# StpSDK Namespace

## Classes

|  |  |
| --- | --- |
| [BaseFS](#_6B4BF41E_Topic) | Base class for all communication classes |
| [Coa](#_9DE4EC48_Topic) | Course of Action (COA) |
| [FiresFeatures](#_62450958_Topic) | Task Fires features |
| [FsdbAllScenarioObjectsQuery](#_BFAC6CF6_Topic) | Query snapshot of all current scenario objects |
| [LatLon](#_56D57CE3_Topic) | Latitude/Longitude (decimal degrees) coordinate |
| [Location](#_EA2AA317_Topic) | Location |
| [MovementFeatures](#_520E4532_Topic) | Task movement features |
| [ObjectSet](#_74B5F514_Topic) | Container for mix of scenario objects - format currently used for storing STP metadata |
| [PlanningScenario](#_B7245B7_Topic) | Scenario definition |
| [PoidObject](#_9887A88E_Topic) | Umbrella object, that represents all STP objects with a unique id, i.e., STP metadata |
| [SketchRecoResult](#_13CB1FF6_Topic) | Recognition alternate |
| [SpeechRecoItem](#_980C2CA5_Topic) | Recognition hypotheses / alternates |
| [SpeechRecoResult](#_2598FDE1_Topic) | Speech recognition results |
| [StpCommunicationException](#_E2A451B7_Topic) | The exception thrown if there is an error connecting to the S2C2 agent system. The inner exception is set to the actual exception (if this was not thrown as the result of parameter validation) that caused the underlying error. |
| [StpException](#_7159B231_Topic) | The exception thrown if an error occurs as the result of passing in invalid arguments. The inner exception is set to the actual exception (if this was not thrown as the result of parameter validation) that caused the underlying error. |
| [StpItem](#_29D5C3C1_Topic) | Common STP item root class |
| [StpNode(T)](#_7DE19A2D_Topic) | Stp item node |
| [StpOaaConnector](#_30102A37_Topic) | Communication with STP's native pubsub subsystem (the OAA-based Facilitator) |
| [StpRecognizer](#_BBE6C9F9_Topic) | Commands and events to interact with Sketch-Thru-Plan (STP) |
| [StpRecognizer.CoaSwitchedEventArgs](#_976C653F_Topic) | The Delegate that describes the function prototype for COA switches |
| [StpRecognizer.ListeningStateChangedEventArgs](#_4149C279_Topic) | Arguments for audio capture state changes |
| [StpRecognizer.MapOperationEventArgs](#_17C81DDE_Topic) | Arguments for map operations (zoom/pan) |
| [StpRecognizer.PenDownUpEventArgs](#_77CD8720_Topic) | Arguments for pen down and up events |
| [StpRecognizer.RoleSwitchEventArgs](#_CD245A4A_Topic) | Arguments for Role switches |
| [StpRecognizer.SketchRecognitionEventArgs](#_1158F768_Topic) | Sketch recognition event parameters |
| [StpRecognizer.SpeechRecognitionEventArgs](#_AA5962C5_Topic) | Speech recognition event parameters |
| [StpRecognizer.StpConnectionErrorEventArgs](#_F8D096BA_Topic) | Arguments for STP connection error |
| [StpRecognizer.StpMessageEventArgs](#_38520B4A_Topic) | Arguments for STP-generated message events |
| [StpRecognizer.SymbolEditEventArgs](#_825D215E_Topic) | Arguments for Symbol edit operations |
| [StpRecognizer.SymboReportEventArgs](#_C45AA0C0_Topic) | Arguments for Symbols update report events |
| [StpService](#_CC1225D1_Topic) | STP item service |
| [StpSymbol](#_26F34E3C_Topic) | Military symbol |
| [StpSymbol.SIDC](#_1870C202_Topic) | SIDC symbol ID |
| [StpTask](#_DDBE5955_Topic) | Military task |
| [StpTaskOrgRelationship](#_67DB8B61_Topic) | Task Org (TO) / ORBAT unit relationship |
| [StpTaskOrgUnit](#_86161284_Topic) | Task Org (TO) / ORBAT Unit |
| [SymbolService](#_1141CCEC_Topic) | STP symbol service |
| [TaskOrgService](#_6194A66E_Topic) | STP task org service |
| [TaskOrgService.UnitRelationshipPair](#_FF355EE6_Topic) |  |
| [TaskOrgState](#_EA7B1AC3_Topic) | Task Org ORBAT state |
| [TaskService](#_C8FC04E8_Topic) | STP task service |
| [TimingConstants](#_D7869C82_Topic) | Some common values for use with the SetSegmentationTimeout call |
| [UnitTaskPair](#_5DE989EB_Topic) | Pair of [symbol, associated task] |
| [Utility](#_B3E64F70_Topic) | Common utility methods |

## Interfaces

|  |  |
| --- | --- |
| [IRecoSymbol](#_3654190_Topic) | Recognized symbol interface |
| [ISpeechRecognizer](#_7DDCB981_Topic) | Speech recognizer required services |
| [IStpConnector](#_EE268E8_Topic) | Required communication connection services for interacting with STP |
| [IStpObject](#_1E1A3296_Topic) | Common Stp object properties |

## Delegates

|  |  |
| --- | --- |
| [OnErrorDelegate](#_3CBB764B_Topic) | Arguments for recognition error events |
| [OnRecognizedDelegate](#_1E6DFB71_Topic) | Arguments for complete phrase recognized event |
| [OnRecognizingDelegate](#_4B5BAC_Topic) | Arguments for partial recognition event |
| [OnSpeechStartPauseEndDelegate](#_52250641_Topic) | Arguments for start/end of speech detected events |
| [StpCommunicationErrorDelegate](#_B30F3713_Topic) | The delegate void that describes the function prototype for STP communication errors |
| [StpInformDelegate](#_DB7DB5AB_Topic) | The delegate void that describes the function prototype for STP Inform events |
| [StpRecognizer.CoaSwitchDelegate](#_4833A8D7_Topic) | The Delegate that describes the function prototype for COA switches |
| [StpRecognizer.ListeningStateChangedDelegate](#_48AEA85D_Topic) | Audio capture state change event signature |
| [StpRecognizer.MapOperationDelegate](#_1B8A278C_Topic) | Map operations (zoom/pan) event signature |
| [StpRecognizer.PenDownUpDelegate](#_A5052F22_Topic) | Pen down and up event signature |
| [StpRecognizer.RoleSwitchDelegate](#_88954A20_Topic) | Role switch event signature |
| [StpRecognizer.ShutdownDelegate](#_3170DF47_Topic) | STP shutdown event signature |
| [StpRecognizer.SketchIntegratedDelegate](#_568DB6D1_Topic) | Signature for event indicating that ink has been processed (and can be removed) |
| [StpRecognizer.SketchRecognizedDelegate](#_89CC53C5_Topic) | Recognition of sketched gestures event signature |
| [StpRecognizer.SpeechRecognitionDelegate](#_9DEB2F7F_Topic) | Recognition of speech event signature |
| [StpRecognizer.StpConnectionErrorDelegate](#_82B44F9D_Topic) | STP connection error event signature |
| [StpRecognizer.StpMessageDelegate](#_A4F0849C_Topic) | STP-generated message event signature |
| [StpRecognizer.SymbolAddedDelegate](#_C56D47C_Topic) | Symbol added event signature |
| [StpRecognizer.SymbolDeletedDelegate](#_A609A4DF_Topic) | Symbols deleted event signature |
| [StpRecognizer.SymbolEditDelegate](#_E92C7FDE_Topic) | Symbol edit operations event signature |
| [StpRecognizer.SymbolModifiedDelegate](#_1DE821E8_Topic) | Symbol update event signature |
| [StpRecognizer.SymboReportDelegate](#_D4303EE_Topic) | Symbols update report event signature |
| [StpRecognizer.TaskAddeddDelegate](#_3F213709_Topic) | Task added event signature |
| [StpRecognizer.TaskDeletedDelegate](#_991FB5EC_Topic) | Deleted Task event signature |
| [StpRecognizer.TaskModifiedDelegate](#_A7D5C96D_Topic) | Task update event signature |
| [StpRecognizer.TaskOrgRelationshipAddeddDelegate](#_9F48008F_Topic) | ask Org relationship added event signature |
| [StpRecognizer.TaskOrgRelationshipDeletedDelegate](#_33E1D964_Topic) | Deleted Tasks Org relationships event signature |
| [StpRecognizer.TaskOrgRelationshipModifiedDelegate](#_AF6D3B00_Topic) | Task org relationship update event signature |
| [StpRecognizer.TaskOrgUnitAddeddDelegate](#_559F7370_Topic) | Task Org unit added event signature |
| [StpRecognizer.TaskOrgUnitDeletedDelegate](#_D0B31BE_Topic) | Deleted Tasks Org units event signature |
| [StpRecognizer.TaskOrgUnitModifiedDelegate](#_96B95D79_Topic) | Task org unit update event signature |
| [StpRequestDelegate](#_8FF7D29A_Topic) | The delegate void that describes the function prototype for STP Request events |

## Enumerations

|  |  |
| --- | --- |
| [Affiliation](#_49AA5AC9_Topic) | Force affiliation 2525/APP6 D |
| [AffiliationAlpha](#_4091FCE6_Topic) | Force affiliation 2525/APP6 C |
| [CommandRelationship](#_EB26EAA2_Topic) | Task Org (TO) / ORBAT unit relationship types |
| [Echelon](#_76968760_Topic) | Echelon affiliation 2525/APP6 D |
| [EchelonAlpha](#_A27AED16_Topic) | Echelon affiliation 2525/APP6 C |
| [Modifier](#_10207D1C_Topic) | Modifier affiliation 2525/APP6 D |
| [ModifierAlpha](#_1D39B453_Topic) | Modifier affiliation 2525/APP6 C |
| [Status](#_36A2B98_Topic) | Status affiliation 2525/APP6 D |
| [StatusAlpha](#_B3D92A89_Topic) | Status affiliation 2525/APP6 D |
| [StpRecognizer.CoaAffiliation](#_657E4100_Topic) | Affiliation of a Course of Action |
| [StpRecognizer.CoaPushType](#_93FBE1D6_Topic) | Type of documents being pushed |
| [StpRecognizer.StpMessageLevel](#_8382FAE9_Topic) | STP message category |
| [StpSymbol.GeometryTypeEnum](#_FC7EE834_Topic) | Geometry type |
| [StpSymbol.IconTypeEnum](#_3D71F27F_Topic) | Icon type |
| [StpSymbol.SymbolStatusEnum](#_F8DDD172_Topic) | Symbol ststus |
| [Strength](#_2800DDEC_Topic) | Strength affiliation 2525/APP6 D |
| [TaskHow](#_778F7E56_Topic) | "How" component of a task |
| [TaskWhat](#_F1355AF2_Topic) | "What" component of a task |
| [TaskWhy](#_E511C406_Topic) | "Why" component of a task |

# Affiliation Enumeration

Force affiliation 2525/APP6 D

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public enum Affiliation |

|  |
| --- |
| C++ |
| public enum class Affiliation |

## Members

|  |  |  |
| --- | --- | --- |
| pending | 0 |  |
| unknown | 1 |  |
| assumedfriend | 2 |  |
| friend | 3 |  |
| neutral | 4 |  |
| suspected | 5 |  |
| hostile | 6 |  |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# AffiliationAlpha Enumeration

Force affiliation 2525/APP6 C

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public enum AffiliationAlpha |

|  |
| --- |
| C++ |
| public enum class AffiliationAlpha |

## Members

|  |  |  |
| --- | --- | --- |
| assumedfriend | 65 |  |
| friend | 70 |  |
| hostile | 72 |  |
| neutral | 78 |  |
| pending | 80 |  |
| suspected | 83 |  |
| unknown | 85 |  |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# BaseFS Class

Base class for all communication classes

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class BaseFS : IPrologTerm |

|  |
| --- |
| C++ |
| public ref class BaseFS : IPrologTerm |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → BaseFS |
| **Derived** | [StpSDK.Coa](#_9DE4EC48_Topic) [StpSDK.PoidObject](#_9887A88E_Topic) [StpSDK.StpTaskOrgRelationship](#_67DB8B61_Topic) [StpSDK.TaskOrgState](#_EA7B1AC3_Topic) |
| **Implements** | **IPrologTerm** |

## Constructors

|  |  |
| --- | --- |
| [BaseFS](#_4AA121AF_Topic) | Constructor |

## Methods

|  |  |
| --- | --- |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# BaseFS Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public BaseFS() |

|  |
| --- |
| C++ |
| public: BaseFS() |

## See Also

#### Reference

[BaseFS Class](#_6B4BF41E_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# Coa Class

Course of Action (COA)

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class Coa : BaseFS |

|  |
| --- |
| C++ |
| public ref class Coa : public BaseFS |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → [BaseFS](#_6B4BF41E_Topic) → Coa |

## Constructors

|  |  |
| --- | --- |
| [Coa](#_8CFE6B7A_Topic) | Constructor |

## Properties

|  |  |
| --- | --- |
| [CreatorRole](#_FAD7A9DB_Topic) | Creator role |
| [Name](#_1015BF7C_Topic) | COA name |
| [Poid](#_A80763CB_Topic) | Unique identifier |
| [TaskOrgState](#_E5E51FDB_Topic) | State of the associated Task Org/ ORBAT |
| [Type](#_4228D017_Topic) | Type: "friendly", "hostile" |

## Methods

|  |  |
| --- | --- |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# Coa Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Coa() |

|  |
| --- |
| C++ |
| public: Coa() |

## See Also

#### Reference

[Coa Class](#_9DE4EC48_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# Coa.CreatorRole Property

Creator role

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string CreatorRole { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ CreatorRole {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[Coa Class](#_9DE4EC48_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# Coa.Name Property

COA name

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Name { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Name {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[Coa Class](#_9DE4EC48_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# Coa.Poid Property

Unique identifier

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Poid { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Poid {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[Coa Class](#_9DE4EC48_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# Coa.TaskOrgState Property

State of the associated Task Org/ ORBAT

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public TaskOrgState TaskOrgState { get; set; } |

|  |
| --- |
| C++ |
| public: property TaskOrgState^ TaskOrgState {  TaskOrgState^ get ();  void set (TaskOrgState^ value); } |

#### Property Value

[TaskOrgState](#_EA7B1AC3_Topic)

## See Also

#### Reference

[Coa Class](#_9DE4EC48_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# Coa.Type Property

Type: "friendly", "hostile"

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Type { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Type {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[Coa Class](#_9DE4EC48_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# CommandRelationship Enumeration

Task Org (TO) / ORBAT unit relationship types

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public enum CommandRelationship |

|  |
| --- |
| C++ |
| public enum class CommandRelationship |

## Members

|  |  |  |
| --- | --- | --- |
| none | 0 | None |
| organic | 1 | Organic |
| attached | 2 | Attached |
| assigned | 3 | Assigned |
| adcon | 4 | ADCON |
| opcon | 5 | OPCON |
| tacon | 6 | TACON |
| ds | 7 | Direct Support |
| r | 8 | Reinforcing |
| gsr | 9 | General Support Reinforcing |
| gs | 10 | General Support |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# Echelon Enumeration

Echelon affiliation 2525/APP6 D

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public enum Echelon |

|  |
| --- |
| C++ |
| public enum class Echelon |

## Members

|  |  |  |
| --- | --- | --- |
| none | 0 |  |
| team | 11 |  |
| squad | 12 |  |
| section | 13 |  |
| platoon | 14 |  |
| company | 15 |  |
| battalion | 16 |  |
| regiment | 17 |  |
| brigade | 18 |  |
| division | 21 |  |
| corps | 22 |  |
| army | 23 |  |
| armygroup | 24 |  |
| region | 25 |  |
| command | 26 |  |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# EchelonAlpha Enumeration

Echelon affiliation 2525/APP6 C

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public enum EchelonAlpha |

|  |
| --- |
| C++ |
| public enum class EchelonAlpha |

## Members

|  |  |  |
| --- | --- | --- |
| none | 0 |  |
| team | 65 |  |
| squad | 66 |  |
| section | 67 |  |
| platoon | 68 |  |
| company | 69 |  |
| battalion | 70 |  |
| regiment | 71 |  |
| brigade | 72 |  |
| division | 73 |  |
| corps | 74 |  |
| army | 75 |  |
| armygroup | 76 |  |
| region | 77 |  |
| command | 78 |  |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# FiresFeatures Class

Task Fires features

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class FiresFeatures : IPrologTerm |

|  |
| --- |
| C++ |
| public ref class FiresFeatures : IPrologTerm |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → FiresFeatures |
| **Implements** | **IPrologTerm** |

## Constructors

|  |  |
| --- | --- |
| [FiresFeatures](#_93FD1088_Topic) | Constructor |

## Properties

|  |  |
| --- | --- |
| [fsTYPE](#_D32E3961_Topic) | Object type |

## Methods

|  |  |
| --- | --- |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# FiresFeatures Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public FiresFeatures() |

|  |
| --- |
| C++ |
| public: FiresFeatures() |

## See Also

#### Reference

[FiresFeatures Class](#_62450958_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# FiresFeatures.fsTYPE Property

Object type

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string fsTYPE { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ fsTYPE {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[FiresFeatures Class](#_62450958_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# FsdbAllScenarioObjectsQuery Class

Query snapshot of all current scenario objects

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class FsdbAllScenarioObjectsQuery : IPrologTerm |

|  |
| --- |
| C++ |
| public ref class FsdbAllScenarioObjectsQuery : IPrologTerm |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → FsdbAllScenarioObjectsQuery |
| **Implements** | **IPrologTerm** |

## Constructors

|  |  |
| --- | --- |
| [FsdbAllScenarioObjectsQuery](#_535BE3C8_Topic) | Constructor |

## Properties

|  |  |
| --- | --- |
| [Queries](#_F966C119_Topic) | List of queries |

## Methods

|  |  |
| --- | --- |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# FsdbAllScenarioObjectsQuery Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public FsdbAllScenarioObjectsQuery() |

|  |
| --- |
| C++ |
| public: FsdbAllScenarioObjectsQuery() |

## See Also

#### Reference

[FsdbAllScenarioObjectsQuery Class](#_BFAC6CF6_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# FsdbAllScenarioObjectsQuery.Queries Property

List of queries

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public List<Object> Queries { get; } |

|  |
| --- |
| C++ |
| public: property List<Object^>^ Queries {  List<Object^>^ get (); } |

#### Property Value

[List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)

([Object](https://docs.microsoft.com/dotnet/api/system.object))

## See Also

#### Reference

[FsdbAllScenarioObjectsQuery Class](#_BFAC6CF6_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IRecoSymbol Interface

Recognized symbol interface

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public interface IRecoSymbol |

|  |
| --- |
| C++ |
| public interface class IRecoSymbol |

## Properties

|  |  |
| --- | --- |
| [Description](#_DAA0AE95_Topic) | Description of the symbol with no designators, e.g. Armored Infantry Company |
| [DesigPlusDescription](#_E81B997C_Topic) | Designators prefixed to Description |
| [FullDescription](#_8247D91A_Topic) | Full description, including affiliation, unit type, and unit designator, echelon, etc |
| [Order](#_2F80766A_Topic) | Rank / Order |
| [ParentCoa](#_5EC31B10_Topic) | Parent COA unique id |
| [Poid](#_B1983E4B_Topic) | Unique identifier |
| [ShortDescription](#_6B0D1E81_Topic) | Short description: either just the DesignatorDescription, or if not designators, the Description |
| [Type](#_EA959FEB_Topic) | Symbol type: "unit", "mootw", "tg", "task", "task\_org\_unit", "task\_org\_relationship", "edit" |

## Methods

|  |  |
| --- | --- |
| [Equals](#_4BBB694E_Topic) | Equality test |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# IRecoSymbol.Description Property

Description of the symbol with no designators, e.g. Armored Infantry Company

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| string Description { get; } |

|  |
| --- |
| C++ |
| property String^ Description {  String^ get (); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[IRecoSymbol Interface](#_3654190_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IRecoSymbol.DesigPlusDescription Property

Designators prefixed to Description

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| string DesigPlusDescription { get; } |

|  |
| --- |
| C++ |
| property String^ DesigPlusDescription {  String^ get (); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[IRecoSymbol Interface](#_3654190_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IRecoSymbol.FullDescription Property

Full description, including affiliation, unit type, and unit designator, echelon, etc

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| string FullDescription { get; } |

|  |
| --- |
| C++ |
| property String^ FullDescription {  String^ get (); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[IRecoSymbol Interface](#_3654190_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IRecoSymbol.Order Property

Rank / Order

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| int Order { get; set; } |

|  |
| --- |
| C++ |
| property int Order {  int get ();  void set (int value); } |

#### Property Value

[Int32](https://docs.microsoft.com/dotnet/api/system.int32)

## See Also

#### Reference

[IRecoSymbol Interface](#_3654190_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IRecoSymbol.ParentCoa Property

Parent COA unique id

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| string ParentCoa { get; } |

|  |
| --- |
| C++ |
| property String^ ParentCoa {  String^ get (); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[IRecoSymbol Interface](#_3654190_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IRecoSymbol.Poid Property

Unique identifier

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| string Poid { get; set; } |

|  |
| --- |
| C++ |
| property String^ Poid {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[IRecoSymbol Interface](#_3654190_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IRecoSymbol.ShortDescription Property

Short description: either just the DesignatorDescription, or if not designators, the Description

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| string ShortDescription { get; } |

|  |
| --- |
| C++ |
| property String^ ShortDescription {  String^ get (); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[IRecoSymbol Interface](#_3654190_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IRecoSymbol.Type Property

Symbol type: "unit", "mootw", "tg", "task", "task\_org\_unit", "task\_org\_relationship", "edit"

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| string Type { get; } |

|  |
| --- |
| C++ |
| property String^ Type {  String^ get (); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[IRecoSymbol Interface](#_3654190_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IRecoSymbol.Equals Method

Equality test

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| bool Equals(  Object o ) |

|  |
| --- |
| C++ |
| bool Equals(  Object^ o ) |

#### Parameters

o [Object](https://docs.microsoft.com/dotnet/api/system.object)

#### Return Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[IRecoSymbol Interface](#_3654190_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# ISpeechRecognizer Interface

Speech recognizer required services

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public interface ISpeechRecognizer |

|  |
| --- |
| C++ |
| public interface class ISpeechRecognizer |

## Methods

|  |  |
| --- | --- |
| [RecognizeOnceUntilStop](#_C0F9B550_Topic) | Activate the microphone and attempt to recognize speech in the next few seconds Ideally, the recognition would include 2s of audio \_before\_ the call, drawing from some buffer |
| [RecognizeOnceUntilTimeout](#_8CA0B696_Topic) | Activate the microphone and attempt to recognize speech, listening until an utterance is completed, or Stop() is called to signal the end of the extended listening period Ideally, the recognition would include 2s of audio \_before\_ the call, drawing from some buffer |
| [RequestRecognitionStop](#_C455D00B_Topic) | Stop the recognition process. Is normally called at the end of a sketch action |

## Events

|  |  |
| --- | --- |
| [OnError](#_EB446C35_Topic) | Event handler invoked when there is a recognition error |
| [OnRecognized](#_C83E7B1D_Topic) | Event handler invoked whenever the recognizer has a complete phrase to return |
| [OnRecognizing](#_B4FF0295_Topic) | Event handler invoked whenever the recognizer has a partial recognition available |
| [OnSpeechEnd](#_A0A648AE_Topic) | Event triggered at the end of speech (after a small time has elapsed) |
| [OnSpeechStart](#_C2899D2_Topic) | Event triggered when speech start is detected |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# ISpeechRecognizer.RecognizeOnceUntilStop Method

Activate the microphone and attempt to recognize speech in the next few seconds Ideally, the recognition would include 2s of audio \_before\_ the call, drawing from some buffer

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| Task<SpeechRecoResult> RecognizeOnceUntilStop(  IAudioCapture audioCapture ) |

|  |
| --- |
| C++ |
| Task<SpeechRecoResult^>^ RecognizeOnceUntilStop(  IAudioCapture^ audioCapture ) |

#### Parameters

audioCapture [IAudioCapture](#_A748303_Topic)

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task-1)([SpeechRecoResult](#_2598FDE1_Topic))

Recognized items/hypotheses, or null if nothing was recognized

## See Also

#### Reference

[ISpeechRecognizer Interface](#_7DDCB981_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# ISpeechRecognizer.RecognizeOnceUntilTimeout Method

Activate the microphone and attempt to recognize speech, listening until an utterance is completed, or Stop() is called to signal the end of the extended listening period Ideally, the recognition would include 2s of audio \_before\_ the call, drawing from some buffer

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| Task<SpeechRecoResult> RecognizeOnceUntilTimeout(  IAudioCapture audioCapture ) |

|  |
| --- |
| C++ |
| Task<SpeechRecoResult^>^ RecognizeOnceUntilTimeout(  IAudioCapture^ audioCapture ) |

#### Parameters

audioCapture [IAudioCapture](#_A748303_Topic)

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task-1)([SpeechRecoResult](#_2598FDE1_Topic))

Recognized items/hypotheses, or null if nothing was recognized

## See Also

#### Reference

[ISpeechRecognizer Interface](#_7DDCB981_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# ISpeechRecognizer.RequestRecognitionStop Method

Stop the recognition process. Is normally called at the end of a sketch action

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| void RequestRecognitionStop(  int wait = 0 ) |

|  |
| --- |
| C++ |
| void RequestRecognitionStop(  int wait = 0 ) |

#### Parameters

wait [Int32](https://docs.microsoft.com/dotnet/api/system.int32) (Optional)

Time in milliseconds to wait before stopping recognition

## See Also

#### Reference

[ISpeechRecognizer Interface](#_7DDCB981_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# ISpeechRecognizer.OnError Event

Event handler invoked when there is a recognition error

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| event OnErrorDelegate OnError |

|  |
| --- |
| C++ |
| event OnErrorDelegate^ OnError {  void add (OnErrorDelegate^ value);  void remove (OnErrorDelegate^ value); } |

#### Value

[OnErrorDelegate](#_3CBB764B_Topic)

## See Also

#### Reference

[ISpeechRecognizer Interface](#_7DDCB981_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# ISpeechRecognizer.OnRecognized Event

Event handler invoked whenever the recognizer has a complete phrase to return

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| event OnRecognizedDelegate OnRecognized |

|  |
| --- |
| C++ |
| event OnRecognizedDelegate^ OnRecognized {  void add (OnRecognizedDelegate^ value);  void remove (OnRecognizedDelegate^ value); } |

#### Value

[OnRecognizedDelegate](#_1E6DFB71_Topic)

## See Also

#### Reference

[ISpeechRecognizer Interface](#_7DDCB981_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# ISpeechRecognizer.OnRecognizing Event

Event handler invoked whenever the recognizer has a partial recognition available

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| event OnRecognizingDelegate OnRecognizing |

|  |
| --- |
| C++ |
| event OnRecognizingDelegate^ OnRecognizing {  void add (OnRecognizingDelegate^ value);  void remove (OnRecognizingDelegate^ value); } |

#### Value

[OnRecognizingDelegate](#_4B5BAC_Topic)

## See Also

#### Reference

[ISpeechRecognizer Interface](#_7DDCB981_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# ISpeechRecognizer.OnSpeechEnd Event

Event triggered at the end of speech (after a small time has elapsed)

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| event OnSpeechStartPauseEndDelegate OnSpeechEnd |

|  |
| --- |
| C++ |
| event OnSpeechStartPauseEndDelegate^ OnSpeechEnd {  void add (OnSpeechStartPauseEndDelegate^ value);  void remove (OnSpeechStartPauseEndDelegate^ value); } |

#### Value

[OnSpeechStartPauseEndDelegate](#_52250641_Topic)

## See Also

#### Reference

[ISpeechRecognizer Interface](#_7DDCB981_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# ISpeechRecognizer.OnSpeechStart Event

Event triggered when speech start is detected

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| event OnSpeechStartPauseEndDelegate OnSpeechStart |

|  |
| --- |
| C++ |
| event OnSpeechStartPauseEndDelegate^ OnSpeechStart {  void add (OnSpeechStartPauseEndDelegate^ value);  void remove (OnSpeechStartPauseEndDelegate^ value); } |

#### Value

[OnSpeechStartPauseEndDelegate](#_52250641_Topic)

## See Also

#### Reference

[ISpeechRecognizer Interface](#_7DDCB981_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IStpConnector Interface

Required communication connection services for interacting with STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public interface IStpConnector |

|  |
| --- |
| C++ |
| public interface class IStpConnector |

## Properties

|  |  |
| --- | --- |
| [Auth](#_58E80F22_Topic) | Service identifier (or "Author") |
| [BaseName](#_AB9565C7_Topic) | Service generic name |
| [Connected](#_2C2F4D2C_Topic) | Connection status |
| [Name](#_285020BD_Topic) | Service unique name (includes machine id to distinguish from instances running in other machines) |

## Methods

|  |  |
| --- | --- |
| [Connect](#_B88B8FF3_Topic) | Connect to STP |
| [Disconnect](#_5BADABCC_Topic) | Disconnects from STP |
| [Dispose](#_4B142C0F_Topic) | Dispose connection |
| [LogToStp](#_34F8E78D_Topic) | Log a message |
| [Register](#_E1453B8E_Topic) | Register the service with STP, informing of the subscriptions that are supported |
| [SetAgentName](#_D51C68B8_Topic) | Establish the name of this component within STP |
| [StpBatchRequestAsync](#_ACC8CAD_Topic) | Invoke some service with an RPC-like call, waiting for side effects to have been processed |
| [StpInform](#_C4992EA6_Topic) | Post an event/message to STP |
| [StpRequestAsync](#_6FA6530B_Topic) | Invoke some service with an RPC-like call |

## Events

|  |  |
| --- | --- |
| [OnStpCommunicationError](#_A7ADDB4_Topic) | Event raised when there is an error communicating with STP |
| [OnStpInform](#_A7336E9E_Topic) | Event raised when an event/message this service subscribes to is posted |
| [OnStpRequest](#_33561D60_Topic) | Event raised when an event this service provides is invoked as an RPC-like call |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# IStpConnector.Auth Property

Service identifier (or "Author")

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| Auth Auth { get; } |

|  |
| --- |
| C++ |
| property Auth^ Auth {  Auth^ get (); } |

#### Property Value

**Auth**

## See Also

#### Reference

[IStpConnector Interface](#_EE268E8_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IStpConnector.BaseName Property

Service generic name

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| string BaseName { get; } |

|  |
| --- |
| C++ |
| property String^ BaseName {  String^ get (); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[IStpConnector Interface](#_EE268E8_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IStpConnector.Connected Property

Connection status

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| bool Connected { get; } |

|  |
| --- |
| C++ |
| property bool Connected {  bool get (); } |

#### Property Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[IStpConnector Interface](#_EE268E8_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IStpConnector.Name Property

Service unique name (includes machine id to distinguish from instances running in other machines)

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| string Name { get; } |

|  |
| --- |
| C++ |
| property String^ Name {  String^ get (); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[IStpConnector Interface](#_EE268E8_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IStpConnector.Connect Method

Connect to STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| bool Connect(  bool exitAppIfNoConnection = true,  int secondsToRetry = 0 ) |

|  |
| --- |
| C++ |
| bool Connect(  bool exitAppIfNoConnection = true,   int secondsToRetry = 0 ) |

#### Parameters

exitAppIfNoConnection [Boolean](https://docs.microsoft.com/dotnet/api/system.boolean) (Optional)

secondsToRetry [Int32](https://docs.microsoft.com/dotnet/api/system.int32) (Optional)

#### Return Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

True if connected successfully

## See Also

#### Reference

[IStpConnector Interface](#_EE268E8_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IStpConnector.Disconnect Method

Disconnects from STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| void Disconnect() |

|  |
| --- |
| C++ |
| void Disconnect() |

## See Also

#### Reference

[IStpConnector Interface](#_EE268E8_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IStpConnector.Dispose Method

Dispose connection

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| void Dispose() |

|  |
| --- |
| C++ |
| void Dispose() |

## See Also

#### Reference

[IStpConnector Interface](#_EE268E8_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IStpConnector.LogToStp Method

Log a message

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| void LogToStp(  string message,  TraceLevel level ) |

|  |
| --- |
| C++ |
| void LogToStp(  String^ message,   TraceLevel level ) |

#### Parameters

message [String](https://docs.microsoft.com/dotnet/api/system.string)

level [TraceLevel](https://docs.microsoft.com/dotnet/api/system.diagnostics.tracelevel)

## See Also

#### Reference

[IStpConnector Interface](#_EE268E8_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IStpConnector.Register Method

Register the service with STP, informing of the subscriptions that are supported

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| bool Register(  string name,  string solvables,  string machineId = null,  string session = null ) |

|  |
| --- |
| C++ |
| bool Register(  String^ name,   String^ solvables,   String^ machineId = nullptr,   String^ session = nullptr ) |

#### Parameters

name [String](https://docs.microsoft.com/dotnet/api/system.string)

solvables [String](https://docs.microsoft.com/dotnet/api/system.string)

machineId [String](https://docs.microsoft.com/dotnet/api/system.string) (Optional)

Optional string identifying the instance being registered. The default is a unique id of the machine where the invoking service is running

session [String](https://docs.microsoft.com/dotnet/api/system.string) (Optional)

Optional session id - defaults to the machineId

#### Return Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

True if registration was successful

## See Also

#### Reference

[IStpConnector Interface](#_EE268E8_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IStpConnector.SetAgentName Method

Establish the name of this component within STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| void SetAgentName(  string agentName,  string machineId,  string session ) |

|  |
| --- |
| C++ |
| void SetAgentName(  String^ agentName,   String^ machineId,   String^ session ) |

#### Parameters

agentName [String](https://docs.microsoft.com/dotnet/api/system.string)

machineId [String](https://docs.microsoft.com/dotnet/api/system.string)

session [String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[IStpConnector Interface](#_EE268E8_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IStpConnector.StpBatchRequestAsync Method

Invoke some service with an RPC-like call, waiting for side effects to have been processed

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| Task<List<string>> StpBatchRequestAsync(  Func<CancellationToken, Task<List<string>>> requestOp,  CancellationToken cancellationToken ) |

|  |
| --- |
| C++ |
| Task<List<String^>^>^ StpBatchRequestAsync(  Func<CancellationToken, Task<List<String^>^>^>^ requestOp,   CancellationToken cancellationToken ) |

#### Parameters

requestOp [Func](https://docs.microsoft.com/dotnet/api/system.func-2)([CancellationToken](https://docs.microsoft.com/dotnet/api/system.threading.cancellationtoken), [Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task-1)([List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([String](https://docs.microsoft.com/dotnet/api/system.string))))

cancellationToken [CancellationToken](https://docs.microsoft.com/dotnet/api/system.threading.cancellationtoken)

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task-1)([List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([String](https://docs.microsoft.com/dotnet/api/system.string)))

List of results returned

## See Also

#### Reference

[IStpConnector Interface](#_EE268E8_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IStpConnector.StpInform Method

Post an event/message to STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| bool StpInform(  string stpEvent,  string parmList = null ) |

|  |
| --- |
| C++ |
| bool StpInform(  String^ stpEvent,   String^ parmList = nullptr ) |

#### Parameters

stpEvent [String](https://docs.microsoft.com/dotnet/api/system.string)

parmList [String](https://docs.microsoft.com/dotnet/api/system.string) (Optional)

#### Return Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[IStpConnector Interface](#_EE268E8_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IStpConnector.StpRequestAsync Method

Invoke some service with an RPC-like call

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| Task<List<string>> StpRequestAsync(  string stpEvent,  CancellationToken cancellationToken ) |

|  |
| --- |
| C++ |
| Task<List<String^>^>^ StpRequestAsync(  String^ stpEvent,   CancellationToken cancellationToken ) |

#### Parameters

stpEvent [String](https://docs.microsoft.com/dotnet/api/system.string)

cancellationToken [CancellationToken](https://docs.microsoft.com/dotnet/api/system.threading.cancellationtoken)

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task-1)([List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([String](https://docs.microsoft.com/dotnet/api/system.string)))

List of results returned

## See Also

#### Reference

[IStpConnector Interface](#_EE268E8_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IStpConnector.OnStpCommunicationError Event

Event raised when there is an error communicating with STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| event StpCommunicationErrorDelegate OnStpCommunicationError |

|  |
| --- |
| C++ |
| event StpCommunicationErrorDelegate^ OnStpCommunicationError {  void add (StpCommunicationErrorDelegate^ value);  void remove (StpCommunicationErrorDelegate^ value); } |

#### Value

[StpCommunicationErrorDelegate](#_B30F3713_Topic)

## See Also

#### Reference

[IStpConnector Interface](#_EE268E8_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IStpConnector.OnStpInform Event

Event raised when an event/message this service subscribes to is posted

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| event StpInformDelegate OnStpInform |

|  |
| --- |
| C++ |
| event StpInformDelegate^ OnStpInform {  void add (StpInformDelegate^ value);  void remove (StpInformDelegate^ value); } |

#### Value

[StpInformDelegate](#_DB7DB5AB_Topic)

## See Also

#### Reference

[IStpConnector Interface](#_EE268E8_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IStpConnector.OnStpRequest Event

Event raised when an event this service provides is invoked as an RPC-like call

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| event StpRequestDelegate OnStpRequest |

|  |
| --- |
| C++ |
| event StpRequestDelegate^ OnStpRequest {  void add (StpRequestDelegate^ value);  void remove (StpRequestDelegate^ value); } |

#### Value

[StpRequestDelegate](#_8FF7D29A_Topic)

## See Also

#### Reference

[IStpConnector Interface](#_EE268E8_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IStpObject Interface

Common Stp object properties

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public interface IStpObject |

|  |
| --- |
| C++ |
| public interface class IStpObject |

## Properties

|  |  |
| --- | --- |
| [Description](#_80BF6817_Topic) | Item description |
| [Poid](#_99E7261A_Topic) | Unique identifier |
| [Type](#_CA666915_Topic) | Object class, for example in a military domain: "unit", "mootw", "tg", "task", "task\_org\_unit", "task\_org\_relationship", "edit" |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# IStpObject.Description Property

Item description

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| string Description { get; set; } |

|  |
| --- |
| C++ |
| property String^ Description {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[IStpObject Interface](#_1E1A3296_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IStpObject.Poid Property

Unique identifier

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| string Poid { get; set; } |

|  |
| --- |
| C++ |
| property String^ Poid {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[IStpObject Interface](#_1E1A3296_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# IStpObject.Type Property

Object class, for example in a military domain: "unit", "mootw", "tg", "task", "task\_org\_unit", "task\_org\_relationship", "edit"

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| string Type { get; set; } |

|  |
| --- |
| C++ |
| property String^ Type {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[IStpObject Interface](#_1E1A3296_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# LatLon Class

Latitude/Longitude (decimal degrees) coordinate

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class LatLon : Latlon, IPrologTerm |

|  |
| --- |
| C++ |
| public ref class LatLon : public Latlon,   IPrologTerm |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → **Latlon** → LatLon |
| **Implements** | **IPrologTerm** |

## Constructors

|  |  |
| --- | --- |
| [LatLon()](#_E91B6D87_Topic) | Constructor |
| [LatLon(Double, Double)](#_13264A49_Topic) | Constructor |

## Properties

|  |  |
| --- | --- |
| **Lat** | (Inherited from **Latlon**) |
| **LatDirection** | (Inherited from **Latlon**) |
| **Lon** | (Inherited from **Latlon**) |
| **LonDirection** | (Inherited from **Latlon**) |

## Methods

|  |  |
| --- | --- |
| **Equals** | (Inherited from **Latlon**) |
| **GetHashCode** | (Inherited from **Latlon**) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| **ToString** | (Inherited from **Latlon**) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# LatLon Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public LatLon() |

|  |
| --- |
| C++ |
| public: LatLon() |

## See Also

#### Reference

[LatLon Class](#_56D57CE3_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# LatLon(Double, Double) Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public LatLon(  double lat,  double lon ) |

|  |
| --- |
| C++ |
| public: LatLon(  double lat,   double lon ) |

#### Parameters

lat [Double](https://docs.microsoft.com/dotnet/api/system.double)

lon [Double](https://docs.microsoft.com/dotnet/api/system.double)

## See Also

#### Reference

[LatLon Class](#_56D57CE3_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# Location Class

Location

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class Location : IPrologTerm |

|  |
| --- |
| C++ |
| public ref class Location : IPrologTerm |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → Location |
| **Implements** | **IPrologTerm** |

