Property

Retrieves a value indicating whether this IScriptQuery is editable.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool editable { get; }
```

Property Value

Type: Boolean
`true` if editable; otherwise, `false`.

See Also

IScriptQuery Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQuery.name Property

Retrieves the name.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string name { get; }
```

Property Value

Type: String
The name.

See Also

IScriptQuery Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQuery.parameters Property

Retrieves the parameters.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptQueryParameter[] parameters { get; }
```

Property Value

Type: IScriptQueryParameter[ ]
The parameters.

See Also

IScriptQuery Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQuery.text Property

Retrieves the text.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string text { get; }
```

Property Value

Type: String
The text.

See Also

IScriptQuery Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQuery.unique_id Property

Retrieves the unique identifier.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
Guid unique_id { get; }
```

Property Value

Type: Guid
The unique identifier.

See Also

IScriptQuery Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueryChain Interface

Scripting API of a query chain object.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptQueryChain
```

The **IScriptQueryChain** type exposes the following members.

Properties

	Name	Description
	IScriptQueryChain.category Property	Retrieves the category.
	IScriptQueryChain.description Property	Retrieves the description.
	IScriptQueryChain.editable Property	Retrieves a value indicating whether this **IScriptQueryChain** is editable.
	IScriptQueryChain.group Property	Retrieves the group.
	IScriptQueryChain.name Property	Retrieves the name.
	IScriptQuery.parameters Property	Retrieves the parameters.
	IScriptQueryChain.queries Property	Retrieves the assigned queries.
	IScriptQueryChain.unique_id Property	Retrieves the unique identifier.

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueryChain.IScriptQueryChain Properties

The IScriptQueryChain type exposes the following members.

Properties

	Name	Description
	category	Retrieves the category.
	description	Retrieves the description.
	editable	Retrieves a value indicating whether this IScriptQueryChain is editable.
	group	Retrieves the group.
	name	Retrieves the name.
	parameters	Retrieves the parameters.
	queries	Retrieves the assigned queries.
	unique_id	Retrieves the unique identifier.

See Also

IScriptQueryChain Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueryChain.category Property

Retrieves the category.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string category { get; }
```

Property Value

Type: String
The category.

See Also

IScriptQueryChain Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueryChain.description Property

Retrieves the description.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string description { get; }
```

Property Value

Type: String
The description.

See Also

IScriptQueryChain Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueryChain.editable Property

Retrieves a value indicating whether this IScriptQueryChain is editable.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool editable { get; }
```

Property Value

Type: Boolean
`true` if editable; otherwise, `false`.

See Also

IScriptQueryChain Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueryChain.group Property

Retrieves the group.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string group { get; }
```

Property Value

Type: String
The group.

See Also

IScriptQueryChain Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueryChain.name Property

Retrieves the name.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string name { get; }
```

Property Value

Type: String
The name.

See Also

IScriptQueryChain Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueryChain.parameters Property

Retrieves the parameters.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptQueryParameter[] parameters { get; }
```

Property Value

Type: IScriptQueryParameter[]
The parameters.

See Also

IScriptQueryChain Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueryChain.queries Property

Retrieves the assigned queries.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptQuery[] queries { get; }
```

Property Value

Type: IScriptQuery[]
The queries.

See Also

IScriptQueryChain Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueryChain.unique_id Property

Retrieves the unique identifier.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
Guid unique_id { get; }
```

Property Value

Type: Guid
The unique identifier.

See Also

IScriptQueryChain Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueryParameter Interface

Scripting API of a query parameter object

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptQueryParameter
```

The **IScriptQueryParameter** type exposes the following members.

Properties

	Name	Description
	IScriptQueryParameter.category Property	Retrieves the category.
	IScriptQueryParameter.name Property	Retrieves the parameter name.
	IScriptQueryParameter.value Property	Retrieves the parameter value.

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueryParameter.IScriptQueryParameter Properties

The IScriptQueryParameter type exposes the following members.

Properties

	Name	Description
	category	Retrieves the category.
	name	Retrieves the parameter name.
	value	Retrieves the parameter value.

See Also

IScriptQueryParameter Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueryParameter.category Property

Retrieves the category.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string category { get; }
```

Property Value

Type: String
The category.

See Also

IScriptQueryParameter Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueryParameter.name Property

Retrieves the parameter name.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string name { get; }
```

Property Value

Type: String
The parameter name.

See Also

IScriptQueryParameter Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueryParameter.value Property

Retrieves the parameter value.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string value { get; }
```

Property Value

Type: String
The parameter value.

See Also

IScriptQueryParameter Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueryRepository Interface

Scripting API to access all query chains.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptQueryRepository
```

The **IScriptQueryRepository** type exposes the following members.

Methods

	Name	Description
	IScriptQueryRepository.get_all_query_chains Method	Retrieves all query chains.
	IScriptQueryRepository.get_query_chain_by_name Method	Retrieves the query chains by name.
	IScriptQueryRepository.get_query_chain_by_unique_id Method	Retrieves the query chains by unique identifier.
	IScriptQueryRepository.get_query_chains_by_name Method	Retrieves queries that contain the given string as part of the name.

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueryRepository.IScriptQueryRepository Methods

The IScriptQueryRepository type exposes the following members.

Methods

	Name	Description
	get_all_query_chains	Retrieves all query chains.
	get_query_chain_by_name	Retrieves the query chains by name.
	get_query_chain_by_unique_id	Retrieves the query chains by unique identifier.
	get_query_chains_by_name	Retrieves queries that contain the given string as part of the name.

See Also

IScriptQueryRepository Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueryRepository.get_all_query_chains Method

Retrieves all query chains.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptQueryChain[] get_all_query_chains()
```

Return Value

Type: IScriptQueryChain[ ]
The requested query chains.

See Also

IScriptQueryRepository Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueryRepository.get_query_chain_by_name Method

Retrieves the query chains by name.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptQueryChain get_query_chain_by_name(
      string name
)
```

Parameters

name

Type: System.String

The name.

Return Value

Type: IScriptQueryChain
The requested query chains

See Also

IScriptQueryRepository Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueryRepository.get_query_chain_by_unique_id Method

Retrieves the query chains by unique identifier.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptQueryChain get_query_chain_by_unique_id(
      Guid unique_id
)
```

Parameters

unique_id

Type: System.Guid

The unique identifier.

Return Value

Type: IScriptQueryChain
The requested query chain.

See Also

IScriptQueryRepository Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptQueryRepository.get_query_chains_by_name Method

Retrieves queries that contain the given string as part of the name.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptQueryChain[] get_query_chains_by_name(
      string name_search_text
)
```

Parameters

name_search_text

Type: System.String

The name search text.

Return Value

Type: IScriptQueryChain[ ]
The requested query chains.

See Also

IScriptQueryRepository Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptSnapshotOptions Interface

Scripting API for Machine Advisor Code Analysis snapshot options.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptSnapshotOptions
```

The **IScriptSnapshotOptions** type exposes the following members.

Properties

	Name	Description
	IScriptSnapshotOptions.changelog Property	Retrieves or sets the snapshot changelog.
	IScriptSnapshotOptions.creation_date Property	Retrieves or sets the creation date.
	IScriptSnapshotOptions.name Property	Retrieves or sets the name.
	IScriptSnapshotOptions.notes Property	Retrieves or sets the snapshot notes.
	IScriptSnapshotOptions.released Property	Retrieves or sets a value indicating whether this snapshot was released.
	IScriptSnapshotOptions.version Property	Retrieves or sets the version.

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptSnapshotOptions.IScriptSnapshotOptions Properties

The IScriptSnapshotOptions type exposes the following members.

Properties

	Name	Description
	changelog	Retrieves or sets the snapshot changelog.
	creation_date	Retrieves or sets the creation date.
	name	Retrieves or sets the name.
	notes	Retrieves or sets the snapshot notes.
	released	Retrieves or sets a value indicating whether this snapshot was released.
	version	Retrieves or sets the version.

See Also

IScriptSnapshotOptions Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptSnapshotOptions.changelog Property

Retrieves or sets the snapshot changelog.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string changelog { get; set; }
```

Property Value

Type: String
The snapshot changelog.

See Also

IScriptSnapshotOptions Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptSnapshotOptions.creation_date Property

Retrieves or sets the creation date.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string creation_date { get; set; }
```

Property Value

Type: String
The creation date.

See Also

IScriptSnapshotOptions Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptSnapshotOptions.name Property

Retrieves or sets the name.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string name { get; set; }
```

Property Value

Type: String
The name.

See Also

IScriptSnapshotOptions Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptSnapshotOptions.notes Property

Retrieves or sets the snapshot notes.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string notes { get; set; }
```

Property Value

Type: String
The notes description.

See Also

IScriptSnapshotOptions Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptSnapshotOptions.released Property

Retrieves or sets a value indicating whether this snapshot was released.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool released { get; set; }
```

Property Value

Type: Boolean
`true` if released; otherwise, `false`.

See Also

IScriptSnapshotOptions Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptSnapshotOptions.version Property

Retrieves or sets the version.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string version { get; set; }
```

Property Value

Type: String
The version.

See Also

IScriptSnapshotOptions Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptSnapshots Interface

Scripting API for Machine Advisor Code Analysis snapshots.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptSnapshots
```

The **IScriptSnapshots** type exposes the following members.

Methods

	Name	Description
	IScriptSnapshots.create_snapshot_options Method	Creates the snapshot options.
	IScriptSnapshots.store Method (String, String)	Stores the Code Analysis snapshot to disk.
	IScriptSnapshots.store Method (IScriptSnapshotOptions, String)	Stores the Code Analysis snapshot to disk.
	upload(String)	Uploads the snapshot to Code Analysis cloud.
	upload(IScriptSnapshotOptions)	Uploads the snapshot to Code Analysis cloud.

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptSnapshots.IScriptSnapshots Methods

The IScriptSnapshots type exposes the following members.

Methods

	Name	Description
	create_snapshot_options	Creates the snapshot options.
	store(String, String)	Stores the Code Analysis snapshot to disk.
	store(IScriptSnapshotOptions, String)	Stores the Code Analysis snapshot to disk.
	IScriptSnapshots.upload Method (String)	Uploads the snapshot to Code Analysis cloud.
	IScriptSnapshots.upload Method (IScriptSnapshotOptions)	Uploads the snapshot to Code Analysis cloud.

See Also

IScriptSnapshots Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptSnapshots.create_snapshot_options Method

Creates the snapshot options.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptSnapshotOptions create_snapshot_options()
```

Return Value

Type: IScriptSnapshotOptions
The snapshot option.

See Also

IScriptSnapshots Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptSnapshots.store Method

Overload List

	Name	Description
	store(String, String)	Stores the Code Analysis snapshot to disk.
	store(IScriptSnapshotOptions, String)	Stores the Code Analysis snapshot to disk.

See Also

IScriptSnapshots Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptSnapshots.store Method (String, String)

Stores the Code Analysis snapshot to disk.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void store(
      string snapshot_name,
      string filename
)
```

Parameters

snapshot_name

Type: System.String

Name of the snapshot.

filename

Type: System.String

The filename.

See Also

IScriptSnapshots Interface
IScriptSnapshots.store Method
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptSnapshots.store Method (IScriptSnapshotOptions, String)

Stores the Code Analysis snapshot to disk.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void store(
      IScriptSnapshotOptions snapshot_options,
      string filename
)
```

Parameters

snapshot_options

Type: SchneiderElectric.Scripting.CodeAnalysis.IScriptSnapshotOptions

The snapshot options.

filename

Type: System.String

The filename.

See Also

IScriptSnapshots Interface
store Overload
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptSnapshots.upload Method

Overload List

	Name	Description
	upload(String)	Uploads the snapshot to Code Analysis cloud.
	upload(IScriptSnapshotOptions)	Uploads the snapshot to Code Analysis cloud.

See Also

IScriptSnapshots Interface
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptSnapshots.upload Method (String)

Uploads the snapshot to Code Analysis cloud.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool upload(
      string snapshot_name
)
```

Parameters

snapshot_name

Type: System.String

Name of the snapshot.

Return Value

Type: Boolean
Indicates if upload succeeded.

See Also

IScriptSnapshots Interface
IScriptSnapshots.upload Method
SchneiderElectric.Scripting.CodeAnalysis Namespace

IScriptSnapshots.upload Method (IScriptSnapshotOptions)

Uploads the snapshot to Code Analysis cloud.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.Programming.CodeAnalysisIntegration.plugin (in SchneiderElectric.Programming.CodeAnalysisIntegration.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool upload(
      IScriptSnapshotOptions snapshot_options
)
```

Parameters

snapshot_options

Type: SchneiderElectric.Scripting.CodeAnalysis.IScriptSnapshotOptions

The snapshot options.

Return Value

Type: Boolean
Indicates if upload succeeded.

See Also

IScriptSnapshots Interface
upload Overload
SchneiderElectric.Scripting.CodeAnalysis Namespace

HttpBackendTypes Enumeration

The available and supported Http Backend types

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.CodeAnalysis.QueryEngine (in SchneiderElectric.CodeAnalysis.QueryEngine.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public enum HttpBackendTypes
```

Members

Member name	Value	Description
Generic	0	The generic Http connector for Endpoints fulfilling the SPARQL Protocol Specification
Fuseki	1	The fuseki http connector
Stardog	2	The stardog http connector

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

TripleStorageBackendTypes Enumeration

Definition of used strategy for backend type selection.

Namespace: SchneiderElectric.Scripting.CodeAnalysis
Assembly: SchneiderElectric.CodeAnalysis.QueryEngine (in SchneiderElectric.CodeAnalysis.QueryEngine.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public enum TripleStorageBackendTypes
```

Members

Member name	Value	Description
OutProc	0	Force Out-Process (use own TripleStorage exe, e.g., with In-Memory as backend + CodeAnalysis WCF based protocol as communication)
DebugOutProc	1	Force debug Out-Process (like ForceOutProc but with debug configuration for TripleStorage)
Automatic	2	Automatic selection
InMemory	3	Force In-Memory RDF backend -- see dotNetRDF
Http	4	Force http based RDF backend -- see dotNetRDF

See Also

SchneiderElectric.Scripting.CodeAnalysis Namespace

Chapter 2
SchneiderElectric.Scripting.Collections Namespace

This namespace contains scripting list collections.

Interfaces

	Interface	Description
	IScriptCollection(T)	Defines methods to manipulate generic collections.
	IScriptList(T)	Represents a collection of objects that can be individually accessed by index.
	IScriptList2(T)	Extension interface for IScriptList(T)

IScriptCollection(T) Interface

Defines methods to manipulate generic collections.

Namespace: SchneiderElectric.Scripting.Collections
Assembly: SchneiderElectric.Platform.Scripting (in SchneiderElectric.Platform.Scripting.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptCollection<T> : IEnumerable<T>,
      IEnumerable
```

Type Parameters

T

The type of the elements in the collection.

The IScriptCollection(T) type exposes the following members.

Properties

	Name	Description
	IScriptCollection(T).count Property	Retrieves the number of elements contained in the IScriptCollection(T).
	IScriptCollection(T).is_readonly Property	Retrieves a value indicating whether the IScriptCollection(T) is read-only.

Methods

	Name	Description
	IScriptCollection(T).add Method	Adds an item to the IScriptCollection(T).

IScriptCollection(T).clear Method	Removes all items from the IScriptCollection(T).
IScriptCollection(T).contains Method	Determines whether the IScriptCollection(T) contains a specific value.
IScriptCollection(T).copy_to Method	Copies the elements of the IScriptCollection(T) to an Array, starting at a particular Array index.
IScriptCollection(T).remove Method	Removes the first occurrence of a specific object from the IScriptCollection(T).

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Collections Namespace

IScriptCollection(T).IScriptCollection(T) Properties

The IScriptCollection(T) generic type exposes the following members.

Properties

	Name	Description
	count	Retrieves the number of elements contained in the IScriptCollection(T).
	is_readonly	Retrieves a value indicating whether the IScriptCollection(T) is read-only.

See Also

IScriptCollection(T)Interface
SchneiderElectric.Scripting.Collections Namespace

IScriptCollection(T).count Property

Retrieves the number of elements contained in the IScriptCollection(T).

Namespace: SchneiderElectric.Scripting.Collections
Assembly: SchneiderElectric.Platform.Scripting (in SchneiderElectric.Platform.Scripting.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
int count { get; }
```

Return Value

Type: Int32
The number of elements contained in the IScriptCollection(T).

See Also

IScriptCollection(T)Interface
SchneiderElectric.Scripting.Collections Namespace

IScriptCollection(T).is_readonly Property

Retrieves a value indicating whether the IScriptCollection(T) is read-only.

Namespace: SchneiderElectric.Scripting.Collections
Assembly: SchneiderElectric.Platform.Scripting (in SchneiderElectric.Platform.Scripting.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool is_readonly { get; }
```

Return Value

Type: Boolean
true if the IScriptCollection(T) is read-only; otherwise, false.

See Also

IScriptCollection(T)Interface
SchneiderElectric.Scripting.Collections Namespace

IScriptCollection(T).IScriptCollection(T) Methods

The IScriptCollection(T) generic type exposes the following members.

Methods

	Name	Description
	add	Adds an item to the IScriptCollection(T).
	clear	Removes all items from the IScriptCollection(T).
	contains	Determines whether the IScriptCollection(T) contains a specific value.
	copy_to	Copies the elements of the IScriptCollection(T) to an Array, starting at a particular Array index.
	remove	Removes the first occurrence of a specific object from the IScriptCollection(T).

See Also

IScriptCollection(T)Interface
SchneiderElectric.Scripting.Collections Namespace

IScriptCollection(T).add Method

Adds an item to the IScriptCollection(T).

Namespace: SchneiderElectric.Scripting.Collections
Assembly: SchneiderElectric.Platform.Scripting (in SchneiderElectric.Platform.Scripting.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void add(
       T item
)
```

Parameters

item

Type: *T*

The object to add to the IScriptCollection(T).

Exceptions

Exception	Condition
NotSupportedException	The IScriptCollection(T) is read-only.

See Also

IScriptCollection(T)Interface
SchneiderElectric.Scripting.Collections Namespace

IScriptCollection(T).clear Method

Removes all items from the IScriptCollection(T).

Namespace: SchneiderElectric.Scripting.Collections
Assembly: SchneiderElectric.Platform.Scripting (in SchneiderElectric.Platform.Scripting.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void clear()
```

Exceptions

Exception	Condition
NotSupportedException	The IScriptCollection(T) is read-only.

See Also

IScriptCollection(T)Interface
SchneiderElectric.Scripting.Collections Namespace

IScriptCollection(T).contains Method

Determines whether the IScriptCollection(T) contains a specific value.

Namespace: SchneiderElectric.Scripting.Collections
Assembly: SchneiderElectric.Platform.Scripting (in SchneiderElectric.Platform.Scripting.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool contains(
      T item
)
```

Parameters

item

Type: *T*

The object to locate in the IScriptCollection(T).

Return Value

Type: Boolean
true if *item* is found in the IScriptCollection(T); otherwise, false.

See Also

IScriptCollection(T)Interface
SchneiderElectric.Scripting.Collections Namespace

IScriptCollection(T).copy_to Method

Copies the elements of the IScriptCollection(T) to an Array, starting at a particular Array index.

Namespace: SchneiderElectric.Scripting.Collections
Assembly: SchneiderElectric.Platform.Scripting (in SchneiderElectric.Platform.Scripting.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void copy_to(
      T[] array,
      int arrayIndex
)
```

Parameters

array

Type: *T*[]

The one-dimensional Array that is the destination of the elements copied from IScriptCollection(T). The Array must have zero-based indexing.

arrayIndex

Type: System.Int32

The zero-based index in *array* at which copying begins.

Exceptions

Exception	Condition
ArgumentNullException	*array* is null.
ArgumentOutOfRangeException	*arrayIndex* is less than 0.

ArgumentException	The number of elements in the source IScriptCollection(T) is greater than the available space from *arrayIndex* to the end of the destination *array*.

See Also

IScriptCollection(T)Interface
SchneiderElectric.Scripting.Collections Namespace

IScriptCollection(T).remove Method

Removes the first occurrence of a specific object from the IScriptCollection(T).

Namespace: SchneiderElectric.Scripting.Collections
Assembly: SchneiderElectric.Platform.Scripting (in SchneiderElectric.Platform.Scripting.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool remove(
      T item
)
```

Parameters

item

Type: *T*

The object to remove from the IScriptCollection(T).

Return Value

Type: Boolean
true if *item* was successfully removed from the IScriptCollection(T); otherwise, false. This method also returns false if *item* is not found in the original IScriptCollection(T).

Exceptions

Exception	Condition
NotSupportedException	The IScriptCollection(T) is read-only.

See Also

IScriptCollection(T)Interface
SchneiderElectric.Scripting.Collections Namespace

IScriptList(*T*) Interface

Represents a collection of objects that can be individually accessed by index.

Namespace: SchneiderElectric.Scripting.Collections
Assembly: SchneiderElectric.Platform.Scripting (in SchneiderElectric.Platform.Scripting.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptList<T> : IScriptCollection<T>,
      IEnumerable<T>, IEnumerable
```

Type Parameters

T

The type of elements in the list.

The IScriptList(T) type exposes the following members.

Properties

	Name	Description
	IScriptList(T).Item Property	Retrieves or sets the element at the specified index.

Methods

	Name	Description
	IScriptList(T).index_of Method	Determines the index of a specific item in the IScriptList(T).
	IScriptList(T).insert Method	Inserts an item to the IScriptList(T) at the specified index.

IScriptList(T).remove_at Method	Removes the IScriptList(T) item at the specified index.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Collections Namespace

IScriptList(T).IScriptList(T) Properties

The IScriptList(T) generic type exposes the following members.

Properties

	Name	Description
	Item	Retrieves or sets the element at the specified index.

See Also

IScriptList(T)Interface
SchneiderElectric.Scripting.Collections Namespace

IScriptList(T).Item Property

Retrieves or sets the element at the specified index.

Namespace: SchneiderElectric.Scripting.Collections
Assembly: SchneiderElectric.Platform.Scripting (in SchneiderElectric.Platform.Scripting.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
T this[
      int index
] { get; set; }
```

Parameters

index

Type: System.Int32

The zero-based index of the element to get or set.

Property Value

Type: *T*
The element at the specified index.

See Also

IScriptList(T)Interface
SchneiderElectric.Scripting.Collections Namespace

IScriptList(T).IScriptList(T) Methods

The IScriptList(T) generic type exposes the following members.

Methods

	Name	Description
	index_of	Determines the index of a specific item in the IScriptList(T).
	insert	Inserts an item to the IScriptList(T) at the specified index.
	remove_at	Removes the IScriptList(T) item at the specified index.

See Also

IScriptList(T)Interface
SchneiderElectric.Scripting.Collections Namespace

IScriptList(T).index_of Method

Determines the index of a specific item in the IScriptList(T).

Namespace: SchneiderElectric.Scripting.Collections
Assembly: SchneiderElectric.Platform.Scripting (in SchneiderElectric.Platform.Scripting.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
int index_of(
      T item
)
```

Parameters

item

Type: *T*

The object to locate in the IScriptList(T).

Return Value

Type: Int32
The index of item if found in the list; otherwise, -1.

Remarks

If an object occurs multiple times in the list, the IndexOf method always returns the first instance found.

See Also

IScriptList(T)Interface
SchneiderElectric.Scripting.Collections Namespace

IScriptList(T).insert Method

Inserts an item to the IScriptList(T) at the specified index.

Namespace: SchneiderElectric.Scripting.Collections
Assembly: SchneiderElectric.Platform.Scripting (in SchneiderElectric.Platform.Scripting.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void insert(
      int index,
      T item
)
```

Parameters

index

Type: System.Int32

The zero-based index at which item should be inserted.

item

Type: *T*

The object to insert into the IScriptList(T).

See Also

IScriptList(T)Interface
SchneiderElectric.Scripting.Collections Namespace

IScriptList(T).remove_at Method

Removes the IScriptList(T) item at the specified index.

Namespace: SchneiderElectric.Scripting.Collections
Assembly: SchneiderElectric.Platform.Scripting (in SchneiderElectric.Platform.Scripting.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void remove_at(
       int index
)
```

Parameters

index

Type: System.Int32

The zero-based index of the item to remove.

See Also

IScriptList(T)Interface
SchneiderElectric.Scripting.Collections Namespace

IScriptList2(*T*) Interface

Extension interface for IScriptList(T)

Namespace: SchneiderElectric.Scripting.Collections
Assembly: SchneiderElectric.Platform.Scripting (in SchneiderElectric.Platform.Scripting.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptList2<T> : IScriptList<T>,
      IScriptCollection<T>, IEnumerable<T>, IEnumerable
```

Type Parameters

T

The IScriptList2(T) type exposes the following members.

Methods

	Name	Description
	IScriptList2(T).add_range Method	Adds the elements of the specified collection to the end of the IScriptCollection(T).
	IScriptList2(T).remove_range Method	Removes a range of elements from the IScriptCollection(T).

See Also

SchneiderElectric.Scripting.Collections Namespace

IScriptList2(*T*).IScriptList2(*T*) Methods

The IScriptList2(T) generic type exposes the following members.

Methods

	Name	Description
	add_range	Adds the elements of the specified collection to the end of the IScriptCollection(T).
	remove_range	Removes a range of elements from the IScriptCollection(T).

See Also

IScriptList2(T)Interface
SchneiderElectric.Scripting.Collections Namespace

IScriptList2(*T*).add_range Method

Adds the elements of the specified collection to the end of the IScriptCollection(T).

Namespace: SchneiderElectric.Scripting.Collections
Assembly: SchneiderElectric.Platform.Scripting (in SchneiderElectric.Platform.Scripting.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void add_range(
      IEnumerable<T> collection
)
```

Parameters

collection

Type: System.Collections.Generic.IEnumerable(*T*)

The collection whose elements should be added to the end of the IScriptCollection(T).

Exceptions

Exception	Condition
NotSupportedException	The IScriptCollection(T) is read-only.
ArgumentNullException	collection is `null`.

See Also

IScriptList2(T)Interface
SchneiderElectric.Scripting.Collections Namespace

IScriptList2(T).remove_range Method

Removes a range of elements from the IScriptCollection(T).

Namespace: SchneiderElectric.Scripting.Collections
Assembly: SchneiderElectric.Platform.Scripting (in SchneiderElectric.Platform.Scripting.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void remove_range(
      IEnumerable<T> collection
)
```

Parameters

collection

Type: System.Collections.Generic.IEnumerable(*T*)

The collection whose elements should be removed from the IScriptCollection(T).

Exceptions

Exception	Condition
NotSupportedException	The IScriptCollection(T) is read-only.
ArgumentNullException	collection is `null`.

See Also

IScriptList2(T)Interface
SchneiderElectric.Scripting.Collections Namespace

Chapter 3
SchneiderElectric.Scripting.Extensions.Application Namespace

This namespace contains extensions methods to the handle application objects.

Classes

	Class	Description
	ParameterListHandlingExtension	Extends a **IScriptApplication** with the ability to add new parameter list objects.

ParameterListHandlingExtension Class

Extends a **IScriptApplication** with the ability to add new parameter list objects.

Inheritance Hierarchy

System.Object
  SchneiderElectric.Scripting.Extensions.Application.ParameterListHandlingExtension

Namespace: SchneiderElectric.Scripting.Extensions.Application
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public sealed class ParameterListHandlingExtension
```

The **ParameterListHandlingExtension** type exposes the following members.

Constructors

	Name	Description
	ParameterListHandlingExtension Constructor	Initializes a new instance of the **ParameterListHandlingExtension** class.

Methods

	Name	Description
	ParameterListHandlingExtension.add_parameter_list Method	Adds a new parameter list to the application.

See Also

SchneiderElectric.Scripting.Extensions.Application Namespace

ParameterListHandlingExtension Constructor

Initializes a new instance of the ParameterListHandlingExtension class.

Namespace: SchneiderElectric.Scripting.Extensions.Application
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public ParameterListHandlingExtension(
      IScriptObject scriptObject
)
```

Parameters

scriptObject

Type: IScriptObject

The script object.

Exceptions

Exception	Condition
ArgumentNullException	scriptObject is null.

See Also

ParameterListHandlingExtension Class
SchneiderElectric.Scripting.Extensions.Application Namespace

ParameterListHandlingExtension.ParameterListHandlingExtension Methods

The ParameterListHandlingExtension type exposes the following members.

Methods

	Name	Description
	add_parameter_list	Adds a new parameter list to the application.

See Also

ParameterListHandlingExtension Class
SchneiderElectric.Scripting.Extensions.Application Namespace

ParameterListHandlingExtension.add_parameter_list Method

Adds a new parameter list to the application.

Namespace: SchneiderElectric.Scripting.Extensions.Application
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public IExtendedObject<IScriptObject> add_parameter_list(
      string name
)
```

Parameters

name

Type: System.String

The name of the new parameter list.

Return Value

Type: IExtendedObject(IScriptObject)
A script object

Exceptions

Exception	Condition
ArgumentException	Name is null or empty.

Examples

This example shows how to add a new parameter list to an existing application.

Python

```
p = projects.primary
app = p.active_application

# create a new parameter list with the name 'ParameterList'
app.add_parameter_list('ParameterList')
```

See Also

ParameterListHandlingExtension Class
SchneiderElectric.Scripting.Extensions.Application Namespace

Chapter 4
SchneiderElectric.Scripting.Extensions.ApplicationLogger Namespace

This namespace contains extensions methods to the handle application logger objects.

Classes

	Class	Description
	ApplicationLoggerExtension	The application logger extension

Interfaces

	Interface	Description
	IScriptApplicationLoggerObjectMarker	Every **IScriptObject** instance will be extended with this method.

ApplicationLoggerExtension Class

The application logger extension

Inheritance Hierarchy

System.Object
SchneiderElectric.Scripting.Extensions.ApplicationLogger.ApplicationLoggerExtension

Namespace: SchneiderElectric.Scripting.Extensions.ApplicationLogger
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public sealed class ApplicationLoggerExtension
```

The **ApplicationLoggerExtension** type exposes the following members.

Constructors

	Name	Description
	ApplicationLoggerExtension Constructor	Creates an instance of ApplicationLoggerExtension

Methods

	Name	Description
	ApplicationLoggerExtension.add_application_logger Method	Adds a new application logger object to the application.

See Also

SchneiderElectric.Scripting.Extensions.ApplicationLogger Namespace

ApplicationLoggerExtension Constructor

Creates an instance of ApplicationLoggerExtension

Namespace: SchneiderElectric.Scripting.Extensions.ApplicationLogger
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public ApplicationLoggerExtension(
      IScriptObject scriptObject
)
```

Parameters

scriptObject

Type: IScriptObject

See Also

ApplicationLoggerExtension Class
SchneiderElectric.Scripting.Extensions.ApplicationLogger Namespace

ApplicationLoggerExtension.ApplicationLoggerExtension Methods

The ApplicationLoggerExtension type exposes the following members.

Methods

	Name	Description
	add_application_logger	Adds a new application logger object to the application.

See Also

ApplicationLoggerExtension Class
SchneiderElectric.Scripting.Extensions.ApplicationLogger Namespace

ApplicationLoggerExtension.add_application_logger Method

Adds a new application logger object to the application.

Namespace: SchneiderElectric.Scripting.Extensions.ApplicationLogger
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public IExtendedObject<IScriptObject> add_application_logger()
```

Return Value

Type: IExtendedObject(IScriptObject)

A script object.

See Also

ApplicationLoggerExtension Class
SchneiderElectric.Scripting.Extensions.ApplicationLogger Namespace

IScriptApplicationLoggerObjectMarker Interface

Every **IScriptObject** instance will be extended with this method.