## Constructors

|  |  |
| --- | --- |
| [Location](#_319277F9_Topic) | Constructor |

## Properties

|  |  |
| --- | --- |
| [Altitude](#_AF76CF9E_Topic) | Altitude |
| [CandidatePoids](#_AF27C0AA_Topic) | Unique ids of the elements intersected by the stroke represented by the geo coords |
| [Centroid](#_49C472C3_Topic) | Centroid of the object represented by this location |
| [Coords](#_4470123E_Topic) | Geo coords |
| [Radius](#_BB140D66_Topic) | Radius of the object represented by this location |
| [Shape](#_857F9052_Topic) | Shape: "point", "line", "area" |
| [Type](#_38D6D1A1_Topic) | Object type: point, line, area |
| [Width](#_CBDFC8A3_Topic) | Width of the object represented by this location |

## Methods

|  |  |
| --- | --- |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# Location Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Location() |

|  |
| --- |
| C++ |
| public: Location() |

## See Also

#### Reference

[Location Class](#_EA2AA317_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# Location.Altitude Property

Altitude

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public double Altitude { get; set; } |

|  |
| --- |
| C++ |
| public: property double Altitude {  double get ();  void set (double value); } |

#### Property Value

[Double](https://docs.microsoft.com/dotnet/api/system.double)

## See Also

#### Reference

[Location Class](#_EA2AA317_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# Location.CandidatePoids Property

Unique ids of the elements intersected by the stroke represented by the geo coords

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public List<string> CandidatePoids { get; set; } |

|  |
| --- |
| C++ |
| public: property List<String^>^ CandidatePoids {  List<String^>^ get ();  void set (List<String^>^ value); } |

#### Property Value

[List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)

([String](https://docs.microsoft.com/dotnet/api/system.string))

## See Also

#### Reference

[Location Class](#_EA2AA317_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# Location.Centroid Property

Centroid of the object represented by this location

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public LatLon Centroid { get; set; } |

|  |
| --- |
| C++ |
| public: property LatLon^ Centroid {  LatLon^ get ();  void set (LatLon^ value); } |

#### Property Value

[LatLon](#_56D57CE3_Topic)

## See Also

#### Reference

[Location Class](#_EA2AA317_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# Location.Coords Property

Geo coords

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public List<LatLon> Coords { get; set; } |

|  |
| --- |
| C++ |
| public: property List<LatLon^>^ Coords {  List<LatLon^>^ get ();  void set (List<LatLon^>^ value); } |

#### Property Value

[List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)

([LatLon](#_56D57CE3_Topic))

## See Also

#### Reference

[Location Class](#_EA2AA317_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# Location.Radius Property

Radius of the object represented by this location

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public double Radius { get; set; } |

|  |
| --- |
| C++ |
| public: property double Radius {  double get ();  void set (double value); } |

#### Property Value

[Double](https://docs.microsoft.com/dotnet/api/system.double)

## See Also

#### Reference

[Location Class](#_EA2AA317_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# Location.Shape Property

Shape: "point", "line", "area"

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Shape { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Shape {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[Location Class](#_EA2AA317_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# Location.Type Property

Object type: point, line, area

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Type { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Type {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[Location Class](#_EA2AA317_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# Location.Width Property

Width of the object represented by this location

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public double Width { get; set; } |

|  |
| --- |
| C++ |
| public: property double Width {  double get ();  void set (double value); } |

#### Property Value

[Double](https://docs.microsoft.com/dotnet/api/system.double)

## See Also

#### Reference

[Location Class](#_EA2AA317_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# Modifier Enumeration

Modifier affiliation 2525/APP6 D

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public enum Modifier |

|  |
| --- |
| C++ |
| public enum class Modifier |

## Members

|  |  |  |
| --- | --- | --- |
| none | 0 |  |
| dummy | 1 |  |
| hq | 2 |  |
| dummy\_hq | 3 |  |
| task\_force | 4 |  |
| dummy\_task\_force | 5 |  |
| task\_force\_hq | 6 |  |
| dummytask\_force\_hq | 7 |  |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# ModifierAlpha Enumeration

Modifier affiliation 2525/APP6 C

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public enum ModifierAlpha |

|  |
| --- |
| C++ |
| public enum class ModifierAlpha |

## Members

|  |  |  |
| --- | --- | --- |
| none | 45 |  |
| hq | 65 |  |
| task\_force\_hq | 66 |  |
| dummy\_hq | 67 |  |
| dummytask\_force\_hq | 68 |  |
| task\_force | 69 |  |
| dummy | 70 |  |
| dummy\_task\_force | 71 |  |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# MovementFeatures Class

Task movement features

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class MovementFeatures : IPrologTerm |

|  |
| --- |
| C++ |
| public ref class MovementFeatures : IPrologTerm |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → MovementFeatures |
| **Implements** | **IPrologTerm** |

## Constructors

|  |  |
| --- | --- |
| [MovementFeatures](#_8AD7254F_Topic) | Constructor |

## Properties

|  |  |
| --- | --- |
| [Movement](#_103B6257_Topic) | Is a movement |
| [MovesTo](#_DC4E77ED_Topic) | MOvent's target TG |

## Methods

|  |  |
| --- | --- |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# MovementFeatures Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public MovementFeatures() |

|  |
| --- |
| C++ |
| public: MovementFeatures() |

## See Also

#### Reference

[MovementFeatures Class](#_520E4532_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# MovementFeatures.Movement Property

Is a movement

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public bool Movement { get; set; } |

|  |
| --- |
| C++ |
| public: property bool Movement {  bool get ();  void set (bool value); } |

#### Property Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[MovementFeatures Class](#_520E4532_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# MovementFeatures.MovesTo Property

MOvent's target TG

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string MovesTo { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ MovesTo {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[MovementFeatures Class](#_520E4532_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# ObjectSet Class

Container for mix of scenario objects - format currently used for storing STP metadata

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class ObjectSet : IPrologTerm, IEnumerable |

|  |
| --- |
| C++ |
| public ref class ObjectSet : IPrologTerm,   IEnumerable |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → ObjectSet |
| **Implements** | **IPrologTerm**, [IEnumerable](https://learn.microsoft.com/dotnet/api/system.collections.ienumerable) |

## Constructors

|  |  |
| --- | --- |
| [ObjectSet()](#_5575311C_Topic) | Default constructor |
| [ObjectSet(List(PoidObject), String[])](#_6632504_Topic) | Create an object from a list of STP objects, excluding certain fsTYPES |
| [ObjectSet(String, String[])](#_5E038530_Topic) | Create an object from a serialized functor, excluding certain fsTYPES |

## Properties

|  |  |
| --- | --- |
| [Objects](#_EDA215DC_Topic) | Objects of the set |

## Methods

|  |  |
| --- | --- |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [FromC2SIM](#_BE6738C7_Topic) | Build an ObjectSet from C2SIM xml documents |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetObjectByType](#_92A704BC_Topic) | Get objects of a particular type: planning\_scenario, coa, |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [SortByType](#_D89FF9CB_Topic) | Sort so that referenced poids are correctly resolved |
| [ToMultilineString](#_56E46540_Topic) | Format content as a string, with line breaks between individual objects |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# ObjectSet Constructor

Default constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public ObjectSet() |

|  |
| --- |
| C++ |
| public: ObjectSet() |

## See Also

#### Reference

[ObjectSet Class](#_74B5F514_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# ObjectSet(List<PoidObject>, String[]) Constructor

Create an object from a list of STP objects, excluding certain fsTYPES

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public ObjectSet(  List<PoidObject> scenarioObjects,  string[] excludedTypes = null ) |

|  |
| --- |
| C++ |
| public: ObjectSet(  List<PoidObject^>^ scenarioObjects,   array<String^>^ excludedTypes = nullptr ) |

#### Parameters

scenarioObjects [List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([PoidObject](#_9887A88E_Topic))

excludedTypes [String](https://docs.microsoft.com/dotnet/api/system.string)[] (Optional)

## Remarks

If not provided, the excluded types default to { "planning\_scenario", "agent\_state", "edit", "viewport", "ink" }

## See Also

#### Reference

[ObjectSet Class](#_74B5F514_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# ObjectSet(String, String[]) Constructor

Create an object from a serialized functor, excluding certain fsTYPES

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public ObjectSet(  string functorString,  string[] excludedTypes = null ) |

|  |
| --- |
| C++ |
| public: ObjectSet(  String^ functorString,   array<String^>^ excludedTypes = nullptr ) |

#### Parameters

functorString [String](https://docs.microsoft.com/dotnet/api/system.string)

excludedTypes [String](https://docs.microsoft.com/dotnet/api/system.string)[] (Optional)

Object types to exclude - If not provided, the excluded types default to {"agent\_state", "edit", "viewport", "ink" }

## See Also

#### Reference

[ObjectSet Class](#_74B5F514_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# ObjectSet.Objects Property

Objects of the set

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public List<PoidObject> Objects { get; set; } |

|  |
| --- |
| C++ |
| public: property List<PoidObject^>^ Objects {  List<PoidObject^>^ get ();  void set (List<PoidObject^>^ value); } |

#### Property Value

[List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)

([PoidObject](#_9887A88E_Topic))

## See Also

#### Reference

[ObjectSet Class](#_74B5F514_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# ObjectSet.FromC2SIM Method

Build an ObjectSet from C2SIM xml documents

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public static ObjectSet FromC2SIM(  string xml,  string currentRole,  string defaultBlueCoaPoid,  string defaultRedCoaPoid ) |

|  |
| --- |
| C++ |
| public: static ObjectSet^ FromC2SIM(  String^ xml,   String^ currentRole,   String^ defaultBlueCoaPoid,   String^ defaultRedCoaPoid ) |

#### Parameters

xml [String](https://docs.microsoft.com/dotnet/api/system.string)

currentRole [String](https://docs.microsoft.com/dotnet/api/system.string)

defaultBlueCoaPoid [String](https://docs.microsoft.com/dotnet/api/system.string)

defaultRedCoaPoid [String](https://docs.microsoft.com/dotnet/api/system.string)

#### Return Value

[ObjectSet](#_74B5F514_Topic)

## See Also

#### Reference

[ObjectSet Class](#_74B5F514_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# ObjectSet.GetObjectByType Method

Get objects of a particular type: planning\_scenario, coa,

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public List<PoidObject> GetObjectByType(  string type ) |

|  |
| --- |
| C++ |
| public: List<PoidObject^>^ GetObjectByType(  String^ type ) |

#### Parameters

type [String](https://docs.microsoft.com/dotnet/api/system.string)

#### Return Value

[List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([PoidObject](#_9887A88E_Topic))

## See Also

#### Reference

[ObjectSet Class](#_74B5F514_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# ObjectSet.SortByType Method

Sort so that referenced poids are correctly resolved

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void SortByType() |

|  |
| --- |
| C++ |
| public: void SortByType() |

## See Also

#### Reference

[ObjectSet Class](#_74B5F514_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# ObjectSet.ToMultilineString Method

Format content as a string, with line breaks between individual objects

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string ToMultilineString() |

|  |
| --- |
| C++ |
| public: String^ ToMultilineString() |

#### Return Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[ObjectSet Class](#_74B5F514_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# OnErrorDelegate Delegate

Arguments for recognition error events

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void OnErrorDelegate(  string msg ) |

|  |
| --- |
| C++ |
| public delegate void OnErrorDelegate(  String^ msg ) |

#### Parameters

msg [String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# OnRecognizedDelegate Delegate

Arguments for complete phrase recognized event

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void OnRecognizedDelegate(  SpeechRecoResult sr ) |

|  |
| --- |
| C++ |
| public delegate void OnRecognizedDelegate(  SpeechRecoResult^ sr ) |

#### Parameters

sr [SpeechRecoResult](#_2598FDE1_Topic)

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# OnRecognizingDelegate Delegate

Arguments for partial recognition event

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void OnRecognizingDelegate(  string phrase ) |

|  |
| --- |
| C++ |
| public delegate void OnRecognizingDelegate(  String^ phrase ) |

#### Parameters

phrase [String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# OnSpeechStartPauseEndDelegate Delegate

Arguments for start/end of speech detected events

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void OnSpeechStartPauseEndDelegate() |

|  |
| --- |
| C++ |
| public delegate void OnSpeechStartPauseEndDelegate() |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# PlanningScenario Class

Scenario definition

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class PlanningScenario : PoidObject |

|  |
| --- |
| C++ |
| public ref class PlanningScenario : public PoidObject |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → [BaseFS](#_6B4BF41E_Topic) → [PoidObject](#_9887A88E_Topic) → PlanningScenario |

## Constructors

|  |  |
| --- | --- |
| [PlanningScenario()](#_3AD9526C_Topic) | Constructor |
| [PlanningScenario(BaseFS)](#_21B3033F_Topic) | Construct from another foundational object |

## Properties

|  |  |
| --- | --- |
| [Auth](#_C7CAE0EC_Topic) | Identification of the component creating the scenario |
| [CreatorRole](#_110B3346_Topic) | Role that created the scenario |
| [IsLoaded](#_4C0DE6C6_Topic) | Whether the scenario is already loaded |
| [IsValid](#_CE27FFC_Topic) | Whether scenario passes validation |
| [Name](#_451B8B1B_Topic) | Scenario name |
| [NetworkPath](#_4D363BD_Topic) | Default save path on a network if collaborating |
| [Poid](#_FDACAC7B_Topic) | Unique id (may be empty in queries) (Inherited from [PoidObject](#_9887A88E_Topic)) |
| [savePath](#_3359CBB_Topic) | Default save file path |
| [TaskOrgState](#_ED679A99_Topic) | State of associated Task Org / ORBAT |
| [Type](#_1BEF82DA_Topic) | Object type (Inherited from [PoidObject](#_9887A88E_Topic)) |

## Methods

|  |  |
| --- | --- |
| [CreateDefault](#_DC8F948E_Topic) | Factory method for default scenario |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](#_E35DF0A2_Topic) | Poid object serialized to an STP string (Inherited from [PoidObject](#_9887A88E_Topic)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# PlanningScenario Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public PlanningScenario() |

|  |
| --- |
| C++ |
| public: PlanningScenario() |

## See Also

#### Reference

[PlanningScenario Class](#_B7245B7_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# PlanningScenario(BaseFS) Constructor

Construct from another foundational object

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public PlanningScenario(  BaseFS bfs ) |

|  |
| --- |
| C++ |
| public: PlanningScenario(  BaseFS^ bfs ) |

#### Parameters

bfs [BaseFS](#_6B4BF41E_Topic)

## See Also

#### Reference

[PlanningScenario Class](#_B7245B7_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# PlanningScenario.Auth Property

Identification of the component creating the scenario

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Auth Auth { get; set; } |

|  |
| --- |
| C++ |
| public: property Auth^ Auth {  Auth^ get ();  void set (Auth^ value); } |

#### Property Value

**Auth**

## See Also

#### Reference

[PlanningScenario Class](#_B7245B7_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# PlanningScenario.CreatorRole Property

Role that created the scenario

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string CreatorRole { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ CreatorRole {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[PlanningScenario Class](#_B7245B7_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# PlanningScenario.IsLoaded Property

Whether the scenario is already loaded

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public bool IsLoaded { get; set; } |

|  |
| --- |
| C++ |
| public: property bool IsLoaded {  bool get ();  void set (bool value); } |

#### Property Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[PlanningScenario Class](#_B7245B7_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# PlanningScenario.IsValid Property

Whether scenario passes validation

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public bool IsValid { get; set; } |

|  |
| --- |
| C++ |
| public: property bool IsValid {  bool get ();  void set (bool value); } |

#### Property Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[PlanningScenario Class](#_B7245B7_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# PlanningScenario.Name Property

Scenario name

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Name { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Name {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[PlanningScenario Class](#_B7245B7_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# PlanningScenario.NetworkPath Property

Default save path on a network if collaborating

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string NetworkPath { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ NetworkPath {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[PlanningScenario Class](#_B7245B7_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# PlanningScenario.savePath Property

Default save file path

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string savePath { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ savePath {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[PlanningScenario Class](#_B7245B7_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# PlanningScenario.TaskOrgState Property

State of associated Task Org / ORBAT

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public TaskOrgState TaskOrgState { get; set; } |

|  |
| --- |
| C++ |
| public: property TaskOrgState^ TaskOrgState {  TaskOrgState^ get ();  void set (TaskOrgState^ value); } |

#### Property Value

[TaskOrgState](#_EA7B1AC3_Topic)

## See Also

#### Reference

[PlanningScenario Class](#_B7245B7_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# PlanningScenario.CreateDefault Method

Factory method for default scenario

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public static PlanningScenario CreateDefault(  string name = null ) |

|  |
| --- |
| C++ |
| public: static PlanningScenario^ CreateDefault(  String^ name = nullptr ) |

#### Parameters

name [String](https://docs.microsoft.com/dotnet/api/system.string) (Optional)

Scenario name - defaults to STP\_isoutccreationdate

#### Return Value

[PlanningScenario](#_B7245B7_Topic)

## See Also

#### Reference

[PlanningScenario Class](#_B7245B7_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# PoidObject Class

Umbrella object, that represents all STP objects with a unique id, i.e., STP metadata

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class PoidObject : BaseFS, IPrologTerm |

|  |
| --- |
| C++ |
| public ref class PoidObject : public BaseFS,   IPrologTerm |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → [BaseFS](#_6B4BF41E_Topic) → PoidObject |
| **Derived** | [StpSDK.PlanningScenario](#_B7245B7_Topic) |
| **Implements** | **IPrologTerm** |

## Constructors

|  |  |
| --- | --- |
| [PoidObject](#_41699616_Topic) | Constructor |

## Properties

|  |  |
| --- | --- |
| [Poid](#_FDACAC7B_Topic) | Unique id (may be empty in queries) |
| [Type](#_1BEF82DA_Topic) | Object type |

## Methods

|  |  |
| --- | --- |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](#_E35DF0A2_Topic) | Poid object serialized to an STP string (Overrides [Object.ToString()](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# PoidObject Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public PoidObject() |

|  |
| --- |
| C++ |
| public: PoidObject() |

## See Also

#### Reference

[PoidObject Class](#_9887A88E_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# PoidObject.Poid Property

Unique id (may be empty in queries)

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Poid { get; } |

|  |
| --- |
| C++ |
| public: property String^ Poid {  String^ get (); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[PoidObject Class](#_9887A88E_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# PoidObject.Type Property

Object type

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Type { get; } |

|  |
| --- |
| C++ |
| public: property String^ Type {  String^ get (); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[PoidObject Class](#_9887A88E_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# PoidObject.ToString Method

Poid object serialized to an STP string

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public override string ToString() |

|  |
| --- |
| C++ |
| public: virtual String^ ToString() override |

#### Return Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[PoidObject Class](#_9887A88E_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# SketchRecoResult Class

Recognition alternate

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class SketchRecoResult |

|  |
| --- |
| C++ |
| public ref class SketchRecoResult |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → SketchRecoResult |

## Constructors

|  |  |
| --- | --- |
| [SketchRecoResult](#_1FB4545_Topic) | Construct a Sketch reco item |

## Properties

|  |  |
| --- | --- |
| [Confidence](#_7C3EBAB5_Topic) | Likelihood/confidence of the interpretation |
| [Type](#_C1203430_Topic) | Sketch type |

## Methods

|  |  |
| --- | --- |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](#_2D99C985_Topic) | String representation of a Sketch reco item (Overrides [Object.ToString()](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# SketchRecoResult Constructor

Construct a Sketch reco item

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public SketchRecoResult(  SketchClass type,  double confidence ) |

|  |
| --- |
| C++ |
| public: SketchRecoResult(  SketchClass type,   double confidence ) |

#### Parameters

type **SketchClass**

confidence [Double](https://docs.microsoft.com/dotnet/api/system.double)

## See Also

#### Reference

[SketchRecoResult Class](#_13CB1FF6_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# SketchRecoResult.Confidence Property

Likelihood/confidence of the interpretation

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public double Confidence { get; set; } |

|  |
| --- |
| C++ |
| public: property double Confidence {  double get ();  void set (double value); } |

#### Property Value

[Double](https://docs.microsoft.com/dotnet/api/system.double)

## See Also

#### Reference

[SketchRecoResult Class](#_13CB1FF6_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# SketchRecoResult.Type Property

Sketch type

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public SketchClass Type { get; set; } |

|  |
| --- |
| C++ |
| public: property SketchClass Type {  SketchClass get ();  void set (SketchClass value); } |

#### Property Value

**SketchClass**

## See Also

#### Reference

[SketchRecoResult Class](#_13CB1FF6_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# SketchRecoResult.ToString Method

String representation of a Sketch reco item

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public override string ToString() |

|  |
| --- |
| C++ |
| public: virtual String^ ToString() override |

#### Return Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[SketchRecoResult Class](#_13CB1FF6_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# SpeechRecoItem Class

Recognition hypotheses / alternates

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class SpeechRecoItem |

|  |
| --- |
| C++ |
| public ref class SpeechRecoItem |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → SpeechRecoItem |

## Constructors

|  |  |
| --- | --- |
| [SpeechRecoItem](#_7893D496_Topic) | Construct a speech reco item |

## Properties

|  |  |
| --- | --- |
| [Confidence](#_6433488C_Topic) | Likelihood/confidence of the interpretation |
| [EndSec](#_7D5BEAB7_Topic) | Time speech ended |
| [ExtraRecoInfo](#_F7244428_Topic) | Additional reco-specific information to expose |
| [StartSec](#_E0A42F04_Topic) | Time speech started |
| [Text](#_C1E90A20_Topic) | Transcribed speech text |

## Methods

|  |  |
| --- | --- |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](#_FE836030_Topic) | String representation of a speech reco item (Overrides [Object.ToString()](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# SpeechRecoItem Constructor

Construct a speech reco item

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public SpeechRecoItem(  string text,  double confidence,  double? startSec = null,  double? endSec = null ) |

|  |
| --- |
| C++ |
| public: SpeechRecoItem(  String^ text,   double confidence,   Nullable<double> startSec = nullptr,   Nullable<double> endSec = nullptr ) |

#### Parameters

text [String](https://docs.microsoft.com/dotnet/api/system.string)

confidence [Double](https://docs.microsoft.com/dotnet/api/system.double)

startSec [Nullable](https://docs.microsoft.com/dotnet/api/system.nullable-1)([Double](https://docs.microsoft.com/dotnet/api/system.double)) (Optional)

endSec [Nullable](https://docs.microsoft.com/dotnet/api/system.nullable-1)([Double](https://docs.microsoft.com/dotnet/api/system.double)) (Optional)

## See Also

#### Reference

[SpeechRecoItem Class](#_980C2CA5_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# SpeechRecoItem.Confidence Property

Likelihood/confidence of the interpretation

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public double Confidence { get; set; } |

|  |
| --- |
| C++ |
| public: property double Confidence {  double get ();  void set (double value); } |

#### Property Value

[Double](https://docs.microsoft.com/dotnet/api/system.double)

## See Also

#### Reference

[SpeechRecoItem Class](#_980C2CA5_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# SpeechRecoItem.EndSec Property

Time speech ended

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public double? EndSec { get; set; } |

|  |
| --- |
| C++ |
| public: property Nullable<double> EndSec {  Nullable<double> get ();  void set (Nullable<double> value); } |

#### Property Value

[Nullable](https://docs.microsoft.com/dotnet/api/system.nullable-1)

([Double](https://docs.microsoft.com/dotnet/api/system.double))

## See Also

#### Reference

[SpeechRecoItem Class](#_980C2CA5_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# SpeechRecoItem.ExtraRecoInfo Property

Additional reco-specific information to expose

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string ExtraRecoInfo { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ ExtraRecoInfo {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[SpeechRecoItem Class](#_980C2CA5_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# SpeechRecoItem.StartSec Property

Time speech started

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public double? StartSec { get; set; } |

|  |
| --- |
| C++ |
| public: property Nullable<double> StartSec {  Nullable<double> get ();  void set (Nullable<double> value); } |

#### Property Value

[Nullable](https://docs.microsoft.com/dotnet/api/system.nullable-1)

([Double](https://docs.microsoft.com/dotnet/api/system.double))

## See Also

#### Reference

[SpeechRecoItem Class](#_980C2CA5_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# SpeechRecoItem.Text Property

Transcribed speech text

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Text { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Text {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[SpeechRecoItem Class](#_980C2CA5_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# SpeechRecoItem.ToString Method

String representation of a speech reco item

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public override string ToString() |

|  |
| --- |
| C++ |
| public: virtual String^ ToString() override |

#### Return Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[SpeechRecoItem Class](#_980C2CA5_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# SpeechRecoResult Class

Speech recognition results

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class SpeechRecoResult |

|  |
| --- |
| C++ |
| public ref class SpeechRecoResult |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → SpeechRecoResult |

## Constructors

|  |  |
| --- | --- |
| [SpeechRecoResult(String)](#_8CC86455_Topic) | Construct a new speech recognition result object |
| [SpeechRecoResult(String, List(SpeechRecoResult), Int32)](#_26266A2_Topic) | Construct a new recognition result by combining multiple individual ones |
| [SpeechRecoResult(String, DateTime, DateTime)](#_842FB095_Topic) | Construct a new speech recognition result object |

## Properties

|  |  |
| --- | --- |
| [EndTime](#_F16C0C66_Topic) | Time speech ended |
| [FromReco](#_5B0C7E52_Topic) | Identifies the recognizer producing the result |
| [Results](#_68E2463D_Topic) | Speech recognition hypothesis |
| [StartTime](#_205BAE47_Topic) | Time speech started |

## Methods

|  |  |
| --- | --- |
| [AddAlternate](#_3ED9A5C8_Topic) | Add an alternate to the results |
| [Combine](#_886CF755_Topic) | Combine results into this instance |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# SpeechRecoResult(String) Constructor

Construct a new speech recognition result object

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public SpeechRecoResult(  string fromReco ) |

|  |
| --- |
| C++ |
| public: SpeechRecoResult(  String^ fromReco ) |

#### Parameters

fromReco [String](https://docs.microsoft.com/dotnet/api/system.string)

Recognizer identification

## See Also

#### Reference

[SpeechRecoResult Class](#_2598FDE1_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# SpeechRecoResult(String, List<SpeechRecoResult>, Int32) Constructor

Construct a new recognition result by combining multiple individual ones

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public SpeechRecoResult(  string fromRecos,  List<SpeechRecoResult> allResults,  int maxCombinedRecos = -1 ) |

|  |
| --- |
| C++ |
| public: SpeechRecoResult(  String^ fromRecos,   List<SpeechRecoResult^>^ allResults,   int maxCombinedRecos = -1 ) |

#### Parameters

fromRecos [String](https://docs.microsoft.com/dotnet/api/system.string)

Identification of the potentially multiple recognizers that generated the results being combined

allResults [List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([SpeechRecoResult](#_2598FDE1_Topic))

maxCombinedRecos [Int32](https://docs.microsoft.com/dotnet/api/system.int32) (Optional)

Max number of alternates to keep; -1 means keep all available

## See Also

#### Reference

[SpeechRecoResult Class](#_2598FDE1_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# SpeechRecoResult(String, DateTime, DateTime) Constructor

Construct a new speech recognition result object

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public SpeechRecoResult(  string fromReco,  DateTime startTime,  DateTime endTime ) |

|  |
| --- |
| C++ |
| public: SpeechRecoResult(  String^ fromReco,   DateTime startTime,   DateTime endTime ) |

#### Parameters

fromReco [String](https://docs.microsoft.com/dotnet/api/system.string)

Recognizer identification

startTime [DateTime](https://docs.microsoft.com/dotnet/api/system.datetime)

endTime [DateTime](https://docs.microsoft.com/dotnet/api/system.datetime)

## See Also

#### Reference

[SpeechRecoResult Class](#_2598FDE1_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# SpeechRecoResult.EndTime Property

Time speech ended

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public DateTime EndTime { get; set; } |

|  |
| --- |
| C++ |
| public: property DateTime EndTime {  DateTime get ();  void set (DateTime value); } |

#### Property Value

[DateTime](https://docs.microsoft.com/dotnet/api/system.datetime)

## See Also

#### Reference

[SpeechRecoResult Class](#_2598FDE1_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# SpeechRecoResult.FromReco Property

Identifies the recognizer producing the result

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string FromReco { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ FromReco {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[SpeechRecoResult Class](#_2598FDE1_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# SpeechRecoResult.Results Property

Speech recognition hypothesis

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public List<SpeechRecoItem> Results { get; set; } |

|  |
| --- |
| C++ |
| public: property List<SpeechRecoItem^>^ Results {  List<SpeechRecoItem^>^ get ();  void set (List<SpeechRecoItem^>^ value); } |

#### Property Value

[List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)

([SpeechRecoItem](#_980C2CA5_Topic))

## See Also

#### Reference

[SpeechRecoResult Class](#_2598FDE1_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# SpeechRecoResult.StartTime Property

Time speech started

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public DateTime StartTime { get; set; } |

|  |
| --- |
| C++ |
| public: property DateTime StartTime {  DateTime get ();  void set (DateTime value); } |

#### Property Value

[DateTime](https://docs.microsoft.com/dotnet/api/system.datetime)

## See Also

#### Reference

[SpeechRecoResult Class](#_2598FDE1_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# SpeechRecoResult.AddAlternate Method

Add an alternate to the results

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void AddAlternate(  string alternate,  double likelihood,  double? startSec = null,  double? endSec = null,  string extraRecoInfo = null ) |

|  |
| --- |
| C++ |
| public: void AddAlternate(  String^ alternate,   double likelihood,   Nullable<double> startSec = nullptr,   Nullable<double> endSec = nullptr,   String^ extraRecoInfo = nullptr ) |

#### Parameters

alternate [String](https://docs.microsoft.com/dotnet/api/system.string)

likelihood [Double](https://docs.microsoft.com/dotnet/api/system.double)

startSec [Nullable](https://docs.microsoft.com/dotnet/api/system.nullable-1)([Double](https://docs.microsoft.com/dotnet/api/system.double)) (Optional)

endSec [Nullable](https://docs.microsoft.com/dotnet/api/system.nullable-1)([Double](https://docs.microsoft.com/dotnet/api/system.double)) (Optional)

extraRecoInfo [String](https://docs.microsoft.com/dotnet/api/system.string) (Optional)

## Remarks

If another hypothesis with the same transcription exists, the one with the highest confidence is kept, and a slight bump to the likelihood is applied

## See Also

#### Reference

[SpeechRecoResult Class](#_2598FDE1_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# SpeechRecoResult.Combine Method

Combine results into this instance

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void Combine(  SpeechRecoResult res,  int maxCombinedRecos = -1 ) |

|  |
| --- |
| C++ |
| public: void Combine(  SpeechRecoResult^ res,   int maxCombinedRecos = -1 ) |

#### Parameters

res [SpeechRecoResult](#_2598FDE1_Topic)

maxCombinedRecos [Int32](https://docs.microsoft.com/dotnet/api/system.int32) (Optional)

Max number of alternates to keep; -1 means keep all available

## See Also

#### Reference

[SpeechRecoResult Class](#_2598FDE1_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# Status Enumeration

Status affiliation 2525/APP6 D

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public enum Status |

|  |
| --- |
| C++ |
| public enum class Status |

## Members

|  |  |  |
| --- | --- | --- |
| present | 0 |  |
| anticipated | 1 |  |
| fully\_capable | 2 |  |
| damaged | 3 |  |
| destroyed | 4 |  |
| full | 5 |  |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StatusAlpha Enumeration

Status affiliation 2525/APP6 D

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public enum StatusAlpha |

|  |
| --- |
| C++ |
| public enum class StatusAlpha |

## Members

|  |  |  |
| --- | --- | --- |
| anticipated | 65 |  |
| fully\_capable | 67 |  |
| damaged | 68 |  |
| full | 70 |  |
| present | 80 |  |
| destroyed | 88 |  |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpCommunicationErrorDelegate Delegate

The delegate void that describes the function prototype for STP communication errors

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void StpCommunicationErrorDelegate(  StpCommunicationException stpCommException ) |

|  |
| --- |
| C++ |
| public delegate void StpCommunicationErrorDelegate(  StpCommunicationException^ stpCommException ) |

#### Parameters

stpCommException [StpCommunicationException](#_E2A451B7_Topic)

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpCommunicationException Class

The exception thrown if there is an error connecting to the S2C2 agent system. The inner exception is set to the actual exception (if this was not thrown as the result of parameter validation) that caused the underlying error.

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class StpCommunicationException : Exception |

|  |
| --- |
| C++ |
| public ref class StpCommunicationException : public Exception |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → [Exception](https://docs.microsoft.com/dotnet/api/system.exception) → StpCommunicationException |

## Constructors

|  |  |
| --- | --- |
| [StpCommunicationException](#_8A47A31D_Topic) | Constructor |

## Properties

|  |  |
| --- | --- |
| [Data](https://docs.microsoft.com/dotnet/api/system.exception.data#System_Exception_Data) | Gets a collection of key/value pairs that provide additional user-defined information about the exception. (Inherited from [Exception](https://docs.microsoft.com/dotnet/api/system.exception)) |
| [HelpLink](https://docs.microsoft.com/dotnet/api/system.exception.helplink#System_Exception_HelpLink) | Gets or sets a link to the help file associated with this exception. (Inherited from [Exception](https://docs.microsoft.com/dotnet/api/system.exception)) |
| [HResult](https://docs.microsoft.com/dotnet/api/system.exception.hresult#System_Exception_HResult) | Gets or sets HRESULT, a coded numerical value that is assigned to a specific exception. (Inherited from [Exception](https://docs.microsoft.com/dotnet/api/system.exception)) |
| [InnerException](https://docs.microsoft.com/dotnet/api/system.exception.innerexception#System_Exception_InnerException) | Gets the [Exception](https://docs.microsoft.com/dotnet/api/system.exception) instance that caused the current exception. (Inherited from [Exception](https://docs.microsoft.com/dotnet/api/system.exception)) |
| [Message](https://docs.microsoft.com/dotnet/api/system.exception.message#System_Exception_Message) | Gets a message that describes the current exception. (Inherited from [Exception](https://docs.microsoft.com/dotnet/api/system.exception)) |
| [Source](https://docs.microsoft.com/dotnet/api/system.exception.source#System_Exception_Source) | Gets or sets the name of the application or the object that causes the error. (Inherited from [Exception](https://docs.microsoft.com/dotnet/api/system.exception)) |
| [StackTrace](https://docs.microsoft.com/dotnet/api/system.exception.stacktrace#System_Exception_StackTrace) | Gets a string representation of the immediate frames on the call stack. (Inherited from [Exception](https://docs.microsoft.com/dotnet/api/system.exception)) |
| [TargetSite](https://docs.microsoft.com/dotnet/api/system.exception.targetsite#System_Exception_TargetSite) | Gets the method that throws the current exception. (Inherited from [Exception](https://docs.microsoft.com/dotnet/api/system.exception)) |

## Methods

|  |  |
| --- | --- |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetBaseException](https://docs.microsoft.com/dotnet/api/system.exception.getbaseexception#System_Exception_GetBaseException) | When overridden in a derived class, returns the [Exception](https://docs.microsoft.com/dotnet/api/system.exception) that is the root cause of one or more subsequent exceptions. (Inherited from [Exception](https://docs.microsoft.com/dotnet/api/system.exception)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetObjectData](https://docs.microsoft.com/dotnet/api/system.exception.getobjectdata#System_Exception_GetObjectData_System_Runtime_Serialization_SerializationInfo_System_Runtime_Serialization_StreamingContext_) | When overridden in a derived class, sets the [SerializationInfo](https://docs.microsoft.com/dotnet/api/system.runtime.serialization.serializationinfo) with information about the exception. (Inherited from [Exception](https://docs.microsoft.com/dotnet/api/system.exception)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.exception.gettype#System_Exception_GetType) | Gets the runtime type of the current instance. (Inherited from [Exception](https://docs.microsoft.com/dotnet/api/system.exception)) |
| [ToString](https://docs.microsoft.com/dotnet/api/system.exception.tostring#System_Exception_ToString) | Creates and returns a string representation of the current exception. (Inherited from [Exception](https://docs.microsoft.com/dotnet/api/system.exception)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpCommunicationException Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpCommunicationException(  string message,  Exception inner ) |

|  |
| --- |
| C++ |
| public: StpCommunicationException(  String^ message,   Exception^ inner ) |

#### Parameters

message [String](https://docs.microsoft.com/dotnet/api/system.string)

inner [Exception](https://docs.microsoft.com/dotnet/api/system.exception)

## See Also

#### Reference

[StpCommunicationException Class](#_E2A451B7_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpException Class

The exception thrown if an error occurs as the result of passing in invalid arguments. The inner exception is set to the actual exception (if this was not thrown as the result of parameter validation) that caused the underlying error.