Namespace: SchneiderElectric.Scripting.Extensions.ApplicationLogger
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptApplicationLoggerObjectMarker
```

The **IScriptApplicationLoggerObjectMarker** type exposes the following members.

Properties

	Name	Description
	IScriptApplicationLoggerObjectMarker.is_application_logger Property	Retrieves a value indicating whether this instance is an application logger object.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Extensions.ApplicationLogger Namespace

IScriptApplicationLoggerObjectMarker.IScriptApplicationLoggerObjectMarker Properties

The IScriptApplicationLoggerObjectMarker type exposes the following members.

Properties

	Name	Description
	is_application_logger	Retrieves a value indicating whether this instance is an application logger object.

See Also

IScriptApplicationLoggerObjectMarker Interface
SchneiderElectric.Scripting.Extensions.ApplicationLogger Namespace

IScriptApplicationLoggerObjectMarker.is_application_logger Property

Retrieves a value indicating whether this instance is an application logger object.

Namespace: SchneiderElectric.Scripting.Extensions.ApplicationLogger
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool is_application_logger { get; }
```

Property Value

Type: Boolean
`true` if this instance is application logger object; otherwise, `false`.

See Also

IScriptApplicationLoggerObjectMarker Interface
SchneiderElectric.Scripting.Extensions.ApplicationLogger Namespace

Chapter 5
SchneiderElectric.Scripting.Extensions.ParameterList Namespace

This namespace contains extensions methods to the modify parameter list objects.

Interfaces

	Interface	Description
	IScriptParameterListObject	Functionality for manipulating parameter list objects.
	IScriptParameterListObjectMarker	Every **IScriptObject** instance will be extended with this method.

IScriptParameterListObject Interface

Functionality for manipulating parameter list objects.

Namespace: SchneiderElectric.Scripting.Extensions.ParameterList
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptParameterListObject :
IScriptParameterListObjectMarker
```

The **IScriptParameterListObject** type exposes the following members.

Properties

	Name	Description
	IScriptParameterListObject.devices Property	Retrieves a list of all devices, configured in the parameter list.
	IScriptParameterListObject.parameters Property	Retrieves a list of all parameters, configured in the parameter list.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Extensions.ParameterList Namespace

IScriptParameterListObject.IScriptParameterListObject Properties

The IScriptParameterListObject type exposes the following members.

Properties

	Name	Description
	devices	Retrieves a list of all devices, configured in the parameter list.
	parameters	Retrieves a list of all parameters, configured in the parameter list.

See Also

IScriptParameterListObject Interface
SchneiderElectric.Scripting.Extensions.ParameterList Namespace

IScriptParameterListObject.devices Property

Retrieves a list of all devices, configured in the parameter list.

Namespace: SchneiderElectric.Scripting.Extensions.ParameterList
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptList2<IExtendedObject<IScriptObject>> devices { get; }
```

Property Value

Type: IScriptList2(**IExtendedObject**(**IScriptObject**))

Examples

This example shows how to modify a parameter list.

Python

```
p = projects.primary
app = p.active_application

# find the parameter list 'ParameterList'
parameter_list = app.find('ParameterList', True)[0]

# check if the object is actually a parameter list
if parameter_list.is_parameter_list:
    # add 4 devices to the parameter list
    parameter_list.devices.add(p.find('DI_0', True)[0])
    parameter_list.devices.add(p.find('DI_1', True)[0])
    parameter_list.devices.add(p.find('DI_2', True)[0])
    parameter_list.devices.add(p.find('DI_3', True)[0])

    # add some parameters to the parameter list
    parameter_list.parameters.add('Value')
```

```
    parameter_list.parameters.add('Filter')
    parameter_list.parameters.add('LogAdr')

    print('Settings of %s:' % (parameter_list.get_name(True)))
    print('Number of devices: %s' % (parameter_list.devices.count))
    print('Number of parameters: %s' %
(parameter_list.parameters.count))
    print('')

    print('List of devices:')
    for device in parameter_list.devices:
        print(device.get_name(True))

    print('')
    print('List of parameters:')
    for parameter in parameter_list.parameters:
        print(parameter)
```

See Also

IScriptParameterListObject Interface
SchneiderElectric.Scripting.Extensions.ParameterList Namespace

IScriptParameterListObject.parameters Property

Retrieves a list of all parameters, configured in the parameter list.

Namespace: SchneiderElectric.Scripting.Extensions.ParameterList
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptList2<string> parameters { get; }
```

Property Value

Type: IScriptList2(String)

Examples

This example shows how to modify a parameter list.

Python

```
p = projects.primary
app = p.active_application

# find the parameter list 'ParameterList'
parameter_list = app.find('ParameterList', True)[0]

# check if the object is actually a parameter list
if parameter_list.is_parameter_list:
    # add 4 devices to the parameter list
    parameter_list.devices.add(p.find('DI_0', True)[0])
    parameter_list.devices.add(p.find('DI_1', True)[0])
    parameter_list.devices.add(p.find('DI_2', True)[0])
    parameter_list.devices.add(p.find('DI_3', True)[0])

    # add some parameters to the parameter list
    parameter_list.parameters.add('Value')
```

```
    parameter_list.parameters.add('Filter')
    parameter_list.parameters.add('LogAdr')

    print('Settings of %s:' % (parameter_list.get_name(True)))
    print('Number of devices: %s' % (parameter_list.devices.count))
    print('Number of parameters: %s' %
(parameter_list.parameters.count))
    print('')

    print('List of devices:')
    for device in parameter_list.devices:
        print(device.get_name(True))

    print('')
    print('List of parameters:')
    for parameter in parameter_list.parameters:
        print(parameter)
```

See Also

IScriptParameterListObject Interface
SchneiderElectric.Scripting.Extensions.ParameterList Namespace

IScriptParameterListObjectMarker Interface

Every **IScriptObject** instance will be extended with this method.

Namespace: SchneiderElectric.Scripting.Extensions.ParameterList
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptParameterListObjectMarker
```

The **IScriptParameterListObjectMarker** type exposes the following members.

Properties

	Name	Description
	IScriptParameterListObjectMarker.is_parameter_list Property	Retrieves a value indicating whether this instance is a parameter list object.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Extensions.ParameterList Namespace

IScriptParameterListObjectMarker.IScriptParameterListObjectMarker Properties

The IScriptParameterListObjectMarker type exposes the following members.

Properties

	Name	Description
	is_parameter_list	Retrieves a value indicating whether this instance is a parameter list object.

See Also

IScriptParameterListObjectMarker Interface
SchneiderElectric.Scripting.Extensions.ParameterList Namespace

IScriptParameterListObjectMarker.is_parameter_list Property

Retrieves a value indicating whether this instance is a parameter list object.

Namespace: SchneiderElectric.Scripting.Extensions.ParameterList
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool is_parameter_list { get; }
```

Property Value

Type: Boolean
`true` if this instance is parameter list object; otherwise, `false`.

See Also

IScriptParameterListObjectMarker Interface
SchneiderElectric.Scripting.Extensions.ParameterList Namespace

Chapter 6
SchneiderElectric.Scripting.Extensions.ScriptApplication Namespace

This namespace contains extensions of the IScriptApplication type of the existing CODESYS ScriptEngine API.

Classes

	Class	Description
	TaskHandlingExtension	Legacy interface for task objects. This remains for compatibility reasons to previous versions. The official API is now provided directly by CODESYS.

Interfaces

	Interface	Description
	IScriptApplicationBuildProperties	This interface can be used to read and modify the application build properties.
	IScriptApplicationExtension	This interface can be used to read and modify various application properties.
	IScriptDeploymentStatusExtension	This interface can be used to determine the deployment status of an application on a target device.
	IScriptVisuObjectContainer	This allows to create visu objects; the methods will be available in the project root as well as applications, and folders below them.

TaskHandlingExtension Class

Legacy interface for task objects. This remains for compatibility reasons to previous versions. The official API is now provided directly by CODESYS.

Inheritance Hierarchy

System.Object
  SchneiderElectric.Scripting.Extensions.ScriptApplication.TaskHandlingExtension

Namespace: SchneiderElectric.Scripting.Extensions.ScriptApplication
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public sealed class TaskHandlingExtension
```

The **TaskHandlingExtension** type exposes the following members.

Constructors

	Name	Description
	TaskHandlingExtension Constructor	Initializes a new instance of the **TaskHandlingExtension** class.

Methods

	Name	Description
	TaskHandlingExtension.add_cyclic_task Method	Adds a new cyclic task to the application. The cyclic task will be processed cyclic according to the time definition (task cycle time) given in the property **Interval**.

See Also

SchneiderElectric.Scripting.Extensions.ScriptApplication Namespace

TaskHandlingExtension Constructor

Initializes a new instance of the TaskHandlingExtension class.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptApplication
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public TaskHandlingExtension(
      IScriptObject scriptObject
)
```

Parameters

scriptObject

Type: IScriptObject

The application object.

Exceptions

Exception	Condition
ArgumentNullException	applicationObject is null.

See Also

TaskHandlingExtension Class
SchneiderElectric.Scripting.Extensions.ScriptApplication Namespace

TaskHandlingExtension.TaskHandlingExtension Methods

The TaskHandlingExtension type exposes the following members.

Methods

	Name	Description
	add_cyclic_task	Adds a new cyclic task to the application. The cyclic task will be processed cyclic according to the time definition (task cycle time) given in the property **Interval**.

See Also

TaskHandlingExtension Class
SchneiderElectric.Scripting.Extensions.ScriptApplication Namespace

TaskHandlingExtension.add_cyclic_task Method

Adds a new cyclic task to the application. The cyclic task will be processed cyclic according to the time definition (task cycle time) given in the property **Interval**.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptApplication
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void add_cyclic_task(
      string name
)
```

Parameters

name

Type: System.String

The name of the new task.

Exceptions

Exception	Condition
ArgumentException	name is null or empty.

Examples

This example shows how to add a new task to an existing application.

Python

```
p = projects.primary
app = p.active_application
```

```
# create a new task with the name 'TASK_SR_Test'
app.add_cyclic_task('TASK_SR_Test')
```

See Also

TaskHandlingExtension Class
SchneiderElectric.Scripting.Extensions.ScriptApplication Namespace

IScriptApplicationBuildProperties Interface

This interface can be used to read and modify the application build properties.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptApplication
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptApplicationBuildProperties
```

The **IScriptApplicationBuildProperties** type exposes the following members.

Properties

	Name	Description
	IScriptApplicationBuildProperties.download_application_content Property	Retrieves or sets a boolean value indicating whether application content is downloaded.
	IScriptApplicationBuildProperties.size_for_dynamic_memory Property	Retrieves or sets the maximum size of memory to use for dynamic memory allocation in bytes.
	IScriptApplicationBuildProperties.use_dynamic_memory Property	Retrieves or sets a boolean value indicating whether to use dynamic memory allocation.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Extensions.ScriptApplication Namespace

IScriptApplicationBuildProperties.IScriptApplicationBuildProperties Properties

The IScriptApplicationBuildProperties type exposes the following members.

Properties

	Name	Description
	download_application_content	Retrieves or sets a boolean value indicating whether application content is downloaded.
	size_for_dynamic_memory	Retrieves or sets the maximum size of memory to use for dynamic memory allocation in bytes.
	use_dynamic_memory	Retrieves or sets a boolean value indicating whether to use dynamic memory allocation.

See Also

IScriptApplicationBuildProperties Interface
SchneiderElectric.Scripting.Extensions.ScriptApplication Namespace

IScriptApplicationBuildProperties.download_application_content Property

Retrieves or sets a boolean value indicating whether application content is downloaded.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptApplication
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool download_application_content { get; set; }
```

Property Value

Type: Boolean

See Also

IScriptApplicationBuildProperties Interface
SchneiderElectric.Scripting.Extensions.ScriptApplication Namespace

IScriptApplicationBuildProperties.size_for_dynamic_memory Property

Retrieves or sets the maximum size of memory to use for dynamic memory allocation in bytes.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptApplication
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
int size_for_dynamic_memory { get; set; }
```

Property Value

Type: Int32

Remarks

Value must be greater or equal to 1000. A value of -1 means that this feature is not active.

See Also

IScriptApplicationBuildProperties Interface
SchneiderElectric.Scripting.Extensions.ScriptApplication Namespace

IScriptApplicationBuildProperties.use_dynamic_memory Property

Retrieves or sets a boolean value indicating whether to use dynamic memory allocation.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptApplication
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool use_dynamic_memory { get; set; }
```

Property Value

Type: Boolean

Remarks

Convenience property for setting size_for_dynamic_memory size to -1 (False) or default value (True).

See Also

IScriptApplicationBuildProperties Interface
SchneiderElectric.Scripting.Extensions.ScriptApplication Namespace

IScriptApplicationExtension Interface

This interface can be used to read and modify various application properties.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptApplication
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptApplicationExtension
```

The **IScriptApplicationExtension** type exposes the following members.

Properties

	Name	Description
	IScriptApplicationExtension.application_build_properties Property	Retrieves the application build properties of the application.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Extensions.ScriptApplication Namespace

IScriptApplicationExtension.IScriptApplicationExtension Properties

The IScriptApplicationExtension type exposes the following members.

Properties

	Name	Description
	application_build_properties	Retrieves the application build properties of the application.

See Also

IScriptApplicationExtension Interface
SchneiderElectric.Scripting.Extensions.ScriptApplication Namespace

IScriptApplicationExtension.application_build_properties Property

Retrieves the application build properties of the application.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptApplication
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptApplicationBuildProperties application_build_properties {
get; }
```

Property Value

Type: IScriptApplicationBuildProperties

See Also

IScriptApplicationExtension Interface
SchneiderElectric.Scripting.Extensions.ScriptApplication Namespace

IScriptDeploymentStatusExtension Interface

This interface can be used to determine the deployment status of an application on a target device.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptApplication
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptDeploymentStatusExtension
```

Methods

	Name	Description
	IScriptDeploymentStatusExtension.get_deployment_status Method	Compares the application of the loaded project against the one on the target device and returns which deployment action needs to be taken at the next login. This method uses the configured target address on the device communication page.
	IScriptDeploymentStatusExtension.get_deployment_status Method (String)	Compares the application of the loaded project against the one on the target device and returns which deployment action needs to be taken at the next login.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Extensions.ScriptApplication Namespace

IScriptDeploymentStatusExtension.IScriptDeploymentStatusExtension Methods

Methods

	Name	Description
	get_deployment_status()	Compares the application of the loaded project against the one on the target device and returns which deployment action needs to be taken at the next login. This method uses the configured target address on the device communication page.
	get_deployment_status(String)	Compares the application of the loaded project against the one on the target device and returns which deployment action needs to be taken at the next login.

See Also

IScriptDeploymentStatusExtension Interface
SchneiderElectric.Scripting.Extensions.ScriptApplication Namespace

IScriptDeploymentStatusExtension.get_deployment_status Method

Overload List

	Name	Description
	get_deployment_status()	Compares the application of the loaded project against the one on the target device and returns which deployment action needs to be taken at the next login. This method uses the configured target address on the device communication page.
	get_deployment_status(String)	Compares the application of the loaded project against the one on the target device and returns which deployment action needs to be taken at the next login.

See Also

IScriptDeploymentStatusExtension Interface
SchneiderElectric.Scripting.Extensions.ScriptApplication Namespace

IScriptDeploymentStatusExtension.get_deployment_status Method

Compares the application of the loaded project against the one on the target device and returns which deployment action needs to be taken at the next login. This method uses the configured target address on the device communication page.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptApplication
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
ApplicationDeploymentStatus get_deployment_status()
```

Return Value

Type: **ApplicationDeploymentStatus**
The required deployment action at the next login to the device.

Examples

This example shows how to retrieve the deployment status of the active application.

Python

```
# Script shows how to retrieve the deployment status of the active
application.
# We enable the new Python 3 print syntax
from __future__ import print_function

if not projects.primary:
    system.ui.error('No primary project set')

proj = projects.primary

# Get active application
app = proj.active_application
```

```
# Get application deployment status via configured target address on
the device communication page
deployment_status = app.get_deployment_status()

if (deployment_status ==
ApplicationDeploymentStatus.DownloadRequired):
    print("A full download of the application is required")
elif (deployment_status ==
ApplicationDeploymentStatus.OnlineChange):
    print("An online change can be applied")
else:
    print("Application on the device is up to date")

# Get application deployment status via custom target URL
print(app.get_deployment_status('etcp3://127.0.0.1'))
```

See Also

IScriptDeploymentStatusExtension Interface
IScriptDeploymentStatusExtension.get_deployment_status Method
SchneiderElectric.Scripting.Extensions.ScriptApplication Namespace

IScriptDeploymentStatusExtension.get_deployment_status Method (String)

Compares the application of the loaded project against the one on the target device and returns which deployment action needs to be taken at the next login.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptApplication
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
ApplicationDeploymentStatus get_deployment_status(
      string URL
)
```

Parameters

URL

Type: System.String

The address to the target device.

Return Value

Type: **ApplicationDeploymentStatus**
The required deployment action at the next login to the device.

Examples

This example shows how to retrieve the deployment status of the active application.

Python

```
# Script shows how to retrieve the deployment status of the active
application.
# We enable the new Python 3 print syntax
from __future__ import print_function

if not projects.primary:
    system.ui.error('No primary project set')

proj = projects.primary

# Get active application
app = proj.active_application

# Get application deployment status via configured target address on
the device communication page
deployment_status = app.get_deployment_status()

if (deployment_status ==
ApplicationDeploymentStatus.DownloadRequired):
    print("A full download of the application is required")
elif (deployment_status ==
ApplicationDeploymentStatus.OnlineChange):
    print("An online change can be applied")
else:
    print("Application on the device is up to date")

# Get application deployment status via custom target URL
print(app.get_deployment_status('etcp3://127.0.0.1'))
```

See Also

IScriptDeploymentStatusExtension Interface
get_deployment_status Overload
SchneiderElectric.Scripting.Extensions.ScriptApplication Namespace

IScriptVisuObjectContainer Interface

This allows to create visu objects, the methods will be available in the project root as well as applications, and folders below them.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptApplication
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptVisuObjectContainer
```

The **IScriptVisuObjectContainer** type exposes the following members.

Methods

	Name	Description
	IScriptVisuObjectContainer.create_empty_visu Method	Creates an empty Visualization with the specified name.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Extensions.ScriptApplication Namespace

IScriptVisuObjectContainer.IScriptVisuObjectContainer Methods

The IScriptVisuObjectContainer type exposes the following members.

Methods

	Name	Description
	create_empty_visu	Creates an empty Visualization with the specified name.

See Also

IScriptVisuObjectContainer Interface
SchneiderElectric.Scripting.Extensions.ScriptApplication Namespace

IScriptVisuObjectContainer.create_empty_visu Method

Creates an empty Visualization with the specified name.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptApplication
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IExtendedObject<IScriptObject> create_empty_visu(
      string name
)
```

Parameters

name

Type: System.String

The name.

Return Value

Type: **IExtendedObject**(**IScriptObject**)
The **IScriptObject** of the newly created Visualization.

Exceptions

Exception	Condition
Exception	Any exception which occurs if the name is not an IEC identifier, or an object with the same name already exists within the same namespace, or the object cannot be created under this parent.

See Also

IScriptVisuObjectContainer Interface
SchneiderElectric.Scripting.Extensions.ScriptApplication Namespace

Chapter 7
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

This namespace contains extensions of the ScriptDeviceObject type of the existing CODESYS ScriptEngine API.

Classes

	Class	Description
	CommunicationExtension	Provides methods for communication-related settings and functions of a device.
	ConvertExtension	This extension provides methods for testing and converting a device or device module.
	DeviceIdDto	Implements IDeviceId and is used for returning device information to scripts. Additionally, provide another field for the ModuleId, because there is no matching IModuleId in the 3S Python API.
	DevicePropertiesExtension Class	This class is an extension object of CoDeSys IScriptDeviceObject. Click on the class name to see all members.

Interfaces

	Interface	Description
	IScriptChildDevicesExtension Interface	Interface to get all child devices that can be appended to a device or project.
	IScriptDriverInfo Interface	This interface provides access to all information needed in order to properly configure the driver and supporting objects of a device or connector.
	IScriptVariableMapping Interface	Defines the mapping of a data element on a specific variable.

CommunicationExtension Class

Provides methods for communication-related settings and functions of a device.

Inheritance Hierarchy

System.Object
  SchneiderElectric.Scripting.Extensions.ScriptDeviceObject.CommunicationExtension

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public class CommunicationExtension
```

The **CommunicationExtension** type exposes the following members.

Methods

	Name	Description
	CommunicationExtension.get_communication_address Method	Retrieves the communication address of the PLC.
	CommunicationExtension.reboot_plc Method	Reboots the PLC.
	CommunicationExtension.reset_diagnosis_messages Method	Resets the diagnosis messages of the controller.
	CommunicationExtension.set_communication_address Method	Sets the communication address of the PLC. This can be an IP Address, a

		nodename or full qualified connection URL.

See Also

SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

CommunicationExtension.CommunicationExtension Methods

The CommunicationExtension type exposes the following members.

Methods

	Name	Description
	get_communication_address	Retrieves the communication address of the PLC.
	reboot_plc	Reboots the PLC.
	reset_diagnosis_messages	Resets the diagnosis messages of the controller.
	set_communication_address	Sets the communication address of the PLC. This can be an IP Address, a nodename or full qualified connection URL.

See Also

CommunicationExtension Class
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

CommunicationExtension.get_communication_address Method

Retrieves the communication address of the PLC.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string get_communication_address()
```

Return Value

Type: String
The communication Address. This can be an IP Address, a nodename or full qualified connection URL. Examples: - 192.168.2.25 - MyController - etcp3://192.168.2.25 - etcp3://10.128.154.12:1105,192.168.2.25 - enodename3://10.128.154.12:1105,MyController - etcp3://[10.128.154.12:1217],192.168.2.25 - enodename3://[10.128.154.12:1217],MyController

Examples

This example shows an example of getting the address.

Python

```
from __future__ import print_function

def main():
    if not projects.primary:
        system.ui.error("No active project.")
        return

    project = projects.primary
    # locating the controller named 'LMC'
    controller = project.find('LMC', True)[0]
    address = controller.get_communication_address()
```

```
    print(address)
    system.ui.info("Test complete")

main()
```

See Also

CommunicationExtension Class
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

CommunicationExtension.reboot_plc Method

Reboots the PLC.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void reboot_plc()
```

Remarks

This function requires the application to be logged in

Examples

This example shows an example of rebooting the PLC.

Python

```
from __future__ import print_function

def perform_application_login(project):
    app = project.active_application
    onlineapp = online.create_online_application(app)
    onlineapp.login(OnlineChangeOption.Try, True)

def main():
    if not projects.primary:
        system.ui.error("No active project.")
        return

    perform_application_login(project)
    #find the controller named 'LMC' which shall be rebooted
    controller = project.find('LMC', True)[0]
    #reboot the controller
    controller.reboot_plc()
```

```
    system.ui.info("Test complete")

main()
```

See Also

CommunicationExtension Class
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

CommunicationExtension.reset_diagnosis_messages Method

Resets the diagnosis messages of the controller.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void reset_diagnosis_messages()
```

Remarks

This function requires the application to be logged in

Examples

This example shows an example of resetting the diagnosis messages of a controller

Python

```
from __future__ import print_function

def perform_application_login(project):
    app = project.active_application
    onlineapp = online.create_online_application(app)
    onlineapp.login(OnlineChangeOption.Try, True)

def main():
    if not projects.primary:
        system.ui.error("No active project.")
        return

    project = projects.primary
    perform_application_login(project)
    #find the controller which msgs shall be resetted
    controller = project.find('LMC', True)[0]
```

```
    #reset the diag msgs
    controller.reset_diagnosis_messages()
    system.ui.info("Test complete")

main()
```

See Also

CommunicationExtension Class
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

CommunicationExtension.set_communication_address Method

Sets the communication address of the PLC. This can be an IP Address, a nodename or full qualified connection URL.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void set_communication_address(
      string address
)
```

Parameters

address

Type: System.String

The communication address in one of the following notations: - 192.168.2.25 - MyController - etcp3://192.168.2.25 - etcp3://10.128.154.12:1105,192.168.2.25 - enodename3://10.128.154.12:1105,MyController - etcp3://[10.128.154.12:1217],192.168.2.25 - enodename3://[10.128.154.12:1217],MyController

Examples

This example shows an example of setting an IP address.

Python

```
from __future__ import print_function

def main():
    if not projects.primary:
        system.ui.error("No active project.")
```

```
        return

    project = projects.primary
    #find the controller by the object name where address should be
set and read.
    controller = project.find('LMC', True)[0]
    #reboot the controller
    controller.set_communication_address('192.168.2.25')
    #read address back and show it.
    print('get_communication_address:=' +
controller.get_communication_address())
    system.ui.info("Test complete")

main()
```

See Also

CommunicationExtension Class
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

ConvertExtension Class

This extension provides methods for testing and converting a device or device module.

Inheritance Hierarchy

System.Object
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject.ConvertExtension

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public class ConvertExtension
```

The **ConvertExtension** type exposes the following members.

Methods

	Name	Description
	can_convert(IDeviceId, String)	Verifies whether the device can be converted to another specific device or module.
	can_convert(Int32, String, String, String)	Verifies whether the device can be converted to another specific device or module.
	convert(IDeviceId, String)	Converts the device to the specified target device.
	convert(Int32, String, String, String)	Converts the device to the specified target device.
	get_alternative_devices	Retrieves a list of alternative DeviceIDs for the current device.

	get_preferred_alternative_devices	Retrieves the preferred alternative DeviceIDs for the current device.

See Also

SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

ConvertExtension.ConvertExtension Methods

The ConvertExtension type exposes the following members.

Methods

	Name	Description
	can_convert(IDeviceId, String)	Verifies whether the device can be converted to another specific device or module.
	can_convert(Int32, String, String, String)	Verifies whether the device can be converted to another specific device or module.
	convert(IDeviceId, String)	Converts the device to the specified target device.
	convert(Int32, String, String, String)	Converts the device to the specified target device.
	ConvertExtension.get_alternative_devices Method	Retrieves a list of alternative DeviceIDs for the current device.
	ConvertExtension.get_preferred_alternative_devices Method	Retrieves the preferred alternative DeviceIDs for the current device.

See Also

ConvertExtension Class
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

ConvertExtension.can_convert Method

Overload List

	Name	Description
	ConvertExtension.can_convert Method (IDeviceId, String)	Verifies whether the device can be converted to another specific device or module.
	ConvertExtension.can_convert Method (Int32, String, String, String)	Verifies whether the device can be converted to another specific device or module.

See Also

ConvertExtension Class
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

ConvertExtension.can_convert Method (IDeviceId, String)

Verifies whether the device can be converted to another specific device or module.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public bool can_convert(
      IDeviceId targetDeviceId,
      string targetModuleId = null
)
```

Parameters

targetDeviceId

Type: IDeviceId

The target device id.

targetModuleId (Optional)

Type: System.String

The target module id (optional).

Return Value

Type: Boolean
True if the conversion is possible, false otherwise

Remarks

If a module shall be checked, pass a valid *targetModuleId*, otherwise leave it

null.

Examples

This example shows how to verify whether a validation would be possible.

Python

```
from __future__ import print_function

# define the device id for the parameters
x01c = DeviceID(4096, "1003 009D", "1.36.2.6")
lxm52 = DeviceID(4096, "1003 0082", "1.50.0.4")
lxm52Id = "LXM52"

def main():
    if not projects.primary:
        system.ui.error("No active project.")
        return

    proj = projects.primary
    controller = proj.find('LMC', True)[0]
    drive = proj.find('Drive', True)[0]

    #test using DeviceID
    result = controller.can_convert(x01c)
    print('Conversion possible: ' + str(result))
    #test using DeviceID
    result = drive.can_convert(lxm52, lxm52Id)
    print('Conversion possible: ' + str(result))
    #test using single parameters
    result = drive.can_convert(4096, "1003 0082", "1.36.2.6",
"LXM52"):
    print('Conversion possible: ' + str(result))

main()
```

See Also

ConvertExtension Class
ConvertExtension.can_convert Method
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

ConvertExtension.can_convert Method (Int32, String, String, String)

Verifies whether the device can be converted to another specific device or module.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public bool can_convert(
      int targetType,
      string targetId,
      string targetVersion,
      string targetModuleId = null
)
```

Parameters

targetType

Type: System.Int32

Type of the target.

targetId

Type: System.String

The target id.

targetVersion

Type: System.String

The target version.

targetModuleId (Optional)

Type: System.String

The target module id (optional).

Return Value

Type: Boolean
True if the conversion is possible, false otherwise

Remarks

If a module shall be checked, pass a valid *targetModuleId*, otherwise leave it null.

Examples

This example shows how verify whether a validation would be possible.

Python

```
from __future__ import print_function

# define the device id for the parameters
x01c = DeviceID(4096, "1003 009D", "1.36.2.6")
lxm52 = DeviceID(4096, "1003 0082", "1.50.0.4")
lxm52Id = "LXM52"

def main():
    if not projects.primary:
        system.ui.error("No active project.")
        return

    proj = projects.primary
    controller = proj.find('LMC', True)[0]
    drive = proj.find('Drive', True)[0]

    #test using DeviceID
    result = controller.can_convert(x01c)
    print('Conversion possible: ' + str(result))
    #test using DeviceID
    result = drive.can_convert(lxm52, lxm52Id)
    print('Conversion possible: ' + str(result))
```

```
    #test using single parameters
    result = drive.can_convert(4096, "1003 0082", "1.36.2.6",
"LXM52"):
    print('Conversion possible: ' + str(result))

main()
```

See Also

ConvertExtension Class
can_convert Overload
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

ConvertExtension.convert Method

Overload List

	Name	Description
	ConvertExtension.convert Method (IDeviceId, String)	Converts the device to the specified target device.
	ConvertExtension.convert Method (Int32, String, String, String)	Converts the device to the specified target device.

See Also

ConvertExtension Class
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

ConvertExtension.convert Method (IDeviceId, String)

Converts the device to the specified target device.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void convert(
      IDeviceId targetDeviceId,
      string targetModuleId = null
)
```

Parameters

targetDeviceId

Type: IDeviceId

The target device id.

targetModuleId (Optional)

Type: System.String

The target module id (optional).

Remarks

If a module shall be converted, pass a valid *targetModuleId*, otherwise leave it null.

Examples

This example shows how to convert a device.

Python

```
from __future__ import print_function

def main():
    if not projects.primary:
        system.ui.error("No active project.")
        return

    proj = projects.primary
    # find the controller to convert by name 'LMC'
    controller = proj.find('LMC', True)[0]
    # find the drive to convert by name 'Drive'
    drive = proj.find('Drive', True)[0]

    controller.convert(4096, "1003 009D", "1.36.2.6")
    drive.convert(DeviceID(4096, "1003 0082", "1.50.0.4"), "LXM52")
    system.ui.info("Conversion complete")

main()
```

See Also

ConvertExtension Class
ConvertExtension.convert Method
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

ConvertExtension.convert Method (Int32, String, String, String)

Converts the device to the specified target device.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void convert(
      int targetType,
      string targetId,
      string targetVersion,
      string targetModuleId = null
)
```

Parameters

targetType

Type: System.Int32

Type of the target device.

targetId

Type: System.String

The target device id.

targetVersion

Type: System.String

The target device version.

targetModuleId (Optional)

Type: System.String

The target module id (optional).

Remarks

If a module shall be converted, pass a valid *targetModuleId*, otherwise leave it null.

Examples

This example shows how to convert a device.

Python

```
from __future__ import print_function

def main():
    if not projects.primary:
        system.ui.error("No active project.")
        return

    proj = projects.primary
    # find the controller to convert by name 'LMC'
    controller = proj.find('LMC', True)[0]
    # find the drive to convert by name 'Drive'
    drive = proj.find('Drive', True)[0]

    controller.convert(4096, "1003 009D", "1.36.2.6")
    drive.convert(DeviceID(4096, "1003 0082", "1.50.0.4"), "LXM52")
    system.ui.info("Conversion complete")

main()
```

See Also

ConvertExtension Class
convert Overload
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

ConvertExtension.get_alternative_devices Method

Retrieves a list of alternative DeviceIDs for the current device.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public IList<IDeviceId> get_alternative_devices()
```

Return Value

Type: IList(**IDeviceId**)
A list of DeviceIDs

Examples

This example shows an example of getting a list of alternative devices for a given device.

Python

```
from __future__ import print_function

#help function to print the delivered device ids
def deviceid_to_string(devId):
    mystr = "ID: {0.id} Type: {0.type} Version:
{0.version}".format(devId)
    if hasattr(devId, 'module_id') and devId.module_id is not None:
        mystr += " ModuleID: {0.module_id}".format(devId)
    return mystr


def main():
    if not projects.primary:
        system.ui.error("No active project.")
        return
```

```
    proj = projects.primary

    controller = proj.find('LMC', True)[0]
    alternativeControllers = controller.get_alternative_devices()
    print("ALTERNATIVE DEVICES FOR LMC")
    for id in alternativeControllers:
        print(deviceid_to_string(id))

    drive = proj.find('drive', True)[0]
    alternativeDrives = drive.get_alternative_devices()
    print("ALTERNATIVE DEVICES FOR DRIVE")
    for id in alternativeDrives:
        print(deviceid_to_string(id))

    system.ui.info("Test complete. Please check the script output
window")

main()
```

See Also

ConvertExtension Class
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

ConvertExtension.get_preferred_alternative_devices Method

Retrieves the preferred alternative DeviceIDs for the current device.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public IList<IDeviceId> get_preferred_alternative_devices()
```

Return Value

Type: IList(**IDeviceId**)
A list of DeviceIDs

Examples

This example shows an example of getting a list of alternative devices for a given device.

Python

```
from __future__ import print_function

#help function to print the delivered device ids
def deviceid_to_string(devId):
    mystr = "ID: {0.id} Type: {0.type} Version:
{0.version}".format(devId)
    if hasattr(devId, 'module_id') and devId.module_id is not None:
        mystr += " ModuleID: {0.module_id}".format(devId)
    return mystr


def main():
    if not projects.primary:
        system.ui.error("No active project.")
        return
```

```
    proj = projects.primary

    controller = proj.find('LMC', True)[0]
    alternativeControllers =
controller.get_preferred_alternative_devices()
    print("ALTERNATIVE DEVICES FOR LMC")
    for id in alternativeControllers:
        print(deviceid_to_string(id))

    drive = proj.find('drive', True)[0]
    alternativeDrives = drive.get_preferred_alternative_devices()
    print("ALTERNATIVE DEVICES FOR DRIVE")
    for id in alternativeDrives:
        print(deviceid_to_string(id))

    system.ui.info("Test complete. Please check the script output
window")

main()
```

See Also

ConvertExtension Class
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

DeviceIdDto Class

Implements IDeviceId and is used for returning device information to scripts. Additionally, provides another field for the ModuleId, because there is no matching IModuleId in the 3S Python API.

Inheritance Hierarchy

System.Object
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject.DeviceIdDto

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public class DeviceIdDto : IDeviceId
```

The **DeviceIdDto** type exposes the following members.

Properties

	Name	Description
	DeviceIdDto.id Property	Retrieves the device id code.
	DeviceIdDto.module_id Property	Retrieves the module id if this is a module.
	DeviceIdDto.type Property	Retrieves the device type.
	DeviceIdDto.version Property	Retrieves the device version.

See Also

SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

DeviceIdDto.DeviceIdDto Properties

The DeviceIdDto type exposes the following members.

Properties

	Name	Description
	id	Retrieves the device id code.
	module_id	Retrieves the module id if this is a module.
	type	Retrieves the device type.
	version	Retrieves the device version.

See Also

DeviceIdDto Class
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

DeviceIdDto.id Property

Retrieves the device id code.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string id { get; }
```

Property Value

Type: String
The id.

Implements

IDeviceId.id

See Also

DeviceIdDto Class
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

DeviceIdDto.module_id Property

Retrieves the module id if this is a module.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string module_id { get; }
```

Property Value

Type: String
The module id if this is a module, otherwise null.

See Also

DeviceIdDto Class
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

DeviceIdDto.type Property

Retrieves the device type.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public int type { get; }
```

Property Value

Type: Int32
The type.

Implements

IDeviceId.type

See Also

DeviceIdDto Class
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

DeviceIdDto.version Property

Retrieves the device version.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string version { get; }
```

Property Value

Type: String
The version.

Implements

IDeviceId.version

See Also

DeviceIdDto Class
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

DevicePropertiesExtension Class

This class is an extension object of CoDeSys IScriptDeviceObject. Click on the class name to see all members.

Inheritance Hierarchy

System.Object
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject.DevicePropertiesExtension

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public class DevicePropertiesExtension
```

The **DevicePropertiesExtension** type exposes the following members.

Properties

	Name	Description
	DevicePropertiesExtension.driver_info_ext Property	This property provides access to all information needed to properly configure the driver and supporting objects of the connector.

Methods

	Name	Description

DevicePropertiesExtension.get_all_parameters Method	Retrieve all parameters from a device.
DevicePropertiesExtension.get_parameter Method	Get a specific parameter by identifier and connector id.
DevicePropertiesExtension.get_parameter_iec_address Method	Retrieves the IEC address where to map this item in the process image.
get_parameter_io_variable_mapping(Int64, Int32)	Retrieves the mapping of a data element on a specific variable. If a variable mapping is defined, an instance of IScriptVariableMapping will be returned. If no variable mapping is defined, `null` (`None` in Python) will be returned.
get_parameter_io_variable_mapping(Int64, Int32, Int32)	Retrieves the mapping of a data element (sub-element) on a specific variable. If a variable mapping is defined, an instance of IScriptVariableMapping will be returned. If no variable mapping is defined, `null` (`None` in Python) will be returned.

set_parameter	This function is used to set a specific offline parameter value.
set_parameter_iec_address	Sets the IEC address where to map this item in the process image.
DevicePropertiesExtension.set_parameter_io_variable_mapping Method (Int64, Int32, String, Boolean)	Defines the mapping of a data element on a specific variable.
DevicePropertiesExtension.set_parameter_io_variable_mapping Method (Int64, Int32, Int32, String, Boolean)	Defines the mapping of a data element (sub-element) on a specific variable.

See Also

SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

DevicePropertiesExtension.DevicePropertiesExtension Properties

The DevicePropertiesExtension type exposes the following members.

Properties

	Name	Description
	driver_info_ext	This property provides access to all information needed to properly configure the driver and supporting objects of the connector.

See Also

DevicePropertiesExtension Class
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

DevicePropertiesExtension.driver_info_ext Property

This property provides access to all information needed in order to properly configure the driver and supporting objects of the connector.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public IScriptDriverInfo driver_info_ext { get; }
```

Property Value

Type: IScriptDriverInfo

See Also

DevicePropertiesExtension Class
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

DevicePropertiesExtension.DevicePropertiesExtension Methods

The DevicePropertiesExtension type exposes the following members.

Methods

	Name	Description
	get_all_parameters	Retrieve all parameters from a device.
	get_parameter	Get a specific parameter by identifier and connector id.
	get_parameter_iec_address	Retrieves the IEC address where to map this item in the process image.
	DevicePropertiesExtension.get_parameter_io_variable_mapping Method (Int64, Int32)	Retrieves the mapping of a data element on a specific variable. If a variable mapping is defined, an instance of IScriptVariableMapping will be returned. If no variable mapping is defined, `null` (`None` in Python) will be returned.
	DevicePropertiesExtension.get_parameter_io_variable_mapping Method (Int64, Int32, Int32)	Retrieves the mapping of a data element (sub-element) on a specific variable. If a variable mapping is defined, an instance of

		IScriptVariableMapping will be returned. If no variable mapping is defined, `null` (`None` in Python) will be returned.
	DevicePropertiesExtension.set_parameter Method	This function is used to set a specific offline parameter value.
	DevicePropertiesExtension.set_parameter_iec_address Method	Sets the IEC address where to map this item in the process image.
	set_parameter_io_variable_mapping(Int64, Int32, String, Boolean)	Defines the mapping of a data element on a specific variable.
	set_parameter_io_variable_mapping(Int64, Int32, Int32, String, Boolean)	Defines the mapping of a data element (sub-element) on a specific variable.

See Also

DevicePropertiesExtension Class
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

DevicePropertiesExtension.get_all_parameters Method

Retrieve all parameters from a device.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public IEnumerable<IDataElement> get_all_parameters()
```

Return Value

Type: IEnumerable(**IDataElement**)
Method returns an IEnumerable that contains all parameters of the device.

Remarks

Each entry in the list represents an IParameter object. All members of this object can be found in CoDeSys API description.

Examples

This example shows how to retrieve a list with all parameters from a device.

Python

```
# Script searches for a specific device and prints all parameters
# We enable the new Python 3 print syntax
from __future__ import print_function

# The path to our project
project_path = r"D:\PythonProjects\GetAllParameters.project"

# Clean up any open project:
if projects.primary:
    projects.primary.close()
```

```
# Load the project
proj = projects.open(project_path);

# Set the project as primary project
proj = projects.primary

# Define the printing function
def printtree(treeobj, depth=0):

    # Check if the treeobj is a device
    if treeobj.is_device:
        # Get the not localized name of the device
        device_name = treeobj.get_name(False)

        # If name matches the device name that we want...
        if device_name == "DRV_Lexium62":

            # Call the get_all_parameters() function, to get a
complete list of all parameters of that device object.
            # A parameter can contain subparameter, which can be
checked with .HasSubElements property
            parameter_list = treeobj.get_all_parameters()

            # prints all parameters
            for parameter in parameter_list:
                print("ID: " + parameter.Identifier + " Name: " +
parameter.VisibleName + " Value: " + parameter.Value + "
ParameterSet: " +
str((parameter.GetAssociatedConnector).ConnectorId))

    # Retrieve all child object, if get_children(True) and call the
printtree function recursivley
    for child in treeobj.get_children(False):
        printtree(child, depth+1)

# Retrieve all objects in the device tree
objects = proj.get_children()

# Call the printtree function for each object in the device tree
for singleobject in objects:
    printtree(singleobject)
```

See Also

DevicePropertiesExtension Class
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

DevicePropertiesExtension.get_parameter Method

Get a specific parameter by identifier and connector id.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public IDataElement get_parameter(
      long identifier,
      int connectorID
)
```

Parameters

identifier

Type: System.Int64

Unique identifier of this data element within the parent element.

connectorID

Type: System.Int32

The connector id for a specific parameter.

Return Value

Type: **IDataElement**
An element that specifies a value. Base type for Parameter objects and interface of all subcomponents of a parameter. May be a structured type itself and in turn contain other data elements.

Remarks

If you do not know the identifier and the connector ID, you can call the get_all_parameters() method to identify them. All members of this object can be found in CoDeSys API description.

Examples

This example shows how to retrieve a specific parameter from a device.

Python

```
# Script searches for a specific device and prints all parameters
# We enable the new Python 3 print syntax
from __future__ import print_function

# The path to our project
project_path = r"D:\PythonProjects\GetParameter.project"

# Clean up any open project:
if projects.primary:
    projects.primary.close()

# Load the project
proj = projects.open(project_path);

# Set the project as primary project
proj = projects.primary

# Search a specific device in the project by name
device = proj.find('DRV_Lexium62', True)[0]

# If device is found, get a specific parameter
if device != None:
    # We are interestet in the WorkingMode parameter
    # As we have seen in get_all_parameters() the working mode has
the following id and parameter set:
    # ID: 191 Name: WorkingMode Value: 1 ParameterSet: 1
    parameter = device.get_parameter(191, 1)

    # Print the value of the offline parameter
    print("ID: " + parameter.Identifier + " Name: " +
parameter.VisibleName + " Value: " + parameter.Value + "
ParameterSet: " +
str((parameter.GetAssociatedConnector).ConnectorId))
```

See Also

DevicePropertiesExtension Class
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

DevicePropertiesExtension.get_parameter_iec_address Method

Retrieves the IEC address where to map this item in the process image.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string get_parameter_iec_address(
      long identifier,
      int connectorId
)
```

Parameters

identifier

Type: System.Int64

Unique identifier of this data element within the parent element.

connectorId

Type: System.Int32

The connector id for a specific parameter.

Return Value

Type: String
The IEC address of the specified parameter.

Exceptions

Exception	Condition

ArgumentOutOfRangeException	A parameter with the specified identifier and connectorId does not exist.

Examples

This example shows how to modify the IEC address of a specific device parameter.

Python

```
# Script searches for a specific device and prints all parameters
# We enable the new Python 3 print syntax
from __future__ import print_function

# The path to our project
project_path =
r"D:\PythonProjects\ModifyParameterIecAddress.project"

# Clean up any open project:
if projects.primary:
    projects.primary.close()

# Load the project
proj = projects.open(project_path);

# Set the project as primary project
proj = projects.primary

# Search a specific device in the project by name
device = proj.find('_1_byte_input_0x10_', True)[0]

# If device is found, read the current IEC address and modify it
if device != None:
    # Read the IEC address of the 'Input0' parameter / channel; ID:
1, ConnectorId: 1
    iec_address = device.get_parameter_iec_address(1, 1)
    print(iec_address)

    # Set the IEC address of the 'Input0' parameter / channel to
'%IB3' and print out the new value to validate the operation
    device.set_parameter_iec_address(1, 1, '%IB3')
```

```
iec_address = device.get_parameter_iec_address(1, 1)
print(iec_address)
```

See Also

DevicePropertiesExtension Class
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

DevicePropertiesExtension.get_parameter_io_variable_mapping Method

Overload List

	Name	Description
	get_parameter_io_variable_mapping(Int64, Int32)	Retrieves the mapping of a data element on a specific variable. If a variable mapping is defined, an instance of IScriptVariableMapping will be returned. If no variable mapping is defined, `null` (`None` in Python) will be returned.
	get_parameter_io_variable_mapping(Int64, Int32, Int32)	Retrieves the mapping of a data element (sub-element) on a specific variable. If a variable mapping is defined, an instance of IScriptVariableMapping will be returned. If no variable mapping is defined, `null` (`None` in Python) will be returned.

See Also

DevicePropertiesExtension Class
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

DevicePropertiesExtension.get_parameter_io_variable_mapping Method (Int64, Int32)

Retrieves the mapping of a data element on a specific variable. If a variable mapping is defined, an instance of IScriptVariableMapping will be returned. If no variable mapping is defined, `null` (`None` in Python) will be returned.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public IScriptVariableMapping get_parameter_io_variable_mapping(
      long identifier,
      int connectorId
)
```

Parameters

identifier

Type: System.Int64

Unique identifier of this data element within the parent element.

connectorId

Type: System.Int32

The connector id for a specific parameter.

Return Value

Type: IScriptVariableMapping
The variable mapping of the specified parameter or `null` (`None` in Python) if no mapping is defined.

Exceptions

Exception	Condition
ArgumentOutOfRangeException	A parameter with the specified identifier and connectorId does not exist.

Examples

This example shows how to modify the IO mapping of a specific device parameter.

Python

```
# Script searches for a specific device and prints all parameters
# We enable the new Python 3 print syntax
from __future__ import print_function

# The path to our project
project_path = r"D:\PythonProjects\ModifyIoMapping.project"

# Clean up any open project:
if projects.primary:
    projects.primary.close()

# Load the project
proj = projects.open(project_path);

# Set the project as primary project
proj = projects.primary

# define a print function to write the current mapping of a device
parameter to the console
def print_variable_mapping(device, parameter_id, connector_id):

    parameter = device.get_parameter(parameter_id, connector_id)
    variable_mapping =
device.get_parameter_io_variable_mapping(parameter_id, connector_id)

    if variable_mapping != None:
        print("Parameter: " + parameter.VisibleName + " of device "
+ device.get_name() + " is mapped to " + variable_mapping.variable)
```

```
    else:
        print("No mapping defined for parameter: " +
parameter.VisibleName + " of device " + device.get_name())

# Search a specific device in the project by name
device = proj.find('_1_byte_input_0x10_', True)[0]

# If device is found, read the current IEC address and modify it
if device != None:

    # Print the current mapping
    print_variable_mapping(device, 1, 1)

    # Map the 'Input0' parameter / channel to 'Application.bTest'
    device.set_parameter_io_variable_mapping(1, 1,
'Application.bTest')

    # Map the first two bits of 'Input0' to an existing variable
    device.set_parameter_io_variable_mapping(1, 1, 0,
'Application.xTest1')
    device.set_parameter_io_variable_mapping(1, 1, 1,
'Application.xTest2', False)

     # Map the third bit of 'Input0' to a newly created variable
    device.set_parameter_io_variable_mapping(1, 1, 2,
'Application.xTest3', True)

    # Print the current mapping again
    print_variable_mapping(device, 1, 1)
```

See Also

DevicePropertiesExtension Class
DevicePropertiesExtension.get_parameter_io_variable_mapping Method
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

DevicePropertiesExtension.get_parameter_io_variable_mapping Method (Int64, Int32, Int32)

Retrieves the mapping of a data element (sub-element) on a specific variable. If a variable mapping is defined, an instance of IScriptVariableMapping will be returned. If no variable mapping is defined, `null` (`None` in Python) will be returned.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public IScriptVariableMapping get_parameter_io_variable_mapping(
      long identifier,
      int connectorId,
      int subElementIndex
)
```

Parameters

identifier

Type: System.Int64

Unique identifier of this data element within the parent element.

connectorId

Type: System.Int32

The connector id for a specific parameter.

subElementIndex

Type: System.Int32

Zerobased index of the sub-element to get or set.

Return Value

Type: IScriptVariableMapping
The variable mapping of the specified parameter or `null` (`None` in Python) if no mapping is defined.

Exceptions

Exception	Condition
ArgumentOutOfRangeException	A parameter with the specified identifier and connectorId does not exist.
IndexOutOfRangeException	Thrown if subElementIndex is smaller then zero or greater then the number of sub-elements in the specified parameter.

Examples

This example shows how to modify the IO mapping of a specific device parameter.

Python

```
# Script searches for a specific device and prints all parameters
# We enable the new Python 3 print syntax
from __future__ import print_function

# The path to our project
project_path = r"D:\PythonProjects\ModifyIoMapping.project"

# Clean up any open project:
if projects.primary:
    projects.primary.close()

# Load the project
proj = projects.open(project_path);

# Set the project as primary project
proj = projects.primary

# define a print function to write the current mapping of a device
```

```
parameter to the console
def print_variable_mapping(device, parameter_id, connector_id):

    parameter = device.get_parameter(parameter_id, connector_id)
    variable_mapping =
device.get_parameter_io_variable_mapping(parameter_id, connector_id)

    if variable_mapping != None:
        print("Parameter: " + parameter.VisibleName + " of device "
+ device.get_name() + " is mapped to " + variable_mapping.variable)
    else:
        print("No mapping defined for parameter: " +
parameter.VisibleName + " of device " + device.get_name())

# Search a specific device in the project by name
device = proj.find('_1_byte_input_0x10_', True)[0]

# If device is found, read the current IEC address and modify it
if device != None:

    # Print the current mapping
    print_variable_mapping(device, 1, 1)

    # Map the 'Input0' parameter / channel to 'Application.bTest'
    device.set_parameter_io_variable_mapping(1, 1,
'Application.bTest')

    # Map the first two bits of 'Input0' to an existing variable
    device.set_parameter_io_variable_mapping(1, 1, 0,
'Application.xTest1')
    device.set_parameter_io_variable_mapping(1, 1, 1,
'Application.xTest2', False)

     # Map the third bit of 'Input0' to a newly created variable
    device.set_parameter_io_variable_mapping(1, 1, 2,
'Application.xTest3', True)

    # Print the current mapping again
    print_variable_mapping(device, 1, 1)
```

See Also

DevicePropertiesExtension Class
get_parameter_io_variable_mapping Overload
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

DevicePropertiesExtension.set_parameter Method

This function is used to set a specific offline parameter value.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void set_parameter(
      IParameter parameter,
      string value
)
```

Parameters

parameter

Type: IParameter

The parameter whose offline value should be changed.

value

Type: System.String

The new offline value of the parameter.

Remarks

If the parameter is null an ArgumentNullException is raised. If present, the device editor is also updated (GUI mode only).

Examples

This example shows how to set a specific parameter value from a device.

Python

```
# We enable the new Python 3 print syntax
from __future__ import print_function

# The path to our project
project_path = r"D:\PythonProjects\SetParameter.project"

# Clean up any open project:
if projects.primary:
    projects.primary.close()

# Load the project
proj = projects.open(project_path);

# Set the project as primary project
proj = projects.primary

# To set a parameter you need a device, a parameter and a new value
that should be assigned to the parameter
# At first we search for the SERCOSIII node...
sercosNode = proj.find('SERCOSIII', True)[0]

# Add a new device named Robot_XK29 to the SERCOSIII node, we assume
that no other device is below the SERCOSIII node, otherwise the
index must be changed
sercosNode.insert("Robot_XK29", 0, DeviceID(4096, "1003 0082",
"1.36.2.2"), 'LXM62DxS')

# Now we get the children of the SERCOS node, we assume that
Robot_XK29 is the only one, otherwise the index must be changed
Robot_XK29 = sercosNode.get_children(True)[0]

# Call the get_all_parameters() function, to get a complete list of
all parameters of that device object.
# A parameter can contain subparameter, which can be checked with
.HasSubElements property
parameter_list = treeobj.get_all_parameters()

# prints all parameters
for parameter in parameter_list:
    print("ID: " + parameter.Identifier + " Name: " +
parameter.VisibleName + " Value: " + parameter.Value + "
ParameterSet: " +
```

```
str((parameter.GetAssociatedConnector).ConnectorId))

# We get the WorkingMode parameter:
# ID: 191 Name: WorkingMode Value: 1 ParameterSet: 1
working_mode = Robot_XK29.get_parameter(191, 1)

# Finally we set the WorkingMode parameter to 2 = Deactivated
Robot_XK29.set_parameter(working_mode, "2")
```

See Also

DevicePropertiesExtension Class
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

DevicePropertiesExtension.set_parameter_iec_address Method

Sets the IEC address where to map this item in the process image.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void set_parameter_iec_address(
      long identifier,
      int connectorId,
      string iecAddress
)
```

Parameters

identifier

Type: System.Int64

Unique identifier of this data element within the parent element.

connectorId

Type: System.Int32

The connector id for a specific parameter.

iecAddress

Type: System.String

The new IEC address for the specified parameter. If `null` (`None` in Python) is passed, the IEC address is assigned automatically.

Exceptions

Exception	Condition
ArgumentOutOfRangeException	A parameter with the specified identifier and connectorId does not exist.

Examples

This example shows how to modify the IEC address of a specific device parameter.

Python

```
# Script searches for a specific device and prints all parameters
# We enable the new Python 3 print syntax
from __future__ import print_function

# The path to our project
project_path =
r"D:\PythonProjects\ModifyParameterIecAddress.project"

# Clean up any open project:
if projects.primary:
    projects.primary.close()

# Load the project
proj = projects.open(project_path);

# Set the project as primary project
proj = projects.primary

# Search a specific device in the project by name
device = proj.find('_1_byte_input_0x10_', True)[0]

# If device is found, read the current IEC address and modify it
if device != None:
    # Read the IEC address of the 'Input0' parameter / channel; ID:
1, ConnectorId: 1
    iec_address = device.get_parameter_iec_address(1, 1)
    print(iec_address)

    # Set the IEC address of the 'Input0' parameter / channel to
'%IB3' and print out the new value to validate the operation
    device.set_parameter_iec_address(1, 1, '%IB3')
```

```
iec_address = device.get_parameter_iec_address(1, 1)
print(iec_address)
```

See Also

DevicePropertiesExtension Class
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

DevicePropertiesExtension.set_parameter_io_variable_mapping Method

Overload List

	Name	Description
	set_parameter_io_variable_mapping(Int64, Int32, String, Boolean)	Defines the mapping of a data element on a specific variable.
	set_parameter_io_variable_mapping(Int64, Int32, Int32, String, Boolean)	Defines the mapping of a data element (sub-element) on a specific variable.

See Also

DevicePropertiesExtension Class
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

DevicePropertiesExtension.set_parameter_io_variable_mapping Method (Int64, Int32, String, Boolean)

Defines the mapping of a data element on a specific variable.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void set_parameter_io_variable_mapping(
      long identifier,
      int connectorId,
      string variable,
      bool createVariable = false
)
```

Parameters

identifier

Type: System.Int64

Unique identifier of this data element within the parent element.

connectorId

Type: System.Int32

The connector id for a specific parameter.

variable

Type: System.String

The name of the variable on which the value should be mapped. If `null` (`None` in Python) is passed, the current mapping is removed.

createVariable (Optional)

Type: System.Boolean

Describes whether a new variable should be created or the channel is mapped on an existing variable. (This parameter is optional, default = `false`)

See Also

DevicePropertiesExtension Class
DevicePropertiesExtension.set_parameter_io_variable_mapping Method
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

DevicePropertiesExtension.set_parameter_io_variable_mapping Method (Int64, Int32, Int32, String, Boolean)

Defines the mapping of a data element (sub-element) on a specific variable.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void set_parameter_io_variable_mapping(
      long identifier,
      int connectorId,
      int subElementIndex,
      string variable,
      bool createVariable = false
)
```

Parameters

identifier

Type: System.Int64

Unique identifier of this data element within the parent element.

connectorId

Type: System.Int32

The connector id for a specific parameter.

subElementIndex

Type: System.Int32

Zerobased index of the sub-element to get or set.

variable

Type: System.String

The name of the variable on which the value should be mapped. If `null` (`None` in Python) is passed, the current mapping is removed.

createVariable (Optional)

Type: System.Boolean

Describes whether a new variable should be created or the channel is mapped on an existing variable. (This parameter is optional, default = `false`)

See Also

DevicePropertiesExtension Class
set_parameter_io_variable_mapping Overload
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

IScriptChildDevicesExtension Interface

Interface to retreive all child devices that can be appended to a device or project.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptChildDevicesExtension
```

The **IScriptChildDevicesExtension** type exposes the following members.

Methods

	Name	Description
	IScriptChildDevicesExtension.get_allowed_child_devices Method	Retrieve all the child devices that can be appended to this device or project.

See Also

SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

IScriptChildDevicesExtension.IScriptChildDevicesExtension Methods

The IScriptChildDevicesExtension type exposes the following members.

Methods

	Name	Description
	get_allowed_child_devices	Retrieve all the child devices that can be appended to this device or project.

See Also

IScriptChildDevicesExtension Interface
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

IScriptChildDevicesExtension.get_allowed_child_devices Method

Retrieve all the child devices that can be appended to this device or project.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptDeviceCollection get_allowed_child_devices(
      bool filterNewestVersions = true
)
```

Parameters

filterNewestVersions (Optional)

Type: System.Boolean

If set to true, only the newest version of each device is returned. This parameter is optional, the default value is true.

Return Value

Type: **IScriptDeviceCollection**
A device collection of possible child devices.

Remarks

Each entry in the list represents an IScriptDeviceDescription object. All members of this object can be found in CoDeSys API description.

Examples

This example shows how to retrieve a list with all allowed child devices from a device.

Python

```
# Script creates an empty project and prints all possible devices
that can be appended on top level
# We enable the new Python 3 print syntax
from __future__ import print_function

import os

## Close current project
if projects.primary:
    projects.primary.close()

## Create an empty project
proj =
projects.create(os.path.expanduser("~\\Documents\\GetAllowedChildDev
ices.project"))

# Define the printing function
def printdevices(devicelist):
    # prints all devices
    for device in devicelist:
        print("Name: " + device.device_info.name + " Version: " +
device.device_id.version)

# Retrieve all possible devices on project level
devicelist = proj.get_allowed_child_devices()

# Call the printdevices function
printdevices(devicelist)
```

See Also

IScriptChildDevicesExtension Interface
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

IScriptDriverInfo Interface

This interface provides access to all information needed to properly configure the driver and supporting objects of a device or connector.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptDriverInfo
```

The **IScriptDriverInfo** type exposes the following members.

Properties

	Name	Description
	IScriptDriverInfo.always_update_variables_mode Property	Retrieves or sets the always mapping mode for the PLC as it is done in the PLC settings page.
	IScriptDriverInfo.bus_cycle_task Property	The name of the task, in which to call "start buscycle".
	IScriptDriverInfo.bus_cycle_task_guid Property	set/get the bus cycle task
	IScriptDriverInfo.stop_reset_behaviour Property	set/get the behavior when stop/reset
	IScriptDriverInfo.stop_reset_behaviour_user_program Property	set/get the behavior program when stop/reset
	IScriptDriverInfo.update_ios_in_stop Property	Defines whether the bus updates IOs in stop.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

IScriptDriverInfo.IScriptDriverInfo Properties

The IScriptDriverInfo type exposes the following members.

Properties

	Name	Description
	always_update_variables_mode	Retrieves or sets the always mapping mode for the PLC as it is done in the PLC settings page.
	bus_cycle_task	The name of the task, in which to call "start buscycle".
	bus_cycle_task_guid	set/get the the bus cycle task
	stop_reset_behaviour	set/get the behavior when stop/reset
	stop_reset_behaviour_user_program	set/get the behavior program when stop/reset
	update_ios_in_stop	Defines whether the bus should update IOs in stop.

See Also

IScriptDriverInfo Interface
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

IScriptDriverInfo.always_update_variables_mode Property

Retrieves or sets the always mapping mode for the PLC as it is done in the PLC settings page.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
AlwaysUpdateVariablesMode always_update_variables_mode { get; set; }
```

Property Value

Type: AlwaysUpdateVariablesMode

Examples

This example shows how to modify the 'Update IOs settings'.

Python

```
# The path to our project
project_path = r"D:\PythonProjects\ModifyUpdateIOsSettings.project"

# Clean up any open project:
if projects.primary:
    projects.primary.close()

# Load the project
proj = projects.open(project_path);

# Set the project as primary project
proj = projects.primary

# Search a specific device in the project by name
device = proj.find('LMC_PacDrive', True)[0]
```

```
# If device is found, read the current IEC address and modify it
if device != None:
    if device.driver_info_ext.update_ios_in_stop == False:

        # Ensure update IOs in stop is enabled
        device.driver_info_ext.update_ios_in_stop = True

        # set update mode; valid values:
        # - AlwaysUpdateVariablesMode.Disabled
        # - AlwaysUpdateVariablesMode.OnlyIfUnused
        # - AlwaysUpdateVariablesMode.AlwaysInBusCycle
        device.driver_info_ext.always_update_variables_mode =
AlwaysUpdateVariablesMode.AlwaysInBusCycle

        # set the behaviour for outputs in stop; valid values:
        # - StopResetBehaviour.KeepCurrentValues
        # - StopResetBehaviour.SetToDefault
        # - StopResetBehaviour.ExecuteProgram
        device.driver_info_ext.stop_reset_behaviour =
StopResetBehaviour.SetToDefault

        # set a user program to call when outputs are in stop/reset
        # Note: This automatically sets 'stop_reset_behaviour' to
'StopResetBehaviour.execute_program'
        # Attention: The value is not validated. You have to
ensuere, the specified PRG exists in your application
        device.driver_info_ext.stop_reset_behaviour_user_program =
'SR_Main'
```

See Also

IScriptDriverInfo Interface
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

IScriptDriverInfo.bus_cycle_task Property

The name of the task, in which to call "start buscycle".

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string bus_cycle_task { get; set; }
```

Property Value

Type: String

Examples

This example shows how to modify the bus cycle task.

Python

```
# Script searches for a specific device and prints all parameters
# We enable the new Python 3 print syntax
from __future__ import print_function

# The path to our project
project_path = r"D:\PythonProjects\ModifyBusCycleTask.project"

# Clean up any open project:
if projects.primary:
    projects.primary.close()

# Load the project
proj = projects.open(project_path);

# Set the project as primary project
proj = projects.primary
```

```
# Search a specific device in the project by name
device = proj.find('LMC_PacDrive', True)[0]

# If device is found, read the current IEC address and modify it
if device != None:

    # Print the current bus cycle task
    device.driver_info_ext.bus_cycle_task

    # Set the bus cycle task to TASK_SR_Main
    device.driver_info_ext.bus_cycle_task = 'TASK_SR_Main'

    # Print the current bus cycle task again
    device.driver_info_ext.bus_cycle_task
```

See Also

IScriptDriverInfo Interface
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

IScriptDriverInfo.bus_cycle_task_guid Property

Set/Get the the bus cycle task.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
Guid bus_cycle_task_guid { get; set; }
```

Property Value

Type: Guid

Examples

This example shows how to modify the bus cycle task.

Python

```
# Script searches for a specific device and prints all parameters
# We enable the new Python 3 print syntax
from __future__ import print_function

# The path to our project
project_path = r"D:\PythonProjects\ModifyBusCycleTask.project"

# Clean up any open project:
if projects.primary:
    projects.primary.close()

# Load the project
proj = projects.open(project_path);

# Set the project as primary project
proj = projects.primary
```

```
# Search a specific device in the project by name
device = proj.find('LMC_PacDrive', True)[0]

# If device is found, read the current IEC address and modify it
if device != None:

    # Print the current bus cycle task
    device.driver_info_ext.bus_cycle_task

    # Set the bus cycle task to TASK_SR_Main
    device.driver_info_ext.bus_cycle_task = 'TASK_SR_Main'

    # Print the current bus cycle task again
    device.driver_info_ext.bus_cycle_task
```

See Also

IScriptDriverInfo Interface
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

IScriptDriverInfo.stop_reset_behaviour Property

Set/Get the behavior when stop/reset.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
StopResetBehaviour stop_reset_behaviour { get; set; }
```

Property Value

Type: StopResetBehaviour

Examples

This example shows how to modify the 'Update IOs settings'.