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class StpException : Exception |

|  |
| --- |
| C++ |
| public ref class StpException : public Exception |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → [Exception](https://docs.microsoft.com/dotnet/api/system.exception) → StpException |

## Constructors

|  |  |
| --- | --- |
| [StpException](#_D9703693_Topic) | Constructor |

## Properties

|  |  |
| --- | --- |
| [Data](https://docs.microsoft.com/dotnet/api/system.exception.data#System_Exception_Data) | Gets a collection of key/value pairs that provide additional user-defined information about the exception. (Inherited from [Exception](https://docs.microsoft.com/dotnet/api/system.exception)) |
| [HelpLink](https://docs.microsoft.com/dotnet/api/system.exception.helplink#System_Exception_HelpLink) | Gets or sets a link to the help file associated with this exception. (Inherited from [Exception](https://docs.microsoft.com/dotnet/api/system.exception)) |
| [HResult](https://docs.microsoft.com/dotnet/api/system.exception.hresult#System_Exception_HResult) | Gets or sets HRESULT, a coded numerical value that is assigned to a specific exception. (Inherited from [Exception](https://docs.microsoft.com/dotnet/api/system.exception)) |
| [InnerException](https://docs.microsoft.com/dotnet/api/system.exception.innerexception#System_Exception_InnerException) | Gets the [Exception](https://docs.microsoft.com/dotnet/api/system.exception) instance that caused the current exception. (Inherited from [Exception](https://docs.microsoft.com/dotnet/api/system.exception)) |
| [Message](https://docs.microsoft.com/dotnet/api/system.exception.message#System_Exception_Message) | Gets a message that describes the current exception. (Inherited from [Exception](https://docs.microsoft.com/dotnet/api/system.exception)) |
| [Source](https://docs.microsoft.com/dotnet/api/system.exception.source#System_Exception_Source) | Gets or sets the name of the application or the object that causes the error. (Inherited from [Exception](https://docs.microsoft.com/dotnet/api/system.exception)) |
| [StackTrace](https://docs.microsoft.com/dotnet/api/system.exception.stacktrace#System_Exception_StackTrace) | Gets a string representation of the immediate frames on the call stack. (Inherited from [Exception](https://docs.microsoft.com/dotnet/api/system.exception)) |
| [TargetSite](https://docs.microsoft.com/dotnet/api/system.exception.targetsite#System_Exception_TargetSite) | Gets the method that throws the current exception. (Inherited from [Exception](https://docs.microsoft.com/dotnet/api/system.exception)) |

## Methods

|  |  |
| --- | --- |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetBaseException](https://docs.microsoft.com/dotnet/api/system.exception.getbaseexception#System_Exception_GetBaseException) | When overridden in a derived class, returns the [Exception](https://docs.microsoft.com/dotnet/api/system.exception) that is the root cause of one or more subsequent exceptions. (Inherited from [Exception](https://docs.microsoft.com/dotnet/api/system.exception)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetObjectData](https://docs.microsoft.com/dotnet/api/system.exception.getobjectdata#System_Exception_GetObjectData_System_Runtime_Serialization_SerializationInfo_System_Runtime_Serialization_StreamingContext_) | When overridden in a derived class, sets the [SerializationInfo](https://docs.microsoft.com/dotnet/api/system.runtime.serialization.serializationinfo) with information about the exception. (Inherited from [Exception](https://docs.microsoft.com/dotnet/api/system.exception)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.exception.gettype#System_Exception_GetType) | Gets the runtime type of the current instance. (Inherited from [Exception](https://docs.microsoft.com/dotnet/api/system.exception)) |
| [ToString](https://docs.microsoft.com/dotnet/api/system.exception.tostring#System_Exception_ToString) | Creates and returns a string representation of the current exception. (Inherited from [Exception](https://docs.microsoft.com/dotnet/api/system.exception)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpException Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpException(  string message,  Exception inner ) |

|  |
| --- |
| C++ |
| public: StpException(  String^ message,   Exception^ inner ) |

#### Parameters

message [String](https://docs.microsoft.com/dotnet/api/system.string)

inner [Exception](https://docs.microsoft.com/dotnet/api/system.exception)

## See Also

#### Reference

[StpException Class](#_7159B231_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpInformDelegate Delegate

The delegate void that describes the function prototype for STP Inform events

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void StpInformDelegate(  string stpEvent ) |

|  |
| --- |
| C++ |
| public delegate void StpInformDelegate(  String^ stpEvent ) |

#### Parameters

stpEvent [String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpItem Class

Common STP item root class

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class StpItem : IStpObject, IPrologTerm,   INotifyPropertyChanged |

|  |
| --- |
| C++ |
| public ref class StpItem : IStpObject,   IPrologTerm, INotifyPropertyChanged |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → StpItem |
| **Derived** | [StpSDK.StpSymbol](#_26F34E3C_Topic) [StpSDK.StpTask](#_DDBE5955_Topic) |
| **Implements** | **IPrologTerm**, [IStpObject](#_1E1A3296_Topic), [INotifyPropertyChanged](https://learn.microsoft.com/dotnet/api/system.componentmodel.inotifypropertychanged) |

## Constructors

|  |  |
| --- | --- |
| [StpItem()](#_D24BAD89_Topic) | Constructor |
| [StpItem(String)](#_7BF305E1_Topic) | Construct and initialize type |

## Properties

|  |  |
| --- | --- |
| [Alternates](#_8C14CBDA_Topic) | Alternate interpretations for this symbol |
| [Confidence](#_5BB39197_Topic) | Confidence of the interpretation of the user's action |
| [CreatorRole](#_FA816E11_Topic) | Current role performing the edit |
| [Description](#_242CD2F7_Topic) | Item description |
| [FullDescription](#_88901A17_Topic) | Detailed item description |
| [Order](#_503DA165_Topic) | Alternate index: 0 is the most likely, followed by 1,2,... |
| [ParentCoa](#_D4163F0F_Topic) | Unique id of COA containing symbol |
| [Poid](#_3C8CBFB_Topic) | Unique identifier |
| [SymbolId](#_CFF9A56E_Topic) | Symbol identifier, such as a 2525/APP6 SIDC or similar code that identifies the nature of the symbol |
| [Type](#_99815743_Topic) | Object class, for example in a military domain: "unit", "mootw", "tg", "task", "task\_org\_unit", "task\_org\_relationship", "edit" |

## Methods

|  |  |
| --- | --- |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## Events

|  |  |
| --- | --- |
| [PropertyChanged](#_EB032560_Topic) | Event Fody will associate injected code with |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpItem Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpItem() |

|  |
| --- |
| C++ |
| public: StpItem() |

## See Also

#### Reference

[StpItem Class](#_29D5C3C1_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpItem(String) Constructor

Construct and initialize type

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpItem(  string fsType ) |

|  |
| --- |
| C++ |
| public: StpItem(  String^ fsType ) |

#### Parameters

fsType [String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpItem Class](#_29D5C3C1_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpItem.Alternates Property

Alternate interpretations for this symbol

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public List<StpItem> Alternates { get; set; } |

|  |
| --- |
| C++ |
| public: property List<StpItem^>^ Alternates {  List<StpItem^>^ get ();  void set (List<StpItem^>^ value); } |

#### Property Value

[List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)

([StpItem](#_29D5C3C1_Topic))

## See Also

#### Reference

[StpItem Class](#_29D5C3C1_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpItem.Confidence Property

Confidence of the interpretation of the user's action

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public double Confidence { get; set; } |

|  |
| --- |
| C++ |
| public: property double Confidence {  double get ();  void set (double value); } |

#### Property Value

[Double](https://docs.microsoft.com/dotnet/api/system.double)

## See Also

#### Reference

[StpItem Class](#_29D5C3C1_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpItem.CreatorRole Property

Current role performing the edit

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string CreatorRole { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ CreatorRole {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpItem Class](#_29D5C3C1_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpItem.Description Property

Item description

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public virtual string Description { get; set; } |

|  |
| --- |
| C++ |
| public: virtual property String^ Description {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

#### Implements

[IStpObject.Description](#_80BF6817_Topic)

## See Also

#### Reference

[StpItem Class](#_29D5C3C1_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpItem.FullDescription Property

Detailed item description

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public virtual string FullDescription { get; } |

|  |
| --- |
| C++ |
| public: virtual property String^ FullDescription {  String^ get (); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpItem Class](#_29D5C3C1_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpItem.Order Property

Alternate index: 0 is the most likely, followed by 1,2,...

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public int Order { get; set; } |

|  |
| --- |
| C++ |
| public: virtual property int Order {  int get () sealed;  void set (int value) sealed; } |

#### Property Value

[Int32](https://docs.microsoft.com/dotnet/api/system.int32)

## See Also

#### Reference

[StpItem Class](#_29D5C3C1_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpItem.ParentCoa Property

Unique id of COA containing symbol

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string ParentCoa { get; set; } |

|  |
| --- |
| C++ |
| public: virtual property String^ ParentCoa {  String^ get () sealed;  void set (String^ value) sealed; } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpItem Class](#_29D5C3C1_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpItem.Poid Property

Unique identifier

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Poid { get; set; } |

|  |
| --- |
| C++ |
| public: virtual property String^ Poid {  String^ get () sealed;  void set (String^ value) sealed; } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

#### Implements

[IStpObject.Poid](#_99E7261A_Topic)

## See Also

#### Reference

[StpItem Class](#_29D5C3C1_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpItem.SymbolId Property

Symbol identifier, such as a 2525/APP6 SIDC or similar code that identifies the nature of the symbol

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public virtual string SymbolId { get; set; } |

|  |
| --- |
| C++ |
| public: virtual property String^ SymbolId {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpItem Class](#_29D5C3C1_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpItem.Type Property

Object class, for example in a military domain: "unit", "mootw", "tg", "task", "task\_org\_unit", "task\_org\_relationship", "edit"

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Type { get; set; } |

|  |
| --- |
| C++ |
| public: virtual property String^ Type {  String^ get () sealed;  void set (String^ value) sealed; } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

#### Implements

[IStpObject.Type](#_CA666915_Topic)

## See Also

#### Reference

[StpItem Class](#_29D5C3C1_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpItem.PropertyChanged Event

Event Fody will associate injected code with

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event PropertyChangedEventHandler PropertyChanged |

|  |
| --- |
| C++ |
| public: virtual event PropertyChangedEventHandler^ PropertyChanged {  void add (PropertyChangedEventHandler^ value);  void remove (PropertyChangedEventHandler^ value); } |

#### Value

[PropertyChangedEventHandler](https://learn.microsoft.com/dotnet/api/system.componentmodel.propertychangedeventhandler)

#### Implements

[INotifyPropertyChanged.PropertyChanged](https://learn.microsoft.com/dotnet/api/system.componentmodel.inotifypropertychanged.propertychanged)

## See Also

#### Reference

[StpItem Class](#_29D5C3C1_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpNode<T> Class

Stp item node

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class StpNode<T> where T : StpItem, INotifyPropertyChanged |

|  |
| --- |
| C++ |
| generic<typename T> where T : StpItem, INotifyPropertyChanged public ref class StpNode |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → StpNode(T) |

#### Type Parameters

T

## Constructors

|  |  |
| --- | --- |
| [StpNode(T)()](#_E9C170B4_Topic) | Constructor |
| [StpNode(T)(T, String, String, String)](#_EF68B2CC_Topic) | Constructor |

## Properties

|  |  |
| --- | --- |
| [ChildrenCount](#_BB401442_Topic) | Optional nNumber of children below this node |
| [Depth](#_88047F7A_Topic) | Optional node depths in the a tree - roots are 0 |
| [Description](#_4AC2793C_Topic) | Node item's description |
| [Item](#_F4051607_Topic) | Node's item |
| [Key](#_5C0ABEB7_Topic) | Node's key - can be a composition of item poids, in case multiple items with the same name are represented by a single node |
| [ParentKey](#_E99F46B9_Topic) | Parent node key |

## Methods

|  |  |
| --- | --- |
| [Equals](#_EF0A6487_Topic) | Equality comparer (Overrides [Object.Equals(Object)](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_)) |
| [GetHashCode](#_8508B90C_Topic) | Hash code (Overrides [Object.GetHashCode()](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## Events

|  |  |
| --- | --- |
| [PropertyChanged](#_888C8383_Topic) | Event Fody will associate injected code with |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpNode<T> Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpNode() |

|  |
| --- |
| C++ |
| public: StpNode() |

## See Also

#### Reference

[StpNode(T) Class](#_7DE19A2D_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpNode<T>(T, String, String, String) Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpNode(  T item,  string uniqueKey,  string parentId,  string description = null ) |

|  |
| --- |
| C++ |
| public: StpNode(  T item,   String^ uniqueKey,   String^ parentId,   String^ description = nullptr ) |

#### Parameters

item [T](#_7DE19A2D_Topic)

uniqueKey [String](https://docs.microsoft.com/dotnet/api/system.string)

parentId [String](https://docs.microsoft.com/dotnet/api/system.string)

description [String](https://docs.microsoft.com/dotnet/api/system.string) (Optional)

Optional description - defaults to Item.Description

## See Also

#### Reference

[StpNode(T) Class](#_7DE19A2D_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpNode<T>.ChildrenCount Property

Optional nNumber of children below this node

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public int ChildrenCount { get; set; } |

|  |
| --- |
| C++ |
| public: property int ChildrenCount {  int get ();  void set (int value); } |

#### Property Value

[Int32](https://docs.microsoft.com/dotnet/api/system.int32)

## See Also

#### Reference

[StpNode(T) Class](#_7DE19A2D_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpNode<T>.Depth Property

Optional node depths in the a tree - roots are 0

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public int Depth { get; set; } |

|  |
| --- |
| C++ |
| public: property int Depth {  int get ();  void set (int value); } |

#### Property Value

[Int32](https://docs.microsoft.com/dotnet/api/system.int32)

## See Also

#### Reference

[StpNode(T) Class](#_7DE19A2D_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpNode<T>.Description Property

Node item's description

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Description { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Description {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpNode(T) Class](#_7DE19A2D_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpNode<T>.Item Property

Node's item

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public T Item { get; set; } |

|  |
| --- |
| C++ |
| public: property T Item {  T get ();  void set (T value); } |

#### Property Value

[T](#_7DE19A2D_Topic)

## See Also

#### Reference

[StpNode(T) Class](#_7DE19A2D_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpNode<T>.Key Property

Node's key - can be a composition of item poids, in case multiple items with the same name are represented by a single node

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Key { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Key {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpNode(T) Class](#_7DE19A2D_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpNode<T>.ParentKey Property

Parent node key

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string ParentKey { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ ParentKey {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpNode(T) Class](#_7DE19A2D_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpNode<T>.Equals Method

Equality comparer

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public override bool Equals(  Object obj ) |

|  |
| --- |
| C++ |
| public: virtual bool Equals(  Object^ obj ) override |

#### Parameters

obj [Object](https://docs.microsoft.com/dotnet/api/system.object)

#### Return Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpNode(T) Class](#_7DE19A2D_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpNode<T>.GetHashCode Method

Hash code

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public override int GetHashCode() |

|  |
| --- |
| C++ |
| public: virtual int GetHashCode() override |

#### Return Value

[Int32](https://docs.microsoft.com/dotnet/api/system.int32)

## See Also

#### Reference

[StpNode(T) Class](#_7DE19A2D_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpNode<T>.PropertyChanged Event

Event Fody will associate injected code with

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event PropertyChangedEventHandler PropertyChanged |

|  |
| --- |
| C++ |
| public:  event PropertyChangedEventHandler^ PropertyChanged {  void add (PropertyChangedEventHandler^ value);  void remove (PropertyChangedEventHandler^ value); } |

#### Value

[PropertyChangedEventHandler](https://learn.microsoft.com/dotnet/api/system.componentmodel.propertychangedeventhandler)

## See Also

#### Reference

[StpNode(T) Class](#_7DE19A2D_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpOaaConnector Class

Communication with STP's native pubsub subsystem (the OAA-based Facilitator)

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class StpOaaConnector : Agent,   IStpConnector |

|  |
| --- |
| C++ |
| public ref class StpOaaConnector : public Agent,   IStpConnector |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → **Agent** → StpOaaConnector |
| **Implements** | [IStpConnector](#_EE268E8_Topic) |

## Constructors

|  |  |
| --- | --- |
| [StpOaaConnector(ILogger)](#_976B9BBC_Topic) | Connector construction - defaults to localhost:9595 |
| [StpOaaConnector(ILogger, String, Int32)](#_60BCF722_Topic) | Construct a connector to the OAA pub/sub system |

## Properties

|  |  |
| --- | --- |
| **Auth** | (Inherited from **Agent**) |
| **BaseName** | (Inherited from **Agent**) |
| **Connected** | (Inherited from **Agent**) |
| **Host** | (Inherited from **Agent**) |
| **Name** | (Inherited from **Agent**) |
| **Port** | (Inherited from **Agent**) |

## Methods

|  |  |
| --- | --- |
| [Connect](#_79D39749_Topic) | Establish a connection with the STP engine |
| [Disconnect](#_65522180_Topic) | Disconnect from the STP runtime |
| **Dispose** | (Inherited from **Agent**) |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| **Inform** | (Inherited from **Agent**) |
| **LogToFacilitator(String, LogLevel)** | (Inherited from **Agent**) |
| **LogToFacilitator(String, TraceLevel)** | (Inherited from **Agent**) **Obsolete.** |
| [LogToStp](#_8C3527C2_Topic) | Add entry to the central STP log - called by the logging infrastructure |
| [Register](#_B3CE80F1_Topic) | Register service with the STP pubsub (Facilitator) |
| **SendStatusMessage** | (Inherited from **Agent**) |
| [SetAgentName](#_CC536346_Topic) | Establish the name of this component within STP |
| [StpBatchRequestAsync](#_1186954A_Topic) | Invoke some service with an RPC-like call, waiting for side effects to have been processed |
| [StpInform](#_1623BF30_Topic) | Post message to STP |
| [StpRequestAsync](#_EC033E41_Topic) | Post message and await response from STP (remote RPC style) |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## Events

|  |  |
| --- | --- |
| [OnStpCommunicationError](#_11FB382B_Topic) | Event raised when there is an error communicating with STP |
| [OnStpInform](#_7C3EF3E5_Topic) | An event that you subscribe to in order to receive Symbol recognition events. |
| [OnStpRequest](#_C8BD7751_Topic) | An event that you subscribe to in order to receive Symbol recognition events. |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpOaaConnector(ILogger) Constructor

Connector construction - defaults to localhost:9595

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpOaaConnector(  ILogger logger ) |

|  |
| --- |
| C++ |
| public: StpOaaConnector(  ILogger^ logger ) |

#### Parameters

logger [ILogger](https://docs.microsoft.com/dotnet/api/microsoft.extensions.logging.ilogger)

## See Also

#### Reference

[StpOaaConnector Class](#_30102A37_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpOaaConnector(ILogger, String, Int32) Constructor

Construct a connector to the OAA pub/sub system

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpOaaConnector(  ILogger logger,  string stpHost,  int stpPort ) |

|  |
| --- |
| C++ |
| public: StpOaaConnector(  ILogger^ logger,   String^ stpHost,   int stpPort ) |

#### Parameters

logger [ILogger](https://docs.microsoft.com/dotnet/api/microsoft.extensions.logging.ilogger)

stpHost [String](https://docs.microsoft.com/dotnet/api/system.string)

stpPort [Int32](https://docs.microsoft.com/dotnet/api/system.int32)

## See Also

#### Reference

[StpOaaConnector Class](#_30102A37_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpOaaConnector.Connect Method

Establish a connection with the STP engine

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public bool Connect(  bool exitAppIfNoConnection = true,  int secondsToRetry = 0 ) |

|  |
| --- |
| C++ |
| public: virtual bool Connect(  bool exitAppIfNoConnection = true,   int secondsToRetry = 0 ) sealed |

#### Parameters

exitAppIfNoConnection [Boolean](https://docs.microsoft.com/dotnet/api/system.boolean) (Optional)

Forces the application to exit in case there is a failure in communication with STP

secondsToRetry [Int32](https://docs.microsoft.com/dotnet/api/system.int32) (Optional)

Optional number of seconds to wait for agent connection to succeed.

#### Return Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

True if connected successfully, false otherwise

#### Implements

[IStpConnector.Connect(Boolean, Int32)](#_B88B8FF3_Topic)

## See Also

#### Reference

[StpOaaConnector Class](#_30102A37_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpOaaConnector.Disconnect Method

Disconnect from the STP runtime

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void Disconnect() |

|  |
| --- |
| C++ |
| public: virtual void Disconnect() sealed |

#### Implements

[IStpConnector.Disconnect()](#_5BADABCC_Topic)

## See Also

#### Reference

[StpOaaConnector Class](#_30102A37_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpOaaConnector.LogToStp Method

Add entry to the central STP log - called by the logging infrastructure

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void LogToStp(  string message,  TraceLevel level ) |

|  |
| --- |
| C++ |
| public: virtual void LogToStp(  String^ message,   TraceLevel level ) sealed |

#### Parameters

message [String](https://docs.microsoft.com/dotnet/api/system.string)

level [TraceLevel](https://docs.microsoft.com/dotnet/api/system.diagnostics.tracelevel)

#### Implements

[IStpConnector.LogToStp(String, TraceLevel)](#_34F8E78D_Topic)

## See Also

#### Reference

[StpOaaConnector Class](#_30102A37_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpOaaConnector.Register Method

Register service with the STP pubsub (Facilitator)

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public bool Register(  string agentName,  string solvables,  string machineId = null,  string session = null ) |

|  |
| --- |
| C++ |
| public: virtual bool Register(  String^ agentName,   String^ solvables,   String^ machineId = nullptr,   String^ session = nullptr ) sealed |

#### Parameters

agentName [String](https://docs.microsoft.com/dotnet/api/system.string)

Identification of the application that is joining STP

solvables [String](https://docs.microsoft.com/dotnet/api/system.string)

machineId [String](https://docs.microsoft.com/dotnet/api/system.string) (Optional)

Optional string identifying the instance being registered. The default is a unique id of the machine where the invoking service is running

session [String](https://docs.microsoft.com/dotnet/api/system.string) (Optional)

Optional tag for collaborative sessions - defaults to a unique client name

#### Return Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

True if registration was successful

#### Implements

[IStpConnector.Register(String, String, String, String)](#_E1453B8E_Topic)

## See Also

#### Reference

[StpOaaConnector Class](#_30102A37_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpOaaConnector.SetAgentName Method

Establish the name of this component within STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void SetAgentName(  string agentName,  string machineId,  string session ) |

|  |
| --- |
| C++ |
| public: virtual void SetAgentName(  String^ agentName,   String^ machineId,   String^ session ) sealed |

#### Parameters

agentName [String](https://docs.microsoft.com/dotnet/api/system.string)

machineId [String](https://docs.microsoft.com/dotnet/api/system.string)

session [String](https://docs.microsoft.com/dotnet/api/system.string)

#### Implements

[IStpConnector.SetAgentName(String, String, String)](#_D51C68B8_Topic)

## See Also

#### Reference

[StpOaaConnector Class](#_30102A37_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpOaaConnector.StpBatchRequestAsync Method

Invoke some service with an RPC-like call, waiting for side effects to have been processed

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Task<List<string>> StpBatchRequestAsync(  Func<CancellationToken, Task<List<string>>> requestOp,  CancellationToken cancellationToken ) |

|  |
| --- |
| C++ |
| public: virtual Task<List<String^>^>^ StpBatchRequestAsync(  Func<CancellationToken, Task<List<String^>^>^>^ requestOp,   CancellationToken cancellationToken ) sealed |

#### Parameters

requestOp [Func](https://docs.microsoft.com/dotnet/api/system.func-2)([CancellationToken](https://docs.microsoft.com/dotnet/api/system.threading.cancellationtoken), [Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task-1)([List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([String](https://docs.microsoft.com/dotnet/api/system.string))))

cancellationToken [CancellationToken](https://docs.microsoft.com/dotnet/api/system.threading.cancellationtoken)

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task-1)([List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([String](https://docs.microsoft.com/dotnet/api/system.string)))

#### Implements

[IStpConnector.StpBatchRequestAsync(Func(CancellationToken, Task(List(String))), CancellationToken)](#_ACC8CAD_Topic)

## Remarks

This method is useful in circumstances in which a request such as a scenario load causes a potentially large number of additional actions to be queued, for example the creation of multiple new symbols. A regular StpRequestAsyc returns right after the main request has been satisfied, but before all the side-effect actions have been completed, which may take some time.

## See Also

#### Reference

[StpOaaConnector Class](#_30102A37_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpOaaConnector.StpInform Method

Post message to STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public bool StpInform(  string stpEvent,  string parmList = null ) |

|  |
| --- |
| C++ |
| public: virtual bool StpInform(  String^ stpEvent,   String^ parmList = nullptr ) sealed |

#### Parameters

stpEvent [String](https://docs.microsoft.com/dotnet/api/system.string)

parmList [String](https://docs.microsoft.com/dotnet/api/system.string) (Optional)

#### Return Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

#### Implements

[IStpConnector.StpInform(String, String)](#_C4992EA6_Topic)

## See Also

#### Reference

[StpOaaConnector Class](#_30102A37_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpOaaConnector.StpRequestAsync Method

Post message and await response from STP (remote RPC style)

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Task<List<string>> StpRequestAsync(  string stpEvent,  CancellationToken cancellationToken = default ) |

|  |
| --- |
| C++ |
| public: virtual Task<List<String^>^>^ StpRequestAsync(  String^ stpEvent,   CancellationToken cancellationToken = CancellationToken() ) sealed |

#### Parameters

stpEvent [String](https://docs.microsoft.com/dotnet/api/system.string)

cancellationToken [CancellationToken](https://docs.microsoft.com/dotnet/api/system.threading.cancellationtoken) (Optional)

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task-1)([List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([String](https://docs.microsoft.com/dotnet/api/system.string)))

#### Implements

[IStpConnector.StpRequestAsync(String, CancellationToken)](#_6FA6530B_Topic)

## See Also

#### Reference

[StpOaaConnector Class](#_30102A37_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpOaaConnector.OnStpCommunicationError Event

Event raised when there is an error communicating with STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpCommunicationErrorDelegate OnStpCommunicationError |

|  |
| --- |
| C++ |
| public: virtual event StpCommunicationErrorDelegate^ OnStpCommunicationError {  void add (StpCommunicationErrorDelegate^ value);  void remove (StpCommunicationErrorDelegate^ value); } |

#### Value

[StpCommunicationErrorDelegate](#_B30F3713_Topic)

#### Implements

[IStpConnector.OnStpCommunicationError](#_A7ADDB4_Topic)

## See Also

#### Reference

[StpOaaConnector Class](#_30102A37_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpOaaConnector.OnStpInform Event

An event that you subscribe to in order to receive Symbol recognition events.

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpInformDelegate OnStpInform |

|  |
| --- |
| C++ |
| public: virtual event StpInformDelegate^ OnStpInform {  void add (StpInformDelegate^ value);  void remove (StpInformDelegate^ value); } |

#### Value

[StpInformDelegate](#_DB7DB5AB_Topic)

#### Implements

[IStpConnector.OnStpInform](#_A7336E9E_Topic)

## See Also

#### Reference

[StpOaaConnector Class](#_30102A37_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpOaaConnector.OnStpRequest Event

An event that you subscribe to in order to receive Symbol recognition events.

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRequestDelegate OnStpRequest |

|  |
| --- |
| C++ |
| public: virtual event StpRequestDelegate^ OnStpRequest {  void add (StpRequestDelegate^ value);  void remove (StpRequestDelegate^ value); } |

#### Value

[StpRequestDelegate](#_8FF7D29A_Topic)

#### Implements

[IStpConnector.OnStpRequest](#_33561D60_Topic)

## See Also

#### Reference

[StpOaaConnector Class](#_30102A37_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer Class

Commands and events to interact with Sketch-Thru-Plan (STP)

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class StpRecognizer : IDisposable |

|  |
| --- |
| C++ |
| public ref class StpRecognizer : IDisposable |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → StpRecognizer |
| **Implements** | [IDisposable](https://learn.microsoft.com/dotnet/api/system.idisposable) |

## Remarks

Represents an abstracted connection to the STP system primarily for the purpose of sending ink and speech, and receiving recognition messages in the military domain

## Constructors

|  |  |
| --- | --- |
| [StpRecognizer](#_C3066FC2_Topic) | Constructs STP SDK object |

## Properties

|  |  |
| --- | --- |
| [IsConnected](#_46E38DB4_Topic) | State of the cOnnection to the STP engine |
| [JMSSVGPath](#_11D273A5_Topic) | Path to the Joint Military Symbology Library SVG metadata |
| [WhenCoaSwitched](#_3B363C0C_Topic) | Event raised when a COA is added by STP |
| [WhenConnectionError](#_52DF6047_Topic) | Observable that emits when STP connection error occur |
| [WhenListeningStateChanged](#_A6695AD9_Topic) | Observable that emits when the audio capture state changes (starts/stops listening) |
| [WhenMapOperation](#_8D3C8678_Topic) | Observable that emits when a map Operation (zoom,pan,...) is requested by STP |
| [WhenPenDown](#_C898A7F4_Topic) | Observable that emits when a pen down event is received by STP |
| [WhenPenUp](#_3FC98B6B_Topic) | Observable that emits when a pen down event is received by STP |
| [WhenRoleSwitched](#_2E29F704_Topic) | Observable that emits when a Role switch is requested by STP |
| [WhenShutingdown](#_68E98C92_Topic) | Observable that emits when STP is shutting down - clients should consider if they should shutdown as well, or otherwise change state to indicate STP is no longer active |
| [WhenSketchIntegrated](#_F6401845_Topic) | Observable that emits when ink can be removed from STP (has been processed) |
| [WhenSketchRecognized](#_69B380FC_Topic) | Observable that emits when Sketch recognition results are made available by STP |
| [WhenSpeechRecognized](#_F014D97C_Topic) | Observable that emits when speech recognition results are made available by STP |
| [WhenStpMessage](#_8028C998_Topic) | Observable that emits when STP-generated messages are received |
| [WhenSymbolEdit](#_A9F8F034_Topic) | Observable that emits when a symbol edit Operation (move, delete,...) is requested by STP |
| [WhenSymbolReport](#_ED059535_Topic) | Event raised when a Report is received that updates a symbol position or health |

## Methods

|  |  |
| --- | --- |
| [AddSymbol](#_E8D9D151_Topic) | Command the creation of a new STP symbol. STP will respond with an object creation event |
| [AddTask](#_FB5045D8_Topic) | Command the STP runtime to add a task. STP will respond with an object updated event |
| [AddTaskOrgRelationship](#_89F19102_Topic) | Command the creation of a new STP Task Org relationship. STP will respond with an object creation event |
| [AddTaskOrgUnit](#_8B0B8625_Topic) | Command the creation of a new STP Task Org unit. STP will respond with an object creation event |
| [AdvertiseViewport](#_4991E75A_Topic) | Advertise the dimensions of an updated Viewport |
| [ChangeTimeOut](#_A2EADE76_Topic) | Change the sketch segmentation timeout to the given time in seconds |
| [ChooseAlternate](#_A11394E8_Topic) | Pick an alternate recognition for a symbol/task. The STP runtime responds with an object chosen notification |
| [ConfirmTask](#_642FDE2C_Topic) | Mark a task as completed. STP will respond with an object updated event |
| [Connect](#_BFE4ED9E_Topic) | Connect to the STP runtime |
| [ConnectAndRegister](#_9992AF7A_Topic) | Connect to the STP runtime and register the service with STP, establishing name and events/messages subscription |
| [ConvertToTranscription](#_BA1FEFD_Topic) | Convert alphabetic, numerical typed info to transcription-style text, e.g. "10" becomes "ten", "a" becomes "alpha" |
| [CreateCoaAsync](#_73EEE749_Topic) | Create a new COA |
| [CreateNewScenarioAsync](#_C6C16751_Topic) | Create and load a new scenario, replacing any previous content that might have been loaded into STP |
| [CreateSymbolService](#_DE933967_Topic) | Symbol Service factory |
| [CreateTaskOrgService](#_31D2BCE7_Topic) | Symbol Service factory |
| [CreateTaskService](#_9D7CF7F_Topic) | Task Service factory |
| [DeleteSymbol](#_86BF9A0D_Topic) | Command the STP runtime to delete a symbol/task. STP will respond with an object updated event |
| [DeleteTask](#_B63C9C83_Topic) | Command the STP runtime to delete a task. STP will respond with an object updated event |
| [DeleteTaskOrgRelationship](#_68AF5A9E_Topic) | Command the STP runtime to delete a Task Org relationship. STP will respond with an object updated event |
| [DeleteTaskOrgUnit](#_95548607_Topic) | Command the STP runtime to delete a Task Org Unit. STP will respond with an object updated event |
| [Disconnect](#_F0B1E822_Topic) | Disconnect from the STP runtime |
| [Dispose](#_1A2DD0FB_Topic) | Dispose |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ExportCoaAsync](#_83BD6267_Topic) | Cause an export\_coa message to be propagated. |
| [GetActiveScenarioDescriptionAsync](#_C31F069A_Topic) | Get currently defined planning scenario |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetScenarioContentAsync](#_B9561E66_Topic) | Get the current scenario content as a multiline string ready to be persisted |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [HasActiveScenarioAsync](#_5B6F2FE5_Topic) | Checks STP for a loaded scenario |
| [ImportC2SIMDataAsync](#_5542A552_Topic) | Add consent from C2SIM Initialization and Order files |
| [ImportSTPDataAsync](#_4311440C_Topic) | Import STP native content into the current scenario |
| [JoinScenarioSessionAsync](#_C0423878_Topic) | Load all current STP objects into a project - this emulates receiving the STP events to create objects |
| [LoadNewScenarioAsync](#_D6D0F933_Topic) | Load a new scenario, replacing any previous content that might have been loaded into STP |
| [PushCoaAsync](#_7A9F6858_Topic) | Cause an push\_coa\_to\_server message to be propagated. |
| [RecognizeNow](#_73AE145D_Topic) | Force the system to perform a recognition on any strokes sent without waiting for the segmentation timeout |
| [Register(Auth, List(String))](#_6076CDEC_Topic) | Register service with STP, establishing name and events/messages subscription |
| [Register(String, String, String)](#_9D6FF40E_Topic) | Register service with STP, establishing name and events/messages subscription |
| [RegisterEvents](#_C6192337_Topic) | Register service with STP, establishing name and events/messages subscription |
| [RequestActiveCoasAsync](#_87E4CA1_Topic) | Get list of currently defined COAs |
| [RequestAllPoidObjectsAsync](#_E09B83CA_Topic) | Get a list of all STP entities currently defined, including symbols, tasks, TO elements, etc |
| [RequestPoidObjectAsync](#_9D9A3EC9_Topic) | Get STP entities (symbol, task, TO element, etc) with a specific id (poid) |
| [ResetComponentStateAsync](#_92B9B29_Topic) | Clear this component's state - back to defaults |
| [ResetStpScenarioAsync](#_1DCBE33E_Topic) | Clear STP's scenario data |
| [SendAudioCaptureState](#_5768A631_Topic) | Send state of the audio capture device - listening or not |
| [SendInk](#_98AC7F4B_Topic) | Sends sketch ink from your map to STP |
| [SendPenDown](#_CA3107A3_Topic) | Send a pen down message |
| [SendSimulatedSpeechRecognition](#_7F6F56BC_Topic) | Send a (typed in) string of text that the system will treat as if it came from speech recognition |
| [SendSpeechRecognition](#_AEE3033E_Topic) | Send transcribed speech results, as obtained by a speech recognizer |
| [SetSpeechListening](#_F0BC7AE9_Topic) | Set the listening state of the speech recognizer. |
| [Stop](#_7A4AD683_Topic) | Stop STP recognition |
| [SwitchRoleAndCoa](#_3105123E_Topic) | Switch to a COA / Role pairing that will be used as the default henceforth |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [UndoLastOp](#_1D02D6FD_Topic) | Undo the last operation performed on an object with a given poid |
| [UpdateSymbol](#_B12642BA_Topic) | Command the update of an STP symbol. STP will respond with an object updated event |
| [UpdateTask(String, StpTask)](#_19342093_Topic) | Command the STP runtime to update a task. STP will respond with an object updated event |
| [UpdateTask(String, List(StpTask))](#_FC92EE04_Topic) | Command the STP runtime to update a task. STP will respond with an object updated event |
| [UpdateTaskOrgRelationship](#_9065CF9C_Topic) | Command the update of an STP Task Org relationship. STP will respond with an object updated event |
| [UpdateTaskOrgUnit](#_FE1BC443_Topic) | Command the update of an STP Task Org unit. STP will respond with an object updated event |

## Events

|  |  |
| --- | --- |
| [OnCoaSwitched](#_7C0C14DA_Topic) | Event raised when a COA switch is requested by STP |
| [OnConnectionError](#_4F130A80_Topic) | Event raised when STP connection error occur |
| [OnListeningStateChanged](#_E88DA4A0_Topic) | Event raised when the audio capture state changes (starts/stops listening) |
| [OnMapOperation](#_8A9FB3D8_Topic) | Event raised when a map Operation (zoom,pan,...) is requested by STP |
| [OnPenDown](#_30A41DA4_Topic) | Event raised when a pen down event is received by STP |
| [OnPenUp](#_82652A25_Topic) | Event raised when a pen up event is received by STP |
| [OnRoleSwitched](#_ADD32A79_Topic) | Event raised when a Role switch is requested by STP |
| [OnShutdown](#_E1A8A6B5_Topic) | Event raised when STP is shutting down - clients should consider if they should shutdown as well, or otherwise change state to indicate STP is no longer active |
| [OnSketchIntegrated](#_1D18FC97_Topic) | Event raised when ink can be removed from STP (has been processed) |
| [OnSketchRecognized](#_2E3660BA_Topic) | Event raised when ink can be removed from STP (has been processed) |
| [OnSpeechRecognized](#_7B6CB531_Topic) | Event raised when speech recognition results are made available by STP |
| [OnStpMessage](#_5EB8AD7_Topic) | Event raised when STP-generated messages are received |
| [OnSymbolAdded](#_D46A9A4E_Topic) | Event raised when a symbol is added by STP |
| [OnSymbolDeleted](#_3BA2790E_Topic) | Event raised when a symbol is deleted by STP |
| [OnSymbolEdited](#_87610BC3_Topic) | Event raised when a symbol edit Operation (move, delete,...) is requested by STP |
| [OnSymbolModified](#_6AC1BE89_Topic) | Event raised when a symbol is modified by STP |
| [OnSymbolReport](#_2037F944_Topic) | Event raised when a Report is received that updates a symbol position or health |
| [OnTaskAdded](#_4BDD25FC_Topic) | Event raised when a task is recognized by STP |
| [OnTaskDeleted](#_7A04F786_Topic) | Event raised when a task is deleted by STP |
| [OnTaskModified](#_87E7E931_Topic) | Event raised when a task is modified by STP |
| [OnTaskOrgRelationshipAdded](#_6A9FC707_Topic) | Event raised when a task org unit is recognized by STP |
| [OnTaskOrgRelationshipDeleted](#_8299D1A3_Topic) | Event raised when a task org unit is deleted by STP |
| [OnTaskOrgRelationshipModified](#_B1CA0DCD_Topic) | Event raised when a task org unit is modified by STP |
| [OnTaskOrgUnitAdded](#_4599A5DA_Topic) | Event raised when a task org unit is recognized by STP |
| [OnTaskOrgUnitDeleted](#_234F7805_Topic) | Event raised when a task org unit is deleted by STP |
| [OnTaskOrgUnitModified](#_CBE92F58_Topic) | Event raised when a task org unit is modified by STP |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer Constructor

Constructs STP SDK object

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpRecognizer(  IStpConnector stpConnector ) |

|  |
| --- |
| C++ |
| public: StpRecognizer(  IStpConnector^ stpConnector ) |

#### Parameters

stpConnector [IStpConnector](#_EE268E8_Topic)

STP communication object using some specific protocol

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.IsConnected Property

State of the cOnnection to the STP engine

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public bool IsConnected { get; } |

|  |
| --- |
| C++ |
| public: property bool IsConnected {  bool get (); } |

#### Property Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.JMSSVGPath Property

Path to the Joint Military Symbology Library SVG metadata

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public static string JMSSVGPath { get; set; } |

|  |
| --- |
| C++ |
| public: static property String^ JMSSVGPath {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.WhenCoaSwitched Property

Event raised when a COA is added by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public IObservable<StpRecognizer.CoaSwitchedEventArgs> WhenCoaSwitched { get; } |

|  |
| --- |
| C++ |
| public: property IObservable<StpRecognizer.CoaSwitchedEventArgs^>^ WhenCoaSwitched {  IObservable<StpRecognizer.CoaSwitchedEventArgs^>^ get (); } |

#### Property Value

[IObservable](https://learn.microsoft.com/dotnet/api/system.iobservable-1)

([StpRecognizer.CoaSwitchedEventArgs](#_976C653F_Topic))

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.WhenConnectionError Property

Observable that emits when STP connection error occur

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public IObservable<StpRecognizer.StpConnectionErrorEventArgs> WhenConnectionError { get; } |

|  |
| --- |
| C++ |
| public: property IObservable<StpRecognizer.StpConnectionErrorEventArgs^>^ WhenConnectionError {  IObservable<StpRecognizer.StpConnectionErrorEventArgs^>^ get (); } |

#### Property Value

[IObservable](https://learn.microsoft.com/dotnet/api/system.iobservable-1)

([StpRecognizer.StpConnectionErrorEventArgs](#_F8D096BA_Topic))

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.WhenListeningStateChanged Property

Observable that emits when the audio capture state changes (starts/stops listening)

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public IObservable<StpRecognizer.ListeningStateChangedEventArgs> WhenListeningStateChanged { get; } |

|  |
| --- |
| C++ |
| public: property IObservable<StpRecognizer.ListeningStateChangedEventArgs^>^ WhenListeningStateChanged {  IObservable<StpRecognizer.ListeningStateChangedEventArgs^>^ get (); } |

#### Property Value

[IObservable](https://learn.microsoft.com/dotnet/api/system.iobservable-1)

([StpRecognizer.ListeningStateChangedEventArgs](#_4149C279_Topic))

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.WhenMapOperation Property

Observable that emits when a map Operation (zoom,pan,...) is requested by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public IObservable<StpRecognizer.MapOperationEventArgs> WhenMapOperation { get; } |

|  |
| --- |
| C++ |
| public: property IObservable<StpRecognizer.MapOperationEventArgs^>^ WhenMapOperation {  IObservable<StpRecognizer.MapOperationEventArgs^>^ get (); } |

#### Property Value

[IObservable](https://learn.microsoft.com/dotnet/api/system.iobservable-1)

([StpRecognizer.MapOperationEventArgs](#_17C81DDE_Topic))

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.WhenPenDown Property

Observable that emits when a pen down event is received by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public IObservable<StpRecognizer.PenDownUpEventArgs> WhenPenDown { get; } |

|  |
| --- |
| C++ |
| public: property IObservable<StpRecognizer.PenDownUpEventArgs^>^ WhenPenDown {  IObservable<StpRecognizer.PenDownUpEventArgs^>^ get (); } |

#### Property Value

[IObservable](https://learn.microsoft.com/dotnet/api/system.iobservable-1)

([StpRecognizer.PenDownUpEventArgs](#_77CD8720_Topic))

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.WhenPenUp Property

Observable that emits when a pen down event is received by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public IObservable<StpRecognizer.PenDownUpEventArgs> WhenPenUp { get; } |

|  |
| --- |
| C++ |
| public: property IObservable<StpRecognizer.PenDownUpEventArgs^>^ WhenPenUp {  IObservable<StpRecognizer.PenDownUpEventArgs^>^ get (); } |

#### Property Value

[IObservable](https://learn.microsoft.com/dotnet/api/system.iobservable-1)

([StpRecognizer.PenDownUpEventArgs](#_77CD8720_Topic))

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.WhenRoleSwitched Property

Observable that emits when a Role switch is requested by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public IObservable<StpRecognizer.RoleSwitchEventArgs> WhenRoleSwitched { get; } |

|  |
| --- |
| C++ |
| public: property IObservable<StpRecognizer.RoleSwitchEventArgs^>^ WhenRoleSwitched {  IObservable<StpRecognizer.RoleSwitchEventArgs^>^ get (); } |

#### Property Value

[IObservable](https://learn.microsoft.com/dotnet/api/system.iobservable-1)

([StpRecognizer.RoleSwitchEventArgs](#_CD245A4A_Topic))