Python

```
# The path to our project
project_path = r"D:\PythonProjects\ModifyUpdateIOsSettings.project"

# Clean up any open project:
if projects.primary:
    projects.primary.close()

# Load the project
proj = projects.open(project_path);

# Set the project as primary project
proj = projects.primary

# Search a specific device in the project by name
device = proj.find('LMC_PacDrive', True)[0]

# If device is found, read the current IEC address and modify it
```

```
if device != None:
    if device.driver_info_ext.update_ios_in_stop == False:

        # Ensure update IOs in stop is enabled
        device.driver_info_ext.update_ios_in_stop = True

        # set update mode; valid values:
        # - AlwaysUpdateVariablesMode.Disabled
        # - AlwaysUpdateVariablesMode.OnlyIfUnused
        # - AlwaysUpdateVariablesMode.AlwaysInBusCycle
        device.driver_info_ext.always_update_variables_mode =
AlwaysUpdateVariablesMode.AlwaysInBusCycle

        # set the behaviour for outputs in stop; valid values:
        # - StopResetBehaviour.KeepCurrentValues
        # - StopResetBehaviour.SetToDefault
        # - StopResetBehaviour.ExecuteProgram
        device.driver_info_ext.stop_reset_behaviour =
StopResetBehaviour.SetToDefault

        # set a user program to call when outputs are in stop/reset
        # Note: This automatically sets 'stop_reset_behaviour' to
'StopResetBehaviour.execute_program'
        # Attention: The value is not validated. You have to
ensuere, the specified PRG exists in your application
        device.driver_info_ext.stop_reset_behaviour_user_program =
'SR_Main'
```

See Also

IScriptDriverInfo Interface
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

IScriptDriverInfo.stop_reset_behaviour_user_program Property

Set/Get the behavior program when stop/reset.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string stop_reset_behaviour_user_program { get; set; }
```

Property Value

Type: String

Examples

This example shows how to modify the 'Update IOs settings'.

Python

```
# The path to our project
project_path = r"D:\PythonProjects\ModifyUpdateIOsSettings.project"

# Clean up any open project:
if projects.primary:
    projects.primary.close()

# Load the project
proj = projects.open(project_path);

# Set the project as primary project
proj = projects.primary

# Search a specific device in the project by name
device = proj.find('LMC_PacDrive', True)[0]

# If device is found, read the current IEC address and modify it
```

```
if device != None:
    if device.driver_info_ext.update_ios_in_stop == False:

        # Ensure update IOs in stop is enabled
        device.driver_info_ext.update_ios_in_stop = True

        # set update mode; valid values:
        # - AlwaysUpdateVariablesMode.Disabled
        # - AlwaysUpdateVariablesMode.OnlyIfUnused
        # - AlwaysUpdateVariablesMode.AlwaysInBusCycle
        device.driver_info_ext.always_update_variables_mode =
AlwaysUpdateVariablesMode.AlwaysInBusCycle

        # set the behaviour for outputs in stop; valid values:
        # - StopResetBehaviour.KeepCurrentValues
        # - StopResetBehaviour.SetToDefault
        # - StopResetBehaviour.ExecuteProgram
        device.driver_info_ext.stop_reset_behaviour =
StopResetBehaviour.SetToDefault

        # set a user program to call when outputs are in stop/reset
        # Note: This automatically sets 'stop_reset_behaviour' to
'StopResetBehaviour.execute_program'
        # Attention: The value is not validated. You have to
ensuere, the specified PRG exists in your application
        device.driver_info_ext.stop_reset_behaviour_user_program =
'SR_Main'
```

See Also

IScriptDriverInfo Interface
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

IScriptDriverInfo.update_ios_in_stop Property

Defines whether the bus should update IOs in stop.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool update_ios_in_stop { get; set; }
```

Property Value

Type: Boolean
`true` if the bus should update IOs in stop; otherwise, `false`.

Examples

This example shows how to modify the 'Update IOs settings'.

Python

```
# The path to our project
project_path = r"D:\PythonProjects\ModifyUpdateIOsSettings.project"

# Clean up any open project:
if projects.primary:
    projects.primary.close()

# Load the project
proj = projects.open(project_path);

# Set the project as primary project
proj = projects.primary

# Search a specific device in the project by name
device = proj.find('LMC_PacDrive', True)[0]
```

```
# If device is found, read the current IEC address and modify it
if device != None:
    if device.driver_info_ext.update_ios_in_stop == False:

        # Ensure update IOs in stop is enabled
        device.driver_info_ext.update_ios_in_stop = True

        # set update mode; valid values:
        # - AlwaysUpdateVariablesMode.Disabled
        # - AlwaysUpdateVariablesMode.OnlyIfUnused
        # - AlwaysUpdateVariablesMode.AlwaysInBusCycle
        device.driver_info_ext.always_update_variables_mode =
AlwaysUpdateVariablesMode.AlwaysInBusCycle

        # set the behaviour for outputs in stop; valid values:
        # - StopResetBehaviour.KeepCurrentValues
        # - StopResetBehaviour.SetToDefault
        # - StopResetBehaviour.ExecuteProgram
        device.driver_info_ext.stop_reset_behaviour =
StopResetBehaviour.SetToDefault

        # set a user program to call when outputs are in stop/reset
        # Note: This automatically sets 'stop_reset_behaviour' to
'StopResetBehaviour.execute_program'
        # Attention: The value is not validated. You have to
ensuere, the specified PRG exists in your application
        device.driver_info_ext.stop_reset_behaviour_user_program =
'SR_Main'
```

See Also

IScriptDriverInfo Interface
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

IScriptVariableMapping Interface

Defines the mapping of a data element on a specific variable.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptVariableMapping
```

The **IScriptVariableMapping** type exposes the following members.

Properties

	Name	Description
	IScriptVariableMapping.create_variable Property	Describes whether a new variable should be created or the channel is mapped on an existing variable.
	IScriptVariableMapping.default_variable Property	The name of the default variable on which the value should be mapped.
	IScriptVariableMapping.id Property	Retrieves the id of this object.
	IScriptVariableMapping.variable Property	The name of the variable on which the value should be mapped.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

IScriptVariableMapping.IScriptVariableMapping Properties

The IScriptVariableMapping type exposes the following members.

Properties

	Name	Description
	create_variable	Describes whether a new variable should be created or the channel is mapped on an existing variable.
	default_variable	The name of the default variable on which the value should be mapped.
	id	Retrieves the id of this object.
	variable	The name of the variable on which the value should be mapped.

See Also

IScriptVariableMapping Interface
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

IScriptVariableMapping.create_variable Property

Describes whether a new variable should be created or the channel is mapped on an existing variable.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool create_variable { get; }
```

Property Value

Type: Boolean

See Also

IScriptVariableMapping Interface
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

IScriptVariableMapping.default_variable Property

The name of the default variable on which the value should be mapped.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string default_variable { get; }
```

Property Value

Type: String

See Also

IScriptVariableMapping Interface
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

IScriptVariableMapping.id Property

Get the id of this object.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
long id { get; }
```

Property Value

Type: Int64

See Also

IScriptVariableMapping Interface
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

IScriptVariableMapping.variable Property

The name of the variable on which the value should be mapped.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptDeviceObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string variable { get; }
```

Property Value

Type: String

See Also

IScriptVariableMapping Interface
SchneiderElectric.Scripting.Extensions.ScriptDeviceObject Namespace

Chapter 8
SchneiderElectric.Scripting.Extensions.ScriptLibManObject Namespace

This namespace contains extensions of the IScriptLibMan type of the existing CODESYS ScriptEngine API.

Classes

	Class	Description
	LibraryConfigurationExtension Class	Library Extensions for IScriptApplication (based on IScriptObject) and IScriptProject.

LibraryConfigurationExtension Class

Library Extensions for IScriptApplication (based on IScriptObject) and IScriptProject

Inheritance Hierarchy

System.Object
  SchneiderElectric.Scripting.Extensions.ScriptLibManObject.LibraryConfigurationExtension

Namespace: SchneiderElectric.Scripting.Extensions.ScriptLibManObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public class LibraryConfigurationExtension
```

The **LibraryConfigurationExtension** type exposes the following members.

Methods

	Name	Description
	get_invalid_library_mappings	Retrieves a list with full names of libraries which have references that cause conflicts.
	is_current_mapping_valid	Verifies whether the current mapping of the library references is valid.
	is_library_forward_compatible	Verifies whether the given library is a forward compatible library.

	make_auto_mapping	Automatically map and update all libraries to the best matching versions.
	LibraryConfigurationExtension.set_new_library_version Method (String, String)	Explicitly sets a specific version mapping for the given library.
	LibraryConfigurationExtension.set_new_library_version Method (String, String, String)	Explicitly sets a specific version mapping for the given library.

See Also

Chapter 8 SchneiderElectric.Scripting.Extensions.ScriptLibManObject Namespace

LibraryConfigurationExtension.LibraryConfigurationExtension Methods

The LibraryConfigurationExtension type exposes the following members.

Methods

	Name	Description
	LibraryConfigurationExtension.get_invalid_library_mappings Method	Retrieves a list with full names of libraries which have references that cause conflicts.
	LibraryConfigurationExtension.is_current_mapping_valid Method	Verifies whether the current mapping of the library references is valid.
	LibraryConfigurationExtension.is_library_forward_compatible Method	Verifies whether the given library is a forward compatible library.
	LibraryConfigurationExtension.make_auto_mapping Method	Automatically map and update all libraries to the best matching versions.
	set_new_library_version(String, String)	Explicitly sets a specific version mapping for the given library.
	set_new_library_version(String, String, String)	Explicitly sets a specific version mapping for the given library.

See Also

LibraryConfigurationExtension Class
SchneiderElectric.Scripting.Extensions.ScriptLibManObject Namespace

LibraryConfigurationExtension.get_invalid_library_mappings Method

Retrieves a list with full names of libraries which have references that cause conflicts.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptLibManObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string[] get_invalid_library_mappings()
```

Return Value

Type: String[ ]
A list with full names of the libraries in conflict state

Examples

This example shows how to retrieve invalid mappings from project and application

Python

```
p = projects.primary
libmgr = p.get_library_manager()
print("Checking project library mappings")
if not libmgr.is_current_mapping_valid():
    for lib in libmgr.get_invalid_library_mappings():
        print("Library reference cannot be satisfied for: " + lib)
else:
    print("All mappings valid")

app = p.active_application
libmgr = app.get_library_manager()
print("Checking application library mappings")
if not libmgr.is_current_mapping_valid():
    for lib in libmgr.get_invalid_library_mappings():
```

```
        print("Library reference cannot be satisfied for: " + lib)
else:
    print("All mappings valid")
```

See Also

LibraryConfigurationExtension Class
SchneiderElectric.Scripting.Extensions.ScriptLibManObject Namespace

LibraryConfigurationExtension.is_current_mapping_valid Method

Verifies whether the current mapping of the library references is valid.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptLibManObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public bool is_current_mapping_valid()
```

Return Value

Type: Boolean
`True` if all mappings are valid, `false` otherwise

Examples

This example shows how to validate mappings and retrieve the invalid mappings.

Python

```
p = projects.primary
libmgr = p.get_library_manager()
print("Checking project library mappings")
if not libmgr.is_current_mapping_valid():
    for lib in libmgr.get_invalid_library_mappings():
        print("Library reference cannot be satisfied for: " + lib)
else:
    print("All mappings valid")

app = p.active_application
libmgr = app.get_library_manager()
print("Checking application library mappings")
if not libmgr.is_current_mapping_valid():
    for lib in libmgr.get_invalid_library_mappings():
        print("Library reference cannot be satisfied for: " + lib)
```

```
else:
    print("All mappings valid")
```

See Also

LibraryConfigurationExtension Class
SchneiderElectric.Scripting.Extensions.ScriptLibManObject Namespace

LibraryConfigurationExtension.is_library_forward_compatible Method

Verifies whether the given library is a forward compatible library.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptLibManObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public bool is_library_forward_compatible(
      string libDisplayName
)
```

Parameters

libDisplayName

Type: System.String

Display name of the library.

Return Value

Type: Boolean
`True` if the given library is forward compatible, `false` otherwise

Examples

This example shows iterates through all referenced libraries of the application and verifies whether they are forward compatible

Python

```
p = projects.primary
app = p.active_application
libmgr = app.get_library_manager()
```

```
print("# Checking all libraries:")
for lib in libman.get_libraries():
    print("-     " + lib + "      Is Forward Compatible Library?  "
+ str(libmgr.is_library_forward_compatible(lib)))
```

See Also

LibraryConfigurationExtension Class
SchneiderElectric.Scripting.Extensions.ScriptLibManObject Namespace

LibraryConfigurationExtension.make_auto_mapping Method

Automatically map and update all libraries to the best matching versions.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptLibManObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void make_auto_mapping(
      bool replaceExistingLegacyMappings = false,
      bool reportChanges = false
)
```

Parameters

replaceExistingLegacyMappings (Optional)

Type: System.Boolean

If `True`, also replace legacy mappings. Default is `False`

reportChanges (Optional)

Type: System.Boolean

If `True`, updated libraries will be reported to the standard output.

Examples

This example shows how to update all libraries.

Python

```
p = projects.primary
app = p.active_application
libmgr = app.get_library_manager()
```

```
if libmgr.is_current_mapping_valid():
    print("Current mapping is valid")
else:
    print("Updating all libraries")
    libmgr.make_auto_mapping()
```

See Also

LibraryConfigurationExtension Class
SchneiderElectric.Scripting.Extensions.ScriptLibManObject Namespace

LibraryConfigurationExtension.set_new_library_version Method

Overload List

	Name	Description
	set_new_library_version(String, String)	Explicitly sets a specific version mapping for the given library.
	set_new_library_version(String, String, String)	Explicitly sets a specific version mapping for the given library.

See Also

LibraryConfigurationExtension Class
SchneiderElectric.Scripting.Extensions.ScriptLibManObject Namespace

LibraryConfigurationExtension.set_new_library_version Method (String, String)

Explicitly sets a specific version mapping for the given library.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptLibManObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void set_new_library_version(
      string libraryFullName,
      string newLibVersion
)
```

Parameters

libraryFullName

Type: System.String

Full name of the library in the form <Title>, <Version> (<Vendor>)

newLibVersion

Type: System.String

The new library version. `NULL` (Python: `None`) for Legacy

Examples

This example shows the various methods for setting the referenced library version

Python

```
p = projects.primary
app = p.active_application
libmgr = app.get_library_manager()
# set version using individual parameters
libmgr.set_new_library_version("PD_GlobalDiagnostics", "Schneider
Electric", "1.0.1.0")
# set version using the library full name
libmgr.set_new_library_version("PD_AxisModule, 1.1.6.0 (Schneider
Electric)", "1.2.4.0")
# set version to Legacy
libmgr.set_new_library_version("PD_Template", "Schneider Electric",
None)
```

See Also

LibraryConfigurationExtension Class
LibraryConfigurationExtension.set_new_library_version Method
SchneiderElectric.Scripting.Extensions.ScriptLibManObject Namespace

LibraryConfigurationExtension.set_new_library_version Method (String, String, String)

Explicitly sets a specific version mapping for the given library.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptLibManObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void set_new_library_version(
      string libName,
      string libVendor,
      string newLibVersion
)
```

Parameters

libName

Type: System.String

Name of the library.

libVendor

Type: System.String

The library vendor.

newLibVersion

Type: System.String

The new library version. `NULL` (Python: `None`) for Legacy

Examples

This example shows the various methods for setting the referenced library version

Python

```
p = projects.primary
app = p.active_application
libmgr = app.get_library_manager()
# set version using individual parameters
libmgr.set_new_library_version("PD_GlobalDiagnostics", "Schneider
Electric", "1.0.1.0")
# set version using the library full name
libmgr.set_new_library_version("PD_AxisModule, 1.1.6.0 (Schneider
Electric)", "1.2.4.0")
# set version to Legacy
libmgr.set_new_library_version("PD_Template", "Schneider Electric",
None)
```

See Also

LibraryConfigurationExtension Class
set_new_library_version Overload
SchneiderElectric.Scripting.Extensions.ScriptLibManObject Namespace

Chapter 9
SchneiderElectric.Scripting.Extensions.ScriptObject Namespace

This namespace contains extensions of the ScriptObject type of the existing CODESYS ScriptEngine API.

Classes

	Class	Description
	PouExtension Class	Class provides access to the interface and implementation text of a POU. Only Statement List is supported as this extension is written for text.

Interfaces

	Interface	Description
	IScriptNetwork Interface	This interface provides access to a specific network of an NWL object.

PouExtension Class

Class provides access to the interface and implementation text of a POU.
Only Statement List is supported as this extension is written for text.

Inheritance Hierarchy

System.Object
SchneiderElectric.Scripting.Extensions.ScriptObject.PouExtension

Namespace: Chapter 9 SchneiderElectric.Scripting.Extensions.ScriptObject Namespace
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public class PouExtension
```

The **PouExtension** type exposes the following members.

Properties

	Name	Description
	PouExtension.has_nwl_implementation Property	Retrieves a value indicating whether this IScriptObject has a nwl implementation part.
	PouExtension.is_POU Property	Returns true if the object is a POU.

Methods

	Name	Description
	PouExtension.get_implementation_text Method	Retrieves the current implementation text.

	PouExtension.get_interface_text Method	Retrieves the current interface text.
	PouExtension.get_network Method	Retrieves a network inside a POU specified by its network number.
	PouExtension.get_networks Method	Retrieves a list of all networks inside a POU.
	PouExtension.remove_network Method	Removes a network inside a POU specified by its network number.
	PouExtension.set_implementation_text Method	Sets the implementation text of the POU.
	PouExtension.set_interface_text Method	Sets the interface text of the POU.

Remarks

This class is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Extensions.ScriptObject Namespace

PouExtension.PouExtension Properties

The PouExtension type exposes the following members.

Properties

	Name	Description
	has_nwl_implementation	Retrieves a value indicating whether this IScriptObject has a nwl implementation part.
	is_POU	Returns true if the object is a POU.

See Also

PouExtension Class
SchneiderElectric.Scripting.Extensions.ScriptObject Namespace

PouExtension.has_nwl_implementation Property

Retrieves a value indicating whether this IScriptObject has a NWL implementation part.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public bool has_nwl_implementation { get; }
```

Property Value

Type: Boolean
true if it has a textual implementation; otherwise, false.

See Also

PouExtension Class
SchneiderElectric.Scripting.Extensions.ScriptObject Namespace

PouExtension.is_POU Property

Returns true if the object is a POU.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public bool is_POU { get; }
```

Property Value

Type: Boolean

See Also

PouExtension Class
SchneiderElectric.Scripting.Extensions.ScriptObject Namespace

PouExtension.PouExtension Methods

The PouExtension type exposes the following members.

Methods

	Name	Description
	get_implementation_text	Retrieves the current implementation text.
	get_interface_text	Retrieves the current interface text.
	get_network	Retrieves a network inside a POU specified by its network number.
	get_networks	Retrieves a list of all networks inside a POU.
	remove_network	Removes a network inside a POU specified by its network number.
	set_implementation_text	Sets the implementation text of the POU.
	set_interface_text	Sets the interface text of the POU.

See Also

PouExtension Class
SchneiderElectric.Scripting.Extensions.ScriptObject Namespace

PouExtension.get_implementation_text Method

Retrieves the current implementation text.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string get_implementation_text()
```

Return Value

Type: String
Returns a string of the current implementation text.

Examples

This example shows how to retrieve the implementation text of a POU.

Python

```
if not projects.primary:
    system.ui.error('No primary project set')

p = projects.primary
pou = p.find('SR_Main', True)[0]
code = pou.get_implementation_text()
print(code)
```

See Also

PouExtension Class
SchneiderElectric.Scripting.Extensions.ScriptObject Namespace

PouExtension.get_interface_text Method

Retrieves the current interface text.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string get_interface_text()
```

Return Value

Type: String
Returns the current interface text.

Examples

This example shows how to retrieve the text of the POU declaration part.

Python

```
if not projects.primary:
    system.ui.error('No primary project set')

p = projects.primary
pou = p.find('SR_Main', True)[0]
decl = pou.get_interface_text()
print(decl)
```

See Also

PouExtension Class
SchneiderElectric.Scripting.Extensions.ScriptObject Namespace

PouExtension.get_network Method

Retrieves a network inside a POU specified by its network number.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public IScriptNetwork get_network(
      int network_number
)
```

Parameters

network_number

Type: System.Int32

The network number.

Return Value

Type: IScriptNetwork
Returns the specified network.

Examples

This example shows how to retrieve and analyze the networks of a POU and remove some of the items.

Python

```
# Script shows how to retrieve and analyze the network list of a POU
and remove some of the containing items.
# We enable the new Python 3 print syntax
from __future__ import print_function
```

```
# Define the printing function
def print_networks():
    # Prints all networks
    for network in pou.get_networks():
        print(
            "id: %3d, network_number: %2d, title: %-10s, comment: %-
20s, label: %-20s, out_commented: %-5s, network_item_count: %2d" %
            (network.id, network.network_number, network.title,
network.comment, network.label, network.out_commented,
network.network_item_count)
        )

if not projects.primary:
    system.ui.error('No primary project set')

proj = projects.primary

# Get main POU
pou = proj.find("SR_Main", True)[0]

# Get first network and print out comment
first_network = pou.get_network(1)
print("First network's comment: %s" % first_network.comment)

# Print out all networks
print("Before action:")
print_networks()

# Remove all out commented networks
for network in pou.get_networks():
    if network.out_commented:
pou.remove_network(network.network_number)

print("After action:")
print_networks()
```

See Also

PouExtension Class
SchneiderElectric.Scripting.Extensions.ScriptObject Namespace

PouExtension.get_networks Method

Retrieves a list of all networks inside a POU.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public IEnumerable<IScriptNetwork> get_networks()
```

Return Value

Type: IEnumerable(IScriptNetwork)
Returns a list of all networks.

Examples

This example shows how to retrieve and analyze the networks of a POU and remove some of the items.

Python

```
# Script shows how to retrieve and analyze the network list of a POU
and remove some of the containing items.
# We enable the new Python 3 print syntax
from __future__ import print_function

# Define the printing function
def print_networks():
    # Prints all networks
    for network in pou.get_networks():
        print(
            "id: %3d, network_number: %2d, title: %-10s, comment: %-
20s, label: %-20s, out_commented: %-5s, network_item_count: %2d" %
            (network.id, network.network_number, network.title,
network.comment, network.label, network.out_commented,
network.network_item_count)
```

```
        )

if not projects.primary:
    system.ui.error('No primary project set')

proj = projects.primary

# Get main POU
pou = proj.find("SR_Main", True)[0]

# Get first network and print out comment
first_network = pou.get_network(1)
print("First network's comment: %s" % first_network.comment)

# Print out all networks
print("Before action:")
print_networks()

# Remove all out commented networks
for network in pou.get_networks():
    if network.out_commented:
pou.remove_network(network.network_number)

print("After action:")
print_networks()
```

See Also

PouExtension Class
SchneiderElectric.Scripting.Extensions.ScriptObject Namespace

PouExtension.remove_network Method

Removes a network inside a POU specified by its network number.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void remove_network(
      int network_number
)
```

Parameters

network_number

Type: System.Int32

The current network number.

Examples

This example shows how to retrieve and analyze the networks of a POU and remove some of the items.

Python

```
# Script shows how to retrieve and analyze the network list of a POU
and remove some of the containing items.
# We enable the new Python 3 print syntax
from __future__ import print_function

# Define the printing function
def print_networks():
    # Prints all networks
    for network in pou.get_networks():
        print(
```

```
            "id: %3d, network_number: %2d, title: %-10s, comment: %-
20s, label: %-20s, out_commented: %-5s, network_item_count: %2d" %
            (network.id, network.network_number, network.title,
network.comment, network.label, network.out_commented,
network.network_item_count)
        )

if not projects.primary:
    system.ui.error('No primary project set')

proj = projects.primary

# Get main POU
pou = proj.find("SR_Main", True)[0]

# Get first network and print out comment
first_network = pou.get_network(1)
print("First network's comment: %s" % first_network.comment)

# Print out all networks
print("Before action:")
print_networks()

# Remove all out commented networks
for network in pou.get_networks():
    if network.out_commented:
pou.remove_network(network.network_number)

print("After action:")
print_networks()
```

See Also

PouExtension Class
SchneiderElectric.Scripting.Extensions.ScriptObject Namespace

PouExtension.set_implementation_text Method

Sets the implementation text of the POU.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void set_implementation_text(
      string implementationText
)
```

Parameters

implementationText

Type: System.String

The new implementation text, that should be set.

Examples

This example shows how to set the text of the POU implementation part and the declaration part.

Python

```
decl = "PROGRAM SR_Main\n" + \
            "VAR\n" + \
            "    iTest: INT;\n" + \
            "END_VAR";

code = "iTest := iTest +1;"

if not projects.primary:
    system.ui.error('No primary project set')
```

```
p = projects.primary
pou = p.find('SR_Main', True)[0]

pou.set_interface_text(decl)
pou.set_implementation_text(code)
```

See Also

PouExtension Class
SchneiderElectric.Scripting.Extensions.ScriptObject Namespace

PouExtension.set_interface_text Method

Sets the interface text of the POU.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void set_interface_text(
      string interfaceText
)
```

Parameters

interfaceText

Type: System.String

The new interface text, that should be set.

Examples

This example shows how to set the text of the POU implementation part and the declaration part.

Python

```
decl = "PROGRAM SR_Main\n" + \
            "VAR\n" + \
            "    iTest: INT;\n" + \
            "END_VAR";

code = "iTest := iTest +1;"

if not projects.primary:
    system.ui.error('No primary project set')
```

```
p = projects.primary
pou = p.find('SR_Main', True)[0]

pou.set_interface_text(decl)
pou.set_implementation_text(code)
```

See Also

PouExtension Class
SchneiderElectric.Scripting.Extensions.ScriptObject Namespace

IScriptNetwork Interface

This interface provides access to a specific network of an NWL object.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptNetwork
```

The **IScriptNetwork** type exposes the following members.

Properties

	Name	Description
	IScriptNetwork.comment Property	Retrieves or sets the network comment.
	IScriptNetwork.id Property	Retrieves the internal network id.
	IScriptNetwork.label Property	Retrieves or sets the network label.
	IScriptNetwork.network_item_count Property	Retrieves the number of subitems for the network.
	IScriptNetwork.network_number Property	Retrieves the network number.
	IScriptNetwork.out_commented Property	Retrieves or sets a boolean value indicating whether this network is commented out.
	IScriptNetwork.title Property	Retrieves or sets the network title.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Extensions.ScriptObject Namespace

IScriptNetwork.IScriptNetwork Properties

The IScriptNetwork type exposes the following members.

Properties

	Name	Description
	comment	Retrieves or sets the network comment.
	id	Retrieves the internal network id.
	label	Retrieves or sets the network label.
	network_item_count	Retrieves the number of subitems for the network.
	network_number	Retrieves the network number.
	out_commented	Retrieves or sets a boolean value indicating whether this network is commented out or not.
	title	Retrieves or sets the network title.

See Also

IScriptNetwork Interface
SchneiderElectric.Scripting.Extensions.ScriptObject Namespace

IScriptNetwork.comment Property

Retrieves or sets the network comment.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string comment { get; set; }
```

Property Value

Type: String

See Also

IScriptNetwork Interface
SchneiderElectric.Scripting.Extensions.ScriptObject Namespace

IScriptNetwork.id Property

Retrieves the internal network id.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
long id { get; }
```

Property Value

Type: Int64

See Also

IScriptNetwork Interface
SchneiderElectric.Scripting.Extensions.ScriptObject Namespace

IScriptNetwork.label Property

Retrieves or sets the network label.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string label { get; set; }
```

Property Value

Type: String

See Also

IScriptNetwork Interface
SchneiderElectric.Scripting.Extensions.ScriptObject Namespace

IScriptNetwork.network_item_count Property

Retrieves the number of subitems for the network.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
int network_item_count { get; }
```

Property Value

Type: Int32

See Also

IScriptNetwork Interface
SchneiderElectric.Scripting.Extensions.ScriptObject Namespace

IScriptNetwork.network_number Property

Retrieves the network number.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
int network_number { get; }
```

Property Value

Type: Int32

See Also

IScriptNetwork Interface
SchneiderElectric.Scripting.Extensions.ScriptObject Namespace

IScriptNetwork.out_commented Property

Retrieves or sets a boolean value indicating if this network is commented out.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool out_commented { get; set; }
```

Property Value

Type: Boolean

See Also

IScriptNetwork Interface
SchneiderElectric.Scripting.Extensions.ScriptObject Namespace

IScriptNetwork.title Property

Retrieves or sets the network title.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string title { get; set; }
```

Property Value

Type: String

See Also

IScriptNetwork Interface
SchneiderElectric.Scripting.Extensions.ScriptObject Namespace

Chapter 10
SchneiderElectric.Scripting.Extensions.ScriptProject Namespace

This namespace contains extensions of the ScriptProject type of the existing CODESYS ScriptEngine API.

Classes

	Class	Description
	JobListExtension Class	This class is an extension object of CoDeSys IScriptProjectObject. Click on the class name to see all members.
	UpdateExtension Class	This class is an extension object of CoDeSys IScriptProjectObject. Click on the class name to see all members.

JobListExtension Class

This class is an extension object of CoDeSys IScriptProjectObject.

Inheritance Hierarchy

System.Object
SchneiderElectric.Scripting.Extensions.ScriptProject.JobListExtension

Namespace: Chapter 10 SchneiderElectric.Scripting.Extensions.ScriptProject Namespace
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public class JobListExtension
```

The **JobListExtension** type exposes the following members.

Constructors

	Name	Description
	JobListExtension Constructor	Initializes a new instance of the UpdateExtension class.

Properties

	Name	Description
	JobListExtension.job_list Property	Provides access to job list objects and job modification API.

See Also

SchneiderElectric.Scripting.Extensions.ScriptProject Namespace

JobListExtension Constructor

Initializes a new instance of the UpdateExtension class.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptProject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public JobListExtension(
      IScriptProject baseObject
)
```

Parameters

baseObject

Type: IScriptProject

The base object.

Exceptions

Exception	Condition
ArgumentNullException	baseObject is null.

See Also

JobListExtension Class
SchneiderElectric.Scripting.Extensions.ScriptProject Namespace

JobListExtension.JobListExtension Properties

The JobListExtension type exposes the following members.

Properties

	Name	Description
	job_list	Provides access to job list objects and job modification API.

See Also

JobListExtension Class
SchneiderElectric.Scripting.Extensions.ScriptProject Namespace

JobListExtension.job_list Property

Provides access to job list objects and job modification API.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptProject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public IScriptJobList job_list { get; }
```

Property Value

Type: IScriptJobList

See Also

JobListExtension Class
SchneiderElectric.Scripting.Extensions.ScriptProject Namespace

UpdateExtension Class

This class is an extension object of CoDeSys IScriptProjectObject.

Inheritance Hierarchy

System.Object
SchneiderElectric.Scripting.Extensions.ScriptProject.UpdateExtension

Namespace: SchneiderElectric.Scripting.Extensions.ScriptProject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public class UpdateExtension
```

The **UpdateExtension** type exposes the following members.

Methods

	Name	Description
	UpdateExtension.update Method	Updates all parts of the project to the latest version.

See Also

SchneiderElectric.Scripting.Extensions.ScriptProject Namespace

UpdateExtension.UpdateExtension Methods

The UpdateExtension type exposes the following members.

Methods

	Name	Description
	update	Updates all parts of the project to the latest version.

See Also

UpdateExtension Class
SchneiderElectric.Scripting.Extensions.ScriptProject Namespace

UpdateExtension.update Method

Updates all parts of the project to the latest version.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptProject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void update()
```

Examples

This example shows how to perform a comparison and print the resulting comparison tree.

Python

```
# make sure that when started interactively, NOT to update the
project when the dialog requests it (click cancel)
p = projects.primary
print("Updating project")
p.update_project()
print("update done")
```

See Also

UpdateExtension Class
SchneiderElectric.Scripting.Extensions.ScriptProject Namespace

Chapter 11
SchneiderElectric.Scripting.Extensions.ScriptTaskObject Namespace

This namespace contains extensions to read and modify task objects.

Classes

	Class	Description
	ScriptCyclicTaskObject Class	Legacy interface for task objects. This remains for compatibility reasons to previous versions. The official API is now provided directly by CODESYS.

ScriptCyclicTaskObject Class

Legacy interface for task objects. This remains for compatibility reasons to previous versions. The official API is now provided directly by CODESYS.

Inheritance Hierarchy

System.Object
  SchneiderElectric.Scripting.Extensions.ScriptTaskObject.ScriptCyclicTaskObject

Namespace: Chapter 11 SchneiderElectric.Scripting.Extensions.ScriptTaskObject Namespace
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public sealed class ScriptCyclicTaskObject
```

The **ScriptCyclicTaskObject** type exposes the following members.

Constructors

	Name	Description
	ScriptCyclicTaskObject Constructor	Initializes a new instance of the **ScriptCyclicTaskObject** class.

Methods

	Name	Description
	ScriptCyclicTaskObject.add_pou Method	Adds a new POU to the list of controlled POUs.

	ScriptCyclicTaskObject.get_pous Method	Retrieves the POUs which are controlled by the task.
	ScriptCyclicTaskObject.remove_pou Method	Removes a controlled POU at the specified index.

See Also

SchneiderElectric.Scripting.Extensions.ScriptTaskObject Namespace

ScriptCyclicTaskObject Constructor

Initializes a new instance of the ScriptCyclicTaskObject class.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptTaskObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public ScriptCyclicTaskObject(
      IScriptObject scriptObject
)
```

Parameters

scriptObject

Type: IScriptObject

The base object.

See Also

ScriptCyclicTaskObject Class
SchneiderElectric.Scripting.Extensions.ScriptTaskObject Namespace

ScriptCyclicTaskObject.ScriptCyclicTaskObject Methods

The ScriptCyclicTaskObject type exposes the following members.

Methods

	Name	Description
	add_pou	Adds a new POU to the list of controlled POUs.
	get_pous	The POUs which are controlled by the task.
	remove_pou	Removes a controlled POU at the specified index.

See Also

ScriptCyclicTaskObject Class
SchneiderElectric.Scripting.Extensions.ScriptTaskObject Namespace

ScriptCyclicTaskObject.add_pou Method

Adds a new POU to the list of controlled POUs.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptTaskObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void add_pou(
      string pou_name,
      string comment = null
)
```

Parameters

pou_name

Type: System.String

The name of the POU to control.

comment (Optional)

Type: System.String

An optional comment.

Exceptions

Exception	Condition
ArgumentException	pou_name is null or empty.

See Also

ScriptCyclicTaskObject Class
SchneiderElectric.Scripting.Extensions.ScriptTaskObject Namespace

ScriptCyclicTaskObject.get_pous Method

The POUs which are controlled by the task.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptTaskObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public IList<string> get_pous()
```

Return Value

Type: IList(String)
A list of POU names, controlled by this task.

See Also

ScriptCyclicTaskObject Class
SchneiderElectric.Scripting.Extensions.ScriptTaskObject Namespace

ScriptCyclicTaskObject.remove_pou Method

Removes a controlled POU at the specified index.

Namespace: SchneiderElectric.Scripting.Extensions.ScriptTaskObject
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void remove_pou(
      int index
)
```

Parameters

index

Type: System.Int32

The zero-based index of the element to remove.

Exceptions

Exception	Condition
ArgumentOutOfRangeException	*index* is less than 0 -or- *index* is equal to or greater than Count

See Also

ScriptCyclicTaskObject Class
SchneiderElectric.Scripting.Extensions.ScriptTaskObject Namespace

Chapter 12
SchneiderElectric.Scripting.Extentions.DeviceIntegration Namespace

This namespace contains extensions of the IScriptDevice type of the existing CODESYS ScriptEngine API.

Interfaces

	Interface	Description
	IScriptDeviceIntegration Interface	Script object interface for Scripting API attached to a script device object.
	IScriptDeviceIntegrationExtension Interface	Scripting API to extend the device script object for Device Integration operations.
	IScriptUserFunction Interface	Script object interface for Scripting API of a user function instance attached to a device object.

IScriptDeviceIntegration Interface

Script object interface for Scripting API attached to a script device object.

Namespace: Chapter 12 SchneiderElectric.Scripting.Extentions.DeviceIntegration Namespace
Assembly: SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin (in SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptDeviceIntegration
```

The **IScriptDeviceIntegration** type exposes the following members.

Properties

	Name	Description
	IScriptDeviceIntegration.active_user_functions Property	Retrieves the active user functions.
	IScriptDeviceIntegration.all_user_functions Property	Retrieves all available user functions.
	IScriptDeviceIntegration.device_variant Property	Retrieves or sets the device variant.
	IScriptDeviceIntegration.inactive_user_functions Property	Retrieves the inactive user functions.
	IScriptDeviceIntegration.is_supported Property	Retrieves a value indicating whether Device Integration features are supported.

Methods

	Name	Description

IScriptDeviceIntegration.get_user_function_by_id Method	Retrieves the user function by identifier.
IScriptDeviceIntegration.test_dump_information Method	Test API - not for public use.
IScriptDeviceIntegration.test_set_user_functions_enabled_state Method	Test API - not for public use.

See Also

SchneiderElectric.Scripting.Extentions.DeviceIntegration Namespace

IScriptDeviceIntegration.IScriptDeviceIntegration Properties

The IScriptDeviceIntegration type exposes the following members.

Properties

	Name	Description
	active_user_functions	Retrieves the active user functions.
	all_user_functions	Retrieves all available user functions.
	device_variant	Retrieves or sets the device variant.
	inactive_user_functions	Retrieves the inactive user functions.
	is_supported	Retrieves a value indicating whether Device Integration features are supported.

See Also

IScriptDeviceIntegration Interface
SchneiderElectric.Scripting.Extentions.DeviceIntegration Namespace

IScriptDeviceIntegration.active_user_functions Property

Retrieves the active user functions.

Namespace: SchneiderElectric.Scripting.Extentions.DeviceIntegration
Assembly: SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin (in SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptUserFunction[] active_user_functions { get; }
```

Property Value

Type: IScriptUserFunction[]
The active user functions.

See Also

IScriptDeviceIntegration Interface
SchneiderElectric.Scripting.Extentions.DeviceIntegration Namespace

IScriptDeviceIntegration.all_user_functions Property

Retrieves all available user functions.

Namespace: SchneiderElectric.Scripting.Extentions.DeviceIntegration
Assembly: SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin (in SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptUserFunction[] all_user_functions { get; }
```

Property Value

Type: IScriptUserFunction[]
All available user functions.

See Also

IScriptDeviceIntegration Interface
SchneiderElectric.Scripting.Extentions.DeviceIntegration Namespace

IScriptDeviceIntegration.device_variant Property

Retrieves or sets the device variant.

Namespace: SchneiderElectric.Scripting.Extentions.DeviceIntegration
Assembly: SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin (in SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
int device_variant { get; set; }
```

Property Value

Type: Int32
the device variant.

See Also

IScriptDeviceIntegration Interface
SchneiderElectric.Scripting.Extentions.DeviceIntegration Namespace

IScriptDeviceIntegration.inactive_user_functions Property

Retrieves the inactive user functions.

Namespace: SchneiderElectric.Scripting.Extentions.DeviceIntegration
Assembly: SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin (in SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptUserFunction[] inactive_user_functions { get; }
```

Property Value

Type: IScriptUserFunction[]
The inactive user functions.

See Also

IScriptDeviceIntegration Interface
SchneiderElectric.Scripting.Extentions.DeviceIntegration Namespace

IScriptDeviceIntegration.is_supported Property

Retrieves a value indicating whether Device Integration features are supported.

Namespace: SchneiderElectric.Scripting.Extentions.DeviceIntegration
Assembly: SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin (in SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool is_supported { get; }
```

Property Value

Type: Boolean
`true` if Device Integration features are supported; otherwise, `false`.

See Also

IScriptDeviceIntegration Interface
SchneiderElectric.Scripting.Extentions.DeviceIntegration Namespace

IScriptDeviceIntegration.IScriptDeviceIntegration Methods

The IScriptDeviceIntegration type exposes the following members.

Methods

	Name	Description
	get_user_function_by_id	Retrieves the user function by identifier.
	test_dump_information	Test API - not for public use.
	test_set_user_functions_enabled_state	Test API - not for public use.

See Also

IScriptDeviceIntegration Interface
SchneiderElectric.Scripting.Extentions.DeviceIntegration Namespace

IScriptDeviceIntegration.get_user_function_by_id Method

Retrieves the user function by identifier.

Namespace: SchneiderElectric.Scripting.Extentions.DeviceIntegration
Assembly: SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin (in SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptUserFunction get_user_function_by_id(
      string id
)
```

Parameters

id

Type: System.String

The identifier.

Return Value

Type: IScriptUserFunction
The requested user function

See Also

IScriptDeviceIntegration Interface
SchneiderElectric.Scripting.Extentions.DeviceIntegration Namespace

IScriptDeviceIntegration.test_dump_information Method

Test API - not for public use.

Namespace: SchneiderElectric.Scripting.Extentions.DeviceIntegration
Assembly: SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin (in SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void test_dump_information()
```

See Also

IScriptDeviceIntegration Interface
SchneiderElectric.Scripting.Extentions.DeviceIntegration Namespace

IScriptDeviceIntegration.test_set_user_functions_enabled_state Method

Test API - not for public use.

Namespace: SchneiderElectric.Scripting.Extentions.DeviceIntegration
Assembly: SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin (in SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void test_set_user_functions_enabled_state(
      bool enabled
)
```

Parameters

enabled

Type: System.Boolean

if set to `true` [enabled].

See Also

IScriptDeviceIntegration Interface
SchneiderElectric.Scripting.Extentions.DeviceIntegration Namespace

IScriptDeviceIntegrationExtension Interface

Scripting API to extend the device script object for Device Integration operations.

Namespace: SchneiderElectric.Scripting.Extentions.DeviceIntegration
Assembly: SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin (in SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptDeviceIntegrationExtension
```

The **IScriptDeviceIntegrationExtension** type exposes the following members.

Properties

	Name	Description
	IScriptDeviceIntegrationExtension.device_integration Property	Retrieves access to device integration scripting API.

See Also

SchneiderElectric.Scripting.Extentions.DeviceIntegration Namespace

IScriptDeviceIntegrationExtension.IScriptDeviceIntegrationExtension Properties

The IScriptDeviceIntegrationExtension type exposes the following members.

Properties

	Name	Description
	device_integration	Retrieves access to device integration scripting API.

See Also

IScriptDeviceIntegrationExtension Interface
SchneiderElectric.Scripting.Extentions.DeviceIntegration Namespace

IScriptDeviceIntegrationExtension.device_integration Property

Retrieves access to device integration scripting API.

Namespace: SchneiderElectric.Scripting.Extentions.DeviceIntegration
Assembly: SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin (in SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptDeviceIntegration device_integration { get; }
```

Property Value

Type: IScriptDeviceIntegration
The access to device integration scripting API.

See Also

IScriptDeviceIntegrationExtension Interface
SchneiderElectric.Scripting.Extentions.DeviceIntegration Namespace

IScriptUserFunction Interface

Script object interface for Scripting API of a user function instance attached to a device object.

Namespace: SchneiderElectric.Scripting.Extentions.DeviceIntegration
Assembly: SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin (in SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptUserFunction
```

The **IScriptUserFunction** type exposes the following members.

Properties

	Name	Description
	IScriptUserFunction.description Property	Retrieves the user function description.
	IScriptUserFunction.id Property	Retrieves the user function id.
	IScriptUserFunction.is_active Property	Retrieves a value indicating whether user function is active.
	IScriptUserFunction.name Property	Retrieves the user function name (displayable name).

Methods

	Name	Description
	IScriptUserFunction.activate Method	Activates the user function.
	IScriptUserFunction.deactivate Method	Deactivates the user function.

See Also

SchneiderElectric.Scripting.Extentions.DeviceIntegration Namespace

IScriptUserFunction.IScriptUserFunction Properties

The IScriptUserFunction type exposes the following members.

Properties

	Name	Description
	description	Retrieves the user function description.
	id	Retrieves the user function id.
	is_active	Retrieves a value indicating whether user function is active.
	name	Retrieves the user function name (displayable name).

See Also

IScriptUserFunction Interface
SchneiderElectric.Scripting.Extentions.DeviceIntegration Namespace

IScriptUserFunction.description Property

Retrieves the user function description.

Namespace: SchneiderElectric.Scripting.Extentions.DeviceIntegration
Assembly: SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin (in SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string description { get; }
```

Property Value

Type: String
The user function description.

See Also

IScriptUserFunction Interface
SchneiderElectric.Scripting.Extentions.DeviceIntegration Namespace

IScriptUserFunction.id Property

Retrieves the user function id.

Namespace: SchneiderElectric.Scripting.Extentions.DeviceIntegration
Assembly: SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin (in SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string id { get; }
```

Property Value

Type: String
The user function id.

See Also

IScriptUserFunction Interface
SchneiderElectric.Scripting.Extentions.DeviceIntegration Namespace

IScriptUserFunction.is_active Property

Retrieves a value indicating whether user function is active.

Namespace: SchneiderElectric.Scripting.Extentions.DeviceIntegration
Assembly: SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin (in SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool is_active { get; }
```

Property Value

Type: Boolean
`true` if this user function is active; otherwise, `false`.

See Also

IScriptUserFunction Interface
SchneiderElectric.Scripting.Extentions.DeviceIntegration Namespace

IScriptUserFunction.name Property

Retrieves the user function name (displayable name).

Namespace: SchneiderElectric.Scripting.Extentions.DeviceIntegration
Assembly: SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin (in SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string name { get; }
```

Property Value

Type: String
The user function name.

See Also

IScriptUserFunction Interface
SchneiderElectric.Scripting.Extentions.DeviceIntegration Namespace

IScriptUserFunction.IScriptUserFunction Methods

The IScriptUserFunction type exposes the following members.

Methods

	Name	Description
	activate	Activates the user function.
	deactivate	Deactivates the user function.

See Also

IScriptUserFunction Interface
SchneiderElectric.Scripting.Extentions.DeviceIntegration Namespace

IScriptUserFunction.activate Method

Activates the user function.

Namespace: SchneiderElectric.Scripting.Extentions.DeviceIntegration
Assembly: SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin (in SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void activate()
```

See Also

IScriptUserFunction Interface
SchneiderElectric.Scripting.Extentions.DeviceIntegration Namespace

IScriptUserFunction.deactivate Method

Deactivates the user function.

Namespace: SchneiderElectric.Scripting.Extentions.DeviceIntegration
Assembly: SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin (in SchneiderElectric.Programming.DeviceIntegration.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void deactivate()
```

See Also

IScriptUserFunction Interface
SchneiderElectric.Scripting.Extentions.DeviceIntegration Namespace

Chapter 13
SchneiderElectric.Scripting.Types.Communication Namespace

This namespace provides types that allow access to the communication settings.

Classes

	Class	Description
	Communication Class	Class provides the functionality to show and change the communication settings. Click on the members to show some examples.

Communication Class

Class provides the functionality to show and change the communication settings.

Inheritance Hierarchy

System.Object
SchneiderElectric.Scripting.Types.Communication.Communication

Namespace: Chapter 13 SchneiderElectric.Scripting.Types.Communication Namespace
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#
`public class Communication`

The **Communication** type exposes the following members.

Properties

	Name	Description
	Communication.ip_address Property	Obsolete. Retrieves or sets the IP-Address.

Methods

	Name	Description
	Communication.add_gateway Method	Adds a gateway to the project.

See Also

SchneiderElectric.Scripting.Types.Communication Namespace

Communication.Communication Properties

The Communication type exposes the following members.

Properties

	Name	Description
	ip_address	Obsolete. Retrieves or sets the IP-Address.

See Also

Communication Class
SchneiderElectric.Scripting.Types.Communication Namespace

Communication.ip_address Property

Note: This API is now obsolete.

Retrieves or sets the IP-Address.

Namespace: SchneiderElectric.Scripting.Types.Communication
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
[ObsoleteAttribute("This property is obsolete. Please use
'get_communication_address' on the device object instead")]
public string ip_address { get; set; }
```

Property Value

Type: String
The IP-Address.

Remarks

This property is obsolete. Use 'get_communication_address' on the device object instead.

See Also

Communication Class
SchneiderElectric.Scripting.Types.Communication Namespace

Communication.Communication Methods

The Communication type exposes the following members.

Methods

	Name	Description
	add_gateway	Adds a gateway to the project.

See Also

Communication Class
SchneiderElectric.Scripting.Types.Communication Namespace

Communication.add_gateway Method

Adds a gateway to the project.

Namespace: SchneiderElectric.Scripting.Types.Communication
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void add_gateway(
      string gatewayName,
      string gatewayAddress,
      ushort gatewayPort
)
```

Parameters

gatewayName

Type: System.String

The intended name of the gateway.

gatewayAddress

Type: System.String

The intended address of the gateway.

gatewayPort

Type: System.UInt16

The intended port of the gateway.

Examples

This example shows how to add a gateway to the project.

Python

```
# We enable the new Python 3 print syntax
from __future__ import print_function

# The path to our project
project_path = r"D:\PythonProjects\Example.project"

# Clean up any open project:
if projects.primary:
    projects.primary.close()

# Load the project
proj = projects.open(project_path);

# Set the project as primary project
proj = projects.primary

# Add the gateway
communication_settings.add_gateway("GatewayName", "127.0.0.1", 1217)

# Save project
projects.primary.save()
```

See Also

Communication Class
SchneiderElectric.Scripting.Types.Communication Namespace

Chapter 14
SchneiderElectric.Scripting.Types.Compiler Namespace

This namespace provides types that allow access to the compiler settings.

Classes

	Class	Description
	CompilerSettings Class	Class provides the functionality to show and change the current compiler version. Click on the members to show some examples.

CompilerSettings Class

Class provides the functionality to show and change the current compiler version.

Inheritance Hierarchy

System.Object
SchneiderElectric.Scripting.Types.Compiler.CompilerSettings

Namespace: Chapter 14 SchneiderElectric.Scripting.Types.Compiler Namespace
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public class CompilerSettings
```

The **CompilerSettings** type exposes the following members.

Properties

	Name	Description
	CompilerSettings.active_compiler_version Property	Retrieves or sets the active compiler version.
	CompilerSettings.active_compiler_version_as_text Property	Retrieves or sets the active compiler version (as text).

Methods

	Name	Description

	CompilerSettings.get_all_compiler_version_not_filtered Method	Retrieves all compiler version not filtered by OEM.
	CompilerSettings.get_all_compiler_versions Method	Retrieves all compiler versions.
	CompilerSettings.get_all_compiler_versions_as_text Method	Retrieves all compiler versions.
	CompilerSettings.map_from_internal_to_oem_version Method	Maps from internal to OEM version.
	CompilerSettings.map_from_internal_to_oem_version_as_text Method	Maps from internal to OEM version.
	CompilerSettings.map_from_oem_text_to_internal_version Method	Maps from OEM to internal version.
	CompilerSettings.map_from_oem_to_internal_version Method	Maps from OEM to internal version.

See Also

SchneiderElectric.Scripting.Types.Compiler Namespace

CompilerSettings.CompilerSettings Properties

The CompilerSettings type exposes the following members.

Properties

	Name	Description
	active_compiler_version	Retrieves or sets the active compiler version.
	active_compiler_version_as_text	Retrieves or sets the active compiler version (as text).

See Also

CompilerSettings Class
SchneiderElectric.Scripting.Types.Compiler Namespace

CompilerSettings.active_compiler_version Property

Retrieves or sets the active compiler version.

Namespace: SchneiderElectric.Scripting.Types.Compiler
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string active_compiler_version { get; set; }
```

Property Value

Type: String
The active compiler version.

Remarks

This property returns / requires the version format mapped by OEM. Use MapFromInternalToOEMVersion() and MapFromOEMToInternalVersion() to convert between CoDeSys and OEM version.

Examples

This example shows how to use the active_compiler_version property to set or get the current compiler version.

Python

```
# We enable the new Python 3 print syntax
from __future__ import print_function

# Load the project
proj = projects.primary

# Set the project as primary project
proj = projects.primary
```

```
print("All compiler versions")

# Retrieve all compiler versions (filtered)
compiler_versions = compiler_settings.get_all_compiler_versions()

# Print all compiler versions (filtered)
for version in compiler_versions:
    print (" - OEM mapped version: " + version)

# Get active compiler version
compiler_version = compiler_settings.active_compiler_version

print("Current compiler version: " + compiler_version)

# Set new compiler version
compiler_settings.active_compiler_version = "1.36.35.0"

print("New compiler version: " +
compiler_settings.active_compiler_version)

# Save project
projects.primary.save()
```

See Also

CompilerSettings Class
SchneiderElectric.Scripting.Types.Compiler Namespace

CompilerSettings.active_compiler_version_as_text Property

Retrieves or sets the active compiler version (as text).

Namespace: SchneiderElectric.Scripting.Types.Compiler
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string active_compiler_version_as_text { get; set; }
```

Property Value

Type: String
The active compiler version.

Remarks

This property returns / requires the version format mapped by OEM. Use MapFromInternalToOEMVersion() and MapFromOEMToInternalVersion() to convert between CoDeSys and OEM version.

Examples

This example shows how to use the active_compiler_version property to set or get the current compiler version.

Python

```
# We enable the new Python 3 print syntax
from __future__ import print_function

# Load the project
proj = projects.primary

# Set the project as primary project
proj = projects.primary
```

```
print("All compiler versions")

# Retrieve all compiler versions (filtered)
compiler_versions = compiler_settings.get_all_compiler_versions()

# Print all compiler versions (filtered)
for version in compiler_versions:
    print (" - OEM mapped version: " + version)

# Get active compiler version
compiler_version = compiler_settings.active_compiler_version

print("Current compiler version: " + compiler_version)

# Set new compiler version
compiler_settings.active_compiler_version = "1.36.35.0"

print("New compiler version: " +
compiler_settings.active_compiler_version)

# Save project
projects.primary.save()
```

See Also

CompilerSettings Class
SchneiderElectric.Scripting.Types.Compiler Namespace

CompilerSettings.CompilerSettings Methods

The CompilerSettings type exposes the following members.

Methods

	Name	Description
	get_all_compiler_version_not_filtered	Retrieves all compiler version not filtered by OEM.
	get_all_compiler_versions	Retrieves all compiler versions.
	get_all_compiler_versions_as_text	Retrieves all compiler versions.
	map_from_internal_to_oem_version	Maps from internal to OEM version.
	map_from_internal_to_oem_version_as_text	Maps from internal to OEM version.
	map_from_oem_text_to_internal_version	Maps from OEM to internal version.
	map_from_oem_to_internal_version	Maps from OEM to internal version.

See Also

CompilerSettings Class
SchneiderElectric.Scripting.Types.Compiler Namespace

CompilerSettings.get_all_compiler_version_not_filtered Method

Retrieves all compiler version not filtered by OEM.

Namespace: SchneiderElectric.Scripting.Types.Compiler
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string[] get_all_compiler_version_not_filtered()
```

Return Value

Type: String[ ]
Returns a full list with all compiler versions.

Remarks

The versions are based on the original CoDeSys compiler version

Examples

This example shows how to retrieve a list of all compiler versions.

Python

```
# We enable the new Python 3 print syntax
from __future__ import print_function

proj = projects.primary

print("All compiler versions (not filtered)")

# Retrieve all compiler versions (not filtered)
compiler_versions =
compiler_settings.get_all_compiler_version_not_filtered()

# Print all compiler versions (not filtered)
```

```
for version in compiler_versions:
    print (" - CoDeSys based version: " + version)
```

See Also

CompilerSettings Class
SchneiderElectric.Scripting.Types.Compiler Namespace

CompilerSettings.get_all_compiler_versions Method

Retrieves all compiler versions.

Namespace: SchneiderElectric.Scripting.Types.Compiler
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string[] get_all_compiler_versions()
```

Return Value

Type: String[ ]
Returns a filtered list with all compiler versions.

Remarks

The versions are based on the mapped OEM compiler version

Examples

This example shows how to retrieve a list of OEM filtered compiler versions.

Python

```
# We enable the new Python 3 print syntax
from __future__ import print_function

proj = projects.primary

print("All compiler versions")

# Retrieve all compiler versions (filtered)
compiler_versions = compiler_settings.get_all_compiler_versions()

# Print all compiler versions (filtered)
```

```
for version in compiler_versions:
    print (" - OEM mapped version: " + version)
```

See Also

CompilerSettings Class
SchneiderElectric.Scripting.Types.Compiler Namespace

CompilerSettings.get_all_compiler_versions_as_text Method

Retrieves all compiler versions.

Namespace: SchneiderElectric.Scripting.Types.Compiler
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string[] get_all_compiler_versions_as_text()
```

Return Value

Type: String[ ]
Returns a filtered list with all compiler versions.

Remarks

The versions are based on the mapped OEM compiler version.

Examples

This example shows how to retrieve a list of OEM filtered compiler versions.

Python

```
# We enable the new Python 3 print syntax
from __future__ import print_function

proj = projects.primary

print("All compiler versions")

# Retrieve all compiler versions (filtered)
compiler_versions = compiler_settings.get_all_compiler_versions()

# Print all compiler versions (filtered)
```

```
for version in compiler_versions:
    print (" - OEM mapped version: " + version)
```

See Also

CompilerSettings Class
SchneiderElectric.Scripting.Types.Compiler Namespace

CompilerSettings.map_from_internal_to_oem_version Method

Maps from internal to OEM version.

Namespace: SchneiderElectric.Scripting.Types.Compiler
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string map_from_internal_to_oem_version(
      string version
)
```

Parameters

version

Type: System.String

The internal version string.

Return Value

Type: String
The mapped OEM version, null if not mapped.

Examples

This example shows how to verify the mapping between an internal and OEM compiler version.

Python

```
# We enable the new Python 3 print syntax
from __future__ import print_function

# Set the project as primary project
```

```
proj = projects.primary

print("All compiler versions (not filtered)")

# Retrieve all compiler versions (not filtered)
compiler_versions =
compiler_settings.get_all_compiler_version_not_filtered()

# Print all compiler versions (not filtered)
for version in compiler_versions:
    print (" - CoDeSys based version: " + version)

    # Check if CoDeSys compiler version is mapped to an OEM version
    mapped_version =
compiler_settings.map_from_internal_to_oem_version(version)

    if mapped_version == None:
        print (" - Not OEM mapped!")
    else:
        print (" - OEM mapped version: " + mapped_version)
```

See Also

CompilerSettings Class
SchneiderElectric.Scripting.Types.Compiler Namespace

CompilerSettings.map_from_internal_to_oem_version_as_text Method

Maps from internal to OEM version.

Namespace: SchneiderElectric.Scripting.Types.Compiler
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string map_from_internal_to_oem_version_as_text(
      string version
)
```

Parameters

version

Type: System.String

The internal version string.

Return Value

Type: String
The mapped OEM version, null if not mapped.

Examples

This example shows how to verify the mapping between an internal and OEM compiler version.

Python

```
# We enable the new Python 3 print syntax
from __future__ import print_function

# Set the project as primary project
```

```
proj = projects.primary

print("All compiler versions (not filtered)")

# Retrieve all compiler versions (not filtered)
compiler_versions =
compiler_settings.get_all_compiler_version_not_filtered()

# Print all compiler versions (not filtered)
for version in compiler_versions:
    print (" - CoDeSys based version: " + version)

    # Check if CoDeSys compiler version is mapped to an OEM version
    mapped_version =
compiler_settings.map_from_internal_to_oem_version(version)

    if mapped_version == None:
        print (" - Not OEM mapped!")
    else:
        print (" - OEM mapped version: " + mapped_version)
```

See Also

CompilerSettings Class
SchneiderElectric.Scripting.Types.Compiler Namespace

CompilerSettings.map_from_oem_text_to_internal_version Method

Maps from OEM to internal version.

Namespace: SchneiderElectric.Scripting.Types.Compiler
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string map_from_oem_text_to_internal_version(
      string version_as_text
)
```

Parameters

version_as_text

Type: System.String

The OEM version string.

Return Value

Type: String
The mapped internal version, null if not mapped.

Examples

This example shows how to verify the mapping between an OEM and internal compiler version.

Python

```
# We enable the new Python 3 print syntax
from __future__ import print_function

proj = projects.primary
```

```
print("All compiler versions")

# Retrieve all compiler versions (filtered)
compiler_versions = compiler_settings.get_all_compiler_versions()

# Print all compiler versions (filtered)
for version in compiler_versions:
    print (" - OEM mapped version: " + version)

    # Check if OEM version is mapped to a CoDeSys compiler version
    mapped_version =
compiler_settings.map_from_oem_to_internal_version(version)

    if mapped_version == None:
        # No mapping available
        print (" - No CoDeSys based version mapped!")
    else:
        # Mapping available, print mapped version
        print (" - CoDeSys based version: " + mapped_version)
```

See Also

CompilerSettings Class
SchneiderElectric.Scripting.Types.Compiler Namespace

CompilerSettings.map_from_oem_to_internal_version Method

Maps from OEM to internal version.

Namespace: SchneiderElectric.Scripting.Types.Compiler
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string map_from_oem_to_internal_version(
      string version
)
```

Parameters

version

Type: System.String

The OEM version string.

Return Value

Type: String
The mapped internal version, null if not mapped.

Examples

This example shows how to verify the mapping between an OEM and internal compiler version.

Python

```
# We enable the new Python 3 print syntax
from __future__ import print_function

proj = projects.primary
```

```
print("All compiler versions")

# Retrieve all compiler versions (filtered)
compiler_versions = compiler_settings.get_all_compiler_versions()

# Print all compiler versions (filtered)
for version in compiler_versions:
    print (" - OEM mapped version: " + version)

    # Check if OEM version is mapped to a CoDeSys compiler version
    mapped_version =
compiler_settings.map_from_oem_to_internal_version(version)

    if mapped_version == None:
        # No mapping available
        print (" - No CoDeSys based version mapped!")
    else:
        # Mapping available, print mapped version
        print (" - CoDeSys based version: " + mapped_version)
```

See Also

CompilerSettings Class
SchneiderElectric.Scripting.Types.Compiler Namespace

Chapter 15
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

This namespace contains types that support accessing and using ETEST functionality from within the Python API.

Classes

	Class	Description
	ScriptLegacyTestResult Classt Result	Part of the "legacy" scripting API - remains for compatibility.
	TestProvider Class	Class that provides the functionality to run ETESTs and to verify the results. Click on the members to show some examples.