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.WhenShutingdown Property

Observable that emits when STP is shutting down - clients should consider if they should shutdown as well, or otherwise change state to indicate STP is no longer active

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public IObservable<Unit> WhenShutingdown { get; } |

|  |
| --- |
| C++ |
| public: property IObservable<Unit>^ WhenShutingdown {  IObservable<Unit>^ get (); } |

#### Property Value

[IObservable](https://learn.microsoft.com/dotnet/api/system.iobservable-1)

(**Unit**)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.WhenSketchIntegrated Property

Observable that emits when ink can be removed from STP (has been processed)

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public IObservable<Unit> WhenSketchIntegrated { get; } |

|  |
| --- |
| C++ |
| public: property IObservable<Unit>^ WhenSketchIntegrated {  IObservable<Unit>^ get (); } |

#### Property Value

[IObservable](https://learn.microsoft.com/dotnet/api/system.iobservable-1)

(**Unit**)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.WhenSketchRecognized Property

Observable that emits when Sketch recognition results are made available by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public IObservable<StpRecognizer.SketchRecognitionEventArgs> WhenSketchRecognized { get; } |

|  |
| --- |
| C++ |
| public: property IObservable<StpRecognizer.SketchRecognitionEventArgs^>^ WhenSketchRecognized {  IObservable<StpRecognizer.SketchRecognitionEventArgs^>^ get (); } |

#### Property Value

[IObservable](https://learn.microsoft.com/dotnet/api/system.iobservable-1)

([StpRecognizer.SketchRecognitionEventArgs](#_1158F768_Topic))

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.WhenSpeechRecognized Property

Observable that emits when speech recognition results are made available by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public IObservable<StpRecognizer.SpeechRecognitionEventArgs> WhenSpeechRecognized { get; } |

|  |
| --- |
| C++ |
| public: property IObservable<StpRecognizer.SpeechRecognitionEventArgs^>^ WhenSpeechRecognized {  IObservable<StpRecognizer.SpeechRecognitionEventArgs^>^ get (); } |

#### Property Value

[IObservable](https://learn.microsoft.com/dotnet/api/system.iobservable-1)

([StpRecognizer.SpeechRecognitionEventArgs](#_AA5962C5_Topic))

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.WhenStpMessage Property

Observable that emits when STP-generated messages are received

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public IObservable<StpRecognizer.StpMessageEventArgs> WhenStpMessage { get; } |

|  |
| --- |
| C++ |
| public: property IObservable<StpRecognizer.StpMessageEventArgs^>^ WhenStpMessage {  IObservable<StpRecognizer.StpMessageEventArgs^>^ get (); } |

#### Property Value

[IObservable](https://learn.microsoft.com/dotnet/api/system.iobservable-1)

([StpRecognizer.StpMessageEventArgs](#_38520B4A_Topic))

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.WhenSymbolEdit Property

Observable that emits when a symbol edit Operation (move, delete,...) is requested by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public IObservable<StpRecognizer.SymbolEditEventArgs> WhenSymbolEdit { get; } |

|  |
| --- |
| C++ |
| public: property IObservable<StpRecognizer.SymbolEditEventArgs^>^ WhenSymbolEdit {  IObservable<StpRecognizer.SymbolEditEventArgs^>^ get (); } |

#### Property Value

[IObservable](https://learn.microsoft.com/dotnet/api/system.iobservable-1)

([StpRecognizer.SymbolEditEventArgs](#_825D215E_Topic))

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.WhenSymbolReport Property

Event raised when a Report is received that updates a symbol position or health

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public IObservable<StpRecognizer.SymboReportEventArgs> WhenSymbolReport { get; } |

|  |
| --- |
| C++ |
| public: property IObservable<StpRecognizer.SymboReportEventArgs^>^ WhenSymbolReport {  IObservable<StpRecognizer.SymboReportEventArgs^>^ get (); } |

#### Property Value

[IObservable](https://learn.microsoft.com/dotnet/api/system.iobservable-1)

([StpRecognizer.SymboReportEventArgs](#_C45AA0C0_Topic))

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.AddSymbol Method

Command the creation of a new STP symbol. STP will respond with an object creation event

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void AddSymbol(  StpItem stpSymbol ) |

|  |
| --- |
| C++ |
| public: void AddSymbol(  StpItem^ stpSymbol ) |

#### Parameters

stpSymbol [StpItem](#_29D5C3C1_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.AddTask Method

Command the STP runtime to add a task. STP will respond with an object updated event

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void AddTask(  StpTask stpTask ) |

|  |
| --- |
| C++ |
| public: void AddTask(  StpTask^ stpTask ) |

#### Parameters

stpTask [StpTask](#_DDBE5955_Topic)

## Exceptions

|  |  |
| --- | --- |
| [StpException](#_7159B231_Topic) |  |

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.AddTaskOrgRelationship Method

Command the creation of a new STP Task Org relationship. STP will respond with an object creation event

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void AddTaskOrgRelationship(  StpTaskOrgUnit stpToUnit ) |

|  |
| --- |
| C++ |
| public: void AddTaskOrgRelationship(  StpTaskOrgUnit^ stpToUnit ) |

#### Parameters

stpToUnit [StpTaskOrgUnit](#_86161284_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.AddTaskOrgUnit Method

Command the creation of a new STP Task Org unit. STP will respond with an object creation event

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void AddTaskOrgUnit(  StpTaskOrgUnit stpToUnit ) |

|  |
| --- |
| C++ |
| public: void AddTaskOrgUnit(  StpTaskOrgUnit^ stpToUnit ) |

#### Parameters

stpToUnit [StpTaskOrgUnit](#_86161284_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.AdvertiseViewport Method

Advertise the dimensions of an updated Viewport

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void AdvertiseViewport(  LatLon topLeft,  LatLon botRight ) |

|  |
| --- |
| C++ |
| public: void AdvertiseViewport(  LatLon^ topLeft,   LatLon^ botRight ) |

#### Parameters

topLeft [LatLon](#_56D57CE3_Topic)

botRight [LatLon](#_56D57CE3_Topic)

## Exceptions

|  |  |
| --- | --- |
| [StpException](#_7159B231_Topic) |  |

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.ChangeTimeOut Method

Change the sketch segmentation timeout to the given time in seconds

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void ChangeTimeOut(  double timeout ) |

|  |
| --- |
| C++ |
| public: void ChangeTimeOut(  double timeout ) |

#### Parameters

timeout [Double](https://docs.microsoft.com/dotnet/api/system.double)

## Remarks

This is the time the sketch recognizer waits after each stroke before it starts processing. This is required to support conditions in which the user may be entering more than one stroke to build a single symbol, as is the case when drawing full 2525/APP6 symbols. Normally this will be set to 0.0 (TimimigConstants.Timing\_PLA) for regular Point, Line, Area single stroke operation, and 2.5 (TimingConstants.Timing\_Drawing) when drawing full symbols Other timeouts may be set to accommodate user preferences (e.g. shorter wait even when drawing for expert users)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.ChooseAlternate Method

Pick an alternate recognition for a symbol/task. The STP runtime responds with an object chosen notification

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void ChooseAlternate(  string poid,  int nbestIndex ) |

|  |
| --- |
| C++ |
| public: void ChooseAlternate(  String^ poid,   int nbestIndex ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

STP unique id

nbestIndex [Int32](https://docs.microsoft.com/dotnet/api/system.int32)

Zero-based index indicating which alternate should become active

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.ConfirmTask Method

Mark a task as completed. STP will respond with an object updated event

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void ConfirmTask(  string poid,  int index ) |

|  |
| --- |
| C++ |
| public: void ConfirmTask(  String^ poid,   int index ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

STP unique id

index [Int32](https://docs.microsoft.com/dotnet/api/system.int32)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.Connect Method

Connect to the STP runtime

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public bool Connect(  int secondsToRetry = 0 ) |

|  |
| --- |
| C++ |
| public: bool Connect(  int secondsToRetry = 0 ) |

#### Parameters

secondsToRetry [Int32](https://docs.microsoft.com/dotnet/api/system.int32) (Optional)

Optional number of seconds to wait for agent connection to succeed. 0 or omit parameter to not retry, or less than 0 for infinite wait.

#### Return Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

true if successful, or false if a connection could not be established

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.ConnectAndRegister Method

Connect to the STP runtime and register the service with STP, establishing name and events/messages subscription

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public bool ConnectAndRegister(  string appName,  int secondsToRetry = 0,  string machineId = null,  string session = null ) |

|  |
| --- |
| C++ |
| public: bool ConnectAndRegister(  String^ appName,   int secondsToRetry = 0,   String^ machineId = nullptr,   String^ session = nullptr ) |

#### Parameters

appName [String](https://docs.microsoft.com/dotnet/api/system.string)

Identification of the application that is joining STP

secondsToRetry [Int32](https://docs.microsoft.com/dotnet/api/system.int32) (Optional)

Optional number of seconds to wait for agent connection to succeed. 0 or omit parameter to not retry, or less than 0 for infinite wait.

machineId [String](https://docs.microsoft.com/dotnet/api/system.string) (Optional)

Optional string identifying the instance being registered. The default is a unique id of the machine where the invoking service is running

session [String](https://docs.microsoft.com/dotnet/api/system.string) (Optional)

Optional tag for collaborative sessions - defaults to the unique agent name

#### Return Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

true if successful, or false if a connection could not be established

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.ConvertToTranscription Method

Convert alphabetic, numerical typed info to transcription-style text, e.g. "10" becomes "ten", "a" becomes "alpha"

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public List<SpeechRecoItem> ConvertToTranscription(  string typedInput ) |

|  |
| --- |
| C++ |
| public: List<SpeechRecoItem^>^ ConvertToTranscription(  String^ typedInput ) |

#### Parameters

typedInput [String](https://docs.microsoft.com/dotnet/api/system.string)

#### Return Value

[List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([SpeechRecoItem](#_980C2CA5_Topic))

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.CreateCoaAsync Method

Create a new COA

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Task<string> CreateCoaAsync(  string name,  StpRecognizer.CoaAffiliation affiliation,  string role,  CancellationToken cancellationToken = default ) |

|  |
| --- |
| C++ |
| public: Task<String^>^ CreateCoaAsync(  String^ name,   StpRecognizer.CoaAffiliation affiliation,   String^ role,   CancellationToken cancellationToken = CancellationToken() ) |

#### Parameters

name [String](https://docs.microsoft.com/dotnet/api/system.string)

affiliation [StpRecognizer.CoaAffiliation](#_657E4100_Topic)

friend or hostile

role [String](https://docs.microsoft.com/dotnet/api/system.string)

s2, s3, s4, fso, eng

cancellationToken [CancellationToken](https://docs.microsoft.com/dotnet/api/system.threading.cancellationtoken) (Optional)

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task-1)([String](https://docs.microsoft.com/dotnet/api/system.string))

New Coa's poid

## Exceptions

|  |  |
| --- | --- |
| [OperationCanceledException](https://docs.microsoft.com/dotnet/api/system.operationcanceledexception) | If operation times out |

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.CreateNewScenarioAsync Method

Create and load a new scenario, replacing any previous content that might have been loaded into STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Task<string> CreateNewScenarioAsync(  string name,  CancellationToken cancellationToken = default ) |

|  |
| --- |
| C++ |
| public: Task<String^>^ CreateNewScenarioAsync(  String^ name,   CancellationToken cancellationToken = CancellationToken() ) |

#### Parameters

name [String](https://docs.microsoft.com/dotnet/api/system.string)

cancellationToken [CancellationToken](https://docs.microsoft.com/dotnet/api/system.threading.cancellationtoken) (Optional)

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task-1)([String](https://docs.microsoft.com/dotnet/api/system.string))

## Exceptions

|  |  |
| --- | --- |
| [OperationCanceledException](https://docs.microsoft.com/dotnet/api/system.operationcanceledexception) | If operation times out |

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.CreateSymbolService Method

Symbol Service factory

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public SymbolService CreateSymbolService() |

|  |
| --- |
| C++ |
| public: SymbolService^ CreateSymbolService() |

#### Return Value

[SymbolService](#_1141CCEC_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.CreateTaskOrgService Method

Symbol Service factory

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public TaskOrgService CreateTaskOrgService() |

|  |
| --- |
| C++ |
| public: TaskOrgService^ CreateTaskOrgService() |

#### Return Value

[TaskOrgService](#_6194A66E_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.CreateTaskService Method

Task Service factory

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public TaskService CreateTaskService(  SymbolService symbolService ) |

|  |
| --- |
| C++ |
| public: TaskService^ CreateTaskService(  SymbolService^ symbolService ) |

#### Parameters

symbolService [SymbolService](#_1141CCEC_Topic)

Service caching symbols - these are referenced in tasks

#### Return Value

[TaskService](#_C8FC04E8_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.DeleteSymbol Method

Command the STP runtime to delete a symbol/task. STP will respond with an object updated event

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void DeleteSymbol(  string poid ) |

|  |
| --- |
| C++ |
| public: void DeleteSymbol(  String^ poid ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

STP unique id

## Exceptions

|  |  |
| --- | --- |
| [StpException](#_7159B231_Topic) |  |

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.DeleteTask Method

Command the STP runtime to delete a task. STP will respond with an object updated event

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void DeleteTask(  string poid ) |

|  |
| --- |
| C++ |
| public: void DeleteTask(  String^ poid ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

STP unique id

## Exceptions

|  |  |
| --- | --- |
| [StpException](#_7159B231_Topic) |  |

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.DeleteTaskOrgRelationship Method

Command the STP runtime to delete a Task Org relationship. STP will respond with an object updated event

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void DeleteTaskOrgRelationship(  string poid ) |

|  |
| --- |
| C++ |
| public: void DeleteTaskOrgRelationship(  String^ poid ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

STP unique id

## Exceptions

|  |  |
| --- | --- |
| [StpException](#_7159B231_Topic) |  |

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.DeleteTaskOrgUnit Method

Command the STP runtime to delete a Task Org Unit. STP will respond with an object updated event

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void DeleteTaskOrgUnit(  string poid ) |

|  |
| --- |
| C++ |
| public: void DeleteTaskOrgUnit(  String^ poid ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

STP unique id

## Exceptions

|  |  |
| --- | --- |
| [StpException](#_7159B231_Topic) |  |

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.Disconnect Method

Disconnect from the STP runtime

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void Disconnect() |

|  |
| --- |
| C++ |
| public: void Disconnect() |

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.Dispose Method

Dispose

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void Dispose() |

|  |
| --- |
| C++ |
| public: virtual void Dispose() sealed |

#### Implements

[IDisposable.Dispose()](https://docs.microsoft.com/dotnet/api/system.idisposable.dispose#System_IDisposable_Dispose)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.ExportCoaAsync Method

Cause an export\_coa message to be propagated.

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Task ExportCoaAsync(  string projectName,  string folderPath,  List<string> coaPoids,  StpRecognizer.CoaPushType pushType,  CancellationToken cancellationToken ) |

|  |
| --- |
| C++ |
| public: Task^ ExportCoaAsync(  String^ projectName,   String^ folderPath,   List<String^>^ coaPoids,   StpRecognizer.CoaPushType pushType,   CancellationToken cancellationToken ) |

#### Parameters

projectName [String](https://docs.microsoft.com/dotnet/api/system.string)

folderPath [String](https://docs.microsoft.com/dotnet/api/system.string)

coaPoids [List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([String](https://docs.microsoft.com/dotnet/api/system.string))

pushType [StpRecognizer.CoaPushType](#_93FBE1D6_Topic)

cancellationToken [CancellationToken](https://docs.microsoft.com/dotnet/api/system.threading.cancellationtoken)

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task)

## Remarks

Multiple bridge components may pick this up as a signal to initiate export to another format

## Exceptions

|  |  |
| --- | --- |
| [StpException](#_7159B231_Topic) |  |

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.GetActiveScenarioDescriptionAsync Method

Get currently defined planning scenario

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Task<PlanningScenario> GetActiveScenarioDescriptionAsync(  CancellationToken cancellationToken = default ) |

|  |
| --- |
| C++ |
| public: Task<PlanningScenario^>^ GetActiveScenarioDescriptionAsync(  CancellationToken cancellationToken = CancellationToken() ) |

#### Parameters

cancellationToken [CancellationToken](https://docs.microsoft.com/dotnet/api/system.threading.cancellationtoken) (Optional)

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task-1)([PlanningScenario](#_B7245B7_Topic))

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.GetScenarioContentAsync Method

Get the current scenario content as a multiline string ready to be persisted

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Task<string> GetScenarioContentAsync(  CancellationToken cancellationToken = default ) |

|  |
| --- |
| C++ |
| public: Task<String^>^ GetScenarioContentAsync(  CancellationToken cancellationToken = CancellationToken() ) |

#### Parameters

cancellationToken [CancellationToken](https://docs.microsoft.com/dotnet/api/system.threading.cancellationtoken) (Optional)

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task-1)([String](https://docs.microsoft.com/dotnet/api/system.string))

## Exceptions

|  |  |
| --- | --- |
| [OperationCanceledException](https://docs.microsoft.com/dotnet/api/system.operationcanceledexception) | If operation times out |

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.HasActiveScenarioAsync Method

Checks STP for a loaded scenario

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Task<bool> HasActiveScenarioAsync(  CancellationToken cancellationToken = default ) |

|  |
| --- |
| C++ |
| public: Task<bool>^ HasActiveScenarioAsync(  CancellationToken cancellationToken = CancellationToken() ) |

#### Parameters

cancellationToken [CancellationToken](https://docs.microsoft.com/dotnet/api/system.threading.cancellationtoken) (Optional)

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task-1)([Boolean](https://docs.microsoft.com/dotnet/api/system.boolean))

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.ImportC2SIMDataAsync Method

Add consent from C2SIM Initialization and Order files

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Task<bool> ImportC2SIMDataAsync(  string content,  string defaultBlueCoaPoid,  string defaultRedCoaPoid,  CancellationToken cancellationToken = default ) |

|  |
| --- |
| C++ |
| public: Task<bool>^ ImportC2SIMDataAsync(  String^ content,   String^ defaultBlueCoaPoid,   String^ defaultRedCoaPoid,   CancellationToken cancellationToken = CancellationToken() ) |

#### Parameters

content [String](https://docs.microsoft.com/dotnet/api/system.string)

defaultBlueCoaPoid [String](https://docs.microsoft.com/dotnet/api/system.string)

Unique identifier of the COA where friendly units are placed by default

defaultRedCoaPoid [String](https://docs.microsoft.com/dotnet/api/system.string)

Unique identifier of the COA where hostile units are placed by default

cancellationToken [CancellationToken](https://docs.microsoft.com/dotnet/api/system.threading.cancellationtoken) (Optional)

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task-1)([Boolean](https://docs.microsoft.com/dotnet/api/system.boolean))

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.ImportSTPDataAsync Method

Import STP native content into the current scenario

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Task<bool> ImportSTPDataAsync(  string content,  CancellationToken cancellationToken = default ) |

|  |
| --- |
| C++ |
| public: Task<bool>^ ImportSTPDataAsync(  String^ content,   CancellationToken cancellationToken = CancellationToken() ) |

#### Parameters

content [String](https://docs.microsoft.com/dotnet/api/system.string)

cancellationToken [CancellationToken](https://docs.microsoft.com/dotnet/api/system.threading.cancellationtoken) (Optional)

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task-1)([Boolean](https://docs.microsoft.com/dotnet/api/system.boolean))

## Exceptions

|  |  |
| --- | --- |
| [OperationCanceledException](https://docs.microsoft.com/dotnet/api/system.operationcanceledexception) | If operation times out |

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.JoinScenarioSessionAsync Method

Load all current STP objects into a project - this emulates receiving the STP events to create objects

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Task JoinScenarioSessionAsync(  CancellationToken cancellationToken = default ) |

|  |
| --- |
| C++ |
| public: Task^ JoinScenarioSessionAsync(  CancellationToken cancellationToken = CancellationToken() ) |

#### Parameters

cancellationToken [CancellationToken](https://docs.microsoft.com/dotnet/api/system.threading.cancellationtoken) (Optional)

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task)

## Exceptions

|  |  |
| --- | --- |
| [OperationCanceledException](https://docs.microsoft.com/dotnet/api/system.operationcanceledexception) | If operation times out |

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.LoadNewScenarioAsync Method

Load a new scenario, replacing any previous content that might have been loaded into STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Task LoadNewScenarioAsync(  string content,  CancellationToken cancellationToken = default ) |

|  |
| --- |
| C++ |
| public: Task^ LoadNewScenarioAsync(  String^ content,   CancellationToken cancellationToken = CancellationToken() ) |

#### Parameters

content [String](https://docs.microsoft.com/dotnet/api/system.string)

Content to load, formatted as object\_set([[element1], [element2], ...])

cancellationToken [CancellationToken](https://docs.microsoft.com/dotnet/api/system.threading.cancellationtoken) (Optional)

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task)

## Exceptions

|  |  |
| --- | --- |
| [OperationCanceledException](https://docs.microsoft.com/dotnet/api/system.operationcanceledexception) | If operation times out |

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.PushCoaAsync Method

Cause an push\_coa\_to\_server message to be propagated.

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Task PushCoaAsync(  string projectName,  List<string> coaPoids,  StpRecognizer.CoaPushType pushType,  CancellationToken cancellationToken = default ) |

|  |
| --- |
| C++ |
| public: Task^ PushCoaAsync(  String^ projectName,   List<String^>^ coaPoids,   StpRecognizer.CoaPushType pushType,   CancellationToken cancellationToken = CancellationToken() ) |

#### Parameters

projectName [String](https://docs.microsoft.com/dotnet/api/system.string)

coaPoids [List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([String](https://docs.microsoft.com/dotnet/api/system.string))

pushType [StpRecognizer.CoaPushType](#_93FBE1D6_Topic)

cancellationToken [CancellationToken](https://docs.microsoft.com/dotnet/api/system.threading.cancellationtoken) (Optional)

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task)

## Remarks

Multiple bridge components may pick this up as a signal to initiate export to another system

## Exceptions

|  |  |
| --- | --- |
| [StpException](#_7159B231_Topic) |  |
| [InvalidOperationException](https://docs.microsoft.com/dotnet/api/system.invalidoperationexception) |  |

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.RecognizeNow Method

Force the system to perform a recognition on any strokes sent without waiting for the segmentation timeout

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void RecognizeNow(  Auth auth = null ) |

|  |
| --- |
| C++ |
| public: void RecognizeNow(  Auth^ auth = nullptr ) |

#### Parameters

auth **Auth** (Optional)

Optional auth to use - defaults to the component's auth

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.Register(Auth, List<String>) Method

Register service with STP, establishing name and events/messages subscription

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public bool Register(  Auth auth,  List<string> solvables ) |

|  |
| --- |
| C++ |
| public: bool Register(  Auth^ auth,   List<String^>^ solvables ) |

#### Parameters

auth **Auth**

Identification of the application that is joining STP

solvables [List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([String](https://docs.microsoft.com/dotnet/api/system.string))

String listing the event subscriptions for this service

#### Return Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.Register(String, String, String) Method

Register service with STP, establishing name and events/messages subscription

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public bool Register(  string agentName,  string machineId = null,  string session = null ) |

|  |
| --- |
| C++ |
| public: bool Register(  String^ agentName,   String^ machineId = nullptr,   String^ session = nullptr ) |

#### Parameters

agentName [String](https://docs.microsoft.com/dotnet/api/system.string)

Identification of the application that is joining STP

machineId [String](https://docs.microsoft.com/dotnet/api/system.string) (Optional)

Optional string identifying the instance being registered. The default is a unique id of the machine where the invoking service is running

session [String](https://docs.microsoft.com/dotnet/api/system.string) (Optional)

Optional tag for collaborative sessions - defaults to the unique agent name

#### Return Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.RegisterEvents Method

Register service with STP, establishing name and events/messages subscription

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public bool RegisterEvents(  string agentName,  List<string> events,  string machineId = null,  string session = null ) |

|  |
| --- |
| C++ |
| public: bool RegisterEvents(  String^ agentName,   List<String^>^ events,   String^ machineId = nullptr,   String^ session = nullptr ) |

#### Parameters

agentName [String](https://docs.microsoft.com/dotnet/api/system.string)

Identification of the application that is joining STP

events [List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([String](https://docs.microsoft.com/dotnet/api/system.string))

String listing the names of the events subscribed by this service

machineId [String](https://docs.microsoft.com/dotnet/api/system.string) (Optional)

Optional string identifying the instance being registered. The default is a unique id of the machine where the invoking service is running

session [String](https://docs.microsoft.com/dotnet/api/system.string) (Optional)

Optional tag for collaborative sessions - defaults to the unique agent name

#### Return Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.RequestActiveCoasAsync Method

Get list of currently defined COAs

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Task<List<Coa>> RequestActiveCoasAsync(  CancellationToken cancellationToken ) |

|  |
| --- |
| C++ |
| public: Task<List<Coa^>^>^ RequestActiveCoasAsync(  CancellationToken cancellationToken ) |

#### Parameters

cancellationToken [CancellationToken](https://docs.microsoft.com/dotnet/api/system.threading.cancellationtoken)

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task-1)([List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([Coa](#_9DE4EC48_Topic)))

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.RequestAllPoidObjectsAsync Method

Get a list of all STP entities currently defined, including symbols, tasks, TO elements, etc

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Task<List<PoidObject>> RequestAllPoidObjectsAsync(  CancellationToken cancellationToken ) |

|  |
| --- |
| C++ |
| public: Task<List<PoidObject^>^>^ RequestAllPoidObjectsAsync(  CancellationToken cancellationToken ) |

#### Parameters

cancellationToken [CancellationToken](https://docs.microsoft.com/dotnet/api/system.threading.cancellationtoken)

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task-1)([List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([PoidObject](#_9887A88E_Topic)))

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.RequestPoidObjectAsync Method

Get STP entities (symbol, task, TO element, etc) with a specific id (poid)

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Task<PoidObject> RequestPoidObjectAsync(  string poid,  CancellationToken cancellationToken = default ) |

|  |
| --- |
| C++ |
| public: Task<PoidObject^>^ RequestPoidObjectAsync(  String^ poid,   CancellationToken cancellationToken = CancellationToken() ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

cancellationToken [CancellationToken](https://docs.microsoft.com/dotnet/api/system.threading.cancellationtoken) (Optional)

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task-1)([PoidObject](#_9887A88E_Topic))

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.ResetComponentStateAsync Method

Clear this component's state - back to defaults

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Task ResetComponentStateAsync(  CancellationToken cancellationToken = default ) |

|  |
| --- |
| C++ |
| public: Task^ ResetComponentStateAsync(  CancellationToken cancellationToken = CancellationToken() ) |

#### Parameters

cancellationToken [CancellationToken](https://docs.microsoft.com/dotnet/api/system.threading.cancellationtoken) (Optional)

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task)

## Exceptions

|  |  |
| --- | --- |
| [OperationCanceledException](https://docs.microsoft.com/dotnet/api/system.operationcanceledexception) | If operation times out |

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.ResetStpScenarioAsync Method

Clear STP's scenario data

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Task ResetStpScenarioAsync(  CancellationToken cancellationToken = default ) |

|  |
| --- |
| C++ |
| public: Task^ ResetStpScenarioAsync(  CancellationToken cancellationToken = CancellationToken() ) |

#### Parameters

cancellationToken [CancellationToken](https://docs.microsoft.com/dotnet/api/system.threading.cancellationtoken) (Optional)

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task)

## Exceptions

|  |  |
| --- | --- |
| [OperationCanceledException](https://docs.microsoft.com/dotnet/api/system.operationcanceledexception) | If operation times out |

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SendAudioCaptureState Method

Send state of the audio capture device - listening or not

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void SendAudioCaptureState(  bool isListening ) |

|  |
| --- |
| C++ |
| public: void SendAudioCaptureState(  bool isListening ) |

#### Parameters

isListening [Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SendInk Method

Sends sketch ink from your map to STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void SendInk(  Size pixelBoundsWindow,  LatLon topLeftGeoMap,  LatLon bottomRightGeoMap,  List<LatLon> strokePoints,  DateTime timeStrokeStart,  DateTime timeStrokeEnd,  List<string> intersectedPoids ) |

|  |
| --- |
| C++ |
| public: void SendInk(  Size pixelBoundsWindow,   LatLon^ topLeftGeoMap,   LatLon^ bottomRightGeoMap,   List<LatLon^>^ strokePoints,   DateTime timeStrokeStart,   DateTime timeStrokeEnd,   List<String^>^ intersectedPoids ) |

#### Parameters

pixelBoundsWindow [Size](https://docs.microsoft.com/dotnet/api/system.drawing.size)

The pixel bounds of the window. If you do not have this information, then provide a reasonable default such as (640,480).

topLeftGeoMap [LatLon](#_56D57CE3_Topic)

The geo-coordinates (lat/lon) of the top-left corner of the map. If you do not have this information, then provide a reasonable default such as a 10km square area around the strokePoints you are submitting.

bottomRightGeoMap [LatLon](#_56D57CE3_Topic)

The geo-coordinates (lat/lon) of the bottom-right corner of the map

strokePoints [List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([LatLon](#_56D57CE3_Topic))

The location (if single point) or shape (if multi-point)

timeStrokeStart [DateTime](https://docs.microsoft.com/dotnet/api/system.datetime)

The real-time timestamp that the stroke was started. If you do not have a stroke timestamp, you can use the clock time as close as possible to time the stroke was generated, minus any known latency.

timeStrokeEnd [DateTime](https://docs.microsoft.com/dotnet/api/system.datetime)

The real-time timestamp that the stroke was finished. If you do not have this information, add a small sub-second delta to the stroke start time.

intersectedPoids [List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([String](https://docs.microsoft.com/dotnet/api/system.string))

List of ids (poids) of the elements that the stroke intersects with, for example a point or line sketched on top of a unit. This parameter is essential to support the identification of elements that may be target of an edit operation, such as move, delete, or attribute editing

## Remarks

This method should be called to send each stroke when the user lifts the pen/stylus from the map. It's strongly suggested that you provide as much information as possible

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SendPenDown Method

Send a pen down message

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void SendPenDown(  LatLon location,  DateTime timestamp ) |

|  |
| --- |
| C++ |
| public: void SendPenDown(  LatLon^ location,   DateTime timestamp ) |

#### Parameters

location [LatLon](#_56D57CE3_Topic)

The geo-location of the point where the stylus/mouse was pressed.

timestamp [DateTime](https://docs.microsoft.com/dotnet/api/system.datetime)

The real-time timestamp that the stroke was started. If you do not have a stroke timestamp, you can use the clock time as close as possible to time the stroke was generated, minus any known latency

## Remarks

You should send this message once for each stroke as the user starts a stroke by pressing the stylus/mouse to the map. When the stylus/mouse is lifted, send the entire stroke (including the first point again) via SendInk

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SendSimulatedSpeechRecognition Method

Send a (typed in) string of text that the system will treat as if it came from speech recognition

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void SendSimulatedSpeechRecognition(  string typedInput,  DateTime? startTime = null ) |

|  |
| --- |
| C++ |
| public: void SendSimulatedSpeechRecognition(  String^ typedInput,   Nullable<DateTime> startTime = nullptr ) |

#### Parameters

typedInput [String](https://docs.microsoft.com/dotnet/api/system.string)

Text to be converted (if needed) and sent as speech

startTime [Nullable](https://docs.microsoft.com/dotnet/api/system.nullable-1)([DateTime](https://docs.microsoft.com/dotnet/api/system.datetime)) (Optional)

The time the speech occurred.

## Remarks

Numbers, letters are converted to equivalent words as they would appear if transcribed by a speech recognizer Examples: "A 3 1" - becomes "alpha three one" "21" - becomes "twenty one"

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SendSpeechRecognition Method

Send transcribed speech results, as obtained by a speech recognizer

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void SendSpeechRecognition(  List<SpeechRecoItem> recoList,  DateTime? startTime = null,  DateTime? endTime = null ) |

|  |
| --- |
| C++ |
| public: void SendSpeechRecognition(  List<SpeechRecoItem^>^ recoList,   Nullable<DateTime> startTime = nullptr,   Nullable<DateTime> endTime = nullptr ) |

#### Parameters

recoList [List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([SpeechRecoItem](#_980C2CA5_Topic))

List of alternates representing speech recognition hypotheses

startTime [Nullable](https://docs.microsoft.com/dotnet/api/system.nullable-1)([DateTime](https://docs.microsoft.com/dotnet/api/system.datetime)) (Optional)

The (earliest) time the speech utterance started

endTime [Nullable](https://docs.microsoft.com/dotnet/api/system.nullable-1)([DateTime](https://docs.microsoft.com/dotnet/api/system.datetime)) (Optional)

The (latest) time the speech utterance ended

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SetSpeechListening Method

Set the listening state of the speech recognizer.

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void SetSpeechListening(  bool listen,  Auth auth = null ) |

|  |
| --- |
| C++ |
| public: void SetSpeechListening(  bool listen,   Auth^ auth = nullptr ) |

#### Parameters

listen [Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

auth **Auth** (Optional)

Optional auth to use - defaults to the component's auth

## Remarks

In most cases you will set speech to listening=on when your application starts up. In special cases such as noisy environments you want to toggle speech based on a UI event, but this is generally discouraged so that speech and sketch are available at any time. (Extraneous speech will not generally cause problems because the S2C2 system will usually only use speech that occurs around the same time as an ink gesture.)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.Stop Method

Stop STP recognition

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void Stop() |

|  |
| --- |
| C++ |
| public: void Stop() |

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SwitchRoleAndCoa Method

Switch to a COA / Role pairing that will be used as the default henceforth

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void SwitchRoleAndCoa(  string newRole,  string newCoaPoid,  StpRecognizer.CoaAffiliation affiliation,  bool clearTOCache = false ) |

|  |
| --- |
| C++ |
| public: void SwitchRoleAndCoa(  String^ newRole,   String^ newCoaPoid,   StpRecognizer.CoaAffiliation affiliation,   bool clearTOCache = false ) |

#### Parameters

newRole [String](https://docs.microsoft.com/dotnet/api/system.string)

newCoaPoid [String](https://docs.microsoft.com/dotnet/api/system.string)

affiliation [StpRecognizer.CoaAffiliation](#_657E4100_Topic)

clearTOCache [Boolean](https://docs.microsoft.com/dotnet/api/system.boolean) (Optional)

## Exceptions

|  |  |
| --- | --- |
| [StpException](#_7159B231_Topic) |  |

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.UndoLastOp Method

Undo the last operation performed on an object with a given poid

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void UndoLastOp(  string poid ) |

|  |
| --- |
| C++ |
| public: void UndoLastOp(  String^ poid ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

STP unique id

## Remarks

Care must be taken when using this capability. Undo should be restricted to operations that have an obvious visual impact, for example one that results in some clear rendering effect (adding/removing a symbol). And only actions performed by the user herself should be undone, rather than operations of some other user participating in a collaborative session. Users may become confused if the effect is not obvious, as for example undoing of an edit, particularly for a Task item, which may appear not to have been performed, prompting the user to keep hitting undo, potentially removing other unintended changes Keeping track of just the operations with obvious visual impact, realized by just a particular local user is harder than it sounds, given STP's asynchronous nature, where all operations are piped to the engine, and the actual updates to the UI happen just as a response to asynchronous update events. These events may include results of operations performed by multiple concurrent users.