Interfaces

	Interface	Description
	ILegacyScriptTestResult Interface	Legacy interface to access the test results.
	IScriptTestCaseObject Interface	Functionality for manipulating test case objects.
	IScriptTestCaseObject2 Interface	Functionality for manipulating test case objects and run them completely or just specific test sets / test runs.
	IScriptTestCaseObjectMarker Interface	Every **IScriptObject** instance will be extended with this method.
	IScriptTestElement Interface	Legacy interface to access a test element.
	IScriptTestObjectContainer Interface	This allows objects to create test objects, e.g., TestCases. The methods will be available in the project root as well as applications, and folders below them.
	IScriptTestObjectContainer2 Interface	This allows objects to create test objects, e.g. TestCases. The methods will be available in the

		project root as well as applications, and folders below them.
	IScriptTestResourceObject Interface	Functionality for manipulating test resource objects.
	IScriptTestResourceObjectMarker Interface	Every **IScriptObject** instance will be extended with this method.
	IScriptTestResult Interface	Functionality to access a test result.
	IScriptTestRun Interface	Functionality for manipulating a test run.
	IScriptTestRun2 Interface	Functionality for manipulating a test run. Extension interface for IScriptTestRun.
	IScriptTestSeriesObject Interface	Functionality for manipulating test series objects.
	IScriptTestSeriesObjectMarker Interface	Every **IScriptObject** instance will be extended with this method.
	IScriptTestSetObject Interface	Functionality for manipulating test set objects.
	IScriptTestSetObjectMarker Interface	Every **IScriptObject** instance will be extended with this method.
	IScriptVarDeclaration Interface	Functionality for manipulating test case objects.

Enumerations

	Enumeration	Description
	TestExecutionState Enumeration	Describes the state of the test execution.
	TestResult Enumeration	Describes the result of a test execution.

ScriptLegacyTestResult Class

Part of the "legacy" scripting API - remains for compatibility.

Inheritance Hierarchy

System.Object
SchneiderElectric.Scripting.Types.EtestTestProvider.ScriptLegacyTestResult

Namespace: Chapter 15 SchneiderElectric.Scripting.Types.EtestTestProvider Namespace
Assembly: SchneiderElectric.Programming.Etest.Scripting.plugin (in SchneiderElectric.Programming.Etest.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public class ScriptLegacyTestResult : ILegacyScriptTestResult
```

The **ScriptLegacyTestResult** type exposes the following members.

Properties

	Name	Description
	ScriptLegacyTestResult.is_successful Property	Returns true if the overall result of this ITestResult is successful. Returns false in all other cases (unknown, unsuccessful, cancelled, etc.).

Methods

	Name	Description
	ScriptLegacyTestResult.get_global_result_string Method	Retrieves the test result as string.

	ScriptLegacyTestResult.write_xml Method	Writes the TestResult into an XML Document.

See Also

SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

ScriptLegacyTestResult.ScriptLegacyTestResult Properties

The ScriptLegacyTestResult type exposes the following members.

Properties

	Name	Description
	is_successful	Returns true if the overall result of this ITestResult is successful. Returns false in all other cases (unknown, unsuccessful, cancelled, etc.).

See Also

ScriptLegacyTestResult Class
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

ScriptLegacyTestResult.is_successful Property

Returns true if the overall result of this ITestResult is successful. Returns false in all other cases (unknown, unsuccessful, cancelled, etc.).

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: SchneiderElectric.Programming.Etest.Scripting.plugin (in SchneiderElectric.Programming.Etest.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public bool is_successful { get; }
```

Property Value

Type: Boolean

Implements

ILegacyScriptTestResult.is_successful

See Also

ScriptLegacyTestResult Class
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

ScriptLegacyTestResult.ScriptLegacyTestResult Methods

The ScriptLegacyTestResult type exposes the following members.

Methods

	Name	Description
	get_global_result_string	Retrieves the test result as string.
	write_xml	Writes the TestResult into an XML Document

See Also

ScriptLegacyTestResult Class
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

ScriptLegacyTestResult.get_global_result_string Method

Retrieves the test result as string.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: SchneiderElectric.Programming.Etest.Scripting.plugin (in SchneiderElectric.Programming.Etest.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string get_global_result_string()
```

Return Value

Type: String
The test result

Implements

ILegacyScriptTestResult.get_global_result_string()

See Also

ScriptLegacyTestResult Class
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

ScriptLegacyTestResult.write_xml Method

Writes the TestResult into an XML Document

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: SchneiderElectric.Programming.Etest.Scripting.plugin (in SchneiderElectric.Programming.Etest.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void write_xml(
      Stream outStream
)
```

Parameters

outStream

Type: System.IO.Stream

The stream the XML Document will be written to.

Implements

ILegacyScriptTestResult.write_xml(Stream)

See Also

ScriptLegacyTestResult Class
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

TestProvider Class

Class that provides the functionality to run ETESTs and to verify the results.

Inheritance Hierarchy

System.Object
SchneiderElectric.Scripting.Types.EtestTestProvider.TestProvider

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: SchneiderElectric.Programming.Etest.Scripting.plugin (in SchneiderElectric.Programming.Etest.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public class TestProvider
```

The **TestProvider** type exposes the following members.

Properties

	Name	Description
	TestProvider.is_test_running Property	Indicates if the test is running.

Methods

	Name	Description
	TestProvider.get_all_testcases Method	Retrieves all testcases from a testseries.
	TestProvider.get_all_testelements Method	Returns all testElements from a testseries.

	TestProvider.get_all_testseries Method	Returns all test series from the project.
	TestProvider.run_test Method	This function runs an ETEST.

See Also

SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

TestProvider.TestProvider Properties

The TestProvider type exposes the following members.

Properties

	Name	Description
	is_test_running	Indicates if the test is running.

See Also

TestProvider Class
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

TestProvider.is_test_running Property

Indicates if the test is running.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: SchneiderElectric.Programming.Etest.Scripting.plugin (in SchneiderElectric.Programming.Etest.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public static bool is_test_running { get; }
```

Property Value

Type: Boolean

Examples

This example shows how to run a test.

Python

```
# We enable the new Python 3 print syntax
from __future__ import print_function

# The path to our project
project_path = r"D:\PythonProjects\Example.project"

# Clean up any open project:
if projects.primary:
    projects.primary.close()

# Load the project
proj = projects.open(project_path)

# Set the project as primary project
proj = projects.primary
```

```
# We fetch the active application.
app = proj.active_application

# And create the online application for it.
onlineapp = online.create_online_application(app)

# We login into the device.
onlineapp.login(OnlineChangeOption.Try, True)

# We start the application, if necessary.
if not onlineapp.application_state == ApplicationState.run:
    onlineapp.start()

# We let the app do its work for some time...
system.delay(1000)

# This functions runs the specified test/testseries
def func_run_test(test_name):
    print(test_name)
    etest_test_provider.run_test(test_name)
    while etest_test_provider.is_test_running:
        system.delay(1000)
    return

# Retrieve all testseries from the project
test_series = etest_test_provider.get_all_testseries()

# Run all testseries
for test_object in test_series:
    func_run_test(test_object)

# Retrieve all testelements from testseries "TS_Crank"
test_elements = etest_test_provider.get_all_testelements("TS_Crank")

# Print all testelements
for test_element in test_elements:
    print ("Found TestElement TS_Crank: " + test_element)

    # Run only "TS_Crank" test object
    func_run_test(test_element)
```

See Also

TestProvider Class
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

TestProvider.TestProvider Methods

The TestProvider type exposes the following members.

Methods

	Name	Description
	get_all_testcases	Retrieves all testcases from a testseries.
	get_all_testelements	Returns all testElements from a testseries.
	get_all_testseries	Returns all testseries from the project.
	run_test	This function runs an ETEST.

See Also

TestProvider Class
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

TestProvider.get_all_testcases Method

Retrieves all testcases from a testseries.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: SchneiderElectric.Programming.Etest.Scripting.plugin (in SchneiderElectric.Programming.Etest.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public IList<string> get_all_testcases(
      IExtendedObject<IScriptObject> application = null
)
```

Parameters

application (Optional)

Type: IExtendedObject(IScriptObject)

The application.

Return Value

Type: IList(String)
Returns a list of strings that contain the names of all testcases in the testseries.

Exceptions

Exception	Condition
ApplicationException	Raised if no project is opened.

Examples

This example shows how to retrieve all testelements from a testseries.

Python

```
# We enable the new Python 3 print syntax
from __future__ import print_function

# The path to our project
project_path = r"D:\PythonProjects\Example.project"

# Clean up any open project:
if projects.primary:
    projects.primary.close()

# Load the project
proj = projects.open(project_path);

# Set the project as primary project
proj = projects.primary

# Retrieve all testelements from testseries "TS_Crank"
test_cases = etest_test_provider.get_all_testcases()

# Print all testelements
for tc in test_cases:
    print ("Found TestCase: " + tc)
```

See Also

TestProvider Class
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

TestProvider.get_all_testelements Method

Returns all testElements from a testseries.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: SchneiderElectric.Programming.Etest.Scripting.plugin (in SchneiderElectric.Programming.Etest.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public IEnumerable<IScriptTestElement> get_all_testelements(
      string testseries,
      IExtendedObject<IScriptObject> application = null
)
```

Parameters

testseries

Type: System.String

Name of the testseries.

application (Optional)

Type: IExtendedObject(IScriptObject)

The application.

Return Value

Type: IEnumerable(IScriptTestElement)
Returns a list of testElements

Exceptions

Exception	Condition

ApplicationException	Raised if no project is opened.

Examples

This example shows how to retrieve all testelements from a testseries.

Python

```
# We enable the new Python 3 print syntax
from __future__ import print_function

# The path to our project
project_path = r"D:\PythonProjects\Example.project"

# Clean up any open project:
if projects.primary:
    projects.primary.close()

# Load the project
proj = projects.open(project_path);

# Set the project as primary project
proj = projects.primary

# Retrieve all testelements from testseries "TS_Crank"
test_elements = etest_test_provider.get_all_testelements("TS_Crank")

# Print all testelements
for test_element in test_elements:
    print ("Found TestElement: " + test_element.Name)
```

See Also

TestProvider Class
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

TestProvider.get_all_testseries Method

Returns all testseries from the project.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: SchneiderElectric.Programming.Etest.Scripting.plugin (in SchneiderElectric.Programming.Etest.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public IList<string> get_all_testseries(
      IExtendedObject<IScriptObject> application = null
)
```

Parameters

application (Optional)

Type: IExtendedObject(IScriptObject)

The application.

Return Value

Type: IList(String)
Returns a list of string that contains the names of all testseries.

Exceptions

Exception	Condition
ApplicationException	Raised if no project is opened.

Examples

This example shows how to retrieve all testseries from a project.

Python

```
# We enable the new Python 3 print syntax
from __future__ import print_function

# The path to our project
project_path = r"D:\PythonProjects\Example.project"

# Clean up any open project:
if projects.primary:
    projects.primary.close()

# Load the project
proj = projects.open(project_path);

# Set the project as primary project
proj = projects.primary

# Retrieve all testseries from the project
test_series = etest_test_provider.get_all_testseries()

# Print all testseries
for series in test_series:
    print ("Found TestSeries: " + series)
```

See Also

TestProvider Class
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

TestProvider.run_test Method

This function runs an ETEST

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: SchneiderElectric.Programming.Etest.Scripting.plugin (in SchneiderElectric.Programming.Etest.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public ILegacyScriptTestResult run_test(
      string testName,
      string fullFilePath = null,
      IExtendedObject<IScriptObject> application = null
)
```

Parameters

testName

Type: System.String

Name of the Test that should be run.

fullFilePath (Optional)

Type: System.String

[Optional] Path where the result file is stored.

application (Optional)

Type: IExtendedObject(IScriptObject)

The application to run the test on.

Return Value

Type: ILegacyScriptTestResult
Returns the TestResult object of the finished test.

Exceptions

Exception	Condition
ApplicationException	

Examples

This example shows how to run a test.

Python

```
# We enable the new Python 3 print syntax
from __future__ import print_function

# The path to our project
project_path = r"D:\PythonProjects\Example.project"

# Clean up any open project:
if projects.primary:
    projects.primary.close()

# Load the project
proj = projects.open(project_path)

# Set the project as primary project
proj = projects.primary

# We fetch the active application.
app = proj.active_application

# And create the online application for it.
onlineapp = online.create_online_application(app)

# We login into the device.
onlineapp.login(OnlineChangeOption.Try, True)

# We start the application, if necessary.
if not onlineapp.application_state == ApplicationState.run:
```

```
    onlineapp.start()

# We let the app do its work for some time...
system.delay(1000)

# This functions runs the specified test/testseries
def func_run_test(test_name):
    print(test_name)
    etest_test_provider.run_test(test_name)
    while etest_test_provider.is_test_running:
        system.delay(1000)
    return

# Retrieve all testseries from the project
test_series = etest_test_provider.get_all_testseries()

# Run all testseries
for test_object in test_series:
    func_run_test(test_object)

# Retrieve all testelements from testseries "TS_Crank"
test_elements = etest_test_provider.get_all_testelements("TS_Crank")

# Print all testelements
for test_element in test_elements:
    print ("Found TestElement TS_Crank: " + test_element)

    # Run only "TS_Crank" test object
    func_run_test(test_element)
```

See Also

TestProvider Class
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

ILegacyScriptTestResult Interface

Legacy interface to access the test results

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: SchneiderElectric.Programming.Etest.Scripting.plugin (in SchneiderElectric.Programming.Etest.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface ILegacyScriptTestResult
```

The **ILegacyScriptTestResult** type exposes the following members.

Properties

	Name	Description
	ILegacyScriptTestResult.is_successful Property	Returns true if the overall result of this ITestResult is successful. Returns false in all other cases (unknown, unsuccessful, cancelled, etc.).

Methods

	Name	Description
	ILegacyScriptTestResult.get_global_result_string Method	Retrieves the test result as string.
	ILegacyScriptTestResult.write_xml Method	Writes the TestResult into an XML Document

Remarks

This interface is exported to Python, and thus adheres to Python naming

standards.

See Also

SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

ILegacyScriptTestResult.ILegacyScriptTestResult Properties

The ILegacyScriptTestResult type exposes the following members.

Properties

	Name	Description
	is_successful	Returns true if the overall result of this ITestResult is successful. Returns false in all other cases (unknown, unsuccessful, cancelled, etc.).

See Also

ILegacyScriptTestResult Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

ILegacyScriptTestResult.is_successful Property

Returns true if the overall result of ITestResult is successful. Returns false in all other cases (unknown, unsuccessful, cancelled, etc.).

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: SchneiderElectric.Programming.Etest.Scripting.plugin (in SchneiderElectric.Programming.Etest.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool is_successful { get; }
```

Property Value

Type: Boolean

See Also

ILegacyScriptTestResult Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

ILegacyScriptTestResult.ILegacyScriptTestResult Methods

The ILegacyScriptTestResult type exposes the following members.

Methods

	Name	Description
	get_global_result_string	Retrieves the test result as string.
	write_xml	Writes the TestResult into an XML Document

See Also

ILegacyScriptTestResult Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

ILegacyScriptTestResult.get_global_result_string Method

Retrieves the test result as string.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: SchneiderElectric.Programming.Etest.Scripting.plugin (in SchneiderElectric.Programming.Etest.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string get_global_result_string()
```

Return Value

Type: String
The test result

See Also

ILegacyScriptTestResult Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

ILegacyScriptTestResult.write_xml Method

Writes the TestResult into an XML Document

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: SchneiderElectric.Programming.Etest.Scripting.plugin (in SchneiderElectric.Programming.Etest.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void write_xml(
      Stream outStream
)
```

Parameters

outStream

Type: System.IO.Stream

The stream the XML Document will be written to.

See Also

ILegacyScriptTestResult Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestCaseObject Interface

Functionality for manipulating test case objects.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptTestCaseObject : IScriptTestCaseObjectMarker
```

The **IScriptTestCaseObject** type exposes the following members.

Properties

	Name	Description
	IScriptTestResourceObject.description Property	The Description Text of this test case.
	IScriptTestCaseObject.is_parameterized_test_case_feature_activated Property	Retrieves or sets a value indicating the "parameterized test case feature" is activated.
	IScriptTestCaseObject.resource_references Property	Retrieves a sequence of all referenced IScriptTestResourceObject names.
	IScriptTestCaseObject.test_data_type_name Property	Retrieves or sets the data type (DUT) used for the definition of test runs.

IScriptTestCaseObject.test_data_variable_name Property	Retrieves or sets the name of the test data variable.
IScriptTestCaseObject.test_set_references Property	Retrieves a sequence of all referenced IScriptTestSetObject names.

Methods

	Name	Description
	IScriptTestCaseObject.run Method	Starts executing the TestCase on the active application. This method instantly returns; execution runs asynchronously.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestCaseObject.IScriptTestCaseObject Properties

The IScriptTestCaseObject type exposes the following members.

Properties

	Name	Description
	description	The Description Text of this test case.
	is_parameterized_test_case_feature_activated	Retrieves or sets a value indicating the "parameterized test case feature" is activated.
	resource_references	Retrieves a sequence of all referenced IScriptTestResourceObject names.
	test_data_type_name	Retrieves or sets the data type (DUT) used the definition of test runs.
	test_data_variable_name	Retrieves or sets the name of the test data variable.
	test_set_references	Retrieves a sequence of all referenced IScriptTestSetObject names.

See Also

IScriptTestCaseObject Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestCaseObject.description Property

The Description Text of this test case.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string description { get; set; }
```

Property Value

Type: String

See Also

IScriptTestCaseObject Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestCaseObject.is_parameterized_test_case_feature_activated Property

Retrieves or sets a value indicating the "parameterized test case feature" is activated.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool is_parameterized_test_case_feature_activated { get; set; }
```

Property Value

Type: Boolean
`true` if the "parameterized test case feature" is activated; otherwise, `false`.

See Also

IScriptTestCaseObject Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestCaseObject.resource_references Property

Retrieves a sequence of all referenced IScriptTestResourceObject names.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptList2<IScriptVarDeclaration> resource_references { get; }
```

Property Value

Type: IScriptList2(IScriptVarDeclaration)

See Also

IScriptTestCaseObject Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestCaseObject.test_data_type_name Property

Retrieves or sets the data type (DUT) used the definition of test runs.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string test_data_type_name { get; set; }
```

Property Value

Type: String
The test data type.

See Also

IScriptTestCaseObject Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestCaseObject.test_data_variable_name Property

Retrieves or sets the name of the test data variable.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string test_data_variable_name { get; set; }
```

Property Value

Type: String
The name of the test data variable.

See Also

IScriptTestCaseObject Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestCaseObject.test_set_references Property

Retrieves a sequence of all referenced IScriptTestSetObject names.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptList2<string> test_set_references { get; }
```

Property Value

Type: IScriptList2(String)

See Also

IScriptTestCaseObject Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestCaseObject.IScriptTestCaseObject Methods

The IScriptTestCaseObject type exposes the following members.

Methods

	Name	Description
	run	Starts executing the TestCase on the active application. This method instantly returns; execution runs asynchronously.

See Also

IScriptTestCaseObject Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestCaseObject.run Method

Starts executing the TestCase on the active application. This method instantly returns; execution runs asynchronously.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptTestResult run(
      IExtendedObject<IScriptObject> application = null
)
```

Parameters

application (Optional)

Type: IExtendedObject(IScriptObject)

The application object to use. If this parameter is omitted, the active application is used. (This parameter is optional.)

Return Value

Type: IScriptTestResult
The result of the test run.

Exceptions

Exception	Condition
TestStartImpossibleException	An exception is raised when test execution could not be started. This can have several reasons (not logged in, object to test can't be executed, no task referencing the test suite, etc.)

Remarks

When a **TestStartImpossibleException** is raised, no test result has been created.

See Also

IScriptTestCaseObject Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestCaseObject2 Interface

Functionality for manipulating test case objects and run them completely, or just specific test sets / test runs.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptTestCaseObject2 : IScriptTestCaseObject,
      IScriptTestCaseObjectMarker
```

Methods

	Name	Description
	IScriptTestCaseObject2.run_partly Method (IExtendedObject`1(IScriptObject), UInt32, IExtendedObject`1(IScriptObject))	Starts executing the TestCase on the active application. This method instantly returns; execution runs asynchronously.
	IScriptTestCaseObject2.run_partly Method (String, UInt32, IExtendedObject`1(IScriptObject))	Starts executing the TestCase on the active application. This method instantly returns; execution runs asynchronously.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestCaseObject2.IScriptTestCaseObject2 Methods

Methods

	Name	Description
	run_partly(IExtendedObject(IScriptObject), UInt32, IExtendedObject(IScriptObject))	Starts executing the TestCase on the active application. This method instantly returns; execution runs asynchronously.
	run_partly(String, UInt32, IExtendedObject(IScriptObject))	Starts executing the TestCase on the active application. This method instantly returns; execution runs asynchronously.

See Also

IScriptTestCaseObject2 Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestCaseObject2.run_partly Method

Overload List

	Name	Description
	run_partly(IExtendedObject(IScriptObject), UInt32, IExtendedObject(IScriptObject))	Starts executing the TestCase on the active application. This method instantly returns; execution runs asynchronously.
	run_partly(String, UInt32, IExtendedObject(IScriptObject))	Starts executing the TestCase on the active application. This method instantly returns; execution runs asynchronously.

See Also

IScriptTestCaseObject2 Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestCaseObject2.run_partly Method (IExtendedObject`1(IScriptObject), UInt32, IExtendedObject`1(IScriptObject))

Starts executing the TestCase on the active application. This method instantly returns; execution runs asynchronously.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptTestResult run_partly(
      IExtendedObject<IScriptObject> test_set,
      uint run_id = 0,
      IExtendedObject<IScriptObject> application = null
)
```

Parameters

test_set

Type: IExtendedObject(IScriptObject)

The test set to execute.

run_id (Optional)

Type: System.UInt32

Index of the run in the context of the specified test set. If this parameter is omitted or 0 is passed, all runs of the specified test set are executed. (This parameter is optional.)

application (Optional)

Type: IExtendedObject(IScriptObject)

The application object to use. If this parameter is omitted, the active

application is used. (This parameter is optional.)

Return Value

Type: IScriptTestResult
The result of the test run.

Exceptions

Exception	Condition
TestStartImpossibleException	An exception is raised when test execution could not be started. This can have several reasons (not logged in, object to test can't be executed, no task referencing the test suite, etc.)

Remarks

When a **TestStartImpossibleException** is raised, no test result has been created.

See Also

IScriptTestCaseObject2 Interface
IScriptTestCaseObject2.run _partly Method
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestCaseObject2.run_partly Method (String, UInt32, IExtendedObject`1(IScriptObject))

Starts executing the TestCase on the active application. This method instantly returns; execution runs asynchronously.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptTestResult run_partly(
      string test_set_name,
      uint run_id = 0,
      IExtendedObject<IScriptObject> application = null
)
```

Parameters

test_set_name

Type: System.String

The name of the test set to execute.

run_id (Optional)

Type: System.UInt32

Index of the run in the context of the specified test set. If this parameter is omitted or 0 is passed, all runs of the specified test set are executed. (This parameter is optional.)

application (Optional)

Type: IExtendedObject(IScriptObject)

The application object to use. If this parameter is omitted, the active

application is used. (This parameter is optional.)

Return Value

Type: IScriptTestResult
The result of the test run.

Exceptions

Exception	Condition
TestStartImpossibleException	An exception is raised when test execution could not be started. This can have several reasons (not logged in, object to test can't be executed, no task referencing the test suite, etc.)

Remarks

When a **TestStartImpossibleException** is raised, no test result has been created.

See Also

IScriptTestCaseObject2 Interface
run partly Overload
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestCaseObjectMarker Interface

Every **IScriptObject** instance will be extended with this method.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptTestCaseObjectMarker
```

The **IScriptTestCaseObjectMarker** type exposes the following members.

Properties

	Name	Description
	IScriptTestCaseObjectMarker.is_test_case Property	Retrieves a value indicating whether this instance is a test case object.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestCaseObjectMarker.IScriptTestCaseObjectMarker Properties

The IScriptTestCaseObjectMarker type exposes the following members.

Properties

	Name	Description
	is_test_case	Retrieves a value indicating whether this instance is a test case object.

See Also

IScriptTestCaseObjectMarker Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestCaseObjectMarker.is_test_case Property

Retrieves a value indicating whether this instance is a test case object.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool is_test_case { get; }
```

Property Value

Type: Boolean
`true` if this instance is test case object; otherwise, `false`.

See Also

IScriptTestCaseObjectMarker Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestElement Interface

Legacy interface to access a test element.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: SchneiderElectric.Programming.Etest.Scripting.plugin (in SchneiderElectric.Programming.Etest.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptTestElement
```

The **IScriptTestElement** type exposes the following members.

Properties

	Name	Description
	IScriptTestElement.is_test_case Property	Retrieves whether the element is a test case.
	IScriptTestElement.is_test_series Property	Retrieves whether the element is a test series.
	IScriptTestElement.name Property	Retrieves the name of the test element.
	IScriptTestElement.object_guid Property	Retrieves the object guid of the test element. For CoDeSys based implementations, this is the object Guid that is used to identify the object in the object manager. For all implementations this Guid is a unique identifier: if two ITestElement instances have the same ObjectGuid they represent the same entity.

Methods

	Name	Description

	IScriptTestElement.get_selected_elements Method	Retrieves the elements selected by this element.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestElement.IScriptTestElement Properties

The IScriptTestElement type exposes the following members.

Properties

	Name	Description
	is_test_case	Retrieves whether the element is a test case.
	is_test_series	Retrieves whether the element is a test series.
	name	Retrieves the name of the test element.
	object_guid	Retrieves the object Guid of the test element. For CoDeSys based implementations, this is the object guid that is used to identify the object in the object manager. For all implementations this Guid is a unique identifier: if two ITestElement instances have the same ObjectGuid they represent the same entity.

See Also

IScriptTestElement Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestElement.is_test_case Property

Retrieves whether the element is a test case.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: SchneiderElectric.Programming.Etest.Scripting.plugin (in SchneiderElectric.Programming.Etest.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool is_test_case { get; }
```

Property Value

Type: Boolean

See Also

IScriptTestElement Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestElement.is_test_series Property

Retrieves whether the element is a test series.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: SchneiderElectric.Programming.Etest.Scripting.plugin (in SchneiderElectric.Programming.Etest.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool is_test_series { get; }
```

Property Value

Type: Boolean

See Also

IScriptTestElement Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestElement.name Property

Retrieves the name of the test element.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: SchneiderElectric.Programming.Etest.Scripting.plugin (in SchneiderElectric.Programming.Etest.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string name { get; }
```

Property Value

Type: String

See Also

IScriptTestElement Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestElement.object_guid Property

Retrieves the object guid of the test element.

For CoDeSys based implementations, this is the object Guid that is used to identify the object in the object manager.

For all implementations this Guid is a unique identifier: if two ITestElement instances have the same ObjectGuid they represent the same entity.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: SchneiderElectric.Programming.Etest.Scripting.plugin (in SchneiderElectric.Programming.Etest.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
Guid object_guid { get; }
```

Property Value

Type: Guid

See Also

IScriptTestElement Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestElement.IScriptTestElement Methods

The IScriptTestElement type exposes the following members.

Methods

	Name	Description
	get_selected_elements	Retrieves the elements selected by this element.

See Also

IScriptTestElement Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestElement.get_selected_elements Method

Retrieves the elements selected by this element.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: SchneiderElectric.Programming.Etest.Scripting.plugin (in SchneiderElectric.Programming.Etest.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IEnumerable<IScriptTestElement> get_selected_elements()
```

Return Value

Type: IEnumerable(IScriptTestElement)
all other elements that are selected by this element.

Remarks

This method only returns meaningful data if **is_test_series** is true.

See Also

IScriptTestElement Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestObjectContainer Interface

This allows objects to create test objects, e.g., TestCases. The methods will be available in the project root as well as applications, and folders below them.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptTestObjectContainer
```

The **IScriptTestObjectContainer** type exposes the following members.

Methods

	Name	Description
	IScriptTestObjectContainer.create_test_case Method	Creates a Test Case with the specified name.
	IScriptTestObjectContainer.create_test_resource Method	Creates a Test Resource with the specified name.
	IScriptTestObjectContainer.create_test_series Method	Creates a Test Series with the specified name.
	IScriptTestObjectContainer.create_test_set Method	Creates a Test Set with the specified name.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestObjectContainer.IScriptTestObjectContainer Methods

The IScriptTestObjectContainer type exposes the following members.

Methods

	Name	Description
	create_test_case	Creates a TestCase with the specified name.
	create_test_resource	Creates a TestResource with the specified name.
	create_test_series	Creates a TestSeries with the specified name.
	create_test_set	Creates a TestSet with the specified name.

See Also

IScriptTestObjectContainer Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestObjectContainer.create_test_case Method

Creates a TestCase with the specified name.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IExtendedObject<IScriptObject> create_test_case(
      string name
)
```

Parameters

name

Type: System.String

The name.

Return Value

Type: **IExtendedObject**(**IScriptObject**)
The **IScriptObject** of the newly created TestCase.

Exceptions

Exception	Condition
Exception	Any exception which occurs if the name is not an IEC identifier, or an object with the same name already exists within the same namespace, or the object cannot be created under the parent.

See Also

IScriptTestObjectContainer Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestObjectContainer.create_test_resource Method

Creates a TestResource with the specified name.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IExtendedObject<IScriptObject> create_test_resource(
      string name
)
```

Parameters

name

Type: System.String

The name.

Return Value

Type: **IExtendedObject**(**IScriptObject**)
The **IScriptObject** of the newly created TestResource.

Exceptions

Exception	Condition
Exception	Any exception which occurs if the name is not an IEC identifier, or an object with the same name already exists within the same namespace, or the object cannot be created under the parent.

See Also

IScriptTestObjectContainer Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestObjectContainer.create_test_series Method

Creates a TestSeries with the specified name.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IExtendedObject<IScriptObject> create_test_series(
      string name
)
```

Parameters

name

Type: System.String

The name.

Return Value

Type: **IExtendedObject**(**IScriptObject**)
The **IScriptObject** of the newly created TestSeries.

Exceptions

Exception	Condition
Exception	Any exception which occurs if the name is not an IEC identifier, or an object with the same name already exists within the same namespace, or the object cannot be created under the parent.

See Also

IScriptTestObjectContainer Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestObjectContainer.create_test_set Method

Creates a TestSet with the specified name.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IExtendedObject<IScriptObject> create_test_set(
      string name
)
```

Parameters

name

Type: System.String

The name.

Return Value

Type: **IExtendedObject**(**IScriptObject**)
The **IScriptObject** of the newly created TestSet.

Exceptions

Exception	Condition
Exception	Any exception which occurs if the name is not an IEC identifier, or an object with the same name already exists within the same namespace, or the object cannot be created under the parent.

See Also

IScriptTestObjectContainer Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestObjectContainer2 Interface

This allows objects to create test objects, e.g., TestCases. The methods will be available in the project root as well as applications, and folders below them.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptTestObjectContainer2 :
IScriptTestObjectContainer
```

The **IScriptTestObjectContainer2** type exposes the following members.

Methods

	Name	Description
	IScriptTestObjectContainer2.create_test_case Method	Creates a Test Case with the specified name.
	IScriptTestObjectContainer2.create_test_resource Method	Creates a Test Resource with the specified name.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestObjectContainer2.IScriptTestObjectContainer2 Methods

The IScriptTestObjectContainer2 type exposes the following members.

Methods

	Name	Description
	create_test_case	Creates a TestCase with the specified name.
	create_test_resource	Creates a TestResource with the specified name.

See Also

IScriptTestObjectContainer2 Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestObjectContainer2.create_test_case Method

Creates a TestCase with the specified name.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IExtendedObject<IScriptObject> create_test_case(
      string name,
      bool create_prepare,
      bool create_execute,
      bool create_finalize,
      bool create_cleanup
)
```

Parameters

name

Type: System.String

The name.

create_prepare

Type: System.Boolean

Defines if the test-method "Prepare" is created.

create_execute

Type: System.Boolean

Defines if the test-method "Execute" is created.

create_finalize

Type: System.Boolean

Defines if the test-method "Finalize" is created.

create_cleanup

Type: System.Boolean

Defines if the test-method "Cleanup" is created.

Return Value

Type: IExtendedObject(IScriptObject)
The **IScriptObject** of the newly created TestCase.

Exceptions

Exception	Condition
Exception	Any exception which occurs if the name is not an IEC identifier, or an object with the same name already exists within the same namespace, or the object cannot be created under the parent.

See Also

IScriptTestObjectContainer2 Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestObjectContainer2.create_test_resource Method

Creates a TestResource with the specified name.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IExtendedObject<IScriptObject> create_test_resource(
      string name,
      bool create_prepare,
      bool create_cleanup
)
```

Parameters

name

Type: System.String

The name.

create_prepare

Type: System.Boolean

Defines if the test-method "Prepare" is created.

create_cleanup

Type: System.Boolean

Defines if the test-method "Cleanup" is created.

Return Value

Type: **IExtendedObject**(**IScriptObject**)

The **IScriptObject** of the newly created TestResource.

Exceptions

Exception	Condition
Exception	Any exception which occurs if the name is not an IEC identifier, or an object with the same name already exists within the same namespace, or the object cannot be created under the parent.

See Also

IScriptTestObjectContainer2 Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestResourceObject Interface

Functionality for manipulating test resource objects.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptTestResourceObject :
IScriptTestResourceObjectMarker
```

The **IScriptTestResourceObject** type exposes the following members.

Properties

	Name	Description
	IScriptTestResourceObject.description Property	The Description Text of this test case.
	IScriptTestResourceObject.resource_references Property	Retrieves a sequence of all referenced **IScriptTestResourceObject** names.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestResourceObject.IScriptTestResourceObject Properties

The IScriptTestResourceObject type exposes the following members.

Properties

	Name	Description
	description	The Description Text of this test case.
	resource_references	Retrieves a sequence of all referenced IScriptTestResourceObject names.

See Also

IScriptTestResourceObject Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestResourceObject.description Property

The Description Text of this test case.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string description { get; set; }
```

Property Value

Type: String

See Also

IScriptTestResourceObject Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestResourceObject.resource_references Property

Retrieves a sequence of all referenced IScriptTestResourceObject names.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptList2<IScriptVarDeclaration> resource_references { get; }
```

Property Value

Type: IScriptList2(IScriptVarDeclaration)

See Also

IScriptTestResourceObject Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestResourceObjectMarker Interface

Every **IScriptObject** instance will be extended with this method.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptTestResourceObjectMarker
```

The **IScriptTestResourceObjectMarker** type exposes the following members.

Properties

	Name	Description
	IScriptTestSeriesObjectMarker.is_test_series Property	Retrieves a value indicating whether this instance is a test resource object.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestResourceObjectMarker.IScriptTestResourceObjectMarker Properties

The IScriptTestResourceObjectMarker type exposes the following members.

Properties

	Name	Description
	is_test_resource	Retrieves a value indicating whether this instance is a test resource object.

See Also

IScriptTestResourceObjectMarker Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestResourceObjectMarker.is_test_resource Property

Retrieves a value indicating whether this instance is a test resource object.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool is_test_resource { get; }
```

Property Value

Type: Boolean
`true` if this instance is test resource object; otherwise, `false`.

See Also

IScriptTestResourceObjectMarker Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestResult Interface

Functionality to access a test result.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptTestResult
```

The **IScriptTestResult** type exposes the following members.

Properties

	Name	Description
	IScriptTestResult.element_under_test Property	Retrieves the tested element (TestCase or TestSeries).
	IScriptTestResult.end_time Property	Retrieves the end time of the test run or `null`, if the test run is not yet finished.
	IScriptTestResult.execution_state Property	Retrieves the execution state (running or finished). Until test execution is finished, no meaningful result will be available.
	IScriptTestResult.operator_comment Property	Operator Comment (entered by user).
	IScriptTestResult.operator_name Property	Operator Name (entered by user).
	IScriptTestResult.result Property	Retrieves the result of the executed test. While the test is running, the result will be unknown. Poll execution_state to wait for test completion.
	IScriptTestResult.start_time Property	Retrieves the start time of the test run.

	IScriptTestResult.task_cycle_time Property	Cycle Time of the Task that executed the Test.

Methods

	Name	Description
	IScriptTestResult.save_as_html Method	Saves the result as an HTML file to the specified path.
	IScriptTestResult.save_as_xml Method	Saves the result as a XML file to the specified path.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestResult.IScriptTestResult Properties

The IScriptTestResult type exposes the following members.

Properties

	Name	Description
	element_under_test	Retrieves the tested element (TestCase or TestSeries).
	end_time	Retrieves the end time of the test run or `null`, if the test run is not yet finished.
	execution_state	Retrieves the execution state (running or finished). Until test execution is finished, no meaningful result will be available.
	operator_comment	Operator Comment (entered by user).
	operator_name	Operator Name (entered by user).
	result	Retrieves the result of the executed test. While the test is running, the result will be unknown. Poll execution_state to wait for test completion.
	start_time	Retrieves the start time of the test run.
	task_cycle_time	Cycle Time of the Task that executed the Test.

See Also

IScriptTestResult Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestResult.element_under_test Property

Retrieves the tested element (TestCase or TestSeries).

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IExtendedObject<IScriptObject> element_under_test { get; }
```

Property Value

Type: IExtendedObject(IScriptObject)

See Also

IScriptTestResult Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestResult.end_time Property

Retrieves the end time of the test run or `null` if the test run is not yet finished.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
Nullable<DateTime> end_time { get; }
```

Property Value

Type: Nullable(DateTime)

See Also

IScriptTestResult Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestResult.execution_state Property

Retrieves the execution state (running or finished). Until test execution is finished, no meaningful result will be available.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
TestExecutionState execution_state { get; }
```

Property Value

Type: TestExecutionState

See Also

IScriptTestResult Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestResult.operator_comment Property

Operator Comment (entered by user).

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string operator_comment { get; set; }
```

Property Value

Type: String

See Also

IScriptTestResult Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestResult.operator_name Property

Operator Name (entered by user).

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string operator_name { get; set; }
```

Property Value

Type: String

See Also

IScriptTestResult Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestResult.result Property

Retrieves the result of the executed test. While the test is running, the result will be unknown. Poll execution_state to wait for test completion.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
TestResult result { get; }
```

Property Value

Type: TestResult

See Also

IScriptTestResult Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestResult.start_time Property

Retrieves the start time of the test run.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
DateTime start_time { get; }
```

Property Value

Type: DateTime

See Also

IScriptTestResult Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestResult.task_cycle_time Property

Cycle Time of the Task that executed the Test.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string task_cycle_time { get; }
```

Property Value

Type: String

See Also

IScriptTestResult Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestResult.IScriptTestResult Methods

The IScriptTestResult type exposes the following members.

Methods

	Name	Description
	save_as_html	Saves the result as an HTML file to the specified path.
	save_as_xml	Saves the result as a XML file to the specified path.

See Also

IScriptTestResult Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestResult.save_as_html Method

Saves the result as an HTML file to the specified path.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string save_as_html(
      string path = null,
      string xsltPath = null
)
```

Parameters

path (Optional)

Type: System.String

The path of the export file. If omitted, it is exported into a string and returns that string. (This parameter is optional.)

xsltPath (Optional)

Type: System.String

The path of the XSL transformation file to use. If omitted, we use the standard ETEST template for transformation. (This parameter is optional.)

Return Value

Type: String
The exported HTML as string, or null if a file path is given.

See Also

IScriptTestResult Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestResult.save_as_xml Method

Saves the result as a XML file to the specified path.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string save_as_xml(
      string path
)
```

Parameters

path

Type: System.String

The path of the file we export into. If omitted, we export into a string and return that string. (This parameter is optional.)

Return Value

Type: String
The exported XML as string, or null if a filepath is given.

See Also

IScriptTestResult Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestRun Interface

Functionality for manipulating a test run.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptTestRun
```

The **IScriptTestRun** type exposes the following members.

Properties

	Name	Description
	IScriptTestRun.init_values Property	Retrieves or sets the test run parameters. These values will be used to initialize a test data type (DUT) with the values defined by the user for a test run.
	IScriptTestRun.user_comment Property	Retrieves or sets a user comment for the test run.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestRun.IScriptTestRun Properties

The IScriptTestRun type exposes the following members.

Properties

	Name	Description
	init_values	Retrieves or sets the test run parameters. These values will be used to initialize a test data type (DUT) with the values defined by the user for a test run.
	user_comment	Retrieves or sets a user comment for the test run.

See Also

IScriptTestRun Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestRun.init_values Property

Retrieves or sets the test run parameters. These values will be used to initialize a test data type (DUT) with the values defined by the user for a test run.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptList2<string> init_values { get; }
```

Property Value

Type: IScriptList2(String)

See Also

IScriptTestRun Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestRun.user_comment Property

Retrieves or sets a user comment for the test run.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string user_comment { get; set; }
```

Property Value

Type: String
The user comment.

See Also

IScriptTestRun Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestRun2 Interface

Functionality for manipulating a test run. Extension interface for IScriptTestRun.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptTestRun2 : IScriptTestRun
```

The **IScriptTestRun2** type exposes the following members.

Properties

	Name	Description
	IScriptTestRun2.run_id Property	Identifies a test run in a test set.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestRun2.IScriptTestRun2 Properties

The IScriptTestRun2 type exposes the following members.

Properties

	Name	Description
	run_id	Identifies a test run in a test set.

See Also

IScriptTestRun2 Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestRun2.run_id Property

Identifies a test run in a test set.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
uint run_id { get; }
```

Property Value

Type: UInt32

See Also

IScriptTestRun2 Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestSeriesObject Interface

Functionality for manipulating test series objects.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptTestSeriesObject :
IScriptTestSeriesObjectMarker
```

The **IScriptTestSeriesObject** type exposes the following members.

Properties

	Name	Description
	IScriptTestSeriesObject.referenced_tests Property	Retrieves referenced tests (test cases and test series)

Methods

	Name	Description
	IScriptTestSeriesObject.run Method	Starts executing the TestSeries on the active application. This method instantly returns; execution runs asynchronously.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestSeriesObject.IScriptTestSeriesObject Properties

The IScriptTestSeriesObject type exposes the following members.

Properties

	Name	Description
	referenced_tests	Retrieves referenced tests (test cases and test series).

See Also

IScriptTestSeriesObject Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestSeriesObject.referenced_tests Property

Retrieves referenced tests (test cases and test series)

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptList2<string> referenced_tests { get; }
```

Property Value

Type: IScriptList2(String)

See Also

IScriptTestSeriesObject Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestSeriesObject.IScriptTestSeriesObject Methods

The IScriptTestSeriesObject type exposes the following members.

Methods

	Name	Description
	run	Starts executing the TestSeries on the active application. This method instantly returns; execution runs asynchronously.

See Also

IScriptTestSeriesObject Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestSeriesObject.run Method

Starts executing the TestSeries on the active application. This method instantly returns; execution runs asynchronously.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptTestResult run(
      IExtendedObject<IScriptObject> application = null
)
```

Parameters

application (Optional)

Type: IExtendedObject(IScriptObject)

The application object to use. If this parameter is omitted, the active application is used. (This parameter is optional.)

Return Value

Type: IScriptTestResult
The result of the test run.

Exceptions

Exception	Condition
TestStartImpossibleException	An exception is raised when test execution could not be started. This can have several reasons (not logged in, object to test can't be executed, no task referencing the test suite, etc.)

Remarks

When a **TestStartImpossibleException** is raised, no test result has been created.

See Also

IScriptTestSeriesObject Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestSeriesObjectMarker Interface

Every **IScriptObject** instance will be extended with this method.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptTestSeriesObjectMarker
```

The **IScriptTestSeriesObjectMarker** type exposes the following members.

Properties

	Name	Description
	IScriptTestSeriesObjectMarker.is_test_series Property	Retrieves a value indicating whether this instance is a test series object.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestSeriesObjectMarker.IScriptTestSeriesObjectMarker Properties

The IScriptTestSeriesObjectMarker type exposes the following members.

Properties

	Name	Description
	is_test_series	Retrieves a value indicating whether this instance is a test series object.

See Also

IScriptTestSeriesObjectMarker Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestSeriesObjectMarker.is_test_series Property

Retrieves a value indicating whether this instance is a test series object.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool is_test_series { get; }
```

Property Value

Type: Boolean
`true` if this instance is test series object; otherwise, `false`.

See Also

IScriptTestSeriesObjectMarker Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestSetObject Interface

Functionality for manipulating test set objects.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptTestSetObject : IScriptTestSetObjectMarker
```

The **IScriptTestSetObject** type exposes the following members.

Properties

	Name	Description
	IScriptTestSetObject.test_data_type_name Property	Retrieves or sets the data type (DUT) used the definition of test runs.
	IScriptTestSetObject.test_runs Property	Retrieves a sequence of all test runs defined in this **IScriptTestSetObject**.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestSetObject.IScriptTestSetObject Properties

The IScriptTestSetObject type exposes the following members.

Properties

	Name	Description
	test_data_type_name	Retrieves or sets the data type (DUT) used the definition of test runs.
	test_runs	Retrieves a sequence of all test runs defined in this IScriptTestSetObject.

See Also

IScriptTestSetObject Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestSetObject.test_data_type_name Property

Retrieves or sets the data type (DUT) used the definition of test runs.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string test_data_type_name { get; set; }
```

Property Value

Type: String
The test data type.

See Also

IScriptTestSetObject Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestSetObject.test_runs Property

Retrieves a sequence of all test runs defined in this IScriptTestSetObject.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptList2<IScriptTestRun> test_runs { get; }
```

Property Value

Type: IScriptList2(IScriptTestRun)

Remarks

Internally, the test run is referenced by its index. Therefore, the returned reference is only valid as long as the index of the test run has not changed.

See Also

IScriptTestSetObject Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestSetObjectMarker Interface

Every **IScriptObject** instance will be extended with this method.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptTestSetObjectMarker
```

The **IScriptTestSetObjectMarker** type exposes the following members.

Properties

	Name	Description
	IScriptTestSetObjectMarker.is_test_set Property	Retrieves a value indicating whether this instance is a test set object.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestSetObjectMarker.IScriptTestSetObjectMarker Properties

The IScriptTestSetObjectMarker type exposes the following members.

Properties

	Name	Description
	is_test_set	Retrieves a value indicating whether this instance is a test set object.

See Also

IScriptTestSetObjectMarker Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptTestSetObjectMarker.is_test_set Property

Retrieves a value indicating whether this instance is a test set object.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool is_test_set { get; }
```

Property Value

Type: Boolean
`true` if this instance is test set object; otherwise, `false`.

See Also

IScriptTestSetObjectMarker Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptVarDeclaration Interface

Functionality for manipulating test case objects.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptVarDeclaration
```

The **IScriptVarDeclaration** type exposes the following members.

Properties

	Name	Description
	IScriptVarDeclaration.name Property	Retrieves or sets the name of the variable.
	IScriptVarDeclaration.type Property	Retrieves or sets the type of the variable, e.g., INT or REAL.

Remarks

An implementation class of this interface is injected under the name "VarDeclaration" into the Python scope so Python code can create a variable declaration without the need to sub-class that interface. The constructor signature is: VarDeclaration(string name, string type). This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptVarDeclaration.IScriptVarDeclaration Properties

The IScriptVarDeclaration type exposes the following members.

Properties

	Name	Description
	name	Retrieves or sets the name of the variable.
	type	Retrieves or sets the type of the variable, e.g., INT or REAL.

See Also

IScriptVarDeclaration Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptVarDeclaration.name Property

Retrieves or sets the name of the variable.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string name { get; }
```

Property Value

Type: String
The name of the variable.

See Also

IScriptVarDeclaration Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

IScriptVarDeclaration.type Property

Retrieves or sets the type of the variable, e.g., INT or REAL.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string type { get; }
```

Property Value

Type: String
The type of the variable.

See Also

IScriptVarDeclaration Interface
SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

TestExecutionState Enumeration

Describes the state of the test execution.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public enum TestExecutionState
```

Members

	Member name	Value	Description
	running	0	The test is running.
	finished	1	The test has finished.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

TestResult Enumeration

Describes the result of a test execution.

Namespace: SchneiderElectric.Scripting.Types.EtestTestProvider
Assembly: Elau.Epas5.PacUnitTest (in Elau.Epas5.PacUnitTest.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public enum TestResult
```

Members

	Member name	Value	Description
	unknown	0	The result is unknown (test still running).
	successful	1	The test has completed successfully.
	failed	2	The test has completed unsuccessfully.

Remarks

This interface is exported to Python, and thus adheres to Python naming standards.

See Also

SchneiderElectric.Scripting.Types.EtestTestProvider Namespace

Chapter 16
SchneiderElectric.Scripting.Types.JobList Namespace

This namespace provides types and methodes that allow access to the job lists.

Interfaces

	Interface	Description
	IScriptHistoryEntry Interface	History information entry of a job.
	IScriptJob Interface	Represents a job instance item.
	IScriptJobActivities Interface	API to access job activity information.
	IScriptJobActivity Interface	Represents a job activity item in a job.
	IScriptJobComment Interface	Represents a comment entry in a job.
	IScriptJobComments Interface	Provides access to job comments.
	IScriptJobList Interface	Provides access to jobs.
	IScriptJobTags Interface	Provides access to job tags.

Enumerations

	Enumeration	Description
	JobModificationActions Enumeration	Type definition fo modification actions of jobs.
	JobStates Enumeration	The states which are assigned to a Job.
	JobTypes Enumeration	The Types which are assigned to a Job.
	JobUrgencies Enumeration	Represents the job urgency.

IScriptHistoryEntry Interface

History information entry of a job.

Namespace: Chapter 16 SchneiderElectric.Scripting.Types.JobList Namespace
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptHistoryEntry
```

The **IScriptHistoryEntry** type exposes the following members.

Properties

	Name	Description
	action	Retrieves the action that reflects the type of modification.
	IScriptHistoryEntry.date Property	Retrieves or sets the date when the history event was created.
	IScriptHistoryEntry.new_state Property	Retrieves the JobState that is valid after the modification.
	IScriptHistoryEntry.old_state Property	Retrieves the JobState that was valid before the modification.
	IScriptHistoryEntry.user Property	The User that caused the entry.

See Also

SchneiderElectric.Scripting.Types.JobList Namespace

IScriptHistoryEntry.IScriptHistoryEntry Properties

The IScriptHistoryEntry type exposes the following members.

Properties

	Name	Description
	action	Retrieves the action that reflects the type of modification.
	date	Retrieves or sets the date when the history event was created.
	new_state	Retrieves the JobState that is valid after the modification.
	old_state	Retrieves the JobState that was valid before the modification.
	user	The User that caused the entry.

See Also

IScriptHistoryEntry Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptHistoryEntry.action Property

Retrieves the action that reflects the type of modification.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
JobModificationActions action { get; }
```

Property Value

Type: JobModificationActions
The action.

See Also

IScriptHistoryEntry Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptHistoryEntry.date Property

Retrieves or sets the date when the history event was created.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
DateTime date { get; }
```

Property Value

Type: DateTime
The date.

See Also

IScriptHistoryEntry Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptHistoryEntry.new_state Property

Retrieves the JobState that is valid after the modification.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
JobStates new_state { get; }
```

Property Value

Type: JobStates
The new state.

See Also

IScriptHistoryEntry Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptHistoryEntry.old_state Property

Retrieves the JobState that was valid before the modification.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
JobStates old_state { get; }
```

Property Value

Type: JobStates
The old state.

See Also

IScriptHistoryEntry Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptHistoryEntry.user Property

The User that caused the entry.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string user { get; }
```

Property Value

Type: String

See Also

IScriptHistoryEntry Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJob Interface

Represents a job instance item.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptJob
```

The **IScriptJob** type exposes the following members.

Properties

	Name	Description
	IScriptJob.activities Property	Retrieves the activities that are associated with this Job.
	IScriptJob.assigned_to Property	The person who is assigned to the Job. Default = Win Username
	IScriptJob.closed_date Property	The date when the Job was closed.
	IScriptJob.comments Property	Retrieves the comments that were added by the user.
	IScriptJob.creation_date Property	The date when the Job was created. Default = DateTime.Now.
	IScriptJob.external_id Property	Retrieves or sets the external identifier.
	IScriptJob.guid Property	The Guid from the Job.
	IScriptJob.history Property	History of state changes that were done on the job.
	IScriptJob.is_stored_project_global Property	Declares if the Job could be seen by everyone. Default = true.

IScriptJob.issuer Property	The person who created the Job. Default = Win UserName.
IScriptJob.state Property	Shows the current Job state.
IScriptJob.tags Property	A list of tags that help the user to categorize the job and allow easy search/filter.
IScriptJob.title Property	The Job title.
IScriptJob.tool_guid Property	A Guid, which declares to which product the Job is assigned, e.g., Motion or Logic Builder. As default, the ToolGuid from the currently running process, which has created the Job, is taken.
IScriptJob.type Property	Declares the icon which is shown at the UI.
IScriptJob.urgency Property	Represents the urgency for the Job. Default = JobUrgency.Normal.

Methods

	Name	Description
	IScriptJob.close Method	Closes the Job.
	IScriptJob.commit Method	Saves the Job data.
	IScriptJob.delete Method	Deletes the Job.
	IScriptJob.reopen Method	Reopens the Job.
	IScriptJob.set_in_progress Method	Set Job to "in progress".

See Also

SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJob.IScriptJob Properties

The IScriptJob type exposes the following members.

Properties

	Name	Description
	activities	Retrieves the activities that are associated with this Job.
	assigned_to	The person who is assigned to the Job. Default = Win Username
	closed_date	The date when the Job was closed.
	comments	Retrieves the comments that were added by the user.
	creation_date	The date when the Job was created. Default = DateTime.Now.
	external_id	Retrieves or sets the external identifier.
	guid	The Guid from the Job.
	history	History of state changes that were done on the job.
	is_stored_project_global	Declares if the Job could be seen by everyone. Default = true.
	issuer	The person who created the Job. Default = Win UserName.
	state	Shows the current Job state.
	tags	A list of tags that help the user to categorize the job and allow easy search/filter.
	title	The Job title.
	tool_guid	A Guid, which declares to which product the Job is assigned, e.g., Motion or Logic Builder. As default, the ToolGuid from the currently running process, which has created the Job, is taken.
	type	Declares the icon which is shown at the UI.
	urgency	Represents the urgency for the Job. Default = JobUrgency.Normal.

See Also

IScriptJob Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJob.activities Property

Retrieves the activities that are associated with this Job.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptJobActivities activities { get; }
```

Property Value

Type: IScriptJobActivities
The activities.

See Also

IScriptJob Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJob.assigned_to Property

The person to whom is assigned the Job. Windows Username is the default.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string assigned_to { get; set; }
```

Property Value

Type: String

See Also

IScriptJob Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJob.closed_date Property

The date when the Job was closed.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
DateTime closed_date { get; set; }
```

Property Value

Type: DateTime

See Also

IScriptJob Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJob.comments Property

Retrieves the comments that were added by the user.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptJobComments comments { get; }
```

Property Value

Type: IScriptJobComments
The list of comments.

See Also

IScriptJob Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJob.creation_date Property

The date when the Job was created. Default = DateTime.Now.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
DateTime creation_date { get; set; }
```

Property Value

Type: DateTime

See Also

IScriptJob Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJob.external_id Property

Retrieves or sets the external identifier.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string external_id { get; set; }
```

Property Value

Type: String
The external identifier.

See Also

IScriptJob Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJob.guid Property

The Guid from the Job.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
Guid guid { get; set; }
```

Property Value

Type: Guid

See Also

IScriptJob Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJob.history Property

History of state changes that were done on the job.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptHistoryEntry[] history { get; }
```

Property Value

Type: IScriptHistoryEntry[]

See Also

IScriptJob Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJob.is_stored_project_global Property

Declares, if the Job could be seen by everyone. Default = true.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool is_stored_project_global { get; set; }
```

Property Value

Type: Boolean

See Also

IScriptJob Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJob.issuer Property

The person who created the Job. Default = Win UserName.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string issuer { get; set; }
```

Property Value

Type: String

See Also

IScriptJob Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJob.state Property

Shows the current Job state.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
JobStates state { get; set; }
```

Property Value

Type: JobStates

See Also

IScriptJob Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJob.tags Property

A list of tags that help the user to categorize the job and allow easy search/filter.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptJobTags tags { get; }
```

Property Value

Type: IScriptJobTags
The list of tags.

See Also

IScriptJob Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJob.title Property

The Job title

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string title { get; set; }
```

Property Value

Type: String

See Also

IScriptJob Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJob.tool_guid Property

A Guid, which declares to which product the Job is assigned, e.g., Motion or Logic Builder. As default, the ToolGuid from the currently running process, which has created the Job, is taken.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
Guid tool_guid { get; set; }
```

Property Value

Type: Guid

See Also

IScriptJob Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJob.type Property

Declares the icon which'll be shown at the UI.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
JobTypes type { get; set; }
```

Property Value

Type: JobTypes

See Also

IScriptJob Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJob.urgency Property

Represents the urgency for the Job. Ddefault = JobUrgency.Normal.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
JobUrgencies urgency { get; set; }
```

Property Value

Type: JobUrgencies

See Also

IScriptJob Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJob.IScriptJob Methods

The IScriptJob type exposes the following members.

Methods

	Name	Description
	close	Closes the Job.
	commit	Saves the Job data.
	delete	Deletes the Job.
	reopen	Reopens the Job.
	set_in_progress	Set Job to "in progress".

See Also

IScriptJob Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJob.close Method

Closes the Job.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void close()
```

See Also

IScriptJob Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJob.commit Method

Saves the Job data.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void commit()
```

See Also

IScriptJob Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJob.delete Method

Deletes the Job.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void delete()
```

See Also

IScriptJob Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJob.reopen Method

Reopens the Job.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void reopen()
```

See Also

IScriptJob Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJob.set_in_progress Method

Set Job to "in progress".

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void set_in_progress()
```

See Also

IScriptJob Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobActivities Interface

API to access job activity information.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptJobActivities
```

The **IScriptJobActivities** type exposes the following members.

Properties

	Name	Description
	IScriptJobActivities.all Property	Retrieve all activities.

Methods

	Name	Description
	IScriptJobActivities.by_id Method	Retrieves a job activity object by id.
	IScriptJobActivities.create Method	Creates a new job activity. Activity is attached to the job.
	IScriptJobActivities.has_activity Method	Determines whether a job activity with specified id exists.

See Also

SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobActivities.IScriptJobActivities Properties

The IScriptJobActivities type exposes the following members.

Properties

	Name	Description
	all	Retrieve all activities.

See Also

IScriptJobActivities Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobActivities.all Property

Retrieve all activities.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptJobActivity[] all { get; }
```

Property Value

Type: IScriptJobActivity[]
All activities.

See Also

IScriptJobActivities Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobActivities.IScriptJobActivities Methods

The IScriptJobActivities type exposes the following members.

Methods

	Name	Description
	by_id	Retrieves a job activity object by id.
	create	Creates a new job activity. Activity is attached to the job.
	has_activity	Determines whether a job activity with specified id exists.

See Also

IScriptJobActivities Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobActivities.by_id Method

Retrieves a job activity object by id.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptJobActivity by_id(
      Guid id
)
```

Parameters

id

Type: System.Guid

The identifier.

Return Value

Type: IScriptJobActivity
The job activity

See Also

IScriptJobActivities Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobActivities.create Method

Creates a new job activity. Activity is attached to the job.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptJobActivity create(
      string title,
      string instruction = ""
)
```

Parameters

title

Type: System.String

The title.

instruction (Optional)

Type: System.String

The instruction.

Return Value

Type: IScriptJobActivity
The job activity.

See Also

IScriptJobActivities Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobActivities.has_activity Method

Determines whether a job activity with specified id exists.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool has_activity(
      Guid id
)
```

Parameters

id

Type: System.Guid

The identifier.

Return Value

Type: Boolean
true or false

See Also

IScriptJobActivities Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobActivity Interface

Represents a job activity item in a job.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptJobActivity
```

The **IScriptJobActivity** type exposes the following members.

Properties

	Name	Description
	IScriptJobActivity.guid Property	Retrieves the unique identifier.
	IScriptJobActivity.instruction Property	Instructions for executing the Activity is presented on the control that shows or initiates the Activity.
	IScriptJobActivity.parent_job_guid Property	Retrieves the Guid of the parent job.
	IScriptJobActivity.title Property	Retrieves the descriptive title of the Activity to be presented to the user as short text.

Methods

	Name	Description
	IScriptJobActivity.remove Method	Removes this job activity from the job.

See Also

SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobActivity.IScriptJobActivity Properties

The IScriptJobActivity type exposes the following members.

Properties

	Name	Description
	guid	Retrieves the unique identifier.
	instruction	Instructions for executing the Activity is presented on the control that shows or initiates the Activity.
	parent_job_guid	Retrieves the Guid of the parent job.
	title	A descriptive title of the Activity that will be presented to the user as short text.

See Also

IScriptJobActivity Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobActivity.guid Property

Retrieves the unique identifier.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
Guid guid { get; }
```

Property Value

Type: Guid
The unique identifier.

See Also

IScriptJobActivity Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobActivity.instruction Property

Instructions for executing the Activity is presented on the control that shows or initiates the Activity.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string instruction { get; set; }
```

Property Value

Type: String
The instruction.

See Also

IScriptJobActivity Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobActivity.parent_job_guid Property

Retrieves the Guid of the parent job.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
Guid parent_job_guid { get; }
```

Property Value

Type: Guid
The parent job unique identifier.

See Also

IScriptJobActivity Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobActivity.title Property

A descriptive title of the Activity that is presented to the user as short text.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string title { get; set; }
```

Property Value

Type: String
The title.

See Also

IScriptJobActivity Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobActivity.IScriptJobActivity Methods

The IScriptJobActivity type exposes the following members.

Methods

	Name	Description
	remove	Removes this job activity from the job.

See Also

IScriptJobActivity Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobActivity.remove Method

Removes this job activity from the job.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void remove()
```

See Also

IScriptJobActivity Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobComment Interface

Represents a comment entry in a job.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptJobComment
```

The **IScriptJobComment** type exposes the following members.

Properties

	Name	Description
	IScriptJobComment.date Property	Retrieves or sets the date.
	IScriptJobComment.guid Property	Retrieves the unique identifier ob this job.
	IScriptJobComment.text Property	Retrieves or sets the comment text.
	IScriptJobComment.user_name Property	Retrieves or sets the user name.

Methods

	Name	Description
	IScriptJobComment.remove Method	Removes this comment entry from the job.

See Also

SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobComment.IScriptJobComment Properties

The IScriptJobComment type exposes the following members.

Properties

	Name	Description
	date	Retrieves or sets the date.
	guid	Retrieves the unique identifier of this job.
	text	Retrieves or sets the comment text.
	user_name	Retrieves or sets the user name.

See Also

IScriptJobComment Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobComment.date Property

Retrieves or sets the date.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
DateTime date { get; set; }
```

Property Value

Type: DateTime
The date.

See Also

IScriptJobComment Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobComment.guid Property

Retrieves the unique identifier of this job.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
Guid guid { get; }
```

Property Value

Type: Guid
The unique identifier of this job.

See Also

IScriptJobComment Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobComment.text Property

Retrieves or sets the comment text.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string text { get; set; }
```

Property Value

Type: String
The comment text.

See Also

IScriptJobComment Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobComment.user_name Property

Retrieves or sets the user name.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string user_name { get; set; }
```

Property Value

Type: String
The user name.

See Also

IScriptJobComment Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobComment.IScriptJobComment Methods

The IScriptJobComment type exposes the following members.

Methods

	Name	Description
	remove	Removes this comment entry from the job.

See Also

IScriptJobComment Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobComment.remove Method

Removes this comment entry from the job.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void remove()
```

See Also

IScriptJobComment Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobComments Interface

Provides access to job comments.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptJobComments
```

The **IScriptJobComments** type exposes the following members.

Properties

	Name	Description
	IScriptJobComments.all Property	Retrieves all comments.

Methods

	Name	Description
	IScriptJobComments.create Method	Creates a new comment; comment is attached to the job.

See Also

SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobComments.IScriptJobComments Properties

The IScriptJobComments type exposes the following members.

Properties

	Name	Description
	all	Retrieves all comments.

See Also

IScriptJobComments Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobComments.all Property

Retrieves all comments.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptJobComment[] all { get; }
```

Property Value

Type: IScriptJobComment[]
All comments.

See Also

IScriptJobComments Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobComments.IScriptJobComments Methods

The IScriptJobComments type exposes the following members.

Methods

	Name	Description
	create	Creates a new comment; comment is attached to the job.

See Also

IScriptJobComments Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobComments.create Method

Creates a new comment. commit is attached to the job.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptJobComment create(
      string comment
)
```

Parameters

comment

Type: System.String

The comment.

Return Value

Type: IScriptJobComment
The comment

See Also

IScriptJobComments Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobList Interface

Provides access to jobs.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptJobList
```

The **IScriptJobList** type exposes the following members.