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.UpdateSymbol Method

Command the update of an STP symbol. STP will respond with an object updated event

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void UpdateSymbol(  string poid,  StpItem stpSymbol ) |

|  |
| --- |
| C++ |
| public: void UpdateSymbol(  String^ poid,   StpItem^ stpSymbol ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

STP unique id

stpSymbol [StpItem](#_29D5C3C1_Topic)

## Exceptions

|  |  |
| --- | --- |
| [StpException](#_7159B231_Topic) |  |

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.UpdateTask(String, StpTask) Method

Command the STP runtime to update a task. STP will respond with an object updated event

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void UpdateTask(  string poid,  StpTask stpTask ) |

|  |
| --- |
| C++ |
| public: void UpdateTask(  String^ poid,   StpTask^ stpTask ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

STP unique id

stpTask [StpTask](#_DDBE5955_Topic)

## Exceptions

|  |  |
| --- | --- |
| [StpException](#_7159B231_Topic) |  |

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.UpdateTask(String, List<StpTask>) Method

Command the STP runtime to update a task. STP will respond with an object updated event

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void UpdateTask(  string poid,  List<StpTask> stpTaskAlternates ) |

|  |
| --- |
| C++ |
| public: void UpdateTask(  String^ poid,   List<StpTask^>^ stpTaskAlternates ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

STP unique id

stpTaskAlternates [List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([StpTask](#_DDBE5955_Topic))

## Exceptions

|  |  |
| --- | --- |
| [StpException](#_7159B231_Topic) |  |

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.UpdateTaskOrgRelationship Method

Command the update of an STP Task Org relationship. STP will respond with an object updated event

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void UpdateTaskOrgRelationship(  string poid,  StpTaskOrgUnit stpToRelationship ) |

|  |
| --- |
| C++ |
| public: void UpdateTaskOrgRelationship(  String^ poid,   StpTaskOrgUnit^ stpToRelationship ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

STP unique id

stpToRelationship [StpTaskOrgUnit](#_86161284_Topic)

## Exceptions

|  |  |
| --- | --- |
| [StpException](#_7159B231_Topic) |  |

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.UpdateTaskOrgUnit Method

Command the update of an STP Task Org unit. STP will respond with an object updated event

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void UpdateTaskOrgUnit(  string poid,  StpTaskOrgUnit stpToUnit ) |

|  |
| --- |
| C++ |
| public: void UpdateTaskOrgUnit(  String^ poid,   StpTaskOrgUnit^ stpToUnit ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

STP unique id

stpToUnit [StpTaskOrgUnit](#_86161284_Topic)

## Exceptions

|  |  |
| --- | --- |
| [StpException](#_7159B231_Topic) |  |

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnCoaSwitched Event

Event raised when a COA switch is requested by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.CoaSwitchDelegate OnCoaSwitched |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.CoaSwitchDelegate^ OnCoaSwitched {  void add (StpRecognizer.CoaSwitchDelegate^ value);  void remove (StpRecognizer.CoaSwitchDelegate^ value); } |

#### Value

[StpRecognizer.CoaSwitchDelegate](#_4833A8D7_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnConnectionError Event

Event raised when STP connection error occur

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.StpConnectionErrorDelegate OnConnectionError |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.StpConnectionErrorDelegate^ OnConnectionError {  void add (StpRecognizer.StpConnectionErrorDelegate^ value);  void remove (StpRecognizer.StpConnectionErrorDelegate^ value); } |

#### Value

[StpRecognizer.StpConnectionErrorDelegate](#_82B44F9D_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnListeningStateChanged Event

Event raised when the audio capture state changes (starts/stops listening)

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.ListeningStateChangedDelegate OnListeningStateChanged |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.ListeningStateChangedDelegate^ OnListeningStateChanged {  void add (StpRecognizer.ListeningStateChangedDelegate^ value);  void remove (StpRecognizer.ListeningStateChangedDelegate^ value); } |

#### Value

[StpRecognizer.ListeningStateChangedDelegate](#_48AEA85D_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnMapOperation Event

Event raised when a map Operation (zoom,pan,...) is requested by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.MapOperationDelegate OnMapOperation |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.MapOperationDelegate^ OnMapOperation {  void add (StpRecognizer.MapOperationDelegate^ value);  void remove (StpRecognizer.MapOperationDelegate^ value); } |

#### Value

[StpRecognizer.MapOperationDelegate](#_1B8A278C_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnPenDown Event

Event raised when a pen down event is received by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.PenDownUpDelegate OnPenDown |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.PenDownUpDelegate^ OnPenDown {  void add (StpRecognizer.PenDownUpDelegate^ value);  void remove (StpRecognizer.PenDownUpDelegate^ value); } |

#### Value

[StpRecognizer.PenDownUpDelegate](#_A5052F22_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnPenUp Event

Event raised when a pen up event is received by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.PenDownUpDelegate OnPenUp |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.PenDownUpDelegate^ OnPenUp {  void add (StpRecognizer.PenDownUpDelegate^ value);  void remove (StpRecognizer.PenDownUpDelegate^ value); } |

#### Value

[StpRecognizer.PenDownUpDelegate](#_A5052F22_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnRoleSwitched Event

Event raised when a Role switch is requested by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.RoleSwitchDelegate OnRoleSwitched |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.RoleSwitchDelegate^ OnRoleSwitched {  void add (StpRecognizer.RoleSwitchDelegate^ value);  void remove (StpRecognizer.RoleSwitchDelegate^ value); } |

#### Value

[StpRecognizer.RoleSwitchDelegate](#_88954A20_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnShutdown Event

Event raised when STP is shutting down - clients should consider if they should shutdown as well, or otherwise change state to indicate STP is no longer active

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.ShutdownDelegate OnShutdown |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.ShutdownDelegate^ OnShutdown {  void add (StpRecognizer.ShutdownDelegate^ value);  void remove (StpRecognizer.ShutdownDelegate^ value); } |

#### Value

[StpRecognizer.ShutdownDelegate](#_3170DF47_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnSketchIntegrated Event

Event raised when ink can be removed from STP (has been processed)

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.SketchIntegratedDelegate OnSketchIntegrated |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.SketchIntegratedDelegate^ OnSketchIntegrated {  void add (StpRecognizer.SketchIntegratedDelegate^ value);  void remove (StpRecognizer.SketchIntegratedDelegate^ value); } |

#### Value

[StpRecognizer.SketchIntegratedDelegate](#_568DB6D1_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnSketchRecognized Event

Event raised when ink can be removed from STP (has been processed)

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.SketchRecognizedDelegate OnSketchRecognized |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.SketchRecognizedDelegate^ OnSketchRecognized {  void add (StpRecognizer.SketchRecognizedDelegate^ value);  void remove (StpRecognizer.SketchRecognizedDelegate^ value); } |

#### Value

[StpRecognizer.SketchRecognizedDelegate](#_89CC53C5_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnSpeechRecognized Event

Event raised when speech recognition results are made available by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.SpeechRecognitionDelegate OnSpeechRecognized |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.SpeechRecognitionDelegate^ OnSpeechRecognized {  void add (StpRecognizer.SpeechRecognitionDelegate^ value);  void remove (StpRecognizer.SpeechRecognitionDelegate^ value); } |

#### Value

[StpRecognizer.SpeechRecognitionDelegate](#_9DEB2F7F_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnStpMessage Event

Event raised when STP-generated messages are received

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.StpMessageDelegate OnStpMessage |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.StpMessageDelegate^ OnStpMessage {  void add (StpRecognizer.StpMessageDelegate^ value);  void remove (StpRecognizer.StpMessageDelegate^ value); } |

#### Value

[StpRecognizer.StpMessageDelegate](#_A4F0849C_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnSymbolAdded Event

Event raised when a symbol is added by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.SymbolAddedDelegate OnSymbolAdded |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.SymbolAddedDelegate^ OnSymbolAdded {  void add (StpRecognizer.SymbolAddedDelegate^ value);  void remove (StpRecognizer.SymbolAddedDelegate^ value); } |

#### Value

[StpRecognizer.SymbolAddedDelegate](#_C56D47C_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnSymbolDeleted Event

Event raised when a symbol is deleted by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.SymbolDeletedDelegate OnSymbolDeleted |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.SymbolDeletedDelegate^ OnSymbolDeleted {  void add (StpRecognizer.SymbolDeletedDelegate^ value);  void remove (StpRecognizer.SymbolDeletedDelegate^ value); } |

#### Value

[StpRecognizer.SymbolDeletedDelegate](#_A609A4DF_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnSymbolEdited Event

Event raised when a symbol edit Operation (move, delete,...) is requested by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.SymbolEditDelegate OnSymbolEdited |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.SymbolEditDelegate^ OnSymbolEdited {  void add (StpRecognizer.SymbolEditDelegate^ value);  void remove (StpRecognizer.SymbolEditDelegate^ value); } |

#### Value

[StpRecognizer.SymbolEditDelegate](#_E92C7FDE_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnSymbolModified Event

Event raised when a symbol is modified by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.SymbolModifiedDelegate OnSymbolModified |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.SymbolModifiedDelegate^ OnSymbolModified {  void add (StpRecognizer.SymbolModifiedDelegate^ value);  void remove (StpRecognizer.SymbolModifiedDelegate^ value); } |

#### Value

[StpRecognizer.SymbolModifiedDelegate](#_1DE821E8_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnSymbolReport Event

Event raised when a Report is received that updates a symbol position or health

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.SymboReportDelegate OnSymbolReport |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.SymboReportDelegate^ OnSymbolReport {  void add (StpRecognizer.SymboReportDelegate^ value);  void remove (StpRecognizer.SymboReportDelegate^ value); } |

#### Value

[StpRecognizer.SymboReportDelegate](#_D4303EE_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnTaskAdded Event

Event raised when a task is recognized by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.TaskAddeddDelegate OnTaskAdded |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.TaskAddeddDelegate^ OnTaskAdded {  void add (StpRecognizer.TaskAddeddDelegate^ value);  void remove (StpRecognizer.TaskAddeddDelegate^ value); } |

#### Value

[StpRecognizer.TaskAddeddDelegate](#_3F213709_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnTaskDeleted Event

Event raised when a task is deleted by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.TaskDeletedDelegate OnTaskDeleted |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.TaskDeletedDelegate^ OnTaskDeleted {  void add (StpRecognizer.TaskDeletedDelegate^ value);  void remove (StpRecognizer.TaskDeletedDelegate^ value); } |

#### Value

[StpRecognizer.TaskDeletedDelegate](#_991FB5EC_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnTaskModified Event

Event raised when a task is modified by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.TaskModifiedDelegate OnTaskModified |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.TaskModifiedDelegate^ OnTaskModified {  void add (StpRecognizer.TaskModifiedDelegate^ value);  void remove (StpRecognizer.TaskModifiedDelegate^ value); } |

#### Value

[StpRecognizer.TaskModifiedDelegate](#_A7D5C96D_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnTaskOrgRelationshipAdded Event

Event raised when a task org unit is recognized by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.TaskOrgRelationshipAddeddDelegate OnTaskOrgRelationshipAdded |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.TaskOrgRelationshipAddeddDelegate^ OnTaskOrgRelationshipAdded {  void add (StpRecognizer.TaskOrgRelationshipAddeddDelegate^ value);  void remove (StpRecognizer.TaskOrgRelationshipAddeddDelegate^ value); } |

#### Value

[StpRecognizer.TaskOrgRelationshipAddeddDelegate](#_9F48008F_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnTaskOrgRelationshipDeleted Event

Event raised when a task org unit is deleted by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.TaskOrgRelationshipDeletedDelegate OnTaskOrgRelationshipDeleted |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.TaskOrgRelationshipDeletedDelegate^ OnTaskOrgRelationshipDeleted {  void add (StpRecognizer.TaskOrgRelationshipDeletedDelegate^ value);  void remove (StpRecognizer.TaskOrgRelationshipDeletedDelegate^ value); } |

#### Value

[StpRecognizer.TaskOrgRelationshipDeletedDelegate](#_33E1D964_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnTaskOrgRelationshipModified Event

Event raised when a task org unit is modified by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.TaskOrgRelationshipModifiedDelegate OnTaskOrgRelationshipModified |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.TaskOrgRelationshipModifiedDelegate^ OnTaskOrgRelationshipModified {  void add (StpRecognizer.TaskOrgRelationshipModifiedDelegate^ value);  void remove (StpRecognizer.TaskOrgRelationshipModifiedDelegate^ value); } |

#### Value

[StpRecognizer.TaskOrgRelationshipModifiedDelegate](#_AF6D3B00_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnTaskOrgUnitAdded Event

Event raised when a task org unit is recognized by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.TaskOrgUnitAddeddDelegate OnTaskOrgUnitAdded |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.TaskOrgUnitAddeddDelegate^ OnTaskOrgUnitAdded {  void add (StpRecognizer.TaskOrgUnitAddeddDelegate^ value);  void remove (StpRecognizer.TaskOrgUnitAddeddDelegate^ value); } |

#### Value

[StpRecognizer.TaskOrgUnitAddeddDelegate](#_559F7370_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnTaskOrgUnitDeleted Event

Event raised when a task org unit is deleted by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.TaskOrgUnitDeletedDelegate OnTaskOrgUnitDeleted |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.TaskOrgUnitDeletedDelegate^ OnTaskOrgUnitDeleted {  void add (StpRecognizer.TaskOrgUnitDeletedDelegate^ value);  void remove (StpRecognizer.TaskOrgUnitDeletedDelegate^ value); } |

#### Value

[StpRecognizer.TaskOrgUnitDeletedDelegate](#_D0B31BE_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.OnTaskOrgUnitModified Event

Event raised when a task org unit is modified by STP

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event StpRecognizer.TaskOrgUnitModifiedDelegate OnTaskOrgUnitModified |

|  |
| --- |
| C++ |
| public:  event StpRecognizer.TaskOrgUnitModifiedDelegate^ OnTaskOrgUnitModified {  void add (StpRecognizer.TaskOrgUnitModifiedDelegate^ value);  void remove (StpRecognizer.TaskOrgUnitModifiedDelegate^ value); } |

#### Value

[StpRecognizer.TaskOrgUnitModifiedDelegate](#_96B95D79_Topic)

## See Also

#### Reference

[StpRecognizer Class](#_BBE6C9F9_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.CoaAffiliation Enumeration

Affiliation of a Course of Action

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public enum CoaAffiliation |

|  |
| --- |
| C++ |
| public enum class CoaAffiliation |

## Members

|  |  |  |
| --- | --- | --- |
| FRIENDLY | 0 |  |
| ENEMY | 1 |  |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.CoaPushType Enumeration

Type of documents being pushed

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public enum CoaPushType |

|  |
| --- |
| C++ |
| public enum class CoaPushType |

## Members

|  |  |  |
| --- | --- | --- |
| All | 0 |  |
| Initialization | 1 |  |
| Order | 2 |  |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.CoaSwitchDelegate Delegate

The Delegate that describes the function prototype for COA switches

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void CoaSwitchDelegate(  string coaPoid ) |

|  |
| --- |
| C++ |
| public delegate void CoaSwitchDelegate(  String^ coaPoid ) |

#### Parameters

coaPoid [String](https://docs.microsoft.com/dotnet/api/system.string)

Id of the COA to switch to - can be null if starting a new scenario

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.CoaSwitchedEventArgs Class

The Delegate that describes the function prototype for COA switches

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class CoaSwitchedEventArgs : IEquatable<StpRecognizer.CoaSwitchedEventArgs> |

|  |
| --- |
| C++ |
| public ref class CoaSwitchedEventArgs : IEquatable<StpRecognizer.CoaSwitchedEventArgs^> |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → StpRecognizer.CoaSwitchedEventArgs |
| **Implements** | [IEquatable](https://learn.microsoft.com/dotnet/api/system.iequatable-1)(StpRecognizer.CoaSwitchedEventArgs) |

## Constructors

|  |  |
| --- | --- |
| [StpRecognizer.CoaSwitchedEventArgs](#_A3F6E573_Topic) | The Delegate that describes the function prototype for COA switches |

## Properties

|  |  |
| --- | --- |
| [CoaPoid](#_78C6E58D_Topic) | Id of the COA to switch to - can be null if starting a new scenario |

## Methods

|  |  |
| --- | --- |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.CoaSwitchedEventArgs Constructor

The Delegate that describes the function prototype for COA switches

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public CoaSwitchedEventArgs(  string CoaPoid ) |

|  |
| --- |
| C++ |
| public: CoaSwitchedEventArgs(  String^ CoaPoid ) |

#### Parameters

CoaPoid [String](https://docs.microsoft.com/dotnet/api/system.string)

Id of the COA to switch to - can be null if starting a new scenario

## See Also

#### Reference

[StpRecognizer.CoaSwitchedEventArgs Class](#_976C653F_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.CoaSwitchedEventArgs.CoaPoid Property

Id of the COA to switch to - can be null if starting a new scenario

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string CoaPoid { get; init; } |

|  |
| --- |
| C++ |
| public: property String^ CoaPoid {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpRecognizer.CoaSwitchedEventArgs Class](#_976C653F_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.ListeningStateChangedDelegate Delegate

Audio capture state change event signature

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void ListeningStateChangedDelegate(  bool IsListening ) |

|  |
| --- |
| C++ |
| public delegate void ListeningStateChangedDelegate(  bool IsListening ) |

#### Parameters

IsListening [Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.ListeningStateChangedEventArgs Class

Arguments for audio capture state changes

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class ListeningStateChangedEventArgs : IEquatable<StpRecognizer.ListeningStateChangedEventArgs> |

|  |
| --- |
| C++ |
| public ref class ListeningStateChangedEventArgs : IEquatable<StpRecognizer.ListeningStateChangedEventArgs^> |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → StpRecognizer.ListeningStateChangedEventArgs |
| **Implements** | [IEquatable](https://learn.microsoft.com/dotnet/api/system.iequatable-1)(StpRecognizer.ListeningStateChangedEventArgs) |

## Constructors

|  |  |
| --- | --- |
| [StpRecognizer.ListeningStateChangedEventArgs](#_B3031AD_Topic) | Arguments for audio capture state changes |

## Properties

|  |  |
| --- | --- |
| [isListening](#_C172690B_Topic) |  |

## Methods

|  |  |
| --- | --- |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.ListeningStateChangedEventArgs Constructor

Arguments for audio capture state changes

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public ListeningStateChangedEventArgs(  bool isListening ) |

|  |
| --- |
| C++ |
| public: ListeningStateChangedEventArgs(  bool isListening ) |

#### Parameters

isListening [Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpRecognizer.ListeningStateChangedEventArgs Class](#_4149C279_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.ListeningStateChangedEventArgs.isListening Property

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public bool isListening { get; init; } |

|  |
| --- |
| C++ |
| public: property bool isListening {  bool get ();  void set (bool value); } |

#### Property Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpRecognizer.ListeningStateChangedEventArgs Class](#_4149C279_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.MapOperationDelegate Delegate

Map operations (zoom/pan) event signature

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void MapOperationDelegate(  string operation,  Location location ) |

|  |
| --- |
| C++ |
| public delegate void MapOperationDelegate(  String^ operation,   Location^ location ) |

#### Parameters

operation [String](https://docs.microsoft.com/dotnet/api/system.string)

zoom\_in\_point | zoom\_in\_area | zoom\_out | zoom\_next | zoom\_previous

location [Location](#_EA2AA317_Topic)

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.MapOperationEventArgs Class

Arguments for map operations (zoom/pan)

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class MapOperationEventArgs : IEquatable<StpRecognizer.MapOperationEventArgs> |

|  |
| --- |
| C++ |
| public ref class MapOperationEventArgs : IEquatable<StpRecognizer.MapOperationEventArgs^> |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → StpRecognizer.MapOperationEventArgs |
| **Implements** | [IEquatable](https://learn.microsoft.com/dotnet/api/system.iequatable-1)(StpRecognizer.MapOperationEventArgs) |

## Constructors

|  |  |
| --- | --- |
| [StpRecognizer.MapOperationEventArgs](#_D6FCC4BA_Topic) | Arguments for map operations (zoom/pan) |

## Properties

|  |  |
| --- | --- |
| [Location](#_1AEAFA6D_Topic) |  |
| [Operation](#_71B394DA_Topic) | zoom\_in\_point | zoom\_in\_area | zoom\_out | zoom\_next | zoom\_previous |

## Methods

|  |  |
| --- | --- |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.MapOperationEventArgs Constructor

Arguments for map operations (zoom/pan)

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public MapOperationEventArgs(  string Operation,  Location Location ) |

|  |
| --- |
| C++ |
| public: MapOperationEventArgs(  String^ Operation,   Location^ Location ) |

#### Parameters

Operation [String](https://docs.microsoft.com/dotnet/api/system.string)

zoom\_in\_point | zoom\_in\_area | zoom\_out | zoom\_next | zoom\_previous

Location [Location](#_EA2AA317_Topic)

## See Also

#### Reference

[StpRecognizer.MapOperationEventArgs Class](#_17C81DDE_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.MapOperationEventArgs.Location Property

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Location Location { get; init; } |

|  |
| --- |
| C++ |
| public: property Location^ Location {  Location^ get ();  void set (Location^ value); } |

#### Property Value

[Location](#_EA2AA317_Topic)

## See Also

#### Reference

[StpRecognizer.MapOperationEventArgs Class](#_17C81DDE_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.MapOperationEventArgs.Operation Property

zoom\_in\_point | zoom\_in\_area | zoom\_out | zoom\_next | zoom\_previous

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Operation { get; init; } |

|  |
| --- |
| C++ |
| public: property String^ Operation {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpRecognizer.MapOperationEventArgs Class](#_17C81DDE_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.PenDownUpDelegate Delegate

Pen down and up event signature

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void PenDownUpDelegate(  DateTime time,  LatLon coord ) |

|  |
| --- |
| C++ |
| public delegate void PenDownUpDelegate(  DateTime time,   LatLon^ coord ) |

#### Parameters

time [DateTime](https://docs.microsoft.com/dotnet/api/system.datetime)

coord [LatLon](#_56D57CE3_Topic)

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.PenDownUpEventArgs Class

Arguments for pen down and up events

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class PenDownUpEventArgs : IEquatable<StpRecognizer.PenDownUpEventArgs> |

|  |
| --- |
| C++ |
| public ref class PenDownUpEventArgs : IEquatable<StpRecognizer.PenDownUpEventArgs^> |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → StpRecognizer.PenDownUpEventArgs |
| **Implements** | [IEquatable](https://learn.microsoft.com/dotnet/api/system.iequatable-1)(StpRecognizer.PenDownUpEventArgs) |

## Constructors

|  |  |
| --- | --- |
| [StpRecognizer.PenDownUpEventArgs](#_1EFC4661_Topic) | Arguments for pen down and up events |

## Properties

|  |  |
| --- | --- |
| [Coord](#_C85A7749_Topic) |  |
| [Time](#_52BA3DA4_Topic) |  |

## Methods

|  |  |
| --- | --- |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.PenDownUpEventArgs Constructor

Arguments for pen down and up events

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public PenDownUpEventArgs(  DateTime Time,  LatLon Coord ) |

|  |
| --- |
| C++ |
| public: PenDownUpEventArgs(  DateTime Time,   LatLon^ Coord ) |

#### Parameters

Time [DateTime](https://docs.microsoft.com/dotnet/api/system.datetime)

Coord [LatLon](#_56D57CE3_Topic)

## See Also

#### Reference

[StpRecognizer.PenDownUpEventArgs Class](#_77CD8720_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.PenDownUpEventArgs.Coord Property

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public LatLon Coord { get; init; } |

|  |
| --- |
| C++ |
| public: property LatLon^ Coord {  LatLon^ get ();  void set (LatLon^ value); } |

#### Property Value

[LatLon](#_56D57CE3_Topic)

## See Also

#### Reference

[StpRecognizer.PenDownUpEventArgs Class](#_77CD8720_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.PenDownUpEventArgs.Time Property

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public DateTime Time { get; init; } |

|  |
| --- |
| C++ |
| public: property DateTime Time {  DateTime get ();  void set (DateTime value); } |

#### Property Value

[DateTime](https://docs.microsoft.com/dotnet/api/system.datetime)

## See Also

#### Reference

[StpRecognizer.PenDownUpEventArgs Class](#_77CD8720_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.RoleSwitchDelegate Delegate

Role switch event signature

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void RoleSwitchDelegate(  string role ) |

|  |
| --- |
| C++ |
| public delegate void RoleSwitchDelegate(  String^ role ) |

#### Parameters

role [String](https://docs.microsoft.com/dotnet/api/system.string)

Role to switch to - can be null if starting a new scenario

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.RoleSwitchEventArgs Class

Arguments for Role switches

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class RoleSwitchEventArgs : IEquatable<StpRecognizer.RoleSwitchEventArgs> |

|  |
| --- |
| C++ |
| public ref class RoleSwitchEventArgs : IEquatable<StpRecognizer.RoleSwitchEventArgs^> |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → StpRecognizer.RoleSwitchEventArgs |
| **Implements** | [IEquatable](https://learn.microsoft.com/dotnet/api/system.iequatable-1)(StpRecognizer.RoleSwitchEventArgs) |

## Constructors

|  |  |
| --- | --- |
| [StpRecognizer.RoleSwitchEventArgs](#_70ADE3C2_Topic) | Arguments for Role switches |

## Properties

|  |  |
| --- | --- |
| [Role](#_24178049_Topic) | Role to switch to - can be null if starting a new scenario |

## Methods

|  |  |
| --- | --- |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.RoleSwitchEventArgs Constructor

Arguments for Role switches

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public RoleSwitchEventArgs(  string Role ) |

|  |
| --- |
| C++ |
| public: RoleSwitchEventArgs(  String^ Role ) |

#### Parameters

Role [String](https://docs.microsoft.com/dotnet/api/system.string)

Role to switch to - can be null if starting a new scenario

## See Also

#### Reference

[StpRecognizer.RoleSwitchEventArgs Class](#_CD245A4A_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.RoleSwitchEventArgs.Role Property

Role to switch to - can be null if starting a new scenario

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Role { get; init; } |

|  |
| --- |
| C++ |
| public: property String^ Role {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpRecognizer.RoleSwitchEventArgs Class](#_CD245A4A_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.ShutdownDelegate Delegate

STP shutdown event signature

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void ShutdownDelegate() |

|  |
| --- |
| C++ |
| public delegate void ShutdownDelegate() |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SketchIntegratedDelegate Delegate

Signature for event indicating that ink has been processed (and can be removed)

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void SketchIntegratedDelegate() |

|  |
| --- |
| C++ |
| public delegate void SketchIntegratedDelegate() |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SketchRecognitionEventArgs Class

Sketch recognition event parameters

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class SketchRecognitionEventArgs : IEquatable<StpRecognizer.SketchRecognitionEventArgs> |

|  |
| --- |
| C++ |
| public ref class SketchRecognitionEventArgs : IEquatable<StpRecognizer.SketchRecognitionEventArgs^> |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → StpRecognizer.SketchRecognitionEventArgs |
| **Implements** | [IEquatable](https://learn.microsoft.com/dotnet/api/system.iequatable-1)(StpRecognizer.SketchRecognitionEventArgs) |

## Constructors

|  |  |
| --- | --- |
| [StpRecognizer.SketchRecognitionEventArgs](#_C1877A25_Topic) | Sketch recognition event parameters |

## Properties

|  |  |
| --- | --- |
| [SketchList](#_F1416DC5_Topic) |  |

## Methods

|  |  |
| --- | --- |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SketchRecognitionEventArgs Constructor

Sketch recognition event parameters

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public SketchRecognitionEventArgs(  List<SketchRecoResult> SketchList ) |

|  |
| --- |
| C++ |
| public: SketchRecognitionEventArgs(  List<SketchRecoResult^>^ SketchList ) |

#### Parameters

SketchList [List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([SketchRecoResult](#_13CB1FF6_Topic))

## See Also

#### Reference

[StpRecognizer.SketchRecognitionEventArgs Class](#_1158F768_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SketchRecognitionEventArgs.SketchList Property

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public List<SketchRecoResult> SketchList { get; init; } |

|  |
| --- |
| C++ |
| public: property List<SketchRecoResult^>^ SketchList {  List<SketchRecoResult^>^ get ();  void set (List<SketchRecoResult^>^ value); } |

#### Property Value

[List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)

([SketchRecoResult](#_13CB1FF6_Topic))

## See Also

#### Reference

[StpRecognizer.SketchRecognitionEventArgs Class](#_1158F768_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SketchRecognizedDelegate Delegate

Recognition of sketched gestures event signature

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void SketchRecognizedDelegate(  List<SketchRecoResult> sketchList ) |

|  |
| --- |
| C++ |
| public delegate void SketchRecognizedDelegate(  List<SketchRecoResult^>^ sketchList ) |

#### Parameters

sketchList [List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([SketchRecoResult](#_13CB1FF6_Topic))

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SpeechRecognitionDelegate Delegate

Recognition of speech event signature

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void SpeechRecognitionDelegate(  List<string> speechList ) |

|  |
| --- |
| C++ |
| public delegate void SpeechRecognitionDelegate(  List<String^>^ speechList ) |

#### Parameters

speechList [List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([String](https://docs.microsoft.com/dotnet/api/system.string))

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SpeechRecognitionEventArgs Class

Speech recognition event parameters

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class SpeechRecognitionEventArgs : IEquatable<StpRecognizer.SpeechRecognitionEventArgs> |

|  |
| --- |
| C++ |
| public ref class SpeechRecognitionEventArgs : IEquatable<StpRecognizer.SpeechRecognitionEventArgs^> |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → StpRecognizer.SpeechRecognitionEventArgs |
| **Implements** | [IEquatable](https://learn.microsoft.com/dotnet/api/system.iequatable-1)(StpRecognizer.SpeechRecognitionEventArgs) |

## Constructors

|  |  |
| --- | --- |
| [StpRecognizer.SpeechRecognitionEventArgs](#_906E61AB_Topic) | Speech recognition event parameters |

## Properties

|  |  |
| --- | --- |
| [SpeechList](#_117153A7_Topic) |  |

## Methods

|  |  |
| --- | --- |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SpeechRecognitionEventArgs Constructor

Speech recognition event parameters

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public SpeechRecognitionEventArgs(  List<string> SpeechList ) |

|  |
| --- |
| C++ |
| public: SpeechRecognitionEventArgs(  List<String^>^ SpeechList ) |

#### Parameters

SpeechList [List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([String](https://docs.microsoft.com/dotnet/api/system.string))

## See Also

#### Reference

[StpRecognizer.SpeechRecognitionEventArgs Class](#_AA5962C5_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SpeechRecognitionEventArgs.SpeechList Property

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public List<string> SpeechList { get; init; } |

|  |
| --- |
| C++ |
| public: property List<String^>^ SpeechList {  List<String^>^ get ();  void set (List<String^>^ value); } |

#### Property Value

[List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)

([String](https://docs.microsoft.com/dotnet/api/system.string))

## See Also

#### Reference

[StpRecognizer.SpeechRecognitionEventArgs Class](#_AA5962C5_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.StpConnectionErrorDelegate Delegate

STP connection error event signature

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void StpConnectionErrorDelegate(  StpCommunicationException sce ) |

|  |
| --- |
| C++ |
| public delegate void StpConnectionErrorDelegate(  StpCommunicationException^ sce ) |

#### Parameters

sce [StpCommunicationException](#_E2A451B7_Topic)

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.StpConnectionErrorEventArgs Class

Arguments for STP connection error

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class StpConnectionErrorEventArgs : IEquatable<StpRecognizer.StpConnectionErrorEventArgs> |

|  |
| --- |
| C++ |
| public ref class StpConnectionErrorEventArgs : IEquatable<StpRecognizer.StpConnectionErrorEventArgs^> |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → StpRecognizer.StpConnectionErrorEventArgs |
| **Implements** | [IEquatable](https://learn.microsoft.com/dotnet/api/system.iequatable-1)(StpRecognizer.StpConnectionErrorEventArgs) |

## Constructors

|  |  |
| --- | --- |
| [StpRecognizer.StpConnectionErrorEventArgs](#_F0CEB46D_Topic) | Arguments for STP connection error |

## Properties

|  |  |
| --- | --- |
| [Sce](#_9819E161_Topic) |  |

## Methods

|  |  |
| --- | --- |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.StpConnectionErrorEventArgs Constructor

Arguments for STP connection error

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpConnectionErrorEventArgs(  StpCommunicationException Sce ) |

|  |
| --- |
| C++ |
| public: StpConnectionErrorEventArgs(  StpCommunicationException^ Sce ) |

#### Parameters

Sce [StpCommunicationException](#_E2A451B7_Topic)

## See Also

#### Reference

[StpRecognizer.StpConnectionErrorEventArgs Class](#_F8D096BA_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.StpConnectionErrorEventArgs.Sce Property

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpCommunicationException Sce { get; init; } |

|  |
| --- |
| C++ |
| public: property StpCommunicationException^ Sce {  StpCommunicationException^ get ();  void set (StpCommunicationException^ value); } |

#### Property Value

[StpCommunicationException](#_E2A451B7_Topic)

## See Also

#### Reference

[StpRecognizer.StpConnectionErrorEventArgs Class](#_F8D096BA_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.StpMessageDelegate Delegate

STP-generated message event signature

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void StpMessageDelegate(  StpRecognizer.StpMessageLevel level,  string msg ) |

|  |
| --- |
| C++ |
| public delegate void StpMessageDelegate(  StpRecognizer.StpMessageLevel level,   String^ msg ) |

#### Parameters

level [StpRecognizer.StpMessageLevel](#_8382FAE9_Topic)

Message category

msg [String](https://docs.microsoft.com/dotnet/api/system.string)

The string to display.

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.StpMessageEventArgs Class

Arguments for STP-generated message events

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class StpMessageEventArgs : IEquatable<StpRecognizer.StpMessageEventArgs> |

|  |
| --- |
| C++ |
| public ref class StpMessageEventArgs : IEquatable<StpRecognizer.StpMessageEventArgs^> |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → StpRecognizer.StpMessageEventArgs |
| **Implements** | [IEquatable](https://learn.microsoft.com/dotnet/api/system.iequatable-1)(StpRecognizer.StpMessageEventArgs) |

## Constructors

|  |  |
| --- | --- |
| [StpRecognizer.StpMessageEventArgs](#_95E72B09_Topic) | Arguments for STP-generated message events |

## Properties

|  |  |
| --- | --- |
| [Level](#_EF0A2561_Topic) | Message category |
| [Msg](#_DBAC6B8E_Topic) | The string to display. |

## Methods

|  |  |
| --- | --- |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.StpMessageEventArgs Constructor

Arguments for STP-generated message events

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpMessageEventArgs(  StpRecognizer.StpMessageLevel Level,  string Msg ) |

|  |
| --- |
| C++ |
| public: StpMessageEventArgs(  StpRecognizer.StpMessageLevel Level,   String^ Msg ) |

#### Parameters

Level [StpRecognizer.StpMessageLevel](#_8382FAE9_Topic)

Message category

Msg [String](https://docs.microsoft.com/dotnet/api/system.string)

The string to display.

## See Also

#### Reference

[StpRecognizer.StpMessageEventArgs Class](#_38520B4A_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.StpMessageEventArgs.Level Property

Message category

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpRecognizer.StpMessageLevel Level { get; init; } |

|  |
| --- |
| C++ |
| public: property StpRecognizer.StpMessageLevel Level {  StpRecognizer.StpMessageLevel get ();  void set (StpRecognizer.StpMessageLevel value); } |

#### Property Value

[StpRecognizer.StpMessageLevel](#_8382FAE9_Topic)

## See Also

#### Reference

[StpRecognizer.StpMessageEventArgs Class](#_38520B4A_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.StpMessageEventArgs.Msg Property

The string to display.

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Msg { get; init; } |

|  |
| --- |
| C++ |
| public: property String^ Msg {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpRecognizer.StpMessageEventArgs Class](#_38520B4A_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.StpMessageLevel Enumeration

STP message category

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public enum StpMessageLevel |

|  |
| --- |
| C++ |
| public enum class StpMessageLevel |

## Members

|  |  |  |
| --- | --- | --- |
| Error | 0 |  |
| Warning | 1 |  |
| Info | 2 |  |
| Verbose | 3 |  |
| Debug | 4 |  |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SymbolAddedDelegate Delegate

Symbol added event signature

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void SymbolAddedDelegate(  string poid,  StpItem stpSymbol,  bool isUndo ) |

|  |
| --- |
| C++ |
| public delegate void SymbolAddedDelegate(  String^ poid,   StpItem^ stpSymbol,   bool isUndo ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

stpSymbol [StpItem](#_29D5C3C1_Topic)

Symbol, including Alternates (n-best list)

isUndo [Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SymbolDeletedDelegate Delegate

Symbols deleted event signature

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void SymbolDeletedDelegate(  string poid,  bool isUndo ) |

|  |
| --- |
| C++ |
| public delegate void SymbolDeletedDelegate(  String^ poid,   bool isUndo ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

isUndo [Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SymbolEditDelegate Delegate

Symbol edit operations event signature

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void SymbolEditDelegate(  string operation,  Location location ) |

|  |
| --- |
| C++ |
| public delegate void SymbolEditDelegate(  String^ operation,   Location^ location ) |

#### Parameters

operation [String](https://docs.microsoft.com/dotnet/api/system.string)

delete | move | select

location [Location](#_EA2AA317_Topic)

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SymbolEditEventArgs Class

Arguments for Symbol edit operations

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class SymbolEditEventArgs : IEquatable<StpRecognizer.SymbolEditEventArgs> |

|  |
| --- |
| C++ |
| public ref class SymbolEditEventArgs : IEquatable<StpRecognizer.SymbolEditEventArgs^> |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → StpRecognizer.SymbolEditEventArgs |
| **Implements** | [IEquatable](https://learn.microsoft.com/dotnet/api/system.iequatable-1)(StpRecognizer.SymbolEditEventArgs) |

## Constructors

|  |  |
| --- | --- |
| [StpRecognizer.SymbolEditEventArgs](#_D1969087_Topic) | Arguments for Symbol edit operations |

## Properties

|  |  |
| --- | --- |
| [Location](#_AF210AE9_Topic) |  |
| [Operation](#_24705409_Topic) | delete | move | select |

## Methods

|  |  |
| --- | --- |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SymbolEditEventArgs Constructor

Arguments for Symbol edit operations

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public SymbolEditEventArgs(  string Operation,  Location Location ) |

|  |
| --- |
| C++ |
| public: SymbolEditEventArgs(  String^ Operation,   Location^ Location ) |

#### Parameters

Operation [String](https://docs.microsoft.com/dotnet/api/system.string)

delete | move | select

Location [Location](#_EA2AA317_Topic)

## See Also

#### Reference

[StpRecognizer.SymbolEditEventArgs Class](#_825D215E_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SymbolEditEventArgs.Location Property

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Location Location { get; init; } |

|  |
| --- |
| C++ |
| public: property Location^ Location {  Location^ get ();  void set (Location^ value); } |

#### Property Value

[Location](#_EA2AA317_Topic)

## See Also

#### Reference

[StpRecognizer.SymbolEditEventArgs Class](#_825D215E_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SymbolEditEventArgs.Operation Property

delete | move | select

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Operation { get; init; } |

|  |
| --- |
| C++ |
| public: property String^ Operation {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpRecognizer.SymbolEditEventArgs Class](#_825D215E_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SymbolModifiedDelegate Delegate

Symbol update event signature

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void SymbolModifiedDelegate(  string poid,  StpItem stpSymbol,  bool isUndo ) |

|  |
| --- |
| C++ |
| public delegate void SymbolModifiedDelegate(  String^ poid,   StpItem^ stpSymbol,   bool isUndo ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

stpSymbol [StpItem](#_29D5C3C1_Topic)

isUndo [Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SymboReportDelegate Delegate

Symbols update report event signature

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void SymboReportDelegate(  string poid,  StpItem stpSymbol ) |

|  |
| --- |
| C++ |
| public delegate void SymboReportDelegate(  String^ poid,   StpItem^ stpSymbol ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

stpSymbol [StpItem](#_29D5C3C1_Topic)

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SymboReportEventArgs Class

Arguments for Symbols update report events

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class SymboReportEventArgs : IEquatable<StpRecognizer.SymboReportEventArgs> |

|  |
| --- |
| C++ |
| public ref class SymboReportEventArgs : IEquatable<StpRecognizer.SymboReportEventArgs^> |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → StpRecognizer.SymboReportEventArgs |
| **Implements** | [IEquatable](https://learn.microsoft.com/dotnet/api/system.iequatable-1)(StpRecognizer.SymboReportEventArgs) |

## Constructors

|  |  |
| --- | --- |
| [StpRecognizer.SymboReportEventArgs](#_7FD24566_Topic) | Arguments for Symbols update report events |

## Properties

|  |  |
| --- | --- |
| [Poid](#_EEC5F3DA_Topic) |  |
| [Symbol](#_3311D3C1_Topic) |  |

## Methods

|  |  |
| --- | --- |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SymboReportEventArgs Constructor

Arguments for Symbols update report events

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public SymboReportEventArgs(  string Poid,  StpItem Symbol ) |

|  |
| --- |
| C++ |
| public: SymboReportEventArgs(  String^ Poid,   StpItem^ Symbol ) |

#### Parameters

Poid [String](https://docs.microsoft.com/dotnet/api/system.string)

Symbol [StpItem](#_29D5C3C1_Topic)

## See Also

#### Reference

[StpRecognizer.SymboReportEventArgs Class](#_C45AA0C0_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SymboReportEventArgs.Poid Property

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Poid { get; init; } |

|  |
| --- |
| C++ |
| public: property String^ Poid {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpRecognizer.SymboReportEventArgs Class](#_C45AA0C0_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.SymboReportEventArgs.Symbol Property

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpItem Symbol { get; init; } |

|  |
| --- |
| C++ |
| public: property StpItem^ Symbol {  StpItem^ get ();  void set (StpItem^ value); } |

#### Property Value

[StpItem](#_29D5C3C1_Topic)

## See Also

#### Reference

[StpRecognizer.SymboReportEventArgs Class](#_C45AA0C0_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.TaskAddeddDelegate Delegate

Task added event signature

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void TaskAddeddDelegate(  string poid,  StpTask stpTask,  List<string> taskPoids,  bool isUndo ) |

|  |
| --- |
| C++ |
| public delegate void TaskAddeddDelegate(  String^ poid,   StpTask^ stpTask,   List<String^>^ taskPoids,   bool isUndo ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

stpTask [StpTask](#_DDBE5955_Topic)

taskPoids [List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([String](https://docs.microsoft.com/dotnet/api/system.string))

>Unique STP ids for the task's symbols and TG referenced in the task or alternates

isUndo [Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.TaskDeletedDelegate Delegate

Deleted Task event signature

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void TaskDeletedDelegate(  string poid,  bool isUndo ) |

|  |
| --- |
| C++ |
| public delegate void TaskDeletedDelegate(  String^ poid,   bool isUndo ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

STP unique id

isUndo [Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

Indicates whether the Operation is a result of a previously requested Undo command. Useful for distinguishing between new operations (which may need to be added to an undo stack and just the actual compensating action

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.TaskModifiedDelegate Delegate

Task update event signature

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void TaskModifiedDelegate(  string poid,  StpTask stpTask,  List<string> taskPoids,  bool isUndo ) |

|  |
| --- |
| C++ |
| public delegate void TaskModifiedDelegate(  String^ poid,   StpTask^ stpTask,   List<String^>^ taskPoids,   bool isUndo ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

STP unique id

stpTask [StpTask](#_DDBE5955_Topic)

taskPoids [List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([String](https://docs.microsoft.com/dotnet/api/system.string))

Unique STP ids for the task's symbols and TG referenced in the task or alternates

isUndo [Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

Indicates whether the Operation is a result of a previously requested Undo command. Useful for distinguishing between new operations (which may need to be added to an undo stack and just the actual compensating action

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.TaskOrgRelationshipAddeddDelegate Delegate

ask Org relationship added event signature

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void TaskOrgRelationshipAddeddDelegate(  string poid,  StpTaskOrgRelationship stpTaskOrgRelationship,  bool isUndo ) |

|  |
| --- |
| C++ |
| public delegate void TaskOrgRelationshipAddeddDelegate(  String^ poid,   StpTaskOrgRelationship^ stpTaskOrgRelationship,   bool isUndo ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

stpTaskOrgRelationship [StpTaskOrgRelationship](#_67DB8B61_Topic)

isUndo [Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.TaskOrgRelationshipDeletedDelegate Delegate

Deleted Tasks Org relationships event signature

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void TaskOrgRelationshipDeletedDelegate(  string poid,  bool isUndo ) |

|  |
| --- |
| C++ |
| public delegate void TaskOrgRelationshipDeletedDelegate(  String^ poid,   bool isUndo ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

STP unique id

isUndo [Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

Indicates whether the Operation is a result of a previously requested Undo command. Useful for distinguishing between new operations (which may need to be added to an undo stack and just the actual compensating action

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.TaskOrgRelationshipModifiedDelegate Delegate

Task org relationship update event signature

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void TaskOrgRelationshipModifiedDelegate(  string poid,  StpTaskOrgRelationship stpTaskOrgRelationship,  bool isUndo ) |

|  |
| --- |
| C++ |
| public delegate void TaskOrgRelationshipModifiedDelegate(  String^ poid,   StpTaskOrgRelationship^ stpTaskOrgRelationship,   bool isUndo ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

STP unique id

stpTaskOrgRelationship [StpTaskOrgRelationship](#_67DB8B61_Topic)

isUndo [Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

Indicates whether the Operation is a result of a previously requested Undo command. Useful for distinguishing between new operations (which may need to be added to an undo stack and just the actual compensating action

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.TaskOrgUnitAddeddDelegate Delegate

Task Org unit added event signature

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void TaskOrgUnitAddeddDelegate(  string poid,  StpTaskOrgUnit stpTaskOrgUnit,  bool isUndo ) |

|  |
| --- |
| C++ |
| public delegate void TaskOrgUnitAddeddDelegate(  String^ poid,   StpTaskOrgUnit^ stpTaskOrgUnit,   bool isUndo ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

stpTaskOrgUnit [StpTaskOrgUnit](#_86161284_Topic)

isUndo [Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.TaskOrgUnitDeletedDelegate Delegate

Deleted Tasks Org units event signature

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void TaskOrgUnitDeletedDelegate(  string poid,  bool isUndo ) |

|  |
| --- |
| C++ |
| public delegate void TaskOrgUnitDeletedDelegate(  String^ poid,   bool isUndo ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

STP unique id

isUndo [Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

Indicates whether the Operation is a result of a previously requested Undo command. Useful for distinguishing between new operations (which may need to be added to an undo stack and just the actual compensating action

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRecognizer.TaskOrgUnitModifiedDelegate Delegate

Task org unit update event signature

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void TaskOrgUnitModifiedDelegate(  string poid,  StpTaskOrgUnit stpTaskOrgUnit,  bool isUndo ) |

|  |
| --- |
| C++ |
| public delegate void TaskOrgUnitModifiedDelegate(  String^ poid,   StpTaskOrgUnit^ stpTaskOrgUnit,   bool isUndo ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

STP unique id

stpTaskOrgUnit [StpTaskOrgUnit](#_86161284_Topic)

isUndo [Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

Indicates whether the Operation is a result of a previously requested Undo command. Useful for distinguishing between new operations (which may need to be added to an undo stack and just the actual compensating action

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpRequestDelegate Delegate

The delegate void that describes the function prototype for STP Request events

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void StpRequestDelegate(  string stpEvent,  ref List<string> solutions ) |

|  |
| --- |
| C++ |
| public delegate void StpRequestDelegate(  String^ stpEvent,   List<String^>^% solutions ) |

#### Parameters

stpEvent [String](https://docs.microsoft.com/dotnet/api/system.string)

solutions [List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([String](https://docs.microsoft.com/dotnet/api/system.string))

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpService Class

STP item service

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public abstract class StpService : IDisposable |

|  |
| --- |
| C++ |
| public ref class StpService abstract : IDisposable |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → StpService |
| **Derived** | [StpSDK.SymbolService](#_1141CCEC_Topic) [StpSDK.TaskOrgService](#_6194A66E_Topic) [StpSDK.TaskService](#_C8FC04E8_Topic) |
| **Implements** | [IDisposable](https://learn.microsoft.com/dotnet/api/system.idisposable) |

## Remarks

Exposes STP interpretations as observables that can be further manipulated (e.g. filtered, transformed) and bound to UI elements to have them automatically updated whenever there are changes Subclasses should override SubscribetoEvents to subscribe to those events that are meaningful for the specific service,for example SymbolAdded/Modified/Deleted

## Methods

|  |  |
| --- | --- |
| [Dispose](#_463053E5_Topic) | Dispose |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpService.Dispose Method

Dispose

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void Dispose() |

|  |
| --- |
| C++ |
| public: virtual void Dispose() sealed |

#### Implements

[IDisposable.Dispose()](https://docs.microsoft.com/dotnet/api/system.idisposable.dispose#System_IDisposable_Dispose)

## See Also

#### Reference

[StpService Class](#_CC1225D1_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol Class

Military symbol

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class StpSymbol : StpItem, IRecoSymbol,   INotifyPropertyChanged |

|  |
| --- |
| C++ |
| public ref class StpSymbol : public StpItem,   IRecoSymbol, INotifyPropertyChanged |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → [StpItem](#_29D5C3C1_Topic) → StpSymbol |
| **Derived** | [StpSDK.StpTaskOrgUnit](#_86161284_Topic) |
| **Implements** | [IRecoSymbol](#_3654190_Topic), [INotifyPropertyChanged](https://learn.microsoft.com/dotnet/api/system.componentmodel.inotifypropertychanged) |

## Constructors

|  |  |
| --- | --- |
| [StpSymbol()](#_E19BBC84_Topic) | Constructor |
| [StpSymbol(String)](#_2AE0FFBE_Topic) | Construct with a specific type |

## Properties

|  |  |
| --- | --- |
| [Affiliation](#_214C7692_Topic) | Affiliation |
| [Alternates](#_8C14CBDA_Topic) | Alternate interpretations for this symbol (Inherited from [StpItem](#_29D5C3C1_Topic)) |
| [Altitude](#_3F949CD3_Topic) | Altitude |
| [BattleDimension](#_AFEEA492_Topic) | Battle dimension |
| [Branch](#_8DFBD5AB_Topic) | Branch |
| [Capability](#_79651807_Topic) | Capability |
| [CharlieSIDC](#_DA7F60A_Topic) | 2525/APP6 C SIDC |
| [CodingScheme](#_CFE6E78E_Topic) | Coding scheme |
| [ColorBarOCA](#_C5C1A99D_Topic) | Color bar |
| [CompleteLanguage](#_9D893195_Topic) | Full symbol description created by STP, including defaults omitted by the user |
| [Confidence](#_5BB39197_Topic) | Confidence of the interpretation of the user's action (Inherited from [StpItem](#_29D5C3C1_Topic)) |
| [CreatorRole](#_FA816E11_Topic) | Current role performing the edit (Inherited from [StpItem](#_29D5C3C1_Topic)) |
| [Defense](#_7FB6B609_Topic) | Defense |
| [DeltaSIDC](#_13B13FC_Topic) | 2525/APP6 D SIDC |
| [Description](#_56D6D38D_Topic) | Description of the symbol with no designators, e.g. Armored Infantry Company (Overrides [StpItem.Description](#_242CD2F7_Topic)) |
| [Designator1](#_DBA3BD7F_Topic) | Single designator or first of a pair of designators supported by a symbol, e.g. the north-side boundary designator |
| [Designator2](#_FF5CE117_Topic) | Second designator, e.g. the south-side boundary designator |
| [DesignatorDescription](#_3FE7E156_Topic) | Unit plus parent unit designator, e.g. A/3-1 |
| [DesigPlusDescription](#_CC342792_Topic) | Designators prefixed to Description |
| [DimensionId](#_E6B4C568_Topic) | Dimension |
| [DrawNote](#_9BBF25E0_Topic) | Draw note |
| [DrawRule](#_BE30250F_Topic) | Draw rules |
| [Echelon](#_395A6A21_Topic) | Echelon |
| [FsdbVersion](#_5D012FA_Topic) | Symbol version |
| [FullDescription](#_17A15014_Topic) | Full description, including affiliation, unit type, and unit designator, echelon, etc (Overrides [StpItem.FullDescription](#_88901A17_Topic)) |
| [Geometry](#_34F6BBC3_Topic) | Type of geometry |
| [GeometryType](#_327FB228_Topic) | Geometry type |
| [GlyphPoid](#_FD4A05FA_Topic) | Associate ink/stroked unique identifier |
| [Graphics](#_71F597F5_Topic) | Graphics |
| [GroundRole](#_4FA385FB_Topic) | Ground role |
| [IconType](#_28532CB2_Topic) | Icon type |
| [IsCustomSymbol](#_12C4B22B_Topic) | Whther the symbol is a proper 2525C symbol or represents a custom code (e.g. edit operation) |
| [Labels](#_244C7A59_Topic) | Labels |
| [Location](#_6441A2A_Topic) | Location |
| [MaxAlt](#_228304F2_Topic) | Maximum altitude |
| [MinAlt](#_3959E365_Topic) | Minimum altitude |
| [Mobility](#_C15FEECE_Topic) | Mobility |
| [Modifier](#_B9058661_Topic) | Symbol modifier |
| [Names](#_9E4716A4_Topic) | Names |
| [Order](#_503DA165_Topic) | Alternate index: 0 is the most likely, followed by 1,2,... (Inherited from [StpItem](#_29D5C3C1_Topic)) |
| [OriginalUnitPoid](#_BC640777_Topic) | Unique identifier of the original unit this is derived from |
| [ParentCoa](#_D4163F0F_Topic) | Unique id of COA containing symbol (Inherited from [StpItem](#_29D5C3C1_Topic)) |
| [ParentUnit](#_81A43EA7_Topic) | Parent unit's unique id |
| [Poid](#_3C8CBFB_Topic) | Unique identifier (Inherited from [StpItem](#_29D5C3C1_Topic)) |
| [Relationship](#_AF7AAFA7_Topic) | Relationship between units |
| [Role](#_EFF80658_Topic) | Role |
| [ShortDescription](#_63B5867F_Topic) | Short description: either just the DesignatorDescription, or if not designators, the Description |
| [SpokenLanguage](#_FA06A60_Topic) | Language spoken at symbol creation |
| [Status](#_F4137ED9_Topic) | Status |
| [Strength](#_71A424D4_Topic) | Strength |
| [SymbolId](#_EAFFCEF6_Topic) | Symbol SIDC (Overrides [StpItem.SymbolId](#_CFF9A56E_Topic)) |
| [SymbolSet](#_72C342E_Topic) | Symbol set |
| [SymbolStatus](#_C9601344_Topic) | Symbol status |
| [SymbolType](#_4FEE62_Topic) | Symbol type |
| [Tags](#_C7097F52_Topic) | Tags |
| [TaskOrgPoid](#_B5D6A987_Topic) | Task Org / ORBAT unique identifier |
| [TimeFrom](#_E8D15EB4_Topic) | Starting time |
| [TimeTo](#_93601AF4_Topic) | Ending time |
| [Type](#_99815743_Topic) | Object class, for example in a military domain: "unit", "mootw", "tg", "task", "task\_org\_unit", "task\_org\_relationship", "edit" (Inherited from [StpItem](#_29D5C3C1_Topic)) |
| [UnitParent](#_44DDF614_Topic) | Parent unit designator |
| [UseCivilianFrames](#_1C14F37E_Topic) | Whether civilian frames are used |
| [Weight](#_D16E949_Topic) | Weight |

## Methods

|  |  |
| --- | --- |
| [Bitmap](#_5A6DCE1F_Topic) | Bitmap image - requires the SVG definitions of the Joint Military Symbology Library to be accessible. The path can be set via StpRecognizer.JMSSVGPath before the call |
| [Equals(Object)](#_56D52FC2_Topic) | Equality test (Overrides [Object.Equals(Object)](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_)) |
| [Equals(StpSymbol)](#_946B171F_Topic) | Checks whether the content of this symbol is equivalent to some other by comparing key properties |
| [FromC2SIM](#_3DE740DE_Topic) | Create a new symbol from a C2SIM xml element |
| [GetHashCode](#_53402F38_Topic) | Get hash code (Overrides [Object.GetHashCode()](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode)) |
| [GetLinearSymbolCoords](#_AA4394A_Topic) | Convert 2525/APP anchor points into simpler/linearized representations compatible with less capable renderers |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## Events

|  |  |
| --- | --- |
| [PropertyChanged](#_CA981F74_Topic) | Event Fody will associate injected code with |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpSymbol() |

|  |
| --- |
| C++ |
| public: StpSymbol() |

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol(String) Constructor

Construct with a specific type

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpSymbol(  string fsType ) |

|  |
| --- |
| C++ |
| public: StpSymbol(  String^ fsType ) |

#### Parameters

fsType [String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.Affiliation Property

Affiliation

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Affiliation Affiliation { get; set; } |

|  |
| --- |
| C++ |
| public: property Affiliation Affiliation {  Affiliation get ();  void set (Affiliation value); } |

#### Property Value

[Affiliation](#_49AA5AC9_Topic)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.Altitude Property

Altitude

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Altitude { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Altitude {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.BattleDimension Property

Battle dimension

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string BattleDimension { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ BattleDimension {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.Branch Property

Branch

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Branch { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Branch {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.Capability Property

Capability

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Capability { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Capability {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.CharlieSIDC Property

2525/APP6 C SIDC

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string CharlieSIDC { get; } |

|  |
| --- |
| C++ |
| public: property String^ CharlieSIDC {  String^ get (); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.CodingScheme Property

Coding scheme

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string CodingScheme { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ CodingScheme {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.ColorBarOCA Property

Color bar

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public bool ColorBarOCA { get; } |

|  |
| --- |
| C++ |
| public: property bool ColorBarOCA {  bool get (); } |

#### Property Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.CompleteLanguage Property

Full symbol description created by STP, including defaults omitted by the user

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string CompleteLanguage { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ CompleteLanguage {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.Defense Property

Defense

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Defense { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Defense {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.DeltaSIDC Property

2525/APP6 D SIDC

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpSymbol.SIDC DeltaSIDC { get; set; } |

|  |
| --- |
| C++ |
| public: property StpSymbol.SIDC^ DeltaSIDC {  StpSymbol.SIDC^ get ();  void set (StpSymbol.SIDC^ value); } |

#### Property Value

[StpSymbol.SIDC](#_1870C202_Topic)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.Description Property

Description of the symbol with no designators, e.g. Armored Infantry Company

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public override string Description { get; } |

|  |
| --- |
| C++ |
| public: virtual property String^ Description {  String^ get () override; } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

#### Implements

[IRecoSymbol.Description](#_DAA0AE95_Topic)  
[IStpObject.Description](#_80BF6817_Topic)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.Designator1 Property

Single designator or first of a pair of designators supported by a symbol, e.g. the north-side boundary designator

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Designator1 { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Designator1 {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.Designator2 Property

Second designator, e.g. the south-side boundary designator

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Designator2 { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Designator2 {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.DesignatorDescription Property

Unit plus parent unit designator, e.g. A/3-1

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string DesignatorDescription { get; } |

|  |
| --- |
| C++ |
| public: property String^ DesignatorDescription {  String^ get (); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.DesigPlusDescription Property

Designators prefixed to Description

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string DesigPlusDescription { get; } |

|  |
| --- |
| C++ |
| public: virtual property String^ DesigPlusDescription {  String^ get () sealed; } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

#### Implements

[IRecoSymbol.DesigPlusDescription](#_E81B997C_Topic)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.DimensionId Property

Dimension

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string DimensionId { get; } |

|  |
| --- |
| C++ |
| public: property String^ DimensionId {  String^ get (); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.DrawNote Property

Draw note

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string DrawNote { get; } |

|  |
| --- |
| C++ |
| public: property String^ DrawNote {  String^ get (); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.DrawRule Property

Draw rules

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Dictionary<string, string> DrawRule { get; } |

|  |
| --- |
| C++ |
| public: property Dictionary<String^, String^>^ DrawRule {  Dictionary<String^, String^>^ get (); } |

#### Property Value

[Dictionary](https://docs.microsoft.com/dotnet/api/system.collections.generic.dictionary-2)

([String](https://docs.microsoft.com/dotnet/api/system.string)

, [String](https://docs.microsoft.com/dotnet/api/system.string))

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.Echelon Property

Echelon

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Echelon Echelon { get; set; } |

|  |
| --- |
| C++ |
| public: property Echelon Echelon {  Echelon get ();  void set (Echelon value); } |

#### Property Value

[Echelon](#_76968760_Topic)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.FsdbVersion Property

Symbol version

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string FsdbVersion { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ FsdbVersion {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.FullDescription Property

Full description, including affiliation, unit type, and unit designator, echelon, etc

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public override string FullDescription { get; } |

|  |
| --- |
| C++ |
| public: virtual property String^ FullDescription {  String^ get () override; } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

#### Implements

[IRecoSymbol.FullDescription](#_8247D91A_Topic)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.Geometry Property

Type of geometry

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Geometry { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Geometry {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.GeometryType Property

Geometry type

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpSymbol.GeometryTypeEnum GeometryType { get; } |

|  |
| --- |
| C++ |
| public: property StpSymbol.GeometryTypeEnum GeometryType {  StpSymbol.GeometryTypeEnum get (); } |

#### Property Value

[StpSymbol.GeometryTypeEnum](#_FC7EE834_Topic)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.GlyphPoid Property

Associate ink/stroked unique identifier

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string GlyphPoid { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ GlyphPoid {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.Graphics Property

Graphics

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public List<string> Graphics { get; } |

|  |
| --- |
| C++ |
| public: property List<String^>^ Graphics {  List<String^>^ get (); } |

#### Property Value

[List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)

([String](https://docs.microsoft.com/dotnet/api/system.string))

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.GroundRole Property

Ground role

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string GroundRole { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ GroundRole {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.IconType Property

Icon type

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpSymbol.IconTypeEnum IconType { get; } |

|  |
| --- |
| C++ |
| public: property StpSymbol.IconTypeEnum IconType {  StpSymbol.IconTypeEnum get (); } |

#### Property Value

[StpSymbol.IconTypeEnum](#_3D71F27F_Topic)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.IsCustomSymbol Property

Whther the symbol is a proper 2525C symbol or represents a custom code (e.g. edit operation)

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public bool IsCustomSymbol { get; } |

|  |
| --- |
| C++ |
| public: property bool IsCustomSymbol {  bool get (); } |

#### Property Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.Labels Property

Labels

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public List<Dictionary<string, string>> Labels { get; } |

|  |
| --- |
| C++ |
| public: property List<Dictionary<String^, String^>^>^ Labels {  List<Dictionary<String^, String^>^>^ get (); } |

#### Property Value

[List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)

([Dictionary](https://docs.microsoft.com/dotnet/api/system.collections.generic.dictionary-2)([String](https://docs.microsoft.com/dotnet/api/system.string)

, [String](https://docs.microsoft.com/dotnet/api/system.string)))

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.Location Property

Location

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Location Location { get; set; } |

|  |
| --- |
| C++ |
| public: property Location^ Location {  Location^ get ();  void set (Location^ value); } |

#### Property Value

[Location](#_EA2AA317_Topic)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.MaxAlt Property

Maximum altitude

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string MaxAlt { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ MaxAlt {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.MinAlt Property

Minimum altitude

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string MinAlt { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ MinAlt {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.Mobility Property

Mobility

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Mobility { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Mobility {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.Modifier Property

Symbol modifier

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Modifier Modifier { get; set; } |

|  |
| --- |
| C++ |
| public: property Modifier Modifier {  Modifier get ();  void set (Modifier value); } |

#### Property Value

[Modifier](#_10207D1C_Topic)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.Names Property

Names

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Dictionary<string, string> Names { get; } |

|  |
| --- |
| C++ |
| public: property Dictionary<String^, String^>^ Names {  Dictionary<String^, String^>^ get (); } |

#### Property Value

[Dictionary](https://docs.microsoft.com/dotnet/api/system.collections.generic.dictionary-2)

([String](https://docs.microsoft.com/dotnet/api/system.string)

, [String](https://docs.microsoft.com/dotnet/api/system.string))

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.OriginalUnitPoid Property

Unique identifier of the original unit this is derived from

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string OriginalUnitPoid { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ OriginalUnitPoid {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## Remarks

As tasks are approved, anticipated units related to the unit performing the task (the "who") are created. This property identifies the initial unit

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.ParentUnit Property

Parent unit's unique id

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string ParentUnit { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ ParentUnit {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.Relationship Property

Relationship between units

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public CommandRelationship Relationship { get; set; } |

|  |
| --- |
| C++ |
| public: property CommandRelationship Relationship {  CommandRelationship get ();  void set (CommandRelationship value); } |

#### Property Value

[CommandRelationship](#_EB26EAA2_Topic)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.Role Property

Role

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Role { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Role {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.ShortDescription Property

Short description: either just the DesignatorDescription, or if not designators, the Description

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string ShortDescription { get; } |

|  |
| --- |
| C++ |
| public: virtual property String^ ShortDescription {  String^ get () sealed; } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

#### Implements

[IRecoSymbol.ShortDescription](#_6B0D1E81_Topic)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.SpokenLanguage Property

Language spoken at symbol creation

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string SpokenLanguage { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ SpokenLanguage {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.Status Property

Status

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Status Status { get; set; } |

|  |
| --- |
| C++ |
| public: property Status Status {  Status get ();  void set (Status value); } |

#### Property Value

[Status](#_36A2B98_Topic)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.Strength Property

Strength

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Strength Strength { get; set; } |

|  |
| --- |
| C++ |
| public: property Strength Strength {  Strength get ();  void set (Strength value); } |

#### Property Value

[Strength](#_2800DDEC_Topic)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.SymbolId Property

Symbol SIDC

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public override string SymbolId { get; set; } |

|  |
| --- |
| C++ |
| public: virtual property String^ SymbolId {  String^ get () override;  void set (String^ value) override; } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.SymbolSet Property

Symbol set

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string SymbolSet { get; } |

|  |
| --- |
| C++ |
| public: property String^ SymbolSet {  String^ get (); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.SymbolStatus Property

Symbol status

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpSymbol.SymbolStatusEnum SymbolStatus { get; } |

|  |
| --- |
| C++ |
| public: property StpSymbol.SymbolStatusEnum SymbolStatus {  StpSymbol.SymbolStatusEnum get (); } |

#### Property Value

[StpSymbol.SymbolStatusEnum](#_F8DDD172_Topic)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.SymbolType Property

Symbol type

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string SymbolType { get; } |

|  |
| --- |
| C++ |
| public: property String^ SymbolType {  String^ get (); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.Tags Property

Tags

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Tags { get; } |

|  |
| --- |
| C++ |
| public: property String^ Tags {  String^ get (); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.TaskOrgPoid Property

Task Org / ORBAT unique identifier

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string TaskOrgPoid { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ TaskOrgPoid {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.TimeFrom Property

Starting time

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string TimeFrom { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ TimeFrom {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.TimeTo Property

Ending time

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string TimeTo { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ TimeTo {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.UnitParent Property

Parent unit designator

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string UnitParent { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ UnitParent {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.UseCivilianFrames Property

Whether civilian frames are used

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public bool UseCivilianFrames { get; } |

|  |
| --- |
| C++ |
| public: property bool UseCivilianFrames {  bool get (); } |

#### Property Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.Weight Property

Weight

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Weight { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Weight {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.Bitmap Method

Bitmap image - requires the SVG definitions of the Joint Military Symbology Library to be accessible. The path can be set via StpRecognizer.JMSSVGPath before the call

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Bitmap Bitmap(  int width,  int height ) |

|  |
| --- |
| C++ |
| public: Bitmap^ Bitmap(  int width,   int height ) |

#### Parameters

width [Int32](https://docs.microsoft.com/dotnet/api/system.int32)

height [Int32](https://docs.microsoft.com/dotnet/api/system.int32)

#### Return Value

[Bitmap](https://docs.microsoft.com/dotnet/api/system.drawing.bitmap)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.Equals(Object) Method

Equality test

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public override bool Equals(  Object o ) |

|  |
| --- |
| C++ |
| public: virtual bool Equals(  Object^ o ) override |

#### Parameters

o [Object](https://docs.microsoft.com/dotnet/api/system.object)

#### Return Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

#### Implements

[IRecoSymbol.Equals(Object)](#_4BBB694E_Topic)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.Equals(StpSymbol) Method

Checks whether the content of this symbol is equivalent to some other by comparing key properties

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public bool Equals(  StpSymbol item ) |

|  |
| --- |
| C++ |
| public: bool Equals(  StpSymbol^ item ) |

#### Parameters

item [StpSymbol](#_26F34E3C_Topic)

#### Return Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.FromC2SIM Method

Create a new symbol from a C2SIM xml element

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public static StpSymbol FromC2SIM(  string symbolSidc,  XElement container,  string currentRole,  string defaultBlueCoaPoid,  string defaultRedCoaPoid ) |

|  |
| --- |
| C++ |
| public: static StpSymbol^ FromC2SIM(  String^ symbolSidc,   XElement^ container,   String^ currentRole,   String^ defaultBlueCoaPoid,   String^ defaultRedCoaPoid ) |

#### Parameters

symbolSidc [String](https://docs.microsoft.com/dotnet/api/system.string)

container [XElement](https://docs.microsoft.com/dotnet/api/system.xml.linq.xelement)

currentRole [String](https://docs.microsoft.com/dotnet/api/system.string)

defaultBlueCoaPoid [String](https://docs.microsoft.com/dotnet/api/system.string)

defaultRedCoaPoid [String](https://docs.microsoft.com/dotnet/api/system.string)

#### Return Value

[StpSymbol](#_26F34E3C_Topic)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.GetHashCode Method

Get hash code

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public override int GetHashCode() |

|  |
| --- |
| C++ |
| public: virtual int GetHashCode() override |

#### Return Value

[Int32](https://docs.microsoft.com/dotnet/api/system.int32)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.GetLinearSymbolCoords Method

Convert 2525/APP anchor points into simpler/linearized representations compatible with less capable renderers

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public List<LatLon> GetLinearSymbolCoords() |

|  |
| --- |
| C++ |
| public: List<LatLon^>^ GetLinearSymbolCoords() |

#### Return Value

[List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)([LatLon](#_56D57CE3_Topic))

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.PropertyChanged Event

Event Fody will associate injected code with

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event PropertyChangedEventHandler PropertyChanged |

|  |
| --- |
| C++ |
| public: virtual event PropertyChangedEventHandler^ PropertyChanged {  void add (PropertyChangedEventHandler^ value);  void remove (PropertyChangedEventHandler^ value); } |

#### Value

[PropertyChangedEventHandler](https://learn.microsoft.com/dotnet/api/system.componentmodel.propertychangedeventhandler)

#### Implements

[INotifyPropertyChanged.PropertyChanged](https://learn.microsoft.com/dotnet/api/system.componentmodel.inotifypropertychanged.propertychanged)

## See Also

#### Reference

[StpSymbol Class](#_26F34E3C_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.GeometryTypeEnum Enumeration

Geometry type

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public enum GeometryTypeEnum |

|  |
| --- |
| C++ |
| public enum class GeometryTypeEnum |

## Members

|  |  |  |
| --- | --- | --- |
| NA | 0 |  |
| POINT | 1 |  |
| LINE | 2 |  |
| AREA | 3 |  |
| MIXED | 4 |  |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.IconTypeEnum Enumeration

Icon type

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public enum IconTypeEnum |

|  |
| --- |
| C++ |
| public enum class IconTypeEnum |

## Members

|  |  |  |
| --- | --- | --- |
| NA | 0 |  |
| MAIN | 1 |  |
| MAIN\_1 | 2 |  |
| MAIN\_2 | 3 |  |
| FULL\_OCTAGON | 4 |  |
| FULL\_FRAME | 5 |  |
| SPECIAL | 6 |  |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.SIDC Class

SIDC symbol ID

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class SIDC |

|  |
| --- |
| C++ |
| public ref class SIDC |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → StpSymbol.SIDC |

## Constructors

|  |  |
| --- | --- |
| [StpSymbol.SIDC(SIDC)](#_329E0A7A_Topic) | Constructor |
| [StpSymbol.SIDC(String, String)](#_2A80D370_Topic) | Constructor |

## Properties

|  |  |
| --- | --- |
| [PartAString](#_C016131A_Topic) | SIDC Part A as a string |
| [PartAUInt](#_2B25636A_Topic) | SIDC Part A as a number |
| [PartBString](#_3F931F21_Topic) | SIDC Part B as a string |
| [PartBUInt](#_A3305622_Topic) | SIDC Part B as a number |
| [SymbolSetCode](#_5B83F1F4_Topic) | Symbol set code |

## Methods

|  |  |
| --- | --- |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.SIDC(SIDC) Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public SIDC(  SIDC sIDC ) |

|  |
| --- |
| C++ |
| public: SIDC(  SIDC^ sIDC ) |

#### Parameters

sIDC **SIDC**

## See Also

#### Reference

[StpSymbol.SIDC Class](#_1870C202_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.SIDC(String, String) Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public SIDC(  string partA,  string partB ) |

|  |
| --- |
| C++ |
| public: SIDC(  String^ partA,   String^ partB ) |

#### Parameters

partA [String](https://docs.microsoft.com/dotnet/api/system.string)

partB [String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol.SIDC Class](#_1870C202_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.SIDC.PartAString Property

SIDC Part A as a string

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string PartAString { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ PartAString {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol.SIDC Class](#_1870C202_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.SIDC.PartAUInt Property

SIDC Part A as a number

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public uint PartAUInt { get; set; } |

|  |
| --- |
| C++ |
| public: property unsigned int PartAUInt {  unsigned int get ();  void set (unsigned int value); } |

#### Property Value

[UInt32](https://docs.microsoft.com/dotnet/api/system.uint32)

## See Also

#### Reference

[StpSymbol.SIDC Class](#_1870C202_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.SIDC.PartBString Property

SIDC Part B as a string

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string PartBString { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ PartBString {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol.SIDC Class](#_1870C202_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.SIDC.PartBUInt Property

SIDC Part B as a number

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public uint PartBUInt { get; set; } |

|  |
| --- |
| C++ |
| public: property unsigned int PartBUInt {  unsigned int get ();  void set (unsigned int value); } |

#### Property Value

[UInt32](https://docs.microsoft.com/dotnet/api/system.uint32)

## See Also

#### Reference

[StpSymbol.SIDC Class](#_1870C202_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.SIDC.SymbolSetCode Property

Symbol set code

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string SymbolSetCode { get; } |

|  |
| --- |
| C++ |
| public: property String^ SymbolSetCode {  String^ get (); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSymbol.SIDC Class](#_1870C202_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSymbol.SymbolStatusEnum Enumeration

Symbol ststus

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public enum SymbolStatusEnum |

|  |
| --- |
| C++ |
| public enum class SymbolStatusEnum |

## Members

|  |  |  |
| --- | --- | --- |
| statusEnumNew | 0 |  |
| statusEnumOld | 1 |  |
| statusEnumRetired | 2 |  |
| statusEnumInvalid | 3 |  |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTask Class

Military task

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| [SerializableAttribute] public class StpTask : StpItem, INotifyPropertyChanged |

|  |
| --- |
| C++ |
| [SerializableAttribute] public ref class StpTask : public StpItem,   INotifyPropertyChanged |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → [StpItem](#_29D5C3C1_Topic) → StpTask |
| **Implements** | [INotifyPropertyChanged](https://learn.microsoft.com/dotnet/api/system.componentmodel.inotifypropertychanged) |

## Constructors

|  |  |
| --- | --- |
| [StpTask](#_796C5980_Topic) | Constructor |

## Properties

|  |  |
| --- | --- |
| [Alternates](#_8C14CBDA_Topic) | Alternate interpretations for this symbol (Inherited from [StpItem](#_29D5C3C1_Topic)) |
| [Confidence](#_5BB39197_Topic) | Confidence of the interpretation of the user's action (Inherited from [StpItem](#_29D5C3C1_Topic)) |
| [CreatorRole](#_FA816E11_Topic) | Current role performing the edit (Inherited from [StpItem](#_29D5C3C1_Topic)) |
| [Description](#_CCE44581_Topic) | Description of the task (Overrides [StpItem.Description](#_242CD2F7_Topic)) |
| [EndTime](#_2EA1420B_Topic) | End time slot |
| [FiresFeatures](#_B2EBEEA_Topic) | Fires components |
| [FullDescription](#_F30F2DF5_Topic) | Full description (Overrides [StpItem.FullDescription](#_88901A17_Topic)) |
| [How](#_60B70A4D_Topic) | Task "how" |
| [IsConfirmed](#_2E7A6AB8_Topic) | User has confirmed the task |
| [Language](#_740CCD6D_Topic) | Language describing the task |
| [MovementFeatures](#_FBEACA5A_Topic) | Components indicating movement |
| [Name](#_30341238_Topic) | Task name |
| [Order](#_503DA165_Topic) | Alternate index: 0 is the most likely, followed by 1,2,... (Inherited from [StpItem](#_29D5C3C1_Topic)) |
| [ParentCoa](#_D4163F0F_Topic) | Unique id of COA containing symbol (Inherited from [StpItem](#_29D5C3C1_Topic)) |
| [Poid](#_3C8CBFB_Topic) | Unique identifier (Inherited from [StpItem](#_29D5C3C1_Topic)) |
| [Prob](#_8AAF0E2B_Topic) | Likelyhood / probability that this is the task the user intended |
| [Speech](#_61F99406_Topic) | Speech used at task creation |
| [StartTime](#_374F857B_Topic) | Start time slot |
| [Supported](#_A9108E7C_Topic) | Unique id of the supported unit, if any |
| [SymbolId](#_CFF9A56E_Topic) | Symbol identifier, such as a 2525/APP6 SIDC or similar code that identifies the nature of the symbol (Inherited from [StpItem](#_29D5C3C1_Topic)) |
| [TaskStatus](#_FA7CD20D_Topic) | Task status |
| [Tgs](#_36CD1278_Topic) | Task Tactical Graphics |
| [Trigger](#_DF0D5D44_Topic) | Key element triggering the task |
| [Type](#_99815743_Topic) | Object class, for example in a military domain: "unit", "mootw", "tg", "task", "task\_org\_unit", "task\_org\_relationship", "edit" (Inherited from [StpItem](#_29D5C3C1_Topic)) |
| [UiStatus](#_4D6AB043_Topic) | UI status - "confirming" or "confirmed" (aka "approved") |
| [What](#_EB20691C_Topic) | Task "what" |
| [Who](#_686C067B_Topic) | Unique id of the nit who is executing the task |
| [Why](#_B1F4443B_Topic) | Task "why" |

## Methods

|  |  |
| --- | --- |
| [DefendInPlaceTask](#_6B7052DB_Topic) | Create basic defend in place task |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## Events

|  |  |
| --- | --- |
| [PropertyChanged](#_83106848_Topic) | Event Fody will associate injected code with |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTask Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpTask() |

|  |
| --- |
| C++ |
| public: StpTask() |

## See Also

#### Reference

[StpTask Class](#_DDBE5955_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTask.Description Property

Description of the task

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public override string Description { get; set; } |

|  |
| --- |
| C++ |
| public: virtual property String^ Description {  String^ get () override;  void set (String^ value) override; } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

#### Implements

[IStpObject.Description](#_80BF6817_Topic)

## See Also

#### Reference

[StpTask Class](#_DDBE5955_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTask.EndTime Property

End time slot

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public int EndTime { get; set; } |

|  |
| --- |
| C++ |
| public: property int EndTime {  int get ();  void set (int value); } |

#### Property Value

[Int32](https://docs.microsoft.com/dotnet/api/system.int32)

## See Also

#### Reference

[StpTask Class](#_DDBE5955_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTask.FiresFeatures Property

Fires components

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public FiresFeatures FiresFeatures { get; set; } |

|  |
| --- |
| C++ |
| public: property FiresFeatures^ FiresFeatures {  FiresFeatures^ get ();  void set (FiresFeatures^ value); } |

#### Property Value

[FiresFeatures](#_62450958_Topic)

## See Also

#### Reference

[StpTask Class](#_DDBE5955_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTask.FullDescription Property

Full description

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public override string FullDescription { get; } |

|  |
| --- |
| C++ |
| public: virtual property String^ FullDescription {  String^ get () override; } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpTask Class](#_DDBE5955_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTask.How Property

Task "how"

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public TaskHow How { get; set; } |

|  |
| --- |
| C++ |
| public: property TaskHow How {  TaskHow get ();  void set (TaskHow value); } |

#### Property Value

[TaskHow](#_778F7E56_Topic)

## See Also

#### Reference

[StpTask Class](#_DDBE5955_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTask.IsConfirmed Property

User has confirmed the task

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public bool IsConfirmed { get; } |

|  |
| --- |
| C++ |
| public: property bool IsConfirmed {  bool get (); } |

#### Property Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpTask Class](#_DDBE5955_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTask.Language Property

Language describing the task

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Language { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Language {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpTask Class](#_DDBE5955_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTask.MovementFeatures Property

Components indicating movement

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public MovementFeatures MovementFeatures { get; set; } |

|  |
| --- |
| C++ |
| public: property MovementFeatures^ MovementFeatures {  MovementFeatures^ get ();  void set (MovementFeatures^ value); } |

#### Property Value

[MovementFeatures](#_520E4532_Topic)

## See Also

#### Reference

[StpTask Class](#_DDBE5955_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTask.Name Property

Task name

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Name { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Name {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpTask Class](#_DDBE5955_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTask.Prob Property

Likelyhood / probability that this is the task the user intended

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public double Prob { get; set; } |

|  |
| --- |
| C++ |
| public: property double Prob {  double get ();  void set (double value); } |

#### Property Value

[Double](https://docs.microsoft.com/dotnet/api/system.double)

## See Also

#### Reference

[StpTask Class](#_DDBE5955_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTask.Speech Property

Speech used at task creation

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Speech { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Speech {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpTask Class](#_DDBE5955_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTask.StartTime Property

Start time slot

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public int StartTime { get; set; } |

|  |
| --- |
| C++ |
| public: property int StartTime {  int get ();  void set (int value); } |

#### Property Value

[Int32](https://docs.microsoft.com/dotnet/api/system.int32)

## See Also

#### Reference

[StpTask Class](#_DDBE5955_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTask.Supported Property

Unique id of the supported unit, if any

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Supported { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Supported {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpTask Class](#_DDBE5955_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTask.TaskStatus Property

Task status

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string TaskStatus { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ TaskStatus {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpTask Class](#_DDBE5955_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTask.Tgs Property

Task Tactical Graphics

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public List<string> Tgs { get; set; } |

|  |
| --- |
| C++ |
| public: property List<String^>^ Tgs {  List<String^>^ get ();  void set (List<String^>^ value); } |

#### Property Value

[List](https://docs.microsoft.com/dotnet/api/system.collections.generic.list-1)

([String](https://docs.microsoft.com/dotnet/api/system.string))

## See Also

#### Reference

[StpTask Class](#_DDBE5955_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTask.Trigger Property

Key element triggering the task

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Trigger { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Trigger {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpTask Class](#_DDBE5955_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTask.UiStatus Property

UI status - "confirming" or "confirmed" (aka "approved")

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string UiStatus { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ UiStatus {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpTask Class](#_DDBE5955_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTask.What Property

Task "what"

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public TaskWhat What { get; set; } |

|  |
| --- |
| C++ |
| public: property TaskWhat What {  TaskWhat get ();  void set (TaskWhat value); } |

#### Property Value

[TaskWhat](#_F1355AF2_Topic)

## See Also

#### Reference

[StpTask Class](#_DDBE5955_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTask.Who Property

Unique id of the nit who is executing the task

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Who { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Who {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpTask Class](#_DDBE5955_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTask.Why Property

Task "why"

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public TaskWhy Why { get; set; } |

|  |
| --- |
| C++ |
| public: property TaskWhy Why {  TaskWhy get ();  void set (TaskWhy value); } |

#### Property Value

[TaskWhy](#_E511C406_Topic)

## See Also

#### Reference

[StpTask Class](#_DDBE5955_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTask.DefendInPlaceTask Method

Create basic defend in place task

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public static StpTask DefendInPlaceTask(  string whoSymbolPoid ) |

|  |
| --- |
| C++ |
| public: static StpTask^ DefendInPlaceTask(  String^ whoSymbolPoid ) |

#### Parameters

whoSymbolPoid [String](https://docs.microsoft.com/dotnet/api/system.string)

#### Return Value

[StpTask](#_DDBE5955_Topic)

## See Also

#### Reference

[StpTask Class](#_DDBE5955_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTask.PropertyChanged Event

Event Fody will associate injected code with

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event PropertyChangedEventHandler PropertyChanged |

|  |
| --- |
| C++ |
| public: virtual event PropertyChangedEventHandler^ PropertyChanged {  void add (PropertyChangedEventHandler^ value);  void remove (PropertyChangedEventHandler^ value); } |

#### Value

[PropertyChangedEventHandler](https://learn.microsoft.com/dotnet/api/system.componentmodel.propertychangedeventhandler)

#### Implements

[INotifyPropertyChanged.PropertyChanged](https://learn.microsoft.com/dotnet/api/system.componentmodel.inotifypropertychanged.propertychanged)

## See Also

#### Reference

[StpTask Class](#_DDBE5955_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTaskOrgRelationship Class

Task Org (TO) / ORBAT unit relationship

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class StpTaskOrgRelationship : BaseFS,   INotifyPropertyChanged |

|  |
| --- |
| C++ |
| public ref class StpTaskOrgRelationship : public BaseFS,   INotifyPropertyChanged |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → [BaseFS](#_6B4BF41E_Topic) → StpTaskOrgRelationship |
| **Implements** | [INotifyPropertyChanged](https://learn.microsoft.com/dotnet/api/system.componentmodel.inotifypropertychanged) |

## Constructors

|  |  |
| --- | --- |
| [StpTaskOrgRelationship](#_70132666_Topic) | Constructor |

## Properties

|  |  |
| --- | --- |
| [Child](#_73A54FB_Topic) | Child/subordinate unit's unique id |
| [IsMTOE](#_79726193_Topic) | Whether this is a Modified Table of Organization and Equipment |
| [Parent](#_9CC885EF_Topic) | Parent unit's unique id |
| [Relationship](#_7CA7AAD_Topic) | Relationship between units |
| [Type](#_E2BF7AA0_Topic) | Object type |