Properties

	Name	Description
	IScriptJobList.all Property	Retrieves all jobs.

Methods

	Name	Description
	IScriptJobList.by_assigned_to Method	Retrieve all jobs of specified "assigned to".
	IScriptJobList.by_contains_tag Method	Retrieve all jobs with specified tag.
	IScriptJobList.by_id Method	Retrieve job by specified job guid.
	IScriptJobList.by_issuer Method	Retrieve all jobs of specified issuer.
	IScriptJobList.by_state Method	Retrieve all jobs with specified job state.
	IScriptJobList.by_type Method	Retrieve all jobs with specified job type.
	IScriptJobList.by_urgency Method	Retrieve all jobs with specified job urgency.

IScriptJobList.create Method	Creates a new job. Job is not automatically added. `job.commit()` must be called.

See Also

SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobList.IScriptJobList Properties

The IScriptJobList type exposes the following members.

Properties

	Name	Description
	all	Retrieves all jobs.

See Also

IScriptJobList Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobList.all Property

Retrieves all jobs.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptJob[] all { get; }
```

Property Value

Type: IScriptJob[]
All jobs.

See Also

IScriptJobList Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobList.IScriptJobList Methods

The IScriptJobList type exposes the following members.

Methods

	Name	Description
	by_assigned_to	Retrieve all jobs of specified "assigned to".
	by_contains_tag	Retrieve all jobs with specified tag.
	by_id	Retrieve job by specified job guid.
	by_issuer	Retrieve all jobs of specified issuer.
	by_state	Retrieve all jobs with specified job state.
	by_type	Retrieve all jobs with specified job type.
	by_urgency	Retrieve all jobs with specified job urgency.
	create	Creates a new job. Job is not automatically added. job.commit() must be called.

See Also

IScriptJobList Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobList.by_assigned_to Method

Retrieve all jobs of specified "assigned to".

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptJob[] by_assigned_to(
      string assigned_to
)
```

Parameters

assigned_to

Type: System.String

The assigned to.

Return Value

Type: IScriptJob[]
The jobs

See Also

IScriptJobList Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobList.by_contains_tag Method

Retrieve all jobs with specified tag.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptJob[] by_contains_tag(
      params string[] tag
)
```

Parameters

tag

Type: System.String[]

The tag.

Return Value

Type: IScriptJob[]
The jobs

See Also

IScriptJobList Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobList.by_id Method

Get job by specified job guid.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptJob by_id(
      Guid job_guid
)
```

Parameters

job_guid

Type: System.Guid

The job guid.

Return Value

Type: IScriptJob
The job

See Also

IScriptJobList Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobList.by_issuer Method

Retrieve all jobs of specified issuer.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptJob[] by_issuer(
      string issuer
)
```

Parameters

issuer

Type: System.String

The issuer.

Return Value

Type: IScriptJob[]
The jobs

See Also

IScriptJobList Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobList.by_state Method

Retrieve all jobs with specified job state.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptJob[] by_state(
      JobStates state
)
```

Parameters

state

Type: SchneiderElectric.Scripting.Types.JobList.JobStates

The job state.

Return Value

Type: IScriptJob[]
The jobs

See Also

IScriptJobList Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobList.by_type Method

Retrieve all jobs with specified job type.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptJob[] by_type(
      JobTypes type
)
```

Parameters

type

Type: SchneiderElectric.Scripting.Types.JobList.JobTypes

The job type.

Return Value

Type: IScriptJob[]
The jobs

See Also

IScriptJobList Interface

SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobList.by_urgency Method

Retrieve all jobs with specified job urgency.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptJob[] by_urgency(
      JobUrgencies urgency
)
```

Parameters

urgency

Type: SchneiderElectric.Scripting.Types.JobList.JobUrgencies

The job urgency.

Return Value

Type: IScriptJob[]
The jobs

See Also

IScriptJobList Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobList.create Method

Creates a new job. Job is not automatically added. job.commit() must be called.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
IScriptJob create(
      string title
)
```

Parameters

title

Type: System.String

The title.

Return Value

Type: IScriptJob
The job

See Also

IScriptJobList Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobTags Interface

Provides access to job tags.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public interface IScriptJobTags
```

The **IScriptJobTags** type exposes the following members.

Properties

	Name	Description
	IScriptJobTags.all Property	Retrieves all tags.

Methods

	Name	Description
	IScriptJobTags.add Method	Adds the specified tag.
	IScriptJobTags.contains Method	Determines whether the job contains the specified tag.
	IScriptJobTags.remove Method	Removes the specified tag.

See Also

SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobTags.IScriptJobTags Properties

The IScriptJobTags type exposes the following members.

Properties

	Name	Description
	all	Retrieves all tags.

See Also

IScriptJobTags Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobTags.all Property

Retrieves all tags.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
string[] all { get; }
```

Property Value

Type: String[]
All tags.

See Also

IScriptJobTags Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobTags.IScriptJobTags Methods

The IScriptJobTags type exposes the following members.

Methods

	Name	Description
	add	Adds the specified tag.
	contains	Determines whether the job contains the specified tag.
	remove	Removes the specified tag.

See Also

IScriptJobTags Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobTags.add Method

Adds the specified tag.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void add(
      string tag
)
```

Parameters

tag

Type: System.String

The tag.

See Also

IScriptJobTags Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobTags.contains Method

Determines whether the job contains the specified tag.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
bool contains(
      string tag
)
```

Parameters

tag

Type: System.String

The tag.

Return Value

Type: Boolean
`TRUE` if tag is found otherwise `FALSE`.

See Also

IScriptJobTags Interface
SchneiderElectric.Scripting.Types.JobList Namespace

IScriptJobTags.remove Method

Removes the specified tag.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
void remove(
      string tag
)
```

Parameters

tag

Type: System.String

The tag.

See Also

IScriptJobTags Interface
SchneiderElectric.Scripting.Types.JobList Namespace

JobModificationActions Enumeration

Type definition fo modification actions of jobs.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public enum JobModificationActions
```

Members

	Member name	Value	Description
	submit	0	A submit action.
	open	1	An open action.
	modify	2	A modify action.
	close	3	A close action.

See Also

SchneiderElectric.Scripting.Types.JobList Namespace

JobStates Enumeration

The states that a job can be assigned.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public enum JobStates
```

Members

	Member name	Value	Description
	open	0	The Job is open.
	in_progress	1	The Job is in progress.
	closed	2	The Job is closed.

See Also

SchneiderElectric.Scripting.Types.JobList Namespace

JobTypes Enumeration

The Type which is assigned to a Job.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public enum JobTypes
```

Members

Member name	Value	Description
information	0	The letter i with a blue circle in the background.
question	1	A questionmark with a blue circle in the background.
warning	2	A exclamation point on a yellow triangle.
error	3	A white cross on a red octagon.

See Also

SchneiderElectric.Scripting.Types.JobList Namespace

JobUrgencies Enumeration

Represents the job urgency.

Namespace: SchneiderElectric.Scripting.Types.JobList
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public enum JobUrgencies
```

Members

	Member name	Value	Description
	low	0	The Job is insignificant.
	normal	1	The Job is of normal importance.
	high	2	The Job is important.

See Also

SchneiderElectric.Scripting.Types.JobList Namespace

Chapter 17
SchneiderElectric.Scripting.Types.LibraryPackage Namespace

This namespace provides types that allow access to the Library-Package service.

Classes

	Class	Description
	LibraryPackageApi Class	Class provides the functionality to create and install Library-Packages.

LibraryPackageApi Class

Class provides the functionality to create and install Library-Packages.

Inheritance Hierarchy

System.Object
SchneiderElectric.Scripting.Types.LibraryPackage.LibraryPackageApi

Namespace: Chapter 17 SchneiderElectric.Scripting.Types.LibraryPackage Namespace
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public sealed class LibraryPackageApi
```

The **LibraryPackageApi** type exposes the following members.

Methods

	Name	Description
	LibraryPackageApi.create_library_package Method	Creates a library package at the specified location.
	LibraryPackageApi.install_library_package Method	Loads the specified library-package and installs all contained libraries into the repository.

See Also

SchneiderElectric.Scripting.Types.LibraryPackage Namespace

LibraryPackageApi.LibraryPackageApi Methods

The LibraryPackageApi type exposes the following members.

Methods

	Name	Description
	create_library_package	Creates a library package at the specified location.
	install_library_package	Loads the specified library-package and installs all contained libraries into the repository.

See Also

LibraryPackageApi Class
SchneiderElectric.Scripting.Types.LibraryPackage Namespace

LibraryPackageApi.create_library_package Method

Creates a library package at the specified location.

Namespace: SchneiderElectric.Scripting.Types.LibraryPackage
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void create_library_package(
      string filePath,
      IEnumerable<IManagedLib> libraries
)
```

Parameters

filePath

Type: System.String

The path where the library-package will be created.

libraries

Type: System.Collections.Generic.IEnumerable(**IManagedLib**)

The libraries to include in the package.

Exceptions

Exception	Condition
ArgumentException	filePath is null or empty.
ArgumentNullException	libraries is null.

Examples

This example shows how to retrieve a set of libraries from the Library Manager and create a library package from them.

Python

```
# We enable the new Python 3 print syntax
from __future__ import print_function

# We get all versions of the PacDriveLib
# Precondition: Have a testproject with those libs installed
all_libraries = librarymanager.get_all_libraries(False)
pacdrivelibs = [i for i in all_libraries if i.title ==
"PD_PacDriveLib"]

# We print everything just to know what's going on.
for lib in pacdrivelibs:
    print("Found: ", lib.displayname)

# define the output path for the library package
library_package_path = r"d:\Python\pacdrive.librarypackage"

# We create a library-package at the defined location.
# The package contains all versions of the PacDriveLib
librarypackage_service.create_library_package(library_package_path,
pacdrivelibs)

print("library package created in " + library_package_path)
```

See Also

LibraryPackageApi Class
SchneiderElectric.Scripting.Types.LibraryPackage Namespace

LibraryPackageApi.install_library_package Method

Loads the specified library-package and installs all contained libraries into the repository.

Namespace: SchneiderElectric.Scripting.Types.LibraryPackage
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void install_library_package(
      string filePath,
      bool overwrite = false
)
```

Parameters

filePath

Type: System.String

Path to the library-package file containing the libraries to install.

overwrite (Optional)

Type: System.Boolean

If set to true, existing libraries are replaced. This parameter is optional, the default value is false.

Exceptions

Exception	Condition
ArgumentException	filePath is null or empty.
InvalidOperationException	No library repository available.

Examples

This example shows how to install an existing library package to the system.

Python

```
# We enable the new Python 3 print syntax
from __future__ import print_function

# define the path to the library package that should be installed
library_package_path = r"d:\Python\pacdrive.librarypackage"

# We install the package to the system
librarypackage_service.install_library_package(library_package_path,
False)

print("library package " + " installed")
```

See Also

LibraryPackageApi Class
SchneiderElectric.Scripting.Types.LibraryPackage Namespace

Chapter 18
SchneiderElectric.Scripting.Types.NewProject Namespace

This namespace contains types and methods to create new projects from Schneider Electric templates.

Classes

	Class	Description
	CommonProjectSettings Class	Common project settings for the new project.
	CompilerMessage Class	Data structure for a compiler message.
	ControllerSettings Class	Data structure for controller settings for the new project.
	NewProjectType Class	This type contains methods for creating new projects.

Enumerations

	Enumeration	Description
	ImplementationLanguage Enumeration	Implementation objects for the project wizard script driver.

CommonProjectSettings Class

Common project settings for the new project.

Inheritance Hierarchy

System.Object
SchneiderElectric.Scripting.Types.NewProject.CommonProjectSettings

Namespace: Chapter 18 SchneiderElectric.Scripting.Types.NewProject Namespace
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public class CommonProjectSettings
```

The **CommonProjectSettings** type exposes the following members.

Properties

	Name	Description
	CommonProjectSettings.author Property	The author who creates the project.
	CommonProjectSettings.company Property	The company which created the project.
	CommonProjectSettings.customer Property	The customer which created the project.
	CommonProjectSettings.description Property	Project description.
	CommonProjectSettings.machine_name Property	Specifies the machine name.
	CommonProjectSettings.picture Property	The path to a project picture.

	CommonProjectSettings.project_name Property	The name of the project.
	CommonProjectSettings.project_path Property	The path where the project should be stored.
	CommonProjectSettings.project_type Property	The type of the project.

See Also

SchneiderElectric.Scripting.Types.NewProject Namespace

CommonProjectSettings.CommonProjectSettings Properties

The CommonProjectSettings type exposes the following members.

Properties

	Name	Description
	author	The author who creates the project.
	company	The company which created the project.
	customer	The customer which created the project.
	description	Project description.
	machine_name	Specifies the machine name.
	picture	The path to a project picture.
	project_name	The name of the project.
	project_path	The path where the project should be stored.
	project_type	The type of the project.

See Also

CommonProjectSettings Class
SchneiderElectric.Scripting.Types.NewProject Namespace

CommonProjectSettings.author Property

The author who creates the project.

Namespace: SchneiderElectric.Scripting.Types.NewProject
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string author { get; set; }
```

Property Value

Type: String

See Also

CommonProjectSettings Class
SchneiderElectric.Scripting.Types.NewProject Namespace

CommonProjectSettings.company Property

The company which created the project.

Namespace: SchneiderElectric.Scripting.Types.NewProject
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string company { get; set; }
```

Property Value

Type: String

Remarks

Company and customer are the same in this Python API.

See Also

CommonProjectSettings Class
SchneiderElectric.Scripting.Types.NewProject Namespace

CommonProjectSettings.customer Property

The customer which created the project.

Namespace: SchneiderElectric.Scripting.Types.NewProject
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string customer { get; set; }
```

Property Value

Type: String

Remarks

Company and customer are the same in this Python API.

See Also

CommonProjectSettings Class
SchneiderElectric.Scripting.Types.NewProject Namespace

CommonProjectSettings.description Property

Project description.

Namespace: SchneiderElectric.Scripting.Types.NewProject
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string description { get; set; }
```

Property Value

Type: String

See Also

CommonProjectSettings Class
SchneiderElectric.Scripting.Types.NewProject Namespace

CommonProjectSettings.machine_name Property

Property specifies the machine name.

Namespace: SchneiderElectric.Scripting.Types.NewProject
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string machine_name { get; set; }
```

Property Value

Type: String

See Also

CommonProjectSettings Class
SchneiderElectric.Scripting.Types.NewProject Namespace

CommonProjectSettings.picture Property

The path to a project picture.

Namespace: SchneiderElectric.Scripting.Types.NewProject
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string picture { get; set; }
```

Property Value

Type: String

See Also

CommonProjectSettings Class
SchneiderElectric.Scripting.Types.NewProject Namespace

CommonProjectSettings.project_name Property

The name of the project.

Namespace: SchneiderElectric.Scripting.Types.NewProject
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string project_name { get; set; }
```

Property Value

Type: String

See Also

CommonProjectSettings Class
SchneiderElectric.Scripting.Types.NewProject Namespace

CommonProjectSettings.project_path Property

The path where the project should be stored.

Namespace: SchneiderElectric.Scripting.Types.NewProject
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string project_path { get; set; }
```

Property Value

Type: String

See Also

CommonProjectSettings Class
SchneiderElectric.Scripting.Types.NewProject Namespace

CommonProjectSettings.project_type Property

The type of the project.

Namespace: SchneiderElectric.Scripting.Types.NewProject
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public ProjectTypes project_type { get; set; }
```

Property Value

Type: ProjectTypes

Remarks

Possible project types are:

- EDESIGN_Project
- StandardProject
- EmptyProject
- Library

See Also

CommonProjectSettings Class
SchneiderElectric.Scripting.Types.NewProject Namespace

CompilerMessage Class

Data structure for a compiler message.

Inheritance Hierarchy

System.Object
SchneiderElectric.Scripting.Types.NewProject.CompilerMessage

Namespace: SchneiderElectric.Scripting.Types.NewProject
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public class CompilerMessage
```

The **CompilerMessage** type exposes the following members.

Properties

	Name	Description
	CompilerMessage.Severity Property	Severity of the compiler message.
	CompilerMessage.Text Property	The compiler message.

See Also

SchneiderElectric.Scripting.Types.NewProject Namespace

CompilerMessage.CompilerMessage Properties

The CompilerMessage type exposes the following members.

Properties

	Name	Description
	Severity	Severity of the compiler message.
	Text	The compiler message.

See Also

CompilerMessage Class
SchneiderElectric.Scripting.Types.NewProject Namespace

CompilerMessage.Severity Property

Severity of the compiler message.

Namespace: SchneiderElectric.Scripting.Types.NewProject
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string Severity { get; set; }
```

Property Value

Type: String

See Also

CompilerMessage Class
SchneiderElectric.Scripting.Types.NewProject Namespace

CompilerMessage.Text Property

The compiler message.

Namespace: SchneiderElectric.Scripting.Types.NewProject
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string Text { get; set; }
```

Property Value

Type: String

See Also

CompilerMessage Class
SchneiderElectric.Scripting.Types.NewProject Namespace

ControllerSettings Class

Data structure for controller settings for the new project.

Inheritance Hierarchy

System.Object
SchneiderElectric.Scripting.Types.NewProject.ControllerSettings

Namespace: SchneiderElectric.Scripting.Types.NewProject
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public class ControllerSettings
```

The **ControllerSettings** type exposes the following members.

Properties

	Name	Description
	ControllerSettings.device_name Property	Device Name.
	ControllerSettings.id Property	Device description ID.
	ControllerSettings.implementation_language Property	Programming language.
	ControllerSettings.type Property	Device description type.
	ControllerSettings.version Property	Device description version.

See Also

SchneiderElectric.Scripting.Types.NewProject Namespace

ControllerSettings.ControllerSettings Properties

The ControllerSettings type exposes the following members.

Properties

	Name	Description
	device_name	Device Name.
	id	Device description ID.
	implementation_language	Programming language.
	type	Device description type.
	version	Device description version.

See Also

ControllerSettings Class
SchneiderElectric.Scripting.Types.NewProject Namespace

ControllerSettings.device_name Property

Device Name.

Namespace: SchneiderElectric.Scripting.Types.NewProject
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string device_name { get; set; }
```

Property Value

Type: String

See Also

ControllerSettings Class
SchneiderElectric.Scripting.Types.NewProject Namespace

ControllerSettings.id Property

Device description ID.

Namespace: SchneiderElectric.Scripting.Types.NewProject
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string id { get; set; }
```

Property Value

Type: String

See Also

ControllerSettings Class
SchneiderElectric.Scripting.Types.NewProject Namespace

ControllerSettings.implementation_language Property

Programming language.

Namespace: SchneiderElectric.Scripting.Types.NewProject
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public ImplementationLanguage implementation_language { get; set; }
```

Property Value

Type: ImplementationLanguage

See Also

ControllerSettings Class
SchneiderElectric.Scripting.Types.NewProject Namespace

ControllerSettings.type Property

Device description type.

Namespace: SchneiderElectric.Scripting.Types.NewProject
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public int type { get; set; }
```

Property Value

Type: Int32

See Also

ControllerSettings Class
SchneiderElectric.Scripting.Types.NewProject Namespace

ControllerSettings.version Property

Device description version.

Namespace: SchneiderElectric.Scripting.Types.NewProject
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string version { get; set; }
```

Property Value

Type: String

See Also

ControllerSettings Class
SchneiderElectric.Scripting.Types.NewProject Namespace

NewProjectType Class

This type contains methods for creating new projects.

Inheritance Hierarchy

System.Object
SchneiderElectric.Scripting.Types.NewProject.NewProjectType

Namespace: SchneiderElectric.Scripting.Types.NewProject
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public class NewProjectType
```

The **NewProjectType** type exposes the following members.

Methods

	Name	Description
	NewProjectType.clean_application Method	Cleans the application. Raises an exception if clean is unsuccessful.
	NewProjectType.compile_application Method	Compiles the application.
	NewProjectType.create_common_project_settings Method	Creates a new instance of the common project settings DTO which can be used to create a new project.
	NewProjectType.create_controller_settings Method	Creates a new instance of the controller settings DTO.

	NewProjectType.create_project Method	Creates a new project with the given settings.

See Also

SchneiderElectric.Scripting.Types.NewProject Namespace

NewProjectType.NewProjectType Methods

The NewProjectType type exposes the following members.

Methods

	Name	Description
	clean_application	Cleans the application. Raises an exception if clean is unsuccessful.
	compile_application	Compiles the application.
	create_common_project_settings	Creates a new instance of the common project settings DTO which can be used to create a new project.
	create_controller_settings	Creates a new instance of the controller settings DTO.
	create_project	Creates a new project with the given settings.

See Also

NewProjectType Class
SchneiderElectric.Scripting.Types.NewProject Namespace

NewProjectType.clean_application Method

Cleans the application. Raises an exception if clean is unsuccessful.

Namespace: SchneiderElectric.Scripting.Types.NewProject
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void clean_application(
      IExtendedObject<IScriptObject> application
)
```

Parameters

application

Type: IExtendedObject(IScriptObject)

The application to clean

Examples

This example shows how to clean the application.

Python

```
# We enable the new Python 3 print syntax
from __future__ import print_function

# The path to our project
project_path = r"D:\PythonProjects\Example.project"

# Clean up any open project:
if projects.primary:
    projects.primary.close()
```

```
# Load the project
proj = projects.open(project_path);

# Set the project as primary project
proj = projects.primary

# We fetch the active application.
app = proj.active_application

# Clean application
new_project.clean_application(app)
```

See Also

NewProjectType Class
SchneiderElectric.Scripting.Types.NewProject Namespace

NewProjectType.compile_application Method

Compiles the application.

Namespace: SchneiderElectric.Scripting.Types.NewProject
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public List<CompilerMessage> compile_application(
      IExtendedObject<IScriptObject> application
)
```

Parameters

application

Type: IExtendedObject(IScriptObject)

The application to compile.

Return Value

Type: List(CompilerMessage)
List of errors or null if no errors occured.

Examples

This example shows how to compile the application.

Python

```
# We enable the new Python 3 print syntax
from __future__ import print_function

# The path to our project
```

```
project_path = r"D:\PythonProjects\Example.project"

# Clean up any open project:
if projects.primary:
    projects.primary.close()

# Load the project
proj = projects.open(project_path);

# Set the project as primary project
proj = projects.primary

# We fetch the active application.
app = proj.active_application

# Clean application
new_project.clean_application(app)

# Compile application and store compiler messages in a list
messages = new_project.compile_application(app)

# If messages == None the build was successful
if len(messages) == 0:
    print("--- Build successful ---")
# Otherwise print results
else:
    for i in messages:
        # If serverity == 'Script Engine Exception' the plugin
caused an exception.
        # The text descripes the exeption details.
        print(i.Serverity, i.Text)
```

See Also

NewProjectType Class
SchneiderElectric.Scripting.Types.NewProject Namespace

NewProjectType.create_common_project_settings Method

Creates a new instance of the common project settings DTO which can be used to create a new project.

Namespace: SchneiderElectric.Scripting.Types.NewProject
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public CommonProjectSettings create_common_project_settings()
```

Return Value

Type: CommonProjectSettings
A new instance of the common project settings DTO.

See Also

NewProjectType Class
SchneiderElectric.Scripting.Types.NewProject Namespace

NewProjectType.create_controller_settings Method

Creates a new instance of the controller settings DTO.

Namespace: SchneiderElectric.Scripting.Types.NewProject
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public ControllerSettings create_controller_settings()
```

Return Value

Type: ControllerSettings
A new instance of the controller settings DTO.

See Also

NewProjectType Class
SchneiderElectric.Scripting.Types.NewProject Namespace

NewProjectType.create_project Method

Creates a new project with the given settings.

Namespace: SchneiderElectric.Scripting.Types.NewProject
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void create_project(
      CommonProjectSettings commonProjectSettings,
      ControllerSettings controllerSettings
)
```

Parameters

commonProjectSettings

Type: SchneiderElectric.Scripting.Types.NewProject.CommonProjectSettings

Needs an instance of common project settings.

controllerSettings

Type: SchneiderElectric.Scripting.Types.NewProject.ControllerSettings

Nees an instance of controller settings.

Examples

This example shows how to create a standard project.

Python

```
# Clean up any open project:
if projects.primary:
   projects.primary.close()
```

```
# Create a new instance of the common project settings object
common_settings_DTO = new_project.create_common_project_settings()
common_settings_DTO.machine_name = "Machine Name"
common_settings_DTO.author = "Author"
common_settings_DTO.customer = "Customer"
common_settings_DTO.description = "Description"
common_settings_DTO.picture = None
common_settings_DTO.project_name ="Example.project"
common_settings_DTO.project_path = "D:\Projects"
common_settings_DTO.project_type = ProjectType.StandardProject

# Create a new incstance of the controller settings object
controller_settings_DTO = new_project.create_controller_settings()
controller_settings_DTO.type = 4096
controller_settings_DTO.id = "1003 0082"
controller_settings_DTO.version = "1.36.2.2"
controller_settings_DTO.device_name = "LMC_PacDrive"
controller_settings_DTO.implementation_language =
ImplementationLanguage.structured_text

# Create new standard project
new_project.create_project(common_settings_DTO,
controller_settings_DTO)

# Save the project
projects.primary.save()
```

See Also

NewProjectType Class
SchneiderElectric.Scripting.Types.NewProject Namespace

ImplementationLanguage Enumeration

Implementation objects for the project wizard script driver.

Namespace: SchneiderElectric.Scripting.Types.NewProject
Assembly: SchneiderElectric.Programming.Scripting.plugin (in SchneiderElectric.Programming.Scripting.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public enum ImplementationLanguage
```

Members

Member name	Value	Description
continuous_function_chart	0	Continuous Function Chart (CFC)
function_block_diagram	1	Function Block Diagram (FBD)
instruction_list	2	Instruction List (IL)
ladder_logic_diagram	3	Ladder Logic Diagram (LD)
sequential_function_chart	4	Sequential Function Chart (SFC)
structured_text	5	Structured Text (ST)

See Also

SchneiderElectric.Scripting.Types.NewProject Namespace

Chapter 19
SchneiderElectric.Scripting.Types.Options Namespace

This namespace provides types that allow access to the options and feature settings.

Classes

	Class	Description
	FeatureSettings Class	Class provides the functionality enable or disable of specific features in the platform. Click on the members to show some examples.

FeatureSettings Class

Class provides the functionality enable or disable of specific features in the platform.

Inheritance Hierarchy

System.Object
SchneiderElectric.Scripting.Types.Options.FeatureSettings

Namespace: Chapter 19 SchneiderElectric.Scripting.Types.Options Namespace
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public sealed class FeatureSettings
```

The **FeatureSettings** type exposes the following members.

Methods

	Name	Description
	FeatureSettings.get_feature_setting_value Method	Verifies if a specific feature is enabled.
	FeatureSettings.set_feature_setting_value Method	Enables or disables a specific feature.

See Also

SchneiderElectric.Scripting.Types.Options Namespace

FeatureSettings.FeatureSettings Methods

The FeatureSettings type exposes the following members.

Methods

	Name	Description
	get_feature_setting_value	Verifies if a specific feature is enabled.
	set_feature_setting_value	Enables or disables a specific feature.

See Also

FeatureSettings Class
SchneiderElectric.Scripting.Types.Options Namespace

FeatureSettings.get_feature_setting_value Method

Verifies if a specific feature is enabled.

Namespace: SchneiderElectric.Scripting.Types.Options
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public bool get_feature_setting_value(
      string groupId,
      string featureId,
      bool defaultValue
)
```

Parameters

groupId

Type: System.String

The group identifier.

featureId

Type: System.String

The feature identifier.

defaultValue

Type: System.Boolean

If the requested feature is not present, this default value will be returned.

Return Value

Type: Boolean

`true` if the requrested feature is enabled; otherwise `false`

See Also

FeatureSettings Class
SchneiderElectric.Scripting.Types.Options Namespace

FeatureSettings.set_feature_setting_value Method

Enables or disables a specific feature.

Namespace: SchneiderElectric.Scripting.Types.Options
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public void set_feature_setting_value(
      string groupId,
      string featureId,
      bool value
)
```

Parameters

groupId

Type: System.String

The group identifier.

featureId

Type: System.String

The feature identifier.

value

Type: System.Boolean

Specifies if the feature should be enabled (`true`) or disabled (`false`).

See Also

FeatureSettings Class
SchneiderElectric.Scripting.Types.Options Namespace

Chapter 20
SchneiderElectric.Scripting.Types.Visualization Namespace

This namespace provides types that allow access to the visualization settings.

Classes

	Class	Description
	VisualizationSettings Class	Class provides the functionality to show and modify the visualization settings. Click on the members to show some examples.

VisualizationSettings Class

Class provides the functionality to show and modify the visualization settings.

Inheritance Hierarchy

System.Object
SchneiderElectric.Scripting.Types.Visualization.VisualizationSettings

Namespace: Chapter 20 SchneiderElectric.Scripting.Types.Visualization Namespace
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public class VisualizationSettings
```

The **VisualizationSettings** type exposes the following members.

Properties

	Name	Description
	VisualizationSettings.active_profile_name Property	Retrieves or sets the name of the active profile. The name is the directory name of a profile stored in visual elements repository.

Methods

	Name	Description
	VisualizationSettings.get_all_visual_profile_names Method	Retrieves all visual profile names.

See Also

SchneiderElectric.Scripting.Types.Visualization Namespace

VisualizationSettings.VisualizationSettings Properties

The VisualizationSettings type exposes the following members.

Properties

	Name	Description
	active_profile_name	Retrieves or sets the name of the active profile. The name is the directory name of a profile stored in visual elements repository.

See Also

VisualizationSettings Class
SchneiderElectric.Scripting.Types.Visualization Namespace

VisualizationSettings.active_profile_name Property

Retrieves or sets the name of the active profile. The name is the directory name of a profile stored in visual elements repository.

Namespace: SchneiderElectric.Scripting.Types.Visualization
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string active_profile_name { get; set; }
```

Property Value

Type: String
The name of the active profile.

Examples

This example shows how to use the active_profile_name property to set or get the current visualization profile.

Python

```
# We enable the new Python 3 print syntax
from __future__ import print_function

proj = projects.primary

# Print the active profile
print("Current visual profile: " +
visualization_settings.active_profile_name)

# Retrieve all available visualization profiles
profile_names =
visualization_settings.get_all_visual_profile_names()

# Print the profiles
```

```
for visual_profile in profile_names:
    print (" - " + visual_profile)

# Set the profile to V1.35.12.0
visualization_settings.active_profile_name = "V1.35.20.0"

# Get the active profile
profile_name = visualization_settings.active_profile_name

# Print the active profile
print("New visual profile: " + profile_name)

# Save project
projects.primary.save()
```

See Also

VisualizationSettings Class
SchneiderElectric.Scripting.Types.Visualization Namespace

VisualizationSettings.VisualizationSettings Methods

The VisualizationSettings type exposes the following members.

Methods

	Name	Description
	get_all_visual_profile_names	Retrieves all visual profile names.

See Also

VisualizationSettings Class
SchneiderElectric.Scripting.Types.Visualization Namespace

VisualizationSettings.get_all_visual_profile_names Method

Retrieves all visual profile names.

Namespace: SchneiderElectric.Scripting.Types.Visualization
Assembly: Elau.Epas5.ScriptDriver.plugin (in Elau.Epas5.ScriptDriver.plugin.dll) Version: Version 1.0-dev (developer build)

Syntax

C#

```
public string[] get_all_visual_profile_names()
```

Return Value

Type: String[]
A list of available profile names.

Examples

This example shows how to retrieve all visual profiles.

Python

```
# We enable the new Python 3 print syntax
from __future__ import print_function

proj = projects.primary

# Get current visualization profile
profile_name = visualization_settings.active_profile_name

# Print current visualization profile
print("Current visual profile: " + profile_name)

# Retrieve all available visualization profiles
profile_names =
visualization_settings.get_all_visual_profile_names()

# Print the profiles
```

```
for visual_profile in profile_names:
    print (" - " + visual_profile)

# Save project
projects.primary.save()
```

See Also

VisualizationSettings Class
SchneiderElectric.Scripting.Types.Visualization Namespace