## Methods

|  |  |
| --- | --- |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## Events

|  |  |
| --- | --- |
| [PropertyChanged](#_976A59E_Topic) | Event Fody will associate injected code with |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTaskOrgRelationship Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpTaskOrgRelationship() |

|  |
| --- |
| C++ |
| public: StpTaskOrgRelationship() |

## See Also

#### Reference

[StpTaskOrgRelationship Class](#_67DB8B61_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTaskOrgRelationship.Child Property

Child/subordinate unit's unique id

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Child { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Child {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpTaskOrgRelationship Class](#_67DB8B61_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTaskOrgRelationship.IsMTOE Property

Whether this is a Modified Table of Organization and Equipment

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public bool IsMTOE { get; set; } |

|  |
| --- |
| C++ |
| public: property bool IsMTOE {  bool get ();  void set (bool value); } |

#### Property Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpTaskOrgRelationship Class](#_67DB8B61_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTaskOrgRelationship.Parent Property

Parent unit's unique id

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Parent { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Parent {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpTaskOrgRelationship Class](#_67DB8B61_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTaskOrgRelationship.Relationship Property

Relationship between units

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public CommandRelationship Relationship { get; set; } |

|  |
| --- |
| C++ |
| public: property CommandRelationship Relationship {  CommandRelationship get ();  void set (CommandRelationship value); } |

#### Property Value

[CommandRelationship](#_EB26EAA2_Topic)

## See Also

#### Reference

[StpTaskOrgRelationship Class](#_67DB8B61_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTaskOrgRelationship.Type Property

Object type

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Type { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Type {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpTaskOrgRelationship Class](#_67DB8B61_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTaskOrgRelationship.PropertyChanged Event

Event Fody will associate injected code with

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event PropertyChangedEventHandler PropertyChanged |

|  |
| --- |
| C++ |
| public: virtual event PropertyChangedEventHandler^ PropertyChanged {  void add (PropertyChangedEventHandler^ value);  void remove (PropertyChangedEventHandler^ value); } |

#### Value

[PropertyChangedEventHandler](https://learn.microsoft.com/dotnet/api/system.componentmodel.propertychangedeventhandler)

#### Implements

[INotifyPropertyChanged.PropertyChanged](https://learn.microsoft.com/dotnet/api/system.componentmodel.inotifypropertychanged.propertychanged)

## See Also

#### Reference

[StpTaskOrgRelationship Class](#_67DB8B61_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTaskOrgUnit Class

Task Org (TO) / ORBAT Unit

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class StpTaskOrgUnit : StpSymbol,   INotifyPropertyChanged |

|  |
| --- |
| C++ |
| public ref class StpTaskOrgUnit : public StpSymbol,   INotifyPropertyChanged |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → [StpItem](#_29D5C3C1_Topic) → [StpSymbol](#_26F34E3C_Topic) → StpTaskOrgUnit |
| **Implements** | [INotifyPropertyChanged](https://learn.microsoft.com/dotnet/api/system.componentmodel.inotifypropertychanged) |

## Constructors

|  |  |
| --- | --- |
| [StpTaskOrgUnit](#_BA91B068_Topic) | Constructor |

## Properties

|  |  |
| --- | --- |
| [Affiliation](#_214C7692_Topic) | Affiliation (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [Alternates](#_8C14CBDA_Topic) | Alternate interpretations for this symbol (Inherited from [StpItem](#_29D5C3C1_Topic)) |
| [Altitude](#_3F949CD3_Topic) | Altitude (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [BattleDimension](#_AFEEA492_Topic) | Battle dimension (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [Branch](#_8DFBD5AB_Topic) | Branch (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [Capability](#_79651807_Topic) | Capability (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [CharlieSIDC](#_DA7F60A_Topic) | 2525/APP6 C SIDC (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [CodingScheme](#_CFE6E78E_Topic) | Coding scheme (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [ColorBarOCA](#_C5C1A99D_Topic) | Color bar (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [CompleteLanguage](#_9D893195_Topic) | Full symbol description created by STP, including defaults omitted by the user (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [Confidence](#_5BB39197_Topic) | Confidence of the interpretation of the user's action (Inherited from [StpItem](#_29D5C3C1_Topic)) |
| [CreatorRole](#_FA816E11_Topic) | Current role performing the edit (Inherited from [StpItem](#_29D5C3C1_Topic)) |
| [Defense](#_7FB6B609_Topic) | Defense (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [DeltaSIDC](#_13B13FC_Topic) | 2525/APP6 D SIDC (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [Description](#_56D6D38D_Topic) | Description of the symbol with no designators, e.g. Armored Infantry Company (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [Designator1](#_DBA3BD7F_Topic) | Single designator or first of a pair of designators supported by a symbol, e.g. the north-side boundary designator (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [Designator2](#_FF5CE117_Topic) | Second designator, e.g. the south-side boundary designator (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [DesignatorDescription](#_3FE7E156_Topic) | Unit plus parent unit designator, e.g. A/3-1 (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [DesigPlusDescription](#_CC342792_Topic) | Designators prefixed to Description (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [DimensionId](#_E6B4C568_Topic) | Dimension (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [DrawNote](#_9BBF25E0_Topic) | Draw note (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [DrawRule](#_BE30250F_Topic) | Draw rules (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [Echelon](#_395A6A21_Topic) | Echelon (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [FsdbVersion](#_5D012FA_Topic) | Symbol version (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [FullDescription](#_17A15014_Topic) | Full description, including affiliation, unit type, and unit designator, echelon, etc (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [Geometry](#_34F6BBC3_Topic) | Type of geometry (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [GeometryType](#_327FB228_Topic) | Geometry type (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [GlyphPoid](#_FD4A05FA_Topic) | Associate ink/stroked unique identifier (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [Graphics](#_71F597F5_Topic) | Graphics (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [GroundRole](#_4FA385FB_Topic) | Ground role (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [IconType](#_28532CB2_Topic) | Icon type (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [Info](#_C213733C_Topic) | Additional info |
| [IsCustomSymbol](#_12C4B22B_Topic) | Whther the symbol is a proper 2525C symbol or represents a custom code (e.g. edit operation) (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [IsDefaultEchelon](#_15B6AF36_Topic) | Echelon was automatically assigned based on the parent's at unit creation time |
| [Labels](#_244C7A59_Topic) | Labels (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [Location](#_6441A2A_Topic) | Location (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [MaxAlt](#_228304F2_Topic) | Maximum altitude (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [MinAlt](#_3959E365_Topic) | Minimum altitude (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [Mobility](#_C15FEECE_Topic) | Mobility (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [Modifier](#_B9058661_Topic) | Symbol modifier (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [Name](#_ECF86685_Topic) | Unit name - can be different that the designators, for example "Triple Nickel" for 5/5-5 |
| [Names](#_9E4716A4_Topic) | Names (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [Order](#_503DA165_Topic) | Alternate index: 0 is the most likely, followed by 1,2,... (Inherited from [StpItem](#_29D5C3C1_Topic)) |
| [OriginalUnitPoid](#_BC640777_Topic) | Unique identifier of the original unit this is derived from (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [ParentCoa](#_D4163F0F_Topic) | Unique id of COA containing symbol (Inherited from [StpItem](#_29D5C3C1_Topic)) |
| [ParentUnit](#_81A43EA7_Topic) | Parent unit's unique id (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [Poid](#_3C8CBFB_Topic) | Unique identifier (Inherited from [StpItem](#_29D5C3C1_Topic)) |
| [Relationship](#_AF7AAFA7_Topic) | Relationship between units (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [Role](#_EFF80658_Topic) | Role (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [ShortDescription](#_63B5867F_Topic) | Short description: either just the DesignatorDescription, or if not designators, the Description (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [SpokenLanguage](#_FA06A60_Topic) | Language spoken at symbol creation (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [Status](#_F4137ED9_Topic) | Status (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [Strength](#_71A424D4_Topic) | Strength (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [SymbolId](#_EAFFCEF6_Topic) | Symbol SIDC (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [SymbolSet](#_72C342E_Topic) | Symbol set (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [SymbolStatus](#_C9601344_Topic) | Symbol status (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [SymbolType](#_4FEE62_Topic) | Symbol type (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [Tags](#_C7097F52_Topic) | Tags (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [TaskOrgPoid](#_B5D6A987_Topic) | Task Org / ORBAT unique identifier (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [TimeFrom](#_E8D15EB4_Topic) | Starting time (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [TimeTo](#_93601AF4_Topic) | Ending time (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [Type](#_99815743_Topic) | Object class, for example in a military domain: "unit", "mootw", "tg", "task", "task\_org\_unit", "task\_org\_relationship", "edit" (Inherited from [StpItem](#_29D5C3C1_Topic)) |
| [UnitParent](#_44DDF614_Topic) | Parent unit designator (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [UnitType](#_B550797F_Topic) | Unit type |
| [UseCivilianFrames](#_1C14F37E_Topic) | Whether civilian frames are used (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [Weight](#_D16E949_Topic) | Weight (Inherited from [StpSymbol](#_26F34E3C_Topic)) |

## Methods

|  |  |
| --- | --- |
| [Bitmap](#_5A6DCE1F_Topic) | Bitmap image - requires the SVG definitions of the Joint Military Symbology Library to be accessible. The path can be set via StpRecognizer.JMSSVGPath before the call (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [Equals(Object)](#_56D52FC2_Topic) | Equality test (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [Equals(StpSymbol)](#_946B171F_Topic) | Checks whether the content of this symbol is equivalent to some other by comparing key properties (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [GetHashCode](#_53402F38_Topic) | Get hash code (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [GetLinearSymbolCoords](#_AA4394A_Topic) | Convert 2525/APP anchor points into simpler/linearized representations compatible with less capable renderers (Inherited from [StpSymbol](#_26F34E3C_Topic)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## Events

|  |  |
| --- | --- |
| [PropertyChanged](#_61C00141_Topic) | Event Fody will associate injected code with |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTaskOrgUnit Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpTaskOrgUnit() |

|  |
| --- |
| C++ |
| public: StpTaskOrgUnit() |

## See Also

#### Reference

[StpTaskOrgUnit Class](#_86161284_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTaskOrgUnit.Info Property

Additional info

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Info { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Info {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpTaskOrgUnit Class](#_86161284_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTaskOrgUnit.IsDefaultEchelon Property

Echelon was automatically assigned based on the parent's at unit creation time

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public bool IsDefaultEchelon { get; set; } |

|  |
| --- |
| C++ |
| public: property bool IsDefaultEchelon {  bool get ();  void set (bool value); } |

#### Property Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpTaskOrgUnit Class](#_86161284_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTaskOrgUnit.Name Property

Unit name - can be different that the designators, for example "Triple Nickel" for 5/5-5

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Name { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Name {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## Remarks

Name can be an expression with grouping (parenthesis) alternatives (pipe symbol) and optional (square brackets). Example: (ONE | FIRST) [ROYAL] IRISH [GUARDS] [REGIMENT] Accepts these names, amongst others: ONE IRISH FIRST IRISH ONE ROYAL IRISH FIRST ROYAL IRISH REGIMENT ONE ROYAL ISISH GUARDS REGIMENT

## See Also

#### Reference

[StpTaskOrgUnit Class](#_86161284_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTaskOrgUnit.UnitType Property

Unit type

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string UnitType { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ UnitType {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpTaskOrgUnit Class](#_86161284_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpTaskOrgUnit.PropertyChanged Event

Event Fody will associate injected code with

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event PropertyChangedEventHandler PropertyChanged |

|  |
| --- |
| C++ |
| public: virtual event PropertyChangedEventHandler^ PropertyChanged {  void add (PropertyChangedEventHandler^ value);  void remove (PropertyChangedEventHandler^ value); } |

#### Value

[PropertyChangedEventHandler](https://learn.microsoft.com/dotnet/api/system.componentmodel.propertychangedeventhandler)

#### Implements

[INotifyPropertyChanged.PropertyChanged](https://learn.microsoft.com/dotnet/api/system.componentmodel.inotifypropertychanged.propertychanged)

## See Also

#### Reference

[StpTaskOrgUnit Class](#_86161284_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# Strength Enumeration

Strength affiliation 2525/APP6 D

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public enum Strength |

|  |
| --- |
| C++ |
| public enum class Strength |

## Members

|  |  |  |
| --- | --- | --- |
| none | 0 |  |
| reduced | 1 |  |
| reinforced | 2 |  |
| reduced\_reinforced | 3 |  |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# SymbolService Class

STP symbol service

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class SymbolService : StpService |

|  |
| --- |
| C++ |
| public ref class SymbolService : public StpService |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → [StpService](#_CC1225D1_Topic) → SymbolService |

## Constructors

|  |  |
| --- | --- |
| [SymbolService](#_C91ED31E_Topic) | Constructor |

## Properties

|  |  |
| --- | --- |
| [All](#_B174EDE8_Topic) | All items |
| [Mootw](#_E5045967_Topic) | Observable cache for mootw symbols |
| [TacticalGraphics](#_E6791702_Topic) | Observable cache for tactical graphic symbols |
| [Units](#_AD44E661_Topic) | Observable cache for unit symbols |

## Methods

|  |  |
| --- | --- |
| [Dispose](#_463053E5_Topic) | Dispose (Inherited from [StpService](#_CC1225D1_Topic)) |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# SymbolService Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public SymbolService(  StpRecognizer stpRecognizer ) |

|  |
| --- |
| C++ |
| public: SymbolService(  StpRecognizer^ stpRecognizer ) |

#### Parameters

stpRecognizer [StpRecognizer](#_BBE6C9F9_Topic)

## See Also

#### Reference

[SymbolService Class](#_1141CCEC_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# SymbolService.All Property

All items

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public IObservableCache<StpSymbol, string> All { get; } |

|  |
| --- |
| C++ |
| public: property IObservableCache<StpSymbol^, String^>^ All {  IObservableCache<StpSymbol^, String^>^ get (); } |

#### Property Value

**IObservableCache**([StpSymbol](#_26F34E3C_Topic)

, [String](https://docs.microsoft.com/dotnet/api/system.string))

## See Also

#### Reference

[SymbolService Class](#_1141CCEC_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# SymbolService.Mootw Property

Observable cache for mootw symbols

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public IObservableCache<StpSymbol, string> Mootw { get; } |

|  |
| --- |
| C++ |
| public: property IObservableCache<StpSymbol^, String^>^ Mootw {  IObservableCache<StpSymbol^, String^>^ get (); } |

#### Property Value

**IObservableCache**([StpSymbol](#_26F34E3C_Topic)

, [String](https://docs.microsoft.com/dotnet/api/system.string))

## See Also

#### Reference

[SymbolService Class](#_1141CCEC_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# SymbolService.TacticalGraphics Property

Observable cache for tactical graphic symbols

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public IObservableCache<StpSymbol, string> TacticalGraphics { get; } |

|  |
| --- |
| C++ |
| public: property IObservableCache<StpSymbol^, String^>^ TacticalGraphics {  IObservableCache<StpSymbol^, String^>^ get (); } |

#### Property Value

**IObservableCache**([StpSymbol](#_26F34E3C_Topic)

, [String](https://docs.microsoft.com/dotnet/api/system.string))

## See Also

#### Reference

[SymbolService Class](#_1141CCEC_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# SymbolService.Units Property

Observable cache for unit symbols

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public IObservableCache<StpSymbol, string> Units { get; } |

|  |
| --- |
| C++ |
| public: property IObservableCache<StpSymbol^, String^>^ Units {  IObservableCache<StpSymbol^, String^>^ get (); } |

#### Property Value

**IObservableCache**([StpSymbol](#_26F34E3C_Topic)

, [String](https://docs.microsoft.com/dotnet/api/system.string))

## See Also

#### Reference

[SymbolService Class](#_1141CCEC_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# TaskHow Enumeration

"How" component of a task

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public enum TaskHow |

|  |
| --- |
| C++ |
| public enum class TaskHow |

## Members

|  |  |  |
| --- | --- | --- |
| NOT\_SPECIFIED | 0 |  |
| AIR\_ASSAULT | 1 |  |
| AIR\_RECONNAISSANCE | 2 |  |
| AREA\_DEFENSE | 3 |  |
| ASSAULT | 4 |  |
| ATTACK | 5 |  |
| ATTACK\_IN\_ZONE | 6 |  |
| ATTACK\_BY\_FIRE | 7 |  |
| CERP\_FUNDING | 8 |  |
| CIVILIAN | 9 |  |
| CONTRACTING | 10 |  |
| CORDON\_AND\_SEARCH | 11 |  |
| COUNTERATTACK | 12 |  |
| COUNTERATTACK\_BY\_FIRE | 13 |  |
| COVER | 14 |  |
| DEFEND | 15 |  |
| DELIVER\_SERVICES | 16 |  |
| GUARD | 17 |  |
| INFORMATION\_OPERATIONS | 18 |  |
| INSURGENT | 19 |  |
| MOBILE\_DEFENSE | 20 |  |
| MOVING\_SCREEN | 21 |  |
| NGO\_OPERATION | 22 |  |
| PASSAGE\_OF\_LINES | 23 |  |
| SCREEN | 24 |  |
| SEARCH\_AND\_ATTACK | 25 |  |
| SECURITY | 26 |  |
| SECURITY\_FORCE\_ASSISTANCE | 27 |  |
| SUPPORT\_BY\_FIRE | 28 |  |
| WITHDRAWAL | 29 |  |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# TaskOrgService Class

STP task org service

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class TaskOrgService : StpService |

|  |
| --- |
| C++ |
| public ref class TaskOrgService : public StpService |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → [StpService](#_CC1225D1_Topic) → TaskOrgService |

## Constructors

|  |  |
| --- | --- |
| [TaskOrgService](#_9342FA6D_Topic) | Constructor |

## Properties

|  |  |
| --- | --- |
| [All](#_3487A273_Topic) | All items |
| [Nodes](#_23B95F57_Topic) | Observable cache of (self-referenced) unit nodes representing an ORBAT/TO hierarchy |
| [Tree](#_32E67E5_Topic) | Observable tree of unit nodes |

## Methods

|  |  |
| --- | --- |
| [Dispose](#_463053E5_Topic) | Dispose (Inherited from [StpService](#_CC1225D1_Topic)) |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# TaskOrgService Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public TaskOrgService(  StpRecognizer stpRecognizer ) |

|  |
| --- |
| C++ |
| public: TaskOrgService(  StpRecognizer^ stpRecognizer ) |

#### Parameters

stpRecognizer [StpRecognizer](#_BBE6C9F9_Topic)

## See Also

#### Reference

[TaskOrgService Class](#_6194A66E_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# TaskOrgService.All Property

All items

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public IObservableCache<StpTaskOrgUnit, string> All { get; } |

|  |
| --- |
| C++ |
| public: property IObservableCache<StpTaskOrgUnit^, String^>^ All {  IObservableCache<StpTaskOrgUnit^, String^>^ get (); } |

#### Property Value

**IObservableCache**([StpTaskOrgUnit](#_86161284_Topic)

, [String](https://docs.microsoft.com/dotnet/api/system.string))

## See Also

#### Reference

[TaskOrgService Class](#_6194A66E_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# TaskOrgService.Nodes Property

Observable cache of (self-referenced) unit nodes representing an ORBAT/TO hierarchy

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public IObservableCache<StpTaskOrgUnit, string> Nodes { get; } |

|  |
| --- |
| C++ |
| public: property IObservableCache<StpTaskOrgUnit^, String^>^ Nodes {  IObservableCache<StpTaskOrgUnit^, String^>^ get (); } |

#### Property Value

**IObservableCache**([StpTaskOrgUnit](#_86161284_Topic)

, [String](https://docs.microsoft.com/dotnet/api/system.string))

## See Also

#### Reference

[TaskOrgService Class](#_6194A66E_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# TaskOrgService.Tree Property

Observable tree of unit nodes

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public IObservableCache<Node<StpTaskOrgUnit, string>, string> Tree { get; } |

|  |
| --- |
| C++ |
| public: property IObservableCache<Node<StpTaskOrgUnit^, String^>^, String^>^ Tree {  IObservableCache<Node<StpTaskOrgUnit^, String^>^, String^>^ get (); } |

#### Property Value

**IObservableCache**(**Node**([StpTaskOrgUnit](#_86161284_Topic)

, [String](https://docs.microsoft.com/dotnet/api/system.string)), [String](https://docs.microsoft.com/dotnet/api/system.string))

## See Also

#### Reference

[TaskOrgService Class](#_6194A66E_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# TaskOrgService.UnitRelationshipPair Class

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class UnitRelationshipPair : INotifyPropertyChanged |

|  |
| --- |
| C++ |
| public ref class UnitRelationshipPair : INotifyPropertyChanged |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → TaskOrgService.UnitRelationshipPair |
| **Implements** | [INotifyPropertyChanged](https://learn.microsoft.com/dotnet/api/system.componentmodel.inotifypropertychanged) |

## Constructors

|  |  |
| --- | --- |
| [TaskOrgService.UnitRelationshipPair](#_85593B7_Topic) | Initializes a new instance of the TaskOrgService.UnitRelationshipPair class |

## Properties

|  |  |
| --- | --- |
| [Rel](#_F1E98BA0_Topic) |  |
| [Unit](#_52966015_Topic) |  |

## Methods

|  |  |
| --- | --- |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## Events

|  |  |
| --- | --- |
| [PropertyChanged](#_DD0A504F_Topic) | Event Fody will associate injected code with |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# TaskOrgService.UnitRelationshipPair Constructor

Initializes a new instance of the [TaskOrgService.UnitRelationshipPair](#_FF355EE6_Topic) class

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public UnitRelationshipPair(  StpTaskOrgUnit unit,  Optional<StpTaskOrgRelationship> rel ) |

|  |
| --- |
| C++ |
| public: UnitRelationshipPair(  StpTaskOrgUnit^ unit,   Optional<StpTaskOrgRelationship^> rel ) |

#### Parameters

unit [StpTaskOrgUnit](#_86161284_Topic)

rel **Optional**([StpTaskOrgRelationship](#_67DB8B61_Topic))

## See Also

#### Reference

[TaskOrgService.UnitRelationshipPair Class](#_FF355EE6_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# TaskOrgService.UnitRelationshipPair.Rel Property

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Optional<StpTaskOrgRelationship> Rel { get; set; } |

|  |
| --- |
| C++ |
| public: property Optional<StpTaskOrgRelationship^> Rel {  Optional<StpTaskOrgRelationship^> get ();  void set (Optional<StpTaskOrgRelationship^> value); } |

#### Property Value

**Optional**([StpTaskOrgRelationship](#_67DB8B61_Topic))

## See Also

#### Reference

[TaskOrgService.UnitRelationshipPair Class](#_FF355EE6_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# TaskOrgService.UnitRelationshipPair.Unit Property

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpTaskOrgUnit Unit { get; set; } |

|  |
| --- |
| C++ |
| public: property StpTaskOrgUnit^ Unit {  StpTaskOrgUnit^ get ();  void set (StpTaskOrgUnit^ value); } |

#### Property Value

[StpTaskOrgUnit](#_86161284_Topic)

## See Also

#### Reference

[TaskOrgService.UnitRelationshipPair Class](#_FF355EE6_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# TaskOrgService.UnitRelationshipPair.PropertyChanged Event

Event Fody will associate injected code with

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event PropertyChangedEventHandler PropertyChanged |

|  |
| --- |
| C++ |
| public: virtual event PropertyChangedEventHandler^ PropertyChanged {  void add (PropertyChangedEventHandler^ value);  void remove (PropertyChangedEventHandler^ value); } |

#### Value

[PropertyChangedEventHandler](https://learn.microsoft.com/dotnet/api/system.componentmodel.propertychangedeventhandler)

#### Implements

[INotifyPropertyChanged.PropertyChanged](https://learn.microsoft.com/dotnet/api/system.componentmodel.inotifypropertychanged.propertychanged)

## See Also

#### Reference

[TaskOrgService.UnitRelationshipPair Class](#_FF355EE6_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# TaskOrgState Class

Task Org ORBAT state

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class TaskOrgState : BaseFS |

|  |
| --- |
| C++ |
| public ref class TaskOrgState : public BaseFS |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → [BaseFS](#_6B4BF41E_Topic) → TaskOrgState |

## Constructors

|  |  |
| --- | --- |
| [TaskOrgState()](#_D7E27777_Topic) | Constructor |
| [TaskOrgState(BaseFS)](#_FBEF14CF_Topic) | Construct from another foundational object |

## Properties

|  |  |
| --- | --- |
| [Date](#_A832ED06_Topic) | Version date |
| [TaskOrgAction](#_22C9ECBD_Topic) | Action |
| [UserRole](#_D9836C1C_Topic) | Creator role |

## Methods

|  |  |
| --- | --- |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# TaskOrgState Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public TaskOrgState() |

|  |
| --- |
| C++ |
| public: TaskOrgState() |

## See Also

#### Reference

[TaskOrgState Class](#_EA7B1AC3_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# TaskOrgState(BaseFS) Constructor

Construct from another foundational object

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public TaskOrgState(  BaseFS bfs ) |

|  |
| --- |
| C++ |
| public: TaskOrgState(  BaseFS^ bfs ) |

#### Parameters

bfs [BaseFS](#_6B4BF41E_Topic)

## See Also

#### Reference

[TaskOrgState Class](#_EA7B1AC3_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# TaskOrgState.Date Property

Version date

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Date { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Date {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[TaskOrgState Class](#_EA7B1AC3_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# TaskOrgState.TaskOrgAction Property

Action

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string TaskOrgAction { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ TaskOrgAction {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[TaskOrgState Class](#_EA7B1AC3_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# TaskOrgState.UserRole Property

Creator role

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string UserRole { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ UserRole {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[TaskOrgState Class](#_EA7B1AC3_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# TaskService Class

STP task service

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class TaskService : StpService |

|  |
| --- |
| C++ |
| public ref class TaskService : public StpService |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → [StpService](#_CC1225D1_Topic) → TaskService |

## Constructors

|  |  |
| --- | --- |
| [TaskService](#_79922F6D_Topic) | Constructor |

## Properties

|  |  |
| --- | --- |
| [All](#_104C4D7C_Topic) | All items |
| [Nodes](#_AF460D81_Topic) | Observable cache of (self-referenced) task nodes |
| [Tree](#_7A62E664_Topic) | Observable tree of task |

## Methods

|  |  |
| --- | --- |
| [Dispose](#_463053E5_Topic) | Dispose (Inherited from [StpService](#_CC1225D1_Topic)) |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# TaskService Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public TaskService(  StpRecognizer stpRecognizer,  SymbolService symbolService ) |

|  |
| --- |
| C++ |
| public: TaskService(  StpRecognizer^ stpRecognizer,   SymbolService^ symbolService ) |

#### Parameters

stpRecognizer [StpRecognizer](#_BBE6C9F9_Topic)

symbolService [SymbolService](#_1141CCEC_Topic)

## Exceptions

|  |  |
| --- | --- |
| [ArgumentNullException](https://learn.microsoft.com/dotnet/api/system.argumentnullexception) | Required Symbol Service reference not provided |

## See Also

#### Reference

[TaskService Class](#_C8FC04E8_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# TaskService.All Property

All items

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public IObservableCache<StpTask, string> All { get; } |

|  |
| --- |
| C++ |
| public: property IObservableCache<StpTask^, String^>^ All {  IObservableCache<StpTask^, String^>^ get (); } |

#### Property Value

**IObservableCache**([StpTask](#_DDBE5955_Topic)

, [String](https://docs.microsoft.com/dotnet/api/system.string))

## See Also

#### Reference

[TaskService Class](#_C8FC04E8_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# TaskService.Nodes Property

Observable cache of (self-referenced) task nodes

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public IObservableCache<StpNode<StpItem>, string> Nodes { get; } |

|  |
| --- |
| C++ |
| public: property IObservableCache<StpNode<StpItem^>^, String^>^ Nodes {  IObservableCache<StpNode<StpItem^>^, String^>^ get (); } |

#### Property Value

**IObservableCache**([StpNode](#_7DE19A2D_Topic)([StpItem](#_29D5C3C1_Topic))

, [String](https://docs.microsoft.com/dotnet/api/system.string))

## See Also

#### Reference

[TaskService Class](#_C8FC04E8_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# TaskService.Tree Property

Observable tree of task

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public IObservableCache<Node<StpNode<StpItem>, string>, string> Tree { get; } |

|  |
| --- |
| C++ |
| public: property IObservableCache<Node<StpNode<StpItem^>^, String^>^, String^>^ Tree {  IObservableCache<Node<StpNode<StpItem^>^, String^>^, String^>^ get (); } |

#### Property Value

**IObservableCache**(**Node**([StpNode](#_7DE19A2D_Topic)([StpItem](#_29D5C3C1_Topic))

, [String](https://docs.microsoft.com/dotnet/api/system.string)), [String](https://docs.microsoft.com/dotnet/api/system.string))

## Remarks

Tasks trees have three tiers: 1. Root referencing units with a common name - generally present and anticipated 2. Tasks related to units with that name as children 3. Each task has its Alternates as children (excluding the reference to the task itself)

## See Also

#### Reference

[TaskService Class](#_C8FC04E8_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# TaskWhat Enumeration

"What" component of a task

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public enum TaskWhat |

|  |
| --- |
| C++ |
| public enum class TaskWhat |

## Members

|  |  |  |
| --- | --- | --- |
| NOT\_SPECIFIED | 0 |  |
| ADVISE\_POLICE | 1 |  |
| AMBUSH | 2 |  |
| ASSIGN\_RESPONSIBILITY | 3 |  |
| BLOCK | 4 |  |
| BOMB\_ATTACK | 5 |  |
| BREACH | 6 |  |
| BYPASS | 7 |  |
| CLEAR | 8 |  |
| COERCIVE\_RECRUITING | 9 |  |
| COLLECT\_CASUALTIES | 10 |  |
| COLLECT\_CIVILIANS | 11 |  |
| COLLECT\_PRISONERS | 12 |  |
| CONDUCT\_AMBUSH | 13 |  |
| CONDUCT\_AVIATON\_AMBUSH | 14 |  |
| CONDUCT\_BILAT | 15 |  |
| CONDUCT\_GROUP\_ENGAGEMENT | 16 |  |
| CONDUCT\_RAID | 17 |  |
| CONDUCT\_TCP\_OPERATION | 18 |  |
| CONSTITUTE\_RESERVE | 19 |  |
| CONVOY | 20 |  |
| DEFEAT | 21 |  |
| DELAY | 22 |  |
| DELIVER\_LEAFLET\_PSYOP | 23 |  |
| DEMONSTRATE | 24 |  |
| DESTROY | 25 |  |
| DISRUPT | 26 |  |
| DISTRIBUTE\_FOOD | 27 |  |
| EMPLACE | 28 |  |
| EQUIP\_POLICE | 29 |  |
| ESCORT\_CONVOY | 30 |  |
| EVACUATE\_CASUALTIES | 31 |  |
| EVACUATE\_CIVILIANS | 32 |  |
| EVACUATE\_PRISONERS | 33 |  |
| FIX | 34 |  |
| FOLLOW | 35 |  |
| FOLLOW\_AND\_ASSUME | 36 |  |
| FOLLOW\_AND\_SUPPORT | 37 |  |
| HALT | 38 |  |
| HARRASSMENT\_FIRES | 39 |  |
| HOUSE\_TO\_HOUSE\_PSYOP | 40 |  |
| IED\_ATTACK | 41 |  |
| LIMIT | 42 |  |
| LOOTING | 43 |  |
| MAINTAIN\_HIDE | 44 |  |
| MAINTAIN\_OUTPOST | 45 |  |
| MOVE | 46 |  |
| NEUTRALIZE | 47 |  |
| OBSERVE | 48 |  |
| OCCUPY | 49 |  |
| PATROL | 50 |  |
| PENETRATE | 51 |  |
| POSITION\_SNIPER | 52 |  |
| PRIORITY\_OF\_FIRES | 53 |  |
| PROVIDE\_MEDICAL\_SERVICES | 54 |  |
| PROVIDE\_SERVICE | 55 |  |
| RECEIVE | 56 |  |
| RECONSTRUCTION | 57 |  |
| RECRUIT\_POLICE | 58 |  |
| REFUEL | 59 |  |
| REGULATE\_TRAFFIC | 60 |  |
| REINFORCE | 61 |  |
| RELEASE | 62 |  |
| RESUPPLY | 63 |  |
| RETAIN | 64 |  |
| RIOTING | 65 |  |
| SECURE | 66 |  |
| SEEK\_REFUGE | 67 |  |
| SEIZE | 68 |  |
| SNIPER\_ATTACK | 69 |  |
| SUPPLY | 70 |  |
| SUPPLY\_MUNITIONS | 71 |  |
| TRAIN\_POLICE | 72 |  |
| TRANSFER\_MUNITIONS | 73 |  |
| TRASH\_REMOVAL | 74 |  |
| TURN | 75 |  |
| TV\_RADIO\_PSYOP | 76 |  |
| WATER\_DELIVERY | 77 |  |
| WILLFUL\_RECRUITING | 78 |  |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# TaskWhy Enumeration

"Why" component of a task

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public enum TaskWhy |

|  |
| --- |
| C++ |
| public enum class TaskWhy |

## Members

|  |  |  |
| --- | --- | --- |
| UNKNOWN | 0 |  |
| ALLOW | 1 |  |
| CAUSE | 2 |  |
| CREATE | 3 |  |
| DECEIVE | 4 |  |
| DENY | 5 |  |
| DIVERT | 6 |  |
| ENABLE | 7 |  |
| ENVELOP | 8 |  |
| INFLUENCE | 9 |  |
| OPEN | 10 |  |
| PREVENT | 11 |  |
| PROTECT | 12 |  |
| SUPPORT | 13 |  |
| SURPRISE | 14 |  |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# TimingConstants Class

Some common values for use with the SetSegmentationTimeout call

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public static class TimingConstants |

|  |
| --- |
| C++ |
| public ref class TimingConstants abstract sealed |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → TimingConstants |

## Fields

|  |  |
| --- | --- |
| [Timing\_Drawing](#_959DDB5C_Topic) | Wait up to 2.5s for the next stroke - use when fully drawing 2525 symbols and using the sketch symbol recognizer |
| [Timing\_Expert](#_79F3E1B_Topic) | Short delay between strokes that may be sufficient to allow expert users to draw 2525 symbols |
| [Timing\_Not\_Set](#_27C747E1_Topic) | Not yet set |
| [Timing\_Novice](#_8A53F0B4_Topic) | Longer delay between strokes to allow novice users to draw 2525 symbols |
| [Timing\_PLA](#_92F52CB3_Topic) | No lag between strokes - speech combined with single-stroke gesture (point/line/area/"harpoon", etc.) only |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# TimingConstants.Timing\_Drawing Field

Wait up to 2.5s for the next stroke - use when fully drawing 2525 symbols and using the sketch symbol recognizer

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public const double Timing\_Drawing = 2.5 |

|  |
| --- |
| C++ |
| public: literal double Timing\_Drawing = 2.5 |

#### Field Value

[Double](https://docs.microsoft.com/dotnet/api/system.double)

## Remarks

If the time is too short, recognition will get triggered before the user had a chance to complete the drawing. On the other hand, the additional wait can be perceived by users as system inefficiency. Use only when there is a clear desire to fully draw 2525 symbols

## See Also

#### Reference

[TimingConstants Class](#_D7869C82_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# TimingConstants.Timing\_Expert Field

Short delay between strokes that may be sufficient to allow expert users to draw 2525 symbols

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public const double Timing\_Expert = 1.5 |

|  |
| --- |
| C++ |
| public: literal double Timing\_Expert = 1.5 |

#### Field Value

[Double](https://docs.microsoft.com/dotnet/api/system.double)

## See Also

#### Reference

[TimingConstants Class](#_D7869C82_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# TimingConstants.Timing\_Not\_Set Field

Not yet set

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public const double Timing\_Not\_Set = -1 |

|  |
| --- |
| C++ |
| public: literal double Timing\_Not\_Set = -1 |

#### Field Value

[Double](https://docs.microsoft.com/dotnet/api/system.double)

## See Also

#### Reference

[TimingConstants Class](#_D7869C82_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# TimingConstants.Timing\_Novice Field

Longer delay between strokes to allow novice users to draw 2525 symbols

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public const double Timing\_Novice = 3.5 |

|  |
| --- |
| C++ |
| public: literal double Timing\_Novice = 3.5 |

#### Field Value

[Double](https://docs.microsoft.com/dotnet/api/system.double)

## See Also

#### Reference

[TimingConstants Class](#_D7869C82_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# TimingConstants.Timing\_PLA Field

No lag between strokes - speech combined with single-stroke gesture (point/line/area/"harpoon", etc.) only

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public const double Timing\_PLA = 0 |

|  |
| --- |
| C++ |
| public: literal double Timing\_PLA = 0 |

#### Field Value

[Double](https://docs.microsoft.com/dotnet/api/system.double)

## Remarks

This is the preferred mode for using the more popular Point, Line, Area (PLA) style of interaction, as it provides interpretations in the shortest amount of time after th user has provided the stroke and speech. Note that the user will not be able to sketch multi-line symbols in this mode

## See Also

#### Reference

[TimingConstants Class](#_D7869C82_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# UnitTaskPair Class

Pair of [symbol, associated task]

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class UnitTaskPair : INotifyPropertyChanged |

|  |
| --- |
| C++ |
| public ref class UnitTaskPair : INotifyPropertyChanged |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → UnitTaskPair |
| **Implements** | [INotifyPropertyChanged](https://learn.microsoft.com/dotnet/api/system.componentmodel.inotifypropertychanged) |

## Constructors

|  |  |
| --- | --- |
| [UnitTaskPair](#_B3800D6C_Topic) | Constructor |

## Properties

|  |  |
| --- | --- |
| [Symbol](#_EEDF5_Topic) | Who symbol |

## Methods

|  |  |
| --- | --- |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## Events

|  |  |
| --- | --- |
| [PropertyChanged](#_270F0D83_Topic) | Event Fody will associate injected code with |

## Fields

|  |  |
| --- | --- |
| [Task](#_CADC8800_Topic) | Task associated with the Who |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# UnitTaskPair Constructor

Constructor

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public UnitTaskPair(  StpSymbol symbol,  Optional<StpTask> task ) |

|  |
| --- |
| C++ |
| public: UnitTaskPair(  StpSymbol^ symbol,   Optional<StpTask^> task ) |

#### Parameters

symbol [StpSymbol](#_26F34E3C_Topic)

task **Optional**([StpTask](#_DDBE5955_Topic))

## See Also

#### Reference

[UnitTaskPair Class](#_5DE989EB_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# UnitTaskPair.Symbol Property

Who symbol

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpSymbol Symbol { get; set; } |

|  |
| --- |
| C++ |
| public: property StpSymbol^ Symbol {  StpSymbol^ get ();  void set (StpSymbol^ value); } |

#### Property Value

[StpSymbol](#_26F34E3C_Topic)

## See Also

#### Reference

[UnitTaskPair Class](#_5DE989EB_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# UnitTaskPair.PropertyChanged Event

Event Fody will associate injected code with

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public event PropertyChangedEventHandler PropertyChanged |

|  |
| --- |
| C++ |
| public: virtual event PropertyChangedEventHandler^ PropertyChanged {  void add (PropertyChangedEventHandler^ value);  void remove (PropertyChangedEventHandler^ value); } |

#### Value

[PropertyChangedEventHandler](https://learn.microsoft.com/dotnet/api/system.componentmodel.propertychangedeventhandler)

#### Implements

[INotifyPropertyChanged.PropertyChanged](https://learn.microsoft.com/dotnet/api/system.componentmodel.inotifypropertychanged.propertychanged)

## See Also

#### Reference

[UnitTaskPair Class](#_5DE989EB_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# UnitTaskPair.Task Field

Task associated with the Who

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpTask Task |

|  |
| --- |
| C++ |
| public: StpTask^ Task |

#### Field Value

[StpTask](#_DDBE5955_Topic)

## See Also

#### Reference

[UnitTaskPair Class](#_5DE989EB_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# Utility Class

Common utility methods

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public static class Utility |

|  |
| --- |
| C++ |
| [ExtensionAttribute] public ref class Utility abstract sealed |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → Utility |

## Methods

|  |  |
| --- | --- |
| [Clone(T)](#_730C02A9_Topic) | Clone (deep copy) an object) |
| [IsDefault(T)](#_D661D387_Topic) | Whether the given value is default(T) |
| [SpelledLettersToAcronym](#_E56A1783_Topic) | Add compact representation of spelled out letters |
| [ToTitleCase](#_84C2E82_Topic) | Convert A\_STRING into Title Case |
| [TryConvertEnum(TFrom, TTo)](#_F267ABDF_Topic) | Convert an enum into another if possible, based on element names |
| [WaitAsync(T)](#_2895DD6E_Topic) | Add cancel-able wait to TaskCompletedSource, which doesn't provide the option as a parameter |

## See Also

#### Reference

[StpSDK Namespace](#_23F1BD4A_Topic)

# Utility.Clone<T> Method

Clone (deep copy) an object)

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public static T Clone<T>(  this T source ) |

|  |
| --- |
| C++ |
| public: [ExtensionAttribute] generic<typename T> static T Clone(  T source ) |

#### Parameters

source T

#### Type Parameters

T

#### Return Value

T

#### Usage Note

In Visual Basic and C#, you can call this method as an instance method on any object of type T. When you use instance method syntax to call this method, omit the first parameter. For more information, see [Extension Methods (Visual Basic)](https://docs.microsoft.com/dotnet/visual-basic/programming-guide/language-features/procedures/extension-methods) or [Extension Methods (C# Programming Guide)](https://docs.microsoft.com/dotnet/csharp/programming-guide/classes-and-structs/extension-methods).

## Remarks

From **[!:https%3A%2F%2Fdotnetcoretutorials.com%2F2020%2F09%2F09%2Fcloning-objects-in-c-and-net-core%2F]**

## See Also

#### Reference

[Utility Class](#_B3E64F70_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# Utility.IsDefault<T> Method

Whether the given value is default(T)

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public static bool IsDefault<T>(  this T value ) where T : struct, new() |

|  |
| --- |
| C++ |
| public: [ExtensionAttribute] generic<typename T> where T : value class, gcnew() static bool IsDefault(  T value ) |

#### Parameters

value T

#### Type Parameters

T

#### Return Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

#### Usage Note

In Visual Basic and C#, you can call this method as an instance method on any object of type T. When you use instance method syntax to call this method, omit the first parameter. For more information, see [Extension Methods (Visual Basic)](https://docs.microsoft.com/dotnet/visual-basic/programming-guide/language-features/procedures/extension-methods) or [Extension Methods (C# Programming Guide)](https://docs.microsoft.com/dotnet/csharp/programming-guide/classes-and-structs/extension-methods).

## Remarks

See https://stackoverflow.com/a/5635729

## See Also

#### Reference

[Utility Class](#_B3E64F70_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# Utility.SpelledLettersToAcronym Method

Add compact representation of spelled out letters

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public static string SpelledLettersToAcronym(  string alternate ) |

|  |
| --- |
| C++ |
| public: static String^ SpelledLettersToAcronym(  String^ alternate ) |

#### Parameters

alternate [String](https://docs.microsoft.com/dotnet/api/system.string)

#### Return Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

Alternate with spelled letters replaced by compacted acronym or null if no spelling is detected

## Remarks

Examples: "L D L C" -> "LDLC", "suspected I E D" -> "suspected IED" "R O Z from sixteen hundred" -> "ROZ from sixteen hundred"

## See Also

#### Reference

[Utility Class](#_B3E64F70_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# Utility.ToTitleCase Method

Convert A\_STRING into Title Case

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public static string ToTitleCase(  this string s,  bool convertAllCaps = true ) |

|  |
| --- |
| C++ |
| public: [ExtensionAttribute] static String^ ToTitleCase(  String^ s,   bool convertAllCaps = true ) |

#### Parameters

s [String](https://docs.microsoft.com/dotnet/api/system.string)

convertAllCaps [Boolean](https://docs.microsoft.com/dotnet/api/system.boolean) (Optional)

If true (default), convert ALL CAPS words as well, otherwise, leave them untouched

#### Return Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

#### Usage Note

In Visual Basic and C#, you can call this method as an instance method on any object of type [String](https://docs.microsoft.com/dotnet/api/system.string). When you use instance method syntax to call this method, omit the first parameter. For more information, see [Extension Methods (Visual Basic)](https://docs.microsoft.com/dotnet/visual-basic/programming-guide/language-features/procedures/extension-methods) or [Extension Methods (C# Programming Guide)](https://docs.microsoft.com/dotnet/csharp/programming-guide/classes-and-structs/extension-methods).

## See Also

#### Reference

[Utility Class](#_B3E64F70_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# Utility.TryConvertEnum<TFrom, TTo> Method

Convert an enum into another if possible, based on element names

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public static bool TryConvertEnum<TFrom, TTo>(  int value,  out TTo res ) |

|  |
| --- |
| C++ |
| public: generic<typename TFrom, typename TTo> static bool TryConvertEnum(  int value,   [OutAttribute] TTo% res ) |

#### Parameters

value [Int32](https://docs.microsoft.com/dotnet/api/system.int32)

res TTo

#### Type Parameters

TFrom

TTo

#### Return Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## Remarks

This method is used to convert constants that are equivalent, but may have different values, for example affiliation in 2525D (numeric) and 2525C (char): enum Affiliation { pending = 0, unknown = 1, assumedfriend = 2, friend = 3, neutral = 4, suspected = 5, hostile = 6 }; enum AffiliationAlpha { pending = 'P', unknown = 'U', assumedfriend = 'A', friend = 'F', neutral = 'N', suspected = 'S', hostile = 'H' };

## See Also

#### Reference

[Utility Class](#_B3E64F70_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# Utility.WaitAsync<T> Method

Add cancel-able wait to TaskCompletedSource, which doesn't provide the option as a parameter

## Definition

**Namespace:** [StpSDK](#_23F1BD4A_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public static Task<T> WaitAsync<T>(  this TaskCompletionSource<T> tcs,  CancellationToken ctok ) |

|  |
| --- |
| C++ |
| public: [ExtensionAttribute] generic<typename T> static Task<T>^ WaitAsync(  TaskCompletionSource<T>^ tcs,   CancellationToken ctok ) |

#### Parameters

tcs [TaskCompletionSource](https://docs.microsoft.com/dotnet/api/system.threading.tasks.taskcompletionsource-1)(T)

ctok [CancellationToken](https://docs.microsoft.com/dotnet/api/system.threading.cancellationtoken)

#### Type Parameters

T

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task-1)(T)

TaskT's results

#### Usage Note

In Visual Basic and C#, you can call this method as an instance method on any object of type [TaskCompletionSource](https://docs.microsoft.com/dotnet/api/system.threading.tasks.taskcompletionsource-1)(T). When you use instance method syntax to call this method, omit the first parameter. For more information, see [Extension Methods (Visual Basic)](https://docs.microsoft.com/dotnet/visual-basic/programming-guide/language-features/procedures/extension-methods) or [Extension Methods (C# Programming Guide)](https://docs.microsoft.com/dotnet/csharp/programming-guide/classes-and-structs/extension-methods).

## Remarks

Useful for example to cancel TaskCompletionSource waits when a cancellation token is canceled

|  |
| --- |
| C# |
| try {  var tcs = new TaskCompletionSource>bool<();  bool res = await tcs.WaitAsync(cancelationToken); } catch (OperationCancelledException) {  // Exited via cancellation } |

[https://stackoverflow.com/a/35635651/852915](/>https://stackoverflow.com/a/35635651/852915)

## Exceptions

|  |  |
| --- | --- |
| [OperationCanceledException](https://docs.microsoft.com/dotnet/api/system.operationcanceledexception) |  |

## See Also

#### Reference

[Utility Class](#_B3E64F70_Topic)

[StpSDK Namespace](#_23F1BD4A_Topic)

# StpSDK.Data Namespace

## Classes

|  |  |
| --- | --- |
| [StpUndoableEditOp](#_C3E43DA0_Topic) | STP edit operation |
| [SymbolIdMapper(T)](#_EED8D465_Topic) | Maps STP ids (poids) to thrid-party ids |

## Interfaces

|  |  |
| --- | --- |
| [ICustomId](#_7433C966_Topic) | Interface representing third-party system unique ids |

## Enumerations

|  |  |
| --- | --- |
| [StpUndoableEditOpType](#_A4AB3960_Topic) | Edit operation type |
| [SymbolTypes](#_A53C3CC4_Topic) | Symbol types |

# ICustomId Interface

Interface representing third-party system unique ids

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public interface ICustomId |

|  |
| --- |
| C++ |
| public interface class ICustomId |

## Properties

|  |  |
| --- | --- |
| [IsNotSet](#_613A44_Topic) | Unset id - indicates a non-valid/empty id |

## Methods

|  |  |
| --- | --- |
| [Equals](#_8117FAE7_Topic) | Equality test |
| [GetHashCode](#_74F4F7E1_Topic) | Get hash code |

## See Also

#### Reference

[StpSDK.Data Namespace](#_917E18DE_Topic)

# ICustomId.IsNotSet Property

Unset id - indicates a non-valid/empty id

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| bool IsNotSet { get; } |

|  |
| --- |
| C++ |
| property bool IsNotSet {  bool get (); } |

#### Property Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[ICustomId Interface](#_7433C966_Topic)

[StpSDK.Data Namespace](#_917E18DE_Topic)

# ICustomId.Equals Method

Equality test

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| bool Equals(  Object o ) |

|  |
| --- |
| C++ |
| bool Equals(  Object^ o ) |

#### Parameters

o [Object](https://docs.microsoft.com/dotnet/api/system.object)

#### Return Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[ICustomId Interface](#_7433C966_Topic)

[StpSDK.Data Namespace](#_917E18DE_Topic)

# ICustomId.GetHashCode Method

Get hash code

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| int GetHashCode() |

|  |
| --- |
| C++ |
| int GetHashCode() |

#### Return Value

[Int32](https://docs.microsoft.com/dotnet/api/system.int32)

## See Also

#### Reference

[ICustomId Interface](#_7433C966_Topic)

[StpSDK.Data Namespace](#_917E18DE_Topic)

# StpUndoableEditOp Class

STP edit operation

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class StpUndoableEditOp |

|  |
| --- |
| C++ |
| public ref class StpUndoableEditOp |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → StpUndoableEditOp |

## Constructors

|  |  |
| --- | --- |
| [StpUndoableEditOp](#_2B4EDE13_Topic) | Constructor |

## Properties

|  |  |
| --- | --- |
| [Operation](#_46961CA8_Topic) | Operation type |
| [Poid](#_2C46D52E_Topic) | STP id |
| [ToString](#_E587082D_Topic) | String representation |

## Methods

|  |  |
| --- | --- |
| [Equals(Object)](#_C138F9CC_Topic) | Equality test (Overrides [Object.Equals(Object)](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_)) |
| [Equals(StpUndoableEditOp)](#_FE7F1151_Topic) | Equality test |
| [GetHashCode](#_570B9294_Topic) | Hash code (Overrides [Object.GetHashCode()](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode)) |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |

## Operators

|  |  |
| --- | --- |
| [Equality(StpUndoableEditOp, Object)](#_50C8FFD9_Topic) | Equality operator |
| [Inequality(StpUndoableEditOp, Object)](#_5A2D9282_Topic) | Inequality operator |

## See Also

#### Reference

[StpSDK.Data Namespace](#_917E18DE_Topic)

# StpUndoableEditOp Constructor

Constructor

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpUndoableEditOp(  string poid,  StpUndoableEditOpType operation ) |

|  |
| --- |
| C++ |
| public: StpUndoableEditOp(  String^ poid,   StpUndoableEditOpType operation ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

STP unique id

operation [StpUndoableEditOpType](#_A4AB3960_Topic)

## See Also

#### Reference

[StpUndoableEditOp Class](#_C3E43DA0_Topic)

[StpSDK.Data Namespace](#_917E18DE_Topic)

# StpUndoableEditOp.Operation Property

Operation type

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public StpUndoableEditOpType Operation { get; set; } |

|  |
| --- |
| C++ |
| public: property StpUndoableEditOpType Operation {  StpUndoableEditOpType get ();  void set (StpUndoableEditOpType value); } |

#### Property Value

[StpUndoableEditOpType](#_A4AB3960_Topic)

## See Also

#### Reference

[StpUndoableEditOp Class](#_C3E43DA0_Topic)

[StpSDK.Data Namespace](#_917E18DE_Topic)

# StpUndoableEditOp.Poid Property

STP id

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string Poid { get; set; } |

|  |
| --- |
| C++ |
| public: property String^ Poid {  String^ get ();  void set (String^ value); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpUndoableEditOp Class](#_C3E43DA0_Topic)

[StpSDK.Data Namespace](#_917E18DE_Topic)

# StpUndoableEditOp.ToString Property

String representation

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string ToString { get; } |

|  |
| --- |
| C++ |
| public: property String^ ToString {  String^ get (); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpUndoableEditOp Class](#_C3E43DA0_Topic)

[StpSDK.Data Namespace](#_917E18DE_Topic)

# StpUndoableEditOp.Equals(Object) Method

Equality test

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public override bool Equals(  Object o ) |

|  |
| --- |
| C++ |
| public: virtual bool Equals(  Object^ o ) override |

#### Parameters

o [Object](https://docs.microsoft.com/dotnet/api/system.object)

#### Return Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpUndoableEditOp Class](#_C3E43DA0_Topic)

[StpSDK.Data Namespace](#_917E18DE_Topic)

# StpUndoableEditOp.Equals(StpUndoableEditOp) Method

Equality test

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public bool Equals(  StpUndoableEditOp psi ) |

|  |
| --- |
| C++ |
| public: bool Equals(  StpUndoableEditOp^ psi ) |

#### Parameters

psi [StpUndoableEditOp](#_C3E43DA0_Topic)

#### Return Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpUndoableEditOp Class](#_C3E43DA0_Topic)

[StpSDK.Data Namespace](#_917E18DE_Topic)

# StpUndoableEditOp.GetHashCode Method

Hash code

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public override int GetHashCode() |

|  |
| --- |
| C++ |
| public: virtual int GetHashCode() override |

#### Return Value

[Int32](https://docs.microsoft.com/dotnet/api/system.int32)

## See Also

#### Reference

[StpUndoableEditOp Class](#_C3E43DA0_Topic)

[StpSDK.Data Namespace](#_917E18DE_Topic)

# StpUndoableEditOp.Equality Operator

Equality operator

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public static bool operator ==(  StpUndoableEditOp lhs,  Object rhs ) |

|  |
| --- |
| C++ |
| public: static bool operator ==(  StpUndoableEditOp^ lhs,   Object^ rhs ) |

#### Parameters

lhs [StpUndoableEditOp](#_C3E43DA0_Topic)

rhs [Object](https://docs.microsoft.com/dotnet/api/system.object)

#### Return Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpUndoableEditOp Class](#_C3E43DA0_Topic)

[StpSDK.Data Namespace](#_917E18DE_Topic)

# StpUndoableEditOp.Inequality Operator

Inequality operator

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public static bool operator !=(  StpUndoableEditOp lhs,  Object rhs ) |

|  |
| --- |
| C++ |
| public: static bool operator !=(  StpUndoableEditOp^ lhs,   Object^ rhs ) |

#### Parameters

lhs [StpUndoableEditOp](#_C3E43DA0_Topic)

rhs [Object](https://docs.microsoft.com/dotnet/api/system.object)

#### Return Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpUndoableEditOp Class](#_C3E43DA0_Topic)

[StpSDK.Data Namespace](#_917E18DE_Topic)

# StpUndoableEditOpType Enumeration

Edit operation type

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public enum StpUndoableEditOpType |

|  |
| --- |
| C++ |
| public enum class StpUndoableEditOpType |

## Members

|  |  |  |
| --- | --- | --- |
| Added | 0 |  |
| Modified | 1 |  |
| Removed | 2 |  |

## See Also

#### Reference

[StpSDK.Data Namespace](#_917E18DE_Topic)

# SymbolIdMapper<T> Class

Maps STP ids (poids) to thrid-party ids

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public class SymbolIdMapper<T> where T : new(), ICustomId |

|  |
| --- |
| C++ |
| generic<typename T> where T : gcnew(), ICustomId public ref class SymbolIdMapper |

|  |  |
| --- | --- |
| **Inheritance** | [Object](https://docs.microsoft.com/dotnet/api/system.object) → SymbolIdMapper(T) |

#### Type Parameters

T

## Constructors

|  |  |
| --- | --- |
| [SymbolIdMapper(T)](#_97378CFB_Topic) | Constructor |

## Methods

|  |  |
| --- | --- |
| [AddSymbol](#_476559B3_Topic) | Add symbol to id map |
| [Clear](#_66B1027_Topic) | CLear the map |
| [ContainsOid](#_95C9297F_Topic) | Checks if map contains a given thrid-party id |
| [ContainsPoid](#_A40CA6E1_Topic) | Checks if ma contains an STP id (poid) |
| [Equals](https://docs.microsoft.com/dotnet/api/system.object.equals#System_Object_Equals_System_Object_) | Determines whether the specified object is equal to the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetHashCode](https://docs.microsoft.com/dotnet/api/system.object.gethashcode#System_Object_GetHashCode) | Serves as the default hash function. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [GetOidForPoid](#_EC95BB37_Topic) | Getthe thrid-party id associated with a given STP id (poid) |
| [GetPoid](#_978C573C_Topic) | Get STP id (poid) given a thrid-party id |
| [GetType](https://docs.microsoft.com/dotnet/api/system.object.gettype#System_Object_GetType) | Gets the [Type](https://docs.microsoft.com/dotnet/api/system.type) of the current instance. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [RemoveSymbol](#_7BAB0041_Topic) | Remove symbol from id map |
| [ToString](https://docs.microsoft.com/dotnet/api/system.object.tostring#System_Object_ToString) | Returns a string that represents the current object. (Inherited from [Object](https://docs.microsoft.com/dotnet/api/system.object)) |
| [UpdateSymbolOid](#_D86304F5_Topic) | Update symbol id map, replacing thrid-party id by a new one |

## See Also

#### Reference

[StpSDK.Data Namespace](#_917E18DE_Topic)

# SymbolIdMapper<T> Constructor

Constructor

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public SymbolIdMapper() |

|  |
| --- |
| C++ |
| public: SymbolIdMapper() |

## See Also

#### Reference

[SymbolIdMapper(T) Class](#_EED8D465_Topic)

[StpSDK.Data Namespace](#_917E18DE_Topic)

# SymbolIdMapper<T>.AddSymbol Method

Add symbol to id map

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void AddSymbol(  string poid,  T customId ) |

|  |
| --- |
| C++ |
| public: void AddSymbol(  String^ poid,   T customId ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

STP unique id

customId [T](#_EED8D465_Topic)

## See Also

#### Reference

[SymbolIdMapper(T) Class](#_EED8D465_Topic)

[StpSDK.Data Namespace](#_917E18DE_Topic)

# SymbolIdMapper<T>.Clear Method

CLear the map

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public void Clear() |

|  |
| --- |
| C++ |
| public: void Clear() |

## See Also

#### Reference

[SymbolIdMapper(T) Class](#_EED8D465_Topic)

[StpSDK.Data Namespace](#_917E18DE_Topic)

# SymbolIdMapper<T>.ContainsOid Method

Checks if map contains a given thrid-party id

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public bool ContainsOid(  T customId ) |

|  |
| --- |
| C++ |
| public: bool ContainsOid(  T customId ) |

#### Parameters

customId [T](#_EED8D465_Topic)

#### Return Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[SymbolIdMapper(T) Class](#_EED8D465_Topic)

[StpSDK.Data Namespace](#_917E18DE_Topic)

# SymbolIdMapper<T>.ContainsPoid Method

Checks if ma contains an STP id (poid)

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public bool ContainsPoid(  string poid ) |

|  |
| --- |
| C++ |
| public: bool ContainsPoid(  String^ poid ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

STP unique id

#### Return Value

[Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[SymbolIdMapper(T) Class](#_EED8D465_Topic)

[StpSDK.Data Namespace](#_917E18DE_Topic)

# SymbolIdMapper<T>.GetOidForPoid Method

Getthe thrid-party id associated with a given STP id (poid)

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public T GetOidForPoid(  string poid ) |

|  |
| --- |
| C++ |
| public: T GetOidForPoid(  String^ poid ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

STP unique id

#### Return Value

[T](#_EED8D465_Topic)

## See Also

#### Reference

[SymbolIdMapper(T) Class](#_EED8D465_Topic)

[StpSDK.Data Namespace](#_917E18DE_Topic)

# SymbolIdMapper<T>.GetPoid Method

Get STP id (poid) given a thrid-party id

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public string GetPoid(  T customId ) |

|  |
| --- |
| C++ |
| public: String^ GetPoid(  T customId ) |

#### Parameters

customId [T](#_EED8D465_Topic)

#### Return Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[SymbolIdMapper(T) Class](#_EED8D465_Topic)

[StpSDK.Data Namespace](#_917E18DE_Topic)

# SymbolIdMapper<T>.RemoveSymbol Method

Remove symbol from id map

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Task<bool> RemoveSymbol(  string poid ) |

|  |
| --- |
| C++ |
| public: Task<bool>^ RemoveSymbol(  String^ poid ) |

#### Parameters

poid [String](https://docs.microsoft.com/dotnet/api/system.string)

STP unique id

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task-1)([Boolean](https://docs.microsoft.com/dotnet/api/system.boolean))

## See Also

#### Reference

[SymbolIdMapper(T) Class](#_EED8D465_Topic)

[StpSDK.Data Namespace](#_917E18DE_Topic)

# SymbolIdMapper<T>.UpdateSymbolOid Method

Update symbol id map, replacing thrid-party id by a new one

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public Task<bool> UpdateSymbolOid(  T oldCustomId,  T newCustomId ) |

|  |
| --- |
| C++ |
| public: Task<bool>^ UpdateSymbolOid(  T oldCustomId,   T newCustomId ) |

#### Parameters

oldCustomId [T](#_EED8D465_Topic)

newCustomId [T](#_EED8D465_Topic)

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task-1)([Boolean](https://docs.microsoft.com/dotnet/api/system.boolean))

## See Also

#### Reference

[SymbolIdMapper(T) Class](#_EED8D465_Topic)

[StpSDK.Data Namespace](#_917E18DE_Topic)

# SymbolTypes Enumeration

Symbol types

## Definition

**Namespace:** [StpSDK.Data](#_917E18DE_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public enum SymbolTypes |

|  |
| --- |
| C++ |
| public enum class SymbolTypes |

## Members

|  |  |  |
| --- | --- | --- |
| unit | 0 |  |
| tg | 1 |  |

## See Also

#### Reference

[StpSDK.Data Namespace](#_917E18DE_Topic)

# StpSDK.Speech Namespace

## Interfaces

|  |  |
| --- | --- |
| [IAudioCapture](#_A748303_Topic) | Audio capture required services |
| [IAudioCaptureDevice](#_F88B2F3B_Topic) | Audio capture device interface |
| [IRecoController](#_202C54A1_Topic) | Speech recognition controller interface |

## Delegates

|  |  |
| --- | --- |
| [AudioCaptureDataDelegate](#_839B54DD_Topic) | Arguments for event representing an audio data |
| [AudioCaptureEventDelegate](#_20EE01E4_Topic) | Arguments for event representing an audio event |
| [AudioLevelDelegate](#_7E640211_Topic) | Arguments for event representing Audio volume, ranging from 0.0 to 1.0 |
| [MicrophoneStateChangedDelegate](#_61C59626_Topic) | Arguments for event representing microphone state changes (muted - listening) |
| [RecognitionErrorDelegate](#_B837701C_Topic) | Arguments for recognition error events |
| [SpeechRecognitiondDelegate](#_94D1425C_Topic) | Arguments for recognition results event |
| [SpeechStartPauseEndDetectedDelegate](#_6630558F_Topic) | Arguments for speech start event |

# AudioCaptureDataDelegate Delegate

Arguments for event representing an audio data

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void AudioCaptureDataDelegate(  DateTime timestamp,  short[] data = null ) |

|  |
| --- |
| C++ |
| public delegate void AudioCaptureDataDelegate(  DateTime timestamp,   array<short>^ data = nullptr ) |

#### Parameters

timestamp [DateTime](https://docs.microsoft.com/dotnet/api/system.datetime)

data [Int16](https://docs.microsoft.com/dotnet/api/system.int16)[] (Optional)

## See Also

#### Reference

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# AudioCaptureEventDelegate Delegate

Arguments for event representing an audio event

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void AudioCaptureEventDelegate(  DateTime timestamp,  short[] data = null ) |

|  |
| --- |
| C++ |
| public delegate void AudioCaptureEventDelegate(  DateTime timestamp,   array<short>^ data = nullptr ) |

#### Parameters

timestamp [DateTime](https://docs.microsoft.com/dotnet/api/system.datetime)

data [Int16](https://docs.microsoft.com/dotnet/api/system.int16)[] (Optional)

## See Also

#### Reference

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# AudioLevelDelegate Delegate

Arguments for event representing Audio volume, ranging from 0.0 to 1.0

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void AudioLevelDelegate(  double level ) |

|  |
| --- |
| C++ |
| public delegate void AudioLevelDelegate(  double level ) |

#### Parameters

level [Double](https://docs.microsoft.com/dotnet/api/system.double)

## See Also

#### Reference

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IAudioCapture Interface

Audio capture required services

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public interface IAudioCapture : IAudioCaptureDevice |

|  |
| --- |
| C++ |
| public interface class IAudioCapture : IAudioCaptureDevice |

|  |  |
| --- | --- |
| **Implements** | [IAudioCaptureDevice](#_F88B2F3B_Topic) |

## Properties

|  |  |
| --- | --- |
| [DeviceId](#_927B5042_Topic) | Device Id (Inherited from [IAudioCaptureDevice](#_F88B2F3B_Topic)) |

## Methods

|  |  |
| --- | --- |
| [Dispose](#_BDC20B30_Topic) | Dispose |
| [Start](#_3648638D_Topic) | Start capturing and processing audio |
| [Stop](#_DB4F0DA1_Topic) | Stop capturing audio |

## Events

|  |  |
| --- | --- |
| [AudioLevel](#_7FD58403_Topic) | Event handler for audio level / volume |
| [MicrophoneStateChange](#_140846F5_Topic) | Event handler invoked when the microphone state changes (muted<>listening) |
| [Silence](#_C0BB511F_Topic) | Captured data classified as silence |
| [SpeechData](#_D324B0BA_Topic) | Captured data classified as Speech |
| [SpeechEnd](#_566E2904_Topic) | End of speech detected (short silence after speech) |
| [SpeechPause](#_350BDBD_Topic) | Silence after speech detected, within the timeout that causes speech to be declared completed |
| [SpeechResume](#_12F2225D_Topic) | Speaking after a pause |
| [SpeechStart](#_21A7F581_Topic) | Speech start detected |
| [StraightAudioData](#_66F28BBA_Topic) | Captured data, outside of any speech/silence classification |

## See Also

#### Reference

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IAudioCapture.Dispose Method

Dispose

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| void Dispose() |

|  |
| --- |
| C++ |
| void Dispose() |

## See Also

#### Reference

[IAudioCapture Interface](#_A748303_Topic)

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IAudioCapture.Start Method

Start capturing and processing audio

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| void Start() |

|  |
| --- |
| C++ |
| void Start() |

## See Also

#### Reference

[IAudioCapture Interface](#_A748303_Topic)

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IAudioCapture.Stop Method

Stop capturing audio

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| void Stop() |

|  |
| --- |
| C++ |
| void Stop() |

## See Also

#### Reference

[IAudioCapture Interface](#_A748303_Topic)

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IAudioCapture.AudioLevel Event

Event handler for audio level / volume

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| event AudioLevelDelegate AudioLevel |

|  |
| --- |
| C++ |
| event AudioLevelDelegate^ AudioLevel {  void add (AudioLevelDelegate^ value);  void remove (AudioLevelDelegate^ value); } |

#### Value

[AudioLevelDelegate](#_7E640211_Topic)

## See Also

#### Reference

[IAudioCapture Interface](#_A748303_Topic)

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IAudioCapture.MicrophoneStateChange Event

Event handler invoked when the microphone state changes (muted<>listening)

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| event MicrophoneStateChangedDelegate MicrophoneStateChange |

|  |
| --- |
| C++ |
| event MicrophoneStateChangedDelegate^ MicrophoneStateChange {  void add (MicrophoneStateChangedDelegate^ value);  void remove (MicrophoneStateChangedDelegate^ value); } |

#### Value

[MicrophoneStateChangedDelegate](#_61C59626_Topic)

## See Also

#### Reference

[IAudioCapture Interface](#_A748303_Topic)

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IAudioCapture.Silence Event

Captured data classified as silence

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| event AudioCaptureDataDelegate Silence |

|  |
| --- |
| C++ |
| event AudioCaptureDataDelegate^ Silence {  void add (AudioCaptureDataDelegate^ value);  void remove (AudioCaptureDataDelegate^ value); } |

#### Value

[AudioCaptureDataDelegate](#_839B54DD_Topic)

## See Also

#### Reference

[IAudioCapture Interface](#_A748303_Topic)

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IAudioCapture.SpeechData Event

Captured data classified as Speech

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| event AudioCaptureDataDelegate SpeechData |

|  |
| --- |
| C++ |
| event AudioCaptureDataDelegate^ SpeechData {  void add (AudioCaptureDataDelegate^ value);  void remove (AudioCaptureDataDelegate^ value); } |

#### Value

[AudioCaptureDataDelegate](#_839B54DD_Topic)

## See Also

#### Reference

[IAudioCapture Interface](#_A748303_Topic)

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IAudioCapture.SpeechEnd Event

End of speech detected (short silence after speech)

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| event AudioCaptureEventDelegate SpeechEnd |

|  |
| --- |
| C++ |
| event AudioCaptureEventDelegate^ SpeechEnd {  void add (AudioCaptureEventDelegate^ value);  void remove (AudioCaptureEventDelegate^ value); } |

#### Value

[AudioCaptureEventDelegate](#_20EE01E4_Topic)

## See Also

#### Reference

[IAudioCapture Interface](#_A748303_Topic)

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IAudioCapture.SpeechPause Event

Silence after speech detected, within the timeout that causes speech to be declared completed

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| event AudioCaptureEventDelegate SpeechPause |

|  |
| --- |
| C++ |
| event AudioCaptureEventDelegate^ SpeechPause {  void add (AudioCaptureEventDelegate^ value);  void remove (AudioCaptureEventDelegate^ value); } |

#### Value

[AudioCaptureEventDelegate](#_20EE01E4_Topic)

## See Also

#### Reference

[IAudioCapture Interface](#_A748303_Topic)

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IAudioCapture.SpeechResume Event

Speaking after a pause

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| event AudioCaptureEventDelegate SpeechResume |

|  |
| --- |
| C++ |
| event AudioCaptureEventDelegate^ SpeechResume {  void add (AudioCaptureEventDelegate^ value);  void remove (AudioCaptureEventDelegate^ value); } |

#### Value

[AudioCaptureEventDelegate](#_20EE01E4_Topic)

## See Also

#### Reference

[IAudioCapture Interface](#_A748303_Topic)

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IAudioCapture.SpeechStart Event

Speech start detected

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| event AudioCaptureEventDelegate SpeechStart |

|  |
| --- |
| C++ |
| event AudioCaptureEventDelegate^ SpeechStart {  void add (AudioCaptureEventDelegate^ value);  void remove (AudioCaptureEventDelegate^ value); } |

#### Value

[AudioCaptureEventDelegate](#_20EE01E4_Topic)

## See Also

#### Reference

[IAudioCapture Interface](#_A748303_Topic)

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IAudioCapture.StraightAudioData Event

Captured data, outside of any speech/silence classification

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| event AudioCaptureDataDelegate StraightAudioData |

|  |
| --- |
| C++ |
| event AudioCaptureDataDelegate^ StraightAudioData {  void add (AudioCaptureDataDelegate^ value);  void remove (AudioCaptureDataDelegate^ value); } |

#### Value

[AudioCaptureDataDelegate](#_839B54DD_Topic)

## See Also

#### Reference

[IAudioCapture Interface](#_A748303_Topic)

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IAudioCaptureDevice Interface

Audio capture device interface

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public interface IAudioCaptureDevice |

|  |
| --- |
| C++ |
| public interface class IAudioCaptureDevice |

## Properties

|  |  |
| --- | --- |
| [DeviceId](#_927B5042_Topic) | Device Id |

## See Also

#### Reference

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IAudioCaptureDevice.DeviceId Property

Device Id

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| string DeviceId { get; } |

|  |
| --- |
| C++ |
| property String^ DeviceId {  String^ get (); } |

#### Property Value

[String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[IAudioCaptureDevice Interface](#_F88B2F3B_Topic)

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IRecoController Interface

Speech recognition controller interface

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public interface IRecoController |

|  |
| --- |
| C++ |
| public interface class IRecoController |

## Methods

|  |  |
| --- | --- |
| [Dispose](#_CE2446D_Topic) | Dispose |
| [RequestStop](#_A5864B8B_Topic) | Set recognition to stop once the user is silent |
| [Start](#_E987EE4E_Topic) | Start capturing and recognizing audio |

## Events

|  |  |
| --- | --- |
| [RecognitionError](#_4F1A7F1_Topic) | Event invoked when an error needs to be communicated to clients |
| [Recognized](#_CADE6996_Topic) | Event triggered when recognition has been stable for a few cycles |
| [Recognizing](#_4EA36A19_Topic) | Event triggered when new evolving hypotheses are detected during ongoing reco This is an expensive operation, as intermediate transcriptions need to be produced |
| [SpeechEndDetected](#_14B80639_Topic) | Event triggered at the end of speech (after a small time has elapsed) |
| [SpeechPauseDetected](#_D7267C3A_Topic) | Event triggered when speech start is detected |
| [SpeechResumeDetected](#_7939EBA6_Topic) | Event triggered when speech is detected after a pause |
| [SpeechStartDetected](#_1B513C1_Topic) | Event triggered when speech start is detected |

## See Also

#### Reference

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IRecoController.Dispose Method

Dispose

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| void Dispose() |

|  |
| --- |
| C++ |
| void Dispose() |

## See Also

#### Reference

[IRecoController Interface](#_202C54A1_Topic)

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IRecoController.RequestStop Method

Set recognition to stop once the user is silent

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| Task RequestStop() |

|  |
| --- |
| C++ |
| Task^ RequestStop() |

#### Return Value

[Task](https://docs.microsoft.com/dotnet/api/system.threading.tasks.task)

## See Also

#### Reference

[IRecoController Interface](#_202C54A1_Topic)

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IRecoController.Start Method

Start capturing and recognizing audio

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| void Start() |

|  |
| --- |
| C++ |
| void Start() |

## See Also

#### Reference

[IRecoController Interface](#_202C54A1_Topic)

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IRecoController.RecognitionError Event

Event invoked when an error needs to be communicated to clients

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| event RecognitionErrorDelegate RecognitionError |

|  |
| --- |
| C++ |
| event RecognitionErrorDelegate^ RecognitionError {  void add (RecognitionErrorDelegate^ value);  void remove (RecognitionErrorDelegate^ value); } |

#### Value

[RecognitionErrorDelegate](#_B837701C_Topic)

## See Also

#### Reference

[IRecoController Interface](#_202C54A1_Topic)

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IRecoController.Recognized Event

Event triggered when recognition has been stable for a few cycles

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| event SpeechRecognitiondDelegate Recognized |

|  |
| --- |
| C++ |
| event SpeechRecognitiondDelegate^ Recognized {  void add (SpeechRecognitiondDelegate^ value);  void remove (SpeechRecognitiondDelegate^ value); } |

#### Value

[SpeechRecognitiondDelegate](#_94D1425C_Topic)

## See Also

#### Reference

[IRecoController Interface](#_202C54A1_Topic)

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IRecoController.Recognizing Event

Event triggered when new evolving hypotheses are detected during ongoing reco This is an expensive operation, as intermediate transcriptions need to be produced

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| event SpeechRecognitiondDelegate Recognizing |

|  |
| --- |
| C++ |
| event SpeechRecognitiondDelegate^ Recognizing {  void add (SpeechRecognitiondDelegate^ value);  void remove (SpeechRecognitiondDelegate^ value); } |

#### Value

[SpeechRecognitiondDelegate](#_94D1425C_Topic)

## See Also

#### Reference

[IRecoController Interface](#_202C54A1_Topic)

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IRecoController.SpeechEndDetected Event

Event triggered at the end of speech (after a small time has elapsed)

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| event SpeechStartPauseEndDetectedDelegate SpeechEndDetected |

|  |
| --- |
| C++ |
| event SpeechStartPauseEndDetectedDelegate^ SpeechEndDetected {  void add (SpeechStartPauseEndDetectedDelegate^ value);  void remove (SpeechStartPauseEndDetectedDelegate^ value); } |

#### Value

[SpeechStartPauseEndDetectedDelegate](#_6630558F_Topic)

## See Also

#### Reference

[IRecoController Interface](#_202C54A1_Topic)

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IRecoController.SpeechPauseDetected Event

Event triggered when speech start is detected

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| event SpeechStartPauseEndDetectedDelegate SpeechPauseDetected |

|  |
| --- |
| C++ |
| event SpeechStartPauseEndDetectedDelegate^ SpeechPauseDetected {  void add (SpeechStartPauseEndDetectedDelegate^ value);  void remove (SpeechStartPauseEndDetectedDelegate^ value); } |

#### Value

[SpeechStartPauseEndDetectedDelegate](#_6630558F_Topic)

## See Also

#### Reference

[IRecoController Interface](#_202C54A1_Topic)

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IRecoController.SpeechResumeDetected Event

Event triggered when speech is detected after a pause

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| event SpeechStartPauseEndDetectedDelegate SpeechResumeDetected |

|  |
| --- |
| C++ |
| event SpeechStartPauseEndDetectedDelegate^ SpeechResumeDetected {  void add (SpeechStartPauseEndDetectedDelegate^ value);  void remove (SpeechStartPauseEndDetectedDelegate^ value); } |

#### Value

[SpeechStartPauseEndDetectedDelegate](#_6630558F_Topic)

## See Also

#### Reference

[IRecoController Interface](#_202C54A1_Topic)

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# IRecoController.SpeechStartDetected Event

Event triggered when speech start is detected

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| event SpeechStartPauseEndDetectedDelegate SpeechStartDetected |

|  |
| --- |
| C++ |
| event SpeechStartPauseEndDetectedDelegate^ SpeechStartDetected {  void add (SpeechStartPauseEndDetectedDelegate^ value);  void remove (SpeechStartPauseEndDetectedDelegate^ value); } |

#### Value

[SpeechStartPauseEndDetectedDelegate](#_6630558F_Topic)

## See Also

#### Reference

[IRecoController Interface](#_202C54A1_Topic)

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# MicrophoneStateChangedDelegate Delegate

Arguments for event representing microphone state changes (muted - listening)

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void MicrophoneStateChangedDelegate(  bool isListening ) |

|  |
| --- |
| C++ |
| public delegate void MicrophoneStateChangedDelegate(  bool isListening ) |

#### Parameters

isListening [Boolean](https://docs.microsoft.com/dotnet/api/system.boolean)

## See Also

#### Reference

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# RecognitionErrorDelegate Delegate

Arguments for recognition error events

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void RecognitionErrorDelegate(  string message ) |

|  |
| --- |
| C++ |
| public delegate void RecognitionErrorDelegate(  String^ message ) |

#### Parameters

message [String](https://docs.microsoft.com/dotnet/api/system.string)

## See Also

#### Reference

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# SpeechRecognitiondDelegate Delegate

Arguments for recognition results event

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void SpeechRecognitiondDelegate(  Object r,  DateTime speechStartTime ) |

|  |
| --- |
| C++ |
| public delegate void SpeechRecognitiondDelegate(  Object^ r,   DateTime speechStartTime ) |

#### Parameters

r [Object](https://docs.microsoft.com/dotnet/api/system.object)

speechStartTime [DateTime](https://docs.microsoft.com/dotnet/api/system.datetime)

## See Also

#### Reference

[StpSDK.Speech Namespace](#_817FE20B_Topic)

# SpeechStartPauseEndDetectedDelegate Delegate

Arguments for speech start event

## Definition

**Namespace:** [StpSDK.Speech](#_817FE20B_Topic)  
**Assembly:** StpSDK (in StpSDK.dll) Version: 0.2.5+79024abc1deecfc0fc42ad3ec33031f2df03dbda

|  |
| --- |
| C# |
| public delegate void SpeechStartPauseEndDetectedDelegate(  DateTime timestamp ) |

|  |
| --- |
| C++ |
| public delegate void SpeechStartPauseEndDetectedDelegate(  DateTime timestamp ) |

#### Parameters

timestamp [DateTime](https://docs.microsoft.com/dotnet/api/system.datetime)

## See Also

#### Reference

[StpSDK.Speech Namespace](#_817FE20B_Topic)